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Arizona Corporation Commission
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ARIZONA WATER COMPANY

Docket No. W-01445A-08-0440

2008 RATE HEARING

For Test Year Ending 12/31/07

PREPARED

REJOINDER TESTIMONY & EXHIBITS

OF

Joel M. Reiker

EXHIBIT
A-22
ADMITTED

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ARIZONA WATER COMPANY

Rejoinder Testimony of

Joel M. Reiker

I. Introduction

Q. PLEASE STATE YOUR NAME, EMPLOYER, AND TITLE.

A. My name is Joel M. Reiker. I am employed by Arizona Water Company (the "Company" or "AWC") as Manager of Rates and Regulatory Accounting.

Q. ARE YOU THE SAME JOEL M. REIKER THAT PREVIOUSLY PROVIDED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes.

Q. HAVE YOU REVIEWED THE SURREBUTTAL TESTIMONY FILED BY THE OTHER PARTIES TO THIS PROCEEDING?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. The purpose of my rejoinder testimony is to respond to the surrebuttal testimony of Arizona Corporation Commission Staff ("Staff") and Residential Utility Consumer Office ("RUCO").

Q. HOW IS YOUR REJOINDER TESTIMONY ORGANIZED?

A. My rejoinder testimony is presented in four sections, including this introductory Section I. In Section II, I provide updates and corrections to my rebuttal testimony. In Section III, I respond to the surrebuttal testimony of Staff witnesses Bozzo and Igwe. In Section IV, I respond to RUCO witnesses Coley and Rigsby.

II. Updates and Corrections to Rebuttal Testimony

Q. DO YOU HAVE ANY UPDATES OR CORRECTIONS TO YOUR REBUTTAL TESTIMONY?

A. Yes. Schedule JMR-RJ1 is an update of my rebuttal Schedule JMR-RB2 which, as discussed on pages 4 – 9 of my rebuttal testimony regarding revenue requirement, illustrates the financial impact of Staff's and RUCO's recommendations in this proceeding on the Company's pro forma 2008 operating results.

Q. WHAT CHANGES HAVE YOU MADE IN SCHEDULE JMR-RJ1?

A. In Schedule JMR-RJ1, I have updated revenues, as shown on lines 2 through 7, to more accurately reflect the elimination of surcharge revenues and the effect of sales taxes on pro forma revenues. On line 10 (operating expenses), I have included the pro forma effect of sales taxes, as well as the pro forma effect of increases in the cost of pumping power purchased from Arizona Public Service Company ("APS") and the Salt River Project ("SRP"). These increases are based on a settlement agreement filed on June 12, 2009 in the currently-pending APS rate proceeding (Docket 08-0712), as well as notices sent to customers of SRP on July 14, 2009. On line 16 (interest expense), I included the pro forma effect of 12 months of debt service on the Company's Series M bonds, which were issued in September 2008. Finally, I corrected an error in the formula which calculates 2008 pro forma revenues at RUCO's proposed rates (column E, line 2).[1]

Q. HAVE THE RESULTS OF YOUR ANALYSIS CHANGED?

A. Yes. The results of my analysis shown in Schedule JMR-RJ1 are summarized below:

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[1] This formula calculates 2008 pro forma revenues at RUCO's proposed rates based on actual 2008 billing determinants for residential, commercial, industrial, and construction customers. The original formula in Schedule JMR-RB1 had the incorrect rates for construction sales. Correcting this error increases 2008 pro form revenues at RUCO's proposed rates by $311,164.

	STAFF	RUCO
Return on Average Invested Capital	6.86%	6.44%
Return on Year-End Capital	6.66%	6.25%
Return on Average Common Equity	6.45%	5.54%
Return on Year-End Equity	6.44%	5.49%
Pre-Tax Interest Coverage	2.19x	2.02x

Although the results of my analysis have improved slightly, I believe the conclusions set forth on pages 5 through 7 of my revenue requirement rebuttal testimony are still valid. For example, on pages 8 and 9 of my rate design/cost of service rebuttal testimony, I explain the effect on revenues of post-test year reductions in usage by the Company's two largest customers. Those industrial customers, Abbott Laboratories ("Abbott") and Frito Lay, have stated that they intend to further reduce the amount of water they purchase from the Company. According to Mr. Garfield's rate design/cost of service rebuttal testimony (pp. 5 – 6), under Staff's proposed rates Abbott and Frito Lay alone will be counted on to provide over $1.3 million, or 2.5% of the Company's metered operating revenues. Assuming these two customers continue to reduce consumption as they have stated they intend to do, along with increases in operating expenses other than purchased power, it will be difficult for the Company to generate earnings sufficient to satisfy the interest coverage test set forth in the Company's mortgage bond indenture. As a result, the Company may not be able to issue additional long-term debt. Absent the approval of the adjuster mechanisms the Company seeks in this proceeding, the Company's only recourse will likely be to promptly file another rate case.

III. Rejoinder to Staff Surrebuttal Testimony

A. Rate Base

Plant Retirements

Q. ON PAGE 7 (LINES 8 – 10) OF MR. BOZZO'S SURREBUTTAL TESTIMONY HE CLAIMS THE COMPANY PROVIDED NO RATIONALE FOR TREATING THOSE PLANT ITEMS THE COMPANY PROPOSES TO TREAT AS RETIREMENTS. DO YOU HAVE A RESPONSE?

A. Yes. In Staff data request 11.16, Mr. Bozzo provided the Company a list of plant items and requested that the Company provide the associated original cost, in-service date, accumulated depreciation balance, and any associated CIAC or AIAC balances. In responding to Mr. Bozzo's request, the Company provided notes next to each item, a number of which indicated that an individual plant item "needs to be retired." By noting that a particular plant item "needs to be retired", the Company assumed Staff would be informed that these items have reached the end of their useful lives and were no longer in service. When plant has reached the end of its useful life and is no longer in service, it is customarily retired. As soon as the Company became aware of these items, we identified them as needing to be retired from plant in service.

Q. WHY DIDN'T YOU SIMPLY MAKE A PRO FORMA ADJUSTMENT TO REMOVE THE ITEMS IN QUESTION FROM RATE BASE IN THIS PROCEEDING, AS MR. BOZZO'S SUGGESTS THE COMPANY SHOULD HAVE DONE ON PAGE 7 (LINES 9 – 10) OF HIS SURREBUTTAL TESTIMONY?

A. This is *exactly* what the Company proposes to do. However, instead of accepting the Company's pro forma adjustment, Mr. Bozzo implies (at p. 7, lines 12 – 17) that the Company knowingly chose to leave retired plant in rate base when preparing its application and that it was not forthright with respect to plant

items that were found throughout the course of this proceeding to not be in service. Had the Company known the test year plant balances on its books included plant that should have been previously retired, we would have included the appropriate pro forma adjustment in the Company's application. Nevertheless, we identified these items for Staff and then the Company proposed in my rebuttal testimony the very pro forma adjustment Mr. Bozzo suggests are needed to retire plant. Yet, Mr. Bozzo recommends a different treatment of retired plant in this case.

Q. WHAT BASIS DOES MR. BOZZO PROVIDE FOR STAFF'S RECOMMENDED TREATMENT OF THESE ITEMS?

A. Mr. Bozzo's position that the depreciation reserve should be debited by an amount other than the original book cost of the items in question seems to be based on his erroneous presumption that the Company knowingly included in rate base plant that should have been retired (Bozzo surrebuttal, p. 7). In other words, Mr. Bozzo appears to be recommending treatment that he knows is not correct as a means of penalizing the Company. Not only is his presumption incorrect, but Mr. Bozzo's position also is inconsistent.

Q. HOW IS MR. BOZZO'S POSITION INCONSISTENT?

A. On page 8 (lines 24 – 25) of his surrebuttal testimony, Mr. Bozzo states that "the only reason to remove the full original cost of such an item from Accumulated Depreciation is if it was a retirement." Then, for five of the 16 plant items in question, he removes *more* than the original cost of the item from accumulated depreciation. In other words, his adjustment with respect to these five particular items actually *increases* rate base. Assuming these five items were the only plant items the Company found that should have been retired, Staff would be arguing that because the Company did not propose a pro forma adjustment to retire these items in its application, the Company's rate base should be *increased*. This example illustrates the flaw in Staff's position on the issue of

plant retirements. If Staff's position with respect to this issue is intended to support adjustments that are punitive in nature, as appears to be the case from reading Mr. Bozzo's testimony, it will do so only by mere chance.

Mr. Bozzo's position and recommendation also conflicts with Staff recommendations made as recently as 2008, in which Staff proposed adjustments for plant it found to not be "used and useful" in Docket No. 07-0551. In that case, Staff took the position that a number of plant items were not "used and useful", and proposed an adjustment to retire said plant consistent with the Company's proposed treatment in this case, under which plant in service and accumulated depreciation are reduced by equal amounts. I have attached relevant portions of Staff's testimony in Docket No. 07-0551 hereto as Exhibit JMR-RJ1.

Q. HAVE THE PLANT ITEMS IN QUESTION IN THIS CASE SINCE BEEN RETIRED?

A. Yes. Included as Exhibit JMR-RJ2 are property disposal reports for each of the items in question. These reports are used by the Company's accounting department to properly record the retirement of utility plant. Thus, each of these plant items have now been retired.

Disallowed Plant that is Currently in Service

Q. ON PAGE 12 OF HIS SURREBUTTAL TESTIMONY, MR. BOZZO ASSERTS THAT THE THREE FENCES LOCATED IN THE SUPERSTITION, WHITE TANK, AND SEDONA SYSTEMS, AS WELL AS A BLOCK BUILDING LOCATED IN THE SEDONA SYSTEM "MAY SERVE A PURPOSE, BUT THE RESPONSIBILITY FOR THIS PLANT SHOULD NOT FALL ON THE SHOULDERS OF THE RATEPYERS." DO YOU HAVE A RESPONSE?

A. Yes. Each of these items is currently in service and benefiting customers, and should be included in rate base. According to Mr. Bozzo (p. 12, lines 3 – 8), Staff

believes that if a particular well is retired and out of service, then every piece of plant located at that well site should be disallowed as "not used and useful", regardless of whether or not the plant is related to the retired well. However, what Staff fails to recognize is that even if the Company retires a well, it must still secure the site with appropriate fencing to the extent the site represents a potential liability and/or contains a point of entry into the Company's water system. In addition, these secured sites are routinely used to store miscellaneous piping, fittings and other apparatus. The Company cannot allow the public at large to enter its well sites and pumping stations regardless of whether the wells and pumps are currently in service. These fences continue to serve the very same purpose they served when they were first installed and they should continue to be included in rate base.

Q. WHAT ABOUT THE 8' X 12' BLOCK BUILDING LOCATED AT THE SUNUP WELL SITE IN SEDONA?

A. Although this building is located at the site of a retired well, it is a useful storage facility, and the revenue requirement (roughly $7 per month) is significantly less than the market rate for a commercial rental storage facility of comparable size. The Company has limited storage space in Sedona, and uses every available building for that purpose. It is therefore a prudent decision for the Company to retain the usefulness of this facility and use it as storage.

Q. ON PAGE 12 (LINE 11) OF HIS SURREBUTTAL TESTIMONY, MR. BOZZO REFERENCES DWR WELL NO. 55-613443 LOCATED IN THE CASA GRANDE SYSTEM. IS THIS WELL CURRENTLY IN USE?

A. Yes. The correct DWR No. for this well is 55-616598. This is Well No. 14 in the Casa Grande system. For reasons unknown, DWR well No. 55-613443, which is an agricultural well not owned by the Company, was shown on the plant listing that was provided to Staff's engineer. The Company provided documentation to

Staff memorializing such on May 11, 2009, which I have attached hereto as Exhibit JMR-RJ3.

Q. IS CASA GRANDE WELL NO. 14 CURRENTLY IN SERVICE?

A. Yes. This well is currently in service and providing water to the Company's customers. The Company pumped the following amounts from this well in 2007 through 2009:

M Gallons Pumped – Well 55-616598

	2007	2008	2009
Jan.	6,585.0	5,233.0	5,343.0
Feb.	5,525.0	4,798.0	5,593.0
Mar.	5,991.0	5,758.0	6,314.0
Apr.	6,085.0	5,529.0	5,645.0
May.	6,004.0	5,211.0	2,784.0
Jun.	5,127.0	7,193.0	4,999.0
Jul.	5,297.0	4,105.0	5,685.0
Aug.	5,392.0	5,594.0	
Sep.	4,719.0	2,142.0	
Oct.	5,946.0	1,540.0	
Nov.	5,113.0	5,586.0	
Dec.	4,680.0	5,564.0	
Totals	66,464.0	58,253.0	36,363

Q. ON PAGE 15 (LINES 11 – 27) OF YOUR REVENUE REQUIREMENT REBUTTAL TESTIMONY YOU DISCUSS DWR WELL NO. 55-518969 LOCATED IN THE SEDONA SYSTEM. IS THIS WELL CURRENTLY IN SERVICE?

Q. Yes. This is the Sedona Golf Resort well that Staff recommends be disallowed as not "used and useful." This well is in service and providing water to the Company's customers. The Company pumped the following amounts from this well in 2007 through 2009:

M Gallons Pumped – Well 55-518969

	2007	2008	2009
Jan.	4,454.0	3,417.0	3,837.0
Feb.	4,052.0	3,556.0	3,785.0
Mar.	5,531.0	5,678.0	5,722.0
Apr.	7,135.0	9,074.0	5,687.0
May.	8,518.0	7,443.0	6,637.0
Jun.	9,552.0	9,227.0	7,546.0
Jul.	10,212.0	8,596.0	8,587.0
Aug.	7,792.0	8,214.0	
Sep.	7,209.0	8,051.0	
Oct.	8,741.0	7,368.0	
Nov.	6,110.0	5,005.0	
Dec.	3,492.0	4,592.0	
Totals	82,798.0	80,221.0	41,801.0

Q. ON PAGE 27 (LINES 17 – 28) OF MR. SCHNEIDER'S REBUTTAL TESTIMONY, AS WELL AS SCHEDULE JMR-RB2 (PAGE 2, LINE 3) OF YOUR REVENUE REQUIREMENT REBUTTAL TESTIMONY, THE COMPANY CHARACTERIZES DWR WELL NO. 55-616662 IN THE SEDONA SYSTEM AS PROPERTY HELD FOR FUTURE USE. IS THIS WELL ACTUALLY IN SERVICE?

A. Yes. This is the Rainbow Well No. 6 located in the Sedona system. As explained by Mr. Schneider on page 27 (lines 17 – 19) of his rebuttal testimony, this well has been in continuous service since 1963. The Company pumped the following amounts from this well in 2007 through 2009:

M Gallons Pumped – Well 55-616662

	2007	2008	2009
Jan.	3,813.0	3,704.0	1,179.0
Feb.	2,679.0	3,063.0	0.0
Mar.	3,346.0	5,968.0	2,485.0
Apr.	6,261.0	5,232.0	5,254.0
May.	6,476.0	6,434.0	3,585.0
Jun.	7,350.0	6,072.0	4,297.0
Jul.	6,073.0	6,068.0	6,147.0
Aug.	5,310.0	4,520.0	
Sep.	3,983.0	5,011.0	
Oct.	5,406.0	3,991.0	
Nov.	3,708.0	2,978.0	
Dec.	3,007.0	2,966.0	
Totals	57,412.0	56,007.0	21,947.0

Property Held for Future Use

Q. HOW DO YOU RESPOND TO MR. BOZZO'S STATEMENT ON PAGE 14 (LINES 16 – 22) OF HIS SURREBUTTAL TESIMONY THAT "PLANT HELD FOR FUTURE USE IS SIMPLY NOT RECOGNIZED AS PLANT THAT PROVIDES SERVICE TO, AND THEREFORE BENEFITS CUSTOMERS" AND "CANNOT BE DETERMINED TO BE USED AND USEFUL"?

A. Mr. Bozzo's testimony runs contrary to Staff's recommendation and the Commission's treatment of plant held for future use in Decision No. 68858, which I cited on page 14 (lines 18 – 28) of my revenue requirement rebuttal testimony. The Commission also found plant held for future use "useful and prudent" in Decision No. 59079, dated May 5, 1995, and included it in rate base. Further, I believe Mr. Bozzo has mischaracterized the applicable standard for including plant in the original cost rate base in Arizona when he implies that such plant must be "used *and* useful". According to A.A.C. R14-2-103.3.h, the original cost rate base consists of "the depreciated original cost, prudently invested, of the property (exclusive of contributions and/or advances in aid of construction) at the end of the test year, used *or* useful, plus a proper allowance for working capital and including all applicable pro forma adjustments." (emphasis supplied) Staff

has not shown that the items in question were imprudent investments or that they are not useful. Therefore, rate base treatment is warranted.

Q. HAS THE COMPANY TRANSFERRED THE PLANT IN QUESTION TO ACCOUNT 105 – PROPERTY HELD FOR FUTURE USE?

A. No. Nor do I believe it is necessary to classify these items as property held for future use in order for the Commission to include them in rate base. In fact, when the Commission determined that property held for future use was useful and should be included in rate base in Docket No. 05-0405, it directed Arizona-American Water Company to transfer the items from account 105 to the appropriate plant in service accounts, even though the items were not in service at the end of the test year or at the time of the hearing.

Post Test Year Plant – Pinewood Electrical Panel

Q. IS THE ELECTRICAL PANEL LOCATED IN THE PINEWOOD SYSTEM AND MENTIONED ON PAGE 15 (LINES 3 – 10) AND LISTED ON SCHEDULE JMR-RB2 (PAGE 2, LINE 14) OF YOUR REVENUE REQUIREMENT REBUTTAL TESTIMONY IN SERVICE AT THIS TIME?

A. Yes. Service was established to the new electrical panel on Friday July 10, 2009. On August 11, 2009, the Company filed supplemental responses to RUCO data request 1.31 and Staff data request AII 3-22, which I have attached as Exhibits JMR-RJ4, indicating such.

Summary of Remaining Plant Items in Dispute

Q. HAVE YOU PREPARED AN UPDATED SCHEDULE WHICH SUMMARIZES THE REMAINING PLANT ITEMS THAT ARE IN DISPUTE?

A. Yes. Schedule JMR-RJ2 summarizes the remaining plant items that are in dispute in this proceeding. Column H of Schedule JMR-RJ2 provides the Company's explanation for why these remaining items should be included in rate base.

B. Income Statement

Tank Maintenance

Q. ON PAGE 9 (LINES 20 – 26) OF HIS SURREBUTTAL TESTIMONY, MR. IGWE CLAIMS THE COMPANY'S PROPOSED TANK MAINTENANCE ACCRUAL IS NOT SUPPORTED BY "EMPIRICAL RECORDS", AND HE PRESENTS A TABLE WHICH HE CLAIMS SHOWS THE ACTUAL TANK MAINTENANCE COSTS INCURRED FROM 2001 TO 2007. IS MR. IGWE'S TABLE CORRECT?

A. No. Mr. Igwe's table contains errors and understates the amounts actually spent on tank maintenance. For example, Mr. Igwe's table indicates that the Company only spent $224,228 on tank maintenance in 2001, when in reality the Company spent $325,888. Likewise, Mr. Igwe's table indicates that the Company only spent $145,214 on tank maintenance in 2003, when in reality the Company spent more than twice that amount, $319,059. Mr. Igwe's table also indicates that the Company only spent $403,517 on tank maintenance in 2005, when in reality the Company spent $764,188. I have attached the sub-ledgers for account 265 – Reserve for Tank Maintenance as Exhibit JMR-RJ5, which shows the actual costs the Company incurred from 2001 through 2007 for tank maintenance. Mr. Igwe doesn't indicate what records he relied on when creating his table of actual tank maintenance costs. In any case, his *post hoc* justification of Staff's tank maintenance expense normalization cannot be relied on.

Q. DOESN'T MR. IGWE'S TABLE PROVIDE OTHER USEFUL INFORMATION REGARDING THE COST OF TANK MAINTENANCE GOING FORWARD?

A. No. Staff still fails to recognize the fact that tank interiors are only recoated once every 14 years, and not every seven years as Mr. Igwe's table would suggest, assuming it was correct in the first place. As a result, Staff's table tells us nothing about the cost associated with tanks that are scheduled to be

rehabilitated in coming years. Further, a seven-year average of tank maintenance expense fails to account for the cost of maintaining the interior and exterior of any of the Company's new tanks constructed after 2000, none of which would have been rehabilitated during the seven-year period depicted in Staff's table.

Since 2001, the Company has added 18 steel tanks with a total capacity of 7,029,000 gallons. The total interior surface area of these new tanks is 180,792 sq. feet, and the total exterior surface area is 100,525 sq. feet. During this same period, the Company retired three tanks with a total capacity of approximately 53,800 gallons. The interior and exterior surface areas of these tanks are approximately 2,925 sq. feet, and 2,156 sq. feet, respectively. Thus, the net increase in the interior and exterior surface areas since 2001 is 177,867 sq. feet and 98,369 sq. feet, respectively. The cost of maintaining this net increase is neither accounted for in Staff's table, nor in its proposed level of tank maintenance expense in this proceeding.

Q. YOU MENTIONED THAT STAFF UNDERSTATED THE COMPANY'S ACTUAL TANK MAINTENANCE COSTS INCURRED IN 2005 BY $360,671 ($403,517 - $764,188). DID THIS MISTAKE CARRY OVER INTO STAFF'S PROPOSED ADJUSTMENT TO TANK MAINTENANCE EXPENSE IN THIS PROCEEDING?

A. Yes. I did not initially notice this error when reviewing Staff's direct testimony. When calculating Staff's three-year average of actual tank maintenance expense for the Casa Grande system, Mr. Igwe assumed the Company spent $0 on tank maintenance in 2005 (*see* Igwe Casa Grande Schedule AII-8). Actually, the Company spent $360,671 on tank maintenance in the Casa Grande system in 2005. Correcting this error increases Staff's three-year normalized tank maintenance expense for the Casa Grande system by $120,223, from $80,163 to $200,386. On a company-wide basis, correcting this error increases Staff's

three-year normalized tank maintenance expense by $120,224, from $448,090 to $568,314.

Q. DO YOU HAVE ANY REVISIONS OR CORRECTIONS TO YOUR OWN REBUTTAL TESTIMONY REGARDING THIS ISSUE?

A. Yes. On page 27 (line 2) of my revenue requirement rebuttal testimony, I stated that the reserve-accrual accounting method of recovering tank maintenance expense has operated efficiently and successfully for over 30 years. In fact, this method of accounting for tank maintenance expense has been employed by the Company and approved by the Commission since at least 1960, or approximately 49 years.

Q. WHY IS THIS IMPORTANT?

A. This is important because, Staff recommends that the Commission order the Company to cease using the reserve-accrual accounting method to account for tank maintenance. Assuming Staff's recommendation was adopted, the Company will only recover the actual cost of tank maintenance to the extent such costs are incurred during the three years Staff chooses to average. This is because, as I've stated several times before, these costs *do not recur on an annual basis* – a fact that Staff still does not recognize.

Unfortunately, Mr. Igwe demonstrates Staff's lack of understanding of the Company's tank maintenance program and the Commission's longstanding methodology for allowing the Company to recover these costs when he states on page 10 (lines 4 – 5) of his surrebuttal testimony that the data in his table "shows that the cost of tank maintenance is not a fixed amount as the Company proposes, but varies from year to year." Mr. Igwe's statement is exactly the point the Company has made throughout this proceeding. The fundamental purpose of the reserve-accrual accounting treatment is to level out widely fluctuating year-to-year tank maintenance expenditures in individual systems. The accrual permits rates to be set on average costs over a tank maintenance cycle rather

than a single year's actual expenditures, or in this case an average of three years of actual expenditures, which may not even include any actual costs.

Further, on page 2 (lines 14 – 16) of his surrebuttal testimony, Mr. Igwe criticizes the Company for requesting the approval of various adjuster mechanisms, some of which have been used by the Company for over 25 years, by stating that the Company is "advocating a new paradigm of rate regulation in Arizona." Mr. Igwe then goes on to advocate a change in the methodology the Commission has allowed the Company use to account for tank maintenance for the last 49 years.

Q. WHAT HAPPENS IF RATES ARE SET BASED ON A SINGLE YEAR OF ACTUAL TANK MAINTENANCE EXPENDITURES, OR AN AVERAGE OF THREE YEARS ACTUAL EXPENDITURES?

A. In the case of the Company's Rimrock system, the Company would only recover $92 in annual tank maintenance expense, as recommended by Staff in this proceeding. And, because the Company would no longer be permitted to account for the cost of tank maintenance using the reserve-accrual method, which essentially allows those funds to be "banked" until a tank needs to be painted, the Company would be forced to "use it or lose it". In the case of Rimrock, the Company would be forced to abandon its Commission-approved 7-year and 14-year tank maintenance schedule, and instead budget no more than $92 per year to be expensed on tank maintenance. I should note that the smallest tank in the Rimrock system costs approximately $20,500 to paint. In other words, under Staff's treatment the Company would be forced to manage its tank maintenance program around rate case test years, which may not coincide with the time frames in which tanks actually need to be rehabilitated.

Q. DOES STAFF EXPLAIN IN ITS SURREBUTTAL TESTIMONY WHY IT CHOSE NOT TO EVALUATE THE COMPANY'S PROPOSED TANK MAINTENANCE ACCRUAL USING THE RICHARDSON PROCESS PLANT CONSTRUCTION ESTIMATING STANDARDS, AS IT DID IN EACH OF THE COMPANY'S PRIOR TWO RATE PROCEEDINGS?

A. No. Staff provides no explanation as to why it didn't check the reasonableness of the Company's proposed tank maintenance accrual using the same methods it used, and the Commission approved, in the Company's last two rate proceedings. Staff also doesn't explain why its method of averaging three years of actual costs for an expense that only occurs at intervals of 7 and 14 years is superior to the Richardson Process it used in the Company's last two rate proceedings. The Richardson Process confirmed the validity of the Company's revised accruals in each of the Company's prior two rate proceedings, and the manner in which the Company calculates its revised accrual has not changed since those proceedings.

Normalization of T&D Expense Accounts 663 and 673

Q. DOES STAFF EXPLAIN IN ITS SURREBUTTAL TESTIMONY HOW THE COMPANY IS SUPPOSED TO INCREASE ITS EFFORTS TO REDUCE LOST AND UNACCOUNTED FOR WATER, WHILE AT THE SAME TIME REDUCING THE AMOUNT IT SPENDS ON SUCH EFFORTS?

A. No. Staff hasn't explained why it proposes an adjustment to disallow a portion of the costs charged to maintenance expense account 673, while at the same time recommending that the Commission order the Company to reduce lost and unaccounted for water to below 10%, when a portion of the costs related to such efforts are charged to account 673. As I stated on page 37 (lines 12 – 16) of my revenue requirement rebuttal testimony, it is unreasonable for Staff to assume that the Company can reduce the level of lost and unaccounted for water

reported in the test year by spending less money than it expended on such efforts during the test year.

Staff's conflicting recommendation is no different than if Staff's accounting witness were to recommend a significant disallowance of test year payroll expense at the same time Staff's engineering witness was recommending that the Commission order the Company to increase staffing levels.

Q. DOES STAFF CONTINUE TO IGNORE OTHER CHANGES THAT WOULD HAVE THE OPPOSITE INCOME EFFECT OF STAFF'S ADJUSTMENT TO NORMALIZE ACCOUNTS 663 AND 673?

A. Yes. Staff continues to ignore significant post-test year reductions in usage related to construction water sales, as well as 18% and 9% reductions in usage from test year levels by Abbott and Frito Lay, respectively. I quantified the effect of these reductions in my rebuttal testimony. These reductions represent unrealized revenues of $586,591, $120,973, and $22,044, respectively (Reiker rev. req. rebuttal, pp 35 – 42). Instead of taking these additional factors into consideration, Mr. Igwe brushes them off in passing by stating that the Company should have proposed "pertinent adjustments to compensate for lower costs of production and distribution" (Igwe surrebuttal, p. 14, at 15 – 18).

Q. HAVE YOU QUANTIFIED THE REDUCTION IN PUMPING AND TREATMENT EXPENSES RELATED TO THE REDUCTIONS IN USAGE BY THESE CUSTOMERS?

A. Yes. The following table shows the amount of unrealized revenues as well as the savings in pumping and treatment costs associated with reductions in usage experienced in 2008:

	Unrealized Revenues	Savings in Pumping & Treatment Expense	Net Unrealized Revenues
Construction Sales	$586,591	($98,523)	$488,068
Abbott Laboratories	120,973	(23,096)	97,877
Frito Lay	22,044	(4,774)	17,270
	$729,608	($126,393)	$603,215

As shown above, the net reduction in revenues is nearly twice the amount of Staff's proposed reduction to accounts 663 and 673 of $313,300. Staff simply failed to consider these types of changes when proposing to reduce the Company's expenses by using historical averages. Likewise, Staff failed to take into consideration other areas of change.

Q. WHAT ARE YOU REFERRING TO?

A. I am referring to pending increases in the cost of purchased power provided by the Company's two largest energy providers. On June 12, 2009, Staff filed its proposed settlement agreement in APS' currently-pending rate proceeding (Docket No. 08-0172). That settlement agreement supports an average increase in the cost of electric power of 7.8%. Additionally, on July 14, 2009, the Company received a notice from SRP indicating an average increase in the cost of electric power of 8.8%, which SRP proposes to implement in November 2009, which is before the time frame in which the Commission is expected to make a final ruling in this proceeding. Neither of these rate increases is reflected in the Company's adjusted test year operating expenses, and without a purchased power adjuster the Company will have no way of recovering these additional costs.

Q. HAVE YOU QUANTIFIED THESE INCREASES?

A. Yes. The increase in the cost of electric power represents an additional $245,270 in purchased power expense above and beyond what is already reflected in the adjusted test year in this proceeding. Neither Staff nor RUCO

has taken these changes into consideration when proposing the types of normalizing adjustments they recommend.

Q. ARE THE REDUCTIONS IN USAGE BY ABBOTT AND FRITO LAY THAT THE COMPANY HAS EXPERIENCED AND EXPECTS TO CONTINUE TO EXPERIENCE RELATED TO THE ECONOMIC SLOW-DOWN, AS MR. IGWE SUGGESTS ON PAGE 14 (LINES 10 – 12) OF HIS SURREBUTTAL TESTIMONY?

A. No. Nowhere in Abbott witness Mr. Chasse's testimony does he state that Abbott's reduced usage is the result of an economic slowdown or reduced manufacturing output, which would imply a future increase in usage if the economy rebounds. In fact, Mr. Chasse identifies "responsible water use" as one of Abbott's strategic environmental priorities (Chasse direct, p. 4, lines 13 – 14). Additionally, the New York Times article attached to Mr. Garfield's rate design/cost of service rebuttal testimony as Exhibit WMG-RB5 reports that Frito Lay's efforts to reduce water consumption are part of its effort to establish "green credentials" and not a result of the slowing economy. Those efforts will permanently reduce the quantities of water Frito Lay requires at its plant..

Desert Wells Pumping Station Maintenance Accrual Account

Q. WHAT IS THE DESERT WELLS PUMPING STATION MAINTENANCE ACCRUAL ACCOUNT?

A. The Desert Wells Pumping Station Maintenance Accrual Account is a Commission-approved reserve-accrual account that functions in the same manner as the Commission-approved tank maintenance accrual account. With the Commission's approval, the Company established this account for the purpose of rebuilding the pumps and motors that move water approximately 26 miles uphill from the Desert Wells pumping station near Florence Junction to the Town of Superior. These pumps are rebuilt every seven to eight years at a cost

ranging from $100,000 to $150,000. Because these costs do not recur on an annual basis, the Commission approved the Company's use of a reserve-accrual account to level out fluctuating year-to-year pump maintenance expenditures. The accrual account permits rates to be set on average costs over a pump maintenance cycle rather than a single year's actual expenditures. Because the 26-mile above-ground pipeline is just as crucial to the Company's service to the Superior system as the pumps and motors, the Company requested in its application that it be permitted to charge the cost of maintaining and repairing the pipeline against the pump maintenance accrual account.

Q. HOW DOES THE ACCOUNT WORK?

A. The Commission-approved accrual amount is debited to expense account 633.1 - Pumping Maintenance expense, and credited to liability account 265.1 – Reserve for Pump Maintenance. The actual costs of rebuilding and maintaining the pumps, when incurred, are debited to account 265.1 – Reserve for Pump maintenance. In other words, because these costs do not recur on an annual basis, a balance is accumulated in the reserve account and that balance is reduced as actual costs are incurred. The Commission-authorized accrual is that amount which results in the projected balance of the reserve account equaling $0 at the end of the maintenance cycle. The process I've just described is the same methodology under which the Company's tank maintenance accrual has operated since 1960.

Q. WHAT IS STAFF'S RECOMMENDATION WITH REGARD TO THIS MAINTENANCE ACCRUAL ACCOUNT?

A. Staff recommends that the Company cease using the reserve-accrual method of accounting for these costs, and instead spend no more than $53,249 rebuilding the Desert Station pumps and motors in a given year.

Q. DOES STAFF EXPLAIN IN ITS SURREBUTTAL TESTIMONY WHY IT IS APPROPRIATE TO DEPART FROM THE COMMISSION'S ESTABLISHED METHOD OF ACCOUNTING FOR THESE COSTS?

A. No. Although Mr. Igwe states that Staff finds it appropriate to eliminate this established method, he provides no basis or explanation for Staff's recommendation. As I stated previously in my discussion of tank maintenance, the reserve-accrual account levels out fluctuating year-to-year expenditures and the Commission already has concluded that it is the appropriate way to account for this type of expense.

Q. DO YOU BELIEVE STAFF'S RECOMMENDATION TO ELIMINATE THE RESERVE-ACCRUAL ACCOUNT IS APPROPRIATE GIVEN ITS CONCURRENT RECOMMENDATION REGARDING LOST AND UNACCOUNTED FOR WATER?

A. No, I do not. The pipeline is a major contributor to the high level of lost and unaccounted for water in the Superior system, and the Company's proposal in this case would allow it to recover the costs associated with its maintenance, which does not recur on a regular basis.

C. Depreciation

CIAC Amortization Rate

Q. HOW DO YOU RESPOND TO MR. IGWE'S ASSERTION ON PAGE 18 (LINES 15 – 23) OF HIS SURREBUTTAL TESTIMONY THAT STAFF USED THE CORRECT CIAC AMORTIZATION RATE WHEN DEVELOPING ITS RECOMMENDED REVENUE REQUIREMENT?

A. Staff's assertion is not correct. Had Mr. Igwe read the Commission's decision in the Company's prior Eastern group rate proceeding (Decision No. 66849), or reviewed the work papers in the Company's prior Western group rate proceeding, he would know that Staff used the incorrect CIAC amortization rate

in this proceeding. The correct CIAC amortization rate, and the rate approved by the Commission in the Company's last two rate proceedings, is 2.00%. Mr. Igwe is mistaken in assuming he used the correct CIAC amortization rate when developing Staff's proposed revenue requirement in this proceeding.

In Decision No. 66849, dated March 19, 2004, the Commission said:

> ...Staff calculates the composite depreciation rate by dividing each depreciation expense by its depreciable plant. For CIAC, Staff's calculation resulted in an amortization rate of 2.34 percent.
>
> ...Arizona Water asserts that a composite rate for contributed plant should be based on the annual depreciation associated with the individual plant accounts that include contributed plant, in order to match the CIAC amortization rate to the depreciation rates for those specific accounts.
>
> We agree with Arizona Water that consistency with the move to individual component depreciation rates requires consideration of the individual plant accounts that include contributed plant (*i.e.*, transmission and distribution mains, fire sprinkler caps, services, meters, and hydrants). Based on consideration of the depreciation rates these individual plant accounts results in an Eastern Group composite CIAC amortization rate of 2.00 percent (Ex. A-12, at 27; Ex. S-55). The Company's recommendation for CIAC amortization shall be adopted.

The Commission subsequently adopted the same 2.00% CIAC amortization rate in the Company's Western group rate proceeding in Docket No. 04-0650.

Q. HOW DID STAFF CALCULATE ITS PROPOSED CIAC AMORTIZATION RATE IN THIS PROCEEDING?

A. Staff used the same methodology that the Commission rejected in the above excerpt from Decision No. 66849. Mr. Igwe's proposed CIAC amortization rate is a composite rate based on *all* depreciable plant accounts, including those accounts such as office furniture and power operated equipment which do not typically include contributed plant. To make matters worse, Mr. Igwe calculates a different CIAC amortization rate for each system – even those systems that Staff's rate design witness proposes to fully consolidate. This is yet another

example of the types of conflicting recommendations made by Staff in this proceeding.

Q. HOW DO YOU RESPOND TO MR. IGWE'S STATEMENT ON PAGE 18 (LINES 19 – 20) OF HIS SURREBUTTAL TESTIMONY THAT "AMORTIZATION OF CIAC BASED ON WEIGHTED AVERAGE DEPRECIATION RATE IS EMPLOYED WHEN A UTILITY CANNOT IDENTIFY THE SPECIFIC PLANT ITEMS COMPROMISING ITS CIAC BALANCE"?

A. Mr. Igwe appears to be setting forth his own ideas on this issue. In any case, Mr. Igwe's stated policy doesn't make sense. We know that plant accounts such as Communications Equipment, Power Operated Equipment, Tools, Shop, & Garage Equipment, and Office Furniture (including computers), all of which have relatively high depreciation rates, generally are not included plant that was contributed by developers. However, because a company has not identified the specific assets that have been contributed, Staff would have us revert to an inaccurate calculation that includes these accounts. When making any type of calculation one should rely on the best information available. The Commission agreed with this rule of thumb when it ruled in Decision No. 66849 that the composite CIAC amortization rate should only include those accounts which typically include contributed plant (i.e. T&D mains, fire sprinkler taps, services, meters, and hydrants).

Q. WHAT EFFECT WILL THE ADOPTION OF STAFF'S PROPOSED CIAC AMORTIZATION RATES IN THIS PROCEEDING HAVE ON THE COMPANY?

A. Staff's CIAC amortization rates range from a low of 2.37% in the Ajo system to a high of 4.08% in the Stanfield system. In the case of Stanfield, if Staff's proposed CIAC amortization rate of 4.08% is adopted in this proceeding, contributions will be fully amortized in approximately half the time that the plant that was contributed will reach the end of its useful life and be fully depreciated. More importantly, the Company will be deprived of cash flow in the near-term that

is needed to maintain and upgrade its systems and reduce lost and unaccounted for water, among other things.

Q. HAVE YOU QUANTIFIED THE REDUCTION IN CASH FLOW THAT WILL RESULT IF STAFF'S CIAC AMORTIZATION RATES ARE ADOPTED IN THIS PROCEEDING?

A. Yes. In Schedule JMR-RJ3 I have calculated the expected reduction in cash flow that will result if Staff's proposed CIAC amortization rates are adopted in this proceeding. As shown on page 18, column E, line 49 of Schedule JMR-RJ3, the reduction in cash flow resulting from the adoption of Staff's proposed CIAC amortization rates in this proceeding is $254,802. Internally-generated cash flow represents a critical source of funds used by the Company to maintain and improve its systems, and to provide continued and reliable service to the customers.

Q. IS MR. IGWE CORRECT WHEN HE CLAIMS ON PAGE 19 (LINES 11 – 15) OF HIS SURREBUTTAL TESTIMONY THAT THE "COMPANY'S ASSUMPTION OF A 2 PERCENT CIAC AMORTIZATION RATE FOR ALL ITS SYSTEMS IS ERRONEOUS"?

A. No. Had Mr. Igwe done the analysis, it would have shown that the correct CIAC amortization rate based only on those accounts which typically include contributed plant is in fact 2.00 percent. In Schedule JMR-RJ4, I have calculated the theoretically correct CIAC amortization rate for each of the Company's water systems. As shown in the schedule, the theoretically-correct and appropriate CIAC amortization rate is in fact 2.00 percent in each of the Company's water systems. Thus, a 2.00 percent CIAC amortization rate is specific to each of the Company's systems, and because it only reflects plant accounts that typically include contributed plant, is superior to Staff's composite depreciation rate.

IV. Rejoinder to RUCO

A. Rate Base

Property Held for Future Use

Q. MR. COLEY STATES ON PAGE 8 (LINES 1 – 18) OF HIS SURREBUTTAL TESTIMONY THAT BASED ON THE COMPANY'S TIME FRAME AND DETERIORATED EARNINGS, ITS PLANS FOR PLACING PROPERTY HELD FOR FUTURE USE IN SERVICE ARE SPECULATIVE. DO YOU HAVE A RESPONSE?

A. Yes. To begin with, I am not aware of a set time frame under which a utility's plan to place property held for future use into service must be implemented in order for the Commission to consider it for rate base treatment. However, in Professor Charles Phillips' treatise on the subject he provides a general guideline:

> The rule that most commissions follow in deciding whether to include or exclude such property is one based upon a time limitation; that is, if the property has an expected in-service date within a reasonable time period (*commonly two to ten years*), it is included in rate base. (emphasis added)

I have attached relevant portions of Professor Phillips' book as Exhibit JMR-RJ6.

Post Test Year Plant

Q. HOW DO YOU RESPOND TO MR. COLEY'S TESTIMONY ON PAGES 10 (LINES 18 – 23) AND 11 (LINES 1 – 5) REGARDING POST TEST YEAR PLANT?

A. Mr. Coley states that the matching principle is a fundamental principle of ratemaking, and he claims that making pro forma adjustments to test year plant balances would violate that principle. However, Mr. Coley doesn't explain why the types of pro forma adjustments to test year revenues and expenses that he agrees with, such as recognizing post-test year increases in the cost of

purchased power or property tax assessment ratios that do not go into effect until three years after the test year, do not violate the matching principle. Mr. Coley also states that "the absence of matching misrepresents the meaning and usefulness of operating income and rate base for measuring the fairness and reasonableness in setting rates."

Q. DO YOU KNOW WHAT MR. COLEY MEANS BY THIS LAST STATEMENT?

A. No, I do not. However, I do know what a fair and reasonable rate is.

Q. WHAT IS A FAIR AND REASONABLE RATE?

A. A fair and reasonable rate is one that allows the Company to recover no more, and no less, than its cost of providing service. The purpose of this proceeding is to set rates that are fair and reasonable during the period in which such rates will be in effect.

Q. HAS RUCO SHOWN THAT MAKING PRO FORMA ADJUSTMENTS TO TEST YEAR PLANT BALANCES WOULD RESULT IN A RATE THAT ALLOWS THE COMPANY TO RECOVER MORE THAN ITS COST OF PROVIDING SERVICE?

A. No.

Q. IS THE HIGHWAY 179 IMPROVEMENT PROJECT LOCATED IN THE SEDONA SYSTEM AND DISCUSSED ON PAGES 21 (LINES 21-28) AND 22 (LINES 1-3) OF YOUR REVENUE REQUIREMENT REBUTTAL TESTIMONY COMPLETE?

A. Yes. This project is complete and the pipeline is currently delivering water to the Company's Sedona customers. Exhibit JMR-RJ4 is a copy of the Company's supplemental responses to RUCO data request 1.31 and Staff data request All 3-22 indicating that this project is now complete.

B. Income Statement

Test Year Overtime Hours

Q. DO YOU HAVE ANY RESPONSE TO MR. RIGSGBY'S COMMENTS ON PAGE 5 (LINES 1 – 6) OF HIS SURREBUTTAL TESTIMONY REGARDING RUCO'S ADJUSTMENT TO TEST YEAR OVERTIME HOURS?

A. Yes. RUCO continues to propose an adjustment to reduce the Company's labor expense by assuming that the test year level of overtime hours is not representative of the level of overtime hours that will be incurred going forward. As I've stated previously, it is unreasonable to single out certain items for normalization while ignoring other areas of change that would have the opposite income effect. Increases in the cost of purchased power above and beyond what is reflected in the adjusted test year are expected to be in the range of $250,000. SRP's portion of this increase is expected to go into effect before new rates are approved by the Commission in this proceeding.

Further, RUCO focuses on test year overtime hours and doesn't address whether or not the overall level of adjusted test year payroll expense is representative of conditions expected to be in place during the period that new rates will be in effect. In 2008, the year after the test year, the Company's total payroll expense was $9,214,554. This amount is over $280,000 higher than the level of payroll expense proposed by the Company and recommended by Staff, and over $430,000 higher than the level of payroll expense RUCO proposes in this proceeding. RUCO has not shown that the level of payroll expense that is necessary to provide service is any lower than the adjusted test year amount, or the amount actually incurred in the subsequent year.

Q. DOES THIS CONCLUDE YOUR REVENUE REQUIREMENT REJOINDER TESTIMONY?

A. Yes.

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Summary Results of Operations

Line No.	Description	Total Company [A] Actual 12/31/2008	[B] Pro Forma Company - As Filed 12/31/2008	[C] Pro Forma Company - Rebuttal 12/31/2008	[D] Pro Forma Staff - Direct 12/31/2008	[E] Pro Forma RUCO - Direct 12/31/2008
		2008 Results of Operations				
1						
2	Water Revenues [1]	$ 41,917,395	$ 56,300,024	$ 54,742,572	$ 50,516,788	$ 49,437,696
3	PPAM Revenue	20,528	-	-	-	-
4	ACRM Revenue	3,522,963	-	-	-	-
5	MAP Surcharge Revenue	(2,400)	(2,400)	(2,400)	(2,400)	(2,400)
6	Sales Taxes	4,171,395	5,166,024	5,023,108	4,635,338	4,536,318
7	Total Operating Revenue [2 + 3 + 4 + 5 + 6]	$ 49,629,881	$ 61,463,649	$ 59,763,280	$ 55,149,727	$ 53,971,614
8						
9						
10	Operating Expenses[2]	40,671,906	41,894,988	41,752,072	41,364,302	41,265,282
11	Income Taxes[3]	2,188,428	6,097,946	5,441,604	3,660,772	3,206,021
12	Operating Income [7 - 10 - 11]	$ 6,769,547	$ 13,470,715	$ 12,569,604	$ 10,124,652	$ 9,500,311
13						
14	Other Income and					
15	Deductions	772,488	772,488	772,488	772,488	772,488
16	Interest Expense[4]	4,598,464	6,303,946	6,303,946	6,303,946	6,303,946
17	Net Income [12 - 15 - 16]	$ 2,943,571	$ 7,939,257	$ 7,038,146	$ 4,593,194	$ 3,968,853
18						
19						
20						
21	Short-Term Debt	$ 7,300,000	$ 2,304,315	$ 3,205,425	$ 5,650,377	$ 4,625,095
22						
23	Long-Term Debt	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000
24						
25	Common Equity	69,671,689	74,667,374	73,766,264	71,321,312	72,346,594
26						
27	Total Capital	$ 151,971,689	$ 151,971,689	$ 151,971,689	$ 151,971,689	$ 151,971,689
28						
29						
30						
31	Return on Average					
32	Invested Capital	4.59%	9.13%	8.52%	6.86%	6.44%
33						
34	Return on Year End					
35	Capital	4.45%	8.86%	8.27%	6.66%	6.25%
36						
37	Return on Average					
38	Common Equity	4.18%	10.90%	9.72%	6.45%	5.54%
39						
40	Return on Year End					
41	Common Equity	4.22%	10.63%	9.54%	6.44%	5.49%
42						
43						
44	Pre-Tax Interest Coverage [(12 + 11) ÷ 16]	1.95	3.10	2.86	2.19	2.02
45						
46						
47						

48 [1]Pro forma water revenues reflect reductions in usage from test year levels based
49 on actual reductions by residential, commercial, industrial, and construction customers.
50 % reductions in revenues are; Company: 4.26%, Staff: 4.65%, RUCO: 4.23%
51 [2]Adjusted to reflect increased sales tax & 5% increase in purchased power to reflect
52 pending APS & SRP rate increases.
53 [3]Pro Forma includes net effect of additional revenues and interest expense.
54 [4]Pro Forma includes $1,705,482 in additional interest expense
55 to reflect full year of debt service on Series M bonds.

ARIZONA WATER COMPANY
Test Year Ended Decemer 31, 2007
Docket No. W-01445A-08-0440
Summary of Disputed Staff Disputed Plant

Line No.	[A] System	[B] Description	[C] DWR Well No.	[D] Original Cost	[E] Accumulated Depreciation At 12/31/2007	[F] CIAC Amt	[G] NARUC Acct.	[H] Notes
1	Superstition	Ranch 160 Well #1	55-583450	$ 316,447	$ 60,109	n/a	314	Plant held for future use
2	Superstition	Ranch 160 Well #2	55-588620	$ 484,606	$ 79,500	$ 484,606	314	Plant held for future use
3	Superstition	Fence - Queen Creek Pump Station		$ 7,306	$ 2,255	n/a	321	Currently in use
4	Superstition	5 Pumps/Panel - Queen Creek Pump Station		$ 57,030	$ 80,620	n/a	325	Plant held for future use - was previsously in use
5				$ 865,389	$ 222,484	$ 484,606		
6								
7	Miami	Well #23	55-528263	$ 77,542	$ 34,813	n/a	314	Plant held for future use - was previsously in use
8	Miami	2 Booster Pumps(100 hp)/Panel - 'Bandy Heights Well #17		$ 201,695	$ 41,509	n/a	325	Currently in use
9				$ 279,237	$ 76,321	$ -		
10								
11	Casa Grande	Well #34	55-616588	$ 22,742	$ 22,923	n/a	314	Plant held for future use - was previsously in use
12	Casa Grande	Well #9	55-616594	$ 136,862	$ 173,397	n/a	314	Plant held for future use - was previsously in use
13	Casa Grande	Well #14	55-616598	$ 159,393	$ 135,923	n/a	314	Currently in use - Co. originally provided incorrect DWR No. 55-613443
14	Casa Grande	Inactive	55-616597	$ 248,844	$ 167,037	n/a	314	Plant held for future use - was previsously in use
15				$ 567,841	$ 499,279	$ -		
16								
17	Stanfield	6,000 Gallon Pressure Tank - Table Top Well #3		$ 2,500	$ 2,960	n/a	321	Plant held for future use - was previsously in use
18	Stanfield	Liquid Chlorinator & Building - Table Top Well #3		$ 35,041	$ 7,904	n/a	332	Plant held for future use - was previsously in use
19				$ 37,541	$ 10,863	$ -		
20								
21	White Tank	Fence - Mar West Well #5		$ 2,430	$ 1,757	n/a	314	Currently in use
22	White Tank	5,000 Gallon Pressure Tank - Mar West Well #5		$ 1,752	$ 1,257	n/a	321	Plant held for future use - was previsously in use
23	White Tank	2 Booster Pumps (20 hp & 10 hp)/Panels - Mar West Well #5		$ 33,352	$ 25,950	n/a	325	Plant held for future use - was previsously in use
24	White Tank	Hypochlorinator Cabinet - Well #8		$ 746	$ 130	n/a	331	Plant held for future use - was previsously in use
25	White Tank	Hypochlorinator Cabinet - Well #7 - Warehouse		$ 158	$ 154	n/a	331	Plant held for future use - was previsously in use
26				$ 38,438	$ 29,248	$ -		
27								
28	Coolidge	Well #1	55-616686	$ 16,588	$ 33,046	n/a	314	Plant held for future use - was previsously in use
29	Coolidge	Well #11	55-210293	$ 839,736	$ 13,142	$ 839,736	314	Plant held for future use
30				$ 856,324	$ 46,188	$ 839,736		
31								
32	Lakeside	Well #1	55-616581	$ 313,824	$ 207,265	n/a	314	Plant held for future use - was previsously in use
33				$ 313,824	$ 207,265	$ -		
34								
35	Sedona	Sedona Golf Resort Well	55-518969	$ 973,264	$ 441,132	n/a	314	Currently in use - Co. originally provided incorrect DWR No. 55-516201
36	Sedona	Well #6	55-616662	$ 103,222	$ 153,723	n/a	314	Currently in use
37	Sedona	8' x 12' Block Building - Sunup Well Site		$ 469	$ 310	n/a	314	Currently in use
38	Sedona	Fence - Sunup Well Site		$ 11,689	$ 5,601	n/a	314	Currently in use
39	Sedona	5 hp Pump/Panel - Sunup Well Site		$ 6,761	$ 2,889	n/a	325	Plant held for future use - was previsously in use
40				$ 1,095,405	$ 603,655	$ -		
41								
42	Pinewood	Electrical Panel (WA 1-4308 - Post Test Year) - Well No. 10		$ 40,553	$ 1,191	n/a	325	Placed in service on July 10, 2009
43				$ 40,553	$ 1,191	$ -		
44								
45	Totals			$ 4,094,552	$ 1,696,494	$1,324,342		

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Superstition [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	5,644	note_1	168		
4	303	Other Intangibles	4,630	note_1	231		
5	310.1	Water Rights	362,960	0.00%	-		
6	310.3	Other Source of Supply Land	63,190	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	5,102,614	3.13%	159,712		
9	320	Pumping Plant Land	14,187	0.00%	-		
10	321	Pumping Plant Structures & Improvements	156,041	2.86%	4,463		
11	325	Electtric Pumping Equipment	7,522,163	5.88%	442,303		
12	328	Gas Engine Equipment	-	4.00%	-		
13	330	Water Treatment Plant Land	-	0.00%	-		
14	331	Water Treatment Structures & Improvements	17,821	2.50%	446		
15	332	Water Treatment Equipment	6,867,404	2.86%	196,408		
16	340	Transmission and Distribution Land	185,773	0.00%	-		
17	342	Storage Tanks	4,453,851	2.00%	89,077		
18	343	Transmission & Distribution Mains	47,180,751	1.79%	844,535		
19	344	Fire Sprinkler Taps	570,481	2.00%	11,410		
20	345	Services	11,514,584	2.38%	274,047		
21	346	Meters	1,716,039	4.55%	78,080		
22	348	Hydrants	3,292,465	1.82%	59,923		
23	389	General Plant Land	47,015	0.00%	-		
24	390	General Plant Structures	726,045	2.50%	18,151		
25	390.1	Leasehold Improvements	811,840	note_2	23,132		
26	391	Office Furniture & Equipment	346,496	6.67%	23,111		
27	393	Warehouse Equipment	4,520	5.00%	226		
28	394	Tools, Shop & Garage Equipment	285,746	4.00%	11,430		
29	395	Laboratory Equipment	65,742	5.00%	3,287		
30	396	Power Operated Equipment	35,915	6.67%	2,396		
31	397	Communication Equipment	618,135	6.67%	41,230		
32	398	Miscellaneous Equipment	48,323	3.33%	1,609		
33		Subtotal	$ 92,020,375		$ 2,285,373		
34							
35	Plus:	Phoenix Office	1,533,686		100,295		
36		Meter Shop	36,370		1,311		
37		Post-Test Year Plant	-		-		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ 1,570,056		$ 101,607		
40							
41	Less:	Contributions in Aid of Construction	$ 10,888,555	2.00%	$ 217,771	2.60%	$ 282,580
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 2,169,209		$ 2,104,400
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (64,809)
46							
47							
48							
49							
50							
51							

52 note_1 Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.
53 Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.
54 See supporting document \2007 Amortization of Intangibles.pdf\.
55 note_2 Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Bisbee [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	18,755	note_1	750		
4	303	Other Intangibles	24,121	note_1	1,206		
5	310.1	Water Rights	307,085	0.00%	-		
6	310.3	Other Source of Supply Land	4,033	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	538,724	3.13%	16,862		
9	320	Pumping Plant Land	7,054	0.00%	-		
10	321	Pumping Plant Structures & Improvements	33,537	2.86%	959		
11	325	Electtric Pumping Equipment	677,163	5.88%	39,817		
12	328	Gas Engine Equipment	171,885	4.00%	6,875		
13	330	Water Treatment Plant Land	-	0.00%	-		
14	331	Water Treatment Structures & Improvements	1,452	2.50%	36		
15	332	Water Treatment Equipment	44,949	2.86%	1,286		
16	340	Transmission and Distribution Land	5,044	0.00%	-		
17	342	Storage Tanks	369,280	2.00%	7,386		
18	343	Transmission & Distribution Mains	5,385,513	1.79%	96,401		
19	344	Fire Sprinkler Taps	51,566	2.00%	1,031		
20	345	Services	1,346,780	2.38%	32,053		
21	346	Meters	226,315	4.55%	10,297		
22	348	Hydrants	279,943	1.82%	5,095		
23	389	General Plant Land	2,384	0.00%	-		
24	390	General Plant Structures	16,438	2.50%	411		
25	390.1	Leasehold Improvements	8,234	note_2	175		
26	391	Office Furniture & Equipment	103,115	6.67%	6,878		
27	393	Warehouse Equipment	-	5.00%	-		
28	394	Tools, Shop & Garage Equipment	63,732	4.00%	2,549		
29	395	Laboratory Equipment	543	5.00%	27		
30	396	Power Operated Equipment	16,559	6.67%	1,104		
31	397	Communication Equipment	273,595	6.67%	18,249		
32	398	Miscellaneous Equipment	23,350	3.33%	778		
33		Subtotal	$ 10,001,150		$ 250,226		
34							
35	Plus:	Phoenix Office	306,245		20,027		
36		Meter Shop	7,262		262		
37		Post-Test Year Plant	-		-		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ 313,508		$ 20,289		
40							
41	Less:	Contributions in Aid of Construction	$ 452,659	2.00%	$ 9,053	2.80%	$ 12,688
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 261,462		$ 257,827
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (3,634)
46							
47							
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51							

52 note_1 Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.
53 Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.
54 See supporting document \2007 Amortization of Intangibles.pdf\.
55 note_2 Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Sierra Vista [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	-	note_1	-		
4	303	Other Intangibles	520	note_1	26		
5	310.1	Water Rights	27,536	0.00%	-		
6	310.3	Other Source of Supply Land	8,932	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	651,948	3.13%	20,406		
9	320	Pumping Plant Land	1,881	0.00%	-		
10	321	Pumping Plant Structures & Improvements	13,385	2.86%	383		
11	325	Electtric Pumping Equipment	687,455	5.88%	40,422		
12	328	Gas Engine Equipment	16,467	4.00%	659		
13	330	Water Treatment Plant Land	-	0.00%	-		
14	331	Water Treatment Structures & Improvements	14,812	2.50%	370		
15	332	Water Treatment Equipment	78,057	2.86%	2,232		
16	340	Transmission and Distribution Land	-	0.00%	-		
17	342	Storage Tanks	380,102	2.00%	7,602		
18	343	Transmission & Distribution Mains	3,090,123	1.79%	55,313		
19	344	Fire Sprinkler Taps	148,520	2.00%	2,970		
20	345	Services	1,158,606	2.38%	27,575		
21	346	Meters	216,066	4.55%	9,831		
22	348	Hydrants	354,634	1.82%	6,454		
23	389	General Plant Land	66	0.00%	-		
24	390	General Plant Structures	23,790	2.50%	595		
25	390.1	Leasehold Improvements	-	note_2	-		
26	391	Office Furniture & Equipment	73,017	6.67%	4,870		
27	393	Warehouse Equipment	-	5.00%	-		
28	394	Tools, Shop & Garage Equipment	27,670	4.00%	1,107		
29	395	Laboratory Equipment	1,978	5.00%	99		
30	396	Power Operated Equipment	17,203	6.67%	1,147		
31	397	Communication Equipment	231,004	6.67%	15,408		
32	398	Miscellaneous Equipment	$ 10,157	3.33%	338		
33		Subtotal	$ 7,233,925		$ 197,809		
34							
35	Plus:	Phoenix Office	158,657		10,375		
36		Meter Shop	3,762		136		
37		Post-Test Year Plant	-		-		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ 162,420		$ 10,511		
40							
41	Less:	Contributions in Aid of Construction	$ 1,089,317	2.00%	$ 21,786	2.89%	$ 31,513
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 186,533		$ 176,807
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (9,727)
46							
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51							
52	note_1	Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.					
53		Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.					
54		See supporting document \2007 Amortization of Intangibles.pdf\.					
55	note_2	Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.					

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	San Manuel [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	-	note_1	-		
4	303	Other Intangibles	334	note_1	17		
5	310.1	Water Rights	169,941	0.00%	-		
6	310.3	Other Source of Supply Land	-	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	5,560	3.13%	174		
9	320	Pumping Plant Land	7,000	0.00%	-		
10	321	Pumping Plant Structures & Improvements	14,110	2.86%	404		
11	325	Electtric Pumping Equipment	354,976	5.88%	20,873		
12	328	Gas Engine Equipment	-	4.00%	-		
13	330	Water Treatment Plant Land	2,000	0.00%	-		
14	331	Water Treatment Structures & Improvements	42,578	2.50%	1,064		
15	332	Water Treatment Equipment	1,354,012	2.86%	38,725		
16	340	Transmission and Distribution Land	69,500	0.00%	-		
17	342	Storage Tanks	98,403	2.00%	1,968		
18	343	Transmission & Distribution Mains	1,025,317	1.79%	18,353		
19	344	Fire Sprinkler Taps	100	2.00%	2		
20	345	Services	329,052	2.38%	7,831		
21	346	Meters	124,886	4.55%	5,682		
22	348	Hydrants	65,596	1.82%	1,194		
23	389	General Plant Land	-	0.00%	-		
24	390	General Plant Structures	20,223	2.50%	506		
25	390.1	Leasehold Improvements	35,214	note_2	-		
26	391	Office Furniture & Equipment	101,677	6.67%	6,782		
27	393	Warehouse Equipment	1,128	5.00%	56		
28	394	Tools, Shop & Garage Equipment	70,877	4.00%	2,835		
29	395	Laboratory Equipment	2,618	5.00%	131		
30	396	Power Operated Equipment	2,695	6.67%	180		
31	397	Communication Equipment	101,693	6.67%	6,783		
32	398	Miscellaneous Equipment	17,222	3.33%	574		
33		Subtotal	$ 4,016,715		$ 114,133		
34							
35	Plus:	Phoenix Office	103,312		6,756		
36		Meter Shop	2,450		88		
37		Post-Test Year Plant	-		-		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ 105,762		$ 6,844		
40							
41	Less:	Contributions in Aid of Construction	$ 742,146	2.00%	$ 14,843	3.38%	$ 25,091
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 106,134		$ 95,886
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (10,248)
46							
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52 note_1 Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.
53 Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.
54 See supporting document \2007 Amortization of Intangibles.pdf\.
55 note_2 Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Oracle [A] Test Year End Balance 12/31/2007	Oracle [B] Proposed Depreciation Rate	Oracle [C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	-	note_1	-		
4	303	Other Intangibles	418	note_1	21		
5	310.1	Water Rights	93,121	0.00%	-		
6	310.3	Other Source of Supply Land	24,693	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	882,293	3.13%	27,616		
9	320	Pumping Plant Land	2,742	0.00%	-		
10	321	Pumping Plant Structures & Improvements	72,185	2.86%	2,064		
11	325	Electtric Pumping Equipment	876,909	5.88%	51,562		
12	328	Gas Engine Equipment	-	4.00%	-		
13	330	Water Treatment Plant Land	-	0.00%	-		
14	331	Water Treatment Structures & Improvements	35,054	2.50%	876		
15	332	Water Treatment Equipment	69,020	2.86%	1,974		
16	340	Transmission and Distribution Land	19,680	0.00%	-		
17	342	Storage Tanks	306,126	2.00%	6,123		
18	343	Transmission & Distribution Mains	3,752,298	1.79%	67,166		
19	344	Fire Sprinkler Taps	-	2.00%	-		
20	345	Services	584,528	2.38%	13,912		
21	346	Meters	110,583	4.55%	5,032		
22	348	Hydrants	121,938	1.82%	2,219		
23	389	General Plant Land	-	0.00%	-		
24	390	General Plant Structures	29,332	2.50%	733		
25	390.1	Leasehold Improvements	-	note_2	-		
26	391	Office Furniture & Equipment	3,262	6.67%	218		
27	393	Warehouse Equipment	32	5.00%	2		
28	394	Tools, Shop & Garage Equipment	21,529	4.00%	861		
29	395	Laboratory Equipment	146	5.00%	7		
30	396	Power Operated Equipment	-	6.67%	-		
31	397	Communication Equipment	60,516	6.67%	4,036		
32	398	Miscellaneous Equipment	4,698	3.33%	156		
33		Subtotal	$ 7,071,105		$ 184,579		
34							
35	Plus:	Phoenix Office	140,209		9,169		
36		Meter Shop	3,325		120		
37		Post-Test Year Plant	-		-		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ 143,534		$ 9,289		
40							
41	Less:	Contributions in Aid of Construction	$ 623,732	2.00%	$ 12,475	2.81%	$ 17,542
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 181,393		$ 176,326
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (5,067)
46							
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52 note_1 Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.
53 Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.
54 See supporting document \2007 Amortization of Intangibles.pdf\.
55 note_2 Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Saddlebrook [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	-	note_1	-		
4	303	Other Intangibles	-	note_1	-		
5	310.1	Water Rights	-	0.00%	-		
6	310.3	Other Source of Supply Land	-	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	7,993	3.13%	250		
9	320	Pumping Plant Land	-	0.00%	-		
10	321	Pumping Plant Structures & Improvements	-	2.86%	-		
11	325	Electtric Pumping Equipment	-	5.88%	-		
12	328	Gas Engine Equipment	-	4.00%	-		
13	330	Water Treatment Plant Land	-	0.00%	-		
14	331	Water Treatment Structures & Improvements	-	2.50%	-		
15	332	Water Treatment Equipment	-	2.86%	-		
16	340	Transmission and Distribution Land	-	0.00%	-		
17	342	Storage Tanks	-	2.00%	-		
18	343	Transmission & Distribution Mains	-	1.79%	-		
19	344	Fire Sprinkler Taps	-	2.00%	-		
20	345	Services	604	2.38%	14		
21	346	Meters	45,033	4.55%	2,049		
22	348	Hydrants	-	1.82%	-		
23	389	General Plant Land	-	0.00%	-		
24	390	General Plant Structures	-	2.50%	-		
25	390.1	Leasehold Improvements	-	note_2	-		
26	391	Office Furniture & Equipment	-	6.67%	-		
27	393	Warehouse Equipment	-	5.00%	-		
28	394	Tools, Shop & Garage Equipment	-	4.00%	-		
29	395	Laboratory Equipment	-	5.00%	-		
30	396	Power Operated Equipment	-	6.67%	-		
31	397	Communication Equipment	-	6.67%	-		
32	398	Miscellaneous Equipment	-	3.33%	-		
33		Subtotal	$ 53,630		$ 2,314		
34							
35	Plus:	Phoenix Office	-		-		
36		Meter Shop	-		-		
37		Post-Test Year Plant	-		-		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ -		$ -		
40							
41	Less:	Contributions in Aid of Construction	$ 2,269	2.00%	$ 45	2.00%	$ 45
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 2,268		$ 2,268
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ -
46							
47							
48							
49							
50							
51							
52	note_1	Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.					
53		Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.					
54		See supporting document \2007 Amortization of Intangibles.pdf\.					
55	note_2	Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.					

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Winkelman [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	2,072	note_1	-		
4	303	Other Intangibles	45	note_1	2		
5	310.1	Water Rights	2,514	0.00%	-		
6	310.3	Other Source of Supply Land	422	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	48,327	3.13%	1,513		
9	320	Pumping Plant Land	-	0.00%	-		
10	321	Pumping Plant Structures & Improvements	6,073	2.86%	174		
11	325	Electtric Pumping Equipment	157,859	5.88%	9,282		
12	328	Gas Engine Equipment	-	4.00%	-		
13	330	Water Treatment Plant Land	-	0.00%	-		
14	331	Water Treatment Structures & Improvements	3,906	2.50%	98		
15	332	Water Treatment Equipment	36,038	2.86%	1,031		
16	340	Transmission and Distribution Land	-	0.00%	-		
17	342	Storage Tanks	28,903	2.00%	578		
18	343	Transmission & Distribution Mains	117,110	1.79%	2,096		
19	344	Fire Sprinkler Taps	-	2.00%	-		
20	345	Services	69,426	2.38%	1,652		
21	346	Meters	24,019	4.55%	1,093		
22	348	Hydrants	26,410	1.82%	481		
23	389	General Plant Land	-	0.00%	-		
24	390	General Plant Structures	127	2.50%	3		
25	390.1	Leasehold Improvements	-	note_2	-		
26	391	Office Furniture & Equipment	-	6.67%	-		
27	393	Warehouse Equipment	-	5.00%	-		
28	394	Tools, Shop & Garage Equipment	2,122	4.00%	85		
29	395	Laboratory Equipment	-	5.00%	-		
30	396	Power Operated Equipment	-	6.67%	-		
31	397	Communication Equipment	14,482	6.67%	966		
32	398	Miscellaneous Equipment	465	3.33%	15		
33		Subtotal	$ 540,319		$ 19,069		
34							
35	Plus:	Phoenix Office	13,529		885		
36		Meter Shop	321		12		
37		Post-Test Year Plant	-		-		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ 13,850		$ 896		
40							
41	Less:	Contributions in Aid of Construction	$ 1,835	2.00%	$ 37	3.71%	$ 68
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 19,928		$ 19,897
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (31)
46							
47							
48							
49							
50							
51							

52 note_1 Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.
53 Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.
54 See supporting document \2007 Amortization of Intangibles.pdf\.
55 note_2 Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Miami [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	1,225	note_1	-		
4	303	Other Intangibles	876	note_1	44		
5	310.1	Water Rights	372,478	0.00%	-		
6	310.3	Other Source of Supply Land	90,601	0.00%	-		
7	310.4	Wells - Other	1,526,600	note_1	63,608		
8	314	Wells	2,446,829	3.13%	76,586		
9	320	Pumping Plant Land	4,723	0.00%	-		
10	321	Pumping Plant Structures & Improvements	107,047	2.86%	3,062		
11	325	Electtric Pumping Equipment	1,534,460	5.88%	90,226		
12	328	Gas Engine Equipment	163	4.00%	7		
13	330	Water Treatment Plant Land	550	0.00%	-		
14	331	Water Treatment Structures & Improvements	21,056	2.50%	526		
15	332	Water Treatment Equipment	64,428	2.86%	1,843		
16	340	Transmission and Distribution Land	5,835	0.00%	-		
17	342	Storage Tanks	441,841	2.00%	8,837		
18	343	Transmission & Distribution Mains	3,470,039	1.79%	62,114		
19	344	Fire Sprinkler Taps	60,776	2.00%	1,216		
20	345	Services	906,504	2.38%	21,575		
21	346	Meters	240,710	4.55%	10,952		
22	348	Hydrants	155,474	1.82%	2,830		
23	389	General Plant Land	7,046	0.00%	-		
24	390	General Plant Structures	52,546	2.50%	1,314		
25	390.1	Leasehold Improvements	37,860	note_2	165		
26	391	Office Furniture & Equipment	94,558	6.67%	6,307		
27	393	Warehouse Equipment	5,584	5.00%	279		
28	394	Tools, Shop & Garage Equipment	120,920	4.00%	4,837		
29	395	Laboratory Equipment	5,014	5.00%	251		
30	396	Power Operated Equipment	7,476	6.67%	499		
31	397	Communication Equipment	175,133	6.67%	11,681		
32	398	Miscellaneous Equipment	30,099	3.33%	1,002		
33		Subtotal	$ 11,988,453		$ 369,758		
34							
35	Plus:	Phoenix Office	306,245		20,027		
36		Meter Shop	7,262		262		
37		Post-Test Year Plant	-		-		
38		Net Regulatory Asset / (Liability) (Sch. B-2 Appendix, p. 8)	(700,000)		(28,000)		
39		Subtotal	$ (386,492)		$ (7,711)		
40							
41	Less:	Contributions in Aid of Construction	$ 324,169	2.00%	$ 6,483	3.26%	$ 10,557
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 355,564		$ 351,490
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (4,074)
46							
47	Total Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate - Eastern Group						$ (97,590)
48							
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52 note_1 Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.
53 Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.
54 See supporting document \2007 Amortization of Intangibles.pdf\.
55 note_2 Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Casa Grande [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	65,375	note_1	2,615		
4	303	Other Intangibles	1,908,030	note_1	98,268		
5	310.1	Water Rights	237,537	0.00%	-		
6	310.3	Other Source of Supply Land	205,884	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	5,758,437	3.13%	180,239		
9	320	Pumping Plant Land	6,013	0.00%	-		
10	321	Pumping Plant Structures & Improvements	135,662	2.86%	3,880		
11	325	Electtric Pumping Equipment	5,413,740	5.88%	318,328		
12	328	Gas Engine Equipment	-	4.00%	-		
13	330	Water Treatment Plant Land	680,718	0.00%	-		
14	331	Water Treatment Structures & Improvements	922,357	2.50%	23,059		
15	332	Water Treatment Equipment	5,030,878	2.86%	143,883		
16	340	Transmission and Distribution Land	64,886	0.00%	-		
17	342	Storage Tanks	2,212,049	2.00%	44,241		
18	343	Transmission & Distribution Mains	50,387,125	1.79%	901,930		
19	344	Fire Sprinkler Taps	1,652,993	2.00%	33,060		
20	345	Services	17,187,118	2.38%	409,053		
21	346	Meters	2,237,548	4.55%	101,808		
22	348	Hydrants	6,685,549	1.82%	121,677		
23	389	General Plant Land	8,772	0.00%	-		
24	390	General Plant Structures	434,065	2.50%	10,852		
25	390.1	Leasehold Improvements	-	note_2	-		
26	391	Office Furniture & Equipment	216,336	6.67%	14,430		
27	393	Warehouse Equipment	15,558	5.00%	778		
28	394	Tools, Shop & Garage Equipment	237,252	4.00%	9,490		
29	395	Laboratory Equipment	38,681	5.00%	1,934		
30	396	Power Operated Equipment	82,482	6.67%	5,502		
31	397	Communication Equipment	485,647	6.67%	32,393		
32	398	Miscellaneous Equipment	61,119	3.33%	2,035		
33		Subtotal	$ 102,371,813		$ 2,459,454		
34							
35	Plus:	Phoenix Office	1,632,693		106,770		
36		Meter Shop	38,718		1,396		
37		Post-Test Year Plant (Sch. B-2 Appendix, p. 1)	477,873		13,637		
38		Net Regulatory Asset / (Liability) (Sch. B-2 Appendix, pp. 8-9)	590,093		29,505		
39		Subtotal	$ 2,739,377		$ 151,307		
40							
41	Less:	Contributions in Aid of Construction	$ 14,050,085	2.00%	$ 281,002	2.44%	$ 342,808
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 2,329,760		$ 2,267,954
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (61,806)
46							
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52 note_1 Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.
53 Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.
54 See supporting document \2007 Amortization of Intangibles.pdf\.
55 note_2 Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Stanfield [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	-	note_1	-		
4	303	Other Intangibles	1,198	note_1	92		
5	310.1	Water Rights	3,035	0.00%	-		
6	310.3	Other Source of Supply Land	10,593	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	159,281	3.13%	4,986		
9	320	Pumping Plant Land	200	0.00%	-		
10	321	Pumping Plant Structures & Improvements	2,713	2.86%	78		
11	325	Electtric Pumping Equipment	306,985	5.88%	18,051		
12	328	Gas Engine Equipment	-	4.00%	-		
13	330	Water Treatment Plant Land	-	0.00%	-		
14	331	Water Treatment Structures & Improvements	6,778	2.50%	169		
15	332	Water Treatment Equipment	11,082	2.86%	317		
16	340	Transmission and Distribution Land	-	0.00%	-		
17	342	Storage Tanks	41,125	2.00%	823		
18	343	Transmission & Distribution Mains	124,105	1.79%	2,221		
19	344	Fire Sprinkler Taps	268	2.00%	5		
20	345	Services	69,082	2.38%	1,644		
21	346	Meters	22,259	4.55%	1,013		
22	348	Hydrants	9,243	1.82%	168		
23	389	General Plant Land	-	0.00%	-		
24	390	General Plant Structures	1,312	2.50%	33		
25	390.1	Leasehold Improvements	-	note_2	-		
26	391	Office Furniture & Equipment	-	6.67%	-		
27	393	Warehouse Equipment	-	5.00%	-		
28	394	Tools, Shop & Garage Equipment	534	4.00%	21		
29	395	Laboratory Equipment	-	5.00%	-		
30	396	Power Operated Equipment	-	6.67%	-		
31	397	Communication Equipment	79,355	6.67%	5,293		
32	398	Miscellaneous Equipment	534	3.33%	18		
33		Subtotal	$ 849,682		$ 34,932		
34							
35	Plus:	Phoenix Office	16,604		1,086		
36		Meter Shop	394		14		
37		Post-Test Year Plant (Sch. B-2 Appendix, p. 2)	314,066		11,019		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ 331,063		$ 12,119		
40							
41	Less:	Contributions in Aid of Construction	$ 49,164	2.00%	$ 983	4.08%	$ 2,004
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 46,067		$ 45,046
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (1,021)
46							
47							
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52 note_1 Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.
53 Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.
54 See supporting document \2007 Amortization of Intangibles.pdf\.
55 note_2 Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	White Tank [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	-	note_1	-		
4	303	Other Intangibles	10,363	note_1	783		
5	310.1	Water Rights	21,233	0.00%	-		
6	310.3	Other Source of Supply Land	28,521	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	560,811	3.13%	17,553		
9	320	Pumping Plant Land	-	0.00%	-		
10	321	Pumping Plant Structures & Improvements	19,632	2.86%	561		
11	325	Electtric Pumping Equipment	683,271	5.88%	40,176		
12	328	Gas Engine Equipment	-	4.00%	-		
13	330	Water Treatment Plant Land	-	0.00%	-		
14	331	Water Treatment Structures & Improvements	79	2.50%	2		
15	332	Water Treatment Equipment	19,441	2.86%	556		
16	340	Transmission and Distribution Land	35,990	0.00%	-		
17	342	Storage Tanks	478,301	2.00%	9,566		
18	343	Transmission & Distribution Mains	6,483,036	1.79%	116,046		
19	344	Fire Sprinkler Taps	36,138	2.00%	723		
20	345	Services	1,820,070	2.38%	43,318		
21	346	Meters	202,921	4.55%	9,233		
22	348	Hydrants	542,336	1.82%	9,871		
23	389	General Plant Land	-	0.00%	-		
24	390	General Plant Structures	26,699	2.50%	667		
25	390.1	Leasehold Improvements	-	note_2	-		
26	391	Office Furniture & Equipment	16,715	6.67%	1,115		
27	393	Warehouse Equipment	1,160	5.00%	58		
28	394	Tools, Shop & Garage Equipment	29,879	4.00%	1,195		
29	395	Laboratory Equipment	2,653	5.00%	133		
30	396	Power Operated Equipment	1,788	6.67%	119		
31	397	Communication Equipment	28,046	6.67%	1,871		
32	398	Miscellaneous Equipment	12,513	3.33%	417		
33		Subtotal	$ 11,061,594		$ 253,963		
34							
35	Plus:	Phoenix Office	145,743		9,531		
36		Meter Shop	3,456		125		
37		Post-Test Year Plant (Sch. B-2 Appendix, p. 3)	1,926,242		53,571		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ 2,075,441		$ 63,227		
40							
41	Less:	Contributions in Aid of Construction	$ 1,134,727	2.00%	$ 22,695	2.42%	$ 27,429
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 294,495		$ 289,761
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (4,734)
46							
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52 note_1 Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.
53 Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.
54 See supporting document \2007 Amortization of Intangibles.pdf\.
55 note_2 Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.

ARIZONA WA[illegible] COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Ajo [A] Test Year End Balance 12/31/2007	Ajo [B] Proposed Depreciation Rate	Ajo [C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	-	note_1	-		
4	303	Other Intangibles	3,628	note_1	276		
5	310.1	Water Rights	8,675	0.00%	-		
6	310.3	Other Source of Supply Land	-	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	802	3.13%	25		
9	320	Pumping Plant Land	3,208	0.00%	-		
10	321	Pumping Plant Structures & Improvements	3,015	2.86%	86		
11	325	Electtric Pumping Equipment	83,008	5.88%	4,881		
12	328	Gas Engine Equipment	-	4.00%	-		
13	330	Water Treatment Plant Land	-	0.00%	-		
14	331	Water Treatment Structures & Improvements	-	2.50%	-		
15	332	Water Treatment Equipment	4,290	2.86%	123		
16	340	Transmission and Distribution Land	6,065	0.00%	-		
17	342	Storage Tanks	160,356	2.00%	3,207		
18	343	Transmission & Distribution Mains	1,319,711	1.79%	23,623		
19	344	Fire Sprinkler Taps	18,030	2.00%	361		
20	345	Services	280,887	2.38%	6,685		
21	346	Meters	51,181	4.55%	2,329		
22	348	Hydrants	80,099	1.82%	1,458		
23	389	General Plant Land	-	0.00%	-		
24	390	General Plant Structures	46,411	2.50%	1,160		
25	390.1	Leasehold Improvements	-	note_2	-		
26	391	Office Furniture & Equipment	10,034	6.67%	669		
27	393	Warehouse Equipment	193	5.00%	10		
28	394	Tools, Shop & Garage Equipment	8,618	4.00%	345		
29	395	Laboratory Equipment	34,889	5.00%	1,744		
30	396	Power Operated Equipment	3,234	6.67%	216		
31	397	Communication Equipment	29,119	6.67%	1,942		
32	398	Miscellaneous Equipment	768	3.33%	26		
33		Subtotal	$ 2,156,220		$ 49,165		
34							
35	Plus:	Phoenix Office	49,811		3,257		
36		Meter Shop	1,181		43		
37		Post-Test Year Plant	-		-		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ 50,992		$ 3,300		
40							
41	Less:	Contributions in Aid of Construction	$ 65,554	2.00%	$ 1,311	2.37%	$ 1,554
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 51,154		$ 50,911
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (243)
46							
47							
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49							
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51							

52 note_1 Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.
53 Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.
54 See supporting document \2007 Amortization of Intangibles.pdf\.
55 note_2 Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.

ARIZONA WA. _.(COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Coolidge [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	[D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	*Organization*	$ -	0.00%	$ -		
3	302	Franchises	17,594	note_1	704		
4	303	Other Intangibles	23,935	note_1	1,654		
5	310.1	Water Rights	47,272	0.00%	-		
6	310.3	Other Source of Supply Land	2,927	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	2,048,774	3.13%	64,127		
9	320	Pumping Plant Land	25,685	0.00%	-		
10	321	Pumping Plant Structures & Improvements	14,241	2.86%	407		
11	325	Electtric Pumping Equipment	1,338,188	5.88%	78,685		
12	328	Gas Engine Equipment	20,026	4.00%	801		
13	330	Water Treatment Plant Land	-	0.00%	-		
14	331	Water Treatment Structures & Improvements	166,564	2.50%	4,164		
15	332	Water Treatment Equipment	116,134	2.86%	3,321		
16	340	Transmission and Distribution Land	-	0.00%	-		
17	342	Storage Tanks	290,293	2.00%	5,806		
18	343	Transmission & Distribution Mains	7,474,236	1.79%	133,789		
19	344	Fire Sprinkler Taps	109,774	2.00%	2,195		
20	345	Services	2,584,542	2.38%	61,512		
21	346	Meters	508,592	4.55%	23,141		
22	348	Hydrants	906,830	1.82%	16,504		
23	389	General Plant Land	-	0.00%	-		
24	390	General Plant Structures	37,664	2.50%	942		
25	390.1	Leasehold Improvements	51,930	note_2	670		
26	391	Office Furniture & Equipment	99,871	6.67%	6,661		
27	393	Warehouse Equipment	6,631	5.00%	332		
28	394	*Tools, Shop & Garage Equipment*	75,369	4.00%	3,015		
29	395	Laboratory Equipment	12,024	5.00%	601		
30	396	Power Operated Equipment	15,016	6.67%	1,002		
31	397	Communication Equipment	60,144	6.67%	4,012		
32	398	Miscellaneous Equipment	9,178	3.33%	306		
33		Subtotal	$ 16,063,434		$ 414,351		
34							
35	Plus:	Phoenix Office	324,079		21,193		
36		Meter Shop	7,685		277		
37		Post-Test Year Plant (Sch. B-2 Appendix, p. 4)	664,941		21,129		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ 996,705		$ 42,599		
40							
41	Less:	*Contributions in Aid of Construction*	$ 1,544,697	2.00%	$ 30,894	2.73%	$ 42,196
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 426,056		$ 414,753
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (11,303)
46							
47	Total Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate - Western Group						$ (79,107)
48							
49							
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51							

52 note_1 Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.
53 Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.
54 *See supporting document \2007 Amortization of Intangibles.pdf\.*
55 note_2 Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Lakeside [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	-	note_1	-		
4	303	Other Intangibles	1,200	note_1	60		
5	310.1	Water Rights	220,859	0.00%	-		
6	310.3	Other Source of Supply Land	14,333	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	1,495,561	3.13%	46,811		
9	320	Pumping Plant Land	7,953	0.00%	-		
10	321	Pumping Plant Structures & Improvements	110,147	2.86%	3,150		
11	325	Electtric Pumping Equipment	2,066,418	5.88%	121,505		
12	328	Gas Engine Equipment	-	4.00%	-		
13	330	Water Treatment Plant Land	-	0.00%	-		
14	331	Water Treatment Structures & Improvements	397	2.50%	10		
15	332	Water Treatment Equipment	71,820	2.86%	2,054		
16	340	*Transmission and Distribution Land*	23,558	0.00%	-		
17	342	Storage Tanks	673,013	2.00%	13,460		
18	343	Transmission & Distribution Mains	6,911,576	1.79%	123,717		
19	344	Fire Sprinkler Taps	79,166	2.00%	1,583		
20	345	Services	2,528,006	2.38%	60,167		
21	346	Meters	325,313	4.55%	14,802		
22	348	Hydrants	610,863	1.82%	11,118		
23	389	General Plant Land	1,995	0.00%	-		
24	390	General Plant Structures	98,486	2.50%	2,462		
25	390.1	Leasehold Improvements	54,546	note_2	3,093		
26	391	Office Furniture & Equipment	132,177	6.67%	8,816		
27	393	Warehouse Equipment	3,512	5.00%	176		
28	394	Tools, Shop & Garage Equipment	57,694	4.00%	2,308		
29	395	Laboratory Equipment	394	5.00%	20		
30	396	Power Operated Equipment	4,818	6.67%	321		
31	397	Communication Equipment	136,066	6.67%	9,076		
32	398	Miscellaneous Equipment	24,437	3.33%	814		
33		Subtotal	$ 15,654,309		$ 425,523		
34							
35	Plus:	Phoenix Office	381,269		24,933		
36		Meter Shop	9,042		326		
37		Post-Test Year Plant	-		-		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ 390,311		$ 25,259		
40							
41	Less:	Contributions in Aid of Construction	$ 1,691,940	2.00%	$ 33,839	3.09%	$ 52,247
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 416,943		$ 398,535
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (18,408)
46							
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52 note_1 Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.
53 Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.
54 See supporting document \2007 Amortization of Intangibles.pdf\.
55 note_2 Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.

ARIZONA WA. ..K COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Overgaard [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	-	note_1	-		
4	303	Other Intangibles	746	note_1	37		
5	310.1	Water Rights	116,245	0.00%	-		
6	310.3	Other Source of Supply Land	15,823	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	577,081	3.13%	18,063		
9	320	Pumping Plant Land	600	0.00%	-		
10	321	Pumping Plant Structures & Improvements	36,187	2.86%	1,035		
11	325	Electtric Pumping Equipment	551,633	5.88%	32,436		
12	328	Gas Engine Equipment	-	4.00%	-		
13	330	Water Treatment Plant Land	-	0.00%	-		
14	331	Water Treatment Structures & Improvements	166	2.50%	4		
15	332	Water Treatment Equipment	58,743	2.86%	1,680		
16	340	Transmission and Distribution Land	29,568	0.00%	-		
17	342	Storage Tanks	665,214	2.00%	13,304		
18	343	Transmission & Distribution Mains	5,538,472	1.79%	99,139		
19	344	Fire Sprinkler Taps	38,262	2.00%	765		
20	345	Services	1,691,014	2.38%	40,246		
21	346	Meters	225,602	4.55%	10,265		
22	348	Hydrants	630,571	1.82%	11,476		
23	389	General Plant Land	-	0.00%	-		
24	390	General Plant Structures	221,543	2.50%	5,539		
25	390.1	Leasehold Improvements	-	note_2	-		
26	391	Office Furniture & Equipment	84,234	6.67%	5,618		
27	393	Warehouse Equipment	-	5.00%	-		
28	394	Tools, Shop & Garage Equipment	49,027	4.00%	1,961		
29	395	Laboratory Equipment	389	5.00%	19		
30	396	Power Operated Equipment	3,752	6.67%	250		
31	397	Communication Equipment	107,298	6.67%	7,157		
32	398	Miscellaneous Equipment	12,052	3.33%	401		
33		Subtotal	$ 10,654,222		$ 249,397		
34							
35	Plus:	Phoenix Office	245,365		16,046		
36		Meter Shop	5,819		210		
37		Post-Test Year Plant	-		-		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ 251,184		$ 16,255		
40							
41	Less:	Contributions in Aid of Construction	$ 2,543,592	2.00%	$ 50,872	2.47%	$ 62,890
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 214,780		$ 202,762
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (12,018)
46							
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52 note_1 Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.
53 Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.
54 See supporting document \2007 Amortization of Intangibles.pdf\.
55 note_2 Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Sedona [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	935	note_1	37		
4	303	Other Intangibles	1,579	note_1	79		
5	310.1	Water Rights	86,669	0.00%	-		
6	310.3	Other Source of Supply Land	161,839	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	5,255,090	3.13%	164,484		
9	320	Pumping Plant Land	3,805	0.00%	-		
10	321	Pumping Plant Structures & Improvements	70,727	2.86%	2,023		
11	325	Electtric Pumping Equipment	2,191,643	5.88%	128,869		
12	328	Gas Engine Equipment	223	4.00%	9		
13	330	Water Treatment Plant Land	-	0.00%	-		
14	331	Water Treatment Structures & Improvements	167,702	2.50%	4,193		
15	332	Water Treatment Equipment	621,883	2.86%	17,786		
16	340	Transmission and Distribution Land	112,947	0.00%	-		
17	342	Storage Tanks	1,272,723	2.00%	25,454		
18	343	Transmission & Distribution Mains	14,565,516	1.79%	260,723		
19	344	Fire Sprinkler Taps	620,948	2.00%	12,419		
20	345	Services	2,864,133	2.38%	68,166		
21	346	Meters	563,966	4.55%	25,660		
22	348	Hydrants	1,456,462	1.82%	26,508		
23	389	General Plant Land	-	0.00%	-		
24	390	General Plant Structures	132,291	2.50%	3,307		
25	390.1	Leasehold Improvements	49,955	note_2	1,696		
26	391	Office Furniture & Equipment	137,068	6.67%	9,142		
27	393	Warehouse Equipment	25,774	5.00%	1,289		
28	394	Tools, Shop & Garage Equipment	81,857	4.00%	3,274		
29	395	Laboratory Equipment	11,529	5.00%	576		
30	396	Power Operated Equipment	19,847	6.67%	1,324		
31	397	Communication Equipment	147,261	6.67%	9,822		
32	398	Miscellaneous Equipment	30,129	3.33%	1,003		
33		Subtotal	$ 30,654,499		$ 767,844		
34							
35	Plus:	Phoenix Office	519,633		33,981		
36		Meter Shop	12,323		444		
37		Post-Test Year Plant (Sch. B-2 Appendix, p. 5)	3,138,161		56,694		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ 3,670,117		$ 91,119		
40							
41	Less:	Contributions in Aid of Construction	$ 6,396,542	2.00%	$ 127,931	2.59%	$ 165,907
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 731,033		$ 693,057
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (37,976)
46							
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52 note_1 Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.
53 Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.
54 See supporting document \2007 Amortization of Intangibles.pdf\.
55 note_2 Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Pinewood [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	-	note_1	-		
4	303	Other Intangibles	593	note_1	30		
5	310.1	Water Rights	30,517	0.00%	-		
6	310.3	Other Source of Supply Land	69,340	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	1,046,728	3.13%	32,763		
9	320	Pumping Plant Land	95	0.00%	-		
10	321	Pumping Plant Structures & Improvements	39,970	2.86%	1,143		
11	325	Electtric Pumping Equipment	391,074	5.88%	22,995		
12	328	Gas Engine Equipment	-	4.00%	-		
13	330	Water Treatment Plant Land	-	0.00%	-		
14	331	Water Treatment Structures & Improvements	7,676	2.50%	192		
15	332	Water Treatment Equipment	25,178	2.86%	720		
16	340	Transmission and Distribution Land	18,146	0.00%	-		
17	342	Storage Tanks	333,128	2.00%	6,663		
18	343	Transmission & Distribution Mains	2,112,384	1.79%	37,812		
19	344	Fire Sprinkler Taps	16,323	2.00%	326		
20	345	Services	802,415	2.38%	19,097		
21	346	Meters	152,356	4.55%	6,932		
22	348	Hydrants	128,531	1.82%	2,339		
23	389	General Plant Land	2,858	0.00%	-		
24	390	General Plant Structures	13,590	2.50%	340		
25	390.1	Leasehold Improvements	-	note_2	-		
26	391	Office Furniture & Equipment	828	6.67%	55		
27	393	Warehouse Equipment	992	5.00%	50		
28	394	Tools, Shop & Garage Equipment	14,066	4.00%	563		
29	395	Laboratory Equipment	-	5.00%	-		
30	396	Power Operated Equipment	4,473	6.67%	298		
31	397	Communication Equipment	17,441	6.67%	1,163		
32	398	Miscellaneous Equipment	-	3.33%	-		
33		Subtotal	$ 5,228,703		$ 133,481		
34							
35	Plus:	Phoenix Office	181,410		11,863		
36		Meter Shop	4,302		155		
37		Post-Test Year Plant (Sch. B-2 Appendix, p. 6)	40,553		2,381		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ 226,265		$ 14,400		
40							
41	Less:	Contributions in Aid of Construction	$ 783,751	2.00%	$ 15,675	3.03%	$ 23,723
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 132,206		$ 124,158
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (8,048)
46							
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51							
52	note_1	Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.					
53		Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.					
54		See supporting document \2007 Amortization of Intangibles.pdf\.					
55	note_2	Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.					

ARIZONA WA, ..K COMPANY
Test Year Ended December 31, 2007
Effect of Staff Proposed CIAC Amortization Rate

Line No.	Acct. No.	Description	Rimrock [A] Test Year End Balance 12/31/2007	[B] Proposed Depreciation Rate	[C] Depreciation / Amortization Expense	Reduced Cash Flow Resulting from Staff CIAC Amortization Rate [D] Staff CIAC Rate	[E] Depr. / Cash Flow Effect
1							
2	301	Organization	$ -	0.00%	$ -		
3	302	Franchises	-	note_1	-		
4	303	Other Intangibles	266	note_1	13		
5	310.1	Water Rights	14,202	0.00%	-		
6	310.3	Other Source of Supply Land	13,010	0.00%	-		
7	310.4	Wells - Other	-	note_1	-		
8	314	Wells	570,245	3.13%	17,849		
9	320	Pumping Plant Land	1,644	0.00%	-		
10	321	Pumping Plant Structures & Improvements	4,633	2.86%	133		
11	325	Electtric Pumping Equipment	413,467	5.88%	24,312		
12	328	Gas Engine Equipment	-	4.00%	-		
13	330	Water Treatment Plant Land	-	0.00%	-		
14	331	Water Treatment Structures & Improvements	36,630	2.50%	916		
15	332	Water Treatment Equipment	336,108	2.86%	9,613		
16	340	Transmission and Distribution Land	3,431	0.00%	-		
17	342	Storage Tanks	206,750	2.00%	4,135		
18	343	Transmission & Distribution Mains	2,296,530	1.79%	41,108		
19	344	Fire Sprinkler Taps	31,516	2.00%	630		
20	345	Services	694,652	2.38%	16,533		
21	346	Meters	71,768	4.55%	3,265		
22	348	Hydrants	51,223	1.82%	932		
23	389	General Plant Land	-	0.00%	-		
24	390	General Plant Structures	47,290	2.50%	1,182		
25	390.1	Leasehold Improvements	-	note_2	-		
26	391	Office Furniture & Equipment	410	6.67%	27		
27	393	Warehouse Equipment	748	5.00%	37		
28	394	Tools, Shop & Garage Equipment	11,187	4.00%	447		
29	395	Laboratory Equipment	238	5.00%	12		
30	396	Power Operated Equipment	8,880	6.67%	592		
31	397	Communication Equipment	34,206	6.67%	2,282		
32	398	Miscellaneous Equipment	622	3.33%	21		
33		Subtotal	$ 4,849,656		$ 124,039		
34							
35	Plus:	Phoenix Office	91,013		5,952		
36		Meter Shop	2,158		78		
37		Post-Test Year Plant	-		-		
38		Net Regulatory Asset / (Liability)	-		-		
39		Subtotal	$ 93,171		$ 6,030		
40							
41	Less:	Contributions in Aid of Construction	$ 260,411	2.00%	$ 5,208	2.64%	$ 6,863
42							
43	Total Pro Forma Depreciation & Amortization Expense				$ 124,861		$ 123,206
44							
45	Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate						$ (1,655)
46							
47	Total Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate - Northern Group						$ (78,105)
48							
49	Total Reduction in Cash Flow as a Result of Adopting Staff's CIAC rate - Total Company						$ (254,802)
50							
51							

52 note_1 Acct. 302 - Franchises amortized over 25 years. Acct. 303 - Other intangibles amortized over 15 & 20 Years.
53 Acct. 310.4 - Wells - Other amortized over 24 years. Accumulated Amortization booked to Acct. 111 - Amort. Of Ltd. Term Investments.
54 See supporting document \2007 Amortization of Intangibles.pdf\.
55 note_2 Acct. 390.1 - Leasehold Improvements amortized over the remaining life of the associated lease.

CALCULATION OF THEORETICALLY CORRECT CIAC AMORTIZATION RATE

Line No.			Superstition Plant Balance	Superstition Deprec. Rate	Superstition Depr. Expense	Bisbee Plant Balance	Bisbee Deprec. Rate	Bisbee Depr. Expense	Sierra Vista Plant Balance	Sierra Vista Deprec. Rate	Sierra Vista Depr. Expense	San Manuel Plant Balance	San Manuel Deprec. Rate	San Manuel Depr. Expense
4	343	T & D Mains	$ 47,180,751	1.79%	$ 844,535	$ 5,385,513	1.79%	$ 96,401	$ 3,090,123	1.79%	$ 55,313	$ 1,025,317	1.79%	$ 18,353
5	344	Fire Sprinkler Taps	570,481	2.00%	11,410	51,566	2.00%	1,031	148,520	2.00%	2,970	100	2.00%	2
6	345	Services	11,514,584	2.38%	274,047	1,346,780	2.38%	32,053	1,158,606	2.38%	27,575	329,052	2.38%	7,831
7	346	Meters	1,716,039	4.55%	78,080	226,315	4.55%	10,297	216,066	4.55%	9,831	124,886	4.55%	5,682
8	348	Hydrants	3,292,465	1.82%	59,923	279,943	1.82%	5,095	354,634	1.82%	6,454	65,596	1.82%	1,194
10		Totals	$ 64,274,320		$ 1,267,995	$ 7,290,117		$ 144,878	$ 4,967,949		$ 102,144	$ 1,544,952		$ 33,063
12		CIAC Amortization Rate			2.00%			2.00%			2.00%			2.00%

Line No.			Oracle Plant Balance	Oracle Deprec. Rate	Oracle Depr. Expense	Winkelman Plant Balance	Winkelman Deprec. Rate	Winkelman Depr. Expense	Miami Plant Balance	Miami Deprec. Rate	Miami Depr. Expense	Casa Grande Plant Balance	Casa Grande Deprec. Rate	Casa Grande Depr. Expense
19	343	T & D Mains	$ 3,752,298	1.79%	$ 67,166	$ 117,110	1.79%	$ 2,096	$ 3,470,039	1.79%	$ 62,114	$ 50,387,125	1.79%	$ 901,930
20	344	Fire Sprinkler Taps	-	2.00%	-	-	2.00%	-	60,776	2.00%	1,216	1,652,993	2.00%	33,060
21	345	Services	584,528	2.38%	13,912	69,426	2.38%	1,652	906,504	2.38%	21,575	17,187,118	2.38%	409,053
22	346	Meters	110,583	4.55%	5,032	24,019	4.55%	1,093	240,710	4.55%	10,952	2,237,548	4.55%	101,808
23	348	Hydrants	121,938	1.82%	2,219	26,410	1.82%	481	155,474	1.82%	2,830	6,685,549	1.82%	121,677
25		Totals	$ 4,569,348		$ 88,329	$ 236,965		$ 5,322	$ 4,833,503		$ 98,686	$ 78,150,333		$ 1,567,528
27		CIAC Amortization Rate			2.00%			2.00%			2.00%			2.00%

Line No.			Stanfield Plant Balance	Stanfield Deprec. Rate	Stanfield Depr. Expense	White Tank Plant Balance	White Tank Deprec. Rate	White Tank Depr. Expense	Ajo Plant Balance	Ajo Deprec. Rate	Ajo Depr. Expense	Coolidge Plant Balance	Coolidge Deprec. Rate	Coolidge Depr. Expense
34	343	T & D Mains	$ 124,105	1.79%	$ 2,221	$ 6,483,036	1.79%	$ 116,046	$ 1,319,711	1.79%	$ 23,623	$ 7,474,236	1.79%	$ 133,789
35	344	Fire Sprinkler Taps	268	2.00%	5	36,138	2.00%	723	18,030	2.00%	361	109,774	2.00%	2,195
36	345	Services	69,082	2.38%	1,644	1,820,070	2.38%	43,318	280,887	2.38%	6,685	2,584,542	2.38%	61,512
37	346	Meters	22,259	4.55%	1,013	202,921	4.55%	9,233	51,181	4.55%	2,329	508,592	4.55%	23,141
38	348	Hydrants	9,243	1.82%	168	542,336	1.82%	9,871	80,099	1.82%	1,458	906,830	1.82%	16,504
40		Totals	$ 224,957		$ 5,052	$ 9,084,501		$ 179,190	$ 1,749,908		$ 34,455	$ 11,583,974		$ 237,142
42		CIAC Amortization Rate			2.00%			2.00%			2.00%			2.00%

CALCULATION OF THEORETICALLY CORRECT CIAC AMORTIZATION RATE

Line No.			Lakeside Plant Balance	Lakeside Deprec. Rate	Lakeside Depr. Expense	Overgaard Plant Balance	Overgaard Deprec. Rate	Overgaard Depr. Expense	Sedona Plant Balance	Sedona Deprec. Rate	Sedona Depr. Expense	Pinewood Plant Balance	Pinewood Deprec. Rate	Pinewood Depr. Expense
1														
2														
3														
4	343	T & D Mains	$ 6,911,576	1.79%	$ 123,717	$ 5,538,472	1.79%	$ 99,139	$ 14,565,516	1.79%	$ 260,723	$ 2,112,384	1.79%	$ 37,812
5	344	Fire Sprinkler Taps	79,166	2.00%	1,583	38,262	2.00%	765	620,948	2.00%	12,419	16,323	2.00%	326
6	345	Services	2,528,006	2.38%	60,167	1,691,014	2.38%	40,246	2,864,133	2.38%	68,166	802,415	2.38%	19,097
7	346	Meters	325,313	4.55%	14,802	225,602	4.55%	10,265	563,966	4.55%	25,660	152,356	4.55%	6,932
8	348	Hydrants	610,863	1.82%	11,118	630,571	1.82%	11,476	1,456,462	1.82%	26,508	128,531	1.82%	2,339
9														
10		Totals	$ 10,454,923		$ 211,387	$ 8,123,921		$ 161,891	$ 20,071,024		$ 393,476	$ 3,212,009		$ 66,507
11														
12		CIAC Amortization Rate			2.00%			2.00%			2.00%			2.00%
13														
14														
15			Rimrock											
16			Plant Balance	Deprec. Rate	Depr. Expense									
17														
18														
19	343	T & D Mains	$ 2,296,530	1.79%	$ 41,108									
20	344	Fire Sprinkler Taps	31,516	2.00%	630									
21	345	Services	694,652	2.38%	16,533									
22	346	Meters	71,768	4.55%	3,265									
23	348	Hydrants	51,223	1.82%	932									
24														
25		Totals	$ 3,145,690		$ 62,469									
26														
27		CIAC Amortization Rate			2.00%									
28														
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ORIGINAL

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

MIKE GLEASON, Chairman
WILLIAM A. MUNDELL
JEFF HATCH-MILLER
KRISTIN K. MAYES
GARY PIERCE

IN THE MATTER OF THE APPLICATION OF CHAPARRAL CITY WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO. W-02113A-07-0551 **STAFF'S NOTICE OF FILING DIRECT TESTIMONY**

Staff of the Arizona Corporation Commission ("Staff") hereby files the Direct Testimony of Gordon L. Fox, Pedro M. Chaves, Marvin E. Millsap and Marlin Scott, Jr. of the Utilities Division in the above-referenced matter

RESPECTFULLY SUBMITTED this 3rd day of October, 2008.

Arizona Corporation Commission
DOCKETED
OCT - 3 2008
DOCKETED BY

Robin Mitchell, Staff Attorney
Amanda Ho, Staff Attorney
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Original and thirteen (13) copies of the foregoing filed this 3rd day of October, 2008 with:

Docket Control
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007

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DOCKET CONTROL

BEFORE THE ARIZONA CORPORATION COMMISSION

MIKE GLEASON
Chairman
WILLIAM A. MUNDELL
Commissioner
JEFF HATCH-MILLER
Commissioner
KRISTIN K. MAYES
Commissioner
GARY PIERCE
Commissioner

IN THE MATTER OF THE APPLICATION OF CHAPARRAL CITY WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY BASED THEREON	)	DOCKET NO. W-02113A-07-0551

DIRECT

TESTIMONY

OF

MARVIN E. MILLSAP

PUBLIC UTILITIES ANALYST IV

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

OCTOBER 03, 2008

Q. Why is Staff recommending removal of the cost of studies included in GO plant?

A. In both cases the studies were completed before the acquisition of CCWC and were ordered by the CPUC or mandated by California Statutes. One is a management audit ordered by the CPUC that was completed in 1995 and cost $420,000. The other cost, $820,254, to be excluded is for water management plans completed in 1998 in conjunction with California Water Code Sections 10610 through 10657.

Q. What is the amount of Staff's adjustment to increase the allocation of GO plant to CCWC?

A. After removing the cost of the luxury vehicles and the studies that do not benefit Arizona ratepayers and applying the 4.0 allocation percentage, GO plant in service original cost is increased by $124,299, or $174,963 RCN. Thus, $875,470, or $1,167,091 RCN, of GO plant is included in CCWC's rate base. The details of this adjustment are presented on Schedule MEM-7.

Rate Base Adjustment No. 4 – Accumulated Depreciation

Q. Would you please explain Staff's rate base adjustment No. 4.

A. Staff's adjustment reduces Accumulated Depreciation by $2,031,950 from the Company's amount of $15,877,022 to reflect Staff's calculated Accumulated Depreciation of $13,845,072. The reason for this difference is related to Staff using the 4.0 GO plant allocation percentage and the plant additions and retirements discussed in Rate Base Adjustments No. 6 and No. 7. Changing the GO allocation increased accumulated depreciation by $84,561. Plant additions increased accumulated deprecation by $1,823 and retirements decreased accumulated depreciation by $2,118,334 as shown on Schedule MEM-8. Plant additions and retirements are discussed on Schedule MEM-10 and MEM-11.

Q. What is the effect of expensing plant?

A. If the NARUC USOA is not complied with, the result is an overstatement of operating expenses and understatement of rate base. Adherence to the matching principle and the NARUC USOA requires that the cost of an asset that benefits more than one accounting period be capitalized (by recording it in a plant account) and depreciated over the asset's useful life.

Q. What is Staff's recommendation?

A. Staff recommends increasing plant in service by $37,673 to reclassify plant that was incorrectly recorded as an operating expense as shown on Schedule MEM-23. This adjustment to OCRB is reflected on Schedule MEM – 10, and the adjustment to RCRB is presented on Schedule MEM RCN-5, page 2 of 2.

Rate Base Adjustment No. 7 – Utility Plant-In-Service, Wells and Other Plant to be Retired

Q. Were the Wells discussed in Rate Base Adjustment No. 1 used and useful during the test year?

A. No, they were not. As Staff discussed earlier, the wells were taken out of service in accordance with the well settlement agreement. Further, there are no pumps on the wells so they cannot be used as a back-up source of water when the CAP water is shut down for repair and maintenance.

Q. What is the Company's proposed treatment of the Wells?

A. The Company proposes to include the Wells in plant in service.

Q. What is the effect of CCWC's proposal to include the Wells in rate base?

A. CCWC's proposal to include the Wells, with a combined cost for OCRB purposes of $103,468, or RCRB of $434,984, in rate base over-states the revenue requirement, and ultimately, the rates paid by the Company's customers.

Q. Does CCWC have other plant in service which is not considered used and useful?

A. Yes. As described on Table 8 of Exhibit MSJ, attached to Marlin Scott, Jr.'s Testimony, there is an additional $2,014,866 of plant not used and useful. This plant is primarily related to the water treatment facility acquired in 1986 through 1989. The RCN of this non-used and useful plant is $3,269,076.

Q. What is the appropriate ratemaking treatment for plant that is not used and useful in the test year?

A. For ratemaking purposes, plant that is not used to provide service to customers during the test year should be removed from rate base.

Q. What is Staff's recommendation?

A. Staff recommends decreasing plant in service by $2,118,334, RCN $2,480,011, to remove the wells and other plant that is not used and useful from rate base as shown on Schedules MEM-11 and MEM RCN-5.

CHAPARRAL CITY WATER COMPANY, INC.
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

Schedule MEM-4

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Well Settlement ADJ #1	[C] CAP Allocation ADJ #2	[D] GO Plant ADJ #3	[E] Acc Depr ADJ #4	[F] Working Capital ADJ #5	[G] Capitalize Expenses ADJ #6	[H] Retire Wells ADJ #7	[I] STAFF ADJUSTED
		PLANT IN SERVICE:									
1											
2	301	Organization	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3	302	Franchises	-	-	-	-	-	-	-	-	-
4	303	Land and Land Rights	305,920	-	1,280,000	-	-	-	-	(34,062)	1,551,858
5	304	Structures & Improvements	1,518,648	-	-	-	-	-	11,590	(596)	1,529,642
6	305	Collecting & Impounding Reservoirs	6,548	-	-	-	-	-	-	(6,548)	-
7	306	Lakes, Rivers, Other Intakes	-	-	-	-	-	-	-	-	-
8	307	Wells and Springs	332,065	-	-	-	-	-	-	(172,438)	159,627
9	308	Infiltration Galleries and Tunnels	-	-	-	-	-	-	-	-	-
10	309	Supply Mains	-	-	-	-	-	-	-	-	-
11	310	Power Generation Equipment	-	-	-	-	-	-	-	-	-
12	311	Pumping Equipment	1,506,908	-	-	-	-	-	26,084	55,254	1,588,246
13	320	Water Treatment Plant	7,763,500	-	-	-	-	-	-	(1,976,860)	5,786,640
14	330	Distribution Reservoirs & Standpipes	8,170,420	-	-	-	-	-	-	(1,658,272)	6,512,148
15	331	Transmission & Distribution Mains	17,450,634	-	-	-	-	-	-	1,502,420	18,953,054
16	333	Services	7,389,930	-	-	-	-	-	-	106,409	7,496,339
17	334	Meters & Meter Installation	2,725,673	-	-	-	-	-	-	11,193	2,736,866
18	335	Hydrants	1,171,633	-	-	-	-	-	-	53,352	1,224,985
19	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-	-
20	339	Other Plant & Misc. Equipment	1,610,687	-	-	-	-	-	-	106,542	1,717,229
21	340	Office Furniture & Equipment	270,359	-	-	-	-	-	-	1,814	272,173
22	341	Transportation Equipment	535,315	-	-	-	-	-	-	-	535,315
23	342	Stores Equipment	-	-	-	-	-	-	-	-	-
24	343	Tools, Ship & Garage Equipment	149,365	-	-	-	-	-	-	-	149,365
25	344	Laboratory Equipment	-	-	-	-	-	-	-	-	-
26	345	Power Operated Equipment	-	-	-	-	-	-	-	-	-
27	346	Communication Equipment	39,105	-	-	-	-	-	-	-	39,105
28	347	Miscellaneous Equipment	106,542	-	-	-	-	-	-	(106,542)	-
29	348	Other Tangible Plant	-	-	-	-	-	-	-	-	-
30			51,053,252	-	1,280,000	-	-	-	37,674	(2,118,334)	50,252,592
31											
32											
33			-		-	-	-	-	-	-	-
34	Add:	General Office Plant Allocation	751,171	-		124,299	-	-	-	-	875,470
35											-
36			-	-	-	-	-	-	-	-	-
37			-	-	-	-	-	-	-	-	-
38											
39		Total Plant in Service	$ 51,804,423	$ -	$ 1,280,000	$ 124,299	$ -	$ -	$ 37,674	$(2,118,334)	$ 51,128,062
40		Less: Accumulated Depreciation	15,877,022	-	-	-	(2,031,950)	-	-	-	13,845,072
41			-	-	-	-		-	-	-	-
42		Net Plant in Service (L59 - L 60)	$ 35,927,401	$ -	$ 1,280,000	$ 124,299	$ 2,031,950	$ -	$ 37,674	$(2,118,334)	$ 37,282,990
43											
44		*LESS:*									
45		Contributions in Aid of Construction (CIAC)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
46		Less: Accumulated Amortization	-	-	-	-	-	-	-	-	-
47		Net CIAC (L25 - L26)	6,119,129	-	-	-	0	-	-	-	6,119,129
48		Advances in Aid of Construction (AIAC)	6,557,243	-	-	-	-	-	-	-	6,557,243
49		Customer Meter Deposits	819,845	-	-	-	-	-	-	-	819,845
50		Deferred Income Taxes	925,896	-	-	-	-	-	-	-	925,896
51		Shared Gain on Well (Settlement Agreement Not to Use Wells)	646,000	570,000							1,216,000
52											
53		*ADD:*									
54		Unamortized Debt Issuance Costs	424,010	-	-	-	-	(424,010)	-	-	-
55		Prepayments	192,485	-	-	-	-	(192,485)	-	-	-
		Materials and Supplies	14,521					(14,521)			-
		Deferred Regulatory Assets	1,280,000		(1,280,000)						-
56		Working Capital	-	-	-	-	-	-	-		-
57											
58		**Original Cost Rate Base**	$ 22,770,304	$ (570,000)	$ -	$ 124,299	$ 2,031,950	$ (631,016)	$ 37,674	$(2,118,334)	$ 21,644,677

ADJ #		References:
1	Allocate 100% of Well Settlement Proceeds to Ratepayers.	Schedule MEM-5
2	CAP Allotment Reclassified to Account 303,.	Schedule MEM-6
3	Increase General Office allocation to 4.0%.	Schedule MEM-7
4	Recalculation of Accumulated Depreciation.	Schedule MEM-8
5	Eliminate Working Capital Components	Schedule MEM-9
6	Capitalize Outside Services Expenses	Schedule MEM-10
7	Retire Wells 8 & 9 that are no longer used and useful	Schedule MEM-11

☆ Plant Adds: $1,823
Plant Retirements: ($2,118,334)
G.O. Allocation: $84,561
($2,031,950)

CHAPARRAL CITY WATER COMPANY, INC.
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

RATE BASE ADJUSTMENT #4 - ACCUMULATED DEPRECIATION

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENT A	[C] STAFF ADJUSTMENT B	[D] TOTAL OF STAFF ADJUSTMENTS	[E] STAFF RECOMMENDED
1	General office plant allocation	$ 15,877,022	$ 84,561	$ 2,116,511	$ (2,031,950)	13,845,072
2	Totals	$ 15,877,022	$ 84,561	$ 2,116,511	$ (2,031,950)	$ 13,845,072
3						
4						
5	[A]: Company Schedule B-2, Page 3 and B-3, Page 3 and below Line 63, Column C.					
6	[B]: Testimony - MEM and below calculations and Line 99, Column E.					
7	[C]: Testimony - MEM and below calculations and line 175, Column E.					
8	[D]: Col [B] + Col [C]					
9	[E]: Testimony - MEM					
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Acct. No.	Description	CCWC Plant OCN Accum. Depr. Per Exh. Sch. B-2 Page 3d
301	Organization	-
302	Franchises	-
303	Land and Land Rights	-
304	Structures & Improvements	357,961
305	Collecting & Impounding Reservoirs	573
306	Lakes, Rivers, Other Intakes	-
307	Wells and Springs	183,252
308	Infiltration Galleries and Tunnels	-
309	Supply Mains	-
310	Power Generation Equipment	-
311	Pumping Equipment	879,456
320	Water Treatment Plant	2,304,464
330	Distribution Reservoirs & Standpipes	1,996,014
331	Transmission & Distribution Mains	7,154,728
333	Services	1,060,764
334	Meters & Meter Installation	990,763
335	Hydrants	235,514
336	Backflow Prevention Devices	-
339	Other Plant & Misc. Equipment	135,962
340	Office Furniture & Equipment	45,958
341	Transportation Equipment	60,636
342	Stores Equipment	-
343	Tools, Ship & Garage Equipment	34,980
344	Laboratory Equipment	25
345	Power Operated Equipment	-
346	Communication Equipment	883
347	Miscellaneous Equipment	31,899
348	Other Tangible Plant	-
		15,473,832
	Rounding	2
	Total CCWC Plant Accumulated Depreciation Per Exhibit Schedule B-2. Page 3d.	15,473,834

	General Office Plant Allocated - Accum Depr OCN	Per Exhibit Schedule B-4-A	Allocation Factor	Allocation
301	Organization	3,046	3.21%	98
302	Franchise Cost and Other Intangible Plant	211,596	3.21%	6,792
304	Structures & Improvements	2,354,430	3.21%	75,577
311	Electric Pumping Equipment		3.21%	-
339	Other Plant & Misc. Equipment	162,569	3.21%	5,218
340	Office Furniture & Equipment	8,664,647	3.21%	278,135
341	Transportation Equipment	552,718	3.21%	17,742
343	Tools, Shop & Garage Equipment	192,488	3.21%	6,179
344	Laboratory Equipment	4,062	3.21%	130
345	Power Operated Equipment	249,257	3.21%	8,001
346	Communication Equipment	165,561	3.21%	5,315
	Total GO Accum. Depr. - Exh. Sch. B-2. Pg 4, Line 33.	12,560,374		403,188
	Total Accumulated Depreciation Per Exhibit Schedule B-2. Page 1, Line 6.			15,877,022

Explanation of Staff Adjustment A

As Originally Filed::

		Per Exhibit Sch. B-2, Page 4	Allocation Factor	Original Allocation
Home Office Plant Accumulated Depreciation				
301	Organization	3,046	3.21%	98
302	Franchise Cost and Other Intangible Plant	211,596	3.21%	6,792
304	Structures & Improvements	2,354,430	3.21%	75,577
311	Electric Pumping Equipment	-	3.21%	-
339	Other Plant & Misc. Equipment	162,569	3.21%	5,218
340	Office Furniture & Equipment	8,664,647	3.21%	278,135
341	Transportation Equipment	552,718	3.21%	17,742
343	Tools, Ship & Garage Equipment	192,488	3.21%	6,179
344	Laboratory Equipment	4,062	3.21%	130
345	Power Operated Equipment	249,257	3.21%	8,001
346	Communication Equipment	165,561	3.21%	5,315
		12,560,374		403,188

		Per Exhibit Schedule B-2, Pa	Staff Adjustment A	Adjusted for Allocation	Allocation Factor	Staff Recommended
Home Office Plant Accumulated Depreciation						
301	Organization	3,046	(3,046)	-	4.00%	-
302	Franchise Cost and Other Intangible Plant	211,596	(153,888)	57,708	4.00%	2,308
304	Structures & Improvements	2,354,430		2,354,430	4.00%	94,177
311	Electric Pumping Equipment	-		-	4.00%	-
339	Other Plant & Misc. Equipment	162,569	(166,019)	(3,450)	4.00%	(138)
340	Office Furniture & Equipment	8,664,647		8,664,647	4.00%	346,586
341	Transportation Equipment	552,718	(43,667)	509,051	4.00%	20,362
343	Tools, Ship & Garage Equipment	192,488		192,488	4.00%	7,700
344	Laboratory Equipment	4,062		4,062	4.00%	162
345	Power Operated Equipment	249,257		249,257	4.00%	9,970
346	Communication Equipment	165,561		165,561	4.00%	6,622
		12,560,374	(366,620)	12,193,754		487,750
				As originall filed		403,188
	Add the rounding difference required to agree with the Exhibit					2
	Staff Adjustment A to increase General Office Plant Accumulated depreciation to Colun B, above					84,561

Items Removed from General Office Plant Accumulated Depreciation In Staff Adjustment A:

		Accum Depr
CRC Valuation - Inappropriate accumulated depreciation for intangible	3,046	Per DR MEM 7.4 & 7.5
CPUC Management Audit - Completed in 1995, thus not aaplicable to CCWC.	153,888	
Water Management Plans - Completed in 1998, thus not applicable to CCWC.	166,019	
Luxury Vehicles - Detail listed below.	43,667	
	366,620	

Vehicles Found by Staff to be I	Date Acquired	Price	Accum. Depr.
Ford Explorer - 2004	3/26/2004	$ 45,639	5,988
Infiniti GX35 - 2004	8/13/2004	$ 40,039	5,253
Ford Expedition - 2004	8/13/2004	$ 40,785	5,351
Acura MDX 2001	11/21/2002	$ 38,319	10,055
Infiniti QX4	12/11/2002	$ 50,077	13,140
Audi S4 Avant - 2005	7/6/2005	$ 59,143	3,880
		$ 274,001	$ 43,667

Explanation of Staff Adjustment B

Explanation of Adjustment:
Agreement signed 02/05/2005 with Fountain Hills Sanitation District to take Wells 8 & 9 out of service and retire other Plant identified by Staff as not being used and useful. Also to reclassify plant and accumulated depreciation.

Acct. No.	Description	Cost	Accum Depr
304	Staff adjustment to Structures and addition to accum depr based on half-year conve	11,590	(193)
304	Well No. 9 - Install exhaust fan	596	596
	Subtotal	12,186	403
307	Fully depreciated Cost of Well #8 per response to DR MEM-7.3	$ 49,329	$ 49,329
307	Fully depreciated Cost of Well #9 per response to DR MEM-7.3	54,139	54,139
307	Engine Well	3,348	3,348
	Subtotal	106,816	106,816
311	Staff adjustment to pumping equipment and addition to accum depr based on half-y	26,083	(1,630)
	Subtotal	26,083	(1,630)
320	CAP Plant #1 1986	1,320,562	1,320,562
320	CAP Plant #1 - Treatment Equipment 1987	288,612	288,612
320	CAP Plant #1 - Treatment Equipment 1989	397,339	397,339
320	CAP Plant #1 - Treatment Equipment 19889	4,409	4,409
	Subtotal	2,010,922	2,010,922
305	Collecting and Impounding Reservoirs	(6,548)	(1,801)
307	Wells and Springs (250 hp sub.)	(65,622)	(18,727)
311	Pumping Equipment (250 hp sub. In 1996 Less Fire hydrant in 1996 and DIP in 200	55,254	24,434
320	Water Treatment Equipment (Water Treatment Study in 2004)	34,062	2,908
330	Distribution Reservoirs and Standpipes (Water Services in 1996 and mains in 2005	(1,658,272)	(104,710)
331	Transmission and Distribution Mains (16" main in 2005 and fh Blvd main in 2006)	1,502,420	46,451
333	Services (Water Services in 1996 less Conference Room Table and Chairs in 1993	106,409	30,253
334	Meters and Meter Installation (Meter installation in 1973 less service line in 1994)	11,193	16,154
335	Hydrants (Fire hydrant in 1996 and DIP in 2005)	53,352	10,940
340	Office Furniture and Equipment (Conference Room Table and Chairs in 1993)	1,814	585
303	Land and Land Rights (A/C #348 for RCN)	(34,062)	(6,487)
		-	-
339	Other Plant & Misc. Equip.	106,542	31,889
347	Miscellaneous Equipment	(106,542)	(31,889)
		-	-
		$ 2,156,007	$ 2,116,511

Summary of Staff Adjustment B

Plant Additions -	Line 132	Structures and Improvements	(193)
	Line 141	Pumping equipment	(1,630)
		Subtotal of Additions	(1,823)
Plant Retirements -	Line 133	Structures and Improvements	596
	Line 139	Wells and Springs	106,816
	Line 148	Water Treatment Equipment	2,010,922
		Subtotal of Retirements	2,118,334
		Total reduction to Column C above	2,116,511

PROPERTY DISPOSAL REPORT
ARIZONA WATER COMPANY

P.D.R. 10720

☒ NORMAL RETIREMENT
☐ SALE / CONDEMNATION
REASON FOR REMOVAL End of useful life - not in use

COUNTY
CITY ☐ INSIDE ☐ OUTSIDE
SCHOOL DIST.
FIRE DIST.

SYSTEM 022
ACCT. NO. 321
W.A. NO.
USE ONLY ONE ACCOUNT PER P.D.R.
DATE 8-11-09

TOTAL QUANTITY REMOVED	DETAILED DESCRIPTION	CURRENT COST	YEAR IN-STALLED	ORIGINAL COST FACTOR	ORIGINAL COST AMOUNT
1	10x10 Block Bldg. - Queen Creek Pump Station		'58		$1,173

TOTAL ▶ $1,173

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APPROVED [signature] DIVISION MANAGER OR OPERATIONS SUPERINTENDENT

RED ROS #

POSTED TO ABANDONED ATLAS BY

FORM NO. 10024 12/91

ORIGINAL

PROPERTY DISPOSAL REPORT
ARIZONA WATER COMPANY

P.D.R. 10721

☒ NORMAL RETIREMENT
☐ SALE / CONDEMNATION
REASON FOR REMOVAL End of useful life - not in use

COUNTY
CITY ☐ INSIDE ☐ OUTSIDE
SCHOOL DIST.
FIRE DIST.

SYSTEM 022
ACCT. NO. 325
W.A. NO.
USE ONLY ONE ACCOUNT PER P.D.R.
DATE 8/11/09

TOTAL QUANTITY REMOVED	DETAILED DESCRIPTION	CURRENT COST	YEAR IN-STALLED	ORIGINAL COST FACTOR	ORIGINAL COST AMOUNT
1	Automatic Controls - Queen Creek pump station		'82		$7,684

TOTAL ▶ $7,684

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PROPERTY DISPOSAL REPORT
ARIZONA WATER COMPANY

P.D.R. 10722

☒ NORMAL RETIREMENT
☐ SALE / CONDEMNATION
REASON FOR REMOVAL End of useful life - not in Service

COUNTY
CITY ☐ INSIDE ☐ OUTSIDE
SCHOOL DIST.
FIRE DIST.

SYSTEM 022
ACCT. NO. 332
W.A. NO.
USE ONLY ONE ACCOUNT PER P.D.R.
DATE 8/11/09

TOTAL QUANTITY REMOVED	DETAILED DESCRIPTION	CURRENT COST	YEAR IN-STALLED	ORIGINAL COST FACTOR	ORIGINAL COST AMOUNT
1	filter system - Queen Creek				
	pump station		'83		$3,057

TOTAL ▶ $3,057

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ORIGINAL

PROPERTY DISPOSAL REPORT

ARIZONA WATER COMPANY

P.D.R. 10723

☒ NORMAL RETIREMENT

☐ SALE / CONDEMNATION

REASON FOR REMOVAL End of Useful life - not in Service

COUNTY

CITY ☐ INSIDE ☐ OUTSIDE

SCHOOL DIST.

FIRE DIST.

SYSTEM 022

ACCT. NO. 342

W.A. NO.

USE ONLY ONE ACCOUNT PER P.D.R.

DATE 8/11/09

TOTAL QUANTITY REMOVED	DETAILED DESCRIPTION	CURRENT COST	YEAR INSTALLED	ORIGINAL COST FACTOR	ORIGINAL COST AMOUNT
1	20'X10'D Storage tank - ~~Green Valley pump station~~ Desert Station		'56		$500

TOTAL ▶ $500

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RED ROS #

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FORM NO. 10024 12/91

ORIGINAL

PROPERTY DISPOSAL REPORT
ARIZONA WATER COMPANY

P.D.R. 10724

☒ NORMAL RETIREMENT
☐ SALE / CONDEMNATION
REASON FOR REMOVAL End of useful life - not in SUC.

COUNTY
CITY ☐ INSIDE ☐ OUTSIDE
SCHOOL DIST.
FIRE DIST.

SYSTEM 022
ACCT. NO. 397
W.A. NO.
USE ONLY ONE ACCOUNT PER P.D.R.
DATE 8/11/09

TOTAL QUANTITY REMOVED	DETAILED DESCRIPTION	CURRENT COST	YEAR IN-STALLED	ORIGINAL COST FACTOR	ORIGINAL COST AMOUNT
1	Mobile radio base station - ~~[illegible]~~ Ofc./Warehouse		189		$7,088

TOTAL ▶ $7,088

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RECEIVED BY STOREKEEPER

APPROVED [signature] DIVISION MANAGER OR OPERATIONS SUPERINTENDENT

RED ROS #

POSTED TO ABANDONED ATLAS BY

FORM NO. 10024 12/91

ORIGINAL

PROPERTY DISPOSAL REPORT
ARIZONA WATER COMPANY

P.D.R. 10725

☒ NORMAL RETIREMENT
☐ SALE / CONDEMNATION
REASON FOR REMOVAL End of useful life - no longer in svc

COUNTY
CITY ☐ INSIDE ☐ OUTSIDE
SCHOOL DIST.
FIRE DIST.

SYSTEM 031
ACCT. NO. 397
W.A. NO.
USE ONLY ONE ACCOUNT PER P.D.R.
DATE 8/11/09

TOTAL QUANTITY REMOVED	DETAILED DESCRIPTION	CURRENT COST	YEAR IN-STALLED	ORIGINAL COST FACTOR	ORIGINAL COST AMOUNT
1	Black Gap repeater station		'67		$704

TOTAL ▶ $704

REMOVED BY [signature] FOREMAN
RECEIVED BY STOREKEEPER
APPROVED [signature] DIVISION MANAGER OR OPERATIONS SUPERINTENDENT
RED ROS #
POSTED TO ABANDONED ATLAS BY

FORM NO. 10024 12/91

ORIGINAL

PROPERTY DISPOSAL REPORT

ARIZONA WATER COMPANY

P.D.R. 10726

☒ NORMAL RETIREMENT

☐ SALE / CONDEMNATION

REASON FOR REMOVAL End of useful life, no longer in svc

COUNTY

CITY ☐ INSIDE ☐ OUTSIDE

SCHOOL DIST.

FIRE DIST.

SYSTEM 104

ACCT. NO. 314

W.A. NO.

USE ONLY ONE ACCOUNT PER P.D.R.

DATE 8/11/09

TOTAL QUANTITY REMOVED	DETAILED DESCRIPTION	CURRENT COST	YEAR IN-STALLED	ORIGINAL COST FACTOR	ORIGINAL COST AMOUNT
1	Well #2 - 55-616694		'51		$66,360

TOTAL ▶ $66,360

REMOVED BY _____ FOREMAN

RECEIVED BY _____ STOREKEEPER

APPROVED _____ DIVISION MANAGER OR OPERATIONS SUPERINTENDENT

RED ROS # _____

POSTED TO ABANDONED ATLAS BY _____

FORM NO. 10024 12/91

ORIGINAL

PROPERTY DISPOSAL REPORT
ARIZONA WATER COMPANY

P.D.R. 10727

☒ NORMAL RETIREMENT

☐ SALE / CONDEMNATION

REASON FOR REMOVAL End of Useful Life - no longer in SUC

COUNTY

CITY ☐ INSIDE ☐ OUTSIDE

SCHOOL DIST.

FIRE DIST.

SYSTEM 041

ACCT. NO. 314

W.A. NO.

USE ONLY ONE ACCOUNT PER P.D.R.

DATE 8/11/09

TOTAL QUANTITY REMOVED	DETAILED DESCRIPTION	CURRENT COST	YEAR IN-STALLED	ORIGINAL COST FACTOR	ORIGINAL COST AMOUNT
1	Inactive Well # 55-616583		'73		$115,205
1	Inactive Well # 55-616602		'75		$373,27[illegible]

TOTAL ▶ $488,47[illegible]

REMOVED BY [signature] FOREMAN

RECEIVED BY STOREKEEPER

APPROVED [signature] DIVISION MANAGER OR OPERATIONS SUPERINTENDENT

RED ROS #

POSTED TO ABANDONED ATLAS BY

FORM NO. 10024 12/91

ORIGINAL

PROPERTY DISPOSAL REPORT
ARIZONA WATER COMPANY

P.D.R. 10728

☒ NORMAL RETIREMENT
☐ SALE / CONDEMNATION
REASON FOR REMOVAL End of Useful life, no longer in SUC.

COUNTY
CITY ☐ INSIDE ☐ OUTSIDE
SCHOOL DIST.
FIRE DIST.

SYSTEM 042
ACCT. NO. 342
W.A. NO.
USE ONLY ONE ACCOUNT PER P.D.R.
DATE 8/11/09

TOTAL QUANTITY REMOVED	DETAILED DESCRIPTION	CURRENT COST	YEAR IN-STALLED	ORIGINAL COST FACTOR	ORIGINAL COST AMOUNT
1	16,000 Storage tank - Table Top Well #3		163		$5,100

TOTAL ▶ $5,100

REMOVED BY _____ FOREMAN

RECEIVED BY _____ STOREKEEPER

APPROVED _____ DIVISION MANAGER OR OPERATIONS SUPERINTENDENT

RED ROS # _____

POSTED TO ABANDONED ATLAS BY _____

FORM NO. 10024 12/91

ORIGINAL

PROPERTY DISPOSAL REPORT
ARIZONA WATER COMPANY

P.D.R. 10729

[X] NORMAL RETIREMENT
[ ] SALE / CONDEMNATION
REASON FOR REMOVAL End of useful life - no longer in SUC1

COUNTY
CITY [ ] INSIDE [ ] OUTSIDE
SCHOOL DIST.
FIRE DIST.

SYSTEM 111
ACCT. NO. 314
W.A. NO.
USE ONLY ONE ACCOUNT PER P.D.R.
DATE 8/11/09

TOTAL QUANTITY REMOVED	DETAILED DESCRIPTION	CURRENT COST	YEAR IN-STALLED	ORIGINAL COST FACTOR	ORIGINAL COST AMOUNT
1	Inactive Well # 55-616660		'59		$45,969
1	V.V. Well #1 - 55-616672		'73		$184,328
1	Sunup Well # 55-632272		'52		$78,804
1	Sunup Well site - Automatic Controls		'62		$ 555

TOTAL ▶ $309,65

REMOVED BY [signature] FOREMAN
RECEIVED BY STOREKEEPER
APPROVED [signature] DIVISION MANAGER OR OPERATIONS SUPERINTENDENT
RED ROS #
POSTED TO ABANDONED ATLAS BY

FORM NO. 10024 12/91

ORIGINAL

PROPERTY DISPOSAL REPORT
ARIZONA WATER COMPANY

P.D.R. 10730

☒ NORMAL RETIREMENT

☐ SALE / CONDEMNATION

REASON FOR REMOVAL End of useful life - not in SVC.

COUNTY

CITY ☐ INSIDE ☐ OUTSIDE

SCHOOL DIST.

FIRE DIST.

SYSTEM 112

ACCT. NO. 314

W.A. NO.

USE ONLY ONE ACCOUNT PER P.D.R.

DATE 8/11/09

TOTAL QUANTITY REMOVED	DETAILED DESCRIPTION	CURRENT COST	YEAR IN-STALLED	ORIGINAL COST FACTOR	ORIGINAL COST AMOUNT
1	PW inactive Well - 55-616650		'76		$13,512

TOTAL ▶ $13,512

REMOVED BY _____ FOREMAN

RECEIVED BY _____ STOREKEEPER

APPROVED _____ DIVISION MANAGER OR OPERATIONS SUPERINTENDENT

RED ROS # _____

POSTED TO ABANDONED ATLAS BY _____

FORM NO. 10024 12/91

ORIGINAL

PROPERTY DISPOSAL REPORT
ARIZONA WATER COMPANY

P.D.R. 10731

☒ NORMAL RETIREMENT
☐ SALE / CONDEMNATION
REASON FOR REMOVAL End of useful life - not in Sec.

COUNTY
CITY ☐ INSIDE ☐ OUTSIDE
SCHOOL DIST.
FIRE DIST.

SYSTEM 113
ACCT. NO. 314
W.A. NO.
USE ONLY ONE ACCOUNT PER P.D.R.
DATE 8/11/09

TOTAL QUANTITY REMOVED	DETAILED DESCRIPTION	CURRENT COST	YEAR IN-STALLED	ORIGINAL COST FACTOR	ORIGINAL COST AMOUNT
1	MH1 - 55-803289		'69		$62,097

TOTAL ▶ $62,097

REMOVED BY FOREMAN

RECEIVED BY STOREKEEPER

APPROVED DIVISION MANAGER OR OPERATIONS SUPERINTENDENT

RED ROS #

POSTED TO ABANDONED ATLAS BY

FORM NO. 10024 12/91

ORIGINAL

Joel Reiker

From: Joel Reiker
Sent: Monday, May 11, 2009 4:11 PM
To: 'Brian Bozzo'; 'Katrin Stukov'
Cc: 'aigwe@azcc.gov'; Fred Schneider; Joe Harris
Subject: Well 14
Attachments: CG Property Schedule 5.11.09@345pm.xls; DWR Well Registry Report.pdf

Katrin & Brian-

I double checked with Engineering and DWR. 55-616598 is actually Well #14 and is currently in service. 55-613443 is an agricultural well which does not belong to the Company (see attached). Therefore, I changed the data for Well #14 to reflect the correct DWR#, h.p., yield, depth, and diameter, and I deleted the inactive well previously listed as 55-616598. See attached.

Joel M. Reiker
Manager - Rates & Regulation
Arizona Water Company
3805 N. Black Canyon Hwy • Phoenix, AZ 85015
O.602.240.6860
F.602.240.6878

Run Date: 03/14/2005

AZ DEPARTMENT OF WATER RESOURCES

WELL REGISTRY REPORT - WELLS55

Location	D 6.0 6.0 21 B B B	**Well Reg.No** 55 - 616598	**AMA** PINAL AMA

Registered Name AZ WATER COMPANY,
PO BOX 29006
PHOENIX AZ 85038

File Type REGISTERED WELL
Application/Issue Date 04/02/1982

Owner OWNER
Driller No. 0
Driller Name NO DRILLER SPECIFIED
Driller Phone
County PINAL

Intended Capacity GPM 0.00

Well Type NON-EXEMPT
SubBasin ELOY
Watershed SANTA CRUZ RIVER
Registered Water Uses DOMESTIC
Registered Well Uses WATER PRODUCTION
Discharge Method NONE
Power NO POWER CODE LISTED

Well Depth	600.00	**Case Diam**	20.00	**Tested Cap**	0.00
Pump Cap.	0.00	**Case Depth**	600.00	**CRT**	
Draw Down	0.00	**Water Level**	0.00	**Log**	
		Acres Irrig	0.00	**Finish**	STEEL - PERFORATED OR SLOTTED CASING

Contamination Site: YES - WITHIN 500 FT OF LUST

Comments GORDON FJELD

Current Action

11/8/2004 880 CHANGE IN CONTAMINATION SITE
Action Comment: Old WQARF Code = L&R

Action History

11/4/2004 880 CHANGE IN CONTAMINATION SITE
Action Comment: Old WQARF Code = LLL

8/16/2004 880 CHANGE IN CONTAMINATION SITE
Action Comment: Old WQARF Code = NULL

Arizona Department of Water Resources
WellFinder Program

Summary Information for Registered Well 616598

Database	Field	Value Oracle9i Enterprise Edition Release 9.2.0.4.0 - Production JServer Release 9.2.0.4.0 - Production
WELLS	AMA	PINAL AMA
WELLS	OWNER LAST NAME	AZ WATER COMPANY,
WELLS	OWNER FIRST NAME	
WELLS	OWNER COMPANY NAME	
WELLS	OWNER ADDRESS	PO BOX 29006
WELLS	OWNER ADDRESS	
WELLS	OWNER CITY	PHOENIX
WELLS	OWNER STATE	AZ
WELLS	OWNER ZIP CODE	85038
WELLS	DRILLER LICENSE	0
WELLS	DRILLER NAME	
WELLS	DRILLER COMPANY	NO DRILLER SPECIFIED
WELLS	DRILLER ADDRESS	
WELLS	DRILLER ADDRESS	
WELLS	DRILLER CITY	
WELLS	DRILLER STATE	AZ
WELLS	DRILLER ZIP CODE	
WELLS	AUTHORIZATION DATE	*No information*
WELLS	CONSTRUCTION DATE	*No information*
WELLS	WELL DEPTH	600 feet
WELLS	DEPTH TO WATER	0 feet
WELLS	PUMP TYPE	NO PUMP CODE LISTED
WELLS	PUMP POWER SOURCE	NO POWER CODE LISTED
WELLS	PUMP CAPACITY	0 gallons per minute
WELLS	SITE USES	WATER PRODUCTION
WELLS	WATER USES	DOMESTIC

WELLS	WATER USES	MUNICIPAL
WELLS	WATER USES	INDUSTRIAL
WELLS	WELL TYPE	*No information*
WELLS	CASING DIAMETER	20 inches
WELLS	CASING DEPTH	600 feet
WELLS	CASING TYPE	STEEL - PERFORATED OR SLOTTED CASING
WELLS	SUBDIVISION	NW 1/4 of NW 1/4 of NW 1/4
WELLS	SECTION	21
WELLS	TOWNSHIP	6S
WELLS	RANGE	6E

ROGR Water Withdrawn for Registered Well 616598

Acre-Feet Pumped	To Right	In Year
2.41 af	56-001307.0000	1987
187.34 af	56-001307.0000	1988
213.98 af	56-001307.0000	1989
252.7 af	56-001307.0000	1990
178.16 af	56-001307.0000	1991
90.2 af	56-001307.0000	1992
47.78 af	56-001307.0000	1993
3.13 af	56-001307.0000	1994
37.36 af	56-001307.0000	1995
81.21 af	56-001307.0000	1996
137.48 af	56-001307.0000	1997
75.12 af	56-001307.0000	1998
55.3 af	56-001307.0000	1999
148.76 af	56-001307.0000	2000
231.96 af	56-001307.0000	2001
217.2 af	56-001307.0000	2002
182.15 af	56-001307.0000	2003

JServer Release 9.2.0.4.0 - Production Wed Mar 16 15:08:22 MST 2005

Go back to the Well Information form

Arizona Department of Water Resources
Groundwater Management Support Section
P.O. Box 458 • Phoenix, Arizona 85001-0458
(602) 417-2470 • (800) 352-8488
www.water.az.gov

Request to Change Well Information

RECEIVED APR 22 2005

FILE NUMBER
WELL REGISTRATION NUMBER
55- 616598

- Review instructions prior to completing form in black or blue ink.
- You must include with your Notice:
  - check or money order for any required fee(s)
- Authority for fee: A.A.C. R12-15-151(B)(4)(a), A.R.S. § 45-113(B)

** PLEASE PRINT CLEARLY **

SECTION 1: REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL: ARIZONA WATER Co (CASA GRANDE)

MAILING ADDRESS: P.O. Box 29006

CITY / STATE / ZIP CODE: PHOENIX, AZ 85038

CONTACT PERSON NAME AND TITLE:

TELEPHONE NUMBER:

FAX:

Location of Well

WELL LOCATION ADDRESS (IF ANY):

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
6S	6E	21	B ¼	B ¼	B ¼

LATITUDE			LONGITUDE		
° Degrees	' Minutes	" N Seconds	° Degrees	' Minutes	" W Seconds

COUNTY ASSESSOR'S PARCEL ID NUMBER

BOOK	MAP	PARCEL

COUNTY WHERE WELL IS LOCATED: PINAL

SECTION 2: INFORMATION

☐ Change of Well Drilling Contractor *(Fill out Section 2)*
☐ Change of Well Ownership *(Fill out Section 3)*
☑ Change of Well Information (location, use, etc.) *(Fill out Section 4)*

SECTION 2: REQUEST TO CHANGE WELL DRILLING CONTRACTOR INFORMATION

- If drilling or abandoning a well, the Department must receive this request and issue authorization to the new drilling firm prior to the commencement of well drilling or abandonment.

$10 FEE

Current Well Drilling Contractor

FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL:

DWR LICENSE NUMBER:

TELEPHONE NUMBER:

FAX:

New Well Drilling Contractor

FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL:

DWR LICENSE NUMBER:

ROC LICENSE CATEGORY:

TELEPHONE NUMBER:

FAX:

SECTION 3: STATEMENT OF CHANGE OF WELL OWNERSHIP INFORMATION

- If this change pertains to more than one well and the names are the same, only one $10 fee is required.

$10 FEE

Previous Well Owner

FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL:

MAILING ADDRESS:

CITY / STATE / ZIP CODE:

CONTACT PERSON NAME AND TITLE:

TELEPHONE NUMBER:

FAX:

New Well Owner

FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL:

MAILING ADDRESS:

CITY / STATE / ZIP CODE:

CONTACT PERSON NAME AND TITLE:

TELEPHONE NUMBER:

FAX:

SECTION 4: CHANGE OF WELL INFORMATION (No Fee Required)

NO FEE

NOTE: Applies only to wells that have already been drilled. For proposed wells, an amended Notice of Intent to Drill a Well must be filed.

EXPLAIN: Change to Service Area Well
IN SERVICE- ASSOCIATED WITH SERVICE AREA RIGHT 56-001307.0001 (CASA GRANDE)

I HEREBY CERTIFY that the above statements are true to the best of my knowledge and belief.

TYPE OR PRINT NAME AND TITLE: RICHARD W. HENDERSON VP OPERATIONS

SIGNATURE OF WELL OWNER: Richard W. Henderson

DATE: 4-20-05

OK

Well #14 - CG
D(6-6) 21-4

DEPARTMENT OF WATER RESOURCES
99 EAST VIRGINIA AVENUE
PHOENIX, ARIZONA 85004

RECEIVED APR 2 1982 DEPT. OF WATER RESOURCES

REGISTRATION OF EXISTING WELLS

READ INSTRUCTIONS ON BACK OF THIS FORM BEFORE COMPLETING
PRINT OR TYPE – FILE IN DUPLICATE

09

FOR OFFICE USE ONLY
REGISTRATION NO. 55- 616598
FILE NO. D(6-6)21 Cbb
FILED 4-2-82 (DATE) AT (TIME)
INA
AMA Pinal

REGISTRATION FEE (CHECK ONE)	
EXEMPT WELL (NO CHARGE)	☐
NON-EXEMPT WELL – $10.00	☒

1. Name of Registrant:
   ARIZONA WATER COMPANY
   2612 N. 16th St., P. O. Box 5396, Phoenix, Arizona 85010
   (Address) (City) (State) (Zip)

2. File and/or Control Number under previous groundwater law:
   None (File Number) 35- None (Control Number)

3. a. The well is located within the NW ¼ NW ¼ NW ¼, Section 21, of Township 6S N/S, Range 6E E/W, G & SRB & M, in the County of Pinal.
   b. If in a subdivision: Name of subdivision N/A, Lot No. _____, Address _____.

4. The principal use(s) of water (Examples: irrigation - stockwater - domestic - municipal - industrial)
   Domestic - municipal - industrial.

5. If for irrigation use, number of acres irrigated from well _____.

6. Owner of land on which well is located. If same as Item 1, check this box ☒
   (Address) (City) (State) (Zip)

7. Well data (If data not available, write N/A)
   a. Depth of Well 600 feet
   b. Diameter of casing 20 inches
   c. Depth of casing 600 feet
   d. Type of casing welded steel.
   e. Maximum pump capacity no pump gallons per minute.
   f. Depth to water N/A feet below land surface.
   g. Date well completed N/A (Month) (Day) (Year).

8. The place(s) of use of water. If same as Item 3, check this box ☐.
   ____¼ ____¼ ____¼, Section ____ Township ____ Range ____
   ____¼ ____¼ ____¼, Section ____ Township ____ Range ____
   Attach additional sheet if necessary.

9. DATE 4-2-82 SIGNATURE OF REGISTRANT By: ARIZONA WATER COMPANY
   Chief Engineer

MICROFILMED

INSTRUCTIONS FOR COMPLETING REGISTRATION FORM

General Instructions

1. A person who owns an "Existing Well" shall register the well, pursuant to A.R.S. 45-593, by filing this form in duplicate with the Department of Water Resources not later than midnight June 14, 1982. The form must be completed and signed. Failure to do so will constitute a violation of A.R.S. 45-593, and may subject the well owner to injunction and/or civil penalties, pursuant to A.R.S. Title 45, Article 12.

2. An "Existing Well" means, (1) a well which was drilled on or before June 12, 1980 and which is not abandoned or sealed, or (2) a well which was not completed on or before June 12, 1980, but for which a Notice of Intention to Drill was on file with the Arizona Water Commission on or before June 12, 1980.

3. No registration fee is required for Exempt Wells. A $10.00 registration fee must accompany registration forms for all Non-Exempt Wells.

4. An "Exempt Well" means a well having a pump with a maximum capacity of not more than 35 gallons per minute which is used to withdraw groundwater. An Exempt Well may include the non-commercial irrigation of not more than 1 acre of land.

5. A "Non-Exempt Well" means a well that is not an "Exempt Well".

INSTRUCTIONS FOR REGISTRATION QUESTIONS

1. The Registrant must be the owner of the well and may be an individual, public or private corporation, company, partnership, firm, association, society, estate, trust, any other private organization or enterprise, the United States, any state, territory or country or a governmental entity, political subdivision or municipal corporation organized under or subject to the constitution and laws of this State.

2. If you own an existing irrigation well drilled at any time, or any other type of well drilled on or after June 20, 1968, you should have an assigned control and/or file number. Write these numbers in item 2. If you do not know the number, please explain the reason on the form or on an attached sheet.

3. a. Fill in the Section, Township and Range in all cases if it is available.
   b. If the well is in a subdivision and you have this information, give the subdivision name, Lot Number, and Address.

4. Show all purposes for which the water is used.

5. If the well is used for irrigation, give the number of acres irrigated in 1980 from the well.

6. If the owner of the land is an individual, give the last name, first name, middle initial. If the owner of the land is a corporation, partnership, firm, etc., fill in the appropriate title.

7. Complete the section on Well Data with the most accurate information available to you. If the data is not available, write N/A in the blanks.

8. Give the legal description of the place of use of the water. If place of use is in a subdivision and legal description is not available, give the subdivision name, Lot Number and/or address on the blank line.

9. The person in whose name a well is registered shall notify the Department of any change in ownership and shall keep all information on the registration record current and accurate. A form entitled "Change of Well Information/Ownership" is available for this purpose. A blank form will be furnished with the returned duplicate copy of the registration form.

MICROFILMED

ARIZONA WATER CO
2612 N 16th ST
PO BOX 5396
PHOENIX AZ 85010

STATE OF ARIZONA
DEPARTMENT OF WATER RESOURCES
WATER RIGHTS ADMINISTRATION
99 EAST VIRGINIA
PHOENIX, ARIZONA 85004

RECEIPT

KIND ENTRY	FILE REFERENCE NO.
55	616581
	THRU
	616694

ACCOUNT NO. FUND SOURCE	AGENCY	CHAPTER	DIV.	INT. ACCT.	ITEM DESCRIPTION	RATE	$ AMOUNT
					Filing Fee for Registration of Existing Wells	10.00	1,140.00
					114 wells		
					File No's.: A(8-23)5dcd		
					A(1-7)26adb		
					A(1-8)30dcc		
					A(1-7)26aac and other various		
					D(7-5)9ccc		
					D(6-6)9bbd		
					D(6-6)21bbc		
					D(6-6)9bdd and various others		

~~WATER~~ ~~PAYMENT~~
GUESTS 114
CHK NO 42039
55-I 1140.00
TAX 0.00
TOTL 1140.00
GEN.CHEK 1140.00

904 A 8:16-

Check No. 42039
8-5-82 im

TOTAL $ 1,140.00

*

ARIZONA DEPARTMENT OF WATER RESOURCES

GROUNDWATER MANAGEMENT SUPPORT SECTION
MAIL TO: P.O. BOX 458 - PHOENIX, ARIZONA 85001-0458
Phone (602) 417-2470

29 1998

REQUEST FORM TO CHANGE WELL INFORMATION
OWNERSHIP * DRILLER * VARIANCE

Please complete the appropriate section of this request form and return to P.O. Box 458, Phoenix, Arizona 85001-0458 or hand deliver to the above address with applicable fee. NOTE: A.R.S. §45-593.C requires that the Department be notified of change of well ownership and that the new owner is required to keep the Department's Well Registration records current and accurate. Well data and ownership changes must be submitted within thirty days after changes take place.

SAVE THIS FORM TO REPORT FUTURE CHANGES IN OWNERSHIP, CHANGES IN ADDRESS, OR CHANGE IN WELL DATA SUCH AS PUMP CAPACITY, CORRECTION OF LEGAL DESCRIPTION, CHANGE OF WELL DRILLER AND AMENDING INFORMATION PREVIOUSLY FILED.

1. **CHANGE OF WELL INFORMATION: (NO FEE REQUIRED)**

NOTE: If the location of the proposed well changes after drilling authority has been issued, **attach a $10.00 reissue fee for each well.**

WELL REGISTRATION NO. 55-_____ **FILE NO:**_____

If known, I/We request the following well information be changed:_____

Date_____ **Signature of Current Well Owner**_____

2. **STATEMENT OF CHANGE OF WELL OWNERSHIP: ($10.00 FEE REQUIRED)**

NOTE: If this change consists of more than one well and the names are common: attach a $10.00 fee. Otherwise, each well requires a separate fee of $10.00.

~~I~~ We, the undersigned, state that ~~I am~~ we are the **Previous/New Owner** of the well described below:

SE ¼ (10 Acre) SE ¼ (40 Acre) ____ ¼ (160 Acre) of Section 24 Township 18N Range 18E

Assessor's tax parcel number of the parcel on which the well is located: Book 107 Map 01 Parcel 006B.

Well Registration No. 55- 613443 File No._____(if known)

New Mexico and Arizona Land Co.	Aztec Land and Cattle Co., Ltd.
PRINT Previous Owner's Name	**PRINT** New Owner's Name
6100 Indian School Rd., NE #100	1715 W. Northern, Rm. 104
Mailing Address	Mailing Address
Albuquerque, New Mexico 87110	Phoenix, Arizona 85021
City State Zip	City State Zip
505/881-6644	602/870-4800
Telephone Number	Telephone Number

Signature of Previous/New Well Owner See attached **Date**_____

DWR 55-71 (Rev 12-97))

ANSWERED JUN 1 6 1998

Run Date: 06/15/1998

WELL REGISTRY REPORT - WELLS55

Location A 18 0 18 0 24 D D D **WR** 613443 **AMA** JOSEPH CITY INA

Name AZTEC LAND AND CATTLE CO., LTD
1715 W NORHERN, RM 104

PHOENIX AZ 85021

File Type REGISTERED WELL
Application/Issue Date 06/09/1982

Owner OWNER
Driller Nbr # 114
Driller Name ~~NO DRILLER SPECIFIED~~ Peery Bros Drilling
Driller Phone
County NAVAJO
GPM

Well Type EXEMPT
SubBasin NO SUBBASIN
Watershed LITTLE COLORADO RIVER
Water Uses INDUSTRIAL
Well Uses WATER PRODUCTION
Discharge Method NONE
Power NO POWER CODE LISTED

Well Depth	338.00	**Case Diam**	24.00	**Tested Cap**	0.00
Pump Cap.	0.00	**Case Depth**	338.00	**CRT**	X
Draw Down	0.00	**Water Level**	~~0.00~~ 70	**Log**	X
Completed		**Acres Irrig**	0.00	**Finish**	STEEL-PERFORATEDORSLOTTED CASING

Comments |ICO:|IPQ:|PQ#:

Current Action
05/29/1998 860 CHANGE OF WELL OWNERSHIP

Action History
~~08/15/1978~~ 08/12/78 755 WELL CONSTRUCTION COMPLETED

6/15/98

Well File Update

Make the following changes.

Mike Bell

ANSWERED JUN 1 6 1998

P-32

LAND DEPARTMENT
WATER DIVISION
STATE OF ARIZONA

REPORT OF WELL DRILLER

This report should be prepared by the driller in all detail and filed with the State Land Commissioner following completion of the well.

1. OWNER Arizona Public Service Co. - STA 3172 (Name)
P.O. Box 21666 PHOENIX, AZ. 85036 (Address)

2. Lessee or Operator ..... (Name)
..... (Address)

3. DRILLER Perry Bros Drilling Co. (Name)
2033 N. NAVAJO Dr., FLAGSTAFF, Ariz 86001 (Address)

4. Location of well: Twp. 18N Rge. 18E Section 24 SE ¼ SE ¼ SE ¼ (10-acre subdivision)

5. Intention to Drill File No. A(18-18)24 ddd Permit No. 35-63865

DESCRIPTION OF WELL

6. Total depth of hole 338' ft.

7. Type of casing API A53 .365 wall steel

8. Diameter and length of casing 24 in. from 1.5+ to 338', ... in. from ..... to ....., ... in. from ..... to .....

9. Method of sealing at reduction points Cement placed by tremie method 338' back to 0'

10. Perforated from ✓ to ✓, from ..... to ....., from ..... to ....., from ..... to .....

11. Size of cuts ✓ Number of cuts per foot .....

12. If screen was installed: Length ✓ ft. Diam. ..... in. Type .....

13. Method of construction Drilled by cable tool method (drilled, dug, driven, bored, jetted, etc.)

14. Date started June (Month) 26 (Day) 1978 (Year)

15. Date completed Aug (Month) 12 (Day) 1978 (Year)

16. Depth to water 70.17 ft. (If flowing well, so state.)

17. Describe point from which depth measurements were made, and give sea-level elevation if available Top of 24" casing 18" ~~[illegible]~~ AGL

18. If flowing well, state method of flow regulation .....

19. REMARKS: .....

DO NOT WRITE IN THIS SPACE
OFFICE RECORD

Received 10-5-78 by ✓
Filed 11-6-78 by ✓
File No. A(18-18)24 ddd
35-63865

(Well Log to Appear on Reverse Side)

WS FORM C-301
REV. 4-27-53

STATE LAND
1970 OCT 13 AM 10: 52
DEPARTMENT

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encountered, and depth to which it rose in well.

FROM (FEET)	TO (FEET)	DESCRIPTION OF FORMATION MATERIAL
0	17	Sand and gravel
17	328	Moencopi (red)
328	338	Coconino SS (tan)

I hereby certify that this well was drilled by me (or under my supervision), and that each and all of the statements herein contained are true to the best of my knowledge and belief.

Driller Ralph D. Perry
Name
Perry Bros Drilling
2033 N Navajo Dr Flagstaff Ariz 86001
Address

Date Aug 13 1978

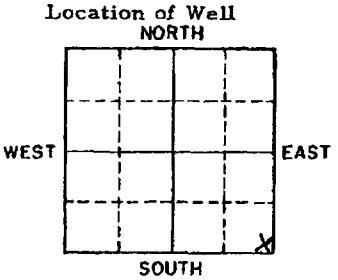
2-73

P-32

STATE LAND DEPARTMENT
Water Division
Phoenix, Arizona 85007

File No. A(18-18)24 ddd
35-63865

Location of Well



(Indicate Well Location by a circle "o" in the above Section Plat)

REPORT OF EQUIPMENT INSTALLED

OWNER Arizona Public Service Co.

LOCATION OF WELL:

SE ¼ SE ¼ SE ¼, Sec. 24 Twp. 18N Rge. 18E

Date Well Completed: Aug 12, 78 Depth 338'

1. Well Test:

Discharge: 0 (Gal. Per Min.) Date Well Tested: Aug 12 1978

Method of Discharge Measurement: ✓ (weir, orifice, current meter, etc.)

Static Water Level: ✓ 70.25' ft. Drawdown ✓ ft.

Total Pumping Lift ✓ ft.

2. Equipment Installed:

Kind of Pump: ✓ (turbine, centrifugal, etc.)

Kind of Power: ✓ (Elec., Nat. Gas, Etc.) H. P. Rating of Motor ✓

I HEREBY CERTIFY that all the above statements are true to the best of my knowledge and belief.

Ralph D. Perry
Signature Perry Bros Drilling
2033 N Navajo Dr
Address Flagstaff, Ariz. 86001

Date Aug 13, 1978.

63-73

62

NOTICE OF INTENTION TO DRILL WELL

LAND DEPARTMENT
WATER DIVISION
STATE OF ARIZONA

By Law, no person shall drill, or cause to be drilled, any well for the development and use of Ground Water in Arizona without first filing Notice of Intention to Drill with the State Land Department. The only exceptions are for those irrigation wells within critical Ground Water areas for which Drilling Permits are required. No well shall be drilled by other than the owner without the driller being licensed with the Registrar of Contractors. The driller's license number must be included before the State Land Department will process the filing.

FILING FEE $3.00

LOCATION OF WELL

North

West | NW¼ | NE¼ | East

SW¼ | SE¼ | X

South

Indicate Well Location by X
(Above diagram represents one 640 acre section)

1. Twp. 18N
2. Rge. 18E
3. Section 24
4. SE ¼ SE ¼ SE ¼
   10-acre subdivision
5. Owner of Well Site NEW
   Mexico & Ariz. Land Co.

INSTRUCTIONS

Fill out both copies and mail to Water Division, State Land Department, 1624 W. Adams, Phoenix, Arizona, 85007.

Duplicate will be returned to Filer, together with Drilling Card. 63865

DESCRIPTION OF WELL

6. Diameter 28 in. depth 750 ft.
7. Type of casing Steel
8. Estimated depth to water 75 ft.
9. Proposed use Chella 5" Pilot Production Well
10. Drilling will start about July 1978
    Month Year
11. Driller Denny Brothers
    Name
    Flagstaff Ariz.
    Address
    Driller's License No. 4-13626-001 C-53
12. Water will be applied to use about June 1982
    Month Year
20. This notice filed by:

Check one { Owner ☐ Lessee ☑ Driller ☐

Name Arizona Public Svc Co.
Address PO Box 21666 Phnx 85036 Attn: Land Dept 514-3172

PLACE OF USE

(P-32)

13. Twp. 18N
14. Rge. 19E
15. Section 23
16. Chella Power Plant
    Legal Description of Land to be Irrigated or place of other use.
17. Acres (if irrigation) .....
18. Owner .....
    Name
19. .....
    Address

DO NOT WRITE IN THIS SPACE
OFFICE RECORD

Received 5-3-78 By [illegible]
Filed 5-8-78 By [illegible]
Duplicate Mailed 5-11-78 By [illegible]
File Number A(18-18)24 [illegible]

A T T A C H M E N T

This well registration form is filed by New Mexico and Arizona Land Company, as owner and lessor of the land and by Arizona Public Service Company, as lessee of the land with the right to drill, operate, and maintain the herein identified well in accordance with and for the purpose set forth in that certain lease pertaining to the land on which said well is located.

RECEIVED
JUN 9 1982
DEPT. OF
WATER RESOURCES

P-32

DEPARTMENT OF WATER RESOURCES
99 EAST VIRGINIA AVENUE
PHOENIX, ARIZONA 85004

REGISTRATION OF EXISTING WELLS

READ INSTRUCTIONS ON BACK OF THIS FORM BEFORE COMPLETING
PRINT OR TYPE — FILE IN DUPLICATE

REGISTRATION FEE (CHECK ONE)	
EXEMPT WELL (NO CHARGE)	☒
NON-EXEMPT WELL — $10.00	☐

RECEIVED JUN 9 1982 DEPT. OF WATER RESOURCES

03

FOR OFFICE USE ONLY
REGISTRATION NO. 55- 613443
FILE NO. A(18-18)24ddd
FILED 6-9-82 (DATE) AT 10 — (TIME)
INA JOSEPH CITY
AMA

1. Name of Registrant: *
New Mexico and Arizona Land Company & Arizona Public Service Company
2810 North 3rd Street (Address) P. O. Box 21666 (City) (State) (Zip)
Phoenix, Arizona 85012 Phoenix, Arizona 85036

2. File and/or Control Number under previous groundwater law:
A (18-18) 24 ddd (File Number) 35.63865 (Control Number)

3. a. The well is located within the SE ¼ SE ¼ SE ¼, Section 24, of Township 18 N/~~S~~, Range 18 E/~~W~~, G & SRB & M, in the County of Navajo.

b. If in a subdivision: Name of subdivision N.A., Lot No. N.A., Address N.A.

4. The principal use(s) of water (Examples: irrigation - stockwater - domestic - municipal - industrial)
Industrial - incomplete (P-32).

5. If for irrigation use, number of acres irrigated from well N.A.

6. Owner of land on which well is located. If same as Item 1, check this box ☐
New Mexico and Arizona Land Company
2810 North 3rd Street (Address) Phoenix (City) Arizona (State) 85012 (Zip)

7. Well data (If data not available, write N/A)
a. Depth of Well 338 feet
b. Diameter of casing 24 inches
c. Depth of casing 338 feet
d. Type of casing Steel.
e. Maximum pump capacity N.A. gallons per minute.
f. Depth to water Unknown feet below land surface.
g. Date well completed Drilling stopped 8/15/78, well never completed (Month) (Day) (Year)

8. The place(s) of use of water. If same as Item 3, check this box ☐. N.A.
___ ¼ ___ ¼ ___ ¼, Section ___ Township ___ Range ___
___ ¼ ___ ¼ ___ ¼, Section ___ Township ___ Range ___

Attach additional sheet if necessary.

9. DATE 6/7/82 SIGNATURE OF REGISTRANT E M Bedwin Vice President
New Mexico and Arizona Land Company
[signature]
Arizona Public Service Company

* See attachment

ARIZONA DEPARTMENT OF WATER RESOURCES WELL REPORT

Quad	Town	Range	Sect	Q160	Q40	Q10	Reg No.	Full Name	City	Well Depth	Depth Cased	Case Diameter	Water Level	Pump (GPM)	Drill Date	Drill Lic No	Wtr Use	Wtr-shed	Log	CRT
A	18.0	18.0	24	A	D	D	613444	AZTEC LAND AND CATTLE CO., LTD 1715 W NORHERN, RM 104	PHOENIX, AZ 85021	1,050.00	278.00	10.00	20.00	0.00	1/1/01	0	FM	03		
A	18.0	18.0	24	D	D	D	613443	AZTEC LAND AND CATTLE CO., LTD 1715 W NORHERN, RM 104	PHOENIX, AZ 85021	338.00	338.00	24.00	0.00	0.00	1/1/01	0	F	03		

-- End Of Report --

ARIZONA WATER COMPANY'S SUPPLEMENTAL RESPONSE TO RESIDENTIAL UTILITY CONSUMER OFFICE'S FIRST SET OF DATA REQUESTS TO ARIZONA WATER COMPANY'S EASTERN, WESTERN, AND NORTHERN GROUPS RATE APPLICATION DOCKET NO. W-01445A-08-0440

August 11, 2009

Company Response Number: 1.31.

Q. Post Test-Year Plant – Please provide relevant updates as to the progress toward completion, placement in service and actual costs incurred for CWIP requested for inclusion in rate base.

A. ****SUPPLEMENTAL RESPONSE DATED AUGUST 11, 2009****

WA 1-3898 (Oak Creek Utility Bridge) The Oak Creek utility bridge located in the Sedona system was contracted and administered by ADOT, and the Company does not have the exact date that the bridge was completed. However, the Company's estimated completion date is October 30, 2008.

WA 1-4268B (Highway 179 Relocation Project) *Waterline construction is complete. All tie-ins are complete (connections to branch lines from the main waterline). The contractor has a small number of "house-keeping" items to complete such as air release valves, concrete pads around fire hydrants, etc.*

WA 1-4308 (Pinewood Well #10 Electrical Panels) *Service was established to the new electrical panels on Friday July 10, 2009. The panels are now in service. For additional discussion of these items see the rebuttal testimony of Fredrick K. Schneider, page 28, lines 5 – 17.*

Response provided by: Fredrick K. Schneider, VP of Engineering
Joel M. Reiker, Manager of Rates
Address: 3805 North Black Canyon Highway
Phoenix, AZ 85015

ARIZONA WATER COMPANY'S SUPPLEMENTAL RESPONSE TO ARIZONA CORPORATION COMMISSION STAFF'S THIRD SET OF DATA REQUESTS TO ARIZONA WATER COMPANY DOCKET NO. W-01445A-08-0440

August ~~8, 2008~~ 11, 2009

Company Response Number: All 3-22

Q. Post-Test Year Plant / Construction Work in Progress – For each System, please provide the following information for each construction project that was not completed at the end of the test year that you are requesting to be included in rate base:

a. Identification and description of project.
b. Date construction began.
c. Date construction is expected to be completed or was completed and placed in service.
d. The periods during which the ratepayers will likely benefit from the project.
e. The extent to which the project replaces existing plant.
f. Actual costs as of the end of the Test Year.
g. Actual costs as of July 31, 2008.
h. Accounts to which such costs will be transferred from construction.
i. Source of funding (i.e., hook-up fees, advances, equity or loans)

****SUPPLEMENTAL RESPONSE DATED AUGUST 11, 2009****

Sedona

WA 1-3898

a) Construct the waterline portion of the shared utility bridge in Sedona over Oak Creek as part of ADOT Highway 179 project.

b) On May 16, 2006 the Company entered into an agreement with ADOT for the waterline and a portion of the bridge construction. Because ADOT is administering the construction, the Company does not have an exact start date.

Response provided by:	Fredrick K. Schneider, Vice President - Engineering Joel M. Reiker, Manager - Rates
Address:	3805 North Black Canyon Highway Phoenix, AZ 85015

ARIZONA WATER COMPANY'S SUPPLEMENTAL RESPONSE TO ARIZONA CORPORATION COMMISSION STAFF'S THIRD SET OF DATA REQUESTS TO ARIZONA WATER COMPANY DOCKET NO. W-01445A-08-0440

August 7, 2008

c) The utility bridge is complete. AWC does not have the exact date of utility bridge construction completion as this project was funded by the City, ADOT and several utility providers in the Sedona area, one of which is Arizona Water Company. *However, the Company's estimated completion date is October 30, 2008.*

d) From the time the project is closed until fully depreciated.

e) The new utility bridge and 16-inch ductile iron pipe waterline replace the old Oak Creek Bridge and 6-inch steel waterline.

f) $326,292

g) $339,798

h) 343 T&D Mains

i) Debt and equity.

WA 1-4267B

a) Phase 2 of the waterline relocation project in Sedona as part of the ADOT Highway 179 project consisting of 600 linear feet of 6-inch, 4,040 linear feet of 12-inch, and 2,680 linear feet of 16-inch waterline.

b) Phase 2 of the ADOT Highway 179 waterline relocation project is funded by the Company while it is contracted and administered by ADOT. In accordance with ADOT policy, the Company is required to fund the projected cost of design, construction and administration prior to biding the project. The required payment was made on June 26, 2007.

Response provided by:	Fredrick K. Schneider, Vice President - Engineering Joel M. Reiker, Manager - Rates
Address:	3805 North Black Canyon Highway Phoenix, AZ 85015

c) *Waterline construction is complete. All tie-ins are complete (connections to branch lines from the main waterline). The contractor has a small number of "house-keeping" items to complete such as air release valves, concrete pads around fire hydrants, etc.*

d) From the time of project completion until fully depreciated.

e) The project replaces a portion of pipeline previously constructed within the old highway alignment.

f) $1,890,680

g) $2,064,537

h) 343 T&D Mains.

i) Debt and equity.

<u>Pinewood</u>

WA 1-4308

a) Replace the electrical panel in Pinewood at the well number 10 site.

b) Construction of the panels was authorized on October 20, 2006.

c) The panel was placed in service on Friday July 10, 2009.

d) From the date of project completion until fully depreciated.

e) The new electrical panel replaces the old electrical panel that had reached the end of its useful life.

f) $40,553

g) $42,598

h) 325 Pumping Electrical Equipment.

i) Debt and equity.

Response provided by:	Fredrick K. Schneider, Vice President - Engineering Joel M. Reiker, Manager - Rates
Address:	3805 North Black Canyon Highway Phoenix, AZ 85015

ARIZONA WATER COMPANY
2001 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK	OV
			(300,520.46)	(98,614.43)	(3,470.33)	(51,414.16)	(216,242.02)	1,622.65	1,621.32	(2,786.59)	59,742.58	(46,007.76)	5,152.49
31-Jan-01	Payroll	1	4,095.60	271.26	52.32		663.11			190.40	269.67		
31-Jan-01	Payroll taxes	2	413.25	27.37	5.28		66.91			19.21	27.21		
31-Jan-01	AP	5	4,781.70	2,126.58			31.95				2.10		
31-Jan-01	Transportation	9	790.67	79.28	9.02		170.95			7.12	19.14		
31-Jan-01	Tank maint accrual	26	(18,693.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,636.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
			0.00										
			0.00										
			0.00										
			0.00										
			0.00										
		JANUARY	(8,611.78)	(1,491.51)	(1,034.38)	(1,038.00)	(3,703.08)	(193.00)	(238.00)	38.73	(531.88)	(1,069.00)	(222.00)
		BTD	(309,132.24)	(100,105.94)	(4,504.71)	(52,452.16)	(219,945.10)	1,429.65	1,383.32	(2,747.86)	59,210.70	(47,076.76)	4,930.49
(8,308.98)	Total 265		(378,259.62)										

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK	OV
			(309,132.24)	(100,105.94)	(4,504.71)	(52,452.16)	(219,945.10)	1,429.65	1,383.32	(2,747.86)	59,210.70	(47,076.76)	4,930.49
28-Feb-01	Payroll	1	6,020.27	482.61	319.41	731.91	1,081.02		76.38	47.60	547.71		
28-Feb-01	Payroll taxes	2	594.56	47.66	31.54	72.28	106.76		7.54	4.70	54.09		
28-Feb-01	AP	5	103,007.18	39,222.51		2,879.98	57,584.41				19.50		
28-Feb-01	Transportation	9	1,494.59	99.95	98.65	140.29	265.09		6.44	11.88	51.03		
28-Feb-01	Tank maint accrual	26	(18,685.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
28-Feb-01	Inventory	7	410.00				410.00						
28-Feb-01	Stores	8	51.25				51.25						
28-Feb-01	Equipment	9A	80.43				80.43						
			0.00										
			0.00										
		FEBRUARY	92,973.28	35,856.73	(651.40)	2,786.46	54,950.96	(193.00)	(147.64)	(113.82)	(177.67)	(1,069.00)	(222.00)
		BDT	(216,158.96)	(64,249.21)	(5,156.11)	(49,665.70)	(164,994.14)	1,236.65	1,235.68	(2,861.68)	59,033.03	(48,145.76)	4,708.49
91,092.28	Total 265		(287,167.34)										

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK	OV
			(216,158.96)	(64,249.21)	(5,156.11)	(49,665.70)	(164,994.14)	1,236.65	1,235.68	(2,861.68)	59,033.03	(48,145.76)	4,708.49
31-Mar-01	Payroll	1	2,972.28		303.21	171.87	441.30				83.70		
31-Mar-01	Payroll taxes	2	276.18		28.17	15.97	41.01				7.78		
31-Mar-01	AP	5	150,618.93				121,544.25					3,275.00	3,850.00
31-Mar-01	Transportation	9	571.44		65.73	10.50	104.98				29.19		
31-Mar-01	Tank maint accrual	26	(18,685.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
31-Mar-01	Equipment	9A	10.90								10.90		
			0.00										
			0.00										
			0.00										
			0.00										
		MARCH	135,764.73	(3,996.00)	(703.89)	(839.66)	117,503.54	(193.00)	(238.00)	(178.00)	(718.43)	2,206.00	3,628.00
		BDT	(80,394.23)	(68,245.21)	(5,860.00)	(50,505.36)	(47,490.60)	1,043.65	997.68	(3,039.68)	58,314.60	(45,939.76)	8,336.49
133,883.73	Total 265		(153,283.61)										

ARIZONA WATER COMPANY
2001 SUBLEDGER

265 **RESERVE for TANK MAINTENANCE**

265

DATE	DESCRIPTION	JV	TOTAL	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
31-Jan-01	Payroll	1	(300,520.46)	2,059.14	8,593.80	(26,469.45)	10,014.84	65,070.39	(16,010.22)	8,523.34	(13,163.19)	11,257.14
31-Jan-01	Payroll taxes	2	4,095.60	1,078.14	58.21	444.02		849.14		219.33		
31-Jan-01	AP	5	413.25	108.79	5.87	44.80		85.68		22.13		
31-Jan-01	Transportation	9	4,781.70	2,095.82		27.35		57.59	32.40	407.91		
31-Jan-01	Tank maint accrual	26	790.67	155.00	8.43	56.85		240.32		44.56		
			(18,693.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
			0.00									
			0.00									
			0.00									
			0.00									
			0.00									
		JANUARY	(8,611.78)	2,458.75	(679.49)	43.02	(56.00)	88.73	(643.60)	503.93	(710.00)	(135.00)
		BTD	(309,132.24)	4,517.89	7,914.31	(26,426.43)	9,958.84	65,159.12	(16,653.82)	9,027.27	(13,873.19)	11,122.14
(8,308.98)	Total 265		(378,259.62)									

265

DATE	DESCRIPTION	JV	TOTAL	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
28-Feb-01	Payroll	1	(309,132.24)	4,517.89	7,914.31	(26,426.43)	9,958.84	65,159.12	(16,653.82)	9,027.27	(13,873.19)	11,122.14
28-Feb-01	Payroll taxes	2	6,020.27	1,169.59		120.10		80.06	1,132.54	164.50	66.84	
28-Feb-01	AP	5	594.56	115.52		11.86		7.91	111.85	16.25	6.60	
28-Feb-01	Transportation	9	103,007.18	167.27	1,425.00	1,449.43		107.53			151.55	
28-Feb-01	Tank maint accrual	26	1,494.59	402.29		19.50		35.32	295.09	35.64	33.42	
28-Feb-01	Inventory	7	(18,685.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
28-Feb-01	Stores	8	410.00									
28-Feb-01	Equipment	9A	51.25									
			80.43									
			0.00									
			0.00									
		FEBRUARY	92,973.28	875.67	673.00	1,070.89	(56.00)	(913.18)	863.48	26.39	(451.59)	(135.00)
		BDT	(216,158.96)	5,393.56	8,587.31	(25,355.54)	9,902.84	64,245.94	(15,790.34)	9,053.66	(14,324.78)	10,987.14
91,092.28	Total 265		(287,167.34)									

265

DATE	DESCRIPTION	JV	TOTAL	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
31-Mar-01	Payroll	1	(216,158.96)	5,393.56	8,587.31	(25,355.54)	9,902.84	64,245.94	(15,790.34)	9,053.66	(14,324.78)	10,987.14
31-Mar-01	Payroll taxes	2	2,972.28	410.57		120.10		1,441.53				
31-Mar-01	AP	5	276.18	38.15		11.16		133.94				
31-Mar-01	Transportation	9	150,618.93	39.84		21,539.99		38.00			331.85	
31-Mar-01	Tank maint accrual	26	571.44	55.50		11.19		294.35				
31-Mar-01	Equipment	9A	(18,685.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
			10.90									
			0.00									
			0.00									
			0.00									
			0.00									
		MARCH	135,764.73	(434.94)	(752.00)	21,152.44	(56.00)	763.82	(676.00)	(190.00)	(378.15)	(135.00)
		BDT	(80,394.23)	4,958.62	7,835.31	(4,203.10)	9,846.84	65,009.76	(16,466.34)	8,863.66	(14,702.93)	10,852.14
133,883.73	Total 265		(153,283.61)									

ARIZONA WATER COMPANY
2001 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK	OV
			(80,394.23)	(68,245.21)	(5,860.00)	(50,505.36)	(47,490.60)	1,043.65	997.68	(3,039.68)	58,314.60	(45,939.76)	8,336.49
30-Apr-01	Payroll	1	153.69	95.48	20.02								
30-Apr-01	Payroll taxes	2	13.94	8.66	1.82								
30-Apr-01	AP	5	31,806.76				31,744.84						
30-Apr-01	Transportation	9	55.97	39.30	6.01								
30-Apr-01	Tank maint accrual	26	(18,685.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
			0.00										
			0.00										
			0.00										
			0.00										
			0.00										
		APRIL	13,345.36	(3,852.56)	(1,073.15)	(1,038.00)	27,116.84	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
		BDT	(67,048.87)	(72,097.77)	(6,933.15)	(51,543.36)	(20,373.76)	850.65	759.68	(3,217.68)	57,464.60	(47,008.76)	8,114.49
11,659.36	Total 265		(141,624.25)										

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK	OV
			(67,048.87)	(72,097.77)	(6,933.15)	(51,543.36)	(20,373.76)	850.65	759.68	(3,217.68)	57,464.60	(47,008.76)	8,114.49
31-May-01	Payroll	1	343.38	85.94	80.06		120.10						
31-May-01	Payroll taxes	2	29.48	7.38	6.87		10.31						
31-May-01	AP	5	68.27		19.55								
31-May-01	Transportation	9	51.82	9.92	15.32		25.24						
31-May-01	Tank maint accrual	26	(18,685.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
			0.00										
			0.00										
			0.00										
			0.00										
			0.00										
		MAY	(18,192.05)	(3,892.76)	(979.20)	(1,038.00)	(4,472.35)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
		BDT	(85,240.92)	(75,990.53)	(7,912.35)	(52,581.36)	(24,846.11)	657.65	521.68	(3,395.68)	56,614.60	(48,077.76)	7,892.49
(20,073.05)	Total 265		(161,697.30)										

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK	OV
			(85,240.92)	(75,990.53)	(7,912.35)	(52,581.36)	(24,846.11)	657.65	521.68	(3,395.68)	56,614.60	(48,077.76)	7,892.49
30-Jun-01	Payroll	1	217.79	177.76	40.03								
30-Jun-01	Payroll taxes	2	19.64	16.03	3.61								
30-Jun-01	AP	5	39.66										
30-Jun-01	Transportation	9	55.52	44.10	11.42								
30-Jun-01	Tank maint accrual	26	(18,685.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
			0.00										
			0.00										
			0.00										
			0.00										
			0.00										
		JUNE	(18,352.39)	(3,758.11)	(1,045.94)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
		BDT	(103,593.31)	(79,748.64)	(8,958.29)	(53,619.36)	(29,474.11)	464.65	283.68	(3,573.68)	55,764.60	(49,146.76)	7,670.49
(16,174.80)	Total 265		(177,872.10)										

ARIZONA WATER COMPANY
2001 SUBLEDGER

265 **RESERVE for TANK MAINTENANCE**

265

DATE	DESCRIPTION	JV	TOTAL	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(80,394.23)	4,958.62	7,835.31	(4,203.10)	9,846.84	65,009.76	(16,466.34)	8,863.66	(14,702.93)	10,852.14
30-Apr-01	Payroll	1	153.69					38.19				
30-Apr-01	Payroll taxes	2	13.94					3.46				
30-Apr-01	AP	5	31,806.76								61.92	
30-Apr-01	Transportation	9	55.97					10.66				
30-Apr-01	Tank maint accrual	26	(18,685.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
			0.00									
			0.00									
			0.00									
			0.00									
			0.00									
		APRIL	13,345.36	(979.00)	(752.00)	(530.00)	(56.00)	(1,091.69)	(676.00)	(190.00)	(648.08)	(135.00)
		BDT	(67,048.87)	3,979.62	7,083.31	(4,733.10)	9,790.84	63,918.07	(17,142.34)	8,673.66	(15,351.01)	10,717.14
11,659.36	Total 265		(141,624.25)									

265

DATE	DESCRIPTION	JV	TOTAL	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(67,048.87)	3,979.62	7,083.31	(4,733.10)	9,790.84	63,918.07	(17,142.34)	8,673.66	(15,351.01)	10,717.14
31-May-01	Payroll	1	343.38	57.28								
31-May-01	Payroll taxes	2	29.48	4.92								
31-May-01	AP	5	68.27					17.98				
31-May-01	Transportation	9	51.82	1.34							30.74	
31-May-01	Tank maint accrual	26	(18,685.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
			0.00									
			0.00									
			0.00									
			0.00									
			0.00									
		MAY	(18,192.05)	(915.46)	(752.00)	(530.00)	(56.00)	(1,126.02)	(676.00)	(190.00)	(679.26)	(135.00)
		BDT	(85,240.92)	3,064.16	6,331.31	(5,263.10)	9,734.84	62,792.05	(17,818.34)	8,483.66	(16,030.27)	10,582.14
(20,073.05)	Total 265		(161,697.30)									

265

DATE	DESCRIPTION	JV	TOTAL	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(85,240.92)	3,064.16	6,331.31	(5,263.10)	9,734.84	62,792.05	(17,818.34)	8,483.66	(16,030.27)	10,582.14
30-Jun-01	Payroll	1	217.79									
30-Jun-01	Payroll taxes	2	19.64									
30-Jun-01	AP	5	39.66									
30-Jun-01	Transportation	9	55.52								39.66	
30-Jun-01	Tank maint accrual	26	(18,685.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
			0.00									
			0.00									
			0.00									
			0.00									
			0.00									
		JUNE	(18,352.39)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(670.34)	(135.00)
		BDT	(103,593.31)	2,085.16	5,579.31	(5,793.10)	9,678.84	61,648.05	(18,494.34)	8,293.66	(16,700.61)	10,447.14
(16,174.80)	Total 265		(177,872.10)									

ARIZONA WATER COMPANY
2001 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK	OV
			(103,593.31)	(79,748.64)	(8,958.29)	(53,619.36)	(29,474.11)	464.65	283.68	(3,573.68)	55,764.60	(49,146.76)	7,670.49
31-Jul-01	Payroll	1	0.00										
31-Jul-01	Payroll taxes	2	0.00										
31-Jul-01	AP	5	4,774.86	4,774.86									
31-Jul-01	Transportation	9	0.00										
31-Jul-01	Tank maint accrual	26	(18,685.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
			0.00										
			0.00										
			0.00										
			0.00										
			0.00										
		JULY	(13,910.14)	778.86	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
		BDT	(117,503.45)	(78,969.78)	(10,059.29)	(54,657.36)	(34,102.11)	271.65	45.68	(3,751.68)	54,914.60	(50,215.76)	7,448.49
(15,616.14)	Total 265		(193,488.24)										

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK	OV
			(117,503.45)	(78,969.78)	(10,059.29)	(54,657.36)	(34,102.11)	271.65	45.68	(3,751.68)	54,914.60	(50,215.76)	7,448.49
31-Aug-01	Payroll	1	0.00										
31-Aug-01	Cash Receipts	3	(20,000.00)										
31-Aug-01	AP	5	9,706.72	1,500.00									
31-Aug-01	Transportation	9	0.00				3,185.00						870.00
31-Aug-01	*Tank maint accrual*	26	(18,685.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
			0.00										
			0.00										
			0.00										
			0.00										
			0.00										
		AUGUST	(28,978.28)	(2,496.00)	(1,101.00)	(1,038.00)	(1,443.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	648.00
		BDT	(146,481.73)	(81,465.78)	(11,160.29)	(55,695.36)	(35,545.11)	78.65	(192.32)	(3,929.68)	54,064.60	(51,284.76)	8,096.49
(30,859.28)	Total 265		(224,347.52)										

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK	OV
			(146,481.73)	(81,465.78)	(11,160.29)	(55,695.36)	(35,545.11)	78.65	(192.32)	(3,929.68)	54,064.60	(51,284.76)	8,096.49
30-Sep-01	Payroll	1	99.16										
30-Sep-01	Payroll taxes	2	8.54										
30-Sep-01	AP	5	458.40										
30-Sep-01	Transportation	9	24.13										
30-Sep-01	Tank maint accrual	26	(18,685.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
			0.00										
			0.00										
			0.00										
			0.00										
			0.00										
		SEPTEMBER	(18,094.77)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
		BDT	(164,576.50)	(85,461.78)	(12,261.29)	(56,733.36)	(40,173.11)	(114.35)	(430.32)	(4,107.68)	53,214.60	(52,353.76)	7,874.49
(19,001.67)	Total 265		(243,349.19)										

ARIZONA WATER COMPANY
2001 SUBLEDGER

265 **RESERVE for TANK MAINTENANCE**

265

DATE	DESCRIPTION	JV	TOTAL	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(103,593.31)	2,085.16	5,579.31	(5,793.10)	9,678.84	61,648.05	(18,494.34)	8,293.66	(16,700.61)	10,447.14
31-Jul-01	Payroll	1	0.00									
31-Jul-01	Payroll taxes	2	0.00									
31-Jul-01	AP	5	4,774.86									
31-Jul-01	Transportation	9	0.00									
31-Jul-01	Tank maint accrual	26	(18,685.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
			0.00									
			0.00									
			0.00									
			0.00									
			0.00									
		JULY	(13,910.14)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
		BDT	(117,503.45)	1,106.16	4,827.31	(6,323.10)	9,622.84	60,504.05	(19,170.34)	8,103.66	(17,410.61)	10,312.14
(15,616.14)	Total 265		(193,488.24)									

265

DATE	DESCRIPTION	JV	TOTAL	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(117,503.45)	1,106.16	4,827.31	(6,323.10)	9,622.84	60,504.05	(19,170.34)	8,103.66	(17,410.61)	10,312.14
31-Aug-01	Payroll	1	0.00									
31-Aug-01	Cash Receipts	3	(20,000.00)			(20,000.00)						
31-Aug-01	AP	5	9,706.72			151.72						
31-Aug-01	Transportation	9	0.00								4,000.00	
31-Aug-01	Tank maint accrual	26	(18,685.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
			0.00									
			0.00									
			0.00									
			0.00									
			0.00									
		AUGUST	(28,978.28)	(979.00)	(752.00)	(20,378.28)	(56.00)	(1,144.00)	(676.00)	(190.00)	3,290.00	(135.00)
		BDT	(146,481.73)	127.16	4,075.31	(26,701.38)	9,566.84	59,360.05	(19,846.34)	7,913.66	(14,120.61)	10,177.14
(30,859.28)	Total 265		(224,347.52)									

265

DATE	DESCRIPTION	JV	TOTAL	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(146,481.73)	127.16	4,075.31	(26,701.38)	9,566.84	59,360.05	(19,846.34)	7,913.66	(14,120.61)	10,177.14
30-Sep-01	Payroll	1	99.16			99.16						
30-Sep-01	Payroll taxes	2	8.54			8.54						
30-Sep-01	AP	5	458.40		2.18	456.22						
30-Sep-01	Transportation	9	24.13			24.13						
30-Sep-01	Tank maint accrual	26	(18,685.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
			0.00									
			0.00									
			0.00									
			0.00									
			0.00									
		SEPTEMBER	(18,094.77)	(979.00)	(749.82)	58.05	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
		BDT	(164,576.50)	(851.84)	3,325.49	(26,643.33)	9,510.84	58,216.05	(20,522.34)	7,723.66	(14,830.61)	10,042.14
(19,001.67)	Total 265		(243,349.19)									

ARIZONA WATER COMPANY
2001 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK	OV
			(164,576.50)	(85,461.78)	(12,261.29)	(56,733.36)	(40,173.11)	(114.35)	(430.32)	(4,107.68)	53,214.60	(52,353.76)	7,874.49
31-Oct-01	Payroll	1	1,998.86	307.50									
31-Oct-01	Payroll taxes	2	162.33	24.97									
31-Oct-01	AP	5	7,237.20	7.59			820.00						
31-Oct-01	Inventory	7	45.40		45.40								
31-Oct-01	Stores	8	5.68		5.68								
31-Oct-01	Transportation	9	260.09	59.12									
31-Oct-01	Tank maint accrual	26	(18,685.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
			0.00										
			0.00										
			0.00										
		OCTOBER	(8,975.44)	(3,596.82)	(1,049.92)	(1,038.00)	(3,808.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
		BDT	(173,551.94)	(89,058.60)	(13,311.21)	(57,771.36)	(43,981.11)	(307.35)	(668.32)	(4,285.68)	52,364.60	(53,422.76)	7,652.49
(10,856.44)	Total 265		(254,205.63)										

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK	OV
			(173,551.94)	(89,058.60)	(13,311.21)	(57,771.36)	(43,981.11)	(307.35)	(668.32)	(4,285.68)	52,364.60	(53,422.76)	7,652.49
30-Nov-01	Payroll	1	1,012.12	118.50			106.76	272.98	320.18				
30-Nov-01	Payroll taxes	2	86.47	10.12			9.12	23.32	27.36				
30-Nov-01	AP	5	227.75						16.55				
30-Nov-01	Transportation	9	213.45	21.84			27.56	70.93	52.74				
30-Nov-01	Tank maint accrual	26	(18,685.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
			0.00										
			0.00										
			0.00										
			0.00										
			0.00										
		NOVEMBER	(17,145.21)	(3,845.54)	(1,101.00)	(1,038.00)	(4,484.56)	174.23	178.83	(178.00)	(850.00)	(1,069.00)	(222.00)
		BTD	(190,697.15)	(92,904.14)	(14,412.21)	(58,809.36)	(48,465.67)	(133.12)	(489.49)	(4,463.68)	51,514.60	(54,491.76)	7,430.49
(19,026.21)	Total 265		(273,231.84)										

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK	OV
			(190,697.15)	(92,904.14)	(14,412.21)	(58,809.36)	(48,465.67)	(133.12)	(489.49)	(4,463.68)	51,514.60	(54,491.76)	7,430.49
31-Dec-01	Payroll	1	2,124.58	118.50			510.64		330.47		455.09		
31-Dec-01	Payroll taxes	2	181.50	10.12			43.62		28.23		38.88		
31-Dec-01	AP	5	7,850.92	860.00			1,720.00						
31-Dec-01	Transportation	9	364.64	19.80			104.72		71.50		66.49		
31-Dec-01	Tank maint accrual	26	(18,685.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)	(222.00)
31-Dec-01	Miscellaneous	20	0.00										
			0.00										
			0.00										
			0.00										
			0.00										
		DECEMBER	(8,163.36)	(2,987.58)	(1,101.00)	(1,038.00)	(2,249.02)	(193.00)	192.20	(178.00)	(289.54)	(1,069.00)	(222.00)
		BTD	(198,860.51)	(95,891.72)	(15,513.21)	(59,847.36)	(50,714.69)	(326.12)	(297.29)	(4,641.68)	51,225.06	(55,560.76)	7,208.49
(6,319.05)	Total 265		(279,550.89)										

ARIZONA WATER COMPANY
2001 SUBLEDGER

265 **RESERVE for TANK MAINTENANCE**

265

DATE	DESCRIPTION	JV	TOTAL	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(164,576.50)	(851.84)	3,325.49	(26,643.33)	9,510.84	58,216.05	(20,522.34)	7,723.66	(14,830.61)	10,042.14
31-Oct-01	Payroll	1	1,998.86	911.90	739.43	40.03						
31-Oct-01	Payroll taxes	2	162.33	74.06	60.05	3.25						
31-Oct-01	AP	5	7,237.20	279.04		0.57		6,130.00				
31-Oct-01	Inventory	7	45.40									
31-Oct-01	Stores	8	5.68									
31-Oct-01	Transportation	9	260.09	106.85	88.20	5.92						
31-Oct-01	Tank maint accrual	26	(18,685.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
			0.00									
			0.00									
			0.00									
		OCTOBER	(8,975.44)	392.85	135.68	(480.23)	(56.00)	4,986.00	(676.00)	(190.00)	(710.00)	(135.00)
		BDT	(173,551.94)	(458.99)	3,461.17	(27,123.56)	9,454.84	63,202.05	(21,198.34)	7,533.66	(15,540.61)	9,907.14
(10,856.44)	Total 265		(254,205.63)									

265

DATE	DESCRIPTION	JV	TOTAL	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(173,551.94)	(458.99)	3,461.17	(27,123.56)	9,454.84	63,202.05	(21,198.34)	7,533.66	(15,540.61)	9,907.14
30-Nov-01	Payroll	1	1,012.12	76.38		117.32						
30-Nov-01	Payroll taxes	2	86.47	6.53		10.02						
30-Nov-01	AP	5	227.75			211.20						
30-Nov-01	Transportation	9	213.45	24.20		16.18						
30-Nov-01	Tank maint accrual	26	(18,685.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
			0.00									
			0.00									
			0.00									
			0.00									
			0.00									
		NOVEMBER	(17,145.21)	(871.89)	(752.00)	(175.28)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
		BTD	(190,697.15)	(1,330.88)	2,709.17	(27,298.84)	9,398.84	62,058.05	(21,874.34)	7,343.66	(16,250.61)	9,772.14
(19,026.21)	Total 265		(273,231.84)									

265

DATE	DESCRIPTION	JV	TOTAL	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(190,697.15)	(1,330.88)	2,709.17	(27,298.84)	9,398.84	62,058.05	(21,874.34)	7,343.66	(16,250.61)	9,772.14
31-Dec-01	Payroll	1	2,124.58	19.10	536.17	154.61						
31-Dec-01	Payroll taxes	2	181.50	1.63	45.81	13.21						
31-Dec-01	AP	5	7,850.92		321.96	18.96		1,390.00		1,540.00	2,000.00	
31-Dec-01	Transportation	9	364.64	4.79	63.68	33.66						
31-Dec-01	Tank maint accrual	26	(18,685.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
31-Dec-01	Miscellaneous	20	0.00									
			0.00									
			0.00									
			0.00									
			0.00									
		DECEMBER	(8,163.36)	(953.48)	215.62	(309.56)	(56.00)	246.00	(676.00)	1,350.00	1,290.00	(135.00)
		BTD	(198,860.51)	(2,284.36)	2,924.79	(27,608.40)	9,342.84	62,304.05	(22,550.34)	8,693.66	(14,960.61)	9,637.14
(6,319.05)	Total 265		(279,550.89)									

ARIZONA WATER COMPANY
2002 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
1/31/2002	Payroll	1	(198,860.51)	(95,891.72)	(15,513.21)	(59,847.36)	(50,714.69)	(326.12)	(297.29)	(4,641.68)	51,225.06	(55,560.76)
1/31/2002	Payroll taxes	2	760.68	314.70					78.68			
1/31/2002	AP	5	75.12	31.08					7.77			
1/31/2002	Transportation	9	4,372.64						4,355.28			
1/31/2002	Tank maint accrual	26	77.34	55.46					5.00			
			(18,693.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,636.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)
			0.00									
			0.00									
			0.00									
			0.00									
			0.00									
	JANUARY		(13,407.22)	(3,594.76)	(1,101.00)	(1,038.00)	(4,636.00)	(193.00)	4,208.73	(178.00)	(850.00)	(1,069.00)
	BTD		(212,267.73)	(99,486.48)	(16,614.21)	(60,885.36)	(55,350.69)	(519.12)	3,911.44	(4,819.68)	50,375.06	(56,629.76)
	(14,217.06) Total 265		(293,767.95)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
2/28/2002	Payroll	1	(212,267.73)	(99,486.48)	(16,614.21)	(60,885.36)	(55,350.69)	(519.12)	3,911.44	(4,819.68)	50,375.06	(56,629.76)
2/28/2002	Payroll taxes	2	2,138.29	663.00			137.69				41.23	
2/28/2002	AP	5	206.99	64.18			13.33				3.99	
2/28/2002	Transportation	9	46,925.47							36.35		
2/28/2002	Tank maint accrual	26	388.31	140.79			27.78				13.94	
2/28/2002	Inventory	7	(18,685.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)
2/28/2002	Stores	8	0.00									
2/28/2002	Equipment	9A	0.00									
			0.00									
			0.00									
			0.00									
	FEBRUARY		30,974.06	(3,128.03)	(1,101.00)	(1,038.00)	(4,449.20)	(193.00)	(238.00)	(141.65)	(790.84)	(1,069.00)
	BTD		(181,293.67)	(102,614.51)	(17,715.21)	(61,923.36)	(59,799.89)	(712.12)	3,673.44	(4,961.33)	49,584.22	(57,698.76)
	32,352.38 Total 265		(261,415.57)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
3/31/2002	Payroll	1	(181,293.67)	(102,614.51)	(17,715.21)	(61,923.36)	(59,799.89)	(712.12)	3,673.44	(4,961.33)	49,584.22	(57,698.76)
3/31/2002	Payroll taxes	2	1,147.84	432.72			154.63				32.99	
3/31/2002	AP	5	104.38	39.35			14.06				3.00	
3/31/2002	Transportation	9	20,867.69	960.00	240.00		600.00				360.00	
3/31/2002	Tank maint accrual	26	192.18	72.88			30.36				7.84	
3/31/2002	Equipment	9A	(18,685.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,069.00)
			0.00									
			0.00									
			0.00									
			0.00									
			0.00									
	MARCH		3,627.09	(2,491.05)	(861.00)	(1,038.00)	(3,828.95)	(193.00)	(238.00)	(178.00)	(446.17)	(1,069.00)
	BTD		(177,666.58)	(105,105.56)	(18,576.21)	(62,961.36)	(63,628.84)	(905.12)	3,435.44	(5,139.33)	49,138.05	(58,767.76)
	21,550.48 Total 265		(239,865.09)									

ARIZONA WATER COMPANY *ARIZONA WATER COMPANY*
2002 SUBLEDGER 2002 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(198,860.51)	7,208.49	(2,284.36)	2,924.79	(27,608.40)	9,342.84	62,304.05	(22,550.34)	8,693.66	(14,960.61)	9,637.14
1/31/2002	Payroll	1	760.68			123.69	243.61						
1/31/2002	Payroll taxes	2	75.12			12.21	24.06						
1/31/2002	AP	5	4,372.64				17.36						
1/31/2002	Transportation	9	77.34			21.72	(4.84)						
1/31/2002	Tank maint accrual	26	(18,693.00)	(222.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
			0.00										
			0.00										
			0.00										
			0.00										
			0.00										
	JANUARY		(13,407.22)	(222.00)	(979.00)	(594.38)	(249.81)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
	BTD		(212,267.73)	6,986.49	(3,263.36)	2,330.41	(27,858.21)	9,286.84	61,160.05	(23,226.34)	8,503.66	(15,670.61)	9,502.14
	(14,217.06) Total 265		(293,767.95)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(212,267.73)	6,986.49	(3,263.36)	2,330.41	(27,858.21)	9,286.84	61,160.05	(23,226.34)	8,503.66	(15,670.61)	9,502.14
2/28/2002	Payroll	1	2,138.29		108.18	61.85	113.39					1,012.95	
2/28/2002	Payroll taxes	2	206.99		10.47	5.99	10.98					98.05	
2/28/2002	AP	5	46,925.47		183.50	34,064.43	12,605.34		35.85				
2/28/2002	Transportation	9	388.31		17.35	9.66	16.10					162.69	
2/28/2002	Tank maint accrual	26	(18,685.00)	(222.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
2/28/2002	Inventory	7	0.00										
2/28/2002	Stores	8	0.00										
2/28/2002	Equipment	9A	0.00										
			0.00										
			0.00										
	FEBRUARY		30,974.06	(222.00)	(659.50)	33,389.93	12,215.81	(56.00)	(1,108.15)	(676.00)	(190.00)	563.69	(135.00)
	BTD		(181,293.67)	6,764.49	(3,922.86)	35,720.34	(15,642.40)	9,230.84	60,051.90	(23,902.34)	8,313.66	(15,106.92)	9,367.14
	32,352.38 Total 265		(261,415.57)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(181,293.67)	6,764.49	(3,922.86)	35,720.34	(15,642.40)	9,230.84	60,051.90	(23,902.34)	8,313.66	(15,106.92)	9,367.14
3/31/2002	Payroll	1	1,147.84			457.23	70.27						
3/31/2002	Payroll taxes	2	104.38			41.58	6.39						
3/31/2002	AP	5	20,867.69	120.00	1,034.50	2,461.00	1,631.37		360.00			13,100.82	
3/31/2002	Transportation	9	192.18			68.52	12.58						
3/31/2002	Tank maint accrual	26	(18,685.00)	(222.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
3/31/2002	Equipment	9A	0.00										
			0.00										
			0.00										
			0.00										
			0.00										
	MARCH		3,627.09	(102.00)	55.50	2,276.33	1,190.61	(56.00)	(784.00)	(676.00)	(190.00)	12,390.82	(135.00)
	BTD		(177,666.58)	6,662.49	(3,867.36)	37,996.67	(14,451.79)	9,174.84	59,267.90	(24,578.34)	8,123.66	(2,716.10)	9,232.14
	21,550.48 Total 265		(239,865.09)										

ARIZONA WATER COMPANY
2002 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(177,666.58)	(105,105.56)	(18,576.21)	(62,961.36)	(63,628.84)	(905.12)	3,435.44	(5,139.33)	49,138.05	(58,767.76)
4/30/2002	Payroll	1	878.20	488.17			23.70					
4/30/2002	Payroll taxes	2	77.88	43.29			2.10					
4/30/2002	AP	5	3,262.07	14.39			712.50					
4/30/2002	Transportation	9	144.88	74.88								
4/30/2002	Equipment	9A	19.76									
4/30/2002	Tank maint accrual	20	(24,412.00)									
4/30/2002	Tank maint accrual	26	(18,685.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(3,692.00)
			0.00									(1,069.00)
			0.00									
			0.00									
	APRIL		(38,714.21)	(3,375.27)	(1,101.00)	(1,038.00)	(3,889.70)	(193.00)	(238.00)	(178.00)	(850.00)	(4,761.00)
	BTD		(216,380.79)	(108,480.83)	(19,677.21)	(63,999.36)	(67,518.54)	(1,098.12)	3,197.44	(5,317.33)	48,288.05	(63,528.76)
(38,234.13)	Total 265		(278,099.22)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(216,380.79)	(108,480.83)	(19,677.21)	(63,999.36)	(67,518.54)	(1,098.12)	3,197.44	(5,317.33)	48,288.05	(63,528.76)
5/31/2002	Payroll	1	603.15	442.01								
5/31/2002	Payroll taxes	2	51.00	37.38								
5/31/2002	AP	5	87,866.10						10,792.00			
5/31/2002	Transportation	9	72.98	54.00								
5/31/2002	Tank maint accrual	26	(24,788.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
			0.00									
			0.00									
			0.00									
			0.00									
			0.00									
	MAY		63,805.23	(3,462.61)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	10,554.00	(178.00)	(850.00)	(1,992.00)
	BTD		(152,575.56)	(111,943.44)	(20,778.21)	(65,037.36)	(72,146.54)	(1,291.12)	13,751.44	(5,495.33)	47,438.05	(65,520.76)
63,380.92	Total 265		(214,718.30)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(152,575.56)	(111,943.44)	(20,778.21)	(65,037.36)	(72,146.54)	(1,291.12)	13,751.44	(5,495.33)	47,438.05	(65,520.76)
6/30/2002	Payroll	1	1,814.70	157.35								
6/30/2002	Payroll taxes	2	160.53	13.92								
6/30/2002	AP	5	18,030.79	2,352.00	12.57		3,288.00		1,109.39	2,232.00	231.66	
6/30/2002	Transportation	9	376.70	39.40								
6/30/2002	Tank maint accrual	26	(24,788.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
			0.00									
			0.00									
			0.00									
			0.00									
			0.00									
	JUNE		(4,405.28)	(1,433.33)	(1,088.43)	(1,038.00)	(1,340.00)	(193.00)	871.39	2,054.00	(618.34)	(1,992.00)
	BTD		(156,980.84)	(113,376.77)	(21,866.64)	(66,075.36)	(73,486.54)	(1,484.12)	14,622.83	(3,441.33)	46,819.71	(67,512.76)
(5,916.95)	Total 265		(220,635.25)									

ARIZONA WATER COMPANY *ARIZONA WATER COMPANY*
2002 SUBLEDGER 2002 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(177,666.58)	6,662.49	(3,867.36)	37,996.67	(14,451.79)	9,174.84	59,267.90	(24,578.34)	8,123.66	(2,716.10)	9,232.14
4/30/2002	Payroll	1	878.20				366.33						
4/30/2002	Payroll taxes	2	77.88				32.49						
4/30/2002	AP	5	3,262.07			2,505.00	30.18						
4/30/2002	Transportation	9	144.88				70.00						
4/30/2002	Equipment	9A	19.76		19.76								
4/30/2002	Tank maint accrual	20	(24,412.00)	(4,144.00)					(11,784.00)	(1,376.00)	(3,416.00)		
4/30/2002	Tank maint accrual	26	(18,685.00)	(222.00)	(979.00)	(752.00)	(530.00)	(56.00)	(1,144.00)	(676.00)	(190.00)	(710.00)	(135.00)
			0.00										
			0.00										
			0.00										
	APRIL		(38,714.21)	(4,366.00)	(959.24)	1,753.00	(31.00)	(56.00)	(12,928.00)	(2,052.00)	(3,606.00)	(710.00)	(135.00)
	BTD		(216,380.79)	2,296.49	(4,826.60)	39,749.67	(14,482.79)	9,118.84	46,339.90	(26,630.34)	4,517.66	(3,426.10)	9,097.14
(38,234.13)	Total 265		(278,099.22)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(216,380.79)	2,296.49	(4,826.60)	39,749.67	(14,482.79)	9,118.84	46,339.90	(26,630.34)	4,517.66	(3,426.10)	9,097.14
5/31/2002	Payroll	1	603.15				161.14						
5/31/2002	Payroll taxes	2	51.00				13.62						
5/31/2002	AP	5	87,866.10		47,420.59								
5/31/2002	Transportation	9	72.98				18.98					29,653.51	
5/31/2002	Tank maint accrual	26	(24,788.00)	(1,258.00)	(979.00)	(752.00)	(530.00)	(56.00)	(4,090.00)	(1,020.00)	(1,044.00)	(710.00)	(135.00)
			0.00										
			0.00										
			0.00										
			0.00										
			0.00										
	MAY		63,805.23	(1,258.00)	46,441.59	(752.00)	(336.26)	(56.00)	(4,090.00)	(1,020.00)	(1,044.00)	28,943.51	(135.00)
	BTD		(152,575.56)	1,038.49	41,614.99	38,997.67	(14,819.05)	9,062.84	42,249.90	(27,650.34)	3,473.66	25,517.41	8,962.14
63,380.92	Total 265		(214,718.30)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(152,575.56)	1,038.49	41,614.99	38,997.67	(14,819.05)	9,062.84	42,249.90	(27,650.34)	3,473.66	25,517.41	8,962.14
6/30/2002	Payroll	1	1,814.70			61.84	1,513.05	82.46					
6/30/2002	Payroll taxes	2	160.53			5.47	133.85	7.29					
6/30/2002	AP	5	18,030.79				8,521.77						
6/30/2002	Transportation	9	376.70			9.74	308.08	19.48				283.40	
6/30/2002	Tank maint accrual	26	(24,788.00)	(1,258.00)	(979.00)	(752.00)	(530.00)	(56.00)	(4,090.00)	(1,020.00)	(1,044.00)	(710.00)	(135.00)
			0.00										
			0.00										
			0.00										
			0.00										
			0.00										
	JUNE		(4,405.28)	(1,258.00)	(979.00)	(674.95)	9,946.75	53.23	(4,090.00)	(1,020.00)	(1,044.00)	(426.60)	(135.00)
	BTD		(156,980.84)	(219.51)	40,635.99	38,322.72	(4,872.30)	9,116.07	38,159.90	(28,670.34)	2,429.66	25,090.81	8,827.14
(5,916.95)	Total 265		(220,635.25)										

ARIZONA WATER COMPANY
2002 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(156,980.84)	(113,376.77)	(21,866.64)	(66,075.36)	(73,486.54)	(1,484.12)	14,622.83	(3,441.33)	46,819.71	(67,512.76)
7/31/2002	Payroll	1	772.60								772.60	
7/31/2002	Payroll taxes	2	67.56								67.56	
7/31/2002	AP	5	0.00									
7/31/2002	Transportation	9	129.30								129.30	
7/31/2002	Equipment	9A	21.12								21.12	
7/31/2002	Tank maint accrual	26	(24,788.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
			0.00									
			0.00									
			0.00									
			0.00									
	JULY		(23,797.42)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	140.58	(1,992.00)
	BTD		(180,778.26)	(117,372.77)	(22,967.64)	(67,113.36)	(78,114.54)	(1,677.12)	14,384.83	(3,619.33)	46,960.29	(69,504.76)
(21,814.23)	Total 265		(242,449.48)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(180,778.26)	(117,372.77)	(22,967.64)	(67,113.36)	(78,114.54)	(1,677.12)	14,384.83	(3,619.33)	46,960.29	(69,504.76)
8/31/2002	Payroll	1	247.68									247.68
8/31/2002	Cash Receipts	3	21.62									21.62
8/31/2002	AP	5	3,222.50				3,222.50					
8/31/2002	Transportation	9	80.91									80.91
8/31/2002	Tank maint accrual	26	(24,788.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
8/31/2002			0.00									
			0.00									
			0.00									
			0.00									
			0.00									
	AUGUST		(21,215.29)	(3,996.00)	(1,101.00)	(1,038.00)	(1,405.50)	(193.00)	(238.00)	(178.00)	(850.00)	(1,641.79)
	BTD		(201,993.55)	(121,368.77)	(24,068.64)	(68,151.36)	(79,520.04)	(1,870.12)	14,146.83	(3,797.33)	46,110.29	(71,146.55)
(23,096.29)	Total 265		(265,545.77)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(201,993.55)	(121,368.77)	(24,068.64)	(68,151.36)	(79,520.04)	(1,870.12)	14,146.83	(3,797.33)	46,110.29	(71,146.55)
9/30/2002	Payroll	1	103.08				103.08					
9/30/2002	Payroll taxes	2	9.00				9.00					
9/30/2002	AP	5	18.32	9.54								
9/30/2002	Transportation	9	25.95				25.95					
9/30/2002	Tank maint accrual	26	(24,788.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
9/30/2002	Inventory	7	45.40		45.40							
9/30/2002	Stores	8	5.68		5.68							
9/30/2002	Equipment	9A	2.65								2.65	
			0.00									
			0.00									
	SEPTEMBER		(24,577.92)	(3,986.46)	(1,049.92)	(1,038.00)	(4,489.97)	(193.00)	(238.00)	(178.00)	(847.35)	(1,992.00)
	BTD		(226,571.47)	(125,355.23)	(25,118.56)	(69,189.36)	(84,010.01)	(2,063.12)	13,908.83	(3,975.33)	45,262.94	(73,138.55)
(26,458.92)	Total 265		(292,004.69)									

ARIZONA WATER COMPANY
2002 SUBLEDGER

ARIZONA WATER COMPANY
2002 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(156,980.84)	(219.51)	40,635.99	38,322.72	(4,872.30)	9,116.07	38,159.90	(28,670.34)	2,429.66	25,090.81	8,827.14
7/31/2002	Payroll	1	772.60										
7/31/2002	Payroll taxes	2	67.56										
7/31/2002	AP	5	0.00										
7/31/2002	Transportation	9	129.30										
7/31/2002	Equipment	9A	21.12										
7/31/2002	Tank maint accrual	26	(24,788.00)	(1,258.00)	(979.00)	(752.00)	(530.00)	(56.00)	(4,090.00)	(1,020.00)	(1,044.00)	(710.00)	(135.00)
			0.00										
			0.00										
			0.00										
			0.00										
	JULY		(23,797.42)	(1,258.00)	(979.00)	(752.00)	(530.00)	(56.00)	(4,090.00)	(1,020.00)	(1,044.00)	(710.00)	(135.00)
	BTD		(180,778.26)	(1,477.51)	39,656.99	37,570.72	(5,402.30)	9,060.07	34,069.90	(29,690.34)	1,385.66	24,380.81	8,692.14
(21,814.23)	Total 265		(242,449.48)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(180,778.26)	(1,477.51)	39,656.99	37,570.72	(5,402.30)	9,060.07	34,069.90	(29,690.34)	1,385.66	24,380.81	8,692.14
8/31/2002	Payroll	1	247.68										
8/31/2002	Cash Receipts	3	21.62										
8/31/2002	AP	5	3,222.50										
8/31/2002	Transportation	9	80.91										
8/31/2002	Tank maint accrual	26	(24,788.00)	(1,258.00)	(979.00)	(752.00)	(530.00)	(56.00)	(4,090.00)	(1,020.00)	(1,044.00)	(710.00)	(135.00)
8/31/2002			0.00										
			0.00										
			0.00										
			0.00										
			0.00										
	AUGUST		(21,215.29)	(1,258.00)	(979.00)	(752.00)	(530.00)	(56.00)	(4,090.00)	(1,020.00)	(1,044.00)	(710.00)	(135.00)
	BTD		(201,993.55)	(2,735.51)	38,677.99	36,818.72	(5,932.30)	9,004.07	29,979.90	(30,710.34)	341.66	23,670.81	8,557.14
(23,096.29)	Total 265		(265,545.77)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(201,993.55)	(2,735.51)	38,677.99	36,818.72	(5,932.30)	9,004.07	29,979.90	(30,710.34)	341.66	23,670.81	8,557.14
9/30/2002	Payroll	1	103.08										
9/30/2002	Payroll taxes	2	9.00										
9/30/2002	AP	5	18.32										
9/30/2002	Transportation	9	25.95						8.78				
9/30/2002	Tank maint accrual	26	(24,788.00)	(1,258.00)	(979.00)	(752.00)	(530.00)	(56.00)	(4,090.00)	(1,020.00)	(1,044.00)	(710.00)	(135.00)
9/30/2002	Inventory	7	45.40										
9/30/2002	Stores	8	5.68										
9/30/2002	Equipment	9A	2.65										
			0.00										
			0.00										
	SEPTEMBER		(24,577.92)	(1,258.00)	(979.00)	(752.00)	(530.00)	(56.00)	(4,081.22)	(1,020.00)	(1,044.00)	(710.00)	(135.00)
	BTD		(226,571.47)	(3,993.51)	37,698.99	36,066.72	(6,462.30)	8,948.07	25,898.68	(31,730.34)	(702.34)	22,960.81	8,422.14
(26,458.92)	Total 265		(292,004.69)										

ARIZONA WATER COMPANY
2002 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(226,571.47)	(125,355.23)	(25,118.56)	(69,189.36)	(84,010.01)	(2,063.12)	13,908.83	(3,975.33)	45,262.94	(73,138.55)
10/31/2002	Payroll	1	851.04	324.54			351.55				113.11	
10/31/2002	Payroll taxes	2	68.47	26.11			28.28				9.10	
10/31/2002	AP	5	3,293.00									
10/31/2002	Inventory	7	0.00									
10/31/2002	Transportation	9	72.21	25.24			25.24				17.31	
10/31/2002	Equipment	9A	4.47								4.47	
10/31/2002	Tank maint accrual	26	(24,788.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
			0.00									
			0.00									
			0.00									
	OCTOBER		(20,498.81)	(3,620.11)	(1,101.00)	(1,038.00)	(4,222.93)	(193.00)	(238.00)	(178.00)	(706.01)	(1,992.00)
	BTD		(247,070.28)	(128,975.34)	(26,219.56)	(70,227.36)	(88,232.94)	(2,256.12)	13,670.83	(4,153.33)	44,556.93	(75,130.55)
	(21,147.96) Total 265		(313,152.65)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(247,070.28)	(128,975.34)	(26,219.56)	(70,227.36)	(88,232.94)	(2,256.12)	13,670.83	(4,153.33)	44,556.93	(75,130.55)
11/30/2002	Payroll	1	980.38	167.19			203.41				428.97	
11/30/2002	Payroll taxes	2	82.07	14.00			17.03				35.90	
11/30/2002	AP	5	18,367.96	17.56			18,273.57					
11/30/2002	Transportation	9	186.23	58.38			42.86				55.39	
11/30/2002	Tank maint accrual	26	(24,788.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
			0.00									
			0.00									
			0.00									
			0.00									
			0.00									
	NOVEMBER		(5,171.36)	(3,738.87)	(1,101.00)	(1,038.00)	13,908.87	(193.00)	(238.00)	(178.00)	(329.74)	(1,992.00)
	BTD		(252,241.64)	(132,714.21)	(27,320.56)	(71,265.36)	(74,324.07)	(2,449.12)	13,432.83	(4,331.33)	44,227.19	(77,122.55)
	(2,709.47) Total 265		(315,862.12)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(252,241.64)	(132,714.21)	(27,320.56)	(71,265.36)	(74,324.07)	(2,449.12)	13,432.83	(4,331.33)	44,227.19	(77,122.55)
12/31/2002	Payroll	1	503.57	177.03			173.29				92.35	
12/31/2002	Payroll taxes	2	42.23	14.84			14.53				7.75	
12/31/2002	AP	5	38,012.55	13,305.31			22,498.92					
12/31/2002	Transportation	9	121.62	67.25			30.30				20.50	
12/31/2002	Tank maint accrual	26	(24,788.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
12/31/2002	Miscellaneous	20	(1.00)									(2.00)
			0.00									
			0.00									
			0.00									
			0.00									
	DECEMBER		13,890.97	9,568.43	(1,101.00)	(1,038.00)	18,089.04	(193.00)	(238.00)	(178.00)	(729.40)	(1,994.00)
	BTD		(238,350.67)	(123,145.78)	(28,421.56)	(72,303.36)	(56,235.03)	(2,642.12)	13,194.83	(4,509.33)	43,497.79	(79,116.55)

ARIZONA WATER COMPANY ARIZONA WATER COMPANY
2002 SUBLEDGER 2002 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(226,571.47)	(3,993.51)	37,698.99	36,066.72	(6,462.30)	8,948.07	25,898.68	(31,730.34)	(702.34)	22,960.81	8,422.14
10/31/2002	Payroll	1	851.04				61.84						
10/31/2002	Payroll taxes	2	68.47				4.98						
10/31/2002	AP	5	3,293.00		3,293.00								
10/31/2002	Inventory	7	0.00										
10/31/2002	Transportation	9	72.21				4.42						
10/31/2002	Equipment	9A	4.47										
10/31/2002	Tank maint accrual	26	(24,788.00)	(1,258.00)	(979.00)	(752.00)	(530.00)	(56.00)	(4,090.00)	(1,020.00)	(1,044.00)	(710.00)	(135.00)
			0.00										
			0.00										
			0.00										
	OCTOBER		(20,498.81)	(1,258.00)	2,314.00	(752.00)	(458.76)	(56.00)	(4,090.00)	(1,020.00)	(1,044.00)	(710.00)	(135.00)
	BTD		(247,070.28)	(5,251.51)	40,012.99	35,314.72	(6,921.06)	8,892.07	21,808.68	(32,750.34)	(1,746.34)	22,250.81	8,287.14
	(21,147.96) Total 265		(313,152.65)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(247,070.28)	(5,251.51)	40,012.99	35,314.72	(6,921.06)	8,892.07	21,808.68	(32,750.34)	(1,746.34)	22,250.81	8,287.14
11/30/2002	Payroll	1	980.38				180.81						
11/30/2002	Payroll taxes	2	82.07				15.14						
11/30/2002	AP	5	18,367.96				76.83						
11/30/2002	Transportation	9	186.23				29.60						
11/30/2002	Tank maint accrual	26	(24,788.00)	(1,258.00)	(979.00)	(752.00)	(530.00)	(56.00)	(4,090.00)	(1,020.00)	(1,044.00)	(710.00)	(135.00)
			0.00										
			0.00										
			0.00										
			0.00										
			0.00										
	NOVEMBER		(5,171.36)	(1,258.00)	(979.00)	(752.00)	(227.62)	(56.00)	(4,090.00)	(1,020.00)	(1,044.00)	(710.00)	(135.00)
	BTD		(252,241.64)	(6,509.51)	39,033.99	34,562.72	(7,148.68)	8,836.07	17,718.68	(33,770.34)	(2,790.34)	21,540.81	8,152.14
	(2,709.47) Total 265		(315,862.12)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(252,241.64)	(6,509.51)	39,033.99	34,562.72	(7,148.68)	8,836.07	17,718.68	(33,770.34)	(2,790.34)	21,540.81	8,152.14
12/31/2002	Payroll	1	503.57						19.67			41.23	
12/31/2002	Payroll taxes	2	42.23						1.65			3.46	
12/31/2002	AP	5	38,012.55			1,104.16	1,104.16						
12/31/2002	Transportation	9	121.62						1.05			2.52	
12/31/2002	Tank maint accrual	26	(24,788.00)	(1,258.00)	(979.00)	(752.00)	(530.00)	(56.00)	(4,090.00)	(1,020.00)	(1,044.00)	(710.00)	(135.00)
12/31/2002	Miscellaneous	20	(1.00)						7.00		(6.00)		
			0.00										
			0.00										
			0.00										
			0.00										
	DECEMBER		13,890.97	(1,258.00)	(979.00)	352.16	574.16	(56.00)	(4,060.63)	(1,020.00)	(1,050.00)	(662.79)	(135.00)
	BTD		(238,350.67)	(7,767.51)	38,054.99	34,914.88	(6,574.52)	8,780.07	13,658.05	(34,790.34)	(3,840.34)	20,878.02	8,017.14

ARIZONA WATER COMPANY
2003 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(238,350.67)	(123,145.78)	(28,421.56)	(72,303.36)	(56,235.03)	(2,642.12)	13,194.83	(4,509.33)	43,497.79	(79,116.55)
31-Jan-03	Payroll	1	50.09				29.83				20.26	
31-Jan-03	Payroll taxes	2	5.08				3.03				2.05	
31-Jan-03	AP	5	0.00									
31-Jan-03	Transportation	9	8.37				4.82				3.55	
31-Jan-03	Tank maint accrual	26	(24,790.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
31-Jan-03			0.00									
31-Jan-03			0.00									
31-Jan-03			0.00									
31-Jan-03			0.00									
31-Jan-03			0.00									
JANUARY			(24,726.46)	(3,996.00)	(1,101.00)	(1,038.00)	(4,590.32)	(193.00)	(238.00)	(178.00)	(825.14)	(1,992.00)
BTD			(263,077.13)	(127,141.78)	(29,522.56)	(73,341.36)	(60,825.35)	(2,835.12)	12,956.83	(4,687.33)	42,672.65	(81,108.55)
(24,627.32)	Total 265		(327,873.83)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(263,077.13)	(127,141.78)	(29,522.56)	(73,341.36)	(60,825.35)	(2,835.12)	12,956.83	(4,687.33)	42,672.65	(81,108.55)
28-Feb-03	Payroll	1	695.24	162.07			59.65				433.00	
28-Feb-03	Payroll taxes	2	69.16	16.12			5.93				43.08	
28-Feb-03	AP	5	2,415.34	9.82			503.52					
28-Feb-03	Transportation	9	138.08	55.76			10.18				61.64	
28-Feb-03	Tank maint accrual	26	(24,790.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
28-Feb-03	Inventory	7	0.00									
28-Feb-03	Stores	8	0.00									
28-Feb-03	Equipment	9A	0.00									
28-Feb-03			0.00									
28-Feb-03			0.00									
FEBRUARY			(21,472.18)	(3,752.23)	(1,101.00)	(1,038.00)	(4,048.72)	(193.00)	(238.00)	(178.00)	(313.28)	(1,992.00)
BTD			(284,549.31)	(130,894.01)	(30,623.56)	(74,379.36)	(64,874.07)	(3,028.12)	12,718.83	(4,865.33)	42,359.37	(83,100.55)
(23,353.18)	Total 265		(351,227.01)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(284,549.31)	(130,894.01)	(30,623.56)	(74,379.36)	(64,874.07)	(3,028.12)	12,718.83	(4,865.33)	42,359.37	(83,100.55)
31-Mar-03	Payroll	1	688.82	476.09	81.04							
31-Mar-03	Payroll taxes	2	64.19	44.37	7.55							
31-Mar-03	AP	5	69,371.63	6,970.73					2,096.90		50,098.40	
31-Mar-03	Transportation	9	191.34	154.02	2.16							
31-Mar-03	Tank maint accrual	26	(24,788.00)	(3,994.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
31-Mar-03	Equipment	9A	0.00									
31-Mar-03	Adjustment	20	0.00									
31-Mar-03			0.00									
31-Mar-03			0.00									
31-Mar-03			0.00									
MARCH			45,527.98	3,651.21	(1,010.25)	(1,038.00)	(4,628.00)	(193.00)	1,858.90	(178.00)	49,247.40	(1,992.00)
BTD			(239,021.33)	(127,242.80)	(31,633.81)	(75,417.36)	(69,502.07)	(3,221.12)	14,577.73	(5,043.33)	91,606.77	(85,092.55)
44,203.80	Total 265		(307,023.21)									

ARIZONA WATER COMPANY
2003 SUBLEDGER

ARIZONA WATER COMPANY
2003 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(238,350.67)	(7,767.51)	38,054.99	34,914.88	(6,574.52)	8,780.07	13,658.05	(34,790.34)	(3,840.34)	20,878.02	8,017.14
31-Jan-03	Payroll	1	50.09										
31-Jan-03	Payroll taxes	2	5.08										
31-Jan-03	AP	5	0.00										
31-Jan-03	Transportation	9	8.37										
31-Jan-03	Tank maint accrual	26	(24,790.00)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.00
31-Jan-03			0.00										
31-Jan-03			0.00										
31-Jan-03			0.00										
31-Jan-03			0.00										
31-Jan-03			0.00										
JANUARY			(24,726.46)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.00
BTD			(263,077.13)	(9,025.51)	37,075.99	34,161.88	(7,104.52)	8,724.07	9,569.05	(35,810.34)	(4,885.34)	20,168.02	7,882.14
(24,627.32) Total 265			(327,873.83)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(263,077.13)	(9,025.51)	37,075.99	34,161.88	(7,104.52)	8,724.07	9,569.05	(35,810.34)	(4,885.34)	20,168.02	7,882.14
28-Feb-03	Payroll	1	695.24					40.52					
28-Feb-03	Payroll taxes	2	69.16					4.03					
28-Feb-03	AP	5	2,415.34						1,902.00				
28-Feb-03	Transportation	9	138.08					10.50					
28-Feb-03	Tank maint accrual	26	(24,790.00)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.00
28-Feb-03	Inventory	7	0.00										
28-Feb-03	Stores	8	0.00										
28-Feb-03	Equipment	9A	0.00										
28-Feb-03			0.00										
28-Feb-03			0.00										
FEBRUARY			(21,472.18)	(1,258.00)	(979.00)	(753.00)	(530.00)	(0.95)	(2,187.00)	(1,020.00)	(1,045.00)	(710.00)	(135.00
BTD			(284,549.31)	(10,283.51)	36,096.99	33,408.88	(7,634.52)	8,723.12	7,382.05	(36,830.34)	(5,930.34)	19,458.02	7,747.14
(23,353.18) Total 265			(351,227.01)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(284,549.31)	(10,283.51)	36,096.99	33,408.88	(7,634.52)	8,723.12	7,382.05	(36,830.34)	(5,930.34)	19,458.02	7,747.14
31-Mar-03	Payroll	1	688.82		131.69								
31-Mar-03	Payroll taxes	2	64.19		12.27								
31-Mar-03	AP	5	69,371.63		1,458.87				4,588.73				
31-Mar-03	Transportation	9	191.34		35.16							4,158.00	
31-Mar-03	Tank maint accrual	26	(24,788.00)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.00)
31-Mar-03	Equipment	9A	0.00										
31-Mar-03	Adjustment	20	0.00										
31-Mar-03			0.00										
31-Mar-03			0.00										
31-Mar-03			0.00										
MARCH			45,527.98	(1,258.00)	658.99	(753.00)	(530.00)	(56.00)	499.73	(1,020.00)	(1,045.00)	3,448.00	(135.00)
BTD			(239,021.33)	(11,541.51)	36,755.98	32,655.88	(8,164.52)	8,667.12	7,881.78	(37,850.34)	(6,975.34)	22,906.02	7,612.14
44,203.80 Total 265			(307,023.21)										

ARIZONA WATER COMPANY
2003 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(239,021.33)	(127,242.80)	(31,633.81)	(75,417.36)	(69,502.07)	(3,221.12)	14,577.73	(5,043.33)	91,606.77	(85,092.55)
30-Apr-03	Payroll	1	680.01	101.30					190.78		149.14	
30-Apr-03	Payroll taxes	2	62.24	9.27					17.46		13.65	
30-Apr-03	AP	5	892.23	42.23								
30-Apr-03	Transportation	9	142.83	21.09					41.18		24.80	
30-Apr-03	Equipment	9A	0.00									
30-Apr-03	Tank maint accrual	20	(767.00)	(2.00)								
30-Apr-03	Tank maint accrual	26	(24,790.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
30-Apr-03			0.00									
30-Apr-03			0.00									
30-Apr-03			0.00									
	APRIL		(23,779.69)	(3,824.11)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	11.42	(178.00)	(663.41)	(1,992.00)
	BTD		(262,801.02)	(131,066.91)	(32,734.81)	(76,455.36)	(74,130.07)	(3,414.12)	14,589.15	(5,221.33)	90,943.36	(87,084.55)
	(23,765.02) Total 265		(330,788.23)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(262,801.02)	(131,066.91)	(32,734.81)	(76,455.36)	(74,130.07)	(3,414.12)	14,589.15	(5,221.33)	90,943.36	(87,084.55)
31-May-03	Payroll	1	293.21	60.78	40.52		29.83				40.52	
31-May-03	Payroll taxes	2	25.34	5.26	3.50		2.58				3.50	
31-May-03	AP	5	162,321.96	960.00	240.00		159,752.79				360.00	
31-May-03	Transportation	9	40.89	14.07	1.58		3.81				4.62	
31-May-03	Tank maint accrual	26	(24,790.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
31-May-03	Equipment	9A	278.55								278.55	
31-May-03	Cash Receipts	3	(2,381.98)	(2,381.98)								
31-May-03			0.00									
31-May-03			0.00									
31-May-03			0.00									
	MAY		135,787.97	(5,337.87)	(815.40)	(1,038.00)	155,161.01	(193.00)	(238.00)	(178.00)	(163.81)	(1,992.00)
	BTD		(127,013.05)	(136,404.78)	(33,550.21)	(77,493.36)	81,030.94	(3,607.12)	14,351.15	(5,399.33)	90,779.55	(89,076.55)
	133,906.97 Total 265		(196,881.26)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(127,013.05)	(136,404.78)	(33,550.21)	(77,493.36)	81,030.94	(3,607.12)	14,351.15	(5,399.33)	90,779.55	(89,076.55)
30-Jun-03	Payroll	1	141.82		40.52		101.30					
30-Jun-03	Payroll taxes	2	12.97		3.70		9.27					
30-Jun-03	AP	5	5,186.92				4,983.58					
30-Jun-03	Transportation	9	28.30		4.40		23.90					
30-Jun-03	Tank maint accrual	26	(24,790.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
30-Jun-03	Equipment	9A	0.00									
30-Jun-03			0.00									
30-Jun-03			0.00									
30-Jun-03			0.00									
30-Jun-03			0.00									
	JUNE		(19,419.99)	(3,996.00)	(1,052.38)	(1,038.00)	490.05	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
	BTD		(146,433.04)	(140,400.78)	(34,602.59)	(78,531.36)	81,520.99	(3,800.12)	14,113.15	(5,577.33)	89,928.55	(91,068.55)
	(17,109.64) Total 265		(213,990.90)									

ARIZONA WATER COMPANY
2003 SUBLEDGER

ARIZONA WATER COMPANY
2003 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(239,021.33)	(11,541.51)	36,755.98	32,655.88	(8,164.52)	8,667.12	7,881.78	(37,850.34)	(6,975.34)	22,906.02	7,612.14
30-Apr-03	Payroll	1	680.01						238.79				
30-Apr-03	Payroll taxes	2	62.24						21.86				
30-Apr-03	AP	5	892.23									850.00	
30-Apr-03	Transportation	9	142.83						55.76				
30-Apr-03	Equipment	9A	0.00										
30-Apr-03	Tank maint accrual	20	(767.00)									(765.00)	
30-Apr-03	Tank maint accrual	26	(24,790.00)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.00
30-Apr-03			0.00										
30-Apr-03			0.00										
30-Apr-03			0.00										
APRIL			(23,779.69)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(3,772.59)	(1,020.00)	(1,045.00)	(625.00)	(135.00
BTD			(262,801.02)	(12,799.51)	35,776.98	31,902.88	(8,694.52)	8,611.12	4,109.19	(38,870.34)	(8,020.34)	22,281.02	7,477.14
(23,765.02)	Total 265		(330,788.23)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(262,801.02)	(12,799.51)	35,776.98	31,902.88	(8,694.52)	8,611.12	4,109.19	(38,870.34)	(8,020.34)	22,281.02	7,477.14
31-May-03	Payroll	1	293.21		60.78		60.78						
31-May-03	Payroll taxes	2	25.34		5.25		5.25						
31-May-03	AP	5	162,321.96	120.00	168.65	240.00			480.52				
31-May-03	Transportation	9	40.89		3.87		12.94						
31-May-03	Tank maint accrual	26	(24,790.00)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.00
31-May-03	Equipment	9A	278.55										
31-May-03	Cash Receipts	3	(2,381.98)										
31-May-03			0.00										
31-May-03			0.00										
31-May-03			0.00										
MAY			135,787.97	(1,138.00)	(740.45)	(513.00)	(451.03)	(56.00)	(3,608.48)	(1,020.00)	(1,045.00)	(710.00)	(135.00
BTD			(127,013.05)	(13,937.51)	35,036.53	31,389.88	(9,145.55)	8,555.12	500.71	(39,890.34)	(9,065.34)	21,571.02	7,342.14
133,906.97	Total 265		(196,881.26)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(127,013.05)	(13,937.51)	35,036.53	31,389.88	(9,145.55)	8,555.12	500.71	(39,890.34)	(9,065.34)	21,571.02	7,342.14
30-Jun-03	Payroll	1	141.82										
30-Jun-03	Payroll taxes	2	12.97										
30-Jun-03	AP	5	5,186.92		203.34								
30-Jun-03	Transportation	9	28.30										
30-Jun-03	Tank maint accrual	26	(24,790.00)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.00)
30-Jun-03	Equipment	9A	0.00										
30-Jun-03			0.00										
30-Jun-03			0.00										
30-Jun-03			0.00										
30-Jun-03			0.00										
JUNE			(19,419.99)	(1,258.00)	(775.66)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.00)
BTD			(146,433.04)	(15,195.51)	34,260.87	30,636.88	(9,675.55)	8,499.12	(3,588.29)	(40,910.34)	(10,110.34)	20,861.02	7,207.14
(17,109.64)	Total 265		(213,990.90)										

ARIZONA WATER COMPANY
2003 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(146,433.04)	(140,400.78)	(34,602.59)	(78,531.36)	81,520.99	(3,800.12)	14,113.15	(5,577.33)	89,928.55	(91,068.55)
31-Jul-03	Payroll	1	40.52						40.52			
31-Jul-03	Payroll taxes	2	3.63						3.63			
31-Jul-03	AP	5	74.37									
31-Jul-03	Transportation	9	9.26						9.26			
31-Jul-03	Equipment	9A	0.00									
31-Jul-03	Tank maint accrual	26	(24,790.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
31-Jul-03			0.00									
31-Jul-03			0.00									
31-Jul-03			0.00									
31-Jul-03			0.00									
JULY			(24,662.22)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(184.59)	(178.00)	(851.00)	(1,992.00)
BTD			(171,095.26)	(144,396.78)	(35,703.59)	(79,569.36)	76,892.99	(3,993.12)	13,928.56	(5,755.33)	89,077.55	(93,060.55)
(26,296.25)	Total 265		(240,287.15)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(171,095.26)	(144,396.78)	(35,703.59)	(79,569.36)	76,892.99	(3,993.12)	13,928.56	(5,755.33)	89,077.55	(93,060.55)
31-Aug-03	Payroll	1	20.26	20.26								
31-Aug-03	Cash Receipts	3	1.82	1.82								
31-Aug-03	AP	5	9,623.73									9,500.00
31-Aug-03	Transportation	9	7.65	7.65								
31-Aug-03	Tank maint accrual	26	(24,790.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
31-Aug-03	Equipment	9A	181.79								181.79	
31-Aug-03	Miscellaneous	20	(850.00)									
31-Aug-03			0.00									
31-Aug-03			0.00									
31-Aug-03			0.00									
AUGUST			(15,804.75)	(3,966.27)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(669.21)	7,508.00
BTD			(186,900.01)	(148,363.05)	(36,804.59)	(80,607.36)	72,264.99	(4,186.12)	13,690.56	(5,933.33)	88,408.34	(85,552.55)
(17,510.75)	Total 265		(257,797.90)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(186,900.01)	(148,363.05)	(36,804.59)	(80,607.36)	72,264.99	(4,186.12)	13,690.56	(5,933.33)	88,408.34	(85,552.55)
30-Sep-03	Payroll	1	526.74	60.78								384.92
30-Sep-03	Payroll taxes	2	47.44	5.47								34.67
30-Sep-03	AP	5	16,732.07				232.75				6,499.32	10,000.00
30-Sep-03	Transportation	9	136.83	20.70								95.89
30-Sep-03	Tank maint accrual	26	(24,790.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
30-Sep-03	Inventory	7	0.00									
30-Sep-03	Stores	8	0.00									
30-Sep-03	Equipment	9A	0.00									
30-Sep-03			0.00									
30-Sep-03			0.00									
SEPTEMBER			(7,346.92)	(3,909.05)	(1,101.00)	(1,038.00)	(4,395.25)	(193.00)	(238.00)	(178.00)	5,648.32	8,523.48
BTD			(194,246.93)	(152,272.10)	(37,905.59)	(81,645.36)	67,869.74	(4,379.12)	13,452.56	(6,111.33)	94,056.66	(77,029.07)
(8,947.92)	Total 265		(266,745.82)									

ARIZONA WATER COMPANY
2003 SUBLEDGER

ARIZONA WATER COMPANY
2003 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(146,433.04)	(15,195.51)	34,260.87	30,636.88	(9,675.55)	8,499.12	(3,588.29)	(40,910.34)	(10,110.34)	20,861.02	7,207.1
31-Jul-03	Payroll	1	40.52										
31-Jul-03	Payroll taxes	2	3.63										
31-Jul-03	AP	5	74.37		74.37								
31-Jul-03	Transportation	9	9.26										
31-Jul-03	Equipment	9A	0.00										
31-Jul-03	Tank maint accrual	26	(24,790.00)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.0
31-Jul-03			0.00										
31-Jul-03			0.00										
31-Jul-03			0.00										
31-Jul-03			0.00										
	JULY		(24,662.22)	(1,258.00)	(904.63)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.0
	BTD		(171,095.26)	(16,453.51)	33,356.24	29,883.88	(10,205.55)	8,443.12	(7,677.29)	(41,930.34)	(11,155.34)	20,151.02	7,072.1
(26,296.25)	Total 265		(240,287.15)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(171,095.26)	(16,453.51)	33,356.24	29,883.88	(10,205.55)	8,443.12	(7,677.29)	(41,930.34)	(11,155.34)	20,151.02	7,072.1
31-Aug-03	Payroll	1	20.26										
31-Aug-03	Cash Receipts	3	1.82										
31-Aug-03	AP	5	9,623.73	123.73									
31-Aug-03	Transportation	9	7.65										
31-Aug-03	Tank maint accrual	26	(24,790.00)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.0
31-Aug-03	Equipment	9A	181.79										
31-Aug-03	Miscellaneous	20	(850.00)									(850.00)	
31-Aug-03			0.00										
31-Aug-03			0.00										
31-Aug-03			0.00										
	AUGUST		(15,804.75)	(1,134.27)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(1,560.00)	(135.0
	BTD		(186,900.01)	(17,587.78)	32,377.24	29,130.88	(10,735.55)	8,387.12	(11,766.29)	(42,950.34)	(12,200.34)	18,591.02	6,937.1
(17,510.75)	Total 265		(257,797.90)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(186,900.01)	(17,587.78)	32,377.24	29,130.88	(10,735.55)	8,387.12	(11,766.29)	(42,950.34)	(12,200.34)	18,591.02	6,937.1
30-Sep-03	Payroll	1	526.74		81.04								
30-Sep-03	Payroll taxes	2	47.44		7.30								
30-Sep-03	AP	5	16,732.07										
30-Sep-03	Transportation	9	136.83		20.24								
30-Sep-03	Tank maint accrual	26	(24,790.00)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.0
30-Sep-03	Inventory	7	0.00										
30-Sep-03	Stores	8	0.00										
30-Sep-03	Equipment	9A	0.00										
30-Sep-03			0.00										
30-Sep-03			0.00										
	SEPTEMBER		(7,346.92)	(1,258.00)	(870.42)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.0
	BTD		(194,246.93)	(18,845.78)	31,506.82	28,377.88	(11,265.55)	8,331.12	(15,855.29)	(43,970.34)	(13,245.34)	17,881.02	6,802.14
(8,947.92)	Total 265		(266,745.82)										

ARIZONA WATER COMPANY
2003 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(194,246.93)	(152,272.10)	(37,905.59)	(81,645.36)	67,869.74	(4,379.12)	13,452.56	(6,111.33)	94,056.66	(77,029.07)
31-Oct-03	Payroll	1	753.84	141.82							81.04	364.66
31-Oct-03	Payroll taxes	2	62.52	11.76							6.72	30.25
31-Oct-03	AP	5	23,054.61									22,849.90
31-Oct-03	Inventory	7	0.00									
31-Oct-03	Transportation	9	94.43	33.46							5.22	38.86
31-Oct-03	Equipment	9A	0.00									
31-Oct-03	Tank maint accrual	26	(24,790.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
31-Oct-03	Maintenance	20	0.00									
31-Oct-03			0.00									
31-Oct-03			0.00									
	OCTOBER		(824.60)	(3,808.96)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(758.02)	21,291.67
	BTD		(195,071.53)	(156,081.06)	(39,006.59)	(82,683.36)	63,241.74	(4,572.12)	13,214.56	(6,289.33)	93,298.64	(55,737.40)
	(2,018.05) Total 265		(268,763.87)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(195,071.53)	(156,081.06)	(39,006.59)	(82,683.36)	63,241.74	(4,572.12)	13,214.56	(6,289.33)	93,298.64	(55,737.40)
30-Nov-03	Payroll	1	858.90	516.61	342.29							
30-Nov-03	Payroll taxes	2	75.00	45.11	29.89							
30-Nov-03	AP	5	9.13	9.13								
30-Nov-03	Transportation	9	(116.88)	237.12	(354.00)							
30-Nov-03	Tank maint accrual	26	(24,790.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
30-Nov-03	Equipment	9A	33.31		33.31							
30-Nov-03			0.00									
30-Nov-03			0.00									
30-Nov-03			0.00									
30-Nov-03			0.00									
	NOVEMBER		(23,930.54)	(3,188.03)	(1,049.51)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
	BTD		(219,002.07)	(159,269.09)	(40,056.10)	(83,721.36)	58,613.74	(4,765.12)	12,976.56	(6,467.33)	92,447.64	(57,729.40)
	(24,030.98) Total 265		(292,794.85)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(219,002.07)	(159,269.09)	(40,056.10)	(83,721.36)	58,613.74	(4,765.12)	12,976.56	(6,467.33)	92,447.64	(57,729.40)
31-Dec-03	Payroll	1	142.78	121.55	21.23							
31-Dec-03	Payroll taxes	2	12.47	10.62	1.85							
31-Dec-03	AP	5	26,008.39	6,523.00	12,163.92		7,321.47					
31-Dec-03	Transportation	9	31.42	26.58	4.84							
31-Dec-03	Tank maint accrual	26	(24,775.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,636.00)	(193.00)	(238.00)	(178.00)	(839.00)	(1,994.00)
31-Dec-03	Equipment	9A	60.12								60.12	
31-Dec-03			0.00									
31-Dec-03			0.00									
31-Dec-03			0.00									
31-Dec-03			0.00									
	DECEMBER		1,480.18	2,685.75	11,090.84	(1,038.00)	2,685.47	(193.00)	(238.00)	(178.00)	(778.88)	(1,994.00)
	BTD		(217,521.89)	(156,583.34)	(28,965.26)	(84,759.36)	61,299.21	(4,958.12)	12,738.56	(6,645.33)	91,668.76	(59,723.40)

ARIZONA WATER COMPANY
2003 SUBLEDGER

ARIZONA WATER COMPANY
2003 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(194,246.93)	(18,845.78)	31,506.82	28,377.88	(11,265.55)	8,331.12	(15,855.29)	(43,970.34)	(13,245.34)	17,881.02	6,802.14
31-Oct-03	Payroll	1	753.84	85.28							81.04		
31-Oct-03	Payroll taxes	2	62.52	7.07							6.72		
31-Oct-03	AP	5	23,054.61									204.71	
31-Oct-03	Inventory	7	0.00										
31-Oct-03	Transportation	9	94.43	12.57							4.32		
31-Oct-03	Equipment	9A	0.00										
31-Oct-03	Tank maint accrual	26	(24,790.00)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.00
31-Oct-03	Maintenance	20	0.00										
31-Oct-03			0.00										
31-Oct-03			0.00										
	OCTOBER		(824.60)	(1,153.08)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(952.92)	(505.29)	(135.00
	BTD		(195,071.53)	(19,998.86)	30,527.82	27,624.88	(11,795.55)	8,275.12	(19,944.29)	(44,990.34)	(14,198.26)	17,375.73	6,667.14
	(2,018.05) Total 265		(268,763.87)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(195,071.53)	(19,998.86)	30,527.82	27,624.88	(11,795.55)	8,275.12	(19,944.29)	(44,990.34)	(14,198.26)	17,375.73	6,667.14
30-Nov-03	Payroll	1	858.90										
30-Nov-03	Payroll taxes	2	75.00										
30-Nov-03	AP	5	9.13										
30-Nov-03	Transportation	9	(116.88)										
30-Nov-03	Tank maint accrual	26	(24,790.00)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.00
30-Nov-03	Equipment	9A	33.31										
30-Nov-03			0.00										
30-Nov-03			0.00										
30-Nov-03			0.00										
30-Nov-03			0.00										
	NOVEMBER		(23,930.54)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.00
	BTD		(219,002.07)	(21,256.86)	29,548.82	26,871.88	(12,325.55)	8,219.12	(24,033.29)	(46,010.34)	(15,243.26)	16,665.73	6,532.14
	(24,030.98) Total 265		(292,794.85)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(219,002.07)	(21,256.86)	29,548.82	26,871.88	(12,325.55)	8,219.12	(24,033.29)	(46,010.34)	(15,243.26)	16,665.73	6,532.14
31-Dec-03	Payroll	1	142.78										
31-Dec-03	Payroll taxes	2	12.47										
31-Dec-03	AP	5	26,008.39										
31-Dec-03	Transportation	9	31.42										
31-Dec-03	Tank maint accrual	26	(24,775.00)	(1,258.00)	(979.00)	(741.00)	(530.00)	(56.00)	(4,094.00)	(1,020.00)	(1,039.00)	(710.00)	(135.00)
31-Dec-03	Equipment	9A	60.12										
31-Dec-03			0.00										
31-Dec-03			0.00										
31-Dec-03			0.00										
31-Dec-03			0.00										
	DECEMBER		1,480.18	(1,258.00)	(979.00)	(741.00)	(530.00)	(56.00)	(4,094.00)	(1,020.00)	(1,039.00)	(710.00)	(135.00)
	BTD		(217,521.89)	(22,514.86)	28,569.82	26,130.88	(12,855.55)	8,163.12	(28,127.29)	(47,030.34)	(16,282.26)	15,955.73	6,397.14

ARIZONA WATER COMPANY
2004 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(217,521.89)	(156,583.34)	(28,965.26)	(84,759.36)	61,299.21	(4,958.12)	12,738.56	(6,645.33)	91,668.76	(59,723.40)
31-Jan-04	Payroll	1	202.59				202.59					
31-Jan-04	Payroll taxes	2	20.44				20.44					
31-Jan-04	AP	5	0.00									
31-Jan-04	Transportation	9	79.60				79.60					
31-Jan-04	Tank maint accrual	26	(24,790.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
31-Jan-04	Miscellaneous	20	(6,071.00)		(6,071.00)							
31-Jan-04			0.00									
31-Jan-04			0.00									
31-Jan-04			0.00									
31-Jan-04			0.00									
JANUARY			(30,558.37)	(3,996.00)	(7,172.00)	(1,038.00)	(4,325.37)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
BTD			(248,080.26)	(160,579.34)	(36,137.26)	(85,797.36)	56,973.84	(5,151.12)	12,500.56	(6,823.33)	90,817.76	(61,715.40)
(31,114.37)	Total 265		(324,310.04)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(248,080.26)	(160,579.34)	(36,137.26)	(85,797.36)	56,973.84	(5,151.12)	12,500.56	(6,823.33)	90,817.76	(61,715.40)
29-Feb-04	Payroll	1	612.31				612.31					
29-Feb-04	Payroll taxes	2	60.12				60.12					
29-Feb-04	AP	5	100.00				100.00					
29-Feb-04	Transportation	9	116.51				116.51					
29-Feb-04	Tank maint accrual	26	(24,790.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
29-Feb-04	Inventory	7	0.00									
29-Feb-04	Stores	8	0.00									
29-Feb-04	Equipment	9A	0.00									
29-Feb-04			0.00									
29-Feb-04			0.00									
FEBRUARY			(23,901.06)	(3,996.00)	(1,101.00)	(1,038.00)	(3,739.06)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
BTD			(271,981.32)	(164,575.34)	(37,238.26)	(86,835.36)	53,234.78	(5,344.12)	12,262.56	(7,001.33)	89,966.76	(63,707.40)
(25,782.06)	Total 265		(350,092.10)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(271,981.32)	(164,575.34)	(37,238.26)	(86,835.36)	53,234.78	(5,344.12)	12,262.56	(7,001.33)	89,966.76	(63,707.40)
31-Mar-04	Payroll	1	155.59	155.59								
31-Mar-04	Payroll taxes	2	14.24	14.24								
31-Mar-04	AP	5	0.00									
31-Mar-04	Transportation	9	44.94	44.94								
31-Mar-04	Tank maint accrual	26	(24,790.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
31-Mar-04	Equipment	9A	0.00									
31-Mar-04	Adjustment	20	0.00									
31-Mar-04			0.00									
31-Mar-04			0.00									
31-Mar-04			0.00									
31-Mar-04			0.00									
MARCH			(24,575.23)	(3,781.23)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
BTD			(296,556.55)	(168,356.57)	(38,339.26)	(87,873.36)	48,606.78	(5,537.12)	12,024.56	(7,179.33)	89,115.76	(65,699.40)
(25,765.82)	Total 265		(375,857.92)									

ARIZONA WATER COMPANY
2004 SUBLEDGER

ARIZONA WATER COMPANY
2004 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(217,521.89)	(22,514.86)	28,569.82	26,130.88	(12,855.55)	8,163.12	(28,127.29)	(47,030.34)	(16,282.26)	15,955.73	6,397.1
31-Jan-04	Payroll	1	202.59										
31-Jan-04	Payroll taxes	2	20.44										
31-Jan-04	AP	5	0.00										
31-Jan-04	Transportation	9	79.60										
31-Jan-04	Tank maint accrual	26	(24,790.00)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.0
31-Jan-04	Miscellaneous	20	(6,071.00)										
31-Jan-04			0.00										
31-Jan-04			0.00										
31-Jan-04			0.00										
31-Jan-04			0.00										
JANUARY			(30,558.37)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.0
BTD			(248,080.26)	(23,772.86)	27,590.82	25,377.88	(13,385.55)	8,107.12	(32,216.29)	(48,050.34)	(17,327.26)	15,245.73	6,262.1
(31,114.37) Total 265			(324,310.04)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(248,080.26)	(23,772.86)	27,590.82	25,377.88	(13,385.55)	8,107.12	(32,216.29)	(48,050.34)	(17,327.26)	15,245.73	6,262.1
29-Feb-04	Payroll	1	612.31										
29-Feb-04	Payroll taxes	2	60.12										
29-Feb-04	AP	5	100.00										
29-Feb-04	Transportation	9	116.51										
29-Feb-04	Tank maint accrual	26	(24,790.00)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.0
29-Feb-04	Inventory	7	0.00										
29-Feb-04	Stores	8	0.00										
29-Feb-04	Equipment	9A	0.00										
29-Feb-04			0.00										
29-Feb-04			0.00										
FEBRUARY			(23,901.06)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.0
BTD			(271,981.32)	(25,030.86)	26,611.82	24,624.88	(13,915.55)	8,051.12	(36,305.29)	(49,070.34)	(18,372.26)	14,535.73	6,127.14
(25,782.06) Total 265			(350,092.10)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(271,981.32)	(25,030.86)	26,611.82	24,624.88	(13,915.55)	8,051.12	(36,305.29)	(49,070.34)	(18,372.26)	14,535.73	6,127.14
31-Mar-04	Payroll	1	155.59										
31-Mar-04	Payroll taxes	2	14.24										
31-Mar-04	AP	5	0.00										
31-Mar-04	Transportation	9	44.94										
31-Mar-04	Tank maint accrual	26	(24,790.00)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.00
31-Mar-04	Equipment	9A	0.00										
31-Mar-04	Adjustment	20	0.00										
31-Mar-04			0.00										
31-Mar-04			0.00										
31-Mar-04			0.00										
MARCH			(24,575.23)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.00
BTD			(296,556.55)	(26,288.86)	25,632.82	23,871.88	(14,445.55)	7,995.12	(40,394.29)	(50,090.34)	(19,417.26)	13,825.73	5,992.14
(25,765.82) Total 265			(375,857.92)										

ARIZONA WATER COMPANY
2004 SUBLEDGER

ARIZONA WATER COMPANY
2004 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(296,556.55)	(26,288.86)	25,632.82	23,871.88	(14,445.55)	7,995.12	(40,394.29)	(50,090.34)	(19,417.26)	13,825.73	5,992.1
30-Apr-04	Payroll	1	207.46										
30-Apr-04	Payroll taxes	2	18.56										
30-Apr-04	AP	5	0.00										
30-Apr-04	Transportation	9	77.90										
30-Apr-04	Equipment	9A	0.00										
30-Apr-04	Tank maint accrual	20	0.00										
30-Apr-04	Tank maint accrual	26	(24,790.00)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.0
30-Apr-04			0.00										
30-Apr-04			0.00										
30-Apr-04			0.00										
	APRIL		(24,486.08)	(1,258.00)	(979.00)	(753.00)	(530.00)	(56.00)	(4,089.00)	(1,020.00)	(1,045.00)	(710.00)	(135.0
	BTD		(321,042.63)	(27,546.86)	24,653.82	23,118.88	(14,975.55)	7,939.12	(44,483.29)	(51,110.34)	(20,462.26)	13,115.73	5,857.1
	(25,684.94) Total 265		(401,542.86)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(321,042.63)	(27,546.86)	24,653.82	23,118.88	(14,975.55)	7,939.12	(44,483.29)	(51,110.34)	(20,462.26)	13,115.73	5,857.1
31-May-04	Payroll	1	255.56		82.98								
31-May-04	Payroll taxes	2	21.82		7.08								
31-May-04	AP	5	47,247.52										
31-May-04	Transportation	9	22.14		6.74								
31-May-04	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
31-May-04	Equipment	9A	0.00										
31-May-04	Miscellaneous	20	(10,707.00)		(2,529.00)	354.00	(816.00)	(339.00)				(1,397.00)	(266.0
31-May-04			0.00										
31-May-04			0.00										
31-May-04			0.00										
	MAY		1,342.04	(1,258.00)	(5,940.20)	(45.00)	(2,162.00)	(734.00)	(4,089.00)	(1,020.00)	(1,045.00)	(3,504.00)	(667.0
	BTD		(319,700.59)	(28,804.86)	18,713.62	23,073.88	(17,137.55)	7,205.12	(48,572.29)	(52,130.34)	(21,507.26)	9,611.73	5,190.1
	(3,760.96) Total 265		(405,303.82)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(319,700.59)	(28,804.86)	18,713.62	23,073.88	(17,137.55)	7,205.12	(48,572.29)	(52,130.34)	(21,507.26)	9,611.73	5,190.1
30-Jun-04	Payroll	1	62.24										
30-Jun-04	Payroll taxes	2	5.58										
30-Jun-04	AP	5	77.46		77.46								
30-Jun-04	Transportation	9	18.63										
30-Jun-04	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
30-Jun-04	Equipment	9A	0.00										
30-Jun-04			0.00										
30-Jun-04			0.00										
30-Jun-04			0.00										
30-Jun-04			0.00										
	JUNE		(35,334.09)	(1,258.00)	(3,430.54)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
	BTD		(355,034.68)	(30,062.86)	15,283.08	22,674.88	(18,483.55)	6,810.12	(52,661.29)	(53,150.34)	(22,552.26)	7,504.73	4,789.14
	(37,477.42) Total 265		(442,781.24)										

ARIZONA WATER COMPANY
2004 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(296,556.55)	(168,356.57)	(38,339.26)	(87,873.36)	48,606.78	(5,537.12)	12,024.56	(7,179.33)	89,115.76	(65,699.40)
30-Apr-04	Payroll	1	207.46	207.46								
30-Apr-04	Payroll taxes	2	18.56	18.56								
30-Apr-04	AP	5	0.00									
30-Apr-04	Transportation	9	77.90	77.90								
30-Apr-04	Equipment	9A	0.00									
30-Apr-04	Tank maint accrual	20	0.00									
30-Apr-04	Tank maint accrual	26	(24,790.00)	(3,996.00)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
30-Apr-04			0.00									
30-Apr-04			0.00									
30-Apr-04			0.00									
	APRIL		(24,486.08)	(3,692.08)	(1,101.00)	(1,038.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
	BTD		(321,042.63)	(172,048.65)	(39,440.26)	(88,911.36)	43,978.78	(5,730.12)	11,786.56	(7,357.33)	88,264.76	(67,691.40)
	(25,684.94) Total 26		(401,542.86)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(321,042.63)	(172,048.65)	(39,440.26)	(88,911.36)	43,978.78	(5,730.12)	11,786.56	(7,357.33)	88,264.76	(67,691.40)
31-May-04	Payroll	1	255.56		141.46		31.12					
31-May-04	Payroll taxes	2	21.82		12.08		2.66					
31-May-04	AP	5	47,247.52				47,247.52					
31-May-04	Transportation	9	22.14		10.08		5.32					
31-May-04	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,629.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
31-May-04	Equipment	9A	0.00									
31-May-04	Miscellaneous	20	(10,707.00)	(4,690.00)	(980.00)	(44.00)						
31-May-04			0.00									
31-May-04			0.00									
31-May-04			0.00									
	MAY		1,342.04	(13,376.00)	(2,898.38)	(1,126.00)	42,657.62	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
	BTD		(319,700.59)	(185,424.65)	(42,338.64)	(90,037.36)	86,636.40	(5,923.12)	11,548.56	(7,535.33)	87,414.76	(69,683.40)
	(3,760.96) Total 265		(405,303.82)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(319,700.59)	(185,424.65)	(42,338.64)	(90,037.36)	86,636.40	(5,923.12)	11,548.56	(7,535.33)	87,414.76	(69,683.40)
30-Jun-04	Payroll	1	62.24				62.24					
30-Jun-04	Payroll taxes	2	5.58				5.58					
30-Jun-04	AP	5	77.46									
30-Jun-04	Transportation	9	18.63				18.63					
30-Jun-04	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,629.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
30-Jun-04	Equipment	9A	0.00									
30-Jun-04			0.00									
30-Jun-04			0.00									
30-Jun-04			0.00									
30-Jun-04			0.00									
	JUNE		(35,334.09)	(8,686.00)	(2,082.00)	(1,082.00)	(4,542.55)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
	BTD		(355,034.68)	(194,110.65)	(44,420.64)	(91,119.36)	82,093.85	(6,116.12)	11,310.56	(7,713.33)	86,564.76	(71,675.40)
	(37,477.42) Total 265		(442,781.24)									

ARIZONA WATER COMPANY
2004 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(355,034.68)	(194,110.65)	(44,420.64)	(91,119.36)	82,093.85	(6,116.12)	11,310.56	(7,713.33)	86,564.76	(71,675.40)
31-Jul-04	Payroll	1	20.75	20.75								
31-Jul-04	Payroll taxes	2	1.85	1.85								
31-Jul-04	AP	5	20,439.93				4,293.28					
31-Jul-04	Transportation	9	5.68	5.68								2,872.94
31-Jul-04	Equipment	9A	0.00									
31-Jul-04	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,629.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
31-Jul-04			0.00									
31-Jul-04			0.00									
31-Jul-04			0.00									
31-Jul-04			0.00									
JULY			(15,029.79)	(8,657.72)	(2,082.00)	(1,082.00)	(335.72)	(193.00)	(238.00)	(178.00)	(850.00)	880.94
BTD			(370,064.47)	(202,768.37)	(46,502.64)	(92,201.36)	81,758.13	(6,309.12)	11,072.56	(7,891.33)	85,714.76	(70,794.46)
(18,412.63) Total 265			(461,193.87)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(370,064.47)	(202,768.37)	(46,502.64)	(92,201.36)	81,758.13	(6,309.12)	11,072.56	(7,891.33)	85,714.76	(70,794.46)
31-Aug-04	Payroll	1	93.36	93.36								
31-Aug-04	Payroll Taxes	2	8.25	8.25								
31-Aug-04	Cash Receipts	3	0.00									
31-Aug-04	AP	5	4,474.58	4,474.58								
31-Aug-04	Transportation	9	33.48	33.48								
31-Aug-04	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,629.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
31-Aug-04	Equipment	9A	0.00									
31-Aug-04	Miscellaneous	20	0.00									
31-Aug-04			0.00									
31-Aug-04			0.00									
AUGUST			(30,888.33)	(4,076.33)	(2,082.00)	(1,082.00)	(4,629.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
BTD			(400,952.80)	(206,844.70)	(48,584.64)	(93,283.36)	77,129.13	(6,502.12)	10,834.56	(8,069.33)	84,864.76	(72,786.46)
(33,420.33) Total 265			(494,614.20)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(400,952.80)	(206,844.70)	(48,584.64)	(93,283.36)	77,129.13	(6,502.12)	10,834.56	(8,069.33)	84,864.76	(72,786.46)
30-Sep-04	Payroll	1	0.00									
30-Sep-04	Payroll taxes	2	0.00									
30-Sep-04	AP	5	3,210.07	1,060.00	240.00		600.00					
30-Sep-04	Transportation	9	0.00								460.00	
30-Sep-04	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,629.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
30-Sep-04	Inventory	7	0.00									
30-Sep-04	Stores	8	0.00									
30-Sep-04	Equipment	9A	0.00									
30-Sep-04			0.00									
30-Sep-04			0.00									
SEPTEMBER			(32,287.93)	(7,626.00)	(1,842.00)	(1,082.00)	(4,029.00)	(193.00)	(238.00)	(178.00)	(390.00)	(1,992.00)
BTD			(433,240.73)	(214,470.70)	(50,426.64)	(94,365.36)	73,100.13	(6,695.12)	10,596.56	(8,247.33)	84,474.76	(74,778.46)
(35,262.96) Total 265			(529,877.16)									

ARIZONA WATER COMPANY
2004 SUBLEDGER

ARIZONA WATER COMPANY
2004 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(355,034.68)	(30,062.86)	15,283.08	22,674.88	(18,483.55)	6,810.12	(52,661.29)	(53,150.34)	(22,552.26)	7,504.73	4,789.1
31-Jul-04	Payroll	1	20.75										
31-Jul-04	Payroll taxes	2	1.85										
31-Jul-04	AP	5	20,439.93		8,607.80								
31-Jul-04	Transportation	9	5.68							4,622.64		43.27	
31-Jul-04	Equipment	9A	0.00										
31-Jul-04	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
31-Jul-04			0.00	-									
31-Jul-04			0.00										
31-Jul-04			0.00										
31-Jul-04			0.00										
JULY			(15,029.79)	(1,258.00)	5,099.80	(399.00)	(1,346.00)	(395.00)	(4,089.00)	3,602.64	(1,045.00)	(2,063.73)	(401.0
BTD			(370,064.47)	(31,320.86)	20,382.88	22,275.88	(19,829.55)	6,415.12	(56,750.29)	(49,547.70)	(23,597.26)	5,441.00	4,388.1
(18,412.63) Total 265			(461,193.87)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(370,064.47)	(31,320.86)	20,382.88	22,275.88	(19,829.55)	6,415.12	(56,750.29)	(49,547.70)	(23,597.26)	5,441.00	4,388.14
31-Aug-04	Payroll	1	93.36										
31-Aug-04	Payroll Taxes	2	8.25										
31-Aug-04	Cash Receipts	3	0.00										
31-Aug-04	AP	5	4,474.58										
31-Aug-04	Transportation	9	33.48										
31-Aug-04	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
31-Aug-04	Equipment	9A	0.00										
31-Aug-04	Miscellaneous	20	0.00										
31-Aug-04			0.00										
31-Aug-04			0.00										
AUGUST			(30,888.33)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
BTD			(400,952.80)	(32,578.86)	16,874.88	21,876.88	(21,175.55)	6,020.12	(60,839.29)	(50,567.70)	(24,642.26)	3,334.00	3,987.14
(33,420.33) Total 265			(494,614.20)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(400,952.80)	(32,578.86)	16,874.88	21,876.88	(21,175.55)	6,020.12	(60,839.29)	(50,567.70)	(24,642.26)	3,334.00	3,987.14
30-Sep-04	Payroll	1	0.00										
30-Sep-04	Payroll taxes	2	0.00										
30-Sep-04	AP	5	3,210.07	120.00	130.07	240.00							
30-Sep-04	Transportation	9	0.00						360.00				
30-Sep-04	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
30-Sep-04	Inventory	7	0.00										
30-Sep-04	Stores	8	0.00										
30-Sep-04	Equipment	9A	0.00										
30-Sep-04			0.00										
30-Sep-04			0.00										
SEPTEMBER			(32,287.93)	(1,138.00)	(3,377.93)	(159.00)	(1,346.00)	(395.00)	(3,729.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
BTD			(433,240.73)	(33,716.86)	13,496.95	21,717.88	(22,521.55)	5,625.12	(64,568.29)	(51,587.70)	(25,687.26)	1,227.00	3,586.14
(35,262.96) Total 265			(529,877.16)										

ARIZONA WATER COMPANY
2004 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(433,240.73)	(214,470.70)	(50,426.64)	(94,365.36)	73,100.13	(6,695.12)	10,596.56	(8,247.33)	84,474.76	(74,778.46)
31-Oct-04	Payroll	1	558.98		558.98							
31-Oct-04	Payroll taxes	2	45.45		45.45							
31-Oct-04	AP	5	1,116.08		117.64		998.44					
31-Oct-04	Inventory	7	0.00									
31-Oct-04	Transportation	9	54.00		54.00							
31-Oct-04	Equipment	9A	19.51		19.51							
31-Oct-04	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,629.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
31-Oct-04	Maintenance	20	0.00									
31-Oct-04			0.00									
31-Oct-04			0.00									
OCTOBER			(33,703.98)	(8,686.00)	(1,286.42)	(1,082.00)	(3,630.56)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
BTD			(466,944.71)	(223,156.70)	(51,713.06)	(95,447.36)	69,469.57	(6,888.12)	10,358.56	(8,425.33)	83,624.76	(76,770.46)
(34,082.53)	Total 265		(563,959.69)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(466,944.71)	(223,156.70)	(51,713.06)	(95,447.36)	69,469.57	(6,888.12)	10,358.56	(8,425.33)	83,624.76	(76,770.46)
30-Nov-04	Payroll	1	82.98	82.98								
30-Nov-04	Payroll taxes	2	7.12	7.12								
30-Nov-04	AP	5	5,584.14	1,631.71	36.97		3,915.46					
30-Nov-04	Transportation	9	25.68	25.68								
30-Nov-04	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,629.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
30-Nov-04	Equipment	9A	0.00									
30-Nov-04			0.00									
30-Nov-04			0.00									
30-Nov-04			0.00									
30-Nov-04			0.00									
NOVEMBER			(29,798.08)	(6,938.51)	(2,045.03)	(1,082.00)	(713.54)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
BTD			(496,742.79)	(230,095.21)	(53,758.09)	(96,529.36)	68,756.03	(7,081.12)	10,120.56	(8,603.33)	82,774.76	(78,762.46)
(33,290.08)	Total 265		(597,249.77)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(496,742.79)	(230,095.21)	(53,758.09)	(96,529.36)	68,756.03	(7,081.12)	10,120.56	(8,603.33)	82,774.76	(78,762.46)
31-Dec-04	Payroll	1	632.73									
31-Dec-04	Payroll taxes	2	54.24									
31-Dec-04	AP	5	5,157.67			57.67				5,100.00		
31-Dec-04	Transportation	9	(402.30)									
31-Dec-04	Tank maint accrual	26	(35,499.00)	(8,686.00)	(2,083.00)	(1,082.00)	(4,629.00)	(193.00)	(238.00)	(178.00)	(850.00)	(1,992.00)
31-Dec-04	Equipment	9A	0.00									
31-Dec-04			0.00									
31-Dec-04			0.00									
31-Dec-04			0.00									
31-Dec-04			0.00									
DECEMBER			(30,056.66)	(8,686.00)	(2,083.00)	(1,024.33)	(4,629.00)	(193.00)	(238.00)	4,922.00	(850.00)	(1,992.00)
BTD			(526,799.45)	(238,781.21)	(55,841.09)	(97,553.69)	64,127.03	(7,274.12)	9,882.56	(3,681.33)	81,924.76	(80,754.46)

ARIZONA WATER COMPANY
2004 SUBLEDGER

ARIZONA WATER COMPANY
2004 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(433,240.73)	(33,716.86)	13,496.95	21,717.88	(22,521.55)	5,625.12	(64,568.29)	(51,587.70)	(25,687.26)	1,227.00	3,586.1
31-Oct-04	Payroll	1	558.98										
31-Oct-04	Payroll taxes	2	45.45										
31-Oct-04	AP	5	1,116.08										
31-Oct-04	Inventory	7	0.00										
31-Oct-04	Transportation	9	54.00										
31-Oct-04	Equipment	9A	19.51										
31-Oct-04	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
31-Oct-04	Maintenance	20	0.00										
31-Oct-04			0.00										
31-Oct-04			0.00										
	OCTOBER		(33,703.98)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
	BTD		(466,944.71)	(34,974.86)	9,988.95	21,318.88	(23,867.55)	5,230.12	(68,657.29)	(52,607.70)	(26,732.26)	(880.00)	3,185.1
	(34,082.53) Total 265		(563,959.69)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(466,944.71)	(34,974.86)	9,988.95	21,318.88	(23,867.55)	5,230.12	(68,657.29)	(52,607.70)	(26,732.26)	(880.00)	3,185.14
30-Nov-04	Payroll	1	82.98										
30-Nov-04	Payroll taxes	2	7.12										
30-Nov-04	AP	5	5,584.14										
30-Nov-04	Transportation	9	25.68										
30-Nov-04	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
30-Nov-04	Equipment	9A	0.00										
30-Nov-04			0.00										
30-Nov-04			0.00										
30-Nov-04			0.00										
30-Nov-04			0.00										
	NOVEMBER		(29,798.08)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
	BTD		(496,742.79)	(36,232.86)	6,480.95	20,919.88	(25,213.55)	4,835.12	(72,746.29)	(53,627.70)	(27,777.26)	(2,987.00)	2,784.14
	(33,290.08) Total 265		(597,249.77)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(496,742.79)	(36,232.86)	6,480.95	20,919.88	(25,213.55)	4,835.12	(72,746.29)	(53,627.70)	(27,777.26)	(2,987.00)	2,784.14
31-Dec-04	Payroll	1	632.73		632.73								
31-Dec-04	Payroll taxes	2	54.24		54.24								
31-Dec-04	AP	5	5,157.67										
31-Dec-04	Transportation	9	(402.30)		(402.30)								
31-Dec-04	Tank maint accrual	26	(35,499.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
31-Dec-04	Equipment	9A	0.00										
31-Dec-04			0.00										
31-Dec-04			0.00										
31-Dec-04			0.00										
31-Dec-04			0.00										
	DECEMBER		(30,056.66)	(1,258.00)	(3,223.33)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
	BTD		(526,799.45)	(37,490.86)	3,257.62	20,520.88	(26,559.55)	4,440.12	(76,835.29)	(54,647.70)	(28,822.26)	(5,094.00)	2,383.14

ARIZONA WATER COMPANY
2005 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(526,799.45)	(238,781.21)	(55,841.09)	(97,553.69)	64,127.03	(7,274.12)	9,882.56	(3,681.33)	81,924.76	(80,754.46)
31-Jan-05	Payroll	1	0.00									
31-Jan-05	Payroll taxes	2	0.00									
31-Jan-05	AP	5	66,384.02			3,756.89	1,488.13			61,139.00		
31-Jan-05	Transportation	9	8.46	8.46								
31-Jan-05	Tank maint accrual	26	(35,470.00)	(8,686.00)	(2,078.00)	(1,080.00)	(4,622.00)	(190.00)	(240.00)	(178.00)	(845.00)	(1,994.00)
31-Jan-05	Miscellaneous	20	0.00									
31-Jan-05			0.00									
31-Jan-05			0.00									
31-Jan-05			0.00									
31-Jan-05			0.00									
JANUARY			30,922.48	(8,677.54)	(2,078.00)	2,676.89	(3,133.87)	(190.00)	(240.00)	60,961.00	(845.00)	(1,994.00)
BTD			(495,876.97)	(247,458.75)	(57,919.09)	(94,876.80)	60,993.16	(7,464.12)	9,642.56	57,279.67	81,079.76	(82,748.46)
27,429.48	Total 265		(603,368.95)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(495,876.97)	(247,458.75)	(57,919.09)	(94,876.80)	60,993.16	(7,464.12)	9,642.56	57,279.67	81,079.76	(82,748.46)
28-Feb-05	Payroll	1	85.64	85.64								
28-Feb-05	Payroll taxes	2	9.22	9.22								
28-Feb-05	AP	5	548.61				420.00					128.61
28-Feb-05	Transportation	9	14.92	14.92								
28-Feb-05	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
28-Feb-05	Inventory	7	0.00									
28-Feb-05	Stores	8	0.00									
28-Feb-05	Equipment	9A	0.00									
28-Feb-05	Transportation	9B	(8.46)	(8.46)								
28-Feb-05	Transportation	9B	0.00									
FEBRUARY			(34,848.07)	(8,584.68)	(2,082.00)	(1,082.00)	(4,208.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,863.39)
BTD			(530,725.04)	(256,043.43)	(60,001.09)	(95,958.80)	56,785.16	(7,657.12)	9,404.56	57,101.67	80,228.76	(84,611.85)
(38,340.07)	Total 265		(641,709.02)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(530,725.04)	(256,043.43)	(60,001.09)	(95,958.80)	56,785.16	(7,657.12)	9,404.56	57,101.67	80,228.76	(84,611.85)
31-Mar-05	Payroll	1	0.00									
31-Mar-05	Payroll taxes	2	0.00									
31-Mar-05	AP	5	37,944.00									
31-Mar-05	Transportation	9	0.00									
31-Mar-05	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
31-Mar-05	Equipment	9A	0.00									
31-Mar-05	Adjustment	20	0.00									
31-Mar-05			0.00									
31-Mar-05			0.00									
31-Mar-05			0.00									
MARCH			2,446.00	(8,686.00)	(2,082.00)	(1,082.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
BTD			(528,279.04)	(264,729.43)	(62,083.09)	(97,040.80)	52,157.16	(7,850.12)	9,166.56	56,923.67	79,377.76	(86,603.85)
6,653.00	Total 265		(635,056.02)									

ARIZONA WATER COMPANY
2005 SUBLEDGER

ARIZONA WATER COMPANY
2005 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(526,799.45)	(37,490.86)	3,257.62	20,520.88	(26,559.55)	4,440.12	(76,835.29)	(54,647.70)	(28,822.26)	(5,094.00)	2,383.1
31-Jan-05	Payroll	1	0.00										
31-Jan-05	Payroll taxes	2	0.00										
31-Jan-05	AP	5	66,384.02										
31-Jan-05	Transportation	9	8.46										
31-Jan-05	Tank maint accrual	26	(35,470.00)	(1,258.00)	(3,503.00)	(397.00)	(1,342.00)	(398.00)	(4,094.00)	(1,020.00)	(1,039.00)	(2,102.00)	(404.0
31-Jan-05	Miscellaneous	20	0.00										
31-Jan-05			0.00										
31-Jan-05			0.00										
31-Jan-05			0.00										
31-Jan-05			0.00										
JANUARY			30,922.48	(1,258.00)	(3,503.00)	(397.00)	(1,342.00)	(398.00)	(4,094.00)	(1,020.00)	(1,039.00)	(2,102.00)	(404.0
BTD			(495,876.97)	(38,748.86)	(245.38)	20,123.88	(27,901.55)	4,042.12	(80,929.29)	(55,667.70)	(29,861.26)	(7,196.00)	1,979.1
27,429.48	Total 265		(603,368.95)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(495,876.97)	(38,748.86)	(245.38)	20,123.88	(27,901.55)	4,042.12	(80,929.29)	(55,667.70)	(29,861.26)	(7,196.00)	1,979.1
28-Feb-05	Payroll	1	85.64										
28-Feb-05	Payroll taxes	2	9.22										
28-Feb-05	AP	5	548.61										
28-Feb-05	Transportation	9	14.92										
28-Feb-05	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
28-Feb-05	Inventory	7	0.00										
28-Feb-05	Stores	8	0.00										
28-Feb-05	Equipment	9A	0.00										
28-Feb-05	Transportation	9B	(8.46)										
28-Feb-05	Transportation	9B	0.00										
FEBRUARY			(34,848.07)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
BTD			(530,725.04)	(40,006.86)	(3,753.38)	19,724.88	(29,247.55)	3,647.12	(85,018.29)	(56,687.70)	(30,906.26)	(9,303.00)	1,578.1
(38,340.07)	Total 265		(641,709.02)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(530,725.04)	(40,006.86)	(3,753.38)	19,724.88	(29,247.55)	3,647.12	(85,018.29)	(56,687.70)	(30,906.26)	(9,303.00)	1,578.14
31-Mar-05	Payroll	1	0.00										
31-Mar-05	Payroll taxes	2	0.00										
31-Mar-05	AP	5	37,944.00				37,944.00						
31-Mar-05	Transportation	9	0.00										
31-Mar-05	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
31-Mar-05	Equipment	9A	0.00										
31-Mar-05	Adjustment	20	0.00										
31-Mar-05			0.00										
31-Mar-05			0.00										
31-Mar-05			0.00										
MARCH			2,446.00	(1,258.00)	(3,508.00)	(399.00)	36,598.00	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
BTD			(528,279.04)	(41,264.86)	(7,261.38)	19,325.88	7,350.45	3,252.12	(89,107.29)	(57,707.70)	(31,951.26)	(11,410.00)	1,177.14
6,653.00	Total 265		(635,056.02)										

ARIZONA WATER COMPANY
2005 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265			TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
DATE	DESCRIPTION	JV	(528,279.04)	(264,729.43)	(62,083.09)	(97,040.80)	52,157.16	(7,850.12)	9,166.56	56,923.67	79,377.76	(86,603.85)
30-Apr-05	Payroll	1	201.65	171.27	30.38							
30-Apr-05	Payroll taxes	2	19.81	16.83	2.98							
30-Apr-05	AP	5	26,659.81		235.90	40.72						
30-Apr-05	Transportation	9	30.92	24.32	6.60							
30-Apr-05	Equipment	9A	65.63		65.63							
30-Apr-05	Tank maint accrual	20	0.00									
30-Apr-05	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
30-Apr-05			0.00									
30-Apr-05			0.00									
30-Apr-05			0.00									
	APRIL		(8,520.18)	(8,473.58)	(1,740.51)	(1,041.28)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
	BTD		(536,799.22)	(273,203.01)	(63,823.60)	(98,082.08)	47,529.16	(8,043.12)	8,928.56	56,745.67	78,526.76	(88,595.85)
	(11,486.67) Total 26		(646,542.69)									

265			TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
DATE	DESCRIPTION	JV	(536,799.22)	(273,203.01)	(63,823.60)	(98,082.08)	47,529.16	(8,043.12)	8,928.56	56,745.67	78,526.76	(88,595.85)
31-May-05	Payroll	1	618.86		618.86							
31-May-05	Payroll taxes	2	56.18		56.18							
31-May-05	AP	5	485.57		8.84							
31-May-05	Transportation	9	56.64		56.64							
31-May-05	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
31-May-05	Equipment	9A	0.00									
31-May-05	Miscellaneous	20	0.00									
31-May-05			0.00									
31-May-05			0.00									
31-May-05			0.00									
	MAY		(34,280.75)	(8,686.00)	(1,341.48)	(1,082.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
	BTD		(571,079.97)	(281,889.01)	(65,165.08)	(99,164.08)	42,901.16	(8,236.12)	8,690.56	56,567.67	77,675.76	(90,587.85)
	(36,053.22) Total 265		(682,595.91)									

265			TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
DATE	DESCRIPTION	JV	(571,079.97)	(281,889.01)	(65,165.08)	(99,164.08)	42,901.16	(8,236.12)	8,690.56	56,567.67	77,675.76	(90,587.85)
30-Jun-05	Payroll	1	0.00									
30-Jun-05	Payroll taxes	2	0.00									
30-Jun-05	AP	5	3,300.00	412.50	412.50		412.50				412.50	
30-Jun-05	Transportation	9	0.00									
30-Jun-05	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
30-Jun-05	Equipment	9A	0.00									
30-Jun-05			0.00									
30-Jun-05			0.00									
30-Jun-05			0.00									
30-Jun-05			0.00									
	JUNE		(32,198.00)	(8,273.50)	(1,669.50)	(1,082.00)	(4,215.50)	(193.00)	(238.00)	(178.00)	(438.50)	(1,992.00)
	BTD		(603,277.97)	(290,162.51)	(66,834.58)	(100,246.08)	38,685.66	(8,429.12)	8,452.56	56,389.67	77,237.26	(92,579.85)
	(35,090.00) Total 265		(717,685.91)									

ARIZONA WATER COMPANY
2005 SUBLEDGER

ARIZONA WATER COMPANY
2005 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(528,279.04)	(41,264.86)	(7,261.38)	19,325.88	7,350.45	3,252.12	(89,107.29)	(57,707.70)	(31,951.26)	(11,410.00)	1,177.14
30-Apr-05	Payroll	1	201.65										
30-Apr-05	Payroll taxes	2	19.81										
30-Apr-05	AP	5	26,659.81			26,187.59	195.60						
30-Apr-05	Transportation	9	30.92										
30-Apr-05	Equipment	9A	65.63										
30-Apr-05	Tank maint accrual	20	0.00										
30-Apr-05	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
30-Apr-05			0.00										
30-Apr-05			0.00										
30-Apr-05			0.00										
	APRIL		(8,520.18)	(1,258.00)	(3,508.00)	25,788.59	(1,150.40)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
	BTD		(536,799.22)	(42,522.86)	(10,769.38)	45,114.47	6,200.05	2,857.12	(93,196.29)	(58,727.70)	(32,996.26)	(13,517.00)	776.14
	(11,486.67) Total 26		(646,542.69)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(536,799.22)	(42,522.86)	(10,769.38)	45,114.47	6,200.05	2,857.12	(93,196.29)	(58,727.70)	(32,996.26)	(13,517.00)	776.14
31-May-05	Payroll	1	618.86										
31-May-05	Payroll taxes	2	56.18										
31-May-05	AP	5	485.57			476.73							
31-May-05	Transportation	9	56.64										
31-May-05	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
31-May-05	Equipment	9A	0.00										
31-May-05	Miscellaneous	20	0.00										
31-May-05			0.00										
31-May-05			0.00										
31-May-05			0.00										
	MAY		(34,280.75)	(1,258.00)	(3,508.00)	77.73	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
	BTD		(571,079.97)	(43,780.86)	(14,277.38)	45,192.20	4,854.05	2,462.12	(97,285.29)	(59,747.70)	(34,041.26)	(15,624.00)	375.14
	(36,053.22) Total 265		(682,595.91)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(571,079.97)	(43,780.86)	(14,277.38)	45,192.20	4,854.05	2,462.12	(97,285.29)	(59,747.70)	(34,041.26)	(15,624.00)	375.14
30-Jun-05	Payroll	1	0.00										
30-Jun-05	Payroll taxes	2	0.00										
30-Jun-05	AP	5	3,300.00	412.50	412.50	412.50			412.50				
30-Jun-05	Transportation	9	0.00										
30-Jun-05	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
30-Jun-05	Equipment	9A	0.00										
30-Jun-05			0.00										
30-Jun-05			0.00										
30-Jun-05			0.00										
30-Jun-05			0.00										
	JUNE		(32,198.00)	(845.50)	(3,095.50)	13.50	(1,346.00)	(395.00)	(3,676.50)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
	BTD		(603,277.97)	(44,626.36)	(17,372.88)	45,205.70	3,508.05	2,067.12	(100,961.79)	(60,767.70)	(35,086.26)	(17,731.00)	(25.86)
	(35,090.00) Total 265		(717,685.91)										

ARIZONA WATER COMPANY
2005 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(603,277.97)	(290,162.51)	(66,834.58)	(100,246.08)	38,685.66	(8,429.12)	8,452.56	56,389.67	77,237.26	(92,579.85)
31-Jul-05	Payroll	1	310.42	117.75			192.67					
31-Jul-05	Payroll taxes	2	29.94	11.36			18.58					
31-Jul-05	AP	5	1,234.41	1,234.41								
31-Jul-05	Transportation	9	75.69	35.25			40.44					
31-Jul-05	Equipment	9A	0.00									
31-Jul-05	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
31-Jul-05			0.00									
31-Jul-05			0.00									
31-Jul-05			0.00									
31-Jul-05			0.00									
JULY			(33,847.54)	(7,287.23)	(2,082.00)	(1,082.00)	(4,376.31)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
BTD			(637,125.51)	(297,449.74)	(68,916.58)	(101,328.08)	34,309.35	(8,622.12)	8,214.56	56,211.67	76,386.26	(94,571.85)
(36,354.23)	Total 265		(754,040.14)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(637,125.51)	(297,449.74)	(68,916.58)	(101,328.08)	34,309.35	(8,622.12)	8,214.56	56,211.67	76,386.26	(94,571.85)
31-Aug-05	Payroll	1	203.38	203.38								
31-Aug-05	Payroll Taxes	2	19.48	19.48								
31-Aug-05	Cash Receipts	3	0.00									
31-Aug-05	AP	5	13,252.52	1,265.58								
31-Aug-05	Transportation	9	54.99									3,180.35
31-Aug-05	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
31-Aug-05	Equipment	9A	0.00									
31-Aug-05	Miscellaneous	20	0.00									
31-Aug-05			0.00									
31-Aug-05			0.00									
AUGUST			(21,967.63)	(7,197.56)	(2,082.00)	(1,082.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	1,188.35
BTD			(659,093.14)	(304,647.30)	(70,998.58)	(102,410.08)	29,681.35	(8,815.12)	7,976.56	56,033.67	75,535.26	(93,383.50)
(24,859.63)	Total 265		(778,899.77)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(659,093.14)	(304,647.30)	(70,998.58)	(102,410.08)	29,681.35	(8,815.12)	7,976.56	56,033.67	75,535.26	(93,383.50)
30-Sep-05	Payroll	1	0.00									
30-Sep-05	Payroll taxes	2	0.00									
30-Sep-05	AP	5	43,753.49	18,800.00	903.49	1,050.00						
30-Sep-05	Transportation	9	0.00									
30-Sep-05	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
30-Sep-05	Inventory	7	0.00									
30-Sep-05	Stores	8	0.00									
30-Sep-05	Equipment	9A	8.66				8.66					
30-Sep-05			0.00									
30-Sep-05			0.00									
SEPTEMBER			8,264.15	10,114.00	(1,178.51)	(32.00)	(4,619.34)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
BTD			(650,828.99)	(294,533.30)	(72,177.09)	(102,442.08)	25,062.01	(9,008.12)	7,738.56	55,855.67	74,684.26	(95,375.50)
4,772.15	Total 265		(774,127.62)									

ARIZONA WATER COMPANY
2005 SUBLEDGER

ARIZONA WATER COMPANY
2005 SUBLEDGER

265 **RESERVE for TANK MAINTENANCE**

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(603,277.97)	(44,626.36)	(17,372.88)	45,205.70	3,508.05	2,067.12	(100,961.79)	(60,767.70)	(35,086.26)	(17,731.00)	(25.8
31-Jul-05	Payroll	1	310.42										
31-Jul-05	Payroll taxes	2	29.94										
31-Jul-05	AP	5	1,234.41										
31-Jul-05	Transportation	9	75.69										
31-Jul-05	Equipment	9A	0.00										
31-Jul-05	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
31-Jul-05			0.00										
31-Jul-05			0.00										
31-Jul-05			0.00										
31-Jul-05			0.00										
	JULY		(33,847.54)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
	BTD		(637,125.51)	(45,884.36)	(20,880.88)	44,806.70	2,162.05	1,672.12	(105,050.79)	(61,787.70)	(36,131.26)	(19,838.00)	(426.86
	(36,354.23) Total 265		(754,040.14)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(637,125.51)	(45,884.36)	(20,880.88)	44,806.70	2,162.05	1,672.12	(105,050.79)	(61,787.70)	(36,131.26)	(19,838.00)	(426.86
31-Aug-05	Payroll	1	203.38										
31-Aug-05	Payroll Taxes	2	19.48										
31-Aug-05	Cash Receipts	3	0.00										
31-Aug-05	AP	5	13,252.52	2,644.60	1,091.77				3,276.02	1,794.20			
31-Aug-05	Transportation	9	54.99		54.99								
31-Aug-05	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
31-Aug-05	Equipment	9A	0.00										
31-Aug-05	Miscellaneous	20	0.00										
31-Aug-05			0.00										
31-Aug-05			0.00										
	AUGUST		(21,967.63)	1,386.60	(2,361.24)	(399.00)	(1,346.00)	(395.00)	(812.98)	774.20	(1,045.00)	(2,107.00)	(401.00
	BTD		(659,093.14)	(44,497.76)	(23,242.12)	44,407.70	816.05	1,277.12	(105,863.77)	(61,013.50)	(37,176.26)	(21,945.00)	(827.86
	(24,859.63) Total 265		(778,899.77)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(659,093.14)	(44,497.76)	(23,242.12)	44,407.70	816.05	1,277.12	(105,863.77)	(61,013.50)	(37,176.26)	(21,945.00)	(827.86
30-Sep-05	Payroll	1	0.00										
30-Sep-05	Payroll taxes	2	0.00										
30-Sep-05	AP	5	43,753.49										
30-Sep-05	Transportation	9	0.00						23,000.00				
30-Sep-05	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
30-Sep-05	Inventory	7	0.00										
30-Sep-05	Stores	8	0.00										
30-Sep-05	Equipment	9A	8.66										
30-Sep-05			0.00										
30-Sep-05			0.00										
	SEPTEMBER		8,264.15	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	18,911.00	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
	BTD		(650,828.99)	(45,755.76)	(26,750.12)	44,008.70	(529.95)	882.12	(86,952.77)	(62,033.50)	(38,221.26)	(24,052.00)	(1,228.86
	4,772.15 Total 265		(774,127.62)										

ARIZONA WATER COMPANY
2005 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265			TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
DATE	DESCRIPTION	JV	(650,828.99)	(294,533.30)	(72,177.09)	(102,442.08)	25,062.01	(9,008.12)	7,738.56	55,855.67	74,684.26	(95,375.50)
31-Oct-05	Payroll	1	42.82	42.82								
31-Oct-05	Payroll taxes	2	3.70	3.70								
31-Oct-05	AP	5	116,950.72	116,560.72			390.00					
31-Oct-05	Inventory	7	0.00									
31-Oct-05	Transportation	9	9.82	9.82								
31-Oct-05	Equipment	9A	0.00									
31-Oct-05	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
31-Oct-05	Maintenance	20	0.00									
31-Oct-05			0.00									
31-Oct-05			0.00									
OCTOBER			81,509.06	107,931.06	(2,082.00)	(1,082.00)	(4,238.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
BTD			(569,319.93)	(186,602.24)	(74,259.09)	(103,524.08)	20,824.01	(9,201.12)	7,500.56	55,677.67	73,833.26	(97,367.50)
78,148.91	Total 265		(695,978.71)									

265			TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
DATE	DESCRIPTION	JV	(569,319.93)	(186,602.24)	(74,259.09)	(103,524.08)	20,824.01	(9,201.12)	7,500.56	55,677.67	73,833.26	(97,367.50)
30-Nov-05	Payroll	1	995.52	802.84			192.68					
30-Nov-05	Payroll taxes	2	93.03	75.02			18.01					
30-Nov-05	AP	5	3,521.25				3,521.25					
30-Nov-05	Transportation	9	326.91	266.03			60.88					
30-Nov-05	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
30-Nov-05	Equipment	9A	0.00									
30-Nov-05			0.00									
30-Nov-05			0.00									
30-Nov-05			0.00									
30-Nov-05			0.00									
NOVEMBER			(30,561.29)	(7,542.11)	(2,082.00)	(1,082.00)	(835.18)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
BTD			(599,881.22)	(194,144.35)	(76,341.09)	(104,606.08)	19,988.83	(9,394.12)	7,262.56	55,499.67	72,982.26	(99,359.50)
(30,526.58)	Total 265		(726,505.29)									

265			TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
DATE	DESCRIPTION	JV	(599,881.22)	(194,144.35)	(76,341.09)	(104,606.08)	19,988.83	(9,394.12)	7,262.56	55,499.67	72,982.26	(99,359.50)
31-Dec-05	Payroll	1	149.87	149.87								
31-Dec-05	Payroll taxes	2	13.98	13.98								
31-Dec-05	AP	5	56,960.38	1,290.00			55,670.38					
31-Dec-05	Transportation	9	53.41	53.41								
31-Dec-05	Tank maint accrual	26	(35,498.00)	(8,686.00)	(2,082.00)	(1,082.00)	(4,628.00)	(193.00)	(238.00)	(178.00)	(851.00)	(1,992.00)
31-Dec-05	Accrued AP	25	308,483.50	1,140.00			299,558.50	7,785.00				
31-Dec-05	Adjustments	27	(3,343.00)				(1,322.00)					
31-Dec-05	Adjustments	27B	84,501.48	84,501.48					(809.00)	(360.00)	(852.00)	
31-Dec-05			0.00									
31-Dec-05			0.00									
DECEMBER			411,321.62	78,462.74	(2,082.00)	(1,082.00)	349,278.88	7,592.00	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
BTD			(188,559.60)	(115,681.61)	(78,423.09)	(105,688.08)	369,267.71	(1,802.12)	6,215.56	54,961.67	71,279.26	(101,351.50)

ARIZONA WATER COMPANY
2005 SUBLEDGER

ARIZONA WATER COMPANY
2005 SUBLEDGER

265 **RESERVE for TANK MAINTENANCE**

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(650,828.99)	(45,755.76)	(26,750.12)	44,008.70	(529.95)	882.12	(86,952.77)	(62,033.50)	(38,221.26)	(24,052.00)	(1,228.8
31-Oct-05	Payroll	1	42.82										
31-Oct-05	Payroll taxes	2	3.70										
31-Oct-05	AP	5	116,950.72										
31-Oct-05	Inventory	7	0.00										
31-Oct-05	Transportation	9	9.82										
31-Oct-05	Equipment	9A	0.00										
31-Oct-05	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
31-Oct-05	Maintenance	20	0.00										
31-Oct-05			0.00										
31-Oct-05			0.00										
	OCTOBER		81,509.06	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
	BTD		(569,319.93)	(47,013.76)	(30,258.12)	43,609.70	(1,875.95)	487.12	(91,041.77)	(63,053.50)	(39,266.26)	(26,159.00)	(1,629.8
78,148.91	Total 265		(695,978.71)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(569,319.93)	(47,013.76)	(30,258.12)	43,609.70	(1,875.95)	487.12	(91,041.77)	(63,053.50)	(39,266.26)	(26,159.00)	(1,629.8
30-Nov-05	Payroll	1	995.52										
30-Nov-05	Payroll taxes	2	93.03										
30-Nov-05	AP	5	3,521.25										
30-Nov-05	Transportation	9	326.91										
30-Nov-05	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
30-Nov-05	Equipment	9A	0.00										
30-Nov-05			0.00										
30-Nov-05			0.00										
30-Nov-05			0.00										
30-Nov-05			0.00										
	NOVEMBER		(30,561.29)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
	BTD		(599,881.22)	(48,271.76)	(33,766.12)	43,210.70	(3,221.95)	92.12	(95,130.77)	(64,073.50)	(40,311.26)	(28,266.00)	(2,030.86
(30,526.58)	Total 265		(726,505.29)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(599,881.22)	(48,271.76)	(33,766.12)	43,210.70	(3,221.95)	92.12	(95,130.77)	(64,073.50)	(40,311.26)	(28,266.00)	(2,030.86
31-Dec-05	Payroll	1	149.87										
31-Dec-05	Payroll taxes	2	13.98										
31-Dec-05	AP	5	56,960.38										
31-Dec-05	Transportation	9	53.41										
31-Dec-05	Tank maint accrual	26	(35,498.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
31-Dec-05	Accrued AP	25	308,483.50										
31-Dec-05	Adjustments	27	(3,343.00)										
31-Dec-05	Adjustments	27B	84,501.48										
31-Dec-05			0.00										
31-Dec-05			0.00										
	DECEMBER		411,321.62	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
	BTD		(188,559.60)	(49,529.76)	(37,274.12)	42,811.70	(4,567.95)	(302.88)	(99,219.77)	(65,093.50)	(41,356.26)	(30,373.00)	(2,431.86

ARIZONA WATER COMPANY
2006 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265			TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
DATE	DESCRIPTION	JV	(188,559.60)	(115,681.61)	(78,423.09)	(105,688.08)	369,267.71	(1,802.12)	6,215.56	54,961.67	71,279.26	(101,351.50)
31-Jan-06	Payroll	1	519.17	44.18			276.16	198.83				
31-Jan-06	Payroll taxes	2	57.71	4.91			30.70	22.10				
31-Jan-06	AP	5	96,707.14	94,672.25	212.20		1,822.69					
31-Jan-06	Transportation	9	166.72	14.18			96.54	56.00				
31-Jan-06	Tank maint accrual	26	(38,812.00)	(8,686.00)	(2,078.00)	(1,080.00)	(5,948.00)	(190.00)	(1,044.00)	(536.00)	(1,699.00)	(1,994.00)
31-Jan-06	Miscellaneous	20	(84,501.48)	(84,501.48)								
31-Jan-06	Equipment	9A	47.07		47.07							
31-Jan-06			0.00									
31-Jan-06			0.00									
31-Jan-06			0.00									
JANUARY			(25,815.67)	1,548.04	(1,818.73)	(1,080.00)	(3,721.91)	86.93	(1,044.00)	(536.00)	(1,699.00)	(1,994.00)
BTD			(214,375.27)	(114,133.57)	(80,241.82)	(106,768.08)	365,545.80	(1,715.19)	5,171.56	54,425.67	69,580.26	(103,345.50)
(28,547.08) Total 265			(266,500.26)									

265			TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
DATE	DESCRIPTION	JV	(214,375.27)	(114,133.57)	(80,241.82)	(106,768.08)	365,545.80	(1,715.19)	5,171.56	54,425.67	69,580.26	(103,345.50)
28-Feb-06	Payroll	1	2,990.30	130.51	2,859.79							
28-Feb-06	Payroll taxes	2	319.90	13.96	305.94							
28-Feb-06	AP	5	87,196.81	10,712.47	30,885.72	11,266.20	26,926.35					
28-Feb-06	Transportation	9	553.37	37.78	515.59					3,572.48		
28-Feb-06	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
28-Feb-06	Inventory	7	0.00									
28-Feb-06	Stores	8	0.00									
28-Feb-06	Equipment	9A	156.99		156.99							
28-Feb-06	Transportation	9B	0.00									
28-Feb-06	Transportation	9B	0.00									
FEBRUARY			52,376.37	2,208.72	32,642.03	10,184.20	20,976.35	(193.00)	(1,047.00)	3,034.48	(1,703.00)	(1,992.00)
BTD			(161,998.90)	(111,924.85)	(47,599.79)	(96,583.88)	386,522.15	(1,908.19)	4,124.56	57,460.15	67,877.26	(105,337.50)
48,927.66 Total 265			(217,572.60)									

265			TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
DATE	DESCRIPTION	JV	(161,998.90)	(111,924.85)	(47,599.79)	(96,583.88)	386,522.15	(1,908.19)	4,124.56	57,460.15	67,877.26	(105,337.50)
31-Mar-06	Payroll	1	1,521.59	596.55	251.54	534.54	138.96					
31-Mar-06	Payroll taxes	2	160.10	62.77	26.47	56.24	14.62					
31-Mar-06	AP	5	21,340.55	16,940.00		4,113.72	255.00			31.83		
31-Mar-06	Transportation	9	165.51	142.88	60.08	127.67	(165.12)					
31-Mar-06	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
31-Mar-06	Equipment	9A	0.00									
31-Mar-06	Adjustment	20	0.00									
31-Mar-06	Payroll taxes	2A	(3.99)	(0.29)	(2.90)	(0.08)	(0.43)	(0.29)				
31-Mar-06			0.00									
31-Mar-06			0.00									
MARCH			(15,657.24)	9,055.91	(1,746.81)	3,750.09	(5,706.97)	(193.29)	(1,047.00)	(506.17)	(1,703.00)	(1,992.00)
BTD			(177,656.14)	(102,868.94)	(49,346.60)	(92,833.79)	380,815.18	(2,101.48)	3,077.56	56,953.98	66,174.26	(107,329.50)
(14,172.34) Total 265			(231,744.94)									

ARIZONA WATER COMPANY
2006 SUBLEDGER

ARIZONA WATER COMPANY
2006 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(188,559.60)	(49,529.76)	(37,274.12)	42,811.70	(4,567.95)	(302.88)	(99,219.77)	(65,093.50)	(41,356.26)	(30,373.00)	(2,431.8
31-Jan-06	Payroll	1	519.17										
31-Jan-06	Payroll taxes	2	57.71										
31-Jan-06	AP	5	96,707.14										
31-Jan-06	Transportation	9	166.72										
31-Jan-06	Tank maint accrual	26	(38,812.00)	(1,258.00)	(3,503.00)	(397.00)	(1,342.00)	(398.00)	(4,094.00)	(1,020.00)	(1,039.00)	(2,102.00)	(404.0
31-Jan-06	Miscellaneous	20	(84,501.48)										
31-Jan-06	Equipment	9A	47.07										
31-Jan-06			0.00										
31-Jan-06			0.00										
31-Jan-06			0.00										
	JANUARY		(25,815.67)	(1,258.00)	(3,503.00)	(397.00)	(1,342.00)	(398.00)	(4,094.00)	(1,020.00)	(1,039.00)	(2,102.00)	(404.0
	BTD		(214,375.27)	(50,787.76)	(40,777.12)	42,414.70	(5,909.95)	(700.88)	(103,313.77)	(66,113.50)	(42,395.26)	(32,475.00)	(2,835.8
	(28,547.08) Total 265		(266,500.26)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(214,375.27)	(50,787.76)	(40,777.12)	42,414.70	(5,909.95)	(700.88)	(103,313.77)	(66,113.50)	(42,395.26)	(32,475.00)	(2,835.8
28-Feb-06	Payroll	1	2,990.30										
28-Feb-06	Payroll taxes	2	319.90										
28-Feb-06	AP	5	87,196.81		61.27	1,137.41	2,634.91						
28-Feb-06	Transportation	9	553.37										
28-Feb-06	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
28-Feb-06	Inventory	7	0.00										
28-Feb-06	Stores	8	0.00										
28-Feb-06	Equipment	9A	156.99										
28-Feb-06	Transportation	9B	0.00										
28-Feb-06	Transportation	9B	0.00										
	FEBRUARY		52,376.37	(1,258.00)	(3,446.73)	738.41	1,288.91	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
	BTD		(161,998.90)	(52,045.76)	(44,223.85)	43,153.11	(4,621.04)	(1,095.88)	(107,402.77)	(67,133.50)	(43,440.26)	(34,582.00)	(3,236.86
	48,927.66 Total 265		(217,572.60)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(161,998.90)	(52,045.76)	(44,223.85)	43,153.11	(4,621.04)	(1,095.88)	(107,402.77)	(67,133.50)	(43,440.26)	(34,582.00)	(3,236.86
31-Mar-06	Payroll	1	1,521.59										
31-Mar-06	Payroll taxes	2	160.10										
31-Mar-06	AP	5	21,340.55										
31-Mar-06	Transportation	9	165.51										
31-Mar-06	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
31-Mar-06	Equipment	9A	0.00										
31-Mar-06	Adjustment	20	0.00										
31-Mar-06	Payroll taxes	2A	(3.99)										
31-Mar-06			0.00										
31-Mar-06			0.00										
	MARCH		(15,657.24)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
	BTD		(177,656.14)	(53,303.76)	(47,731.85)	42,754.11	(5,967.04)	(1,490.88)	(111,491.77)	(68,153.50)	(44,485.26)	(36,689.00)	(3,637.86
	(14,172.34) Total 265		(231,744.94)										

ARIZONA WATER COMPANY
2006 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265			TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
DATE	DESCRIPTION	JV	(177,656.14)	(102,868.94)	(49,346.60)	(92,833.79)	380,815.18	(2,101.48)	3,077.56	56,953.98	66,174.26	(107,329.50)
30-Apr-06	Payroll	1	556.62	22.09	314.43	220.10						
30-Apr-06	Payroll taxes	2	57.94	2.30	32.73	22.91						
30-Apr-06	AP	5	31,024.00	203.28	15,502.67	15,318.05						
30-Apr-06	Transportation	9	155.77	6.68	87.70	61.39						
30-Apr-06	Equipment	9A	0.00									
30-Apr-06	Tank maint accrual	20	0.00									
30-Apr-06	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
30-Apr-06			0.00									
30-Apr-06			0.00									
30-Apr-06			0.00									
	APRIL		(7,046.67)	(8,451.65)	13,855.53	14,540.45	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
	BTD		(184,702.81)	(111,320.59)	(35,491.07)	(78,293.34)	374,865.18	(2,294.48)	2,030.56	56,415.98	64,471.26	(109,321.50)
	(9,863.67) Total 265		(241,608.61)									

265			TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
DATE	DESCRIPTION	JV	(184,702.81)	(111,320.59)	(35,491.07)	(78,293.34)	374,865.18	(2,294.48)	2,030.56	56,415.98	64,471.26	(109,321.50)
31-May-06	Payroll	1	1,286.17	66.28	857.88	362.01						
31-May-06	Payroll taxes	2	121.76	6.27	81.22	34.27						
31-May-06	AP	5	39,512.47		38,668.14		816.03					
31-May-06	Transportation	9	147.79	11.38	99.50	36.91						
31-May-06	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
31-May-06	Equipment	9A	15.92		15.92							
31-May-06	Miscellaneous	20	0.00									
31-May-06			0.00									
31-May-06			0.00									
31-May-06			0.00									
	MAY		2,243.11	(8,602.07)	37,640.66	(648.81)	(5,133.97)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
	BTD		(182,459.70)	(119,922.66)	2,149.59	(78,942.15)	369,731.21	(2,487.48)	983.56	55,877.98	62,768.26	(111,313.50)
	(278.89) Total 265		(241,887.50)									

265			TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
DATE	DESCRIPTION	JV	(182,459.70)	(119,922.66)	2,149.59	(78,942.15)	369,731.21	(2,487.48)	983.56	55,877.98	62,768.26	(111,313.50)
30-Jun-06	Payroll	1	0.00									
30-Jun-06	Payroll taxes	2	0.00									
30-Jun-06	AP	5	24,419.11	9,103.12	6,198.93		9,097.58					
30-Jun-06	Transportation	9	0.00									
30-Jun-06	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
30-Jun-06	Equipment	9A	0.00									
30-Jun-06	Inventory	7	177.30		177.30							
30-Jun-06	Stores	8	22.16		22.16							
30-Jun-06			0.00									
30-Jun-06			0.00									
	JUNE		(14,222.43)	417.12	4,316.39	(1,082.00)	3,147.58	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
	BTD		(196,682.13)	(119,505.54)	6,465.98	(80,024.15)	372,878.79	(2,680.48)	(63.44)	55,339.98	61,065.26	(113,305.50)
	(8,778.25) Total 265		(250,665.75)									

ARIZONA WATER COMPANY
2006 SUBLEDGER

ARIZONA WATER COMPANY
2006 SUBLEDGER

265 **RESERVE for TANK MAINTENANCE**

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(177,656.14)	(53,303.76)	(47,731.85)	42,754.11	(5,967.04)	(1,490.88)	(111,491.77)	(68,153.50)	(44,485.26)	(36,689.00)	(3,637.8
30-Apr-06	Payroll	1	556.62										
30-Apr-06	Payroll taxes	2	57.94										
30-Apr-06	AP	5	31,024.00										
30-Apr-06	Transportation	9	155.77										
30-Apr-06	Equipment	9A	0.00										
30-Apr-06	Tank maint accrual	20	0.00										
30-Apr-06	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
30-Apr-06			0.00										
30-Apr-06			0.00										
30-Apr-06			0.00										
	APRIL		(7,046.67)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
	BTD		(184,702.81)	(54,561.76)	(51,239.85)	42,355.11	(7,313.04)	(1,885.88)	(115,580.77)	(69,173.50)	(45,530.26)	(38,796.00)	(4,038.8
	(9,863.67) Total 265		(241,608.61)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(184,702.81)	(54,561.76)	(51,239.85)	42,355.11	(7,313.04)	(1,885.88)	(115,580.77)	(69,173.50)	(45,530.26)	(38,796.00)	(4,038.8
31-May-06	Payroll	1	1,286.17										
31-May-06	Payroll taxes	2	121.76										
31-May-06	AP	5	39,512.47		28.30								
31-May-06	Transportation	9	147.79										
31-May-06	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
31-May-06	Equipment	9A	15.92										
31-May-06	Miscellaneous	20	0.00										
31-May-06			0.00										
31-May-06			0.00										
31-May-06			0.00										
	MAY		2,243.11	(1,258.00)	(3,479.70)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
	BTD		(182,459.70)	(55,819.76)	(54,719.55)	41,956.11	(8,659.04)	(2,280.88)	(119,669.77)	(70,193.50)	(46,575.26)	(40,903.00)	(4,439.86
	(278.89) Total 265		(241,887.50)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(182,459.70)	(55,819.76)	(54,719.55)	41,956.11	(8,659.04)	(2,280.88)	(119,669.77)	(70,193.50)	(46,575.26)	(40,903.00)	(4,439.86
30-Jun-06	Payroll	1	0.00										
30-Jun-06	Payroll taxes	2	0.00										
30-Jun-06	AP	5	24,419.11		19.48								
30-Jun-06	Transportation	9	0.00										
30-Jun-06	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
30-Jun-06	Equipment	9A	0.00										
30-Jun-06	Inventory	7	177.30										
30-Jun-06	Stores	8	22.16										
30-Jun-06			0.00										
30-Jun-06			0.00										
	JUNE		(14,222.43)	(1,258.00)	(3,488.52)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
	BTD		(196,682.13)	(57,077.76)	(58,208.07)	41,557.11	(10,005.04)	(2,675.88)	(123,758.77)	(71,213.50)	(47,620.26)	(43,010.00)	(4,840.86
	(8,778.25) Total 265		(250,665.75)										

ARIZONA WATER COMPANY
2006 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(196,682.13)	(119,505.54)	6,465.98	(80,024.15)	372,878.79	(2,680.48)	(63.44)	55,339.98	61,065.26	(113,305.50)
31-Jul-06	Payroll	1	512.59	33.71	339.93							
31-Jul-06	Payroll taxes	2	52.37	3.44	34.73							
31-Jul-06	AP	5	17,008.44	2,094.75		5.96	3,062.52				4,040.48	
31-Jul-06	Transportation	9	(4.48)	5.62	(57.68)							
31-Jul-06	Equipment	9A	0.00									
31-Jul-06	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
31-Jul-06			0.00									
31-Jul-06			0.00									
31-Jul-06			0.00									
31-Jul-06			0.00									
JULY			(21,272.08)	(6,548.48)	(1,765.02)	(1,076.04)	(2,887.48)	(193.00)	(1,047.00)	(538.00)	2,337.48	(1,992.00)
BTD			(217,954.21)	(126,054.02)	4,700.96	(81,100.19)	369,991.31	(2,873.48)	(1,110.44)	54,801.98	63,402.74	(115,297.50)
(24,339.08) Total 265			(275,004.83)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(217,954.21)	(126,054.02)	4,700.96	(81,100.19)	369,991.31	(2,873.48)	(1,110.44)	54,801.98	63,402.74	(115,297.50)
31-Aug-06	Payroll	1	88.38	88.38								
31-Aug-06	Payroll Taxes	2	8.98	8.98								
31-Aug-06	Stores	8	24.03		24.03							
31-Aug-06	AP	5	47.89									
31-Aug-06	Inventory	7	192.24		192.24							
31-Aug-06	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
31-Aug-06	Transportation	9	17.84	17.84								
31-Aug-06	Miscellaneous	20	0.00									
31-Aug-06			0.00									
31-Aug-06			0.00									
AUGUST			(38,461.64)	(8,570.80)	(1,865.73)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
BTD			(256,415.85)	(134,624.82)	2,835.23	(82,182.19)	364,041.31	(3,066.48)	(2,157.44)	54,263.98	61,699.74	(117,289.50)
(36,797.74) Total 265			(311,802.57)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(256,415.85)	(134,624.82)	2,835.23	(82,182.19)	364,041.31	(3,066.48)	(2,157.44)	54,263.98	61,699.74	(117,289.50)
30-Sep-06	Payroll	1	0.00									
30-Sep-06	Payroll taxes	2	0.00									
30-Sep-06	AP	5	42,146.00	412.50	412.50		705.00				412.50	
30-Sep-06	Transportation	9	0.00									
30-Sep-06	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
30-Sep-06	Inventory	7	0.00									
30-Sep-06	Stores	8	0.00									
30-Sep-06	Equipment	9A	0.00									
30-Sep-06			0.00									
30-Sep-06			0.00									
SEPTEMBER			3,305.00	(8,273.50)	(1,669.50)	(1,082.00)	(5,245.00)	(193.00)	(1,047.00)	(538.00)	(1,290.50)	(1,992.00)
BTD			(253,110.85)	(142,898.32)	1,165.73	(83,264.19)	358,796.31	(3,259.48)	(3,204.44)	53,725.98	60,409.24	(119,281.50)
(187.00) Total 265			(311,989.57)									

ARIZONA WATER COMPANY
2006 SUBLEDGER

ARIZONA WATER COMPANY
2006 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(196,682.13)	(57,077.76)	(58,208.07)	41,557.11	(10,005.04)	(2,675.88)	(123,758.77)	(71,213.50)	(47,620.26)	(43,010.00)	(4,840.8
31-Jul-06	Payroll	1	512.59						138.95				
31-Jul-06	Payroll taxes	2	52.37						14.20				
31-Jul-06	AP	5	17,008.44		62.90				7,741.83				
31-Jul-06	Transportation	9	(4.48)						47.58				
31-Jul-06	Equipment	9A	0.00										
31-Jul-06	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
31-Jul-06			0.00										
31-Jul-06			0.00										
31-Jul-06			0.00										
31-Jul-06			0.00										
JULY			(21,272.08)	(1,258.00)	(3,445.10)	(399.00)	(1,346.00)	(395.00)	3,853.56	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
BTD			(217,954.21)	(58,335.76)	(61,653.17)	41,158.11	(11,351.04)	(3,070.88)	(119,905.21)	(72,233.50)	(48,665.26)	(45,117.00)	(5,241.8
(24,339.08)	Total 265		(275,004.83)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(217,954.21)	(58,335.76)	(61,653.17)	41,158.11	(11,351.04)	(3,070.88)	(119,905.21)	(72,233.50)	(48,665.26)	(45,117.00)	(5,241.8
31-Aug-06	Payroll	1	88.38										
31-Aug-06	Payroll Taxes	2	8.98										
31-Aug-06	Stores	8	24.03										
31-Aug-06	AP	5	47.89		17.89				30.00				
31-Aug-06	Inventory	7	192.24										
31-Aug-06	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
31-Aug-06	Transportation	9	17.84										
31-Aug-06	Miscellaneous	20	0.00										
31-Aug-06			0.00										
31-Aug-06			0.00										
AUGUST			(38,461.64)	(1,258.00)	(3,490.11)	(399.00)	(1,346.00)	(395.00)	(4,059.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
BTD			(256,415.85)	(59,593.76)	(65,143.28)	40,759.11	(12,697.04)	(3,465.88)	(123,964.21)	(73,253.50)	(49,710.26)	(47,224.00)	(5,642.8
(36,797.74)	Total 265		(311,802.57)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(256,415.85)	(59,593.76)	(65,143.28)	40,759.11	(12,697.04)	(3,465.88)	(123,964.21)	(73,253.50)	(49,710.26)	(47,224.00)	(5,642.8
30-Sep-06	Payroll	1	0.00										
30-Sep-06	Payroll taxes	2	0.00										
30-Sep-06	AP	5	42,146.00	412.50	412.50	412.50			38,966.00				
30-Sep-06	Transportation	9	0.00										
30-Sep-06	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
30-Sep-06	Inventory	7	0.00										
30-Sep-06	Stores	8	0.00										
30-Sep-06	Equipment	9A	0.00										
30-Sep-06			0.00										
30-Sep-06			0.00										
SEPTEMBER			3,305.00	(845.50)	(3,095.50)	13.50	(1,346.00)	(395.00)	34,877.00	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
BTD			(253,110.85)	(60,439.26)	(68,238.78)	40,772.61	(14,043.04)	(3,860.88)	(89,087.21)	(74,273.50)	(50,755.26)	(49,331.00)	(6,043.8
(187.00)	Total 265		(311,989.57)										

ARIZONA WATER COMPANY
2006 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(253,110.85)	(142,898.32)	1,165.73	(83,264.19)	358,796.31	(3,259.48)	(3,204.44)	53,725.98	60,409.24	(119,281.50)
31-Oct-06	Payroll	1	655.77	470.36								
31-Oct-06	Payroll taxes	2	59.10	42.39								
31-Oct-06	AP	5	44,037.06									
31-Oct-06	Inventory	7	168.66		168.66				3,960.00			
31-Oct-06	Stores	8	21.08		21.08							
31-Oct-06	Transportation	9	125.28	97.26								
31-Oct-06	Equipment	9A	0.00									
31-Oct-06	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
31-Oct-06	Maintenance	20	0.00									
31-Oct-06			0.00									
	OCTOBER		6,225.95	(8,075.99)	(1,892.26)	(1,082.00)	(5,950.00)	(193.00)	2,913.00	(538.00)	(1,703.00)	(1,992.00)
	BTD		(246,884.90)	(150,974.31)	(726.53)	(84,346.19)	352,846.31	(3,452.48)	(291.44)	53,187.98	58,706.24	(121,273.50)
	3,108.95 Total 265		(308,880.62)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(246,884.90)	(150,974.31)	(726.53)	(84,346.19)	352,846.31	(3,452.48)	(291.44)	53,187.98	58,706.24	(121,273.50)
30-Nov-06	Payroll	1	452.94	132.56			320.38					
30-Nov-06	Payroll taxes	2	48.20	14.11			34.09					
30-Nov-06	AP	5	92,881.59	1,470.13			83,944.00					
30-Nov-06	Transportation	9	153.57	60.63			92.94					
30-Nov-06	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
30-Nov-06	Equipment	9A	0.00									
30-Nov-06			0.00									
30-Nov-06			0.00									
30-Nov-06			0.00									
30-Nov-06			0.00									
	NOVEMBER		54,695.30	(7,008.57)	(2,082.00)	(1,082.00)	78,441.41	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
	BTD		(192,189.60)	(157,982.88)	(2,808.53)	(85,428.19)	431,287.72	(3,645.48)	(1,338.44)	52,649.98	57,003.24	(123,265.50)
	51,227.71 Total 265		(257,652.91)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(192,189.60)	(157,982.88)	(2,808.53)	(85,428.19)	431,287.72	(3,645.48)	(1,338.44)	52,649.98	57,003.24	(123,265.50)
31-Dec-06	Payroll	1	0.00									
31-Dec-06	Payroll taxes	2	0.00									
31-Dec-06	AP	5	91,079.68	982.50	27.37		83,829.81					
31-Dec-06	Transportation	9	0.00									
31-Dec-06	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
31-Dec-06	Accrued AP	25	0.00									
31-Dec-06	Adjustments	27	0.00									
31-Dec-06			0.00									
31-Dec-06			0.00									
31-Dec-06			0.00									
	DECEMBER		52,238.68	(7,703.50)	(2,054.63)	(1,082.00)	77,879.81	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
	BTD		(139,950.92)	(165,686.38)	(4,863.16)	(86,510.19)	509,167.53	(3,838.48)	(2,385.44)	52,111.98	55,300.24	(125,257.50)

ARIZONA WATER COMPANY
2006 SUBLEDGER

ARIZONA WATER COMPANY
2006 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(253,110.85)	(60,439.26)	(68,238.78)	40,772.61	(14,043.04)	(3,860.88)	(89,087.21)	(74,273.50)	(50,755.26)	(49,331.00)	(6,043.8
31-Oct-06	Payroll	1	655.77						185.41				
31-Oct-06	Payroll taxes	2	59.10						16.71				
31-Oct-06	AP	5	44,037.06		83.56				39,993.50				
31-Oct-06	Inventory	7	168.66										
31-Oct-06	Stores	8	21.08										
31-Oct-06	Transportation	9	125.28						28.02				
31-Oct-06	Equipment	9A	0.00										
31-Oct-06	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
31-Oct-06	Maintenance	20	0.00										
31-Oct-06			0.00										
	OCTOBER		6,225.95	(1,258.00)	(3,424.44)	(399.00)	(1,346.00)	(395.00)	36,134.64	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
	BTD		(246,884.90)	(61,697.26)	(71,663.22)	40,373.61	(15,389.04)	(4,255.88)	(52,952.57)	(75,293.50)	(51,800.26)	(51,438.00)	(6,444.86
	3,108.95 Total 265		(308,880.62)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(246,884.90)	(61,697.26)	(71,663.22)	40,373.61	(15,389.04)	(4,255.88)	(52,952.57)	(75,293.50)	(51,800.26)	(51,438.00)	(6,444.86
30-Nov-06	Payroll	1	452.94										
30-Nov-06	Payroll taxes	2	48.20										
30-Nov-06	AP	5	92,881.59										
30-Nov-06	Transportation	9	153.57					825.95	6,641.51				
30-Nov-06	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.0
30-Nov-06	Equipment	9A	0.00										
30-Nov-06			0.00										
30-Nov-06			0.00										
30-Nov-06			0.00										
30-Nov-06			0.00										
	NOVEMBER		54,695.30	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	430.95	2,552.51	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
	BTD		(192,189.60)	(62,955.26)	(75,171.22)	39,974.61	(16,735.04)	(3,824.93)	(50,400.06)	(76,313.50)	(52,845.26)	(53,545.00)	(6,845.86
	51,227.71 Total 265		(257,652.91)										

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SD	PW	RR	SU	SU-123
			(192,189.60)	(62,955.26)	(75,171.22)	39,974.61	(16,735.04)	(3,824.93)	(50,400.06)	(76,313.50)	(52,845.26)	(53,545.00)	(6,845.86
31-Dec-06	Payroll	1	0.00										
31-Dec-06	Payroll taxes	2	0.00										
31-Dec-06	AP	5	91,079.68										
31-Dec-06	Transportation	9	0.00						6,240.00				
31-Dec-06	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
31-Dec-06	Accrued AP	25	0.00										
31-Dec-06	Adjustments	27	0.00										
31-Dec-06			0.00										
31-Dec-06			0.00										
31-Dec-06			0.00										
	DECEMBER		52,238.68	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	2,151.00	(1,020.00)	(1,045.00)	(2,107.00)	(401.00
	BTD		(139,950.92)	(64,213.26)	(78,679.22)	39,575.61	(18,081.04)	(4,219.93)	(48,249.06)	(77,333.50)	(53,890.26)	(55,652.00)	(7,246.86

ARIZONA WATER COMPANY
2007 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(139,950.92)	(165,686.38)	(4,863.16)	(86,510.19)	509,167.53	(3,838.48)	(2,385.44)	52,111.98	55,300.24	(125,257.50)
31-Jan-07	Payroll	1	31.11				31.11					
31-Jan-07	Payroll taxes	2	3.45				3.45					
31-Jan-07	AP	5	88,425.00				16,512.50	71,912.50				
31-Jan-07	Transportation	9	6.05				6.05					
31-Jan-07	Tank maint accrual	26	(38,812.00)	(8,686.00)	(2,078.00)	(1,080.00)	(5,948.00)	(190.00)	(1,044.00)	(536.00)	(1,699.00)	(1,994.00)
31-Jan-07	Miscellaneous	20	0.00									
31-Jan-07	Equipment	9A	0.00									
31-Jan-07			0.00									
31-Jan-07			0.00									
31-Jan-07			0.00									
	JANUARY		49,653.61	(8,686.00)	(2,078.00)	(1,080.00)	10,605.11	71,722.50	(1,044.00)	(536.00)	(1,699.00)	(1,994.00)
	BTD		(90,297.31)	(174,372.38)	(6,941.16)	(87,590.19)	519,772.64	67,884.02	(3,429.44)	51,575.98	53,601.24	(127,251.50)
46,160.61	Total 265		(160,590.62)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(90,297.31)	(174,372.38)	(6,941.16)	(87,590.19)	519,772.64	67,884.02	(3,429.44)	51,575.98	53,601.24	(127,251.50)
28-Feb-07	Payroll	1	452.48	452.48								
28-Feb-07	Payroll taxes	2	47.76	47.76								
28-Feb-07	AP	5	15,808.53	6,493.00	15.53		6,600.00					
28-Feb-07	Transportation	9	(13.57)	(13.57)							2,700.00	
28-Feb-07	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
28-Feb-07	Inventory	7	0.00									
28-Feb-07	Stores	8	0.00									
28-Feb-07	Equipment	9A	0.00									
28-Feb-07	Transportation	9B	0.00									
28-Feb-07	Transportation	9B	0.00									
	FEBRUARY		(22,545.80)	(1,706.33)	(2,066.47)	(1,082.00)	650.00	(193.00)	(1,047.00)	(538.00)	997.00	(1,992.00)
	BTD		(112,843.11)	(176,078.71)	(9,007.63)	(88,672.19)	520,422.64	67,691.02	(4,476.44)	51,037.98	54,598.24	(129,243.50)
(5,419.61)	Total 265		(166,010.23)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(112,843.11)	(176,078.71)	(9,007.63)	(88,672.19)	520,422.64	67,691.02	(4,476.44)	51,037.98	54,598.24	(129,243.50)
31-Mar-07	Payroll	1	890.62	502.74			297.38					
31-Mar-07	Payroll taxes	2	87.75	49.53			29.30					
31-Mar-07	AP	5	19,564.46									
31-Mar-07	Transportation	9	150.99	72.81			55.18				19,550.85	
31-Mar-07	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
31-Mar-07	Equipment	9A	0.00									
31-Mar-07	Adjustment	20	0.00									
31-Mar-07	Payroll taxes	2A	0.00									
31-Mar-07			0.00									
31-Mar-07			0.00									
	MARCH		(18,147.18)	(8,060.92)	(2,082.00)	(1,082.00)	(5,568.14)	(193.00)	(1,047.00)	(538.00)	17,847.85	(1,992.00)
	BTD		(130,990.29)	(184,139.63)	(11,089.63)	(89,754.19)	514,854.50	67,498.02	(5,523.44)	50,499.98	72,446.09	(131,235.50)
(21,639.18)	Total 265		(187,649.41)									

ARIZONA WATER COMPANY
2007 SUBLEDGER

ARIZONA WATER COMPANY
2007 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SB	SD	PW	RR	SU	SU-123
			(139,950.92)	(64,213.26)	(78,679.22)	39,575.61	(18,081.04)	(4,219.93)	0.00	(48,249.06)	(77,333.50)	(53,890.26)	(55,652.00)	(7,246.86)
31-Jan-07	Payroll	1	31.11											
31-Jan-07	Payroll taxes	2	3.45											
31-Jan-07	AP	5	88,425.00											
31-Jan-07	Transportation	9	6.05											
31-Jan-07	Tank maint accrual	26	(38,812.00)	(1,258.00)	(3,503.00)	(397.00)	(1,342.00)	(398.00)		(4,094.00)	(1,020.00)	(1,039.00)	(2,102.00)	(404.00)
31-Jan-07	Miscellaneous	20	0.00											
31-Jan-07	Equipment	9A	0.00											
31-Jan-07			0.00											
31-Jan-07			0.00											
31-Jan-07			0.00											
JANUARY			49,653.61	(1,258.00)	(3,503.00)	(397.00)	(1,342.00)	(398.00)	0.00	(4,094.00)	(1,020.00)	(1,039.00)	(2,102.00)	(404.00)
BTD			(90,297.31)	(65,471.26)	(82,182.22)	39,178.61	(19,423.04)	(4,617.93)	0.00	(52,343.06)	(78,353.50)	(54,929.26)	(57,754.00)	(7,650.86)
46,160.61	Total 265		(160,590.62)											

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SB	SD	PW	RR	SU	SU-123
			(90,297.31)	(65,471.26)	(82,182.22)	39,178.61	(19,423.04)	(4,617.93)	0.00	(52,343.06)	(78,353.50)	(54,929.26)	(57,754.00)	(7,650.86)
28-Feb-07	Payroll	1	452.48											
28-Feb-07	Payroll taxes	2	47.76											
28-Feb-07	AP	5	15,808.53											
28-Feb-07	Transportation	9	(13.57)											
28-Feb-07	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)		(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
28-Feb-07	Inventory	7	0.00											
28-Feb-07	Stores	8	0.00											
28-Feb-07	Equipment	9A	0.00											
28-Feb-07	Transportation	9B	0.00											
28-Feb-07	Transportation	9B	0.00											
FEBRUARY			(22,545.80)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	0.00	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
BTD			(112,843.11)	(66,729.26)	(85,690.22)	38,779.61	(20,769.04)	(5,012.93)	0.00	(56,432.06)	(79,373.50)	(55,974.26)	(59,861.00)	(8,051.86)
(5,419.61)	Total 265		(166,010.23)											

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SB	SD	PW	RR	SU	SU-123
			(112,843.11)	(66,729.26)	(85,690.22)	38,779.61	(20,769.04)	(5,012.93)	0.00	(56,432.06)	(79,373.50)	(55,974.26)	(59,861.00)	(8,051.86)
31-Mar-07	Payroll	1	890.62							90.50				
31-Mar-07	Payroll taxes	2	87.75							8.92				
31-Mar-07	AP	5	19,564.46		13.61									
31-Mar-07	Transportation	9	150.99							23.00				
31-Mar-07	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)		(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
31-Mar-07	Equipment	9A	0.00											
31-Mar-07	Adjustment	20	0.00											
31-Mar-07	Payroll taxes	2A	0.00											
31-Mar-07			0.00											
31-Mar-07			0.00											
MARCH			(18,147.18)	(1,258.00)	(3,494.39)	(399.00)	(1,346.00)	(395.00)	0.00	(3,966.58)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
BTD			(130,990.29)	(67,987.26)	(89,184.61)	38,380.61	(22,115.04)	(5,407.93)	0.00	(60,398.64)	(80,393.50)	(57,019.26)	(61,968.00)	(8,452.86)
(21,639.18)	Total 265		(187,649.41)											

ARIZONA WATER COMPANY
2007 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(130,990.29)	(184,139.63)	(11,089.63)	(89,754.19)	514,854.50	67,498.02	(5,523.44)	50,499.98	72,446.09	(131,235.50)
30-Apr-07	Payroll	1	146.63	146.63								
30-Apr-07	Payroll taxes	2	14.22	14.22								
30-Apr-07	AP	5	22,342.02		25.81							
30-Apr-07	Transportation	9	33.00	33.00							17,542.72	
30-Apr-07	Equipment	9A	0.00									
30-Apr-07	Tank maint accrual	20	0.00									
30-Apr-07	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
30-Apr-07			0.00									
30-Apr-07			0.00									
30-Apr-07			0.00									
	APRIL		(16,305.13)	(8,492.15)	(2,056.19)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	15,839.72	(1,992.00)
	BTD		(147,295.42)	(192,631.78)	(13,145.82)	(90,836.19)	508,904.50	67,305.02	(6,570.44)	49,961.98	88,285.81	(133,227.50)
	(19,430.83) Total 26		(207,080.24)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(147,295.42)	(192,631.78)	(13,145.82)	(90,836.19)	508,904.50	67,305.02	(6,570.44)	49,961.98	88,285.81	(133,227.50)
31-May-07	Payroll	1	1,299.61		1,299.61							
31-May-07	Payroll taxes	2	116.85		116.85							
31-May-07	AP	5	1,736.76	420.00	56.76							
31-May-07	Transportation	9	239.26		239.26						1,260.00	
31-May-07	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
31-May-07	Equipment	9A	0.00									
31-May-07	Miscellaneous	20	0.00									
31-May-07			0.00									
31-May-07			0.00									
31-May-07			0.00									
	MAY		(35,448.52)	(8,266.00)	(369.52)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(443.00)	(1,992.00)
	BTD		(182,743.94)	(200,897.78)	(13,515.34)	(91,918.19)	502,954.50	67,112.02	(7,617.44)	49,423.98	87,842.81	(135,219.50)
	(37,924.33) Total 265		(245,004.57)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(182,743.94)	(200,897.78)	(13,515.34)	(91,918.19)	502,954.50	67,112.02	(7,617.44)	49,423.98	87,842.81	(135,219.50)
30-Jun-07	Payroll	1	91.83									
30-Jun-07	Payroll taxes	2	8.82									
30-Jun-07	AP	5	45,321.43		577.50							
30-Jun-07	Transportation	9	0.00								44,743.93	
30-Jun-07	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
30-Jun-07	Equipment	9A	0.00									
30-Jun-07	Inventory	7	0.00									
30-Jun-07	Stores	8	0.00									
30-Jun-07			0.00									
30-Jun-07			0.00									
	JUNE		6,581.08	(8,686.00)	(1,504.50)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	43,040.93	(1,992.00)
	BTD		(176,162.86)	(209,583.78)	(15,019.84)	(93,000.19)	497,004.50	66,919.02	(8,664.44)	48,885.98	130,883.74	(137,211.50)
	3,913.16 Total 265		(241,091.41)									

ARIZONA WATER COMPANY
2007 SUBLEDGER

ARIZONA WATER COMPANY
2007 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SB	SD	PW	RR	SU	SU-123
			(130,990.29)	(67,987.26)	(89,184.61)	38,380.61	(22,115.04)	(5,407.93)	0.00	(60,398.64)	(80,393.50)	(57,019.26)	(61,968.00)	(8,452.86)
30-Apr-07	Payroll	1	146.63											
30-Apr-07	Payroll taxes	2	14.22											
30-Apr-07	AP	5	22,342.02											
30-Apr-07	Transportation	9	33.00							4,773.49				
30-Apr-07	Equipment	9A	0.00											
30-Apr-07	Tank maint accrual	20	0.00											
30-Apr-07	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)		(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
30-Apr-07			0.00											
30-Apr-07			0.00											
30-Apr-07			0.00											
	APRIL		(16,305.13)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	0.00	684.49	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
	BTD		(147,295.42)	(69,245.26)	(92,692.61)	37,981.61	(23,461.04)	(5,802.93)	0.00	(59,714.15)	(81,413.50)	(58,064.26)	(64,075.00)	(8,853.86)
(19,430.83)	Total 265		(207,080.24)											

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SB	SD	PW	RR	SU	SU-123
			(147,295.42)	(69,245.26)	(92,692.61)	37,981.61	(23,461.04)	(5,802.93)	0.00	(59,714.15)	(81,413.50)	(58,064.26)	(64,075.00)	(8,853.86)
31-May-07	Payroll	1	1,299.61											
31-May-07	Payroll taxes	2	116.85											
31-May-07	AP	5	1,736.76											
31-May-07	Transportation	9	239.26											
31-May-07	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)		(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
31-May-07	Equipment	9A	0.00											
31-May-07	Miscellaneous	20	0.00											
31-May-07			0.00											
31-May-07			0.00											
31-May-07			0.00											
	MAY		(35,448.52)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	0.00	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
	BTD		(182,743.94)	(70,503.26)	(96,200.61)	37,582.61	(24,807.04)	(6,197.93)	0.00	(63,803.15)	(82,433.50)	(59,109.26)	(66,182.00)	(9,254.86)
(37,924.33)	Total 265		(245,004.57)											

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SB	SD	PW	RR	SU	SU-123
			(182,743.94)	(70,503.26)	(96,200.61)	37,582.61	(24,807.04)	(6,197.93)	0.00	(63,803.15)	(82,433.50)	(59,109.26)	(66,182.00)	(9,254.86)
30-Jun-07	Payroll	1	91.83										91.83	
30-Jun-07	Payroll taxes	2	8.82										8.82	
30-Jun-07	AP	5	45,321.43											
30-Jun-07	Transportation	9	0.00											
30-Jun-07	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)		(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
30-Jun-07	Equipment	9A	0.00											
30-Jun-07	Inventory	7	0.00											
30-Jun-07	Stores	8	0.00											
30-Jun-07			0.00											
30-Jun-07			0.00											
	JUNE		6,581.08	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	0.00	(4,089.00)	(1,020.00)	(1,045.00)	(2,006.35)	(401.00)
	BTD		(176,162.86)	(71,761.26)	(99,708.61)	37,183.61	(26,153.04)	(6,592.93)	0.00	(67,892.15)	(83,453.50)	(60,154.26)	(68,188.35)	(9,655.86)
3,913.16	Total 265		(241,091.41)											

ARIZONA WATER COMPANY
2007 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265			TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
DATE	DESCRIPTION	JV	(176,162.86)	(209,583.78)	(15,019.84)	(93,000.19)	497,004.50	66,919.02	(8,664.44)	48,885.98	130,883.74	(137,211.50)
31-Jul-07	Payroll	1	101.80	101.80								
31-Jul-07	Payroll taxes	2	9.68	9.68								
31-Jul-07	AP	5	14,725.60	7,017.72		1,707.45	3,426.72	1,551.59				
31-Jul-07	Transportation	9	14.37	14.37								
31-Jul-07	Equipment	9A	0.00									
31-Jul-07	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
31-Jul-07			0.00									
31-Jul-07			0.00									
31-Jul-07			0.00									
31-Jul-07			0.00									
JULY			(23,989.55)	(1,542.43)	(2,082.00)	625.45	(2,523.28)	1,358.59	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
BTD			(200,152.41)	(211,126.21)	(17,101.84)	(92,374.74)	494,481.22	68,277.61	(9,711.44)	48,347.98	129,180.74	(139,203.50)
(26,694.03) Total 265			(267,785.44)									

265			TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
DATE	DESCRIPTION	JV	(200,152.41)	(211,126.21)	(17,101.84)	(92,374.74)	494,481.22	68,277.61	(9,711.44)	48,347.98	129,180.74	(139,203.50)
31-Aug-07	Payroll	1	0.00									
31-Aug-07	Payroll Taxes	2	0.00									
31-Aug-07	Stores	8	0.00									
31-Aug-07	AP	5	101.22		101.22							
31-Aug-07	Inventory	7	0.00									
31-Aug-07	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
31-Aug-07	Transportation	9	0.00									
31-Aug-07	Miscellaneous	20	0.00									
31-Aug-07			0.00									
31-Aug-07			0.00									
AUGUST			(38,739.78)	(8,686.00)	(1,980.78)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
BTD			(238,892.19)	(219,812.21)	(19,082.62)	(93,456.74)	488,531.22	68,084.61	(10,758.44)	47,809.98	127,477.74	(141,195.50)
(42,231.78) Total 265			(310,017.22)									

265			TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
DATE	DESCRIPTION	JV	(238,892.19)	(219,812.21)	(19,082.62)	(93,456.74)	488,531.22	68,084.61	(10,758.44)	47,809.98	127,477.74	(141,195.50)
30-Sep-07	Payroll	1	0.00									
30-Sep-07	Payroll taxes	2	0.00									
30-Sep-07	AP	5	9,240.00									
30-Sep-07	Transportation	9	0.00									
30-Sep-07	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
30-Sep-07	Inventory	7	0.00									
30-Sep-07	Stores	8	0.00									
30-Sep-07	Equipment	9A	0.00									
30-Sep-07			0.00									
30-Sep-07			0.00									
SEPTEMBER			(29,601.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
BTD			(268,493.19)	(228,498.21)	(21,164.62)	(94,538.74)	482,581.22	67,891.61	(11,805.44)	47,271.98	125,774.74	(143,187.50)
(32,218.17) Total 265			(342,235.39)									

ARIZONA WATER COMPANY
2007 SUBLEDGER

ARIZONA WATER COMPANY
2007 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SB	SD	PW	RR	SU	SU-123
			(176,162.86)	(71,761.26)	(99,708.61)	37,183.61	(26,153.04)	(6,592.93)	0.00	(67,892.15)	(83,453.50)	(60,154.26)	(68,188.35)	(9,655.86)
31-Jul-07	Payroll	1	101.80											
31-Jul-07	Payroll taxes	2	9.68											
31-Jul-07	AP	5	14,725.60											
31-Jul-07	Transportation	9	14.37										1,022.12	
31-Jul-07	Equipment	9A	0.00											
31-Jul-07	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)		(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
31-Jul-07			0.00											
31-Jul-07			0.00											
31-Jul-07			0.00											
31-Jul-07			0.00											
JULY			(23,989.55)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	0.00	(4,089.00)	(1,020.00)	(1,045.00)	(1,084.88)	(401.00)
BTD			(200,152.41)	(73,019.26)	(103,216.61)	36,784.61	(27,499.04)	(6,987.93)	0.00	(71,981.15)	(84,473.50)	(61,199.26)	(69,273.23)	(10,056.86)
(26,694.03) Total 265			(267,785.44)											

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SB	SD	PW	RR	SU	SU-123
			(200,152.41)	(73,019.26)	(103,216.61)	36,784.61	(27,499.04)	(6,987.93)	0.00	(71,981.15)	(84,473.50)	(61,199.26)	(69,273.23)	(10,056.86)
31-Aug-07	Payroll	1	0.00											
31-Aug-07	Payroll Taxes	2	0.00											
31-Aug-07	Stores	8	0.00											
31-Aug-07	AP	5	101.22											
31-Aug-07	Inventory	7	0.00											
31-Aug-07	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)		(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
31-Aug-07	Transportation	9	0.00											
31-Aug-07	Miscellaneous	20	0.00											
31-Aug-07			0.00											
31-Aug-07			0.00											
AUGUST			(38,739.78)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	0.00	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
BTD			(238,892.19)	(74,277.26)	(106,724.61)	36,385.61	(28,845.04)	(7,382.93)	0.00	(76,070.15)	(85,493.50)	(62,244.26)	(71,380.23)	(10,457.86)
(42,231.78) Total 265			(310,017.22)											

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SB	SD	PW	RR	SU	SU-123
			(238,892.19)	(74,277.26)	(106,724.61)	36,385.61	(28,845.04)	(7,382.93)	0.00	(76,070.15)	(85,493.50)	(62,244.26)	(71,380.23)	(10,457.86)
30-Sep-07	Payroll	1	0.00											
30-Sep-07	Payroll taxes	2	0.00											
30-Sep-07	AP	5	9,240.00	9,240.00										
30-Sep-07	Transportation	9	0.00											
30-Sep-07	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)		(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
30-Sep-07	Inventory	7	0.00											
30-Sep-07	Stores	8	0.00											
30-Sep-07	Equipment	9A	0.00											
30-Sep-07			0.00											
30-Sep-07			0.00											
SEPTEMBER			(29,601.00)	7,982.00	(3,508.00)	(399.00)	(1,346.00)	(395.00)	0.00	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
BTD			(268,493.19)	(66,295.26)	(110,232.61)	35,986.61	(30,191.04)	(7,777.93)	0.00	(80,159.15)	(86,513.50)	(63,289.26)	(73,487.23)	(10,858.86)
(32,218.17) Total 265			(342,235.39)											

ARIZONA WATER COMPANY
2007 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(268,493.19)	(228,498.21)	(21,164.62)	(94,538.74)	482,581.22	67,891.61	(11,805.44)	47,271.98	125,774.74	(143,187.50)
31-Oct-07	Payroll	1	0.00									
31-Oct-07	Payroll taxes	2	0.00									
31-Oct-07	AP	5	14,842.38	11,800.00			575.00					
31-Oct-07	Inventory	7	0.00									
31-Oct-07	Stores	8	0.00									
31-Oct-07	Transportation	9	0.00									
31-Oct-07	Equipment	9A	0.00									
31-Oct-07	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
31-Oct-07	Maintenance	20	0.00									
31-Oct-07			0.00									
	OCTOBER		(23,998.62)	3,114.00	(2,082.00)	(1,082.00)	(5,375.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
	BTD		(292,491.81)	(225,384.21)	(23,246.62)	(95,620.74)	477,206.22	67,698.61	(12,852.44)	46,733.98	124,071.74	(145,179.50)
	(26,679.23) Total 265		(368,914.62)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(292,491.81)	(225,384.21)	(23,246.62)	(95,620.74)	477,206.22	67,698.61	(12,852.44)	46,733.98	124,071.74	(145,179.50)
30-Nov-07	Payroll	1	350.67				350.67					
30-Nov-07	Payroll taxes	2	32.93				32.93					
30-Nov-07	AP	5	540.00				540.00					
30-Nov-07	Transportation	9	94.92				94.92					
30-Nov-07	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
30-Nov-07	Equipment	9A	0.00									
30-Nov-07			0.00									
30-Nov-07			0.00									
30-Nov-07			0.00									
30-Nov-07			0.00									
	NOVEMBER		(37,822.48)	(8,686.00)	(2,082.00)	(1,082.00)	(4,931.48)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
	BTD		(330,314.29)	(234,070.21)	(25,328.62)	(96,702.74)	472,274.74	67,505.61	(13,899.44)	46,195.98	122,368.74	(147,171.50)
	(41,159.53) Total 265		(410,074.15)									

265

DATE	DESCRIPTION	JV	TOTAL	AJ	BE	SV	CG	ST	WT	AO	CL	LK
			(330,314.29)	(234,070.21)	(25,328.62)	(96,702.74)	472,274.74	67,505.61	(13,899.44)	46,195.98	122,368.74	(147,171.50)
31-Dec-07	Payroll	1	1,109.25	588.23			45.25					
31-Dec-07	Payroll taxes	2	103.28	54.77			4.21					
31-Dec-07	AP	5	187,129.12	134,794.55	537.50		537.50				537.50	
31-Dec-07	Transportation	9	282.91	183.04			13.08					
31-Dec-07	Tank maint accrual	26	(38,841.00)	(8,686.00)	(2,082.00)	(1,082.00)	(5,950.00)	(193.00)	(1,047.00)	(538.00)	(1,703.00)	(1,992.00)
31-Dec-07	Accrued AP	25	0.00									
31-Dec-07	Adjustments	27	0.00									
31-Dec-07	Equipment	9A	562.95									
31-Dec-07			0.00									
31-Dec-07			0.00									
31-Dec-07			0.00									
31-Dec-07			0.00									
	DECEMBER		150,346.51	126,934.59	(1,544.50)	(1,082.00)	(5,349.96)	(193.00)	(1,047.00)	(538.00)	(1,165.50)	(1,992.00)
	BTD		(179,967.78)	(107,135.62)	(26,873.12)	(97,784.74)	466,924.78	67,312.61	(14,946.44)	45,657.98	121,203.24	(149,163.50)
	160,138.96 Total 265		(249,935.19)									

ARIZONA WATER COMPANY
2007 SUBLEDGER

ARIZONA WATER COMPANY
2007 SUBLEDGER

265 RESERVE for TANK MAINTENANCE

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SB	SD	PW	RR	SU	SU-123
			(268,493.19)	(66,295.26)	(110,232.61)	35,986.61	(30,191.04)	(7,777.93)	0.00	(80,159.15)	(86,513.50)	(63,289.26)	(73,487.23)	(10,858.86)
31-Oct-07	Payroll	1	0.00											
31-Oct-07	Payroll taxes	2	0.00											
31-Oct-07	AP	5	14,842.38		17.38	1,700.00				750.00				
31-Oct-07	Inventory	7	0.00											
31-Oct-07	Stores	8	0.00											
31-Oct-07	Transportation	9	0.00											
31-Oct-07	Equipment	9A	0.00											
31-Oct-07	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)		(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
31-Oct-07	Maintenance	20	0.00											
31-Oct-07			0.00											
	OCTOBER		(23,998.62)	(1,258.00)	(3,490.62)	1,301.00	(1,346.00)	(395.00)	0.00	(3,339.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
	BTD		(292,491.81)	(67,553.26)	(113,723.23)	37,287.61	(31,537.04)	(8,172.93)	0.00	(83,498.15)	(87,533.50)	(64,334.26)	(75,594.23)	(11,259.86)
(26,679.23)	Total 265		(368,914.62)											

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SB	SD	PW	RR	SU	SU-123
			(292,491.81)	(67,553.26)	(113,723.23)	37,287.61	(31,537.04)	(8,172.93)	0.00	(83,498.15)	(87,533.50)	(64,334.26)	(75,594.23)	(11,259.86)
30-Nov-07	Payroll	1	350.67											
30-Nov-07	Payroll taxes	2	32.93											
30-Nov-07	AP	5	540.00											
30-Nov-07	Transportation	9	94.92											
30-Nov-07	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)		(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
30-Nov-07	Equipment	9A	0.00											
30-Nov-07			0.00											
30-Nov-07			0.00											
30-Nov-07			0.00											
30-Nov-07			0.00											
	NOVEMBER		(37,822.48)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)	0.00	(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
	BTD		(330,314.29)	(68,811.26)	(117,231.23)	36,888.61	(32,883.04)	(8,567.93)	0.00	(87,587.15)	(88,553.50)	(65,379.26)	(77,701.23)	(11,660.86)
(41,159.53)	Total 265		(410,074.15)											

265

DATE	DESCRIPTION	JV	TOTAL	OV	MI	SM	OR	WK	SB	SD	PW	RR	SU	SU-123
			(330,314.29)	(68,811.26)	(117,231.23)	36,888.61	(32,883.04)	(8,567.93)	0.00	(87,587.15)	(88,553.50)	(65,379.26)	(77,701.23)	(11,660.86)
31-Dec-07	Payroll	1	1,109.25										475.77	
31-Dec-07	Payroll taxes	2	103.28										44.30	
31-Dec-07	AP	5	187,129.12	537.50	537.50	537.50				537.50	48,572.07			
31-Dec-07	Transportation	9	282.91										86.79	
31-Dec-07	Tank maint accrual	26	(38,841.00)	(1,258.00)	(3,508.00)	(399.00)	(1,346.00)	(395.00)		(4,089.00)	(1,020.00)	(1,045.00)	(2,107.00)	(401.00)
31-Dec-07	Accrued AP	25	0.00											
31-Dec-07	Adjustments	27	0.00											
31-Dec-07	Equipment	9A	562.95										562.95	
31-Dec-07			0.00											
31-Dec-07			0.00											
31-Dec-07			0.00											
31-Dec-07			0.00											
	DECEMBER		150,346.51	(720.50)	(2,970.50)	138.50	(1,346.00)	(395.00)	0.00	(3,551.50)	47,552.07	(1,045.00)	(937.19)	(401.00)
	BTD		(179,967.78)	(69,531.76)	(120,201.73)	37,027.11	(34,229.04)	(8,962.93)	0.00	(91,138.65)	(41,001.43)	(66,424.26)	(78,638.42)	(12,061.86)
160,138.96	Total 265		(249,935.19)											

The Regulation of Public Utilities

Theory and Practice

CHARLES F. PHILLIPS, JR.

Robert G. Brown
Professor of Economics
Washington and Lee University

1993
PUBLIC UTILITIES REPORTS, INC.
Arlington, Virginia

early railroad valuations, in the form of allowances for roadbed solidification.[150]

At the same time, it is difficult to explain the logic of deducting observed depreciation, however measured, from a reproduction cost or fair value rate base determined by general price indexes. Such a property valuation, as noted earlier, represents a purely imaginary figure.

Other Elements of Value

While the determination of the depreciated value of the tangible and reproducible property has occupied most of the courts', commissions' and utilities' time, several other elements of value also have received attention — working capital allowances, property held for future use, land, intangibles and customer contributions. Each is briefly discussed below. The issues surrounding construction work in progress are considered in the next section.

Working Capital Allowance

The question of working capital must be considered in every rate case and several important problems are raised in determining a suitable allowance. Working capital — the funds representing necessary investment in materials and supplies, and the cash required to meet current obligations and to maintain minimum bank balances — is included in the rate base so that investors are compensated for capital they have supplied to a utility. The amount required depends largely on a utility's purchasing and billing methods, as well as its construction program. When purchases are made on credit, when deposits or payments are required in advance, when accruals are made for the payment of taxes in advance of payment dates, or when customers pay for the service at the time it is used, working capital requirements may be small. When materials and supplies must be purchased long before use, when customers are billed monthly, quarterly, semiannually or even annually, or when the business is seasonal, such requirements may be large.

The calculation of an electric utility's working capital allowance is illustrated in Table 8-2. The cash component may be determined in three basic ways: (1) A detailed lead/lag study, which measures the amount of time before expenses must be paid (expense lead) and compares it with the amount of time before revenues are received (revenue lag). (2) A formula approach (developed to avoid a costly lead/lag study in every case), which commonly uses one-eighth of a utility's annual operating and maintenance expenses, excluding fuel and purchased power. The factor of one-eighth equates to a forty-five-day time lag between the rendering of the service by a utility and payment by the customer.[151] (3) The balance sheet method, representing the

Table 8-2

Working Capital Allowance

Cash Component	
One-eight of Adjusted Operation and Maintenance Expense, Excluding Fuel and Purchased Power	$ 43,106,000
Fuel Lag	5,145,000
TOTAL CASH COMPONENT	$ 48,251,000
PLUS: Materials And Supplies	$ 35,369,000
Fossil Fuel Inventory	59,679,000
Deferred Nuclear Fuel (net of tax)	6,544,000
Deferred Quarto Coal (net of tax)	$ 23,289,000
TOTAL	$ 124,881,000
LESS: Customer Deposits	$ 3,734,000
Tax Offset	
One-fourth of Adjusted Taxes, Excluding FICA, Deferred Taxes, and ODOE	31,638,000
TOTAL	$ 35,372,000
WORKING CAPITAL ALLOWANCE	$137,760,000

Source: *In re Ohio Edison Co.*, 61 PUR4th 241, 258 (Ohio, 1984).

difference between a utility's current assets and current liabilities.[152] The allowance for materials and supplies is based upon a utility's inventories that are held for future operation and use.[153] In addition to these two items, a credit is frequently made for accrued taxes[154] and/or customer deposits,[155] while an allowance may be made for fuel (such as coal or oil inventories, gas storage underground, unrecovered fuel costs)[156] and for compensating balances.[157]

Property Held for Future Use

Property held for future use is the amount of investment in property and plant that is not being used currently by a utility to provide service. Generally, such property is land, purchased when available, for potential future use (such as an office building, a generating site or transmission lines). The rule

that most commissions follow in deciding whether to include or exclude such property is one based upon a time limitation; that is, if the property has an expected in-service date within a reasonable time period (commonly two to ten years),[158] it is included in the rate base. As the District of Columbia commission noted in a 1979 case, suitable generating sites in the Washington metropolitan area were scarce and rapidly increasing in value. Inclusion in the rate base would provide an incentive to the utility to acquire suitable sites as soon as possible.[159]

Land

Except for natural gas utilities, the valuation of land is of little importance in rate-making cases. Unlike most other items in the rate base, land represents a small portion of total property, has no cost of production and tends to appreciate in value. Generally, commissions value land on an original cost basis, although an estimate of its current value is used when fair value property valuations are made.[160]

The Supreme Court approved the FPC's procedure of valuing natural gas land on an original cost basis in 1934.[161] Troxel has argued that this is the proper measure:

> The market price of gas land is not altogether independent of utility service prices: utility consumers buy most of the gas of Appalachian fields, and they buy much of the natural gas output in other areas. If circular reasoning is avoided, a property value cannot be based on the prices that are subject to public control. Another consideration goes against a return on the market price of natural gas land. Gas companies obtain revenue from consumers that is used to cover the gas exploration costs. Since buyers pay some or all of the costs of gas discoveries, they should not pay a return, too, on increases in land prices.[162]

Intangibles

It will be recalled that the Supreme Court, in the *Smyth* case, listed six specific measures of value and then added: "We do not say that there may not be other matters to be regarded in estimating the value of the property."[163] Almost immediately, public utilities claimed allowances for several intangibles, the most important being good will, franchise value, water rights, leaseholds and going concern value. These items should properly be included in the rate base, they argued, because the value of a utility is more than just the value of its physical property. While the commissions and courts have often supported this contention and have made allowances for these items in the past, few are currently included in rate bases.

ARIZONA WATER COMPANY

Docket No. W-01445A-08-0440

2008 RATE HEARING

For Test Year Ending 12/31/07

PREPARED

REJOINDER TESTIMONY

RATE DESIGN AND COST OF SERVICE

OF

Joel M. Reiker

EXHIBIT

A-23

ADMITTED

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ARIZONA WATER COMPANY

Rejoinder Testimony of

Joel M. Reiker

I. Introduction

Q. PLEASE STATE YOUR NAME, EMPLOYER, AND TITLE.

A. My name is Joel M. Reiker. I am employed by Arizona Water Company (the "Company" or "AWC") as Manager of Rates and Regulatory Accounting.

Q. ARE YOU THE SAME JOEL M. REIKER THAT PREVIOUSLY PROVIDED DIRECT, REBUTTAL AND REJOINDER TESTIMONY IN THIS PROCEEDING?

A. Yes.

Q. WHAT IS THE PURPOSE OF THIS REJOINDER TESTIMONY?

A. The purpose of this testimony is to respond to the rate design surrebuttal testimony of Jeffery M. Michlik on behalf of the Utilities Division ("Staff") of the Arizona Corporation Commission ("Commission). I also address RUCO's typical bill increases, and provide a supplemental response to Staff witness Mr. Igwe regarding tank maintenance.

Q. HAVE YOU REVIEWED THE RATE DESIGN/COST OF SERVICE SURREBUTTAL TESTIMONY FILED BY THE OTHER PARTIES TO THIS PROCEEDING?

A. Yes. I have reviewed the surrebuttal testimony of Abbott Laboratories ("Abbott") and the Residential Utility Consumer Office ("RUCO"), as well as Mr. Michlik's testimony. Mr. Harris will respond to the surrebuttal rate design proposed by RUCO. The Company generally agrees with the testimony of Mr. Neidlinger on behalf of Abbott, which addresses the Company's cost of service study ("COSS") and appropriate rate design for the Casa Grande system.

Q. BEFORE ADDRESSING MR. MICHLIK'S SURREBUTTAL TESTIMONY, PLEASE DISCUSS STAFF'S POSITION CONCERNING THE REVISED COSS ATTACHED TO YOUR REBUTTAL RATE DESIGN TESTIMONY.

A. Staff did not address the Company's revised COSS (Schedules RB-G1 to RB-G7) in its surrebuttal testimony. However, Mr. Olea testified in his direct testimony that the methodology used in the COSS is appropriate. As explained in my rebuttal rate design testimony at pages 4-5, the revised COSS reflects the Company's updated adjusted test year operating results and updated revenue requirement and proposed rate design, and uses the allocation factors suggested by Mr. Olea in his direct testimony. Therefore, I assume that Staff has accepted the revised COSS as reflecting a reasonable estimate of the cost of providing service to the various customer classes in each of the Company's systems.

Q. WHAT IS RUCO'S POSITION CONCERNING THE COMPANY'S REVISED COSS?

A. RUCO did not address the Company's revised COSS in its surrebuttal testimony. However, Ms. Jerich, RUCO's Director, testifies on page 4 of her surrebuttal testimony (lines 19-20) that "the principle of traditional cost of service ratemaking" should be used to "ensure that those who use the utility services pay for them." Based on Ms. Jerich's testimony, I assume that RUCO supports the use of the Company's revised COSS to develop fair and equitable rates.

Q. DID ABBOTT ACCEPT THE COMPANY'S REVISED COSS?

A. Abbot's witness, Mr. Neidlinger, discusses the Company's revised COSS in his surrebuttal testimony, and appears to agree with our methodology and cost allocations. Consequently, all parties have accepted the revised COSS as reflecting a reasonable estimate of the cost of providing service to the various customer classes.

Q. ARE THERE ANY ASPECTS OF THE COMPANY'S REVISED COSS THAT YOU WOULD LIKE TO ADDRESS AT THIS TIME?

A. Yes. The Company's revised COSS at proposed rates (Schedule RB-G2), as it relates to the Miami, Stanfield, and Rimrock systems reflect an anomaly related to the allocation of income taxes, which results in a misleading rate of return calculation.

Q. PLEASE EXPLAIN THIS ANOMALY.

A. In rebuttal Schedule RB-G2, the level of income taxes shown for each system is calculated on a stand-alone basis (i.e. assuming no rate consolidation), while revenues are based on the Company's proposed rate design, which reflects revenue shifting resulting from the Company's proposed consolidations. As shown in rebuttal Schedule RB-G2, pages 12, 14, and 22 (Miami, Stanfield, and Rimrock), the level of revenues produced by the Company's proposed rate design results in negative taxable income, as shown on line 15, for these systems. Because the COSS allocates a level of income taxes that would be incurred assuming there was no rate consolidation, the resulting rates of return for these three systems are not reliable estimates. This flaw in the COSS only occurs in the Miami, Stanfield, and Rimcock systems.

II. <u>Response to Mr. Michlik</u>

Industrial Rate Increase

Q. DOES MR. MICHLIK EXPLAIN IN HIS SURREBUTTAL TESTIMONY WHY STAFF PROPOSES TO INCREASE INDUSTRIAL RATES IN THE CASA GRANDE SYSTEM WHEN THOSE CUSTOMERS ARE ALREADY PAYING RATES THAT ARE APPROXIMATELY 40% HIGHER THAN COST?

A. No. On page 5 (lines 2 – 21) of his surrebuttal testimony Mr. Michlik briefly touches on the factors Staff took into consideration when developing its proposed rate design in this proceeding. On lines 14 – 17 Mr. Michlik states, "[i]n addition

to using the results of the COSS as a general guideline, Staff also considered factors such as promotion of efficient water usage, gradualism in rate increases to mitigate rate shock, and *uniformity of rates between customer classes*" (emphasis supplied). The goal of achieving uniformity between customer classes appears to be the basis for Staff's industrial class rate design, which results in Casa Grande industrial customers providing a 90% rate of return.

Q. DOES MR. MICHLIK EXPLAIN WHY STAFF BELIEVES UNIFORMITY OF RATES AMONG CLASSES SHOULD OVERRIDE COST OF SERVICE PRINCIPLES WHEN THE RESULT OF SUCH UNIFORMITY IS ONE CLASS PROVIDING A 90% RATE OF RETURN?

A. No. The American Water Works Association's ("AWWA") Manual of Water Supply Practices M1 – Principles of Water Rates, Fees, and Charges even warns of the rate inequities that can result from system-wide application of the type of rate Staff proposes, and recommends that such rates be specifically tailored for each customer class. The AWWA Manual M1 is a respected source regarding water rate design. It states:

> Systemwide application of a single increasing block rate structure is likely to result in cost-of-service inequities, especially to commercial and industrial customers with relatively constant consumption patterns (low peak demands but high total usage). These customers may not impose costs on a water system proportional to the costs implied by increasing block rates. Additionally, assigning large price increases on these customer classes, known to have the most price-elastic demand, can make it difficult to predict decreases in consumption. A single systemwide increasing block rate design applied to a customer base with diverse

> consumption patterns is more difficult to justify on a cost-of-service basis than increasing block rates targeted to specific customer classes with relatively homogenous consumption patterns.[1]

For this reason, the Company prepared a fully-allocated class cost of service study in this proceeding. While I agree with Mr. Michlik's statement on page 5 of his surrebuttal testimony that the Commission should not rely solely on the COSS to design rates, the COSS should not be ignored in the interest of uniformity when the resulting rate increase to a particular customer class is unfair. Unfortunately, it became apparent in Mr. Michlik's response to Company data request 4.15 that Staff does not believe the subsidies that Casa Grande industrial customers will provide under its proposed rate design are excessive:

> Question: Admit that under Staff's proposed rate design, larger industrial users will subsidize customers in the commercial and residential user classes.
>
> Response: Deny.
>
> Supplemental Response: Based on Staff's analysis there is no *undue* subsidization between customer classes. This topic will be addressed further in Staff's surrebuttal testimony. (emphasis supplied)

---

[1] American Water Works Association, *Manual of Water Supply Practices M1 – Principles of Water Rates, Fees, and Charges* 99-100 (5th ed. 2000).

Q. DOES STAFF EXPLAIN IN ITS SURREBUTTAL TESTIMONY WHY IT BELIEVES THERE IS NO UNDUE SUBSIDIZATION PROVIDED BY THE INDUSTRIAL CLASS UNDER ITS PROPOSE RATE DESIGN?

A. No. Rate subsidies that occur both within and between customer classes can be justified and warranted if the resulting rates are in the public interest, However, Staff has not shown that its proposed rates (for all customer classes) are in the public interest any more than they would be under a rate structure that holds industrial rates at their current level. In other words, Staff hasn't shown that holding industrial rates at their current level would create unfair or inequitable rates for any other class.

Industrial Flat Rate

Q. MR. MICHLIK CLAIMS ON PAGE 6 OF HIS SURREBUTTAL TESTIMONY THAT THE USE OF A FLAT RATE FOR INDUSTRIAL CUSTOMERS FAILS TO SEND THE CORRECT PRICE SIGNAL. DO YOU AGREE?

A. No. As stated in AWWA Manual M-1, "[a] uniform rate also sends customers a usage-based price signal. Although the unit price is constant, customer bills will increase with increased water usage."[2] With an industrial customer such as Abbott, which uses substantial quantities of water, a strong usage-based price signal is sent under a flat rate design: the more water used, the higher the monthly bill. This creates an incentive to conserve in order to lower operating expenses.

Q. DOES THE EXAMPLE MR. MICHLIK PROVIDES ON PAGE 6 (LINES 1 – 31) OF HIS SURREBUTTAL TESTIMONY DEMONSTRATE THAT IT IS NECESSARY TO SEND AN ADDITIONAL PRICE SIGNAL TO INDUSTRAIL CUSTOMERS IN THE FORM OF AN INCREASING BLOCK RATE DESIGN?

---

[2] AWWA Manual M-1, supra, at 85.

A. No. In his example, Mr. Michlik compares the rates proposed by the Company and Staff for *5/8-inch* industrial customers to those proposed for *5/8-inch* residential customers. This example focuses on customers with 5/8-inch meters and ignores the Company's largest industrial customers (4-inch meters and above) who account for over 90% of industrial sales. Mr. Michlik also discusses the "inherent value of water as a scarce resource" and claims that it is necessary to create an "additional financial incentive" to industrial customers like Abbott and Frito Lay – both of which have already implemented conservation measures and have significantly reduced their water use and have stated that that they intend to make further reductions.

Q. DOES THE COMPANY'S RATE DESIGN "DISREGARD THE INHERENT VALUE OF WATER AS A SCARCE RESOURCE," AS MR. MICHLIK STATES ON PAGE 6 OF HIS SURREBUTTAL TESTIMONY?

A. No. Basic economic theory tells us that if prices are lower than cost, consumers will be encouraged to consume more, and if prices are above cost, perhaps because the seller has monopoly power, consumers will be encouraged to consume less. In the case of the Company's residential customers, it is appropriate to send a price signal that encourages customers to conserve water. This price signal is accomplished through the use of an increasing block rate design, under which at some level of consumption the consumer will decide that purchasing one additional unit is not worth the sacrifice of other goods and services that can be purchased. This decision will occur at a lower level of consumption than it would under a flat rate.

Q. WHAT ABOUT THE COMPANY'S INDUSTRIAL CUSTOMERS?

A. The Company's largest industrial customers are already paying rates that are significantly higher than their cost of service. Economics tells us that these consumers are already encouraged to consume less. In fact, not only have

Abbott and Frito Lay already begun to consume significantly less, but have made long-term plans to further reduce usage. Perhaps this is because they have determined that the price of the Company's water is higher than the average cost of an available alternative. It is for this reason that an additional price signal in the form of an increasing block rate design is simply not warranted for those customers.

Residential Increasing Block/Inverted Tier Rates

Q. HOW DO YOU RESPOND TO MR. MICHLIK'S SURREBUTTAL TESTIMONY REGARDING THE DECLINE IN RESIDENTIAL USAGE IN THOSE SYSTEMS WHERE INCREASING BLOCK RATES HAVE BEEN IMPLEMENTED?

A. Mr. Michlik states that the Company should have identified other factors, such as foreclosures, that may have contributed to the decline in residential usage. I agree with Mr. Michlik that vacant houses that are still receiving service would contribute to the decline in average residential usage. However, if this phenomenon played a measurable role in the reduction in average residential usage, we would observe significant reductions in winter months as well as in the summer. Using the data I relied upon in Exhibit JMR-RBEX3 attached to my rate design/cost of service rebuttal testimony for those systems where increasing block rates are currently in effect, I separated winter months (November - April) and summer months (May – October) and conducted multiple regression analyses of each group separately. The results of those analyses are summarized below:

	Avg. Monthly Usage (M Gals)	Avg. Decline/Month (MGals)	t-Statistic
Nov. – Apr.	7.7	-0.018	-1.60
May – Oct.	10.9	-0.045	-3.84

As shown in the table above, the t-statistic for Nov. – Apr. is -1.60. In statistics, the t-statistic is used to test hypotheses about the value of a coefficient. In this case, that coefficient is the estimated average decline in average gallons consumed per month, shown in the above table. Assuming there was actually no reduction in the average number of gallons consumed per month, the true value of the coefficient would be zero. If this "null" hypothesis that the true reduction in average gallons consumed per month is zero, the absolute value of the calculated t-statistic will be less than the critical value of 1.96. Because the absolute value of the t-statistic is less than 1.96, we conclude that the average decline per month is not different than zero gallons. In other words, there is no statistically significant reduction in average residential usage from November through April. On the other hand, we conclude that there *is* a statistically significant reduction in average residential usage in May through October. This makes sense because during the summer months customers usually have higher levels of discretionary consumption (e.g., exterior landscape irrigation, swimming pools, and other outdoor water uses), and "when coupled with higher unit pricing, customers tend to curtail consumption."[3]

[3] AWWA Manual M-1, supra, at 100.

Given the Company's history with increasing block rates, the Company is likely to experience a revenue shortfall if no adjustment is made to account for the imposition of increasing block rates for its Northern Group systems. The Company does not understand why Staff and RUCO do not acknowledge this fact. The purpose of increasing block rates is to encourage water conservation. If such rate designs did not do so, there would be no point in using them. In contrast, increasing block rates tend to result in revenue volatility and make it more difficult for water utilities to recover their cost of service. Staff has presented no evidence suggesting otherwise.

Typical Bill Increases

Q. AT PAGE 8 (LINES 1 – 6) OF HIS SURREBUTTAL MR. MICHLIK CLAIMS THAT STAFF "LEFT OUT" THE ARSENIC COST RECOVERY SURCHARGES WHEN COMPUTING ITS 5/8-INCH TYPICAL BILL INCREASES "IN ORDER TO NOT MISLEAD CUSTOMERS." DO YOU HAVE A RESPONSE?

A. Yes. Mr. Michlik would have 5/8-inch residential customers in Apache Junction believe they will experience a 32.12% rate increase under Staff's proposed rates when in reality they will only experience a 6.03% rate increase. Mr. Michlik would also have 5/8-inch residential customers in Superior believe they will experience a 23.07% increase under Staff's proposed rates, when in reality they will experience a 0.83% rate *decrease*. As shown in the following table, Staff repeats this error in six other systems where the arsenic surcharge is currently in effect:

TYPICAL BILL INCREASE – STAFF PROPOSED

(Average Usage)

	Staff - Incorrect		Staff - Actual	
System	$	%	$	%
Apache Junction	$8.68	32.12%	$2.05	6.03%
Superior	$6.63	23.07%	($0.27)	-0.83%
San Manuel	$12.08	34.66%	$3.17	7.25%
Casa Grande	$5.98	27.00%	$1.37	5.10%
Stanfield	($3.67)	-9.52%	($7.73)	-18.14%
White Tank	$5.67	11.12%	($4.12)	-6.78%
Sedona	$11.75	35.89%	$8.06	22.13%
Rimrock	$0.19	0.59%	($14.71)	-31.7%

Customers deserve accurate information regarding potential rate increases (and decreases) for utility services, and they shouldn't be misled by typical bill increases that bear no relation to the actual increases that may be approved by the Commission.

III. Response to RUCO Witness Moore

Typical Bill Increases

Q. DO YOU HAVE ANY COMMENT ON THE TYPICAL BILL ANALYSES ATTACHED TO MR. MOORE'S TESTIMONY?

A. Yes. Although Mr. Moore included the effect of the ACRM surcharge on RUCO's typical bill increases, he only included the Step-1 ACRM surcharge for Casa Grande. Additionally, the ACRM surcharge for Stanfield shown on page 62 of Mr. Moore's Schedule RD-2 is incorrect.

IV. Summary of Overall Revenue Increases

Q. HAVE YOU SUMMARIZED THE OVERALL REVENUE INCREASES OF THE PARTIES WHILE ACCOUNTING FOR THE EFFECT OF THE ACRM AND PURCHASED POWER ADJUSTER MECHANISM SURCHARGES?

A. Yes. The Company's proposed increases by system are:

	Company Proposed				
	Current Revenues	Proposed Increase	Less: Surcharges	Net Increase	% Increase
Superstition	$ 11,939,904	$ 4,427,916	$ 2,474,101	$ 1,953,815	16.4%
Bisbee	1,723,475	344,737	-	344,737	20.0%
Sierra Vista	1,461,897	11,745	-	11,745	0.8%
San Manuel	812,359	383,695	193,478	190,217	23.4%
Oracle	1,126,215	46,696	-	46,696	4.1%
Winkelman	98,722	30,193	-	30,193	30.6%
Miami	1,850,678	(204)	-	(204)	0.0%
Casa Grande	10,934,895	4,976,271	1,902,034	3,074,237	28.1%
Stanfield	131,926	8,331	11,382	(3,051)	-2.3%
White Tank	1,244,735	321,593	231,069	90,524	7.3%
Ajo	470,994	88,105	-	88,105	18.7%
Coolidge	2,214,952	488,803	-	488,803	22.1%
Lakeside	2,588,943	201,349	(35,711)	237,060	9.2%
Overgaard	1,686,342	(62,249)	1,550	(63,799)	-3.8%
Sedona	3,521,124	2,177,283	390,233	1,787,049	50.8%
Pinewood	1,047,463	118,503	7,420	111,083	10.6%
Rimrock	507,981	253,382	235,950	17,432	3.4%
	$ 43,362,605	$13,816,149	$ 5,411,507	$ 8,404,643	19.4%

Staff's proposed increases by system are:

	Staff Proposed				
	Current Revenues	Proposed Increase	Less: Surcharges	Net Increase	% Increase
Superstition	$ 11,939,904	$ 3,364,063	$ 2,474,101	$ 889,962	7.5%
Bisbee	1,723,475	209,895	-	209,895	12.2%
Sierra Vista	1,461,897	12,337	-	12,337	0.8%
San Manuel	812,359	337,401	193,478	143,923	17.7%
Oracle	1,126,215	(36,270)	-	(36,270)	-3.2%
Winkelman	98,722	23,087	-	23,087	23.4%
Miami	1,850,678	(140,384)	-	(140,384)	-7.6%
Casa Grande	10,934,895	3,873,405	1,902,034	1,971,371	18.0%
Stanfield	131,926	(10,396)	11,382	(21,778)	-16.5%
White Tank	1,244,735	193,884	231,069	(37,185)	-3.0%
Ajo	470,994	74,025	-	74,025	15.7%
Coolidge	2,214,952	162,515	-	162,515	7.3%
Lakeside	2,588,943	(40,927)	(35,711)	(5,216)	-0.2%
Overgaard	1,686,342	(225,184)	1,550	(226,733)	-13.4%
Sedona	3,521,124	2,014,822	390,233	1,624,589	46.1%
Pinewood	1,047,463	(194,410)	7,420	(201,830)	-19.3%
Rimrock	507,981	35,767	235,950	(200,183)	-39.4%
	$ 43,362,605	$ 9,653,631	$ 5,411,507	$ 4,242,124	9.8%

And RUCO's proposed increases by system are:

	RUCO Proposed				
	Current Revenues	Proposed Increase	Less: Surcharges	Net Increase	% Increase
Superstition	$ 11,939,904	$ 2,110,097	$ 2,474,101	$ (364,004)	-3.0%
Bisbee	1,723,475	275,855	-	275,855	16.0%
Sierra Vista	1,461,897	(140,506)	-	(140,506)	-9.6%
San Manuel	812,359	321,629	193,478	128,151	15.8%
Oracle	1,126,215	(54,952)	-	(54,952)	-4.9%
Winkelman	98,722	10,913	-	10,913	11.1%
Miami	1,850,678	265,861	-	265,861	14.4%
Casa Grande	10,934,895	3,625,115	1,902,034	1,723,081	15.8%
Stanfield	131,926	23,175	11,382	11,793	8.9%
White Tank	1,244,735	312,786	231,069	81,717	6.6%
Ajo	470,994	51,665	-	51,665	11.0%
Coolidge	2,214,952	(41,763)	-	(41,763)	-1.9%
Lakeside	2,588,943	(106,497)	(35,711)	(70,786)	-2.7%
Overgaard	1,686,342	(250,510)	1,550	(252,060)	-14.9%
Sedona	3,521,124	952,966	390,233	562,733	16.0%
Pinewood	1,047,463	21,781	7,420	14,361	1.4%
Rimrock	507,981	362,746	235,950	126,796	25.0%
	$ 43,362,605	$ 7,740,361	$ 5,411,507	$ 2,328,854	5.4%

V. Supplemental Response to Mr. Igwe

Tank Maintenance Expense

Q. WHY ARE YOU ADDRESSING TANK MAINTENANCE EXPENSE IN THIS PHASE OF YOUR REJOINDER TESTIMONY?

A. I am addressing the issue of tank maintenance expense in this phase of my rejoinder testimony because, given the short time period allotted for preparing rejoinder, the Company was unable to complete an analysis of tank maintenance costs in response to Staff's testimony regarding this issue in time to include it in the revenue requirement phase of rejoinder.

Q. WHAT DOES THE COMPANY'S ANALYSIS SHOW?

A. The Company's analysis, attached hereto as rejoinder Schedule JMR-RJ5 and supported by rejoinder Exhibit JMR-RJ7, shows that the Company's proposed

per-square foot cost of tank painting is reasonable. One of Staff's reasons for rejecting the Company's proposed tank maintenance accrual is Mr. Igwe's claim that the Company's proposed per-square foot cost of tank painting is based on a single vendor's estimate that was not subject to competitive bidding (see Igwe sb, p. 11, at 21 – 23). However, the analysis shown in rejoinder Schedule JMR-RJ5 shows that the Company's proposed per-square foot painting costs in this proceeding are equal to, or less, than the actual contractual per-square foot painting costs the Company incurred during the test year.

Q. PLEASE EXPLAIN SCHEDULE JMR-RJ5.

A. Schedule JMR-RJ5 provides the details of three tank painting contracts executed by the Company in 2007. These contracts, as well as other tank painting contracts for prior years, were provided to Staff in response to Staff data request GTM 8-5, and are attached as Exhibit JMR-RJ7. Column D of Schedule JMR-RJ5 shows the total 2007 contractual tank painting costs for four of the Company's tanks. Columns E through I of Schedule JMR-RJ5 show the calculation of an estimate of the cost of painting these tanks based on the Company's proposed per-square foot tank painting costs in this proceeding. To summarize, column D, line 10 shows the actual contractual costs, and column I, line 10 shows what the costs would be based on the Company's proposed tank painting costs in this proceeding. As shown in the schedule, the Company's proposed tank painting costs are approximately $13,600 *less* than the 2007 actual contractual costs.

Q. SHOULD THE ANALYSIS SHOWN IN SCHEDULE JMR-RJ5 ALLEVIATE ANY CONCERNS STAFF HAS REGARDING THE REASONABLENESS OF THE COMPANY'S PROPOSED PER-UNIT TANK PAINTING COSTS IN THIS PROCEEDING?

A. Yes. The analysis shows that the actual 2007 contractual tank painting costs were greater than, or equal to the Company's proposed costs embedded in its revised accruals in this proceeding.

Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY?

A. Yes.

EXHIBIT

JMR-RJ7

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Comparison of Company Proposed Tank Painting Costs vs. Actual

	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
	Actual Tank Painting Costs Based on 2007 Contracts				Estimated Costs Based on Company's Proposed Tank Painting Costs					
Line No.	Contract Date	Vendor Name	Service Provided	Total Cost Per Contract	Interior Sq. Feet	Exterior Sq. Feet	Estimated Cost - Interior	Estimated Cost - Exterior	Total Estimated Cost	Difference - Actual Cost minus Estimated Cost
1										
2	10/3/2007	Arizona Coating Applicators	Coat interior of County Line Tank #1 - 1,000,000 gal.	$ 70,552	18,421	12,094	$ 3.83	$ 1.58	$ 70,552	$ (0)
3										
4	10/3/2007	Southwest Industrial, Inc.	Coat intererior & exterior of Red Cliff Tank - 100,000 gal.	$ 24,255	3,498	2,655	$ 4.22	$ 1.68	$ 19,222	$ 5,033
5										
6	10/3/2007	Southwest Industrial, Inc.	Coat interior & exterior of Unit 11A Tank - 100,000 gal.		3,523	3,014	$ 4.22	$ 1.68		
7			Coat interior & exterior of Northern Aire Tank - 40,000	$ 41,904	2,559	1,519	$ 4.22	$ 1.68	$ 33,281	$ 8,623
8										
9										
10										
11				$ 136,711					$ 123,056	$ 13,655
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SCHEDULE

JMR-RJ5

ARIZONA WATER COMPANY

WATER STORAGE TANK COATING CONTRACT

CONTRACTOR: Arizona Coating Applicators, Inc.

Address: 3531 West Lower Buckeye Road
Phoenix, Arizona 85009

DATE OF CONTRACT: October 3, 2007

SYSTEM: APACHE JUNCTION

W.A. #: N/A

DESCRIPTION OF WORK: Coat interior of County Line Tank #1 Tank, in Apache Junction, AZ, 1,000,000-gallon, 32' H X 74' D. Near white abrasive blast cleaning.

WORK SHALL BE COMPLETED ON OR BEFORE 90 CALENDAR DAYS AFTER COMMENCEMENT NOTICE IS ISSUED.

(See Paragraph 3, below.)

TOTAL COST (including taxes): $70,552.00

THIS CONTRACT is made by and between ARIZONA WATER COMPANY, an Arizona corporation (the "Company"), and the CONTRACTOR named above.

1. The Contractor hereby certifies that it has read the attached copies of the Company's *General Conditions of Contract for Tank Coating* ("General Conditions of Contract") and *Water Storage Tank Coating Specifications* ("Specifications"), and understands that all provisions of said General Conditions of Contract and Specifications apply to work covered under this Contract, and which, by this reference, are incorporated herein.
2. The Contractor agrees, as an independent contractor, to furnish all of the labor, tools and certain materials required to perform the work described above for the Company, in accordance with the General Conditions of Contract and the Specifications.
3. Work shall not commence under this Contract until a written Commencement Notice has been given to the Contractor by the Company. In the event the Commencement Notice is not given to the Contractor by the Company within ninety (90) calendar days from the date of this Contract, the Contractor has the option to cancel the Contract by giving written notice of cancellation to the Company.
4. Except as otherwise herein provided, no charge for any extra work and/or material will be allowed unless the same has been ordered in writing by the Company's Authorized Representative, and the price stated in such order.

Upon the satisfactory completion of the work within the Contract time limit, the Company agrees to pay the Contractor as provided in the General Conditions of Contract.

SPECIAL CONDITIONS:

Interior coating inspections shall be made by an Independent Coating Inspector specified by the Company. The Contractor shall be responsible for the scheduling of inspections. Payment will not be made until the final report from the Independent Coating Inspector detailing the satisfactory completion of the work is received in the Company's Phoenix office.

ARIZONA WATER COMPANY Company	ARIZONA COATING APPLICATORS, INC. Contractor
By: Richard W. Nordhausen	By:
Title: VP - OPERATIONS	Title: President

Arizona Coating Applicators INC.

ARIZONA LICENSE
#082593 #082594
CALIFORNIA LICENSE
#640702
NEVADA LICENSE
#45764 #45818
NACE INSPECTOR
#3943

Invoice

BILL TO
Arizona Water Company PO BOX 29006 Phoenix, AZ 85038-9006

DATE	INVOICE #
1/3/2008	2906

P.O. NO.	TERMS	PROJECT
Contract	Net 30	07-091 Apache Jct 74'x32' L.

QUANTITY	DESCRIPTION	RATE	AMOUNT
	Contract dated October 3, 2007 System: Apache Junction W/A#: N/A		
	Description of Work: Coat interior of County Line Tank #1 Tank in Apache Junction, AZ 1,000,000 gallon, 32' H x 74' D. Near white abrasive blast cleaning.	70,552.00	70,552.00
	100% Completion 01-03-2008		
	Thank you for your business. PD 1/3/08		

Remit Payment To: P.O. Box 27425 Phoenix, AZ 85061-7425

Total $70,552.00

Post Office Box 27425 • Phoenix, Arizona 85061-7425
(602) 263-9065 • FAX (602) 272-5114

ARIZONA WATER COMPANY

WATER STORAGE TANK COATING CONTRACT

CONTRACTOR:	Southwest Industrial Coatings, Inc.	DATE OF CONTRACT:	October 3, 2007
Address:	755 South Rainbow Trail	SYSTEM:	PINEWOOD
	Cottonwood, Arizona 86326	W.A. #:	N/A

DESCRIPTION OF WORK:

Coat exterior of Unit 11A Tank, in Pinewood, AZ, 100,000-gallon, 40' H X 21' D. Level 2 surface preparation per attached specifications.

Coat interior of Unit 11A Tank, in Pinewood, AZ, 100,000-gallon, 40' H X 21' D. Near white abrasive blast cleaning.

Coat exterior of Northern Aire Tank, in Pinewood, AZ, 40,000-gallon, 8' H X 30' D. Level 2 surface preparation per attached specifications.

Coat interior of Northern Aire Tank, in Pinewood, AZ, 40,000-gallon, 8' H X 30' D. Near white abrasive blast cleaning.

WORK SHALL BE COMPLETED ON OR BEFORE 90 CALENDAR DAYS AFTER COMMENCEMENT NOTICE IS ISSUED.

(See Paragraph 3, below.)

TOTAL COST (including taxes): $41,904.05

THIS CONTRACT is made by and between ARIZONA WATER COMPANY, an Arizona corporation (the "Company"), and the CONTRACTOR named above.

1. The Contractor hereby certifies that it has read the attached copies of the Company's *General Conditions of Contract for Tank Coating* ("General Conditions of Contract") and *Water Storage Tank Coating Specifications* ("Specifications"), and understands that all provisions of said General Conditions of Contract and Specifications apply to work covered under this Contract, and which, by this reference, are incorporated herein.
2. The Contractor agrees, as an independent contractor, to furnish all of the labor, tools and certain materials required to perform the work described above for the Company, in accordance with the General Conditions of Contract and the Specifications.
3. Work shall not commence under this Contract until a written Commencement Notice has been given to the Contractor by the Company. In the event the Commencement Notice is not given to the Contractor by the Company within ninety (90) calendar days from the date of this Contract, the Contractor has the option to cancel the Contract by giving written notice of cancellation to the Company.
4. Except as otherwise herein provided, no charge for any extra work and/or material will be allowed unless the same has been ordered in writing by the Company's Authorized Representative, and the price stated in such order.

Upon the satisfactory completion of the work within the Contract time limit, the Company agrees to pay the Contractor as provided in the General Conditions of Contract.

SPECIAL CONDITIONS:

Interior coating inspections shall be made by an Independent Coating Inspector specified by the Company. The Contractor shall be responsible for the scheduling of inspections. Payment will not be made until the final report from the Independent Coating Inspector detailing the satisfactory completion of the work is received in the Company's Phoenix office.

ARIZONA WATER COMPANY	SIC INC.
Company	Contractor
By: Richard W. Henderson	By: Richard Church
Title: VP - OPERATIONS	Title: President

SIC
Southwest Industrial Coatings, Inc.
755 S. Rainbow Trail
Cottonwood, AZ 86326

Invoice

Date	Invoice #
12/5/2007	401

Bill To
Arizona Water Company Attn: Tom Harrell PO Box 29006 Phoenix, AZ 85038

P.O. No.	Terms	Project
Pinewood, AZ	Net 15	Munds Park/Pinewo...

Description	Qty	Rate	Amount
Sandblasting & Painting the interior of one (1) 100,000 gallon water storage tank.	1	13,675.00	13,675.00
Hydroblast & Painting the exterior of one (1) 100,000 gallon water storage tank.	1	4,925.00	4,925.00
Bonding at 2.5%	1	465.00	465.00
Repair on interior floor per estimate number 242	1	8,435.37	8,435.37

PD 12/20/07 (APPROX)
STILL OWED $12,948
FOR 40K TANK.

Thanks again for your business.

Subtotal	$27,500.37
Sales Tax (6.89%)	$0.00
Total	$27,500.37
Payments/Credits	$0.00
Balance Due	$27,500.37

SIC
Southwest Industrial
----Coatings, Inc.----
755 S. Rainbow Trail
Cottonwood, AZ 86326

Invoice

Date	Invoice #
1/2/2008	405

Bill To
Arizona Water Company Attn: Tom Harrell PO Box 29006 Phoenix, AZ 85038

P.O. No.	Terms	Project
	Net 15	Munds Park/Pinewo...

Description	Qty	Rate	Amount
Sandblasting & painting of one 40 K water storage tank in Pinewood, AZ per specifications given.		12,948.00	12,948.00
Bonding at 2.5%		323.70	323.70

PD 1/08

PAID IN FULL
FOR PW

Thanks again for your business.

Subtotal	$13,271.70
Sales Tax	$0.00
Total	$13,271.70
Payments/Credits	$0.00
Balance Due	$13,271.70

ARIZONA WATER COMPANY

WATER STORAGE TANK COATING CONTRACT

CONTRACTOR:	Southwest Industrial Coatings, Inc.	DATE OF CONTRACT:	October 3, 2007
Address:	755 South Rainbow Trail	SYSTEM:	SEDONA
	Cottonwood, Arizona 86326	W.A. #:	N/A

DESCRIPTION OF WORK: Coat exterior of Red Cliff Tank, in Sedona, AZ, 100,000-gallon, 24' H X 27' D. Level 2 surface preparation per attached specifications.

Coat interior of Red Cliff Tank, in Sedona, AZ, 100,000-gallon, 24' H X 27' D. Near white abrasive blast cleaning.

WORK SHALL BE COMPLETED ON OR BEFORE 90 CALENDAR DAYS AFTER COMMENCEMENT NOTICE IS ISSUED.

(See Paragraph 3, below.)

TOTAL COST (including taxes): $24,254.58

THIS CONTRACT is made by and between ARIZONA WATER COMPANY, an Arizona corporation (the "Company"), and the CONTRACTOR named above.

1. The Contractor hereby certifies that it has read the attached copies of the Company's *General Conditions of Contract for Tank Coating* ("General Conditions of Contract") and *Water Storage Tank Coating Specifications* ("Specifications"), and understands that all provisions of said General Conditions of Contract and Specifications apply to work covered under this Contract, and which, by this reference, are incorporated herein.
2. The Contractor agrees, as an independent contractor, to furnish all of the labor, tools and certain materials required to perform the work described above for the Company, in accordance with the General Conditions of Contract and the Specifications.
3. Work shall not commence under this Contract until a written Commencement Notice has been given to the Contractor by the Company. In the event the Commencement Notice is not given to the Contractor by the Company within ninety (90) calendar days from the date of this Contract, the Contractor has the option to cancel the Contract by giving written notice of cancellation to the Company.
4. Except as otherwise herein provided, no charge for any extra work and/or material will be allowed unless the same has been ordered in writing by the Company's Authorized Representative, and the price stated in such order.

Upon the satisfactory completion of the work within the Contract time limit, the Company agrees to pay the Contractor as provided in the General Conditions of Contract.

SPECIAL CONDITIONS:

Interior coating inspections shall be made by an Independent Coating Inspector specified by the Company. The Contractor shall be responsible for the scheduling of inspections. Payment will not be made until the final report from the Independent Coating Inspector detailing the satisfactory completion of the work is received in the Company's Phoenix office.

ARIZONA WATER COMPANY Company	SIC INC. Contractor
By: Richard W. Henderson	By: Richard Church
Title: VP-OPERATIONS	Title: President

APPROVED
3/18/2008 03:56 PM
Joe Harris

Southwest Industrial
----Coatings, Inc.----
755 S. Rainbow Trail
Cottonwood, AZ 86326

APPROVED
3/18/2008 06:28 PM
Rick Henderson

Invoice

Date	Invoice #
3/11/2008	416

Bill To
Arizona Water Company PO Box 29006 Phoenix, AZ 85038

P.O. No.	Terms	Project
Red Cliff	Net 15	Red Cliff Sedona 2...

Description	Qty	Rate	Amount
Sandblasting & Painting the interior of one (1) 27' Dia x 24' High Water Storage Tank.	1	13,883.00	13,883.00
Hydroblast & Painting the exterior of one (1) 27' Dia x 24' High Water Storage Tank.	1	4,303.00	4,303.00
Bonding @ 2.5%	1	454.65	454.65
CHANGE ORDER ITEMS PER GREG SPRINKLES REQUEST AND APPROVAL Re-blast interior floor & 6' of bottom ring due to leaky valve. *Note: SIC had to completely remove all existing "Wet" abrasives off the floor to continue with the re-blast.	1	3,226.00	3,226.00
Replace float bowls and guide cables on Munds Park Tank & Red Cliff Tank.	2	825.00	1,650.00
Apply -5-7 mils of primer on the exterior roof due to excessive oxidation and rust.	1	525.00	525.00

Thank you for your business. We truly appreciate it and enjoy working for you!

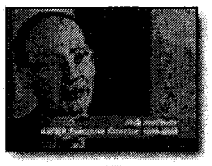
Subtotal	$24,041.65
Sales Tax	$0.00
Total	$24,041.65
Payments/Credits	$0.00
Balance Due	$24,041.65

American Water Works Association
The Authoritative Resource on Safe Water

AWWA's Story

The year of AWWA's birth was 1881, and what a year it was.

The Boer War was raging in South Africa. The exploits of the Apache medicine man Geronimo in the Southwest forced the US and Mexican governments to commit 8,000 troops to ferret him out of his mountain stronghold. In Tombstone, Ariz., the Gunfight at the OK Corral captured the nation's imagination as Wyatt Earp and Doc Holliday vanquished the Clantons. In New Mexico, Billy the Kid bust out of jail, killing two deputies. A couple of months later, he was ambushed and killed by Sheriff Pat Garrett, spawning a new legend.



Watch the History of AWWA Video
(Note: the video is 27 minutes in duration)

Listen to audio-only file in mp3 format (right click to save)

1881 is the year that Clara Barton found the American Red Cross. Pope John XXIII, William Boeing, and Pablo Picasso were born. Fyodor Dostoevsky, Benjamin Disraeli, and Jim Bridger died. It is also a year in which three US presidents occupied the White House — Rutherford B. Hayes, James A. Garfield (assassinated by a disgruntled jobseeker), and Chester A. Arthur.

A group of 22 men agree to exchange water information

Against this background, another event occurred in 1881—it didn't attract attention, but it would have a profound effect on the public's health and standard of living. On March 29 in Engineers' Hall on the campus of Washington University in St. Louis, Mo., 22 men representing water utilities in Illinois, Indiana, Iowa, Kansas, Kentucky, and Tennessee founded the American Water Works Association. They adopted a constitution that stated the purpose of the association as being "for the exchange of information pertaining to the management of water-works, for the mutual advancement of consumers and water companies, and for the purpose of securing economy and uniformity in the operations of water-works." That first meeting covered topics ranging from the "poisoning" of water by lead pipes to the efficacy of using corncobs for fuel.

The 1880s were interesting times, particularly in terms of advancements in science and technology. The first hydroelectric plant began operating in Wisconsin in 1882, and the forerunner of the gasoline engine was invented in 1883. By 1884, Louis Pasteur and Robert Koch had proven the "germ theory" and had isolated the causative agent of cholera, Vibrio cholerae. This was 30 years after the British physician John Snow stated that cholera was caused by contaminated drinking water. The last major cholera outbreak in the United States was in 1877, but by that time a new killer was afoot—typhoid fever. By 1890, the typhoid death rate in some cities exceeded 100 per 100,000 people.

AWWA members were keeping pace with these developments and their effect on water supplies. The conference proceedings of the 1880s–90s are replete with articles on the importance of source water protection and improved filtration to protect public health.

In 1892, the association issued a "Memorial to Congress Praying for a National Law

EXHIBIT
A-24
ADMITTED

to Restrict Pollution of Streams From Which Water Supplies of Cities are Drawn"—the association's first foray into the legislative process. In 1893, AWWA supported passage of the Interstate Quarantine Act for controlling the interstate transfer of communicable diseases.

AWWA gains an international presence

By the turn of the century, AWWA boasted 354 members and a budget of $2,380. Because its proceedings were in demand internationally, the association began selling them for a dollar apiece. In 1901, a paper on using ozone for disinfection was presented immediately after George Warren Fuller demonstrated how much lower the typhoid death rates were for cities that used groundwater or filtered surface water. The average human life span in North America was only 47 years of age, and the infant mortality rate was a tragic 140 per 1,000 live births—far higher than many other countries.

A prime reason for this was the continuing high death rate for typhoid fever, which had recently soared to 120 per 100,000 people in Pittsburgh, Pa.

AWWA continued to provide information to its members and government officials on the importance of source water protection, proper water treatment, and the need for adequate state authority to protect public health.

From 1900 to 1913, the portion of the US population that was served with filtered water increased eightfold, and the typhoid death rate plummeted by 55%. In 1914, the US Public Health Service adopted the first microbiological standards for drinking water to implement the Interstate Quarantine Act. AWWA urged its members to comply with the standard even though it only applied to water served aboard trains and vessels that crossed state lines.

The association continued to provide leadership, champion public health, and publish badly needed information. By 1907 there were enough Canadian members to justify having the annual convention in Toronto, Ont. Another landmark occurred in May 1908 when AWWA adopted a set of "Standard Specifications for Cast Iron Water Pipes and Special Castings" (it took 22 years to develop).

In 1913, the Chemical and Bacteriological Division was formed to give a focus to the rapidly expanding areas of water analysis and treatment. In 1914, a new constitution was approved permitting the formation of geographic sections, which allowed for more local activities, emphasis on regional issues, and increased member participation. The New York Section was founded that same year, and in 1916 the Canada Section was formed to represent all Canadian members.

Quarterly journal replaces annual proceedings

The need for information continued to grow as chlorination and other treatment techniques were introduced. A quarterly version of the JOURNAL was introduced in 1914 to replace the annual proceedings. Abel Wolman became editor in 1919 and made the JOURNAL bimonthly, and then monthly in 1924. The Standardization Council was formed in 1920 and developed AWWA's first major publication. Titled Water Works Practice, it was a treasure trove of water knowledgencollected from 324 experts (including Abel Wolman, who was the editor).

As member expectations grew and activities increased, it became evident that volunteers alone could not manage the workload. During the 1930s, AWWA staff members were hired, and a headquarters office was established in New York, N.Y., a city that housed most of the engineering and scientific societies at that time. Harry Jordan was the first executive director—a post he held for 22 years. At the end of his tenure, typhoid fever had disappeared from North America, thanks in large part to the activities of AWWA.

AWWA's headquarters moved to Denver, Colo., in 1974, and the association has continued to grow in term of members, budget, active volunteers, publications, standards, events, and almost anything else you can measure. We now have more than 57,000 members in 43 sections—and in 100 countries outside of North America. These members provide about 85% of the North American population with safe drinking water.

In tandem with this, AWWA now provides more timely, quality information to more water professionals than any other organization in the world. We are recognized as an effective voice by the US Congress and others on issues dealing with water policy and public health. The association launched the Awwa Research Foundation (renamed in 2009 as the Water Research Foundation) to focus on much needed water supply and treatment issues and Water For People to help provide safe drinking water and sanitation to the poorest of the poor. Both are now successful, independent organizations.

The average life span in North America today is about 77 years of age, and the infant mortality rate is about six per 1,000 live births—far different from conditions in 1900. The Centers for Disease Control and Prevention attribute much of the improvement to advances in water treatment and sanitation.

AWWA and its dedicated members can take pride in the role they have played. As we congratulate ourselves, let's not forget to pay homage to those 22 visionaries who started the association with little else but large amounts of enthusiasm and a common mission of protecting public health through continual improvement.

We also owe a debt of gratitude to those who followed — Fuller, Wolman, Jordan, and the countless others who saw to it that the mission was fulfilled.

AWWA has changed in the past 125 years, and the issues we face in the future will change as well. The one constant is our legacy — the mission of AWWA. Now, it's up to us to fulfill the mission.

Note: This story by Jack W. Hoffbuhr, former AWWA Executive Director, excerpted from the March 2006 Journal AWWA.

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American Water Works Association

The Authoritative Resource on Safe Water

About AWWA

Founded in 1881, AWWA is the authoritative resource on safe water, with more than 60,000 members worldwide sharing knowledge on water resource development, water and wastewater treatment technology, water storage and distribution, and utility management and operations. AWWA provides knowledge, information and advocacy to improve the quality and supply of water in North America and beyond and advances public health, safety and welfare by uniting the efforts of the full spectrum of the water community.

AWWA is an international nonprofit and educational society and the largest and oldest organization of water professionals in the world. Members represent the full spectrum of the water community: treatment plant operators and managers, scientists, environmentalists, manufacturers, academicians, regulators, and others who hold genuine interest in water supply and public health. Membership includes more than 4,600 utilities that supply water to roughly 180 million people in North America. Through our collective strength we become better stewards of water for the greatest good of the people and the environment.

Watch "The Work Before Us" video, first shown at the 2009 Annual Conference Opening General Session, to discover the spirit of public service that motivates AWWA members.

Play ▶

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American Water Works Association

The Authoritative Resource on Safe Water

Frequently Asked Questions

How do I become an AWWA member?

AWWA membership helps you stay involved, informed, connected, and competitive. Visit AWWA's Membership Page for more information on the many benefits of AWWA membership and the many ways you can join.

How can I get in touch with my Section? How can I get more Section information?

Section Services provides a wide variety of general and specific services to the Associations' 43 sections. The Section Services Page provides local Section contact information, a list of AWWA staff available to assist Sections, and many other resources for AWWA Sections and Section volunteers.

How can I volunteer for an AWWA Council, Committee, or Division?

The success of AWWA depends on our many volunteers. For more information on the many different ways to get involved in AWWA, visit the Volunteer Involvement Page.

Where can I get Only Tap Water Delivers materials?

Only Tap Water Delivers materials are available for AWWA member utilities. If your utility is an AWWA member and you have not received the materials, contact Greg Kail at gkail@awwa.org or 303-734-3410.

My login to the AWWA Web site is not working, what should I do?

For any Web site issues, please submit your comment using the Contact Us form and select Website. If you would like to speak with a customer service representative, please call 800.926.7337 (303.794.7711 if outside the U.S and Canada).

Who founded AWWA (when, where, why)?

AWWA was founded in 1881 at Washington University in St. Louis by 22 men representing water utilities in Illinois, Indiana, Iowa, Kansas, Kentucky, and Tennessee. They adopted a constitution that stated the purpose of the association as being "for the exchange of information pertaining to the management of water-works, for the mutual advancement of consumers and water companies, and for the purpose of securing economy and uniformity in the operations of water-works."

What is the purpose/mission statement of AWWA?

AWWA is the authoritative resource on safe water, providing knowledge, information and advocacy to improve the quality and supply of water in North America and beyond. AWWA advances public health, safety and welfare by uniting the efforts of the full spectrum of the water community.

How many members does AWWA have?

AWWA currently has more than 60,000 members, 4,700 utility members.

How can I present at an AWWA conference?

AWWA issues calls for papers prior to all of our conferences.

Where is AWWA located?

AWWA is headquartered at 6666 W. Quincy Ave., Denver, CO 80235-3098. Our Government Affairs office is at 1300 Eye St. NW, Suite 701W, Washington, D.C. 20005-3314. Call the Denver office at 303.794.7711 and the D.C. office at 202.628.8303.

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American Water Works Association
The Authoritative Resource on Safe Water

How AWWA Functions

Governance

- Officers and Executive Committee
- Directors
- How AWWA Functions
- How AWWA Is Governed
- Past Presidents
- Governance, Council, and Committee Structure

AWWA is organized to permit its members and staff to coordinate their efforts in the fields of science and technology, education, public information, government affairs, and other key areas of involvement. The Association has grown from the 22 men who organized it in March 1881, when the US contained less than 1,000 public water supply systems, to its present membership of more than 60,000.

AWWA is comprised of 43 sections. Each section functions under the provisions of its own bylaws and selects its own officers. Every section holds at least one meeting a year, attended by anywhere from 250 to more than 2,000 members and interested parties, at which papers are presented, information and ideas exchanged, committees convened, and (sometimes) products exhibited. This and the many other section activities are for the purpose of improving water utility operation, management, and design.

AWWA activities also develop through the efforts of various councils, divisions, and committees. All of the divisions and most of the 250-plus working committees carry out their assigned projects under the direction of the Association's seven councils. Other committees that report directly to the board are classified as standing committees; administrative and ad hoc committees may report to the Executive Committee or an Association council.

Seven Councils

Seven councils operate in accordance with procedures approved by the AWWA Board of Directors

The Administrative & Policy Council

Oversees broad aspects of Association activities particularly related to all matters other than standards and technical and professional concepts, particularly the Association's Bylaws and Governing Documents.

The International Council

Develops and coordinates AWWA's international policies and activities, actively promoting Association participation in the global drinking water community, representing the interests of the international members in the governance of AWWA, and stimulating participation of international members and organizations within the Association. The council also coordinates with other councils and volunteer units of the Association to enhance international participation and understanding.

The Manufacturers/Associates Council

Provides responsible representation for, and involvement of, associate members, which include manufacturers, manufacturer reps, and contractors; develops programs and activities for these members and encourages their membership and participation in AWWA; provides policy input and develops responses and commitment within the framework of AWWA on matters affecting these members.

The Public Affairs Council

Plans and coordinates public information and public relations programs and assists where applicable in public education and public involvement activities.

The Standards Council

Develops standards and manuals according to procedures outlined in the Governing Documents. Standards are documents that serve as a base for contract specifications for purchases of materials and services. Manuals contain useful information, practices, and recommendations designed to assist operating personnel as well as purchasers.

The Technical & Educational Council

Coordinates the work of the eight divisions and has responsibility for advancing AWWA activities in design, construction, operation, and management of water utilities except in matters pertaining to standards.

The Water Utility Council

Develops action programs to initiate, evaluate, respond, and comment within the framework of Association policy on legislative, regulatory, and other matters directly affecting water utilities in order to encourage provision of better water service to the consuming public. The council also brings to the attention of other councils and committees of the Association policies and procedures that fall within their areas of interest.

Forums

Public Officials Forum (POF)

Represents a cross-section of elected or appointed public officials. The POF creates alliances with other organizations representing public officials; advises AWWA on programs and services as requested by Executive Committee and promotes the value of utility membership in AWWA in their and other communities which includes the involvement of utility employees in AWWA committees at both the Association and Section levels.

Eight Divisions

AWWA members who are particularly interested in specific categories of water utility operation participate in one or more of the following eight divisions of the Technical & Educational Council.

Distribution and Plant Operations

To advance and disseminate knowledge of drinking water distribution systems and water treatment plant facilities operation and maintenance. This includes the latest technologies for infrastructure replacement, rehabilitation of these facilities, latest developments and advances for customer metering practices, cross-connection control, energy management methods, and leak detection procedures and equipment. Emphasis is placed on the advancement of the water utility personnel as the prime concern of this division by development of operational manuals and handbooks as well as technical sessions covering distribution and plant facilities

operations.

Engineering and Construction

To advance and disseminate information on matters of water utility design, engineering, construction and operation practices. The division is dedicated to promoting professionalism and partnering between engineers, technical specialists, contractors, manufacturers, and utility owners to achieve customer satisfaction.

Management

To advance and disseminate knowledge concerned with improving water utility practices in finance, management, commercial and accounting procedures, and other related matters.

Small Systems

To serve as a focal point for all AWWA activities related to small systems and to establish goals and recommend policies to encourage active participation by other councils, committees, and sections. To promote membership through programs, services, continuing education, awards, and other methods and to evaluate issues being faced by small systems and then prepare recommendations and guidelines for programs, tools, and services to be evaluated for implementation by the Association and the sections.

Water Conservation

To increase understanding and practical implementation of water use efficiency.

Water Quality and Technology

To advance and disseminate knowledge and technology related to achieving the highest-quality water by: (1) fostering investigations of the physical, chemical, and microbiological contaminants that affect the quality of water and its suitability for use; (2) promoting the development of water quality monitoring systems and laboratory measurement methods for assessment of water quality from the source to the consumer's tap; (3) promoting use of new technologies and evaluation of alternative methods of water treatment to find those that are most effective and economical to use.

Water Resources

To advance and disseminate knowledge tending to improve practices in the orderly investigation, development, conservation, and protection of surface and groundwaters, which are actual or potential sources of water supplies.

Water Science and Research

To advance, promote, and disseminate scientific and technical research to assure the provision of drinking water of unquestionable quality and sufficient quantity by: (1) identifying and communicating research needs and results related to water supply, treatment, and distribution; (2) encouraging basic and applied research by water utilities, educational institutions, consultants, manufacturers, government agencies, and other appropriate entities; and (3) advancing programs and opportunities for student members.

The eight divisions cooperate on development of technical manuals, reports, specialty conferences, and technical sessions at the annual conference that deal with their own areas of interest. Each division has the authority to undertake studies and investigations within its sphere of interest and appoint working committees that document progress through reports to the Technical & Educational Council, which

considers them and recommends further action.

250 Committees-How They Work

Committees are the right arm of AWWA. Although the Association employs a staff to handle the administrative details of the organization, it is through committee work that its basic objectives are attained. It is through committee work that the best minds in the water utility field are put to work at solving the important problems that face the profession. It is through the voluntary effort of committee members that the public interest is served, justifying the Association's classification as a nonprofit scientific and educational organization dedicated to public service.

The committees of AWWA, organized under the Board of Directors, the councils, and the divisions, are made up of the members best qualified to attack the problems considered vital by these bodies. The committee chair, in each case, has been selected for his or her special interest in and knowledge of the subject at hand. The committee members have been chosen for their special knowledge as well as for their representation of an interested segment of the profession. All have been recommended for their known willingness to contribute to the advancement of water utility service to the public.

Due to budget and time consideration, most of the work done by committees is handled primarily by e-mail. Meetings are usually held in conjunction with the Association's annual conference, when committee members are available for a face-to-face discussion. The Association does include in its annual budget a small allowance to cover the expense of committee meetings that the Executive Committee feels are necessary to the proper conduct of Association programs or affairs. Expenses for such meetings are usually approved on the basis of having AWWA pay only those expenses that cannot be covered except through personal expenditure by the committee member.

The work of committees is of interest to all members of the Association. Thus, the progress reports usually presented at annual conference sessions should be prepared in writing for possible publication. Final reports of committees on critical issues are given priority consideration for publication in Journal AWWA.

Policy Statements

Committees preparing AWWA policy statements are faced with a twofold task. They are expected to provide the Association's considered opinion on a specific problem and to state that consensus in a manner that can be quickly read and understood by the general public. Therefore, it is extremely important that the committee reduce the essence of its policy to the fewest possible words -- no more than a short paragraph or two. If necessary, a one-page supporting statement can be attached.

In the final preparation of any statement, the editorial staff of the Association is given an opportunity to review the language so that the statement, as it goes through the approval process after membership comment, will require no further changes because of editorial style.

Conduct of Meetings

Generally speaking, the chair in the conduct of meetings should be guided by *Robert's Rules of Order*. To assure the most efficient use of the members' time, agendas for the meetings should be adhered to in the conduct of the meetings.

AWWA meetings are open to all members. It is recognized that some matters may require consideration more freely discussed in a closed meeting. Therefore, chairs are given the prerogative of calling for an executive session, at which point any guests are asked to leave.

If meetings are open, guests should be given the floor only upon invitation of the chair, and, of course, guests are in no case to be permitted to vote.

Communications

To afford the chair of any volunteer unit freedom in handling meetings without concern over recording actions, it is required that the Executive Director appoint a staff secretary in order to prepare the minutes of such meetings for the permanent records of the Association. The minutes prepared in such meetings need not record all the arguments pro and con but should include a report of all actions taken.

Between-meeting communications, which will usually comprise the major records of a volunteer unit, should be circulated to all members of the unit and to the headquarters' staff for filing. In addition, the Association publishes the following periodicals to keep members up-to-date on the latest information.

Journal AWWA

A monthly professional and technical journal, available both in print and on-line, that serves as the Association's official publication. The *Journal's* comprehensive articles and reports make it the most valuable continuing source of water supply information in the world.

Opflow

A monthly publication, both in print and on-line, focusing on effective operation and maintenance of water supply treatment and distribution system facilities.

AWWA Streamlines

AWWA Streamlines, launched in January 2009, is a biweekly electronic newsletter that merges two earlier electronic AWWA publications, *E-MainStream* and *WaterWeek*. All AWWA members are eligible to receive the *Streamlines* e-mail with links to the online publication. *Streamlines* brings readers timely and targeted stories about regulatory and legislative developments, industry issues and trends, utility practices, research and new technologies, along with information about the AWWA community and resources.

Other Publications

AWWA also publishes hardcover reference books, softcover manuals, course outlines, AWWA Conference proceedings on CD-ROM, and more than 125 standards that set the guidelines for major categories of products used by the water utility industry. Standards and manuals are available on CD-ROM.

Other, more specialized AWWA publications designed to inform selected segments of the membership include the Safe Drinking Water Advisor, a Compliance Assistance Resource on CD-ROM, and Sourcebook.

Internet

AWWA maintains an Internet World Wide Web site at www.awwa.org with more than 10,000 pages of information about Association and water industry activities and at www.drinktap.org, devoted to information for the general public. Periodical highlights, online discussion forums, job listings, and links to hundreds of utility home pages and other Internet resources and AWWA's collection of more than 5,000 technical documents in electronic format for immediate download enhance the productivity of AWWA volunteers.

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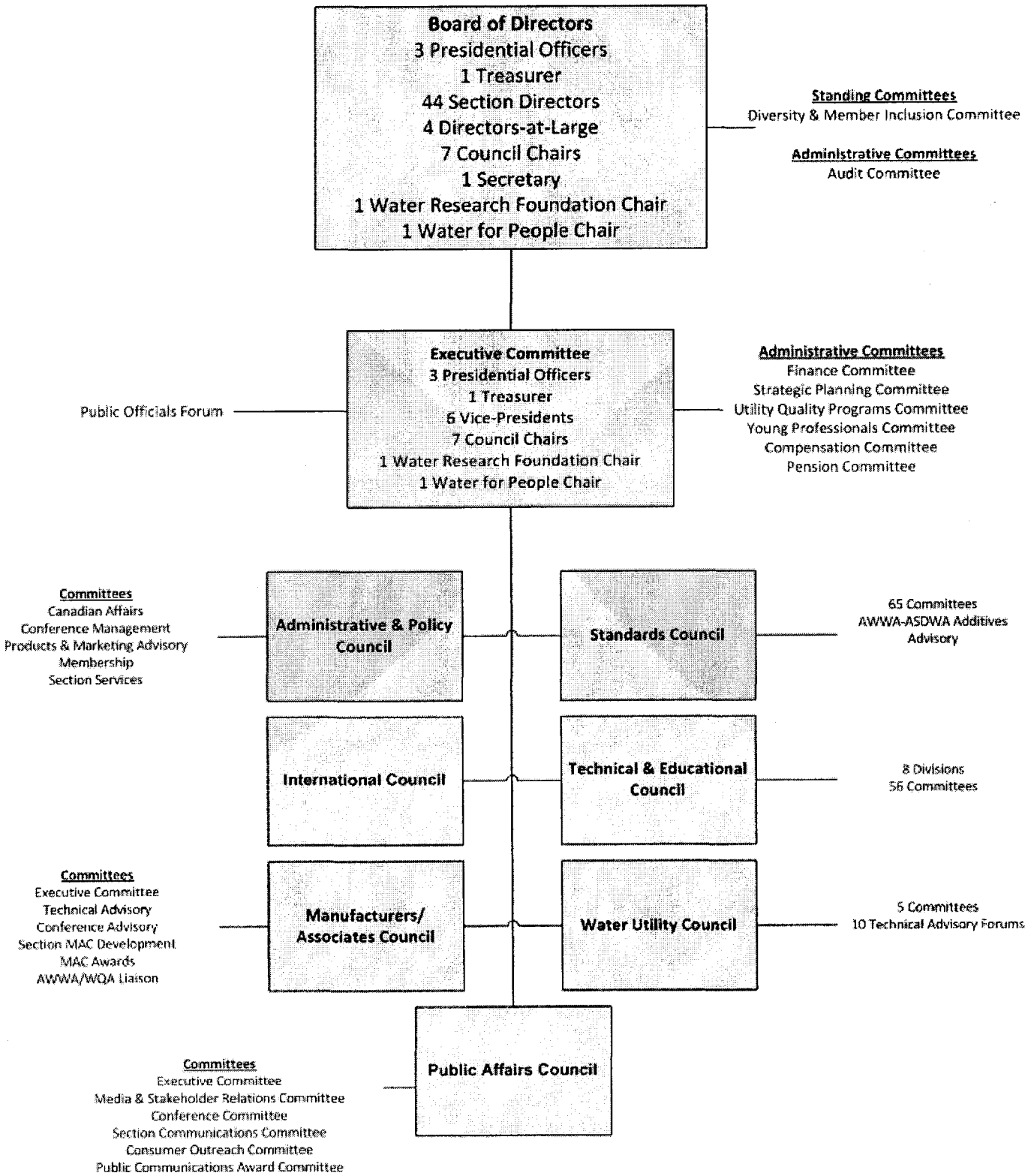
Governance, Council, and Committee Structure



American Water Works Association
The Authoritative Resource on Safe Water

How AWWA Is Governed

Governance

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- Governance, Council, and Committee Structure
- Meeting agendas

Leadership

Board of Directors

Establishing policies for the overall management and direction of Association affairs is the responsibility of the board. The board is comprised of the President, who acts as chair, President-Elect, Immediate Past-President, and Treasurer of the Association, the Chair of each Council, Chairs of the Water Research Foundation, and Water For People, one or more Directors elected by each of the 43 AWWA sections, six of whom also serve as Vice-Presidents, four Directors-at-Large, and the Executive Director, who serves as secretary. Board members serve for three years. Regular board meetings are held in January and at the annual conference.

Executive Committee

Between meetings of the Board of Directors, the Executive Committee exercises full authority in conducting Association business to the extent provided in the Bylaws. The committee is made up of the President, who acts as Chair, President-Elect, Immediate Past-President, Treasurer, six Vice-Presidents, Chairs of the Councils, Chairs of the Water Research Foundation, and Water For People, and the Executive Director, who serves as secretary.

Officers

The President is the chief elected officer of the Association and presides at all board and executive committee meetings and at the general session of the annual conference. He/She accedes to office for a term of one year after serving as President-Elect. An additional year is served as Immediate Past President. At each winter board meeting, the board electors elect a President-Elect, Vice-Presidents to fill any vacancies, and one or two Directors-at-Large. Each fourth year, a Treasurer, nominated by the Executive Committee, is confirmed by the board. The Presidential Officers are the President, President-Elect and Immediate Past-President.

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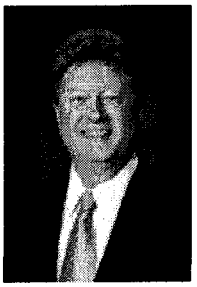
American Water Works Association
The Authoritative Resource on Safe Water

Directors

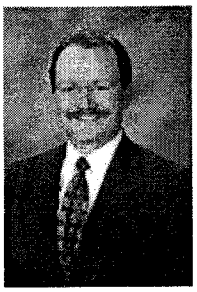


Danny Hutcherson
Ala.-Miss.
2007-2010
Global Key Account Manager for Engineering Partners
Hach Co.
Preston, MS

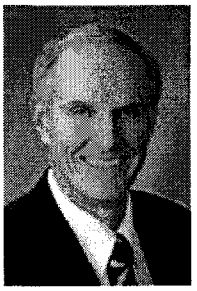
Daniel M. White
Alaska Section
2008-2011
Univ. of Alaska Fairbanks
Fairbanks, AK

Governance

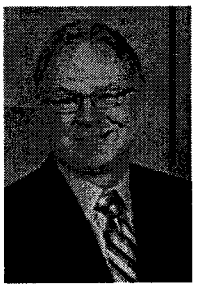
- Officers and Executive Committee
- Directors
- How AWWA Functions
- How AWWA Is Governed
- Past Presidents
- Governance, Council, and Committee Structure



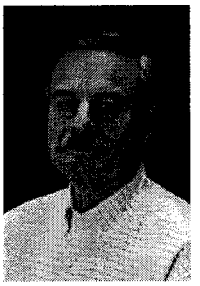
Mark R. Stratton
Arizona
2007-2010
General Manager
Metro Water District
Tucson, AZ



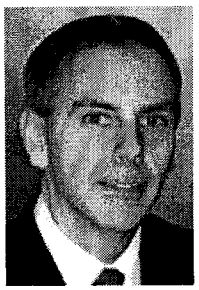
Bruce C. Buchanan
ACWWA,
A Section of AWWA
2008-2011
Touchie Engineering
New Brunswick, Canada



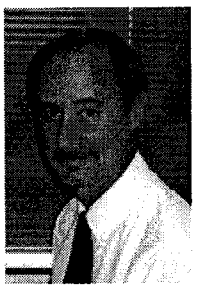
Michael A. Nolan
British Columbia
2009-2012
Kerr Wood Leidal Assoc.
Burnaby, BC
Canada



Charles W. Wulff, Jr.
Calif.-Nev.
2009-2012
CW Wulff Assoc.
Bakersfiled, CA



George Rest
Chesapeake
2008-2011
Sr. Vice President
O'Brien & Gere Engineers, Inc.



Christopher J. Bogucki
Connecticut
2007-2010
Mgr. of Business Develop.

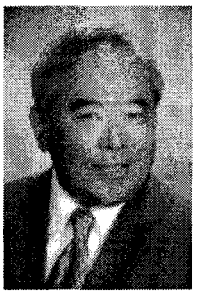
Larry J. Ruffin
Florida
2008-2011
L.J. Ruffin & Assoc.
Orlando, FL

Photo Not Yet Available

Terry M. Cole
Georgia
2009-2012
Jordan Jones & Goulding, Inc.
Norcross, GA

Hyattsville, MD

Connecticut
Water Co.
Clinton, CT



Elson C. Gushiken
Hawaii
2008-2011
ITC Water
Management
Haleiwa, HI

John J. Donahue
Illinois
2008-2011
North Park Public
Water District
Machesney Park, IL

Photo Not Yet
Available

Dan E. Hood
Indiana
2009-2012
M.E. Simpson
Co., Inc.
Valparaiso, IN

**Richard D.
Wheadon**
Intermountain
2008-2011
Carollo Engineers
Midvale, UT

Photo Not Yet
Available

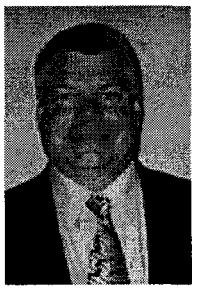
**Carla J.
Schumacher**
Iowa
2009-2012
FOX Engineering
Assoc., Inc.
Amers, IA

Gerald T. Blain
Kansas
2009-2012
City of Wichita
Wichita, KS

Randal J. Braker
*Kentucky-
Tennessee*
2007-2010
General Manager
Duck River Utility
Commission
Tullahoma, TN

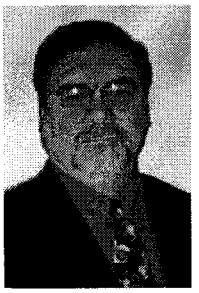
**Emilio Rangel
Woodyard**
Mexico
2007-2010
General Director
Servicios De Aqua y
Drenaje
De Monterrey
Monterrey, CP
Mexico

Gerald H. Caron
Michigan
2007-2010
Superintendent
Wyoming Water
Trmt. Plant
Holland, MI



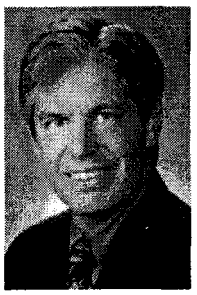
David M. Schultz
Minnesota
2008-2011
Minnesota Dept.
of Health
Saint Cloud, MN

**Daniel D.
Montgomery**
Missouri
2009-2012
Independence
Wtr. Dept.
Independence, MO



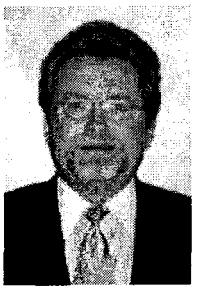
John W. Camden
Montana
2008-2011
Helena, MT

Tony Bilek
Nebraska
2008-2010
Representative
Mc2 Inc.
Omaha, NE



John S. Young
New Jersey
2007-2010
American Water
Voorhees, NJ

Emerson (Jim) Marvel
NEWWA, A Section of AWWA
2007-2010
President
Marvel Water Solutions
Cranston, RI



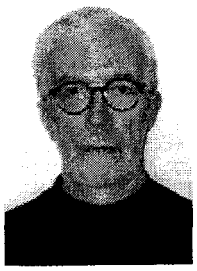
Robert J. Walters
North Carolina
2009-2012
Davidson Water, Inc.
Welcome, NC

Lisa Ansley
North Dakota
2009-2012
AE2S
Bismarck, ND

Brian T. Bisson
Ohio
2008-2011
Aqua Ohio, Inc.
Boardman, OH

Wayne Stiver
OWWA, A Section of AWWA
2009-2012
Peterborough Utilities
Peterborough, ON
Canada

Deborah P. Lippert
Pennsylvania
2007-2010
Pennsylvania American Water
McMurray, PA



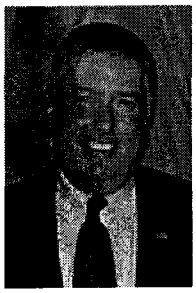
Hubert Demard
Quebec
2007-2010
Project Manager
Reseau Environment
Quebec City, QC
Canada

Martin Garcia
Rocky Mountain
2009-2012
Denver Water
Denver, CO

Martin J. Jarrett
South Dakota
2009-2012
Big Sioux Comm. Water System
Egan, SD

Donald C. Broussard
Southwest
2008-2011
Lafayette Utilities System
Lafayette, LA

Brian L. Ramaley
Virginia
2009-2012
Newport News Waterworks
Newport News, VA

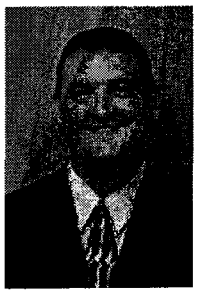


Edward W. Morrison, Jr.
West Virginia
2009-2012
The C.I. Thornburg Co., Inc.
Huntington, WV

Raymond S. Bilevicius
Western Canada
2008-2011
AECOM
Winnipeg, MB
Canada

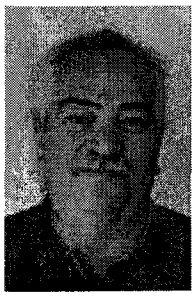
Photo Not Yet Available

James A. Chaffee
Wisconsin
2006-2009
AECOM Water
Stevens Point, WI



Daniel S. Duchniak
Director-at-Large
2008-2011
Waukesha Water Utility
Waukesha, WI

Pamela M. Marchand
Director-at-Large
2007-2010
Chief Engineer/ General Mgr.
Providence Water Supply Board
Providence, RI



Joel Neulight
Service Provider Director-at-Large
2008-2011
Severn Trent Services
Colmar, PA

Marie S. Pearthree
Director-at-Large
2009-2012
CH2M HILL
Tucson, AZ

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American Water Works Association
The Authoritative Resource on Safe Water

Officers and Executive Committee

All officers and other Executive Committee members are also members of the Board of Directors.

Craig R. Woolard
President
Treatment Div. Director
Anchorage Water & Wastewater Utility
Anchorage, AK

Joseph P. Mantua
President-Elect
Black & Veatch
Gaithersburg, MD

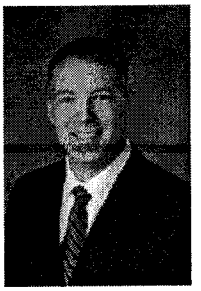
Governance

- Officers and Executive Committee
- Directors
- How AWWA Functions
- How AWWA Is Governed
- Past Presidents
- Governance, Council, and Committee Structure

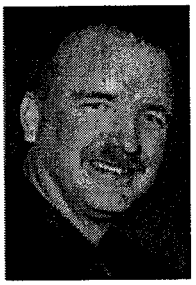
Michael J. Leonard
Immediate Past-President
Water Operations Manager
City of Roswell
Roswell, GA

R. Lee Roberts
Treasurer
President/CEO
Roberts Filter Group
Darby, PA

Debra Kaye
Vice-President and Cal.-Nevada Section Director
2008-2011
Black & Veatch Corp.
LaQuinta, CA



Jeffrey M. Zdrojewski
Vice-President and New York Section Director
2007-2010
Sr. Associate
Malcolm Pirnie, Inc.
Buffalo, NY



Dean Fritzke
Vice-President and Pacific Northwest Section Director
2007-2010
Water Quality

Juan Carlos Perez Bofill
Vice-President and Puerto Rico Section Director
2007-2010

Dee A. Bennett
Vice-President and South Carolina Section Director
2007-2010
Engineering

Charles F. Anderson
Vice-President and Texas Section Director
2008-2011

Coordinator
Tualatin Valley
Water Dist.
Beaverton, OR

Wastewater
Compliance
Director
Puerto Rico
Aqueduct
& Sewer Authority
San Juan, PR

Operations
Manager
City of Columbia
Dept. of Engineering
Columbia, SC

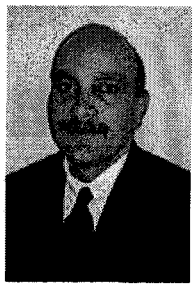
CDM
Fort Worth, TX

Paula I. MacIlwaine
Interim Secretary
Interim Executive Director
AWWA
Denver, CO

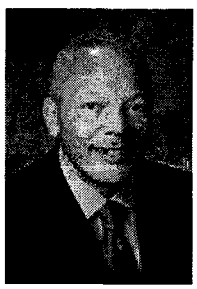
Photo Not Yet Available

Thomas R. Marston
Admin. & Policy Council
2009-2012
Connecticut Water Co.
Clinton, CT

John S. Batten
International Council
2008-2011
Malcolm Pirnie Inc.
White Plains, NY



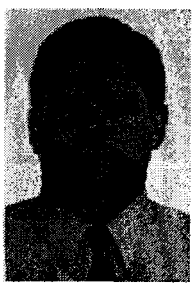
Ronald L. Port
Manuf./Assoc. Council
2007-2010
Managing Director
ITT Water & Wastewter, USA, Inc.
Zelienople, PA



J. Paul Blake
Public Affairs Council
2009-2012
Seattle Public Utilities
Seattle, WA

Robert C. Cheng
Standards Council
2009-2012
Long Beach Wtr. Dept.
Long Beach, CA

Joe G. Jacangelo
Technical & Educational Council
2008-2011
VP, Nat'l. Technical Dir.
MWH
Lovettsville, VA



Michael E. Hooker
Water Utility Council
2007-2010
Executive Director
Onondaga County Water Authority
Syracuse, NY

David E. Rager
Water Research Foundation
2007-2010
Director
Greater Cincinnati Water Works
Cincinnati, OH

Elisa M. Speranza
Water For People
2009-2012
CH2M HILL OMI
Englewood, CO

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Uniform System of Accounts for Class A and B Water Utilities

1976

NATIONAL ASSOCIATION
OF
REGULATORY UTILITY
COMMISSIONERS

EXHIBIT
A-25
admitted

PUBLISHED BY
NATIONAL ASSOCIATION OF
REGULATORY UTILITY COMMISSIONERS
1102 INTERSTATE COMMERCE COMMISSION BUILDING
CONSTITUTION AVENUE AND TWELFTH STREET, N.W.
POST OFFICE BOX 684, WASHINGTON, D.C. 20044
TELEPHONE (202) 628-7324

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NATIONAL ASSOCIATION
OF
REGULATORY UTILITY
COMMISSIONERS

1976
UNIFORM SYSTEM OF ACCOUNTS
FOR
Class A and B
Water Utilities

Pursuant to action by the National Association of Regulatory Utility Commissioners this System of Accounts is recommended to the Commissions represented in the membership of this Association for consideration. and for adoption in their respective jurisdictions. with such modifications only as they may deem necessary in the public interest.

Materials and Expenses:

8. Operating supplies, such as lubricants, meter and gauge charts, etc.
9. Records and report forms.
10. Utility services.
11. Tool expense.
12. Transportation, meals and incidental expenses.

662. Transmission and Distribution Lines Expenses.

This account shall include the cost of labor, materials used and expenses incurred in the operation of transmission and distribution mains, fire mains, services and hydrants.

ITEMS

Labor:

1. Supervising operation of mains, services and hydrants.
2. Routine patrolling.
3. Electrolysis and soil corrosion investigations and tests.
4. Operating and lubricating gates and valves.
5. Observing and recording pressure.
6. Flushing mains and hydrants.
7. Reading and changing charts in master meters.

Materials and Expenses:

8. Operating materials, such as lubricants, meter and gauge charts, etc.
9. Tool expense.
10. Transportation, meals and incidental expenses.

663. Meter Expenses.

This account shall include the cost of labor, materials used and expenses incurred in the operation of customer meters and associated equipment.

ITEMS

Labor:

1. Supervising meter operation.
2. Removing and resetting, disconnecting and reconnecting, changing and relocating meters and associated equipment, except the cost of the first testing and setting of a meter which shall be charged to utility plant account 346, Meters, and 347, Meter Installations.
3. Turning on and shutting off service even though a meter is not installed or removed (other than shutting off for nonpayment of bills.)
4. Inspecting and testing meters on premises or in shops other than that incidental to maintenance.
5. Inspecting and adjusting meter testing equipment.
6. Clerical work on meter history record cards, test cards and reports.

Materials and Expenses:

7. Meter seals and miscellaneous meter supplies.
8. Record and report forms and office supplies for the meter department.
9. Utility services for meter department.
10. Tool expense.
11. Transportation, meals and incidental expenses.
12. The salvage recovered from minor items when a meter is removed from service but not permanently retired shall be credited to this account.

664. Customer Installations Expenses.

This account shall include the cost of labor, materials used and expenses incurred in work on customer installations and in inspecting premises and in rendering services to customers of the nature of those indicated by the list of items hereunder.

ITEMS

Labor:

1. Supervising customer installations work.
2. Testing, inspecting, adjusting, and repairing customers' plumbing and fixtures.
3. Testing and inspecting services installed by the customer.
4. Investigating and adjusting customers' service complaints.
5. Changing customers' house piping for the convenience of the utility.

Materials and Expenses:

6. Materials used in servicing customers' plumbing and fixtures.
7. Tool expense.
8. Transportation, meals and incidental expenses.

NOTE A--Amounts billed customers for any work, the cost of which is charged to this account, shall be credited to this account. Any excess over costs shall be transferred to account 471, Miscellaneous Service Revenues.

NOTE B--Do not include in this account expenses incurred in connection with merchandising, jobbing and contract work.

665. Miscellaneous Expenses.

This account shall include the cost of labor, materials used and expenses incurred in transmission and distribution system operation not provided for elsewhere.

ITEMS

Labor:

1. Preparing maps and prints.
2. General clerical and stenographic work, except that chargeable to account 663, Meter Expenses.

3. Service interruption and trouble records.
4. Operating records, but not plant accounting, covering mains, services, hydrants, valves, and other transmission and distribution facilities. Exclude meter records chargeable to account 663, Meter Expenses.
5. Building service.
6. Miscellaneous labor not provided for elsewhere.

Materials and Expenses:

7. Map and record supplies.
8. Printing, stationery, supplies and expenses, except that chargeable to account 663, Meter Expenses.
9. Building service supplies.
10. Utility services.
11. First-aid supplies.
12. Transportation, meals and incidental expenses.
13. Research and development expenses.

666. Rents.

This account shall include all rents of property of others used, occupied, or operated in connection with the transmission and distribution system. (See Operating Expense Instruction 3.)

Maintenance

670. Maintenance Supervision and Engineering.

This account shall include the cost of labor and expenses incurred in the general supervision and direction of the maintenance of the transmission and distribution system. Direct supervision of specific jobs shall be charged to the appropriate maintenance account. (See Operating Expense Instruction 1.)

671. Maintenance of Structures and Improvements.

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of structures and improvements, the book cost of which is includible in account 341, Structures and Improvements, and of similar property leased from others. (See Operating Expense Instruction 2.)

672. Maintenance of Distribution Reservoirs and Standpipes.

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of distribution reservoirs, tanks, standpipes, and related facilities, the book cost of which is includible in account 342, Distribution Reservoirs and Standpipes, and of similar property leased from others. (See Operating Expense Instruction 2.)

673. Maintenance of Transmission and Distribution Mains.

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of mains, the book cost of which is includible in account 343, Transmission and Distribution Mains, and of similar property leased from others. (See Operating Expense Instruction 2.)

NOTE.--The cost of rearranging and changing the location of mains not retired shall be charged to this account.

674. Maintenance of Fire Mains.

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of Fire Mains, the book cost of which is includible in account 344, Fire Mains, and of similar property leased from others. (See Operating Expense Instruction 2 and account 673.)

675. Maintenance of Services.

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of services, the book cost of which is includible in account 345, Services, and of similar property leased from others. (See Operating Expense Instruction 2.)

NOTE.--The cost of rearranging, reconnecting and changing the location of services not retired shall be charged to this account.

676. Maintenance of Meters.

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of meters and meter testing equipment, the book cost of which is includible in account 346, Meters, account 347, Meter Installations, account 395, Laboratory Equipment, and of similar property leased from others. (See Operating Expense Instruction 2.)

NOTE A.--The initial testing of meters shall be charged to account 346, Meters.
NOTE B.--When water used for testing meters is taken from the supply for general distribution, the cost of water so used may be charged to this account and credited to account 929, Duplicate Charges--Credit.

677. Maintenance of Hydrants.

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of fire hydrants and associated equipment, the book cost of which is includible in account 348, Hydrants, and of similar property leased from others. (See Operating Expense Instruction 2.)

678. Maintenance of Miscellaneous Plant.

This account shall include the cost of labor, materials used and expenses incurred in maintenance of plant, the book cost of which is includible in account 349, Other Transmission and Distribution Plant, and any general or other plant the maintenance of which is assignable to the transmission and distribution function and is not provided for elsewhere. (See Operating Expense Instruction 2.)

LUBIN & ENOCH, P.C.
Nicholas J. Enoch
State Bar No. 016473
Jarrett J. Haskovec
State Bar No. 023926
349 North Fourth Avenue
Phoenix, Arizona 85003
Telephone: (602) 234-0008
Facsimile: (602) 626-3586
E-mail: nicholas.enoch@azbar.org

Attorneys for Intervenor IBEW Local 387

BEFORE THE ARIZONA

CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY, AND FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR UTILITY SERVICE AND FOR CERTAIN RELATED APPROVALS BASED THEREON.	Docket No. W-01445A-08-0440 **NOTICE OF FILING ISSUES MATRIX**

Intervenor Local Union 387, International Brotherhood of Electrical Workers, AFL-CIO, CLC, by and through undersigned counsel, hereby provides notice of filing the attached pre-hearing issues matrix prepared pursuant to the Procedural Order dated November 4, 2008.

RESPECTFULLY SUBMITTED this 1st day of September 2009.

LUBIN & ENOCH, P.C.

Nicholas J. Enoch, Esq.
Attorney for Intervenor

///

///

///

EXHIBIT
A-26
ADMITTED

Original and thirteen (13) copies of IBEW Local 387's Notice filed this 1st day of September 2009, with:

Arizona Corporation Commission
Docket Control Center
1200 West Washington Street
Phoenix, Arizona 85007-2996

Copies of the foregoing transmitted electronically this same date to:

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Arizona Water Company
P.O. Box 29006
Phoenix, Arizona 85038-9006
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Fennemore Craig, P.C.
3003 North Central Avenue, Suite 2600
Phoenix, Arizona 85012
Co-counsel for Applicant

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Ayesha Vohra, Esq.
Staff Counsel, Legal Division
Arizona Corporation Commission
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Phoenix, Arizona 85007

Steven M. Olea, Director
Utilities Division
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007

Michele Van Quathem, Esq.
Ryley Carlock & Applewhite
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Phoenix, Arizona 85004-4417
Attorney for Intervenor Abbott

Michelle L. Wood, Esq.
Residential Utility Consumer Office
1100 West Washington, Suite 220
Phoenix, Arizona 85007
Attorney for Intervenor RUCO

Daniel Vab

LUBIN & ENOCH, P.C.

PHOENIX | DENVER | EL PASO

Stanley Lubin
Nicholas J. Enoch

Jarrett J. Haskovec
David G. McCracken of Counsel*
*Admitted in Texas only

349 North 4th Avenue
Phoenix, Arizona 85003-1505
(602) 234-0008
Fax (602) 626-3586

August 28, 2009

Via Hand-Delivery

Dwight D. Nodes, Assistant Chief ALJ
Hearing Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

RE: IBEW Local 387 (Arizona Water Company General Rate Case)
ACC Docket No. W-01445A-08-0440
Our File No. 1445-072

Dear Judge Nodes:

Pursuant to your Procedural Order (p. 3) dated November 4, 2008, Intervenor Local Union 387, International Brotherhood of Electrical Workers, AFL-CIO, CLC, by and through undersigned counsel, hereby notifies you that, in all material respects, it fully supports Arizona Water Company's ("Company") pending application.

Sincerely yours,

Nicholas J. Enoch

NJE:mg

cc: Robert E. DeSpain
Robert W. Geake, Esq. (via e-mail)
Norman D. James, Esq. (via e-mail)
Janice M. Alward, Esq. (via e-mail)
Steven M. Olea (via e-mail)
Michele Van Quathem, Esq. (via e-mail)
Daniel W. Pozefsky, Esq. (via e-mail)

2009-08-28 ltr to ALJ Nodes.wpd

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Bill Count

Casa Grande

Line No.	[A] Block (M Gal) From	[B] Block (M Gal) To	[C] Number of Bills by Block	[D] Cumulative Bills No.	[E] Cumulative Bills % of Total	[F] Total Use of Bills Stopping in Block	[G] Cumulative Use of Bills Stopping in Block Amount	[H] Cumulative Use of Bills Stopping in Block % of Total	[I] Tier One	[J] Tier Two	[K] Tier Three
1	-	-	0	-	0.00%	0	-	0.00%	-	-	-
2	0.1	0.1	0	-	0.00%	0	-	0.00%	-	-	-
3	0.2	0.2	0	-	0.00%	0	-	0.00%	-	-	-
4	0.3	0.3	0	-	0.00%	0	-	0.00%	-	-	-
5	0.4	0.4	0	-	0.00%	0	-	0.00%	-	-	-
6	0.5	0.5	0	-	0.00%	0	-	0.00%	-	-	-
7	0.6	0.6	0	-	0.00%	0	-	0.00%	-	-	-
8	0.7	0.7	0	-	0.00%	0	-	0.00%	-	-	-
9	0.8	0.8	0	-	0.00%	0	-	0.00%	-	-	-
10	0.9	0.9	0	-	0.00%	0	-	0.00%	-	-	-
11	1.0	1.0	0	-	0.00%	0	-	0.00%	-	-	-
12	1.1	2.0	0	-	0.00%	0	-	0.00%	-	-	-
13	2.1	3.0	0	-	0.00%	0	-	0.00%	-	-	-
14	3.1	4.0	0	-	0.00%	0	-	0.00%	-	-	-
15	4.1	4.5	0	-	0.00%	0	-	0.00%	-	-	-
16	4.6	5.0	0	-	0.00%	0	-	0.00%	-	-	-
17	5.1	6.0	0	-	0.00%	0	-	0.00%	-	-	-
18	6.1	7.0	0	-	0.00%	0	-	0.00%	-	-	-
19	7.1	8.0	0	-	0.00%	0	-	0.00%	-	-	-
20	8.1	9.0	0	-	0.00%	0	-	0.00%	-	-	-
21	9.1	10.0	0	-	0.00%	0	-	0.00%	-	-	-
22	10.1	12.0	0	-	0.00%	0	-	0.00%	-	-	-
23	12.1	14.0	0	-	0.00%	0	-	0.00%	-	-	-
24	14.1	16.0	0	-	0.00%	0	-	0.00%	-	-	-
25	16.1	18.0	0	-	0.00%	0	-	0.00%	-	-	-
26	18.1	20.0	0	-	0.00%	0	-	0.00%	-	-	-
27	20.1	25.0	0	-	0.00%	0	-	0.00%	-	-	-
28	25.1	29.0	0	-	0.00%	0	-	0.00%	-	-	-
29	29.1	30.0	0	-	0.00%	0	-	0.00%	-	-	-
30	30.1	35.0	0	-	0.00%	0	-	0.00%	-	-	-
31	35.1	40.0	0	-	0.00%	0	-	0.00%	-	-	-
32	40.1	47.0	0	-	0.00%	0	-	0.00%	-	-	-
33	47.1	50.0	0	-	0.00%	0	-	0.00%	-	-	-
34	50.1	60.0	0	-	0.00%	0	-	0.00%	-	-	-
35	60.1	67.0	0	-	0.00%	0	-	0.00%	-	-	-
36	67.1	70.0	0	-	0.00%	0	-	0.00%	-	-	-
37	70.1	80.0	0	-	0.00%	0	-	0.00%	-	-	-
38	80.1	90.0	0	-	0.00%	0	-	0.00%	-	-	-
39	90.1	100.0	0	-	0.00%	0	-	0.00%	-	-	-
40	100.1	120.0	0	-	0.00%	0	-	0.00%	-	-	-
41	120.1	139.0	0	-	0.00%	0	-	0.00%	-	-	-
42	139.1	140.0	0	-	0.00%	0	-	0.00%	-	-	-
43	140.1	160.0	0	-	0.00%	0	-	0.00%	-	-	-
44	160.1	165.0	0	-	0.00%	0	-	0.00%	-	-	-
45	165.1	183.0	0	-	0.00%	0	-	0.00%	-	-	-
46	183.1	200.0	0	-	0.00%	0	-	0.00%	-	-	-
47	200.1	250.0	0	-	0.00%	0	-	0.00%	-	-	-
48	250.1	258.0	0	-	0.00%	0	-	0.00%	-	-	-
49	258.1	296.0	0	-	0.00%	0	-	0.00%	-	-	-
50	296.1	300.0	0	-	0.00%	0	-	0.00%	-	-	-
51	300.1	303.0	0	-	0.00%	0	-	0.00%	-	-	-
52	303.1	325.0	0	-	0.00%	0	-	0.00%	-	-	-
53	325.1	400.0	0	-	0.00%	0	-	0.00%	-	-	-
54	400.1	401.0	0	-	0.00%	0	-	0.00%	-	-	-
55	401.1	487.0	0	-	0.00%	0	-	0.00%	-	-	-

Meter Size:		6-Inch
Class:		Industrial
Basic Service Charge:	$	367.90
Tier One Breakover (M Gal):		2,160
Tier Two Breakover (M Gal):		999,999
Tier Three Breakover (M Gal):		999,999
Tier One Rate:	$	1.4869
Tier Two Rate:	$	1.6500
Tier Three Rate:	$	1.6500

EXHIBIT
A-27
ADMITTED

Casa Grande

Line No.	[A] Block (M Gal) From	[B] Block (M Gal) To	[C] Number of Bills by Block	[D] Cumulative Bills No.	[E] Cumulative Bills % of Total	[F] Total Use of Bills Stopping in Block	[G] Cumulative Use of Bills Stopping in Block Amount	[H] % of Total	[I] Tier One	[J] Tier Two	[K] Tier Three
1	487.1	500.0	0	-	0.00%	0	-	0.00%	-	-	-
2	500.1	552.0	0	-	0.00%	0	-	0.00%	-	-	-
3	552.1	568.0	0	-	0.00%	0	-	0.00%	-	-	-
4	568.1	600.0	0	-	0.00%	0	-	0.00%	-	-	-
5	600.1	700.0	0	-	0.00%	0	-	0.00%	-	-	-
6	700.1	775.0	0	-	0.00%	0	-	0.00%	-	-	-
7	775.1	800.0	0	-	0.00%	0	-	0.00%	-	-	-
8	800.1	900.0	0	-	0.00%	0	-	0.00%	-	-	-
9	900.1	917.0	0	-	0.00%	0	-	0.00%	-	-	-
10	917.1	1,000.0	0	-	0.00%	0	-	0.00%	-	-	-
11	1,000.1	1,002.0	0	-	0.00%	0	-	0.00%	-	-	-
12	1,002.1	1,100.0	0	-	0.00%	0	-	0.00%	-	-	-
13	1,100.1	1,145.0	0	-	0.00%	0	-	0.00%	-	-	-
14	1,145.1	1,195.0	0	-	0.00%	0	-	0.00%	-	-	-
15	1,195.1	1,200.0	0	-	0.00%	0	-	0.00%	-	-	-
16	1,200.1	1,300.0	0	-	0.00%	0	-	0.00%	-	-	-
17	1,300.1	1,310.0	0	-	0.00%	0	-	0.00%	-	-	-
18	1,310.1	1,400.0	0	-	0.00%	0	-	0.00%	-	-	-
19	1,400.1	1,500.0	0	-	0.00%	0	-	0.00%	-	-	-
20	1,500.1	1,600.0	0	-	0.00%	0	-	0.00%	-	-	-
21	1,600.1	1,620.0	0	-	0.00%	0	-	0.00%	-	-	-
22	1,620.1	1,700.0	0	-	0.00%	0	-	0.00%	-	-	-
23	1,700.1	1,800.0	0	-	0.00%	0	-	0.00%	-	-	-
24	1,800.1	1,889.0	0	-	0.00%	0	-	0.00%	-	-	-
25	1,889.1	1,900.0	0	-	0.00%	0	-	0.00%	-	-	-
26	1,900.1	1,940.0	0	-	0.00%	0	-	0.00%	-	-	-
27	1,940.1	2,000.0	0	-	0.00%	0	-	0.00%	-	-	-
28	2,000.1	2,160.0	0	-	0.00%	0	-	0.00%	-	-	-
29	2,160.1	2,341.0	0	-	0.00%	0	-	0.00%	-	-	-
30	2,341.1	2,359.0	0	-	0.00%	0	-	0.00%	-	-	-
31	2,359.1	3,055.0	0	-	0.00%	0	-	0.00%	-	-	-
32	3,055.1	3,817.0	0	-	0.00%	0	-	0.00%	-	-	-
33	3,817.1	4,000.0	0	-	0.00%	0	-	0.00%	-	-	-
34	4,000.1	4,416.0	0	-	0.00%	0	-	0.00%	-	-	-
35	4,416.1	5,518.0	0	-	0.00%	0	-	0.00%	-	-	-
36	5,518.1	6,000.0	0	-	0.00%	0	-	0.00%	-	-	-
37	6,000.1	7,292.0	0	-	0.00%	0	-	0.00%	-	-	-
38	7,292.1	8,000.0	2	2	8.33%	15265.4	15,265.4	2.67%	4,320.0	10,945.4	-
39	8,000.1	10,000.0	1	3	12.50%	9870.1	25,135.5	4.40%	6,480.0	18,655.5	-
40	10,000.1	12,000.0	1	4	16.67%	10790.8	35,926.3	6.29%	8,640.0	27,286.3	-
41	12,000.1	14,000.0	5	9	37.50%	64329.2	100,255.5	17.55%	19,440.0	80,815.5	-
42	14,000.1	16,000.0	0	9	37.50%	0	100,255.5	17.55%	19,440.0	80,815.5	-
43	16,000.1	18,000.0	1	10	41.67%	16135.4	116,390.9	20.38%	21,600.0	94,790.9	-
44	18,000.1	20,000.0	0	10	41.67%	0	116,390.9	20.38%	21,600.0	94,790.9	-
45	20,000.1	25,000.0	3	13	54.17%	69322.3	185,713.2	32.51%	28,080.0	157,633.2	-
46	25,000.1	30,000.0	1	14	58.33%	29496	215,209.2	37.67%	30,240.0	184,969.2	-
47	30,000.1	99,999.0	10	24	100.00%	356028	571,237.2	100.00%	51,840.0	519,397.2	-
48											
49											
50	Bills/Use:		24	24		571,237.2	571,237.2		51,840.0	519,397.2	-
51	Revenue:			$ 8,830					$ 77,081	$ 857,005	$ -
52	Total Bill Count Revenue:			$ 942,916							
53	Avg. Gallons/Bill:			23,801,550							
54	Average No. Customers:			2							
55	Median Usage:			23,333,333							

Meter Size:		6-Inch (Continued)
Class:		Industrial
Basic Service Charge:	$	367.90
Tier One Breakover (M Gal):		2,160
Tier Two Breakover (M Gal):		999,999
Tier Three Breakover (M Gal):		999,999
Tier One Rate:	$	1.4869
Tier Two Rate:	$	1.6500
Tier Three Rate:	$	1.6500

Company Name: Arizona Water Company - Casa Grande (Casa Grande)
ADEQ Public Water System No: 11-009
Test Year Ended: 31-Dec-07

WATER COMPANY PLANT DESCRIPTION

WELLS

Arsenic Treatment	Arizona Water Co. ID	ADWR ID Number*	Pump H.P.	Pump Yield (gpm)	Casing Depth (feet)	Casing Diameter (inches)	Meter Size (inches)	Year Drilled
Henness Rd. Trtmt. Plant	Well #19	55-616603	300.0	1750	1000	20	10	1980
	Well #21	55-503113	250	540	696	20	6	1983
	Well #24	55-540306	300	900	1000	18	8	1993
	Well #30	55-208822	200	720	1000	18	8	2006
Mission Royale Trtmt. Plant	Well #29	55-595284	250	1380	1120	18	10	2004
Lake in the Desert Plant	Well #27	55-568553	200	460	1110	18	4	1999
Arizona City Trtmt. Plant	Well #28	55-571205	350	1590	1210	18	10	1999
Cottonwood Trtmt. Plant	Well #23	55-522319	300	1000	1005	18	8	1989
	Well #25	55-546719	300	1300	1074	18	8	1994
	Well #26	55-560803	300	1420	1000	18	10	1997
	Well #10	55-616595	200	900	1025	20	8	1960
	Well #14	55-613443	40.0	150	1070	12, 14, 16, 18	4	1986
	Well #17	55-616601	200.0	770	739	16	6	1975
See Note_1	Well #20	55-616604	300	1150	1000	20	10	1977
	Well #31 (Began using in '08)	55-210294	200	1200	1500	18	10	2006
n/a	Inactive	55-616583	---	---	---	---	---	---
n/a	Inactive	55-616598	---	---	600	20	---	1982
n/a	Inactive	55-506809	---	800	850	20	---	1983
n/a	Inactive	55-616597	---	---	---	---	---	---
n/a	Inactive	55-616602	---	---	---	---	---	---
n/a	Well #32 (Began using in '08)	55-214248	250	1250	1200	18	10	2007
n/a	Well #33 (Began using in '08)	55-212523	250	1100	1000	18	10	2007
n/a	Well #34 (Not in service)	55-616588	350	150	1100	16	NONE	1970
n/a	Well #9 (Not in Service)	55-616594	200	400	1055	16	8	1958

*Arizona Department of Water Resources Identification Number
Note_1 : Excess from Well # 20 that Abbot Labs does not take is being treated at Cottonwood Lane

OTHER WATER SOURCES

Name or Description	Capacity (gpm)	Gallons Purchased or Obtained (in thousands)
n/a	n/a	n/a

EXHIBIT
A-28
ADMITTED

WATER COMPANY PLANT DESCRIPTION CONTINUED

MAINS

Size (in inches)	Material	Length (in feet)
2	---	41,536.0
3	---	23,570.0
4	---	248,529.0
5	---	0.0
6	---	1,165,322.0
8	---	403,649.0
10	---	34,447.0
12	---	396,663.0
14	---	1,265.0
16	---	66,862.0
20	---	1,020.0
24	---	39,911.0
36	---	1,585.0

FIRE HYDRANTS

Quantity Standard	Quantity Other
2,763	

CUSTOMER METERS

Size (in inches)	Quantity
5/8 x 3/4	21,089
3/4	0
1	791
1 1/2	0
2	419
Comp. 3	29
Turbo 3	0
Comp. 4	25
Turbo 4	0
Comp. 6	16
Turbo 6	0
Comp. 8	1

CASA GRANDE INVENTORY OF MAJOR PLANT IN SERVICE

Office Site - 220 E. 2nd St

Office Building 40' x 50' slump block
Contents
2 - Personal Computers/W Printers
12 -Personal Computer
1 - Laptop Computers
1 - Laptop computer w/printer
Itron Computer W/Handhelds
Warehouses 15' x 25' Metal, 40'x100' Slump Block
Printer/Copier 2005
Printer/Copier 2006
3-CSR Printers
Minolta Fax 2800
Telephone System
Contents
Phone Dialer
Automatic Controls
6' Block Wall and Gate Opener

Casa Grande Mountain Tank Site

5,000,000 Gal Tank -
Cathodic Protection
Automatic Controls
Fence

Well Site #10

200 HP Pump, Motor/Panel
Liquid Chlorinator and Building
Fence/slats

Cottonwood Lane Well Site #14

Arsenic Treatment Plant
40 HP Submersible/Panel
3 - 150 HP Boosters/Panels
Cathodic Protection
Phone Dialer
Automatic Controls
8' Block Wall w/ auto gate opener
1,000,000 Gallon Storage Tank
190,000 Gallon Settling Tank

Well Site #17

200 HP Pump, Motor/Panel
Automatic Controls
Liquid Chlorinator and Building
1 - 5' X 6' Storage Bldg
8' Block Wall

Well Site #26

300 HP Pump, Motor/Panel
Automatic Controls
Liquid Chlorinator and Building
6 ' Block Wall

Well #31
200 hp motor & panels
liquid chloinator and bldg
Auto controls
6' block fence

Well Site #23
300 HP Pump, Motor/Panel
Automatic Controls
Liquid Chlorinator and Building
Fence - Block

Well Site #20
300 HP Pump, Motor/Panel
Automatic Controls
Liquid Chlorinator and Building
8' Block Wall w/ Auto Gate Opener

Well Site #25
300 HP Pump, Motor/Panel
Automatic Controls
Liquid Chlorinator and Building
Fence - Block & Chain Link

Well Site #24
300 HP Pump, Motor/Panel
Automatic Controls
Liquid Chlorinator and Building
Fence -Block & Chain Link
Sand Seperator

Well Site #21
250 HP Pump, Motor/Panel
Liquid Chlorinator and Building
Automatic Controls
Fence

Well Site #30 - Quaid
200 HP , Motor/Panel
Automatic Controls
Liquid chlorinator & bldg.
6' block wall & 6' Fence with Slats

Well Site #19
300 HP Pump, Motor/Panel
Automatic Controls
Liquid Chlorinator and Building
Cathodic Protection
Motor Control Center
2 150-HP booster, 1 100-HP booster
Arsenic Treatment
8' Block Wall w/ Auto Gate Opener
1,100,000 Gallon Storage Tank
70,000 Gallon Settling Tank

Scott Drive Tank Site
2 Booster Pumps-30HP/Panel
8' x 8' x 20' Mobile Mini
Building 24' x 24' X 12' steel 1997
1-Bridge Crane & Manual Chain Hoist
3- 40 HP Starters, 1-25 HP Starter /Panel
3-40 HP & 1-25 HP Pump & Motor
1-15 KVA Transformer/Panel
Automatic Controls
Fence
110,000 Gallon Storage Tank
5,000,000 Gallon Storage Tank

Pinal Booster Station
1-20 HP & 2-25 HP Booster Pumps & Panels
Automatic Controls
1 - C-5 3,000 gal Tank & Pump
Fence w/slats

Burgess Peak Tank Site
Base Station
2,000,000 Gal Tank -
Cathodic Protection
Automatic Controls
Fence

AC Golf Course Tank Site
2 Boosters/1-20HP,1-25HP/Panel
6,000 Gal Pressure Tank
60 HP Gas Booster (Out of Service)
Autodialer
Automatic Controls
115,000 Gallon Storage Tank

Arizona City Well #28
350 H.P. motor and panels
Automatic Controls
5,000 Gal Pressure Tank
Arsenic Treatment Plant
Liquid Chlorinator and Building
Fence
35,000 Gallon Settling Tank

Tanger Booster Station
3- 40 HP Boosters
5000 gal Pressure Tank
Automatic Controls
1-300 HP Booster & Panel installed 2008
New Wall under Construction

Mission Royal - Well #29
250 HP motoer & panel
Liquid chloinator and bldg.
Auto Controls
Arsenic treatment
6' Block fence
31,000 Gallon Settling Tank

Mission Royal - Well Site #2 CG Well #33
250 HP motor & panel
liquid chloinator and bldg
Auto controls
8' Block fence
Being Constructed Contract Amount

Mission Royal - WellSite #1 CG Well 32
250 HP motor & panel
liquid chloinator and bldg
Auto controls
8' Block fence

North Park Tank Site
Automatic Controls
Panel
Cathodic Protection
Fence
650,000 Gallon Storage Tank
35,000 Gallon Storage Tank

Lake In The Desert Well #27
200HP Pump,Motor/Panel
Automatic Controls
Arsenic Treatment Plant
Liquid Chlorinator & Building
Fence
4,000 Gallon Settling Tank

POST-TEST YEAR PLANT

Acct		WA 1-3765	WA 1-3556
314	Wells	$ 16,130	$ 94,214
325	Elec. Pumping Equip.	657,563	206,141
343	T&D Mains	1,818,118	135,466
345	Services	6,148	829
332	Water Treatment Equip.	2,861,849	2,308,897
321	Pumping Plt. Struct. & Imp.	5,482	-
348	Hydrants	8,726	1,464
331	Struct. & Imp. - WT	402,821	364,137
342	Storage Tanks	500,042	-
395	Laboratory Equip.	5,147	-
397	Communications Equip.	18,012	-
398	Miscellaneous Equipment	1,697	8,513.74
		$ 6,301,735	$ 3,119,662
	Less: Amts. closed before 12/31/07	(5,826,417)	(3,117,106)
	Total Post-Test Year Plant	$ 475,318	$ 2,556

WA 1-3765: Arsenic treatment for Well 19/Henness Rd., Well 29/Mission Royale, Well 27/ Lake in the Desert, & Well 28/Arizona City

WA 1-3556: Arsenic treatment located at Cottonwood booster station (wells 10, 14, 17, 23, 25, & 26)

ARIZONA WATER COMPANY

W-01445A-08-0440

Evidentiary Hearing

Volumes I through IX
August 31 through September 11, 2009

Exhibit A-29
Applicant Exhibit No. 29

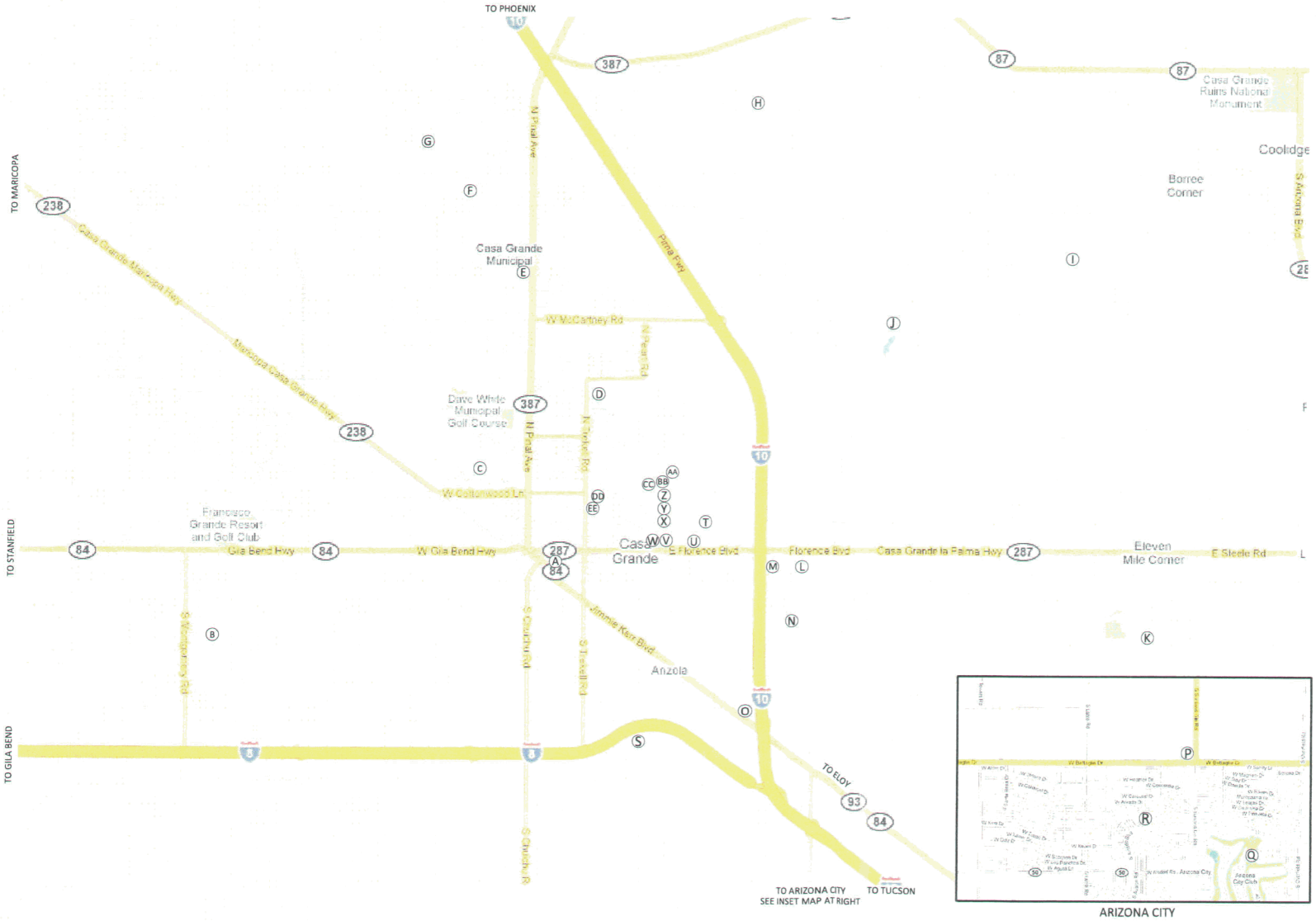
Reduced version provided

ARIZONA WATER COMPANY

PINAL VALLEY WATER SYSTEM

CASA GRANDE & TIERRA GRANDE

WESTERN GROUP



SITE DESIGNATION

A - Arizona Water Company Office/Warehouse
220 East 2nd Street
Casa Grande, Arizona 85222

B - Montgomery Road Well & Tank Site

C - Burgess Peak Tank Site

D - Well Site #9

E - Pinal Booster Station

F - Scott Drive Tank site

G - Indian Hills Tank Site

H - North Park Tank Site

I - Casa Grande/Coolidge Interconnect

J - Lake in the Desert Well #27 & Arsenic Treatment Plant

K - Tierra Grande Well Site Wells #1 & #3

L - Mission Royale Well Site #1 CG Well #32

M - Mission Royal Well Site #29 & Arsenic Treatment Plant

N - Mission Royale Well Site #2 CG Well #33

O - Tanger Booster Station

P - Arizona City Well Site #28 & Arsenic Treatment Plant

Q - Arizona City Golf Course Tank Site

R - Arizona City Del Rio Well Site #34

S - Casa Grande Mountain Tank Site

T - Well Site #19 & Arsenic Treatment Plant

U - Well Site #30 - Quaid

V - Well Site #24

W - Well Site #21

X - Well Site #25

Y - Well Site #20

Z - Well Site #23

AA - Well Site #31

BB - Well Site #26

CC - Well Site #17

DD - Cottonwood Lane Well Site #14 & Arsenic Treatment Plant

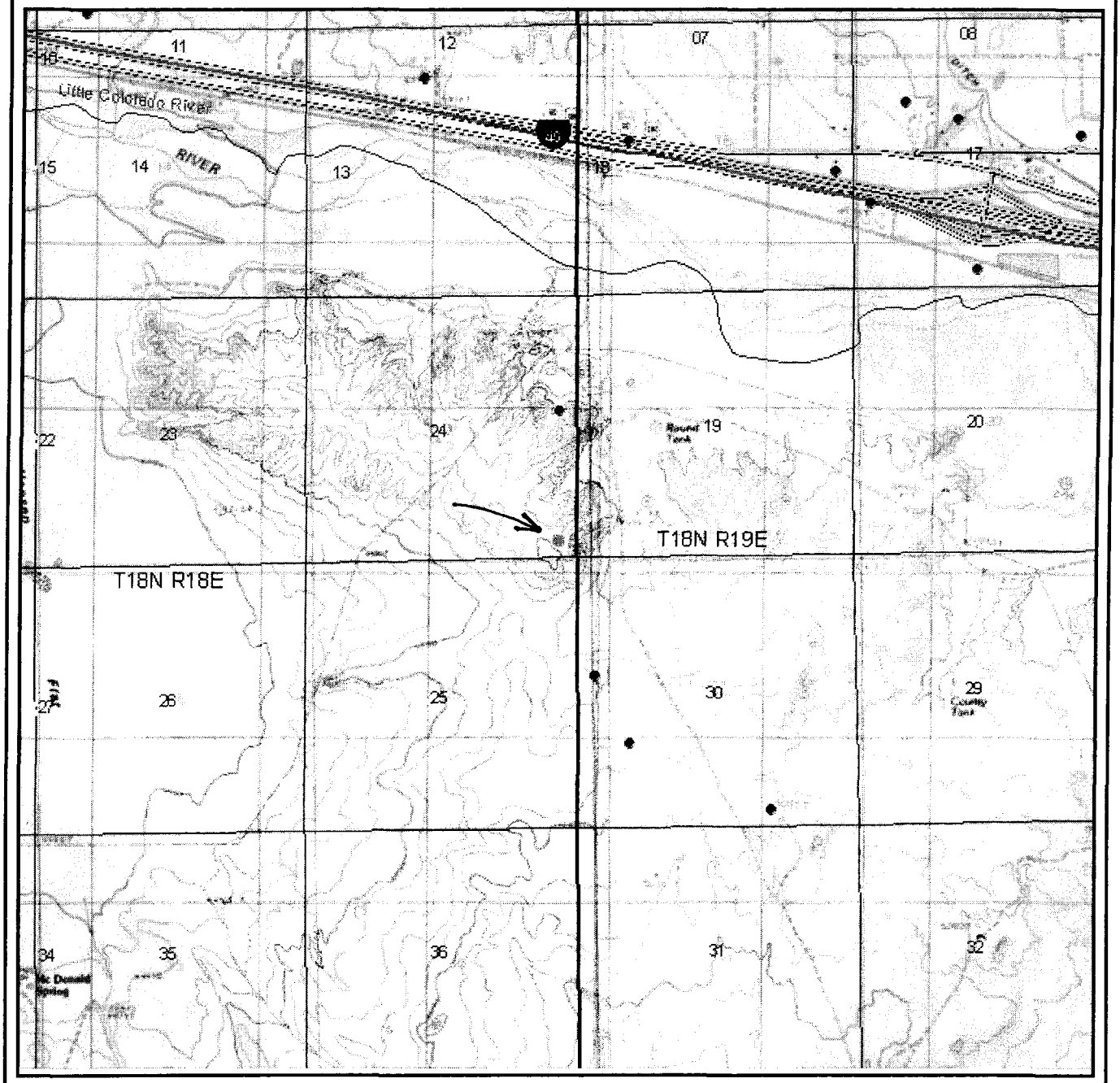
EE - Well Site #10

No — N — Scale

EXHIBIT
A-25
ADMITTED

AZTEC LAND & CATTLE CO.

Well Registry Map 55-613443



- Registered Well(s)*
- Selected Well
- Selection Area
- CAP Aqueduct
- River
- Interstate
- State Route
- US Route

N W E S

0.3 0.15 0 0.3 Miles

ARIZONA DEPARTMENT OF WATER RESOURCES

EXHIBIT
A-30
ADMITTED

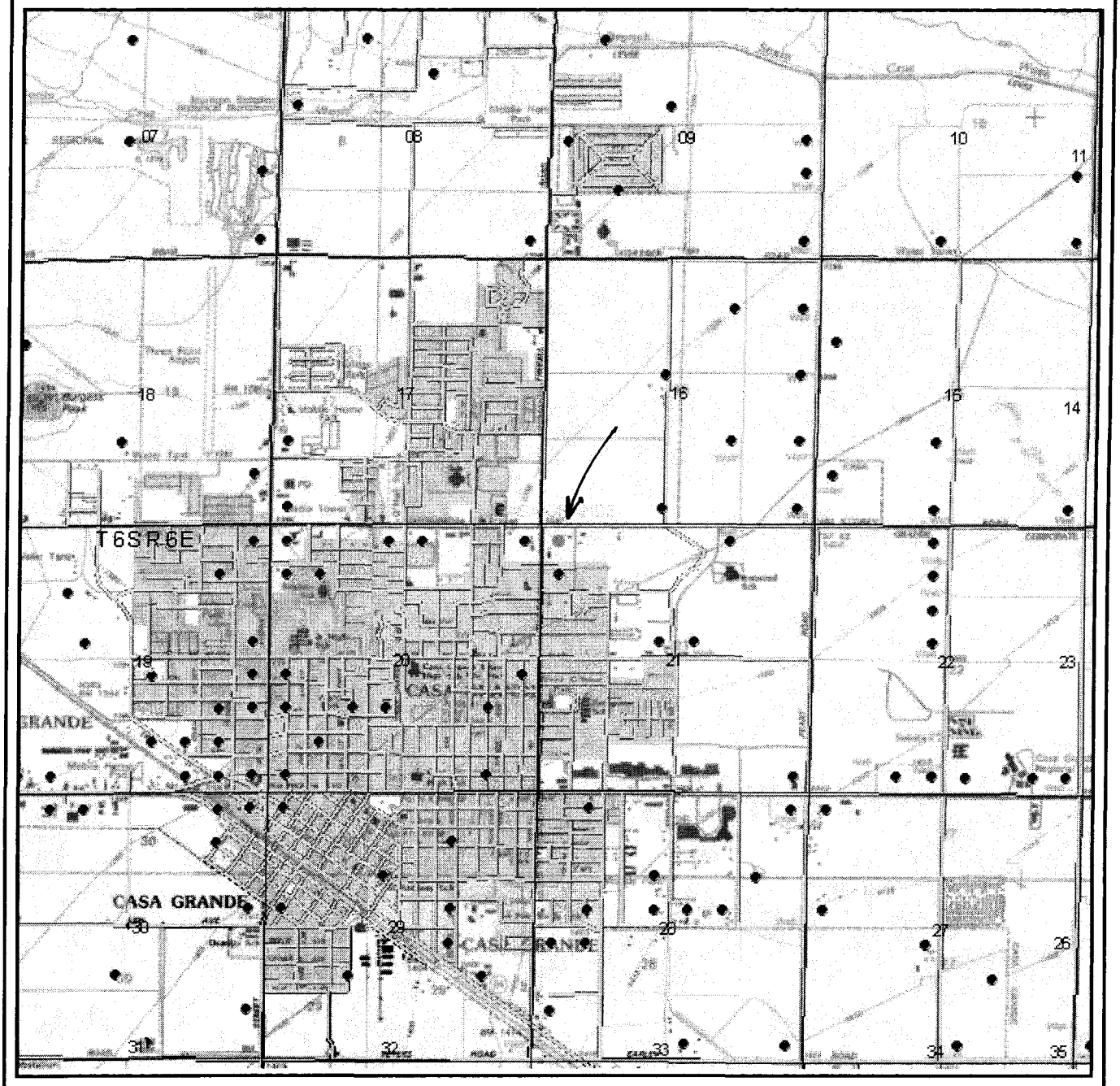
*Locations are approximate and based on the well's legal description

For more information about this map contact:
Arizona Department of Water Resources
Water Resources Information Central
3550 North Central Avenue
Phoenix, AZ 85012
Phone: (602)771-8500 or 1-800-352-8488

Map created on 9/3/2009

AWC well # CG14

Well Registry Map 55-616598



- Registered Well(s)*
- Selected Well
- Selection Area
- CAP Aqueduct
- River
- Interstate
- State Route
- US Route

N W E S

0.3 0.15 0 0.3 Miles

ARIZONA DEPARTMENT OF WATER RESOURCES

EXHIBIT
A-31
ADMITTED

*Locations are approximate and based on the well's legal description

For more information about this map contact:
Arizona Department of Water Resources
Water Resources Information Central
3550 North Central Avenue
Phoenix, AZ 85012
Phone: (602)771-8500 or 1-800-352-8488

Map created on 9/3/2009

55-616598

REGISTRY_ID	YR	WATER_QTY	WATER_MOVEMENT	WATER_TYPE
616598	1987.00	2.41	WITHDRAWAL	GROUNDWATER
616598	1988.00	187.31	WITHDRAWAL	GROUNDWATER
616598	1989.00	213.98	WITHDRAWAL	GROUNDWATER
616598	1990.00	252.70	WITHDRAWAL	GROUNDWATER
616598	1991.00	178.16	WITHDRAWAL	GROUNDWATER
616598	1992.00	90.24	WITHDRAWAL	GROUNDWATER
616598	1993.00	47.78	WITHDRAWAL	GROUNDWATER
616598	1994.00	[illegible]	WITHDRAWAL	GROUNDWATER
616598	1995.00	37.36	WITHDRAWAL	GROUNDWATER
616598	1996.00	[illegible]	WITHDRAWAL	GROUNDWATER
616598	1997.00	137.48	WITHDRAWAL	GROUNDWATER
616598	1998.00	[illegible]	WITHDRAWAL	GROUNDWATER
616598	1999.00	55.30	WITHDRAWAL	GROUNDWATER
616598	2000.00	[illegible]	WITHDRAWAL	GROUNDWATER
616598	2001.00	231.96	WITHDRAWAL	GROUNDWATER
616598	2002.00	[illegible]	WITHDRAWAL	GROUNDWATER
616598	2003.00	182.15	WITHDRAWAL	GROUNDWATER
616598	2004.00	182.98	WITHDRAWAL	GROUNDWATER
616598	2005.00	101.49	WITHDRAWAL	GROUNDWATER
616598	2006.00	[illegible]	WITHDRAWAL	GROUNDWATER
616598	2007.00	204.00	WITHDRAWAL	GROUNDWATER

ARIZONA DEPARTMENT OF WATER RESOURCES, 3550 NORTH CENTRAL AVENUE, PHOENIX, AZ 85012-2105

ANNUAL WATER WITHDRAWAL AND USE REPORT
PROVIDER SUMMARY 2008

A D E F1 F2 W1

OWNER OF GROUNDWATER RIGHT

ARIZONA WATER COMPANY
ATTN: WILLIAM GARFIELD
PO BOX 29006
PHOENIX AZ 85038-9006

TYPE OF RIGHT
LARGE MUNICIPAL PROVIDER

RIGHT / PERMIT NO.
56-001307.0000

REPORTING PARTY
56-001307.0000
ARIZONA WATER COMPANY
ATTN: WILLIAM GARFIELD
PO BOX 29006
PHOENIX AZ 85038-9006

PINAL AMA (520) 836-4857

If any of the information preprinted on this report is incorrect, please make the necessary changes.

PART I GROUNDWATER WITHDRAWN

From Box 14. Schedule A attached

14620.90 X $ 3.00 = $43,862.70

ACRE - FEET X Withdrawal Fee =

PART II WATER DELIVERED TO OTHER RIGHTS

From Box 24 Schedule D attached

70.43 **ACRE - FEET**

PART III WATER RECEIVED FROM OTHER RIGHTS

Total from Schedule E attached

2056.3 **ACRE - FEET**

PART IV LATE FEES

Complete if filing after March 31. NOTE: A portion of a month after March 31 is counted as a full month.

1) Enter number of months late (Maximum of 6)

$ 2) Calculate Late Report Fee ($25.00 X number of months late)

$ 3) Calculate Late Payment Fee (10 % X number of months late X withdrawal fee calculated in Part I

PART V TOTAL FEES DUE

Add amounts from Parts I and IV

$43,862.70

Mail or hand deliver this report, together with the appropriate schedules, worksheets and fees to the Arizona Department of Water Resources. If mailed, the report must be postmarked no later than March 31, 2009. If hand delivered, the report must be received by the Department's Records Management Unit or local AMA office no later than 5:00 PM on March 31, 2009.

REPORTS FILED AFTER MARCH 31, 2009 ARE SUBJECT TO LATE FEES (A.R.S. § 45-632) AND PAYMENT OF PREVIOUSLY WAIVED MONETARY PENALTIES ASSOCIATED WITH PRIOR GROUNDWATER CODE VIOLATIONS.

I hereby certify, under penalty of perjury, that the information contained in this report is, to the best of my knowledge and belief, true, correct and complete.

X Richard W. Henderson — AUTHORIZED SIGNATURE
VP-OPERATIONS — TITLE
3-30-09 — DATE

RICHARD W. HENDERSON — PRINTED NAME
602-240-6860 — TELEPHONE NUMBER

NOTE: THIS REPORT MUST BE FILED EVEN IF NO WATER WAS DELIVERED PURSUANT TO THIS RIGHT.

WORKSHEET W-1 2008

GROUNDWATER RIGHT/PERMIT/ BMP Farm Unit NO. 56-001307.0000

1 DWR WELL REGISTRATION NO.: 55-616597

10 Q	40 Q	160 Q	Sec	Twn	Rng
NE	NW	NE	21	6.0S	6.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER
MAKE / MODEL:
SIZE:
UNITS MEASURED:
INSTALLATION OR OVERHAUL DATE:

3 POWER CO. NAME: ELECTRICAL DISTRICT 2
ACCOUNT NO.: 0400
POWER METER NO.: NOT SERVING

ENERGY CONSUMPTION:
UNITS:

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP? Yes ☐ No ☒

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET		9 BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in Column 13 of Schedule A

10 TOTAL IN ACRE-FEET:

---

1 DWR WELL REGISTRATION NO.: 55-616598 #14

10 Q	40 Q	160 Q	Sec	Twn	Rng
NW	NW	NW	21	6.0S	6.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER
MAKE / MODEL: SENSUS 101
SIZE: 4"
UNITS MEASURED: GAL
INSTALLATION OR OVERHAUL DATE: 5/2008

3 POWER CO. NAME: ARIZONA PUBLIC SERVICE
ACCOUNT NO.: 0906511-001-2
POWER METER NO.: 777610 #14

ENERGY CONSUMPTION: 1809840
UNITS: KWH

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP? Yes ☐ No ☒

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE
0 633344000	37219000 654662000	37219000 21318000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET	179.6	9 BREAKDOWN ESTIMATE	—

Enter total Acre-feet Shown in 10 in Column 13 of Schedule A

10 TOTAL IN ACRE-FEET: 179.6

---

1 DWR WELL REGISTRATION NO.: 55-616600

10 Q	40 Q	160 Q	Sec	Twn	Rng
SE	SE	NW	22	6.0S	6.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER
MAKE / MODEL:
SIZE:
UNITS MEASURED:
INSTALLATION OR OVERHAUL DATE:

3 POWER CO. NAME: ELECTRICAL DISTRICT 2
ACCOUNT NO.: NOT SERVING
POWER METER NO.: 3166

ENERGY CONSUMPTION:
UNITS:

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP? Yes ☐ No ☒

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET		9 BREAKDOWN ESTIMATE	

Enter total Acre-feet Shown in 10 in Column 13 of Schedule A

10 TOTAL IN ACRE-FEET:

---

1 DWR WELL REGISTRATION NO.: 55-616601 #17

10 Q	40 Q	160 Q	Sec	Twn	Rng
NW	SW	SW	15	6.0S	6.0E

2 TYPE OF MEASURING DEVICE: TOTALIZER
MAKE / MODEL: SENSUS 101
SIZE: 6"
UNITS MEASURED: GAL
INSTALLATION OR OVERHAUL DATE: 9/2007

3 POWER CO. NAME: ELECTRICAL DISTRICT 2
ACCOUNT NO.: 03800
POWER METER NO.: 3167 #17

ENERGY CONSUMPTION: 6960
UNITS: KWH

4 DOES ENERGY METER SERVE USES OTHER THAN THE WELL PUMP? Yes ☐ No ☒

ENTER "Y" OR "N" IN COLUMN 5 OF SCHEDULE A

WATER TOTALIZING METER READINGS		
5 INITIAL	6 ENDING	7 DIFFERENCE
45541000	45700000	159000

IF METER WAS REPLACED DURING THE YEAR, INDICATE BEGINNING AND ENDING READING FOR EACH METER IN THE BOXES ABOVE.

8 ACRE FEET	0.5	9 BREAKDOWN ESTIMATE	—

Enter total Acre-feet Shown in 10 in Column 13 of Schedule A

10 TOTAL IN ACRE-FEET: 0.5

Well Registry Information

Registration Number 55- **616672**

General | Construction | Status | Owner | Driller | Pump Data

Well Information

Site Type W - WELL Well Type N - NON-EXEMPT Replaces Well 55-

Location Information

Cadastral A16005014DDD Book 405 Map 28 Parcel 263 Latitude Longitude

Basin and County Information

Basin VERDE RIVER Sub Basin 79 - VERDE VALLEY Watershed 05 - VERDE RIVER

AMA/INA 0 - NOT WITHIN ANY AMA OR INA County 13 - YAVAPAI

Site Uses	Water Uses
Site Use 1 WATER PRODUCTION	Water Use 1 DOMESTIC
Site Use 2	Water Use 2 MUNICIPAL
Site Use 3	Water Use 3 INDUSTRIAL

GWSI Well Information **What is this?**

GWSI Site ID 344632111465301 GWSI Local ID A-16-05 14DDD2

Well Registry is ADWR's well database containing reported information on well status, location and construction.

EXHIBIT
A-32

Well Registry Information

Registration Number 55- **616672**

General | Construction | Status | Owner | Driller | Pump Data

Well Construction Information

Well Depth (ft)	585	Water Level (ft bls)	361		
Casing Depth (ft)	578	Casing Diameter (in)	6	Casing Type	P - STEEL - PERFORATED OR SLOTTED CASING

Well Data

No. of Holes	1	Irrigated Acres	0	Acre Ft Annum		Intended Capacity (GPM)	0

Pump Completion Report

Tested Capacity(GPM)	45	Pump Capacity(GPM)	45	Draw Down (ft)	0
Pump Type	0 - NO PUMP CODE LISTED	Power Type	0 - NO POWER CODE LISTED	Method of Discharge	X - NONE

Place of Use

Township	N/S	1/2 T	Range	E/W	1/2 R	Section	160 Acre	40 Acre	10 Acre	Cadastral

No records to display.

Well Registry is ADWR's well database containing reported information on well status, location and construction.

Well Registry Information

Registration Number 55- **616672**

General Construction Status Owner Driller Pump Data

Well Status

Application Date 04/02/1982 Well Accepted Y - Yes Log Received Log Canceled

Well Action

Action Date	Action Code	Action Description	Action Comments
6/6/2006	555	DRILLER & OWNER PACKETS MAILED	TH
6/14/2004	750	WELL LOG RECEIVED	bjs
12/1/2003	550	DRILLING AUTHORITY ISSUED	JA
11/28/2003	150	NOI RECEIVED FOR A NEW PRODUCTION WELL	JA

Well Registry Comments

Well Comments

ATTN GORDON FJELD

Well Registry is ADWR's well database containing reported information on well status, location and construction.

Well Registry Information

Registration Number 55- **616672**

General Construction Status Owner Driller Pump Data

Owner Information

Begin Date	End Date	Owner Type	Name Type	First Name	Last Name	Company
		CORPORATION	OWNER			ARIZONA WATER COMPANY

Select above owner to view details below

Street Address

Address 1 3805 N BLACK CANYON HWY Address 2

City PHOENIX State AZ Zip 85038 -

Phone Numbers

Country Code Phone (602)240-6860 Ext. Cell Home

Owner Details

Email Title Primary Mailing Y - Yes Registered Name Y - Yes

Comments

Well Registry is ADWR's well database containing reported information on well status, location and construction.

Well Registry Information

Registration Number 55- **616672**

General Construction Status Owner Driller Pump Data

Driller Information

Lic No	Company	Address 1	Address 2	City	State	Zip	Phone
0							
7	LAYNE CHRISTENSEN COMPANY	12030 EAST RIGGS ROAD		CHANDLER	AZ	85249-3701	480-895-7103

Select above driller to view details below

Driller License Information

Active License	I - Inactive	Issue Date	01/01/1801	Expiration Date	
Qualifying Party		ROC License			

Driller License Comments

License Comments	
Driller Comments	Legacy Dataload Record - 10/28/1997

Well Registry is ADWR's well database containing reported information on well status, location and construction.

Well Registry Information

Registration Number 55- **616672**

General | Construction | Status | Owner | Driller | Pump Data

Associated Permits

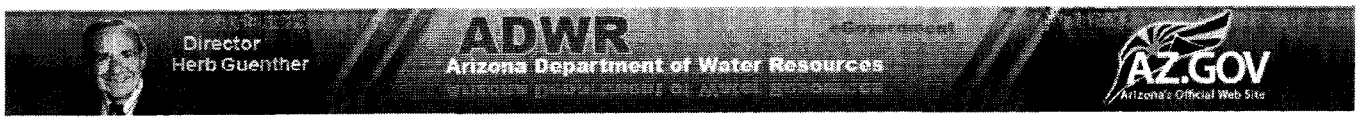
Prog.	Certificate	Conv.	Name	Program Type	Issue Date	Begin Date	End Date
No records to display.							

Pumping Data

Total Water (Acre-Ft) 43

Year	Amount of Water (Acre-Ft)	Water Movement	Water Type
2006	43	WITHDRAWAL	GROUNDWATER

Well Registry is ADWR's well database containing reported information on well status, location and construction.



Well Registry Information

Registration Number 55- **212110**

General | Construction | Status | Owner | Driller | Pump Data

Well Information

Site Type W - WELL Well Type N - NON-EXEMPT Replaces Well 55- 616672

Location Information

Cadastral A16005014DDD Book 405 Map 28 Parcel 263 Latitude Longitude

Basin and County Information

Basin VERDE RIVER Sub Basin 79 - VERDE VALLEY Watershed 05 - VERDE RIVER

AMA/INA 0 - NOT WITHIN ANY AMA OR INA County 13 - YAVAPAI

Site Uses	Water Uses
Site Use 1 WATER PRODUCTION	Water Use 1 DOMESTIC
Site Use 2	Water Use 2
Site Use 3	Water Use 3

GWSI Well Information **What is this?**

GWSI Site ID No corresponding GWSI well GWSI Local ID No corresponding GWSI well

Well Registry is ADWR's well database containing reported information on well status, location and construction.

EXHIBIT
A-33
ADMITTED

Well Registry Information

Registration Number 55- **212110**

General | Construction | Status | Owner | Driller | Pump Data

Well Construction Information

Well Depth (ft)	1045	Water Level (ft bls)	400		
Casing Depth (ft)	1005	Casing Diameter (in)	17	Casing Type	P - STEEL - PERFORATED OR SLOTTED CASING

Well Data

No. of Holes	1	Irrigated Acres		Acre Ft Annum		Intended Capacity (GPM)	750

Pump Completion Report

Tested Capacity(GPM)	Pump Capacity(GPM)	Draw Down (ft)
Pump Type	Power Type	Method of Discharge

Place of Use

Township	N/S	1/2 T	Range	E/W	1/2 R	Section	160 Acre	40 Acre	10 Acre	Cadastral
16	N		5	E		14	D	D	D	A16005014DDD

Well Registry is ADWR's well database containing reported information on well status, location and construction.

Well Registry Information

Registration Number 55- **212110**

General | Construction | Status | Owner | Driller | *Pump Data*

Well Status

Application Date 05/05/2006 Well Accepted Y - Yes Log Received X - Received Log Canceled

Well Action

Action Date	Action Code	Action Description	Action Comments
5/3/2007	750	WELL LOG RECEIVED	MO
6/14/2004	750	WELL LOG RECEIVED	bjs
12/1/2003	550	DRILLING AUTHORITY ISSUED	JA
11/28/2003	150	NOI RECEIVED FOR A NEW PRODUCTION WELL	JA

Well Registry Comments

Well Comments

Valley Vista Well
WELL CAPPED

Well Registry is ADWR's well database containing reported information on well status, location and construction.

Well Registry Information

Registration Number 55- **212110**

General | Construction | Status | Owner | Driller | Pump Data

Owner Information

Begin Date	End Date	Owner Type	Name Type	First Name	Last Name	Company
4/24/2006		PRIVATE OR COMPANY	OWNER			ARIZONA WATER COMPANY

Select above owner to view details below

Street Address

Address 1 3805 N BLACK CANYON HIGHWAY Address 2

City PHOENIX State AZ Zip 85015 -

Phone Numbers

Country Code Phone (602)240-6860 Ext. Cell Home

Owner Details

Email Title Primary Mailing Y - Yes Registered Name Y - Yes

Comments

Well Registry is ADWR's well database containing reported information on well status, location and construction.

Well Registry Information

Registration Number 55- **212110**

General Construction Status Owner Driller Pump Data

Driller Information

Lic No	Company	Address 1	Address 2	City	State	Zip	Phone
7	LAYNE CHRISTENSEN COMPANY	12030 EAST RIGGS ROAD		CHANDLER	AZ	85249-3701	480-895-7103

Select above driller to view details below

Driller License Information

Active License	A - Active	Issue Date	06/08/2006	Expiration Date	05/04/2007
Qualifying Party	SEE COMMENTS	ROC License	C53, "A" & A-4		

Driller License Comments

License Comments: LARRY G. KRALL 1999-2010 ACTIVE JAMES M HAUSLADEN 2009-2010 ACTIVE NORMAN E. MEHLHORN 1999-2006 INACTIVE DON SAWADE 1999-2005 SEE 215 RONALD G. CLAYTON 2003 INACTIVE JOHN KNUDSON 1999-2001 INACTIVE SCOTT CAMPBELL 1988 -1999 SEE 468 DELMAR BRUE 1987-1999 INACTIVE KLEIGH HIRSCHI 1999-2001 SEE 692 MITCHEL DANIELS 1999-2001 SEE 685 ROBERT M. HUSKISON 1991-1998 SEE 605 DAVID ELDON BOWEN 1980-1983 SEE 208 ROBERT KEITH FIFIELD 1982-1986 SEE 555&175 JACQUELINE S. BROPHY 1983-1986 SEE 522 JAMES R. MURRAY 1985-1986 INACTIVE LYLE J. WILL 1986-1990 INACTIVE

Driller Comments

Well Registry is ADWR's well database containing reported information on well status, location and construction.

ARIZONA DEPARTMENT OF WATER RESOURCES

Community Water System
Electronic Filing Receipt

Janet Napolitano
Governor
Herbert R. Guenther
Director

ADWR Community Water System ID: 91-000663.0000
Community Water System Name: AZ WATER CO - VALLEY VISTA
Report Year: 2008
Date Report Electronically Filed: 5/13/2009
Confirmation ID: 5643399

91-000663.0000

Filed By: OWNER

Name: ARIZONA WATER COMPANY
Title:
Address1: ATTN: WILLIAM GARFIELD
Address2: PO BOX 29006
City: PHOENIX **State:** AZ **Zip:** 85038
E-mail THARRELL@AZWATER.COM

Note that amendments to your report data cannot be made using the online eCWS tool. You will need to fill out a separate form with your changes. Please contact ADWR at ecws@azwater.gov or (602) 771-8442.

Part I - Water Withdrawn - A

Well Registry ID	Measurement	Quantity Withdrawn (AF)
55 - 616671	METR - METERED	120
55 - 616670	METR - METERED	35
55 - 518969	METR - METERED	247
55 - 212110	METR - METERED	2
	Total Water Withdrawn (ac-ft):	404

Part II - Water Diverted (including well diversions) - A

Water Right / Well Registry	Source of Water:	Measurement Method	Quantity Diverted (AF)
Water Right or Claim No: Well Registry Id	NONE SPECIFIED		0
		Total Water Diverted (ac-ft):	0

Part III Water Received

Name of Water System	Well Registry ID	Quantity Received (AF)
Source of Water:		0

Part III Water Received

Name of Water System	Well Registry ID	Quantity Received (AF)

Total Water Received (ac-ft):	0

Part IV Water Delivered to Other Water Systems:

Water System Name /	Source of Water	Measurement	Quantity Delivered (AF)
Name: NONE SPECIFIED City or Town: ADEQ#			0
Total Water Delivered to Other Water Systems (ac-ft):			0

Part V Water Delivered to Customers - A:

Customer Type	Number of Connections	Quantity Delivered
RESIDENTIAL		
SINGLE FAMILY	673	239
MULTI FAMILY	24	29
NON-RESIDENTIAL		
COMMERCIAL	46	117
TURF	0	0
OTHER	3	1
Total Connections:	746	**Total Delivered:** 386

Part V Water Delivered to Customers - B

Customer Type	Number of Connections	Quantity Delivered
TOTAL NON-RESIDENTIAL	0	0
TOTAL RESIDENTIAL	0	0
Total Connections:	0	**Total Delivered:** 0

Part V Water Delivered to Customers - C

Customer Type	Number of Connections	Quantity Delivered
TOTAL ALL	0	0

Part VI Description of Effluent Use

A

Name of Waste Water Treatment Facility (WWTF)	Estimated Quantity Generated by WWTF
	0
Total Quantity Generated by WWTF:	0

B

Specific Uses to Which the Effluent Was Applied	Estimated Quantity for Each Use:
	0
Total Estimated Quantity Used Directly from the WWTF(s) (ac-ft):	0

Part VII Storage Facilities

Storage Facility Name	Storage Capacity
SEDONA GOLF RESORT	250,000
SUNUP #1	150,000
SUNUP #2	175,000
Total Storage Capacity (gallons):	575,000

ARIZONA DEPARTMENT OF WATER RESOURCES
Information Management Unit
P.O. Box 458, Phoenix, Arizona 85001-0458
(602) 771-8527 * (800) 352-8488
www.water.az.gov

RECEIVED MAY - 3 2007 INFO MGMT

Well Driller Report and Well Log

ENTERED MAY 24 2007

FILE NUMBER: A(16-5) 14 DDD
WELL REGISTRATION NUMBER: 55-212110
PERMIT NUMBER (IF ISSUED)

+ This report should be prepared by the driller in detail and filed with the Department within 30 days following completion of the well.

** PLEASE PRINT CLEARLY **

SECTION 1. DRILLING AUTHORIZATION

Mail To:

Drilling Firm

NAME	OWR LICENSE NUMBER
LAYNE CHRISTENSEN COMPANY	7
ADDRESS: 12030 EAST RIGGS ROAD	TELEPHONE NUMBER: 480-895-9404
CITY/STATE/ZIP: CHANDLER, AZ 85249-3701	FAX

SECTION 2. REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION OR INDIVIDUAL: ARIZONA WATER COMPANY

MAILING ADDRESS: 3805 N BLACK CANYON HIGHWAY

CITY / STATE / ZIP: PHOENIX, AZ 85015

CONTACT PERSON NAME AND TITLE:

TELEPHONE NUMBER: 602-240-6860 FAX:

WELL NAME (e.g., MW-1, PZ-3, Lot 25 Well, Smith Well, etc.):

Location of Well

WELL LOCATION ADDRESS (IF ANY): 315 Deer Pass Drive, Sedona

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
16N	5E	14	SE 1/4	SE 1/4	SE 1/4

LATITUDE Degrees	Minutes	Seconds "N	LONGITUDE Degrees	Minutes	Seconds "W
°	'		°	'	

METHOD OF LATITUDE / LONGITUDE (CHECK ONE): ☐ USGS Quad Map ☐ Conventional Survey ☐ *GPS: Hand-Held ☐ *GPS: Survey-Grade

LAND SURFACE ELEVATION AT WELL: Feet Above Sea Level

METHOD OF ELEVATION (CHECK ONE): ☐ USGS Quad Map ☐ Conventional Survey ☐ *GPS: Hand-Held ☐ *GPS: Survey-Grade

*IF GPS WAS USED, GEOGRAPHIC COORDINATE DATUM (CHECK ONE): ☐ NAD-83 ☐ Other (please specify):

COUNTY: YAVAPAI

ASSESSOR'S PARCEL ID NUMBER: BOOK 405 MAP 28 PARCEL 263

SECTION 3. WELL CONSTRUCTION DETAILS

Drill Method (CHECK ONE)

- ☐ Air Rotary
- ☐ Bored or Augered
- ☐ Cable Tool
- ☐ Dual Rotary
- ☐ Mud Rotary
- ☐ Reverse Circulation
- ☐ Driven
- ☐ Jetted
- ☐ Air Percussion / Odex Tubing
- ☒ Other (please specify): Flooded Reverse

Method of Well Development (CHECK ONE)

- ☑ Airlift
- ☐ Bail
- ☑ Surge Back
- ☐ Surge Pump
- ☐ Other (please specify)

Method of Sealing at Reduction Points (CHECK ONE)

- ☑ None
- ☐ Packed
- ☐ Swedged
- ☐ Welded
- ☐ Other (please specify)

Condition of Well (CHECK ONE)

- ☑ Capped
- ☐ Pump Installed

Construction Dates

DATE WELL CONSTRUCTION STARTED: 10-4-06

DATE WELL CONSTRUCTION COMPLETED: 4-11-07

I state that this notice is filed in compliance with A.R.S. § 45-596 and is complete and correct to the best of my knowledge and belief.

DRILLING FIRM	SIGNATURE OF QUALIFYING PARTY	DATE
LAYNE CHRISTENSEN Co.	Larry Krall	4/28/07

 81-4615

Well Driller Report and Well Log

WELL REGISTRATION NUMBER
55- 212110

SECTION 4. WELL CONSTRUCTION DESIGN (AS BUILT) (attach additional page if needed)

DEPTH OF BORING	DEPTH OF COMPLETED WELL
1045' Feet Below Land Surface	1005' Feet Below Land Surface

Water Level Information

STATIC WATER LEVEL	DATE MEASURED	TIME MEASURED	IF FLOWING WELL, METHOD OF FLOW REGULATION
400' Feet Below Land Surface	2-1-07	6:30 Am	☐ Valve ☐ Other:

Borehole			Installed Casing													
DEPTH FROM SURFACE		BOREHOLE DIAMETER (inches)	DEPTH FROM SURFACE		OUTER DIAMETER (inches)	MATERIAL TYPE (X)				PERFORATION TYPE (X)						SLOT SIZE IF ANY (inches)
FROM (feet)	TO (feet)		FROM (feet)	TO (feet)		STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	
0	40'	36",	0	40'	32 5/8	X				X						
0	1045'	26"	0	440'	16 5/8	X				X						
			440'	600'	16 5/8	X						X				.050
			600'	620'	16 5/8	X				X						
			620'	980	16 5/8	X						X				.050
			980'	1005	16 5/8	X										

Installed Annular Material

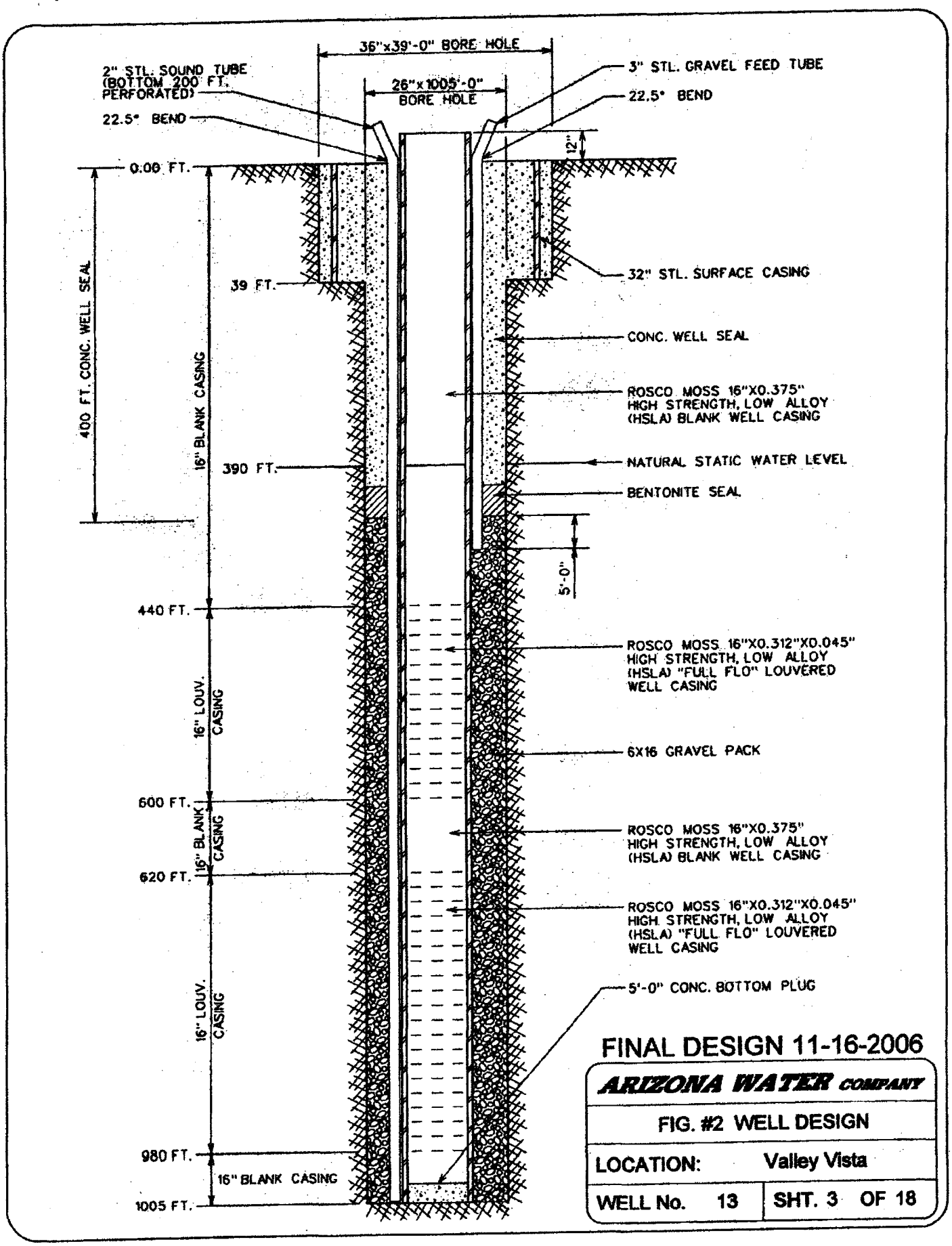
DEPTH FROM SURFACE		ANNULAR MATERIAL TYPE (X)								FILTER PACK		
						BENTONITE						
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	CHIPS	PELLETS	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	SAND	GRAVEL	SIZE
0	398'			X								
398'	410'						X					3/8
410'	1045'								NONA	X		6X16 Gravel

Well Driller Report and Well Log

WELL REGISTRATION NUMBER
55- 212110

SECTION 5. GEOLOGIC LOG OF WELL

DEPTH FROM SURFACE FROM (feet)	TO (feet)	DESCRIPTION Describe material, grain size, color, etc.	Check (X) every interval where water was encountered
0	120'	Hard Rock (Red)	
120'	130'	Red Clay + Grey Sandstone	
130'	230'	Red Rock with Clay	
230'	280'	Clay with Gravel	
280'	300'	Hard Rock	
300'	340'	Rock, Clay, Sand with Gravel	
340'	470'	Red + Grey Rock	X
470'	610'	Red + Grey Rock (Hard)	
610'	660'	Red Rock with Gravel	X
660'	710'	Void	
710'	830'	Red Rock, Clay with Gravel	
830'	850'	Red Rock (Hard)	
850'	890'	Rock, Clay with Gravel	
890'	900'	Gravel with Sand	
900'	910'	Void	
910'	1045'	Sandy Clay with Gravel	



FINAL DESIGN 11-16-2006

ARIZONA WATER COMPANY	
FIG. #2 WELL DESIGN	
LOCATION:	Valley Vista
WELL No. 13	SHT. 3 OF 18

ARIZONA DEPARTMENT OF WATER RESOURCES
WATER MANAGEMENT SUPPORT SECTION

3550 N. Central Avenue
Phoenix, Arizona 85012

THIS AUTHORIZATION SHALL BE IN POSSESSION OF THE DRILLER DURING ALL DRILL OPERATIONS

WELL REGISTRATION NO: 55-212110 REPLACING WELL REGISTRATION NO: 55-616672

AUTHORIZED DRILLER: LAYNE CHRISTENSEN COMPANY LICENSE NO: 7

NOTICE OF INTENTION TO REPLACE A NON-EXEMPT WELL(S) HAS BEEN FILED WITH THE DEPARTMENT BY:

WELL OWNER: ARIZONA WATER COMPANY 3805 N BLACK CANYON HIGHWAY PHOENIX, AZ 85015

THE WELL(S) IS/ARE TO BE LOCATED IN THE:
SE ¼ OF THE SE ¼ OF THE SE ¼ SECTION 14 TOWNSHIP 16 NORTH RANGE 5 EAST

NO. OF WELLS IN THIS PROJECT: 1 ASSESSOR PARCEL NO: 405-28-263

THIS AUTHORIZATION EXPIRES AT MIDNIGHT ON THE 4TH DAY OF MAY, 2007

WATER MANAGEMENT SUPPORT

THE DRILLER MUST FILE A LOG OF THE WELL
WITHIN 30 DAYS OF COMPLETION OF DRILLING

GREAT SEAL OF THE STATE OF ARIZONA
DITAT DEUS
1912

ARIZONA DEPARTMENT OF WATER RESOURCES
3550 N. Central Avenue, Phoenix, Arizona 85012
Telephone (602) 771-8500
Fax (602) 771-8691

June 08, 2006

Janet Napolitano
Governor

Herbert R. Guenther
Director

ARIZONA WATER COMPANY
3805 N BLACK CANYON HIGHWAY
PHOENIX, AZ 85015

Registration No. 55-212110
File No. A(16-5) 14 DDD

Dear Well Owner:

Enclosed is a copy of the Notice of Intention (NOI) to Replace a well that you recently filed with this Department pursuant to A.R.S. § 45-596. This is to inform you that the Department has approved the NOI and has mailed or otherwise provided a drilling card authorizing the drilling of the well to the well driller identified in the NOI. The driller may not begin drilling until he has received the drilling card, which must be displayed on the drill rig during drilling.

Well drilling activities must be completed within one year after the date the NOI was filed with the Department. If drilling is not completed within one year, you must file a new NOI before proceeding with further drilling. If in the course of drilling the well, it is determined that the well cannot be successfully completed as initially intended (dry hole, cave in, lost tools, etc.), the well must be properly abandoned and a Well Abandonment Completion Report must be filed as required by A.A.C. R12-15-816(F).

If you change drillers, you must notify the Department of the new driller's identity. Please ensure that the new driller is licensed by the Department to drill the type of well you require. A new driller may not begin drilling until he receives a new drilling card from the Department. If you are drilling a new or replacement well and it is necessary to change the location of the proposed well, you may not proceed with drilling until you file an amended NOI with the Department and the Department issues an amended drilling card to the driller. If county approval was required for the original well site plan (this applies to domestic wells on parcels that are five acres or less), you must submit a new well site plan with the new well location to your local county health authority for approval prior to filing the amended NOI with the Department.

A.R.S. § 45-600 requires the registered well owner to complete and file a Pump Installation Completion Report form (DWR form 55-56) within 30 days after the installation of pumping equipment. A form is enclosed for your use. Also enclosed is a well owner's guide that provides useful information and advice concerning your upcoming well construction project. A.R.S.§ 45-600 also requires the driller to file a complete and accurate Well Drillers Report and Well Log (DWR form 55-55) within 30 days after completion of drilling. That form was mailed to your driller with the drilling card. You should insist and ensure that all of the required forms are accurately completed and timely filed with the Department.

Please be advised that A.R.S. § 45-593(C) requires the person to whom a well is registered to notify the Department of a change in ownership of the well and/or information pertaining to the physical characteristics of the well in order to keep this well registration file current and accurate. Any change in well information or a request to change well driller must be filed on a Request to Change Well Information form (DWR form 55-71A) that may be downloaded from the ADWR Internet website at <http://www.water.az.gov/adwr/content/forms/default.htm#NOI>.

Sincerely,

Tiffany Hancock

Tiffany Hancock
NOI Unit
Water Management Support Section

Enclosures

Revised #127.50 SKR PAID MAY 09 2006

Arizona Department of Water Resources
Water Management Support Section
P.O. Box 458 • Phoenix, Arizona 85001-0458
(602) 771-8500 • (800) 352-8488
(602) 771-8691 fax • www.azwater.gov

Notice of Intent to Drill, Deepen, Replace or Modify a Well
(except a Non-Exempt Well in an Active Management Area)

$150 or $100 FEE

- Review instructions prior to completing form in black or blue ink.
- You must include with your Notice:
- Check or money order in the amount of the appropriate filing fee. For a well located within an AMA or INA, the fee is $150.00. For a well not located within an AMA or INA, the fee is $100.00 if the well will be used solely for domestic purposes (see page 2 and instructions) and will have a pump with a maximum capacity of not more than 35 gallons per minute. Otherwise, the fee is $150.00.
- Authority for fee: A.R.S. § 45-596.

** PLEASE PRINT CLEARLY **

AMA / INA	B	SB
—	79	
RECEIVED DATE	WS	
5/5/06	05	
ISSUED DATE	WQARF	CERCLA
6/8/06	—	

FILE NUMBER: A(16-5)14 DDD
WELL REGISTRATION NUMBER: 55 - 212110

RECEIVED JUN - 7 2006 WATER MGT

SECTION 1: COUNTY OR LOCAL HEALTH AUTHORITY APPROVAL (if applicable)

If water from the proposed well will be used for domestic purposes on a parcel of land of 5 or fewer acres, the applicable county or local health authority must endorse all items in Section 1 within one year before submission to the Department of Water Resources. You must also attach a site plan (pg. 3).

CHECK ONE
- [x] County or Local Health Authority Recommends Approval (pursuant to A.R.S. § 45-596 (G) and (F))
  - [ ] Field Inspection Performed
  - [x] Site Plan Review Only
- [ ] Insufficient Information to Make a Determination

Yavapai County Office Development Services Stamp
Well Site Review

EHS 6-5-06 Date

COUNTY OR LOCAL AUTHORITY NAME AND TITLE: Geoff Meek

TELEPHONE NUMBER: 928-771-3214 DATE: 6-5-06

COUNTY OR LOCAL AUTHORITY SIGNATURE: [signature]

SECTION 2: REGISTRY INFORMATION

Well Type

CHECK ONE
- [ ] Exempt (Pump has a maximum capacity of not more than 35 gpm and water is not used for irrigation purposes inside an AMA.) (*See instructions.*)
- [x] Non-Exempt (Pump has a maximum capacity of more than 35 gpm and the well is located outside an AMA.) (*See instructions.*)

DESIGN PUMP CAPACITY: 750 Gallons Per Minute

Proposed Action

CHECK ONE
- [ ] Drill New Well
- [ ] Deepen
- [x] Replace
- [ ] Modify

If Deepening, Replacing or Modifying:

ORIGINAL WELL REGISTRATION NUMBER: 55-616672

MAXIMUM CAPACITY OF ORIGINAL WELL: 45 Gallons Per Minute

DISTANCE & DIRECTION FROM ORIGINAL WELL: Feet

Location of Well

WELL LOCATION ADDRESS (IF ANY): 315 Deer Pass Dr. Village of Oak Creek, AZ

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
16N	5E	14	SE ¼	SE ¼	SE ¼

COUNTY ASSESSOR'S PARCEL ID NUMBER

BOOK	MAP	PARCEL	# OF ACRES
405	28	263	.057

PLACE OF WATER USE (ONLY IF DIFFERENT FROM LOCATION OF WELL)

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
			¼	¼	¼

COUNTY WHERE WELL IS LOCATED: YAVAPAI

SECTION 3: OWNER INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL: ARIZONA WATER COMPANY

MAILING ADDRESS: 3805 NORTH BLACK CANYON HWY

CITY / STATE / ZIP CODE: PHOENIX, AZ 85015

CONTACT PERSON NAME AND TITLE: MIKE LOGGINS ENGINEER

TELEPHONE NUMBER: 602-240-6860 FAX: 602-240-6878

Landowner (if different from Well Owner)

FULL NAME OF COMPANY, GOVERNMENT AGENCY, OR INDIVIDUAL:

MAILING ADDRESS:

CITY / STATE / ZIP CODE:

CONTACT PERSON NAME AND TITLE:

TELEPHONE NUMBER: FAX:

SECTION 4

Questions	Yes	No	If Yes:
1. Is the proposed well site within 100 feet of a septic tank system, sewer disposal area, landfill, hazardous materials or petroleum storage area or tank?		X	You must also request a variance (A.A.C. R12-15-818).
2. Is there another well name or identification number associated with this well (e.g., Lot 35 Well, Smith Well, etc.)?	X		PLEASE STATE VALLEY VISTA WELL
3. Is the proposed well a NEW well to be located within an Active Management Area? *(See instructions)*		X	Unless the well is a replacement well and the total number of operable exempt wells on the land is not increasing, you must also file a supplemental form A.R.S. § 45-454(C) & (D).
4. Is the proposed well the second exempt well on this parcel for the same use?		X	If the proposed well is in an Active Management Area, you must also file a supplemental form 55-40A.

Notice of Intent to Drill, Deepen, Replace or Modify a Well

WELL REGISTRATION NUMBER
55 - 212110

SECTION 5. DRILLING AUTHORIZATION

Drilling Firm

NAME: LAYNE CHRISTENSEN COMPANY	
OWR LICENSE NUMBER: NO. 071734 7	ROC LICENSE CATEGORY: A-4
TELEPHONE NUMBER: 480-895-9404	FAX: 480-895-8699
MAILING ADDRESS: 12030 EAST RIGGS ROAD	
CITY / STATE / ZIP CODE: CHANDLER, AZ 85249	
DATE CONSTRUCTION IS TO BEGIN: JUNE 1, 2006	

SECTION 6. WATER / SITE INFORMATION

Principal Use of Water (CHECK ONE)	Other Uses of Water (CHECK ALL THAT APPLY)
☐ Irrigation	☐ Irrigation
☐ Utility	☐ Utility
☐ Commercial	☐ Commercial
☒ Domestic	☐ Domestic
☐ Municipal	☐ Municipal
☐ Industrial	☐ Industrial
☐ Mining	☐ Mining
☐ Stock	☐ Stock
☐ Recharge	☐ Recharge
☐ Dewatering	☐ Dewatering
☐ Other *(please specify)*:	☐ Other *(please specify)*:

SECTION 7. PROPOSED WELL CONSTRUCTION DESIGN (attach separate sheet if needed)

Borehole			Casing													
DEPTH FROM SURFACE			DEPTH FROM SURFACE			MATERIAL TYPE (T)				PERFORATION TYPE (T)						
FROM (feet)	TO (feet)	BOREHOLE DIAMETER (inches)	FROM (feet)	TO (feet)	OUTER DIAMETER (inches)	STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	GROUTING MATERIAL
0	1000	26"														
			0	560	16"	X *				X						
			560	680	16"	X									LOUVERED	
			680	700	16"	X				X						
			700	980	16"	X									LOUVERED	
			980	1000	16"	X				X						

* ADWR well construction standards require a surface seal consisting of a minimum of 20 feet of steel casing. Cement grout must be used to fill the annular space between the surface casing and the borehole. (A.A.C. R12-15-811(B))

JUN - 7 2006

The Department's issuance of an authorization to drill a well is not a determination of whether water withdrawn from the well is legally surface water or groundwater. The legal nature of the water withdrawn from the well may be the subject of court action in the future as part of a determination of surface water rights in your area. If there are court proceedings that could affect your well, you will be notified and be given the opportunity to participate. If you have questions regarding the legal nature of the water to be withdrawn from your proposed well, please consult with an experienced civil engineer, hydrologist or water rights attorney.

For the purposes of determining appropriate fees outside AMAs or INAs, "domestic purposes" is defined as "uses related to the supply, service and activities of households and private residences and includes the application of water to less than 2 acres of land to produce plants or parts of plants for sale or human consumption, or for use as feed for livestock, range livestock or poultry, as such terms are defined in A.R.S. § 3-1201."

I state that this notice is filed in compliance with A.R.S. § 45-596 and is complete and correct to the best of my knowledge and belief.

TYPE OR PRINT NAME AND TITLE: MICHAEL LOGGINS ENGINEER	
SIGNATURE OF WELL OWNER: Michael Loggins	DATE: 5/3/06
SIGNATURE OF LANDOWNER, IF APPLICABLE (SEE INSTRUCTIONS)	DATE

Notice of Intent to Drill, Deepen, Replace or Modify a Well

WELL REGISTRATION NUMBER
55 - 212110

CHECK ONE: ☐ FILING MANUALLY
☐ FILING ELECTRONICALLY* *DRILLER'S E-MAIL ADDRESS: _____

*COUNTY OR LOCAL HEALTH AUTHORITY APPROVAL CODE	COUNTY APPROVAL CODE
If applicant is filing this NOI electronically via the ADWR website and County approval is required, please indicate approval by providing a County Approval Code.	1257975193

WELL SITE PLAN

NAME OF WELL OWNER	COUNTY ASSESSOR'S PARCEL ID NUMBER		
	BOOK	MAP	PARCEL
ARIZONA WATER COMPANY			

- If this well will be a domestic well on 5 acres or less, please draw the following: (1) the boundaries of your property; (2) the proposed well location; (3) the locations of all septic tank systems and sewer systems on the property or within 100 feet of the well location, even if on neighboring properties; and (4) any permanent structures on the property that may aid in locating the well. If the parcel is vacant land or lacks a septic tank or sewer system, please indicate this.
- Indicate the distance between the proposed well location and any septic tank system or sewer system.

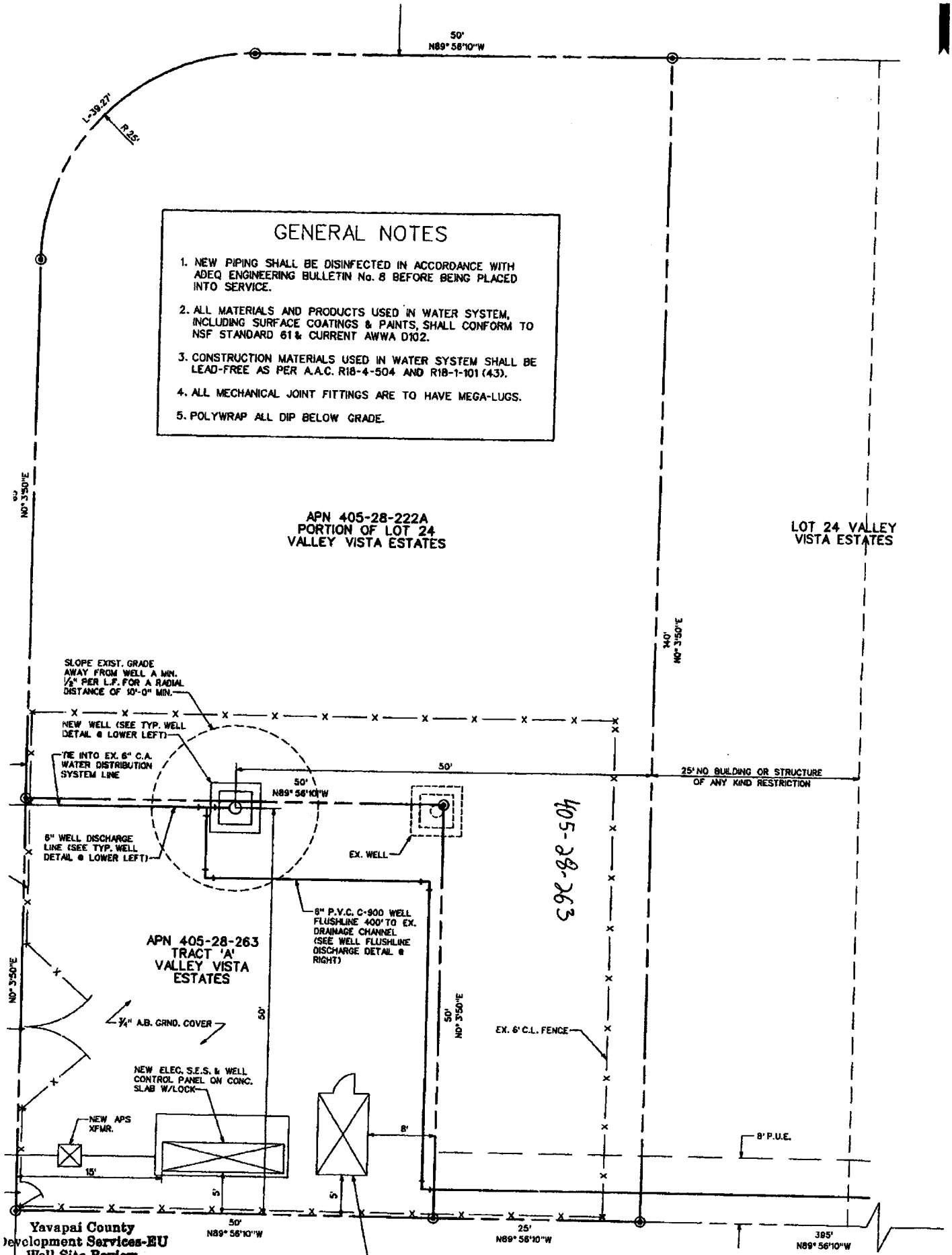
SEE DWG. NO. SD-692

N
W E
S

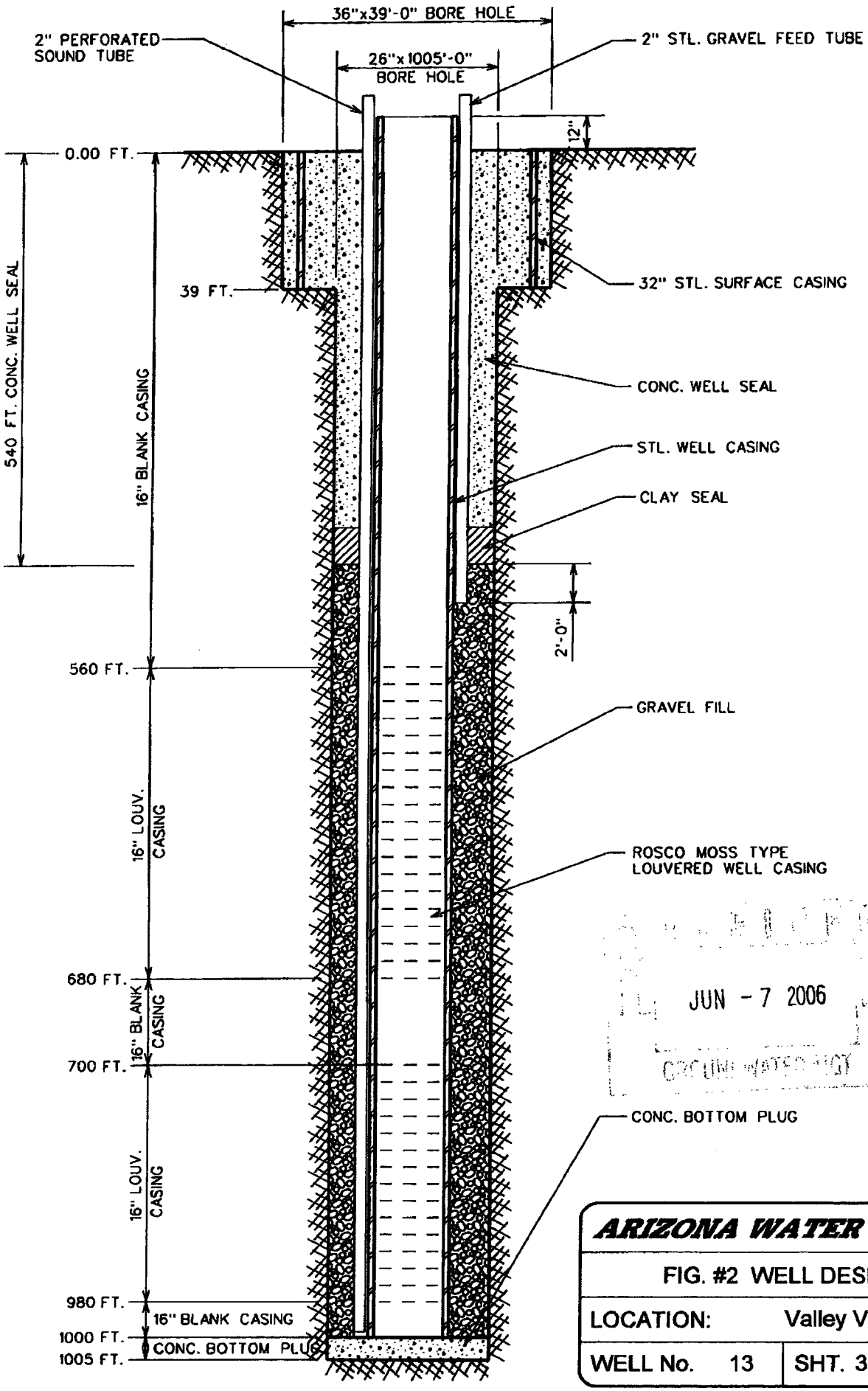
1" = _____ ft

JUN - 7 2006

COUNTY OR LOCAL AUTHORITY NAME AND TITLE		*Official County or Local Seal or Stamp*
COUNTY OR LOCAL AUTHORITY SIGNATURE		
TELEPHONE NUMBER	DATE	


50'
N89° 56'10"W
L=39.27'
R=25'
GENERAL NOTES
1. NEW PIPING SHALL BE DISINFECTED IN ACCORDANCE WITH ADEQ ENGINEERING BULLETIN No. 8 BEFORE BEING PLACED INTO SERVICE.
2. ALL MATERIALS AND PRODUCTS USED IN WATER SYSTEM, INCLUDING SURFACE COATINGS & PAINTS, SHALL CONFORM TO NSF STANDARD 61 & CURRENT AWWA D102.
3. CONSTRUCTION MATERIALS USED IN WATER SYSTEM SHALL BE LEAD-FREE AS PER A.A.C. R18-4-504 AND R18-1-101 (43).
4. ALL MECHANICAL JOINT FITTINGS ARE TO HAVE MEGA-LUGS.
5. POLYWRAP ALL DIP BELOW GRADE.
N0° 3'50"E
APN 405-28-222A
PORTION OF LOT 24
VALLEY VISTA ESTATES
LOT 24 VALLEY
VISTA ESTATES
140'
N0° 3'50"E
SLOPE EXIST. GRADE AWAY FROM WELL A MIN. 1/2" PER L.F. FOR A RADIAL DISTANCE OF 10'-0" MIN.
NEW WELL (SEE TYP. WELL DETAIL @ LOWER LEFT)
TIE INTO EX. 6" C.A. WATER DISTRIBUTION SYSTEM LINE
50'
25' NO BUILDING OR STRUCTURE OF ANY KIND RESTRICTION
50'
N89° 56'10"W
6" WELL DISCHARGE LINE (SEE TYP. WELL DETAIL @ LOWER LEFT)
EX. WELL
405-28-263
6" P.V.C. C-900 WELL FLUSHLINE 400' TO EX. DRAINAGE CHANNEL (SEE WELL FLUSHLINE DISCHARGE DETAIL @ RIGHT)
APN 405-28-263
TRACT 'A'
VALLEY VISTA
ESTATES
N0° 3'50"E
3/4" A.B. GRND. COVER
50'
50'
N0° 3'50"E
EX. 6' C.L. FENCE
NEW ELEC. S.E.S. & WELL CONTROL PANEL ON CONC. SLAB W/LOCK
NEW APS XFMR.
8'
8' P.U.E.
15'
5'
5'
50'
N89° 56'10"W
25'
N89° 56'10"W
395'
N89° 56'10"W
* NEW 0.2 to 1 PPM SODIUM HYPOCHLORITE CHLORINATOR W/LOCK.
Flow: 750 GPM
CL Rate: 0.90 GPH
(SEE CHLORINATOR SPECS. @ LEFT)
* Assuming The Well Runs 24 Hours Per Day While Maintaining A Chlorine Residual Of 0.5 PPM @ The Point Of Chlorination.
Yavapai County
Development Services-EU
Well Site Review
405-28-263
EHS
6-5-06
Date
SEDONA GOLF RESORT
GOLF COURSE
SE COR. SEC 14
T. 16 N., R. 5 E.

212110



JUN - 7 2006
COCONINO WATER DIST

ARIZONA WATER COMPANY

FIG. #2 WELL DESIGN

LOCATION: Valley Vista

WELL No. 13 | SHT. 3 OF 18

See. Revised

Arizona Department of Water Resources
Water Management Support Section
P.O. Box 458 • Phoenix, Arizona 85001-0458
(602) 771-8500 • (800) 352-8488
(602) 771-8691 fax • www.azwater.gov

Notice of Intent to Drill, Deepen, Replace or Modify a Well
(except a Non-Exempt Well in an Active Management Area)

$150 or $100 FEE

- Review instructions prior to completing form in black or blue ink.
- You must include with your Notice:
- Check or money order in the amount of the appropriate filing fee. For a well located within an AMA or INA, the fee is $150.00. For a well not located within an AMA or INA, the fee is $100.00 if the well will be used solely for domestic purposes (see page 2 and instructions) and will have a pump with a maximum capacity of not more than 35 gallons per minute. Otherwise, the fee is $150.00.
- Authority for fee: A.R.S. § 45-596.

AMA / INA	B 79 SB
RECEIVED DATE 4/24/06	WS 05
ISSUED DATE	WQARF CERCLA

FILE NUMBER A(165)14DDD
WELL REGISTRATION NUMBER 55-212110

** PLEASE PRINT CLEARLY **

SECTION 1. COUNTY OR LOCAL HEALTH AUTHORITY APPROVAL (if applicable)

If water from the proposed well will be used for domestic purposes on a parcel of land of 5 or fewer acres, the applicable county or local health authority must endorse all items in Section 1 within one year before submission to the Department of Water Resources. You must also attach a site plan (pg. 3).

CHECK ONE
☐ County or Local Health Authority Recommends Approval (pursuant to A.R.S. § 45-596 (G) and (F))
☐ Field Inspection Performed
☐ Site Plan Review Only
☐ Insufficient Information to Make a Determination

Official County or Local Seal or Stamp

COUNTY OR LOCAL AUTHORITY NAME AND TITLE

TELEPHONE NUMBER | DATE | COUNTY OR LOCAL AUTHORITY SIGNATURE

SECTION 2. REGISTRY INFORMATION

Well Type
CHECK ONE
☐ Exempt (Pump has a maximum capacity of not more than 35 gpm and water is not used for irrigation purposes inside an AMA.) (*See instructions.*)
☒ Non-Exempt (Pump has a maximum capacity of more than 35 gpm and the well is located outside an AMA.) (*See instructions.*)
DESIGN PUMP CAPACITY 750 Gallons Per Minute

Proposed Action
CHECK ONE
☐ Drill New Well
☐ Deepen
☒ Replace
☐ Modify
If Deepening, Replacing or Modifying:
ORIGINAL WELL REGISTRATION NUMBER 55-616672
MAXIMUM CAPACITY OF ORIGINAL WELL 45 Gallons Per Minute
DISTANCE & DIRECTION FROM ORIGINAL WELL Feet

Location of Well
WELL LOCATION ADDRESS (IF ANY) 315 DEER PASS DR. VILLAGE OF OAK CREEK, AZ

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
16N	5E	14	SE ¼	SE ¼	SE ¼

COUNTY ASSESSOR'S PARCEL ID NUMBER

BOOK	MAP	PARCEL	# OF ACRES
405	28	263	.24

PLACE OF WATER USE (ONLY IF DIFFERENT FROM LOCATION OF WELL)

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
			¼	¼	¼

COUNTY WHERE WELL IS LOCATED YAVAPAI

SECTION 3. OWNER INFORMATION

Well Owner
FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL: ARIZONA WATER COMPANY
MAILING ADDRESS: 3805 NORTH BLACK CANYON HIGHWAY
CITY / STATE / ZIP CODE: PHOENIX AZ 85015
CONTACT PERSON NAME AND TITLE: MIKE LOGGINS ENGINEER
TELEPHONE NUMBER: (602) 240-6860 | FAX: (602) 240-6878

Landowner (if different from Well Owner)
FULL NAME OF COMPANY, GOVERNMENT AGENCY, OR INDIVIDUAL
MAILING ADDRESS
CITY / STATE / ZIP CODE
CONTACT PERSON NAME AND TITLE
TELEPHONE NUMBER | FAX

APR 24 2006

SECTION 4.

JUN - 7 2006

Questions	Yes	No	If Yes:
1. Is the proposed well site within 100 feet of a septic tank system, sewer disposal area, landfill, hazardous materials or petroleum storage area or tank?		X	You must also request a variance (A.A.C. R12-15-818).
2. Is there another well name or identification number associated with this well (e.g., Lot 35 Well, Smith Well, etc.)?	X		PLEASE STATE VALLEY VISTA WELL
3. Is the proposed well a NEW well to be located within an Active Management Area? (*See instructions*)		X	Unless the well is a replacement well and the total number of operable exempt wells on the land is not increasing, you must also file a supplemental form A.R.S. § 45-454(C) & (D).
4. Is the proposed well the second exempt well on this parcel for the same use?		X	If the proposed well is in an Active Management Area, you must also file a supplemental form 55-40A.

Notice of Intent to Drill, Deepen, Replace or Modify a Well

WELL REGISTRATION NUMBER
55 - 212110

SECTION 5. DRILLING AUTHORIZATION

Drilling Firm

NAME: LAYNE CHRISTENSEN COMPANY

DWR LICENSE NUMBER: No. 071734 7

ROC LICENSE CATEGORY: A-4

TELEPHONE NUMBER: (480) 895-9404

FAX: (480) 895-8699

MAILING ADDRESS: 12030 EAST RIGGS ROAD

CITY / STATE / ZIP CODE: CHANDLER AZ 85249

DATE CONSTRUCTION IS TO BEGIN: JUNE 1, 2006

SECTION 6. WATER / SITE INFORMATION

Principal Use of Water (CHECK ONE)	*Other Uses* of Water (CHECK ALL THAT APPLY)
☐ Irrigation	☐ Irrigation
☐ Utility	☐ Utility
☐ Commercial	☐ Commercial
☒ Domestic	☐ Domestic
☐ Municipal	☐ Municipal
☐ Industrial	☐ Industrial
☐ Mining	☐ Mining
☐ Stock	☐ Stock
☐ Recharge	☐ Recharge
☐ Dewatering	☐ Dewatering
☐ Other *(please specify)*:	☐ Other *(please specify)*:

SECTION 7. PROPOSED WELL CONSTRUCTION DESIGN (attach separate sheet if needed)

Borehole			Casing													
DEPTH FROM SURFACE			DEPTH FROM SURFACE			MATERIAL TYPE (T)				PERFORATION TYPE (T)						
FROM (feet)	TO (feet)	BOREHOLE DIAMETER (inches)	FROM (feet)	TO (feet)	OUTER DIAMETER (inches)	STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	GROUTING MATERIAL
0	1000	26"	0	1000	16"	X*									LOUVERED	Cement

* ADWR well construction standards require a surface seal consisting of a minimum of 20 feet of steel casing. Cement grout must be used to fill the annular space between the surface casing and the borehole. (A.A.C. R12-15-811(B))

APR 24 2006

The Department's issuance of an authorization to drill a well is not a determination of whether water withdrawn from the well is legally surface water or groundwater. The legal nature of the water withdrawn from the well may be the subject of court action in the future as part of a determination of surface water rights in your area. If there are court proceedings that could affect your well, you will be notified and be given the opportunity to participate. If you have questions regarding the legal nature of the water to be withdrawn from your proposed well, please consult with an experienced civil engineer, hydrologist or water rights attorney.

JUN - 7 2006

For the purposes of determining appropriate fees outside AMAs or INAs, "domestic purposes" is defined as "uses related to the supply, service and activities of households and private residences and includes the application of water to less than 2 acres of land to produce plants or parts of plants for sale or human consumption, or for use as feed for livestock, range livestock or poultry, as such terms are defined in A.R.S. § 3-1201."

I state that this notice is filed in compliance with A.R.S. § 45-596 and is complete and correct to the best of my knowledge and belief.

TYPE OR PRINT NAME AND TITLE: MIKE LOGGINS ENGINEER

SIGNATURE OF WELL OWNER: [signature] — DATE: 4-14-06

SIGNATURE OF LANDOWNER, IF APPLICABLE (SEE INSTRUCTIONS) — DATE:

Notice of Intent to Drill, Deepen, Replace or Modify a Well

WELL REGISTRATION NUMBER
55 - 212110

SECTION 5. DRILLING AUTHORIZATION

Drilling Firm

NAME: LAYNE CHRISTENSEN COMPANY

DWR LICENSE NUMBER: NO. 071734 7

ROC LICENSE CATEGORY: A-4

TELEPHONE NUMBER: 480-895-9404

FAX: 480-895-8699

MAILING ADDRESS: 12030 EAST RIGGS ROAD

CITY / STATE / ZIP CODE: CHANDLER, AZ 85249

DATE CONSTRUCTION IS TO BEGIN: JUNE 1, 2006

SECTION 6. WATER / SITE INFORMATION

Principal Use of Water (CHECK ONE)	*Other Uses* of Water (CHECK ALL THAT APPLY)
☐ Irrigation	☐ Irrigation
☐ Utility	☐ Utility
☐ Commercial	☐ Commercial
☒ Domestic	☐ Domestic
☐ Municipal	☐ Municipal
☐ Industrial	☐ Industrial
☐ Mining	☐ Mining
☐ Stock	☐ Stock
☐ Recharge	☐ Recharge
☐ Dewatering	☐ Dewatering
☐ Other *(please specify)*:	☐ Other *(please specify)*:

SECTION 7. PROPOSED WELL CONSTRUCTION DESIGN (attach separate sheet if needed)

Borehole: DEPTH FROM SURFACE FROM (feet)	Borehole: DEPTH FROM SURFACE TO (feet)	Borehole: BOREHOLE DIAMETER (inches)	Casing: DEPTH FROM SURFACE FROM (feet)	Casing: DEPTH FROM SURFACE TO (feet)	Casing: OUTER DIAMETER (inches)	MATERIAL TYPE (T): STEEL	MATERIAL TYPE (T): PVC	MATERIAL TYPE (T): ABS	MATERIAL TYPE (T): IF OTHER TYPE, DESCRIBE	PERFORATION TYPE (T): BLANK OR NONE	PERFORATION TYPE (T): WIRE WRAP	PERFORATION TYPE (T): SHUTTER SCREEN	PERFORATION TYPE (T): MILLS KNIFE	PERFORATION TYPE (T): SLOTTED	PERFORATION TYPE (T): IF OTHER TYPE, DESCRIBE	GROUTING MATERIAL
0	1000	26"	0	1000	16"	X	*								LOUVERED	

* ADWR well construction standards require a surface seal consisting of a minimum of 20 feet of steel casing. Cement grout must be used to fill the annular space between the surface casing and the borehole. (A.A.C. R12-15-811(B))

APR 24 2006

The Department's issuance of an authorization to drill a well is not a determination of whether water withdrawn from the well is legally surface water or groundwater. The legal nature of the water withdrawn from the well may be the subject of court action in the future as part of a determination of surface water rights in your area. If there are court proceedings that could affect your well, you will be notified and be given the opportunity to participate. If you have questions regarding the legal nature of the water to be withdrawn from your proposed well, please consult with an experienced civil engineer, hydrologist or water rights attorney.

JUN - 7 2006

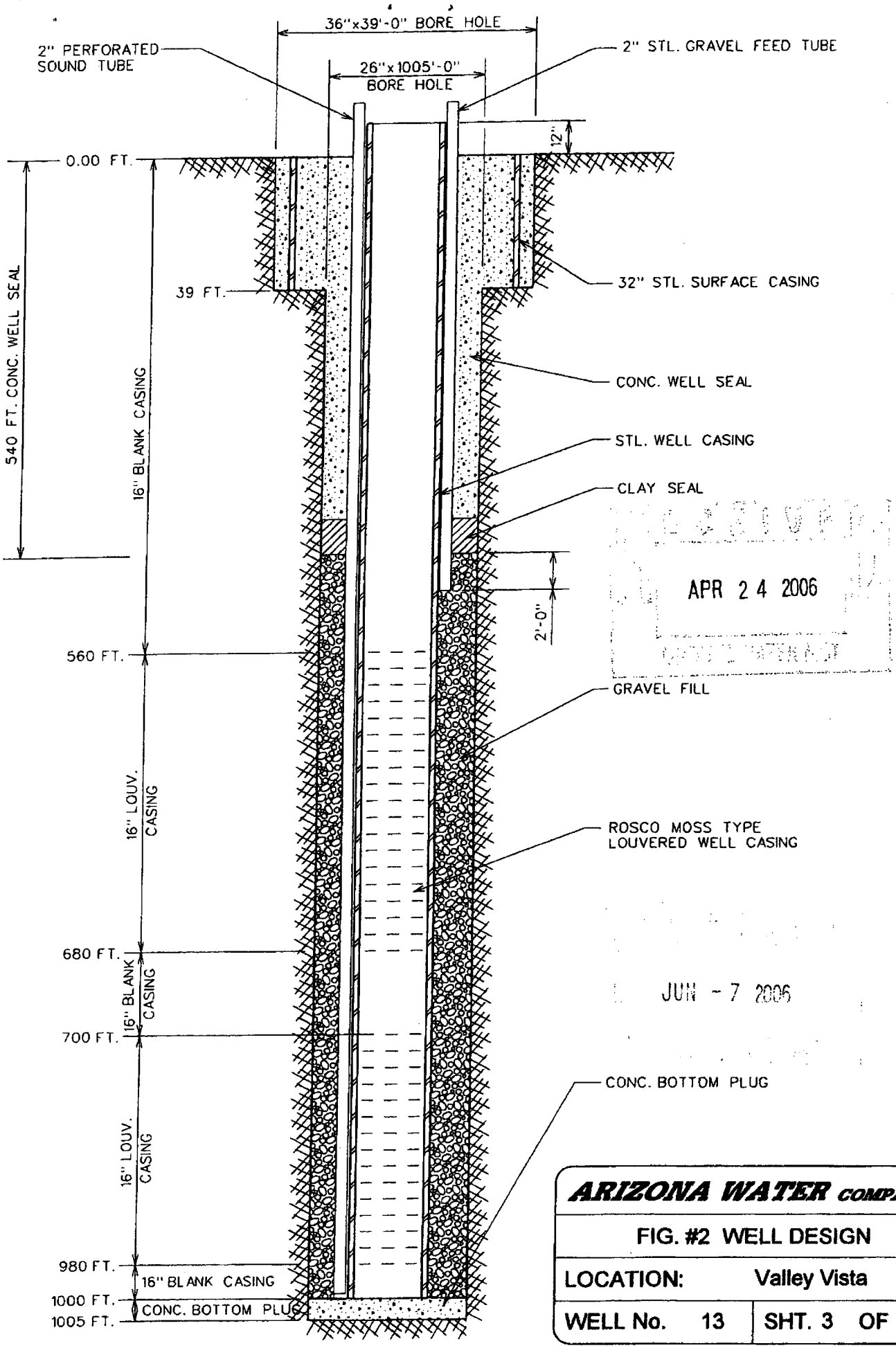
For the purposes of determining appropriate fees outside AMAs or INAs, "domestic purposes" is defined as "uses related to the supply, service and activities of households and private residences and includes the application of water to less than 2 acres of land to produce plants or parts of plants for sale or human consumption, or for use as feed for livestock, range livestock or poultry, as such terms are defined in A.R.S. § 3-1201."

I state that this notice is filed in compliance with A.R.S. § 45-596 and is complete and correct to the best of my knowledge and belief.

TYPE OR PRINT NAME AND TITLE:

SIGNATURE OF WELL OWNER: Michael Whitehead Agent. DATE: 4-21-2006

SIGNATURE OF LANDOWNER, IF APPLICABLE (SEE INSTRUCTIONS): DATE:



APR 24 2006

JUN - 7 2006

ARIZONA WATER COMPANY

FIG. #2 WELL DESIGN

LOCATION: Valley Vista

WELL No. 13 | SHT. 3 OF 18

ARIZONA DEPARTMENT OF WATER RESOURCES
Water Management Support Section – NOI Unit
3550 N Central Ave, Phoenix, Arizona 85012
Telephone (602) 771-8500
Fax (602) 771-8691

JANET NAPOLITANO
Governor

HERB GUENTHER
Director

May 18, 2006

Arizona Water Company
3805 N Black Canyon Hwy
Phoenix AZ 85015

Re: Well Registry Number: 55-212110
File (Location) Number: A(16-5)14DDD

Dear Applicant:

The Department of Water Resources recently received your Notice of Intent (NOI) to Drill a Well. However, our review indicates that the NOI is incomplete under the Groundwater Management Act for the following reason(s):

- Section 1: Since your proposed well will be used for domestic purposes on a parcel of land of 5 or fewer acres, Yavapai County Developmental Services, 928-771-3214, must endorse all items in Section 1.
- Section 7: The first twenty feet of casing must be blank, please correct this on the NOI.

PLEASE CALL TIFFANY HANCOCK AT 602-771-8645 WITH ANY QUESTIONS.

In accordance with Arizona Revised Statutes (A.R.S.) § 45-596, Paragraph D, the Department is mailing this "statement of determination" as a request for information necessary to make the NOI complete and correct. Please provide the Department with the additional information and resubmit the corrected NOI form and any attachments (if applicable) to ADWR. The Department's substantive review time frame is suspended until all requested information is provided. If the Department does not receive the necessary information within sixty (60) days, the application may be denied. You would then have to re-initiate the NOI process to receive a abandonment authority for this location.

ATTACH THIS NOTICE WHEN RESUBMITTING THE COMPLETED NOI AND RETURN TO:

WATER MANAGEMENT SUPPORT SECTION

PO BOX 458
PHOENIX, ARIZONA 85001-0458

YOU MAY ALSO CONTACT YOUR DRILLER OR COUNTY ASSESSOR'S OFFICE FOR ASSISTANCE PERTAINING TO THE NECESSARY INFORMATION THAT IS REQUIRED TO COMPLETE YOUR APPLICATION.

ARIZONA DEPARTMENT OF WATER RESOURCES
Water Management Support Section – NOI Unit
3550 N Central Ave, Phoenix, AZ 85012
Telephone (602) 771-8500
Fax (602) 771-8691

JANET NAPOLITANO
Governor

PLEASE RETURN ALL PAPERS

April 26, 2006

Arizona Water Company
3805 N Black Canyon Highway
Phoenix AZ 85015

Re: Well Registry Number: 55-212110
File (Location) Number: A(16-5)14DDD

JUN - 7 2006

Dear Applicant:

The Department of Water Resources recently received your Notice of Intent (NOI) to Drill, Deepen, Replace or Modify a Well. However, our review indicates that the NOI is incomplete under the Groundwater Management Act for the following reason(s):

- The filing fee for a Non-Exempt well is $150. Please submit the additional $50 for the correct filing fee.
- Section 2: Since you have marked 'Replace' under the Proposed Action an NOI to Abandon the well 55-616672 is required. Since you are not within and Active Management Area (AMA) you are allowed more than one well per parcel. If you do not want to abandon the existing well please mark 'Drill New Well' under the Proposed Action.
- Section 1: Since your proposed well will be used for domestic purposes on a parcel of land of 5 or fewer acres, Yavapai County Developmental Services, 928-771-3214, must endorse all items in Section 1.
- Section 7: The first 20 feet of the casing must be blank and cannot be louvered. Please make the appropriate corrections to the construction design.

PLEASE CALL TIFFANY HANCOCK AT 602-771-8645 WITH ANY QUESTIONS.

In accordance with Arizona Revised Statutes (A.R.S.) § 45-596, Paragraph D, the Department is mailing this "statement of determination" as a request for information necessary to make the NOI complete and correct. Please provide the Department with the additional information and resubmit the corrected NOI form and any attachments (if applicable) to ADWR. The Department's substantive review time frame is suspended until all requested information is provided. If the Department does not receive the necessary information within sixty (60) days, the application may be denied. You would then have to re-initiate the NOI process and pay a new filing fee to receive a drilling authority for this location.

ATTACH THIS NOTICE WHEN RESUBMITTING THE COMPLETED NOI AND RETURN TO:

WATER MANAGEMENT SUPPORT SECTION
PO BOX 458
PHOENIX, ARIZONA 85001-0458

YOU MAY ALSO CONTACT YOUR DRILLER OR COUNTY ASSESSOR'S OFFICE FOR ASSISTANCE PERTAINING TO THE NECESSARY INFORMATION THAT IS REQUIRED TO COMPLETE YOUR APPLICATION.

JUN - 7 2006

Arizona Department of Water Resources
Water Management Support Section
P.O. Box 458 • Phoenix, Arizona 85001-0458
(602) 771-8500 • (800) 352-8488
(602) 771-8691 fax • www.azwater.gov

Notice of Intent to Drill, Deepen, Replace or Modify a Well
(except a Non-Exempt Well in an Active Management Area)

$150 or $100 FEE

- Review instructions prior to completing form in black or blue ink.
- You must include with your Notice:
- Check or money order in the amount of the appropriate filing fee. For a well located within an AMA or INA, the fee is $150.00. For a well not located within an AMA or INA, the fee is $100.00 if the well will be used solely for domestic purposes (see page 2 and instructions) and will have a pump with a maximum capacity of not

AMA / INA	B	SB
RECEIVED DATE	WS	
ISSUED DATE	WQARF	CERCLA

FILE NUMBER

WELL REGISTRATION NUMBER
55-212110

ARIZONA WATER COMPANY
GENERAL ACCOUNT
3805 N. BLACK CANYON HIGHWAY
POST OFFICE BOX 29006
PHOENIX, ARIZONA 85038-9006

91-170
1221

No. 088591

DATE April 17, 2006

Security features included. Details on back.

PAY ONE HUNDRED AND NO/100 DOLLARS $ $100.00

TO THE ORDER OF

ARIZONA DEPT OF WATER RESOURCES
WATER MANAGEMENT SUPPORT SECTION
PO BOX 458
PHOENIX AZ 85001

ARIZONA WATER COMPANY—GENERAL ACCT.
[redacted]

BANK OF AMERICA

[redacted]

(See instructions.)	If Deepening, Replacing or Modifying:	BOOK 405	MAP 28	WATER MGT	.24
☒ Non-Exempt (Pump has a maximum capacity of more than 35 gpm and the well is located outside an AMA.) (See instructions.)	ORIGINAL WELL REGISTRATION NUMBER 55-616672	PLACE OF WATER USE (ONLY IF DIFFERENT FROM LOCATION OF WELL)			
	MAXIMUM CAPACITY OF ORIGINAL WELL 45 Gallons Per Minute	TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE ¼ / 40 ACRE ¼ / 10 ACRE ¼
DESIGN PUMP CAPACITY 750 Gallons Per Minute	DISTANCE & DIRECTION FROM ORIGINAL WELL Feet	COUNTY WHERE WELL IS LOCATED YAVAPAI			

SECTION 3. OWNER INFORMATION

Well Owner		Landowner (if different from Well Owner)	
FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL: ARIZONA WATER COMPANY		FULL NAME OF COMPANY, GOVERNMENT AGENCY, OR INDIVIDUAL	
MAILING ADDRESS: 3805 NORTH BLACK CANYON HWY		MAILING ADDRESS	
CITY / STATE / ZIP CODE: PHOENIX, AZ 85015		CITY / STATE / ZIP CODE: JUN - 7 2006	
CONTACT PERSON NAME AND TITLE: MIKE LOGGINS ENGINEER		CONTACT PERSON NAME AND TITLE	
TELEPHONE NUMBER: 602-240-6860	FAX: 602-240-6878	TELEPHONE NUMBER	FAX

SECTION 4.

Questions	Yes	No	If Yes:
1. Is the proposed well site within 100 feet of a septic tank system, sewer disposal area, landfill, hazardous materials or petroleum storage area or tank?		X	You must also request a variance (A.A.C. R12-15-818).
2. Is there another well name or identification number associated with this well (e.g., Lot 35 Well, Smith Well, etc.)?	X		PLEASE STATE VALLEY VISTA WELL
3. Is the proposed well a NEW well to be located within an Active Management Area? (See instructions)		X	Unless the well is a replacement well and the total number of operable exempt wells on the land is not increasing, you must also file a supplemental form A.R.S. § 45-454(C) & (D).
4. Is the proposed well the second exempt well on this parcel for the same use?		X	If the proposed well is in an Active Management Area, you must also file a supplemental form 55-40A.

Arizona Department of Water Resources
Water Management Support Section
P.O. Box 458 • Phoenix, Arizona 85001-0458
(602) 771-8500 • (800) 352-8488
(602) 771-8691 fax • www.azwater.gov

Notice of Intent to Drill, Deepen, Replace or Modify a Well

(except a Non-Exempt Well in an Active Management Area)

$150 or $100 FEE

- Review instructions prior to completing form in black or blue ink.
- You must include with your Notice:
- Check or money order in the amount of the appropriate filing fee. For a well located within an AMA or INA, the fee is $150.00. For a well not located within an AMA or INA, the fee is $100.00 if the well will be used solely for domestic purposes (see page 2 and instructions) and will have a pump with a maximum capacity of not more than 35 gallons per minute. Otherwise, the fee is $150.00.
- Authority for fee: A.R.S. § 45-596.

** PLEASE PRINT CLEARLY **

AMA / INA	B 79 SB
RECEIVED DATE 4/24/06	WS 05
ISSUED DATE	WQARF CERCLA

FILE NUMBER: A(16-5)14000
WELL REGISTRATION NUMBER: 55 - 212110

SECTION 1. COUNTY OR LOCAL HEALTH AUTHORITY APPROVAL (if applicable)

If water from the proposed well will be used for domestic purposes on a parcel of land of 5 or fewer acres, the applicable county or local health authority must endorse all items in Section 1 within one year before submission to the Department of Water Resources. You must also attach a site plan (pg. 3).

CHECK ONE

☐ County or Local Health Authority Recommends Approval (pursuant to A.R.S. § 45-596 (G) and (F))
- ☐ Field Inspection Performed
- ☐ Site Plan Review Only

☐ Insufficient Information to Make a Determination

Official County or Local Seal or Stamp

COUNTY OR LOCAL AUTHORITY NAME AND TITLE: MAY - 5 2006

TELEPHONE NUMBER | DATE | COUNTY OR LOCAL AUTHORITY SIGNATURE

SECTION 2. REGISTRY INFORMATION

Well Type

CHECK ONE

☐ Exempt (Pump has a maximum capacity of not more than 35 gpm and water is not used for irrigation purposes inside an AMA.) (*See instructions.*)

☒ Non-Exempt (Pump has a maximum capacity of more than 35 gpm and the well is located outside an AMA.) (*See instructions.*)

DESIGN PUMP CAPACITY: 750 Gallons Per Minute

Proposed Action

CHECK ONE

☐ Drill New Well
☐ Deepen
☒ Replace
☐ Modify

If Deepening, Replacing or Modifying:

ORIGINAL WELL REGISTRATION NUMBER: 55 - 616672

MAXIMUM CAPACITY OF ORIGINAL WELL: 45 Gallons Per Minute

DISTANCE & DIRECTION FROM ORIGINAL WELL: Feet

Location of Well

WELL LOCATION ADDRESS (IF ANY): 315 DEER PASS DR. VILLAGE OF OAK CREEK, AZ

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
16N	5E	14	SE ¼	SE ¼	SE ¼

COUNTY ASSESSOR'S PARCEL ID NUMBER

BOOK	MAP	PARCEL	# OF ACRES
405	28	263	.24

PLACE OF WATER USE (ONLY IF DIFFERENT FROM LOCATION OF WELL)

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
			¼	¼	¼

COUNTY WHERE WELL IS LOCATED: YAVAPAI

SECTION 3. OWNER INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL: ARIZONA WATER COMPANY

MAILING ADDRESS: 3805 NORTH BLACK CANYON HIGHWAY

CITY / STATE / ZIP CODE: PHOENIX AZ 85015

CONTACT PERSON NAME AND TITLE: MIKE LOGGINS ENGINEER

TELEPHONE NUMBER: [illegible] | FAX: [illegible]

Landowner (if different from Well Owner)

FULL NAME OF COMPANY, GOVERNMENT AGENCY, OR INDIVIDUAL

MAILING ADDRESS: APR 24 2006

CITY / STATE / ZIP CODE

CONTACT PERSON NAME AND TITLE

TELEPHONE NUMBER | FAX

ARIZONA WATER COMPANY
GENERAL ACCOUNT
3805 N. BLACK CANYON HIGHWAY
POST OFFICE BOX 29006
PHOENIX, ARIZONA 85038-9006

No. 089091

May 2, 2006

PAY FIFTY AND NO/100 DOLLARS $ $50.00

Sodium Hypochlorite Chlorinator Specifications

DESCRIPTION:

The chlorination system shall be a sodium hypochlorite chlorinator as supplied by Chemical Injection Technology Inc., P.O. Box 4144, Cave Creek, AZ 85331 or its equivalent. The chlorination system shall be completely assembled and ready to install.

COMPONENTS:

The Chlorination system shall have the following components:

A. Walchem brand chemical metering pump w/ a total solution output control valve
B. Flooded Suction Adapter
C. Plastic tank assembly
D. Pressure line check valve
E. Manual isolation valve
F. Owled pump control (switched outlet)

ELECTRICAL FIXTURES:

120V, 15A, 1PH, weatherproof duplex outlet (G.F.I.)

CHLORINATOR DESIGN:

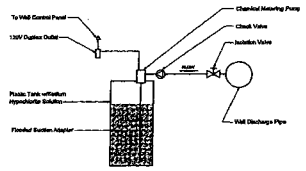
The chlorination facility shall be designed and constructed in accordance with Arizona State Department of Health Engineering Bulletin Number 8 - "Chlorination of Water Systems". Latest Revision.

CHLORINATOR EQUIPMENT:

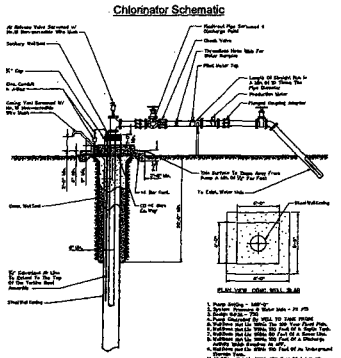
The sodium hypochlorite chlorinator equipment shall conform to NSF Standard 60 and 61.

CHLORINATOR OPERATION:

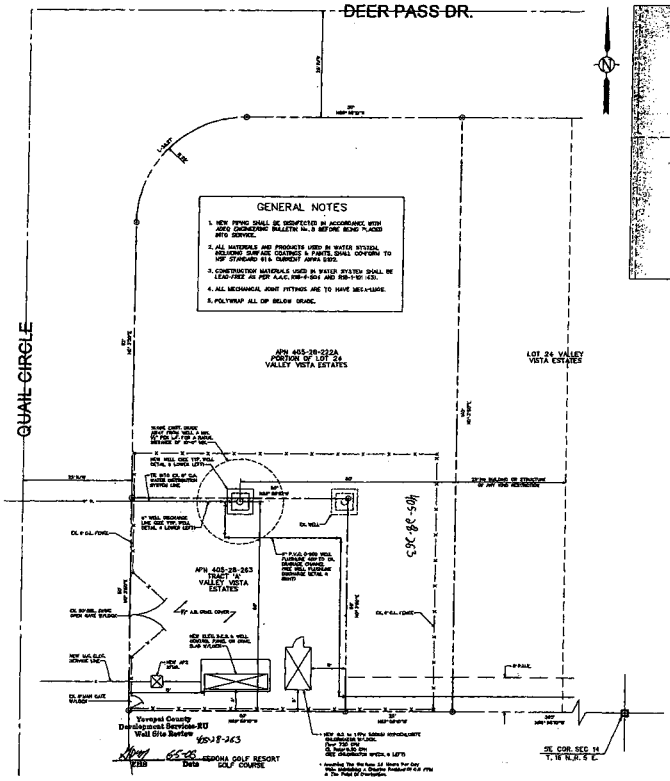
The chlorination facility shall be operated in accordance with Arizona State Department of Health Engineering Bulletin Number 8, "Chlorination of Water Systems". Table 1. Latest revision.



Chlorinator Schematic

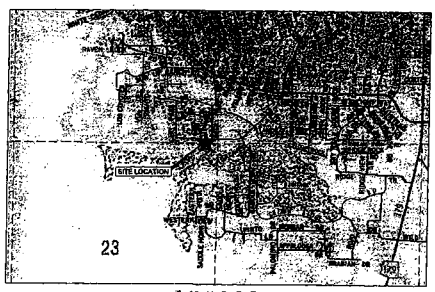


TYPICAL WELL W/ SUBMERSIBLE PUMP



SITE PLAN

SCALE: 1"=10'-0"



T. 16 N., R. 5 E.

SITE LOCATION

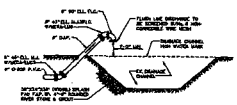
N.T.S.

LEGEND

- ⊙ — ½" REBAR PROPERTY CORNER
- STREET CENTERLINE/MONUMENT LINE
- RIGHT-OF-WAY LINE
- PROPERTY LINE
- O.H. or U.G. ELECTRIC LINE
- EX. WATER LINE

OWNER/DEVELOPER

ARIZONA WATER COMPANY
POST OFFICE BOX 29006
PHOENIX, AZ 85038-9006
(602) 240-6880
CONTACT: JAMES WILSON



WELL FLUSHLINE DISCHARGE DETAIL

N.T.S.

JUN - 7 2006

ARIZONA WATER COMPANY

3805 N. BLACK CANYON HWY. POST OFFICE BOX 29006
PHOENIX, ARIZONA 85038-9006
(602) 240-6880

REPLACE WELL No. 1 @ VALLEY VISTA WELL SITE IN THE VILLAGE OF OAK CREEK - SEDONA, ARIZONA

P.O. 1-4010	F.E. SD-745		
SYSTEM SE 1/4 SEC. 14 - T. 16 N., R. 5 E.			
TAX DIST.			
DATE 4-21-2006	SCALE AS SHOWN		
DRAWN BY JPK	SHEET 1 OF 1		

The above installation is to be installed in accordance with the Arizona Water Company standard specifications on file with the Arizona Department of Environmental Quality

FOR WATER ONLY

263-1100
1-800-STAKE-IT

BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK
CHAIRMAN
JIM IRVIN
COMMISSIONER
RENZ D. JENNINGS
COMMISSIONER

IN THE MATTER OF THE APPLICATION OF PARADISE VALLEY WATER COMPANY AN ARIZONA CORPORATION, FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR UTILITY SERVICE	DOCKET NO. U-1303-96-283
IN THE MATTER OF THE APPLICATION OF PARADISE VALLEY WATER COMPANY AN ARIZONA CORPORATION, FOR AN ACCOUNTING ORDER AUTHORIZING THE ACCRUAL OF POST-IN-SERVICE AFUDC AND THE DEFERRAL OF DEPRECIATION RELATING TO THE CONSTRUCTION OF TRANSMISSION MAINS AND RELATED UTILITY PLANT.	DOCKET NO. U-1303-95-493 DECISION NO. 60220 **OPINION AND ORDER**

DATES OF HEARING:	January 21, 1997 (pre-hearing conference), January 24, 27, and 28, 1997.
PLACE OF HEARING:	Phoenix, Arizona
PRESIDING OFFICER:	Jerry L. Rudibaugh
APPEARANCES:	Mr. Norman D. James, RYLEY, CARLOCK & APPLEWHITE, P.A., on behalf of Paradise Valley Water Company; Mr. James P. Beene and Mr. Paul R. Michaud, Attorneys, on behalf of the Residential Utility Consumer Office; and Ms. Karen E. Nally, Staff Attorney, Legal Division, on behalf of the Utilities Division of the Arizona Corporation Commission.

Arizona Corporation Commission
DOCKETED
MAY 27 1997
DOCKETED BY

EXHIBIT
A-34
ADMITTED

to be in rate base for this case. Accordingly, the Company's request to include Post-In-Service AFUDC in the amount of $302,734 for these projects is denied.

B. Pro Forma Plant Additions

During the summer of 1995, certain customers in the Company's certificated area experienced periods of low water pressure. In addition, many customers in the Clearwater Hills/Tatum Canyon area had no water for extended periods each day during the first three weeks of August 1995. As a result, the Company began to aggressively replace old and undersized transmission mains, add more transmission capacity, upgrade critical booster stations and increase water production to insure that low water pressure and service interruptions do not occur in the future. In order to alleviate the water system deficiencies, the Company made the following capital improvements: 1) Modifications were made to Well No. 17 to increase the production capacity from 1,500 gallons per minute ("gpm") to 2,400 gpm. The total cost of the project was $200,000 and was completed by June 30, 1996; 2) Replaced existing 6" and 8" mains on or near McDonald Drive with 16" and 24" mains at a cost of $1,925,000. This project was necessary to address the inadequacies that resulted in the water outages in the summer of 1995. The project was completed by June 30, 1996; 3) Replaced existing 8" mains on or near Desert Fairways with 16" mains at a cost of $1,425,000. This project was also necessary to address the inadequacies that resulted in water outages; 4) A new state-of-the-art booster station was added to the Clearwater Hills area. The old pumping station was unreliable and could not meet summer demand. The project was completed in July 1996; and 5) The Company experienced outages as a result of antiquated U S West Communications, Inc. leased telephone lines and equipment for its controls system. Consequently, the Company installed its own distribution monitoring system in conjunction with the McDonald Drive main replacement projects.

RUCO recommended approval of the Company's actual expenditures up through September 30, 1996. Of the requested $4,502,918 of post-TY proforma plant additions, RUCO excluded $247,629 as not being known and measurable, nor used and useful. According to RUCO, it would normally recommend denial of all the post-TY plant additions because of income statement and rate base matching problems. Normally, plant additions are built to service customers that were not present during the historical TY. RUCO indicated that generally the matching problems did not exist in this case since the plant additions were made to address an outdated and inadequate water system for pre-TY growth.

RUCO did express concerns that the new plant should generate fewer expenses associated with employee overtime, fewer maintenance expenses, and a lower cost of purchased power. However, RUCO recommended operating expense adjustments to alleviate its concerns.

Staff indicated that the historical TY concept utilized in Arizona only includes in rate base that plant which is in service at the end of the TY. In this case, Staff recognized the large amount of plant investment the Company was making subsequent to the end of the TY. As a result, Staff recommended inclusion in rate base of more than $3.9 million of plant additions that were supported by documentation through mid-September 1996. Staff expressed concerns similar to RUCO's as to the difficulty of matching rate base and operating expenses as the amount of time beyond the TY increases. Based on a mid-September 1996 cut-off, Staff recommended $565,323 of additional construction costs not be included in rate base.

In response, the Company concurred with RUCO and Staff that there needs to be a specific cut-off point in determining plant additions. The Company requested the cut-off point be October 31, 1996 for all plant additions, except for the distribution monitoring system. According to the Company, the following projects were basically completed and accepted by Staff: the Country Club Booster Station; the Desert Fairways Main; the MacDonald Main; the Clearwater Hills Booster Station; and the trailer mounted emergency booster. The Company indicated that not all of the costs were paid as of September 30, 1996. As of October 31, 1996, all of the projects were closed with additional construction costs of $381,720. As to the distribution monitoring system, the Company requested the cut-off date be extended to December 31, 1996 because the majority of the costs were incurred during the last quarter of calendar year 1996. Up through October 31, 1996, the Company incurred additional costs for the distribution monitoring system in the amount of $27,253 with additional costs of $101,256 incurred in November and December of 1996.

While the Commission would normally use a TY cut-off date for including plant in rate base, there are unique circumstances in this case: 1) the Company's CC&N area is almost completely developed with little room for growth; 2) the plant added since the end of the TY is generally to correct system inadequacies that resulted in water outages in 1995; 3) and the magnitude of overall construction is relatively large. We also recognize that there needs to be a cut-off date that permits RUCO and Staff

053.006.0043

sufficient time to audit the Company's proposals. In this case, we find that the October 31, 1996 date is a logical cut-off date since most of the construction was completed and it would still provide time for RUCO and Staff's review as part of their surrebuttal case. We also share concerns expressed by Staff and RUCO regarding matching of rate base and operating expense levels. Certain operational areas will result in greater efficiencies because of the capital improvements. We will attempt to balance those efficiencies with added rate base when reviewing the proper level of operating expenses. By allowing the amounts of $381,720 and $27,253 up through October 31, 1996, we will reduce Staff's proposed disallowance by that amount. Based on all the above, we will disallow $156,350 of the post-TY plant additions.

C. Post-Retirement Benefits Other Than Pensions

Consistent with the Discussion contained in the operating expense section of this Decision, the Company has agreed to remove capitalized post-retirement other than pensions ("PBOPs") from rate base. The adjustment recommended by both Staff and RUCO and accepted by the Company would reduce rate base by $9,059. We concur. No adjustment is necessary since the Company has already included this in its revised OCRB.

D. Miscellaneous

Staff had made various adjustments to plant-in-service, accumulated depreciation, advances, contributions, and cash working capital for which the Company concurred. RUCO had also recommended an adjustment for cash working capital. The amount of these adjustments increased rate base by $22,055 as set forth in Table DPS-2 of Exhibit A-7. No adjustment is necessary since the Company has already included this in its revised OCRB.

E. Original Cost Rate Base Summary

Based on the foregoing, the following statement details the adjusted TY OCRB for ratemaking purposes for Applicant:

...

...

...

...

0 5 3 . 0 0 6 . 0 0 1 3

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

ARIZONA CORPORATION COMMISSION

MICHAEL P. KEARNS
Interim Executive Director

N. JAMES

JUL 29 2009

ACTION _____

July 28, 2009

Norman D. James, Esq.
Jay L. Shapiro, Esq.
Fennemore Craig
3003 North Central Avenue, Suite 2600
Phoenix, Arizona 85012

Via US Mail and Email to:
njames@fclaw.com
jshapiro@fc.law.com
jreiker@azwater.com
jharris@azwater.com
wbirk@fclaw.com
rgeake@azwater.com

Robert W. Geake
Arizona Water Company
P. O. Box 29006
Phoenix, Arizona 85038-9006

RE: Responses to Arizona Water Company's Fourth Set of Data Requests to Staff
Docket No. W-01445A-08-0440

Dear Messrs. James and Geake:

Enclosed are responses to Arizona Water Company's Fourth Set of Data Requests to the Arizona Corporation Commission Staff in the above-referenced matter.

Please do not hesitate to contact me if you have any questions regarding the attached.

Sincerely,

Wesley C. Van Cleve
Staff Counsel, Legal Division
(602) 542-3402

WVC:rbo
Enclosures

EXHIBIT
A-35
ADMITTED

STAFF'S RESPONSES TO
ARIZONA WATER COMPANY'S
FOURTH SET OF DATA REQUESTS
DOCKET NO. W-01445A-08-0440
JULY 28, 2009

Subject: To the extent available, requested information should be provided in searchable PDF, DOC or EXCEL files via email or electronic media.

4.1. Staff witness Elijah Abinah states in his direct testimony that Staff supports full consolidation of the Company's Overgaard and Lakeside systems (i.e., Staff believes that the monthly minimum and commodity rates should be the same).

a. Please confirm that Mr. Abinah's testimony continues to be Staff's position in this case.

Response: **Yes. Mr. Abinah's testimony continues to be Staff's position. In addition, on page 2 lines 13-15, Mr. Abinah stated that "Staff believes where and when it is technically and financially feasible, rate consolidation and system interconnections should be considered by the Commission. Staff further believes that the Company should continue to evaluate/propose full consolidation in its future rate case application for Commission approval.**

Respondent: **Elijah Abinah**

b. If Staff's position has changed, state Staff's current position and explain the reasons for its change in position.

Response: **N/A**

Respondent: **Elijah Abinah**

4.2. Staff witness Elijah Abinah states in his direct testimony that Staff supports full consolidation of the Company's Pinewood, Rimrock and Sedona systems (i.e., Staff believes that the monthly minimum and commodity rates should be the same).

a. Please confirm that Mr. Abinah's testimony continues to be Staff's position in this case.

Response: **See 4.1 a.**

Respondent: **Elijah Abinah**

b. If Staff's position has changed, state Staff's current position and explain the reasons for its change in position.

Response: **See 4.1 b.**

Respondent: **Elijah Abinah**

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4.3. Staff witness Elijah Abinah states in his direct testimony that Staff supports full consolidation of the Company's Superstition and Miami systems (i.e., Staff believes that the monthly minimum and commodity rates should be the same).

a. Please confirm that Mr. Abinah's testimony continues to be Staff's position in this case.

Response: **See 4.1 a.**

Respondent: **Elijah Abinah**

b. If Staff's position has changed, state Staff's current position and explain the reasons for its change in position.

Response: **See 4.1 b.**

Respondent: **Elijah Abinah**

4.4. Staff witness Elijah Abinah states in his direct testimony that Staff supports full consolidation of the Company's Sierra Vista and Bisbee systems (i.e., Staff believes that the monthly minimum and commodity rates should be the same).

a. Please confirm that Mr. Abinah's testimony continues to be Staff's position in this case.

Response: **See 4.1 a.**

Respondent: **Elijah Abinah**

b. If Staff's position has changed, state Staff's current position and explain the reasons for its change in position.

Response: **See 4.1 b.**

Respondent: **Elijah Abinah**

4.5. Staff witness Elijah Abinah states in his direct testimony that Staff supports full consolidation of the Company's Stanfield, Tierra Grande Casa Grande systems (i.e., Staff believes that the monthly minimum and commodity rates should be the same).

Subject: To the extent available, requested information should be provided in searchable PDF, DOC or EXCEL files via email or electronic media.

a. Please confirm that Mr. Abinah's testimony continues to be Staff's position in this case.

Response: **See 4.1 a.**

Respondent: **Elijah Abinah**

b. If Staff's position has changed, state Staff's current position and explain the reasons for its change in position.

Response: **See 4.1 b.**

Respondent: **Elijah Abinah**

4.6. Please provide corrected schedules addressing Staff's proposed rate design for the relevant water systems in the event that Staff's position on rate consolidation, as set forth in Mr. Abinah's direct testimony, conflicts with the direct testimony of Mr. Michlik.

Response: **The correct schedules are in Mr. Michlik's direct testimony.**

Respondent: **Jeffrey Michlik**

Response: **N/A**

Respondent: **Elijah Abinah**

4.7. Explain the basis for Staff's recommendation that construction water users pay a flat commodity rate and no monthly minimum charge for water service.

Response: **Construction water users unlike other users do not have separate individually assigned meters.**

Respondent: **Jeffrey Michlik**

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4.8. Admit that the Company incurs customer-related service costs in administering the accounts of construction water users.

Response: **Admit, the same as other "casual" users of water services.**

Respondent: **Jeffrey Michlik**

4.9. In his direct testimony, Staff witness Steve Olea states that he "assisted Mr. Michlik in developing specific Residential rates for some of the systems" (Olea Dt. at p. 4). Identify by water system each rate that Mr. Olea assisted in developing, and describe what assistance was provided.

Response: **For each water system, Mr. Olea provided Mr. Michlik with input to the specific rate design for the 5/8x3/4-inch meters after Mr. Michlik had determined what the revenue requirement should be for that meter size.**

Respondent: **Jeffrey Michlik**

4.10. Describe how Staff utilized the cost of service study attached to Mr. Olea's direct testimony or, if applicable, the cost of service study submitted by the the Company with its application, in developing its proposed rate design.

Response: **Staff utilized the Cost of Service Study, as a general guideline, but also considered other factors.**

Respondent: **Jeffrey Michlik**

4.11. Explain the relationship between the cost of service study attached to Mr. Olea's direct testimony and Staff's proposed rate design.

Response **See 4.10 above.**

Respondent: **Jeffrey Michlik**

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4.12. Two schedules, labeled SMO-1 and SMO-2, are attached to Mr. Olea's direct testimony. Provide a description of the purpose of these schedules and explain how they were created.

Response: **The purpose of SMO-1 and SMO-2 are illustrative. They were obtained directly from the Company's Cost of Service Study software after Mr. Olea's input modifications as described in his testimony.**

Respondent: **Jeffrey Michlik**

4.13. Explain the meaning of each of the percentages shown on line 24 of Schedule SMO-2, and how those percentages relate to Staff recommended rate of return and its proposed rate design.

Response: **The meaning of the percentages is the same as in the Company's Cost of Service Study.**

Respondent: **Jeffrey Michlik**

4.14. In Staff's opinion, is it fair and equitable to require industrial users to bear a greater share of the cost of water service than users in other classes? Explain the basis for your response, and provide copies of all studies, reports, texts and other authoritative materials you rely upon.

Response: **Answer is "No, however, Staff utilizes general concepts such as gradualism, conservation, uniformity and other concepts and does not rely solely on cost of service information when determining what is fair and equitable."**

Respondent: **Jeffrey Michlik**

4.15. Admit that under Staff's proposed rate design, larger industrial users will subsidize customers in the commercial and residential user classes.

Response: **Deny.**

Respondent: **Jeffrey Michlik**

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4.16. Admit that inverted tier rates, such as those proposed by Staff in this case, result in more revenue volatility than other rate structures (e.g., declining tier and uniform or "flat" rates).

Response: **Deny.**

Respondent: **Jeffrey Michlik**

4.17. Explain Staff's purpose for proposing that the Company have an inverted tier rate design. In your response, provide copies of all studies, reports, texts and authoritative materials you rely upon.

Response: **Encourage more efficient use of water over the long term.**

Respondent: **Jeffrey Michlik**

4.18. Does Staff anticipate that its proposed rate design will encourage customers to use less water?

Response: **Inverted tier rates encourage water efficiency over the long term, by encouraging better long term and efficient water use planning.**

Respondent: **Jeffrey Michlik**

4.19. Explain how Staff has accounted for potential reductions in water usage and, as a result, decreased revenues from water sales resulting from the use of an inverted tier rate design. In your response, provide copies of all studies, reports, texts and authoritative materials you rely upon.

Response: **Staff utilizes a historical test year, and does not speculate on future customer usage patterns.**

Respondent: **Jeffrey Michlik**

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Subject: To the extent available, requested information should be provided in searchable PDF, DOC or EXCEL files via email or electronic media.

4.20. Explain how Staff has accounted for variations in weather and the impact of such variations in customer usage patterns and the Company's ability to recover its revenue requirement. In your response, provide copies of all studies, reports, texts and authoritative materials you rely upon.

Response: **Staff utilizes a historical test year, and does not speculate on future customer usage patterns.**

Respondent: **Jeffrey Michlik**

4.21. Mr. Olea states in his direct testimony that he relied on the American Water Works Association Manual M1, "Principles of Water Rates, Fees, and Charges, in reviewing the Company's cost of service study. With regard to such testimony, please state:

a. Does Staff regard Manual M1 as an authoritative source of information regarding the development and design of rates for water utilities?

Response: **Mr. Olea relied on the American Water Works Association Manual M1, "Principles of Water Rates, Fees and Charges" for basic Cost of Service Study purposes only.**

Respondent: **Jeffrey Michlik**

b. Did Mr. Michlik rely on or otherwise refer to Manual M1 in developing the rate design proposed in his testimony? If so, indicate what portions of Manual M1 he utilized.

Response: **No.**

Respondent: **Jeffrey Michlik**

c. Identify and provide copies of the relevant portions of any other studies, reports, manuals, texts and other authoritative materials that Mr. Michlik relied on or otherwise referred to in connection with developing Staff's proposed rate design.

Response: **Staff's position is based on experience, training, and memory, along with the input from supervisors and managers, and professional judgment.**

Respondent: **Jeffrey Michlik**

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Subject: To the extent available, requested information should be provided in searchable PDF, DOC or EXCEL files via email or electronic media.

4.22. Provide a "typical bill analysis" in the format shown on Schedule JMM-4 for an industrial customer served by the Company's Casa Grande system on a six-inch meter.

Response: **Company has Staff's information and can provide its own schedule.**

Respondent: **Jeffrey Michlik**

4.23. Explain how Staff developed its proposed break points between usage tiers for the residential, commercial and industrial customer classes for each Company system. In responding, provide copies of any studies, reports, manuals, texts and other authoritative materials that were considered.

Response: **As is customary on Staff's rate designs, the break over points limits were calculated automatically, by taking the change in the basic service charge of the between meter sizes, and dividing this amount between the change in the 2nd and 3rd tier. The product is then added the lower meter size break over point to produce a maximum break-over point. Staff then sets the gallonage under this point, for each meter size, so a larger meter size is not receiving more of benefit over a smaller size meter. The Company employs the same methodology.**

Respondent: **Jeffrey Michlik**

4.24. Explain how Staff developed its proposed commodity rate for each usage tier, including the differences between the commodity rates applicable to each tier. In responding, provide copies of any studies, reports, manuals, texts and other authoritative materials that were considered.

Response: **Staff targeted a monthly minimum rate for residential customers of around 43 percent monthly minimum, and 57 percent commodity charge on a stand alone basis, but also considered other factors. So on a stand alone basis most systems follow this methodology. Also on a system stand alone basis most of the three tier rate designs are comparable to other systems. When consolidating the systems on a full or partial consolidated basis. Staff made more adjustments to accommodate differences in the systems in order to make a reasonable rate design. When possible, Staff tried to have the lowest users have the smallest rate increase.**

Respondent: **Jeffrey Michlik**

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JULY 28, 2009

Subject: To the extent available, requested information should be provided in searchable PDF, DOC or EXCEL files via email or electronic media.

4.25. Explain how Staff developed its proposed monthly minimum charges for each Company water system. In responding, provide copies of any studies, reports, manuals, texts and other authoritative materials that were considered.

Response: **See above.**

Respondent: **Jeffrey Michlik**

4.26. Provide for each Company system a breakdown of the revenue produced by Staff's proposed monthly minimum charge and each proposed commodity rate tier.

Response: **The information has already been provided to the Company on a CD.**

Respondent: **Jeffrey Michlik**

4.27. Explain the basis for Staff's recommendation that the first commodity rate tier be the same for the Stansfield, Coolidge and Casa Grande systems.

Response: **To move toward consolidation.**

Respondent: **Jeffrey Michlik**

4.28. Explain the basis for Staff's recommendation that the Pinewood, Rimrock and Sedona systems have unified monthly minimum and commodity rate charges.

Response: **Based on Staff's analysis of the three systems, the benefit of fully consolidating the three systems did make sense when looking at the systems on a stand alone basis and consolidated basis.**

Respondent: **Jeffrey Michlik**

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Subject: To the extent available, requested information should be provided in searchable PDF, DOC or EXCEL files via email or electronic media.

4.29. Explain the basis for Staff's recommendation that the Bisbee and Sierra Vista systems be partially consolidated at this time.

Response: **Based on Staff's analysis of the two systems, the benefit of fully consolidating the two systems today did not make sense when looking at the systems on a stand alone basis and consolidated basis.**

Respondent: **Jeffrey Michlik**

4.30. Did Staff take into account current economic conditions in Arizona in developing its rate design, including the revenues expected to be generated by various customer classes? If so, explain how it did so and provide copies of all documents and materials that it considered on this topic.

Response: **Staff utilizes a historical test year, and does not speculate on future customer usage patterns.**

Respondent: **Jeffrey Michlik**

Company Name: Arizona Water Company - Sedona (Rancho Rojo)
ADEQ Public Water System No: 13-114
Test Year Ended: 31-Dec-07

WATER COMPANY PLANT DESCRIPTION

WELLS

Arsenic Treatment	Arizona Water Co. ID	ADWR ID Number*	Pump H.P.	Pump Yield (gpm)	Casing Depth (feet)	Casing Diameter (inches)	Meter Size (inches)	Year Drilled
Rancho Rojo Trtmt. Plant	RR	55-616671	30.0	n/a	400	8	2	1963
Mesa Trtmt. Plant	WHM	55-616670	5.0	23	15	8	1	1961
Sedona Golf Resort Plant	SGR	55-518969	60.0	265	613	8	3	1989
EPA Trtmt. Plant	VV Well #1	55-616672	10.0	60	578	6	2	1973
n/a	SU (not of service)	55-632272	---	---	16	8	---	1952
n/a	VV Well # 13	55-212110	75.0	300	1005	16	6	2007

*Arizona Department of Water Resources Identification Number

OTHER WATER SOURCES

Name or Description	Capacity (gpm)	Gallons Purchased or Obtained (in thousands)
n/a	n/a	n/a

EXHIBIT
A-36
ADMITTED

MAINS

Size (in inches)	Material	Length (in feet)
2	---	0.0
3	---	0.0
4	---	8,400.0
5	---	0.0
6	---	39,104.0
8	---	35,520.0
10	---	0.0
12	---	900.0
14	---	0.0
16	---	0.0
20	---	0.0

FIRE HYDRANTS

Quantity Standard	Quantity Other
424	

CUSTOMER METERS

Size (in inches)	Quantity
5/8 x 3/4	605
3/4	0
1	117
1 1/2	0
2	28
Comp. 3	1
Turbo 3	0
Comp. 4	2
Turbo 4	0
Comp. 6	0
Turbo 6	0
Comp. 8	1

RANCHO ROJO INVENTORY OF MAJOR PLANT IN SERVICE

Sedona Golf Resort Well Site #1

60 HP Pump, Motor/Panel
Chemical Feed Equipment and Bldg
Arsenic Treatment Plant
Fence

Sedona Golf Resort Tank Site

7.5 HP Booster Pump/Panel
10 HP Booster Pump/Panel
30 HP Booster Pump/Panel
Buildind 16 X 16 Stucco
5000 gallon Pressure tank
Tank Level Recording Equipment
Automatic Controls
Fence
250,000 Gallon Storage Tank

Wild Horse Mesa Well Site

5 HP Pump, Motor/Panel
Chemical Feed Equipment
1,000 Gal Pressure Tank
Site prep for arsenic treat. Equipmt.
Arsenic Treatment Plant
Fence

Rancho Rojo Well Site

30 HP Pump, Motor/Panel
20 HP Booster Pump/Panel
5,000 Gal Pressure Tank
Chlorinator & Cabinet
Automatic Controls
Site prep for arsenic treat. Equipmt.
Arsenic Treatment Plant
Fence

Valley Vista Well Site

Well Pad
Electrical Control Panel
Chemical Feed Equip./ Cab.
Aresenic Treatment Plant
Automatic Controls
Discharge Piping
Fence

Sunup Tank Site

Fence
150,000 Gallon Storage Tank
175,000 Gallon Storage Tank

Sunup Well Site

5 HP Pump, Motor/Panel
Building 8' x 12' Cinder Block 1972
Automatic Controls
Fence

ARIZONA WATER COMPANY

W-01445A-08-0440

Evidentiary Hearing

Volumes I through IX
August 31 through September 11, 2009

Exhibit A-37
Applicant Exhibit No. 37

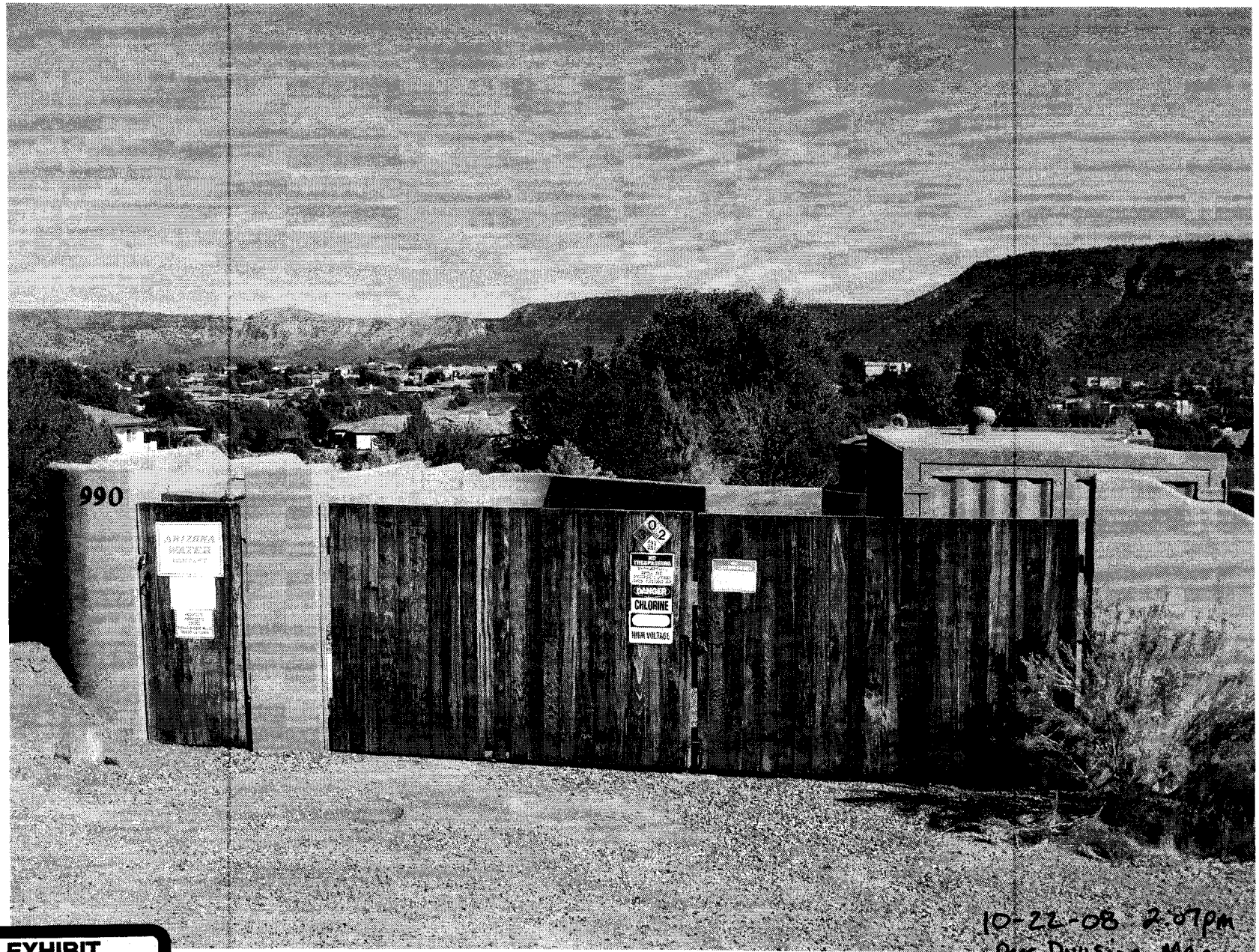
Reduced version provided

ARIZONA WATER COMPANY
VALLEY VISTA
NORTHERN GROUP

SITE DESIGNATION

A - Sedona Golf Resort Well Site #1
B - Sedona Golf Resort Tank Site
C - Wild Horse Mesa Well Site
D - Ranch Rojo Well Site
E - Valley Vista Well Site
F - Sunup Tank Site
G - Sunup Well Site

EXHIBIT
A-37
ADMITTED



10-22-08 2:07pm
per Division Mgr.

EXHIBIT
A-38
ADMITTED

Company Name: Arizona Water Company - Sedona (Sedona)
ADEQ Public Water System No: 03-003
Test Year Ended: 31-Dec-07

WATER COMPANY PLANT DESCRIPTION

WELLS

Arsenic Treatment	Arizona Water Co. ID	ADWR ID Number*	Pump H.P.	Pump Yield (gpm)	Casing Depth (feet)	Casing Diameter (inches)	Meter Size (inches)	Year Drilled
Williams Trtmt. Plant	Well #7	55-616661	125.0	480	700	10	4	n/a
Trtmt. Plant[1]	Well #6	55-616662	60.0	235	n/a	8	3	1949
Arrow Trtmt. Plant	Well #10	55-566709	100.0	380	1010	16	4	1998
n/a	Well #2	55-616656	100.0	510	320	6	4	1960
n/a	Well #4	55-616658	25.0	60	750	8	2	1955
n/a	Well #5	55-616659	60.0	155	684	6	1.5	1962
n/a	Well #8	55-616663	250.0	800	791	16	6	1975
n/a	Well #9	55-506794	150.0	560	505	16	6	1983
n/a	Well #12	55-204279	250.0	500	897	16	6	2004
n/a	Well #11 (Not in service)	55-590241	---	---	1485	16	---	2002
n/a	Inactive	55-516201	---	n/a	613	8	---	1989
n/a	Inactive	55-616660	---	n/a	n/a	n/a	---	1959

*Arizona Department of Water Resources Identification Number
[1]Plant not yet constructed

EXHIBIT
A-39
ADMITTED

OTHER WATER SOURCES

Name or Description	Capacity (gpm)	Gallons Purchased or Obtained (in thousands)
n/a	n/a	n/a

MAINS

Size (in inches)	Material	Length (in feet)
2	---	80,888.0
3	---	21,312.0
4	---	162,439.0
5	---	0.0
6	---	253,623.0
8	---	94,140.0
10	---	0.0
12	---	16,657.0
14	---	0.0
16	---	1,845.0
20	---	0.0

FIRE HYDRANTS

Quantity Standard	Quantity Other
150	

CUSTOMER METERS

Size (in inches)	Quantity
5/8 x 3/4	4,959
3/4	0
1	571
1 1/2	0
2	138
Comp. 3	4
Turbo 3	0
Comp. 4	6
Turbo 4	0
Comp. 6	1
Turbo 6	1
Comp. 8	0

SEDONA INVENTORY OF MAJOR PLANT IN SERVICE

King's Ransom Well Site #2

100 HP Pump, Motor/Pump/Panel
25 HP Booster Pump/Motor/Panel
Control Valve
Chemical Feed Equipment and Bldg
Fence

Sky Mountain Well Site #4

25 HP Pump, Motor/Panel
3 Booster Pumps-5 HP
Chemical Feed Equipment
2" Sand Separator
Building 6' x 8' Red Rock 1967
1,000 Gal Pressure Tank
100,000 Gallon Storage Tank

Harmony Hills Well Site #5

60 HP Pump,Motor/Panel
25 HP Booster Pump
Chemical Feed Equipment and Bldg
Split Rail Fence
2 - 3" Sand Separators
New 10' x 16' Fiberglass Bldg (1)
New 10' x 16' Fiberglass Bldg (2)

Harmony Well Site #12

Electrical panels & entrance section
250 HP Pump Control Valve
Block wall and landscape
Building and pads

Rainbow Well Site #6

60 HP Pump, Motor/Panel
25 HP Booster Pump/Panel
Arsenic Treatment Plant
Chemical Feed Equipment and Bldg
Vinyl Coated Fence / Retaining Wall

Williams Well Site #7

125 HP Pump, Motor/Panel
Booster Pump-75HP/Panel
Arsenic Treatment Plant
Retaining Wall
Chemical Feed Equipment and Bldg
Buildings 2, 4'x 4' Plywood 1991
Fence w/redwood gates
6,000 Gallon Storage Tank

Southwest Center Well Site #8

250HP Pump, Motor/Panel
75 HP Booster Pump/Panel
Control Valve
Warehouse 20' x 40' Cinderblock 1977
Chemical Storage Building
Contents
Covered Parking
Chemical Feed Equipment and building
Fence/w Auto Gates

Well Site #9

150 HP Pump, Motor/Panel
75 HP Booster/Panel
Buildings 12' x 32' Wood 1962 &
20' x 40' steel 1987
Pressure Filter
Chemical Feed Equipment and Bldg
Turbidometer
Fence
2,200 Gallon Filters Tank
6,000 Gallon Filters Tank

Red Cliff Tank Site

2 Booster Pumps-5 HP/Panel
Buildings 9'x 12' Steel 1987 &
12' x 14 steel 1989
1,000 Gal Pressure Tank
Automatic Controls
(North Slopes Booster Station)
15 HP Booster Pump/Panel
20 HP Booster Pump/Panel
25 HP Booster Pump/Panel
Building
5000 Gal Pressure Tank
Tank Level Recording Equip
Automatic Controls
Fence
100,000 Gallon Storage Tank

Well site #10

100 HP Pump, Motor/Panel
25 HP Booster Pump/Motor/Panel
Control Valve
Chemical Feed Equipment and Bldg
Turbidimeter w/phone dialer
Site prep for arsenic treat. Equipmt.
Arsenic Treatment Plant
Fence

Town Tank Site

300,000 Gal Tank -
Cathodic Protection
Automatic Controls
Fence
300,000 Gallon Storage Tank

Rolling Hills Booster Pump Site
2 Booster Pumps-20 HP/Panel
Building 6' x 9' 1977

Sedona West Tank Site
2 10 HP Booster Pumps/Panels
2,000 Gal Pressure Tank
Building 10 X 10
Automatic Controls
Fence
102,800 Gallon Storage Tank

Harmony High Park Booster Site
2 - Booster Pumps 7.5HP/Panel
1 - 2,000 Gal Pressure Tank, 1 - 1,550 Gal. Pressure Tank
Building 10 X 10
Automatic Controls
Fence
1,000,000 Gallon Storage Tank

Schnebly Hill Base Station
Mobile Radio Base Station
Building 8' x 8' Wood 1967

Chapel Rd. Booster Site
Booster Pump-7.5 HP/Panel

Shadowrock Tank Site
Automatic Controls
Tank Level Recording Equip.
Fence
700,000 Gallon Storage Tank

Jordan Park Booster Station
20 HP Motor/Booster/Panel
10 HP Motor/Booster/Panel
10 HP Motor/Booster/Panel
Building 12' x 18' Cinder Block 1995
5000 Gallon Pressure Tank
Cathodic Protection
Automatic Controls
Fence / Block Wall
1,000,000 Gallon Storage Tank

Office - 65 Coffee Pot Dr. #7
Contents/Leasehold Improvements
Automatic Controls
Tank Level Recording Equipment
Itron Computer W/Handhelds
Personal Computer W/ Printer

POST-TEST YEAR PLANT

Acct		WA 1-3779	WA 1-3898	WA 1-4011	WA 1-4267b
331	Struct. & Imp. - W.T.	$ 8,213	$ -	-	-
332	W.T. Equipment	499,153	-	-	-
343	T&D Mains	6	326,292	-	1,890,680
310.3	Other Source of Supply Land			334,007	-
314	Wells			79,779	-
325	Electtric Pumping Equipment			32	-
		$ 507,372	$ 326,292	$ 413,817	$ 1,890,680
	Less: Amts. closed before 12/31/07	-	-	-	-
	Total Post-Test Year Plant	$ 507,372	$ 326,292	$ 413,817	$ 1,890,680

WA 1-3779: Arsenic treatment facilities (Williams)
WA 1-3898: Oak Creek utility bridge (ADOT)
WA 1-4011: Drill & Equip Well
WA 1-4267b: ADOT portion of Hwy 179 improvement

COVER SHEET

FAX

To: BILL KERLEY
ARIZONA WATER COMPANY

Fax #: 240-6878

Subject: Well Information

Date: July 22, 1999

Pages: 2, including this cover sheet.

COMMENTS:

WELL REGISTRY REPORT FOR WELL REGISTRATION # 55-518969 ATTACHED.

WELL REGISTRATION # 55-518969 REPLACED # 55-516201. WELL REGISTRATION # 55-522912 WAS A DUPLICATE REGISTRATION OF # 55-518969.

WELL REGISTRATION # 55-516201 AND # 55-522912 HAVE BEEN CANCELLED, LEAVING # 55-518969 AS THE ACTIVE WELL REGISTRATION NUMBER.

From the desk of...

Sharon Ward
Water Resource Technician
Arizona Department of Water Resources
500 North Third Street
Phoenix AZ 85004

602 417-2405
Fax: 602 417-2421

EXHIBIT
A-40
ADMITTED

Run Date: 07/22/1999

WELL REGISTRY REPORT - WELLS55

Location A 16 0 5 0 24 B B D **WR** 518969 **AMA** NOT WITHIN ANY AMA OR INA

Name ARIZONA WATER COMPANY
PO BOX 29006

PHOENIX AZ 85038

File Type NEW WELLS (INTENTS OR APPLICATIONS)
Application/Issue Date 09/04/1987

Owner OWNER
Driller Nbr 362
Driller Name KENNY PORTER DRILLING
Driller Phone
County YAVAPAI
GPM

Well Type NON-EXEMPT
SubBasin NO SUBBASIN
Watershed VERDE RIVER
Water Uses IRRIGATION
Well Uses WATER PRODUCTION
Discharge Method NONE
Power ELECTRIC MOTOR 16 - 100 HP

Well Depth	775.00	**Case Diam**	8.00	**Tested Cap**	450.00
Pump Cap.	450.00	**Case Depth**	613.00	**CRT**	X
Draw Down	3.00	**Water Level**	326.00	**Log**	X
		Acres Irrig	0.00	**Finish**	STEEL-PERFORATED OR SLOTTED CASING

Comments #518969 REPLACES #516201 DUE TO COLLAPSE OF #516201

Current Action

07/21/1999	860	CHANGE OF WELL OWNERSHIP

Action History

02/10/1989	750	WELL LOG RECEIVED
02/10/1989	755	WELL CONSTRUCTION COMPLETED
02/10/1989	805	COMPLETION REPORT RECEIVED

ARIZONA DEPARTMENT OF WATER RESOURCES
GROUNDWATER MANAGEMENT SUPPORT SECTION
MAIL TO: P.O. BOX 458 - PHOENIX, ARIZONA 85001-0458
Phone (602) 417-2470

REQUEST FORM TO CHANGE WELL INFORMATION
OWNERSHIP * DRILLER * VARIANCE

Please complete the appropriate section of this request form and return to P.O. Box 458, Phoenix, Arizona 85001-0458 or hand deliver to the above address with applicable fee. NOTE: A.R.S. §45-593.C requires that the Department be notified of change of well ownership and that the new owner is required to keep the Department's Well Registration records current and accurate. Well data and ownership changes must be submitted within thirty days after changes take place.

SAVE THIS FORM TO REPORT FUTURE CHANGES IN OWNERSHIP, CHANGES IN ADDRESS, OR CHANGE IN WELL DATA SUCH AS PUMP CAPACITY, CORRECTION OF LEGAL DESCRIPTION, CHANGE OF WELL DRILLER AND AMENDING INFORMATION PREVIOUSLY FILED.

1. **CHANGE OF WELL INFORMATION: (NO FEE REQUIRED)**

NOTE: If the location of the proposed well changes after drilling authority has been issued, **attach a $10.00 reissue fee for each well.**

WELL REGISTRATION NO. 55-_____ **FILE NO:**_____

If known, I/We request the following well information be changed:_____

_____

Date_____ **Signature of Current Well Owner**_____

2. **STATEMENT OF CHANGE OF WELL OWNERSHIP: ($10.00 FEE REQUIRED)**

NOTE: If this change consists of more than one well and the names are common: attach a $10.00 fee. Otherwise, each well requires a separate fee of $10.00.

I, Arizona Water Company, state that I am the ~~Previous~~/New Owner of the well described below:

SE ¼ (10 Acre) NW ¼ (40 Acre) NW ¼ (160 Acre) of Section 24 Township 16N Range 5E

Assessor's tax parcel number of the parcel on which the well is located: Book 405 Map 28 Parcel 016W.

Well Registration No. 55- 516201 File No. 39-05-54375 (if known)

Sedona Golf Resort L.C.	Arizona Water Company
PRINT Previous Owner's Name	**PRINT** New Owner's Name
3838 N. Central, Suite 1500	PO Box 29006
Mailing Address	Mailing Address
Phoenix, AZ 85012	Phoenix, AZ 85038-9006
City State Zip	City State Zip
602-285-6800	602-240-6860
Telephone Number	Telephone Number

Signature of ~~Previous~~/New Well Owner Willis Kerley Agent **Date** 10/29/98

DWR 55-71 (Rev 12-97))

FILE COPY

ARIZONA WATER COMPANY

Docket No. W-01445A-08-_____

2008 RATE HEARING

For Test Year Ending 12/31/07

PREPARED

DIRECT TESTIMONY & EXHIBITS

OF

Thomas M. Zepp

EXHIBIT

A-41

ADMITTED

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ARIZONA WATER COMPANY

Direct Testimony of

Thomas M. Zepp

I. Introduction and Qualifications

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Thomas M. Zepp. My business address is Suite 250, 1500 Liberty Street, S.E., Salem, Oregon 97302.

Q. WHAT IS YOUR PROFESSION AND BACKGROUND?

A. I am an economist and Vice President of Utility Resources, Inc., a consulting firm. I received my Ph.D. in Economics from the University of Florida. Prior to jointly establishing our consulting firm in 1985, I was a consultant at Zinder Companies from 1982 to 1985 and a senior economist on the staff of the Oregon Public Utility Commissioner between 1976 and 1982. Prior to 1976, I taught business and economics courses at the graduate and undergraduate levels.

I have been deposed or testified on various topics before regulatory commissions, courts and legislative committees in twenty-two states, before two Canadian regulatory authorities, and before four Federal agencies. In addition to cost of capital studies, I have testified as to incremental costs of energy and telecommunications services and values of utilities' assets and have presented rate design testimony.

Q. WHAT COST OF CAPITAL STUDIES HAVE YOU PREPARED BEFORE?

A. I have submitted studies or testified on cost of capital and other financial issues before the Interstate Commerce Commission, Bonneville Power Administration, and courts or regulatory agencies in Alaska, Arizona, California, Hawaii, Idaho,

Illinois, Kentucky, Montana, Nevada, New Mexico, Oregon, Tennessee, Utah, Washington and Wyoming.

My studies and testimony have included consideration of the financial health and fair rates of return for Arizona Water Company (the "Company"), General Telephone of the Northwest, Illinois Bell Telephone, Nevada Bell Telephone, Pacific Northwest Bell, U S WEST, Anchorage Municipal Light & Power, Commonwealth Edison, Idaho Power, Iowa-Illinois Gas and Electric, Pacific Power & Light, Portland General Electric, Puget Sound Power & Light, Cascade Natural Gas, Mountain Fuel Supply, Northern Illinois Gas, Northwest Natural Gas, Anchorage Water Utility, Anchorage Wastewater Utility, Arizona-American Water Company, California-American Water Company, California Water Service, Chaparral City Water Company, Dominguez Water Company, Golden State Water Company, Hawaii-American Water Company, Kentucky-American Water Company, Mountain Water Company, New Mexico-American Water Company, New Mexico Utilities, Inc., Oregon Water Company, Paradise Valley Water Company, Park Water Company, San Gabriel Valley Water Company, Southern California Water, Suburban Water System, Tennessee-American Water Company and Valencia Water Company. I have also prepared estimates of the appropriate rates of return for a number of hospitals in Washington, a large insurance company, and U.S. railroads.

Q. DO YOU HAVE OTHER PROFESSIONAL EXPERIENCE RELATED TO COST OF CAPITAL ISSUES?

A. Yes. My article, "Utility Stocks and the Size Effect - Revisited," was published in the *Quarterly Review of Economics and Finance*, Vol. 43, Issue 3, Autumn 2003, pp. 578-582. Also, I published an article "Water Utilities and Risk," *Water the Magazine of the National Association of Water Companies* Vol. 40, No. 1 Winter 1999 and was an invited speaker on the topic of risk of water utilities at the 57th

Annual Western Conference of Public Utility Commissioners in June 1998. I presented a paper "Application of the Capital Asset Pricing Model in the Regulatory Setting" at the 47th Annual Southern Economic Association Conference and published an article "On the Use of the CAPM in Public Utility Rate Cases: Comment," *Financial Management* Autumn 1978, pp. 52-56. I have been a journal referee for the *International Review of Economics and Finance* and *Financial Management.* While on the staff of the Oregon PUC, I also established a sample of over 500,000 observations of common stock returns and measures of risk and conducted a number of studies related to the use of various methods to estimate costs of equity for utilities. I was invited to Stanford University to discuss that research.

II. Purpose of Testimony, Principles, Summary, and Conclusions

Q. WHAT IS THE SUBJECT OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The Company has asked me to estimate its cost of equity. My study is based on market data available to investors at the end of February 2008 and 2007 SEC 10-K Reports.

Q. WHAT ARE THE RESULTS OF YOUR STUDY?

A. I determine that the Company's cost of equity falls in a range of 12.1% to 12.7% and the average of my cost of equity estimates for the Company is 12.4%. I recommend the Arizona Corporation Commission (the "Commission") authorize a rate of return on common equity ("ROE") of no less than 12.4% for the Company at this time.

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. In this Section II, the concept of a fair rate of return and a summary of my analysis are presented.

In Section III, the specific additional risks faced by the Company are discussed. I explain why the Company's cost of equity exceeds the cost of

equity of the water utilities sample I used to determine market-based cost of equity estimates by at least 50 basis points. My water utilities sample is the same as the Commission Staff's ("Staff") sample of six water utilities used in the past. In my analysis, I have assumed that the Company will be allowed to implement the Purchased Water Adjustment Mechanism ("PWAM"), the purchased Power Adjustment Mechanism ("PPAM"), and the Purchased Fuel Adjustment Mechanism ("PFAM") (or in the alternative, the Attrition Adjustment Mechanism ("AAM")) it has requested. If the requested PWAM, PPAM, and PFAM (or AAM) are not authorized, then the Company is more risky from a cost recovery perspective alone than the utilities in the water utilities sample (that already have various and similar adjustment mechanisms) and, as a result, would require a larger risk premium than I have proposed.

I have based my equity cost estimates on the discounted cash flow ("DCF") model and capital asset pricing model ("CAPM"). In recent cases before the Commission, Staff has limited its determination of equity costs to these two models. In also relying on these approaches to determine equity cost estimates, I have recognized that the Commission has relied exclusively on these two approaches in the Company's previous rate cases and recent rate cases for other large Arizona water utilities, including Arizona-American, Chaparral City Water Company and Far West Water & Sewer, Inc.

Section IV provides an overview and perspective on what one should expect the fair rate of return on common equity for the Company to be in years 2009 to 2010, the period when new rates will be put in place, and presents my equity cost estimates for the water utilities sample determined with the DCF model and alternative assumptions about how investors determine expected future growth rates. I add 50 basis points to these cost of equity estimates to determine the Company's cost of equity because of the Company's higher risk.

Section V presents equity cost estimates determined with the other model relied upon by Staff, the traditional version of the CAPM. This CAPM approach has been presented by Staff in numerous cases in the past. To these CAPM cost of equity estimates, I also add 50 basis points to recognize the Company's higher risk.

Section VI provides a summary of my analysis and my recommended return on common equity for the Company.

Q. HAVE YOU PREPARED ANY TABLES AND ATTACHMENTS TO ACCOMPANY YOUR TESTIMONY?

A. Yes. I have prepared 16 tables that support my testimony.

Q. PLEASE PROVIDE SOME PERSPECTIVE AND AN OVERVIEW OF THE ISSUES YOU ADDRESS IN YOUR TESTIMONY.

A. Investors can choose to invest in many different types of assets with varying degrees of risk. Those investments might be in real estate, or gold, or collections of fine art, or financial assets. The financial assets run the gamut from relatively low risk assets such as Treasury securities and somewhat higher risk investment grade corporate bonds to relatively high-risk shares of common stocks. As the level of risk increases, investors require higher expected returns. Common stocks of utilities are generally more risky and thus require higher returns than investment grade bonds, which are secured debt instruments with fixed repayment terms. Operating expenses, interest on debt and repayment of principal take precedence over payments to common stock holders, and thus it is the common equity shareholder of the utility who bears the greatest risk of receiving expected returns. Conceptually,

Required return for		Return on a		risk
common stock	=	risk-free asset	+	premium

where the risk premium required for common stocks will be higher than it is for investment grade bonds.

Regulators generally set rates to recover a utility's cost of service. One of those costs of service is the cost of common equity, the required return for the utility's common stock. Rates that give a utility a reasonable opportunity to earn the cost of equity are fair to customers of the utility because they reflect the cost of providing utility service, including the opportunity to earn a return on equity capital invested in the utility. Such rates are also fair to owners of the utility because the cost of equity is equal to returns expected to be earned by other companies of comparable risk, is high enough to attract needed capital, and allows the utility to maintain its financial integrity.

Q. PLEASE DISCUSS WHAT IS MEANT BY A FAIR RATE OF RETURN.

A. A fair rate of return is achieved when a utility is permitted to set rates and charges for service at levels where the expected return provides common stock investors a reasonable opportunity to earn the cost of common equity. Since operating expenses and interest on debt take precedence over payments to common stock holders, it is the common equity shareholder of the company who bears the greatest risk of receiving expected returns. In 1923, the U.S. Supreme Court set forth the following standards in the Bluefield Waterworks decision:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economic management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of

> its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market, and business conditions generally. 262 U.S. 679, 692-93 (1923).

In the Hope Natural Gas Company decision, issued in 1944, the U. S. Supreme Court stated the following regarding the return to owners of a company:

> [T]he return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital. 320 U.S. 591, 603.

In 1989, in Duquesne Light Co. v Barasch the U. S. Supreme Court also recognized two important economic concepts:

First, it found that regulatory commissions may need to adjust the risk premium element of the rate of return on equity to provide a fair return. It said:

> [W]hether a particular rate is "unjust" or "unreasonable" will depend to some extent on what is a fair rate of return given the risks under a particular rate setting system . . . . 488 U.S. 299, 310.

Therefore, in determining an appropriate return, consideration must be given to the specific risks created by the nature and degree of regulation to which the utility is subject, in addition to examining general economic and financial data for utilities. To meet this requirement of the U. S. Supreme Court, additional risk faced by the Company must be recognized when setting the fair rate for return for the Company.

Second, the U. S. Supreme Court found that the cost of common stock was ". . . the return required to sell such stock upon reasonable terms in the market." 488 U.S. at 310, n 7. The source of funds that would be used to buy shares of common stock, however, does not change that cost of equity. Owners

of the utility could be individuals who bought stock on margin or bought it with 100% of their own funds. Owners could also be a partnership, a developer, a holding company or some other type of owner. Knowledge about ownership does not change the underlying cost of equity. For companies that have no publicly-traded common stock, like the Company, as well as those that do, the U. S. Supreme Court found the test of a fair rate of return is tied to the issue of new shares of common stock.

Q. ARE THERE SPECIFIC CONSIDERATIONS THAT SHOULD BE RECOGNIZED IN ARIZONA?

A. Yes. The Arizona Constitution, Arizona appellate court decisions, and the Commission's policies and practices create a particular rate-setting system that limits the ability of Arizona utilities to earn a fair return on the value of their property devoted to public service. For example, in Arizona the Commission routinely imposes limitations on out-of-period adjustments that are more restrictive than the rate case procedures available to utilities in the water utilities sample I use to determine benchmark equity costs estimates.

The Company also faces the risk that it will have unexpected costs in the period in which new rates are in effect, but will not be able to begin recovering such unexpected costs without completing a new general rate case ("GRC"). This particular rate setting system increases risk and thus requires that the Commission authorize higher ROEs than would be the case in jurisdictions such as California and Pennsylvania, which use forecasted or projected test periods in setting rates and allow utilities to implement surcharges and other cost recovery mechanisms outside a GRC.

Additionally, the Company has added risk because all of the utilities in the water utilities sample have the equivalent of a PPAM, PWAM, PFAM, AAM, or

other adjusters, which allow those utilities to adjust rates between rate cases.[1] The Company had a limited number of such adjustment mechanisms at one time, but the Commission eliminated them in the Eastern Group and Western Group systems' rate cases. *See* Decision No. 66849 (March 19, 2004) and Decision No. 68302 (Nov. 14, 2005). The Commission has authorized similar types of adjusters for electric utilities and thus I assume the requested adjusters will be authorized. If not, the risk faced by the Company is much higher than the risk faced by the utilities in the water utilities sample.

In its Western Group rate case, the Commission required the Company to implement inverted block rate structures designed to achieve water conservation but rejected any adjustment in test year sales to reflect the expected conservation. If conservation is achieved but is not accounted for in test year sales, the Company is left without a reasonable opportunity to fully recover its cost of service or to earn its authorized ROE. This added risk should be recognized when setting the fair rate of return for the Company, particularly if such rate design is approved for the remainder of the Company's systems.

Q. WHAT ARE THE IMPLICATIONS OF THESE ADDED RISKS IN THE DETERMINATION OF A FAIR RATE OF RETURN FOR THE COMPANY?

A. The added risks are important to both customers and equity investors of the Company.

From the perspective of customers, the cost of equity is another cost of service, and customers' rates should provide the Company a reasonable opportunity to recover that cost just as rates should be set to recover other costs of service. The rates customers pay should provide a reasonable opportunity, though not a guarantee, for the Company to earn that cost of equity.

[1] All of the utilities in the water utilities sample have the equivalent of the adjusters proposed by the Company in addition to other adjusters not being proposed by the Company.

From the perspective of equity owners, the added risks require rates and rate adjustment mechanisms that provide a reasonable opportunity to earn an authorized return for its equity investors that maintains the utility's financial integrity, which is commensurate with returns on investments in other enterprises having corresponding risks, and is sufficient to attract needed capital on reasonable terms. Because the Company is more risky than the utilities in the water utilities sample, its required common equity return is higher.

Summary of Findings and Recommendations.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. My findings and recommendations are the following:

1. The cost of common equity faced by the Company is greater than the cost of common equity that faces utilities in the water utilities sample:

   (a) The Company faces risk that stems from the use of an historical test year with limited opportunities for out-of-period adjustments.

   (b) The Company's arsenic treatment cost recovery mechanism ("ACRM") does not provide the opportunity to recover all reasonable costs of meeting the new federal arsenic maximum contaminant level ("MCL") for arsenic and future ACRMs, if approved, will not change this situation.

   (c) The Company faces risk due to the Commission's policy which requires inverted block rates intended to reduce customer water use, but fails to provide a means of recovering the resulting lost revenues.

   (d) The Company is also more risky than the water utilities sample because it is smaller and has more limited financial flexibility.

   (e) Based on the risks discussed in (a), (b), (c) and (d), which are greater for the Company than for utilities in the water utilities

sample, the Company has a cost of equity that is at least 50 basis points higher than the benchmark cost of equity for the water utilities sample, assuming all of the Company's requested adjuster mechanisms are approved, otherwise I would recommend an even higher adjustment.

2. The Company does not have a PPAM in most of its service territories and does not have a PWAM, PFAM, or AAM in any of its service territories, but has requested that they be approved in this case. Such cost adjusters are similar to ones available to the utilities in the water utilities sample. Thus, the Company has been, and is now even more risky than the utilities in the water utilities sample. In determining my recommended ROE, I have recognized electric utilities in Arizona have similar adjusters and have assumed the Commission will also authorize them for the Company. If such adjusters are not authorized, the ROE should be higher than I have recommended.

3. The market cost of common equity faced by the utilities in the water utilities sample falls in a range of 11.6% to 12.2% and has an overall average of 11.9% at this time:

- An average of DCF estimates of the cost of equity indicates a cost of equity for the water utilities sample of 11.6%.
- An average of costs of equity derived using the CAPM approach indicates an average cost of equity for the water utilities sample of 12.1%.

4. Based on the risks of the rate-setting system in Arizona, other company-specific risk, and my estimates of the cost of equity for the water utilities sample made with the DCF and CAPM, I determine the average of my

equity cost estimates for the Company is 12.4% and recommend an ROE of 12.4% be authorized for the Company.

III. Risks of the Company Versus Risks Of Utilities In The Water Utilities Sample.

Q. AS A PRELIMINARY MATTER, PLEASE DISCUSS THE WATER UTILITIES SAMPLE YOU HAVE USED IN YOUR COST OF EQUITY ANALYSES.

A. My water utilities sample is composed of American States Water, Aqua America, California Water Service Group, Connecticut Water Service, Middlesex Water and SJW Corp. These are the water utilities the Staff relied upon to determine benchmark equity costs in the Company's most recent rate cases (Dockets No. W-01445A-04-0650 and W-01445A-02-0619), as well as in the 2007 Anthem District rate case (WS-01303A-06-0403), the 2007 Sun City District case (Docket No. W-01303A-07-0209) and other recent rate cases for Class A and B water utilities. Table 1 lists bond ratings, percentages of regulated revenues from water utility operations, number of customers, operating revenues, and net plant for the six utilities in the water utilities sample as reported by AUS Utility Reports in February 2008 and by the Company.

Q. HOW DOES THE COMPANY'S LEVERAGE COMPARE TO THE LEVERAGE OF THE WATER UTILITIES SAMPLE?

A. It is virtually the same. Table 2 is based on testimony provided by Staff in Table SPI-3 of Docket No. WS-01303A-07-0209 (Sun City District, October 15, 2007). It shows the average equity ratio for the water utilities sample is basically the same as the Company's equity ratio. Consequently, differences in required ROEs due to differences in leverage between the Company and the sample are not at issue in this proceeding.

Q. HOW DOES THE RISK OF THE WATER UTILITIES SAMPLE COMPARE TO THE RISK OF THE SAME SAMPLE WHEN STAFF FILED ITS TESTIMONY IN THE COMPANY'S LAST CASE?

A. It has increased substantially. Staff relies exclusively on beta risk, the risk measure in the original version of the CAPM to determine risk. *See* Direct Testimony of Alejandro Ramirez, Docket No. W-01445A-04-0650 (The Company's Western Group), at pp. 10-11. An average risk company has a beta of 1.0 and below average risk companies have betas less than 1.0. At the time of the Company's Eastern Group case (2003 Hearings), the average beta for the water utilities sample was 0.59. That measure of risk has increased to 0.98, an increase in risk of 66%. *See* Table 5. Leverage of the water utilities sample is approximately the same as Staff reported in Docket No. W-01445A-04-0650. Therefore, the dramatic increase in this particular risk is primarily the result of increased business risks affecting the entire water utility industry.[2]

Q. PLEASE TURN TO GENERAL RISK CONSIDERATIONS. DOES A WATER UTILITY FACE MORE RISK WHEN IT HAS TO MAKE ADDITIONAL INVESTMENTS TO MEET STATE AND FEDERAL WATER QUALITY STANDARDS AND OTHER REGULATORY MANDATES?

A. Yes. First, expected or unexpected requirements for additional capital spending means a water utility has to request rate increases more often and for larger percentage increases in order to maintain a fair rate of return. Regulatory procedures are expensive, time consuming, increase uncertainty, and raise doubts in investors' minds that regulators will authorize high enough rates and/or rate adjustment mechanisms to enable the water utility to earn a fair rate of

[2] There are no beta estimates for the Company. Even though we cannot determine the Company's beta, based on this increase in business risk for the water utility industry, and because the Company is more leveraged than in the last case, the entire evidence indicates the Company is more risky than it was in 2004-2005.

return. This situation increases uncertainty about future returns and thus increases risk.

Second, investors are concerned that regulators will delay inclusion of new plant in rate base or not allow operating costs to be recovered. In Arizona, because there are limitations on out-of-period adjustments, investments may not only be challenged but also may not be allowed in rate base because they are not considered appropriate out-of-period adjustments to test year rate base. Risk increases if such investments are challenged and there is any chance that the Commission will disallow part of the dollars invested or will delay recovery of the costs of those investments. From an investor's point of view, it is the *potential* for such disallowances, delays or exclusion from consideration in setting new rates that increases risk. If additional investments were never required there would be no potential disallowances, delays or possible exclusions, and investor concerns would never arise; thus risk would not increase. But, with the need for increased investments, uncertainty arises and the risk increases.

Q. HAVE YOU STUDIED THE IMPACT OF FINANCING REQUIREMENTS ON THE RISK AND COSTS OF CAPITAL FACED BY UTILITIES?

A. Yes, I have. Several years ago, before recent events in western power markets occurred, I conducted a study of expected differences in bond costs and common equity costs that faced electric utilities with different financing requirements. I found that utilities with above-average financing requirements required an ROE that was approximately 80 basis points higher than was required by an average utility. Higher financing requirements pushed up bond costs, too.

Q. DOES THE COMPANY FACE ANY SPECIFIC RISKS UNDER THE RATE SETTING SYSTEM USED IN ARIZONA THEREBY REQUIRING THE

AUTHORIZED ROE TO BE SET ABOVE THE MARKET COST OF EQUITY FOR THE WATER UTILITIES SAMPLE?

A. Yes, it does. In its *Duquesne* decision, the U. S. Supreme Court stated:

> [T]he impact of certain rates can only be evaluated in the context of the system under which they are imposed . . . . The risks a utility faces are in large part defined by the rate methodology because utilities are virtually always public monopolies dealing in an essential service, and so relatively immune to the usual market risks. *Duquesne Light Company v. Barasch,* 488 U.S. 299, 314-15 (1989).

Two state-specific factors in Arizona make the Company more risky than the utilities in the water utilities sample. One factor is the legal constraint on Arizona water utilities that limits their ability to obtain rate relief outside of GRCs in which the "fair value" of the utility's property is determined and used to set rates. The Arizona Constitution, as interpreted in court decisions, limits the ability of Arizona utilities to utilize adjustment mechanisms, advice letter filings and other streamlined procedures to obtain recovery of costs outside a GRC, in contrast to many other jurisdictions. For example in *RUCO v. Arizona Corporation Commission*, 199 Ariz. 588, 20 P.3d 1169 (App. 2001), the court held the Commission violated the Arizona Constitution because it authorized a water utility to implement a surcharge to recover increased purchased water costs without finding the utility's "fair value." These limitations on obtaining rate relief in Arizona make it more risky for the Company to do business than utilities in the states that permit utilities to implement surcharges and other cost recovery mechanisms outside a GRC. Of course, surcharges and adjuster mechanisms should be approved in this proceeding, as Mr. Garfield testifies.

Second, in a GRC, the Commission requires the use of an historic test year with limitations on the amount of out-of-period adjustments. This process

creates another state-specific factor that increases risk and thus required ROEs for utilities in Arizona. Other states, such as *California* and Pennsylvania (in which primary service territories of four of the six utilities in the water utilities sample are located), use future test years or partially projected test years to better reflect future costs and to match plant, expenses and revenues on a going-forward basis. Such constraints on the determination of new rates in a GRC make it difficult to obtain approval of rates that allow the Company to recover the costs of service it will actually incur during the period when new rates are put in place, which can be several years beyond the test year.

These risks increase the Company's required ROE above the level required by water utilities that operate in states that do not have such limitations imposed, either by law or by agency policy, on the rate setting system. Under the *Duquesne* decision, the additional risk associated with the particular rate setting system must be compensated with an ROE that is higher than would be appropriate for the utilities in the water utilities sample.

Q. DOES THE COMPANY FACE OTHER ADDITIONAL RISKS NOT FACED BY UTILITIES IN THE WATER UTILITIES SAMPLE?

A. Yes. The Company faces risk that unavoidable purchased water and purchased power costs in some of its systems will not be fully recovered and risk that all arsenic treatment costs are not included in the ACRM, and therefore will not be fully recovered.

Changes in purchased water, purchased fuel, and purchased power costs are beyond the control of the Company. In the Eastern Group case, the Commission eliminated the Company's PPAMs and PWAMs in the Eastern Group systems. Decision No. 66849 at pp. 13-14. In the Western Group case, the Commission eliminated the Company's PPAMs and PWAMs for those water systems. Decision No. 66849 at 43-46. The PPAMs and the PWAMs are similar

to surcharges and other cost recovery methods available to the water utilities in the water utilities sample. Such adjusters mitigate risk for the utilities in the water utilities sample. Thus, the elimination of the PPAMs and PWAMs in the Company's Eastern Group and Western Group systems by the Commission has made the Company even more risky than the utilities in the water utilities sample. Such risk is heightened by the fact that the Commission granted Arizona Public Service rate increases in May 2006 and July 2007. Arizona Public Service has just filed a new rate case seeking an 8 percent rate increase, to become effective on July 1, 2009 – before the Company's rate case will have been completed. Without the PPAM, such rate increases, found to be reasonable and approved by this Commission, and which are beyond the control of the Company, burden and pose a risk to the Company that other water utilities with adjusters similar to the PPAM would not have.

Q. HAVE YOU STUDIED THE IMPACT OF RATE ADJUSTMENT MECHANISMS THAT MITIGATE THE IMPACT OF CHANGES IN COSTS BEYOND THE CONTROL OF WATER UTILITIES ON REQUIRED RETURNS OF EQUITY?

A. Yes, I have. In California, prior to November 2001, unexpected outlays for purchased water, purchased power and pump taxes were booked to balancing accounts and ultimately either refunded to customers or collected from customers in the future independent of an earnings test. The California Office of Ratepayer Advocates ("ORA") proposed a modification of the balancing account mechanism that would continue the balancing accounts, but base recovery of unexpected higher costs on an earnings test.[3] I conducted company-specific simulation analyses of the ORA proposal for three California water utilities and found the unmodified cost adjustment mechanisms reduce utilities costs of equity

[3] This California Advocacy Staff proposal was initially adopted but then wisely rejected by the California PUC.

without placing any added burden on ratepayers.[4] My studies showed that the proposed modification of the balancing account procedures increased required ROEs by at least 75 basis points.[5] These negative impacts on expected ROEs were the result of the proposed *modification* of the balancing account mechanisms, not the elimination of them. This study of the proposed change in balancing accounts for the California water utilities shows that the Company's risk and required ROE are increased if it does not have PPAMs and PWAMs in all of its systems.

Q. YOU ALSO MENTIONED THE RISK THE COMPANY FACES WITH RESPECT TO RECOVERY OF ARSENIC-RELATED TREATMENT COSTS. DOESN'T THE ACRM OFFSET THAT RISK?

A. No. EPA's new arsenic MCL of 10 parts per billion ("ppb") required the Company to make substantial new investments in non-revenue producing facilities that would otherwise not have been required and were not required by water utilities in other geographic areas that do not need to remove arsenic from their sources of water. The provisions of the ACRM limit the deferral period of recoverable operations and maintenance ("O&M") costs, exclude recovery of other costs and a return on new treatment plant, and allow only two filings per system.

The Commission acknowledged that the ACRM was not designed to give the Company an opportunity for full cost recovery. In Decision No. 66400 (October 14, 2003), the ACRM was approved for the Northern Group. In that Decision, the Commission found that

> . . . the agreement between Staff and Arizona Water will enable the Company to recover *a portion* of additional O&M expenses associated with arsenic treatment facilities, whether those facilities are constructed and operated by

[4] There is no added burden if ratepayers are expected to pay their actual costs of service.

[5] My study indicated increases in required ROEs of 75 basis points for California Water Service, 90 basis points for Southern California Water and 110 basis points for San Gabriel Valley Water Company.

> Arizona Water or by a third party pursuant to a lease agreement. However, the *recovery of O&M expenses is confined to specific and narrowly defined costs* in order to enable Staff and other parties to more easily audit expenditures incurred by the Company for the treatment facilities. Decision No. 66400 at p. 20 (emphasis added).

The ACRM subsequently authorized for the Eastern and Western Groups is identical to the ACRM for the Northern Group. Thus, arsenic treatment cost recovery is limited to a narrowly defined set of O&M costs.

From a risk standpoint, the new arsenic MCL has a much greater impact on water utilities in Arizona than on the utilities in the water utilities sample, which operate in other parts of the United States where the natural occurrences of arsenic in water supplies are minimal. The ACRM mitigates some of the risk of constructing and operating new facilities to meet the federal arsenic standard, but was not designed to allow full recovery of those costs. The Company has more risk than water utilities in the water utilities sample that do not have to make such additional investments and incur such additional O&M costs to comply with the new federal standard.

Q. ARE THERE ANY OTHER ASPECTS OF THE COMMISSION'S RATE SETTING SYSTEM THAT INCREASE RISK?

A. Yes. In the past several years, the Commission has placed increased emphasis on water conservation, and water utilities have been required to implement inverted block rate structures, which are intended to cause customers to use less water and are not based on the cost of serving particular classes or types of customers. Now, some of the Company's rates are based on an inverted block rate design. *See* Decision No. 68302 at pp. 42-43. As a result, the Company is more risky than water utilities that have rates that more closely conform to the costs of providing service.

Because the primary objective of this type of rate design is to conserve water by causing customers to reduce water use, the adoption of inverted block rates creates additional risk. Inverted block rates cause revenue erosion and instability and the Commission provides no means for the Company to recover the lost revenue. American Water Works Association, *Principles of Water Rates, Fees and Charges* (5th ed. 2000) pp. 99-101. At a minimum, it is reasonable to expect reductions in water use, and therefore a reduction in the utility's revenues, which may prevent it from earning its rate of return. However, the magnitude of these reductions is often difficult to predict. This uncertainty makes it more difficult to develop rates that allow the utility a reasonable opportunity to recover its cost of service, including its cost of equity. This uncertainty creates additional risk that increases the Company's required ROE.

Q. DOES THE COMPANY FACE OTHER RISKS?

A. Yes. The Company is more risky than the water utilities sample because it is smaller than the average utility in the water utilities sample and has less financial flexibility than those publicly traded utilities.

Smaller companies – and smaller water utilities in particular – are more risky than larger companies. Staff used the original version of the CAPM to determine equity costs in recent rate cases. Thirty years after that original version of CAPM was developed, new scholarly studies[6] found that version of the CAPM is incomplete and that the size of a company needs to be included in models designed to explain risk and required returns for common stocks. Thus,

[6] Beta is the measure of risk in the original CAPM. Eugene Fama and Kenneth French found that even after accounting for differences in beta risk among companies, smaller companies are generally more risky than larger ones. "Industry Costs of Equity," 43 *Journal of Financial Economics* (1997) pp. 153-193. In chapter 7 of *Stocks, Bonds, Bills and Inflation, 2004 Yearbook Valuation Edition* (and subsequent updates of that study), Ibbotson Associates reported that when betas are properly estimated, betas are larger for small companies than for larger companies. They also find that even after accounting for differences in beta risk, small firms require an additional risk premium over and above the added risk premium indicated by differences in beta risk.

if other risk factors are the same, smaller companies require higher equity returns than do larger companies. I published an article in *The Quarterly Review of Economics and Finance* ("Utility Stocks and the Size Effect - Revisited," Vol. 43, Issue 3, Autumn 2003, 578-582) that provides specific evidence that the stocks of small water utilities, like the Company, are more risky than the stocks of larger water utilities, such as those in the water utilities sample. The California PUC also conducted a study that showed smaller water utilities are more risky than larger ones.[7] Table 6 reports the results of the most recent Ibbotson Study (now published by Morningstar) and my article which indicate the risk premium for a small company and small water companies in particular is in excess of 99 basis points.

Q. HOW DOES THE COMPANY'S LIMITED FINANCIAL FLEXIBILITY INCREASE ITS RISK?

A. The Company does not have access to the public equity markets that are available to the utilities in the water utilities sample. This lack of financing flexibility increases risk for the Company because it has no choice but to rely on retained earnings, short-term debt, and privately placed bonds to provide the capital necessary to finance the utility plant improvements and additions required to assure the quality and reliability of water service. By contrast, utilities in the water utilities sample have publicly traded common equity and have the flexibility to issue additional shares of common equity to keep their capital structures in balance. For example, in a quarterly *Report to Shareholders*, Middlesex Water stated:

> On May 14, 2004, the Company [Middlesex] closed on the offering of 700,000 shares of its Common Stock. The Company also granted the underwriters an over-allotment option to purchase an additional 100,000 shares. We intend

[7] *Staff Report on Issues Related to Small Water Utilities*, June 10, 1991 and CPUC Decision 92-03-093.

> to use the net proceeds to repay most of our outstanding short-term borrowings. *A Note from the President, May 15, 2004, First Quarter Report to Stockholders, Middlesex Water Company.*

The Company does not have the option to issue common stock to the public to repay its outstanding short-term borrowings or obtain equity capital from the public for any other purpose. This lack of financing flexibility presents a special challenge for the Company because the Company must make relatively large investments.

Q. DO YOU HAVE AN OPINION ABOUT HOW MUCH THE RISK POSED BY THE COMMISSION'S RATE SETTING SYSTEM, THE PARTIAL RECOVERY OF ARSENIC-RELATED COSTS UNDER THE ACRM, INVERTED RATE DESIGNS, AND THE COMPANY'S SMALL SIZE AND LIMITED FINANCIAL FLEXIBILITY INCREASE THE COMPANY'S REQUIRED ROE?

A. Yes. These factors increase the Company's risk and, thus, it's required ROE by a minimum of 50 basis points above the ROE required by the utilities in the water utilities sample, which operate under different rate-setting systems and face less risk. Moreover, my estimate of the required risk premium assumes the Commission will adopt the PPAMs, PWAMs, PFAMs (or AAMs) proposed by the Company. If these adjusters are not approved, then the risk premium must be larger.

Q. ARE YOU AWARE OF ANY OTHER INFORMATION THAT IS GENERALLY AVAILABLE TO INVESTORS AND THE PUBLIC WHICH CORROBORATES THE NEED FOR THE COMMISSION TO PROVIDE A 50 BASIS POINT RISK PREMIUM FOR THE COMPANY?

A. Yes. "Capital Lessons", a March 15, 2006 report prepared by Lehman Brothers ranked regulatory commissions of 47 states. Based on Lehman Brothers ranking, the Commission was found to be the least desirable commission from

and investor's perspective. The report found "In our view, the ACC provides a challenging regulatory environment, and rate case lags and delays will continue in a range of around 18 months after filings, leading to long stretches of regulatory risk and potential for cash-tight situations to develop, as such costs are deferred over long periods before recovery can begin." Mr. Garfield explains that regulatory procedures in Arizona lead to a situation where recovery of many prudent Company costs simply will not occur – not just be deferred for future recovery. This Lehman Brothers report corroborates that Arizona is a risky jurisdiction and thus the Company should be authorized the modest risk premium of 50 basis points I have proposed.

IV. Equity Costs Based on the Discounted Cash Flow Model

Q. PLEASE PROVIDE AN OVERVIEW OF YOUR EQUITY COST ESTIMATES.

A. During the last few months there has been increasing concern that the United States economy is either in or about to enter a recession. Stock prices have dropped significantly and there has been a "flight to quality" as investors have sold risky assets and bought Treasury securities. As the demand for Treasury securities has increased, prices for the Treasury securities have increased and interest rates have declined. Average betas for the water utilities sample have also increased from 0.59 in 2003 when Staff prepared testimony in the Company's Eastern Group GRC to 0.68 in 2005 when Staff prepared testimony in the Company's last GRC (Docket W-01445A-04-0650), to 0.82 when Staff filed testimony in the 2007 Anthem District case (Docket No. WS-01303A-06-0403), to 0.98 in early February 2008. *See* Table 5. While it is true that in most periods costs of common equity tend to move in the same direction as interest rates, but by less, in the current situation it appears risk premiums have increased more for water utilities than suggested by past data. Within the framework of the CAPM, beta risk has increased. Within the framework of the DCF model, equity costs

have increased as dividend yields and forward-looking estimates of growth have increased. As a result, even though interest rates have declined during the past year, there are a number of factors which indicate the cost of equity for the Company has increased.

The evidence I present below shows that is the case. Once complete estimates of both the CAPM and DCF models are made, costs of equity are found to have increased dramatically in the last several months, notwithstanding the drop in Treasury rates.

Q. WHAT EQUITY COST ESTIMATES DO YOU PRESENT IN THIS SECTION OF YOUR TESTIMONY?

A. I estimate the constant growth DCF model with data from the water utilities sample. *See* Tables 3, 7, 8, 9, 10 and 11. After adding 50 basis points to the cost of equity estimates for the water utilities sample to account for the Company's above-average risk, I find an estimated equity cost range of 11.8% to 12.4% and an average DCF cost of equity of 12.1% for the Company. *See* Tables 10, 11 and 16.

Q. PLEASE EXPLAIN THE DCF METHOD OF ESTIMATING THE COST OF EQUITY.

A. The constant growth DCF model computes the cost of equity as the sum of an expected dividend yield ("D_1/P_0") and expected dividend growth ("g"). The expected dividend yield is computed as the ratio of next period's expected dividend ("D_1") divided by the current stock price ("P_0"). Generally, the constant growth model is computed with formula (1) or (2):

(1) Equity Cost = $D_0/P_0 \times (1 + g) + g$

(2) Equity Cost = $D_1/P_0 + g$

where D_0/P_0 is the current dividend yield and D_1/P_0 is found by increasing the current yield by the growth rate. The DCF model is derived from the valuation model shown in equation 3 below:

$$(3) \quad P_0 = D_1/(1+k) + D_2/(1+k)^2 + \ldots + D_\infty/(1+k)^\infty,$$

where k is the cost of equity; P_0 is the current stock price, $D_1, D_2, \ldots D_\infty$ are the cash flows expected to be received in periods 1, 2, . . . ∞, respectively. In the case of an expected acquisition or merger, P_0 increases because investors expect a premium price (be it cash or the value of securities offered in a merger) that would have a present value larger than the present value of the growth in dividends and earnings. During the last ten years, investors have received premiums when mergers and acquisitions occurred. *See* Table 4.

Q. HOW DID YOU COMPUTE CURRENT DIVIDEND YIELDS?

A. My current dividend yield (D_o/P_o) estimates are based on the 12-month and 3-month periods ending in February 2008 which are presented in Table 7.

The time value of money should be taken into account when determining dividend yields. This adjustment is required because the model assumes dividends are paid once a year but investors receive dividend payments on a quarterly basis. If, for example, a utility paid a dividend of $100 per year, investors would prefer to receive dividend payments of $25 per quarter rather than one payment of $100 at the end of the year. The time value of money adjustment compensates for utilities paying dividends more frequently than once a year.

Q. TURN TO YOUR ESTIMATES OF GROWTH. DO YOU HAVE ANY CONCERNS ABOUT USING PAST RECORDED DATA TO DETERMINE GROWTH ESTIMATES FOR THE DCF MODEL?

A. Yes. The DCF model requires the best available estimates of growth investors expect in the future, not estimates of growth that have already occurred. The

data in Table 3, Table 8 and Table 9 show a negative bias in DCF estimates could occur if - as Staff did in Docket No. W-01445A-04-0650 (the Company's 2005 rate case)—growth rates for DCF equity cost estimates are partially based on past growth in dividends per share ("DPS"), and earnings per share ("EPS") when investors expect higher growth in the future than is indicated by historic data. I have six observations:

First, available evidence indicates investors expect more rapid growth in the future than in the past. Table 8 is a compilation of past growth rates reported by the California PUC Staff in various GRCs during the period 1992 to 1998 and the period 2000 to 2007. In the earlier period, analysts expected approximately the same growth in the future as had occurred in the past. In such a situation, past growth could be a reasonable proxy for growth investors expect in the future. But in the more recent period, Table 8 shows that analysts expect future growth rates to be higher than historic growth.

Second, a comparison of data in Table 3 and Table 9 also provides evidence that investors currently expect higher growth in the future than growth which occurred in the past. Analysts' forecasts of growth are readily available on the Internet and would be known to knowledgeable investors when they form their opinions about anticipated future growth. Third, it is reasonable to exclude past DPS growth as an indicator of future sustainable growth[8]. This makes sense when EPS is expected to grow more rapidly than DPS because future retained earnings are expected to increase enabling DPS to grow faster in the future than in the past. In such a situation, past DPS growth is an extremely poor indicator of future growth required in the DCF model.

[8] The California PUC reached that conclusion when it issued Decision 06-08-011 (California Water). In that case, the California Commission accepted California Water's testimony and removed historical DPS growth from the overall average growth rate calculation.

Fourth, if indeed investors believe future growth will be similar to growth in the past, average growth in stock prices and book value per share of common stock ("BVPS") must also be considered. This is reasonable because investors know that, in equilibrium, common stock prices, BVPS, DPS and EPS will all grow at the same rate and would take information about changes in stock prices and growth in BVPS into account when they priced utilities' stocks. Table 3 shows past growth in EPS, stock prices and BVPS have averaged 8.3% and 6.9% for the last five-year and 10-year periods, respectively.

Fifth, if the Commission determines some weight should be given to past growth when determining DCF estimates, it should rely on averages of past growth in EPS, BVPS and stock prices reported in Table 3. BVPS growth provides a useful proxy for past intrinsic growth (also called, sustainable growth) because it provides a direct estimate of increases in book value that came from both retained earnings and sales of shares of stock above book value. Also, consistent with the reasons future DPS growth is expected to exceed past DPS growth, historic DPS growth should not be included in the averages because it understates growth of concern to investors.

Sixth, Gordon, Gordon and Gould ("GG&G") found that a consensus of analysts' forecasts of EPS growth provided better forecasts of growth for the DCF model than did three measures of growth based on past recorded data. GG&G concluded it is logical for financial institutions and investment analysts to take such historical information into account—and other more recent information—when they determine their forecasts for the future. (David A. Gordon, Myron J. Gordon, and Lawrence I. Gould "Choice Among Methods of Estimating Share Yield," *Journal of Portfolio Management* (Spring 1989), pp. 50-55). But, GG&G further concluded that to the extent past, recorded results provide useful indicators of future growth prospects, the forecasts should already

incorporate the past and any further recognition of the past would be unnecessary.

Q. HOW DID YOU ESTIMATE GROWTH RATES?

A. My primary DCF analysis relies on analysts' consensus estimates of growth reported by five institutions—Zacks, Thomson First Call, Reuters, the S&P Earnings Guide and Value Line.

Q. WHERE DO YOU REPORT THE ANALYSTS' FORECASTS?

A. Table 9 reports the analysts' forecasts of future growth. The first three columns of Table 9 show analysts' consensus forecasts of future EPS growth rates reported by *Zacks*, *Thomson First Call* and *Reuters* on the Internet on February 29, 2008 for the utilities in the water utilities sample. The fourth column shows available analysts' forecasts reported in the December 2007 S&P *Earnings Guide*[9]. The final column shows comparable *Value Line* estimates of growth for the three larger water utilities and analysts' forecasts reported by *Value Line* for the smaller water utilities as of January 25, 2008.

Q. DOES YOUR ESTIMATE OF THE AVERAGE OF ANALYSTS' FORECASTS INCLUDE THE FORECASTS MADE FOR CONNNECTICUT WATER SERVICE?

A. No, it does not. Three investor services report an expected growth for Connecticut Water Service of 15%. While I have no reason to believe this is an unreasonable forecast, it is substantially higher than the forecasts being made for the other water utilities. Including the average growth rate estimate for Connecticut Water in the average also increases the average growth rate from 8.6% (*See* Table 9) to 9.5% (*See* Table 3). To be conservative, I have relied upon the smaller growth rate of 8.6% in this initial DCF analysis.

[9] S&P stopped publishing the Earnings Guide in January 2008.

Q. HOW DID YOU UTILIZE THE INFORMATION ON DIVIDEND YIELDS AND ESTIMATED FUTURE GROWTH TO MAKE YOUR INITIAL DCF ESTIMATES FOR THE WATER UTILITIES SAMPLE?

A. I combined my estimate of average future growth of 8.6% shown in Table 9 with the range in dividend yields from Table 7 with the constant growth DCF model specified in equation (1) to compute the DCF equity cost range for the water utilities sample. Table 10 shows the application of this specification of the DCF model indicates a cost of equity range of 11.8% to 11.9% for the water utilities sample at this time. This range of equity costs for the water utilities sample does not, however, account for the additional risk faced by the Company. In Section III above, I explained why an additional equity return premium of no less than 50 basis points is required by the Company. Combining that risk premium with this primary DCF estimate of the cost of equity range for the water utilities sample indicates the cost of equity for the Company falls in a range of 12.3% to 12.4%.

Q. PLEASE EXPLAIN YOUR SECOND DCF ESTIMATE OF THE COST OF EQUITY?

A. My second DCF estimate is based on the approach used by Staff to determine DCF equity costs in past cases. That approach is based on the concept that investors give equal weight to past growth and projections of growth when they determine growth rates they rely upon in making DCF equity cost estimates. While the Staff approach does not take into account the logic and quantitative analysis reported by GG&G discussed above, the Commission has relied on it in the past and thus I include it as a second DCF approach.

In implementing this approach, I have used the estimates of projected growth in Table 9 and the average of the average estimates of past growth provided in Table 3 to determine my estimates of average past growth. With respect to projected growth rates, the estimates I rely upon are based on

averages reported by five institutions. With respect to past growth, in equilibrium, we expect EPS, DPS, BVPS and common stock prices to grow at the same rate, but recognize that recent past DPS growth is a poor indicator of the future equilibrium growth that investors can reasonably expect.

Q. WHERE DO YOU REPORT THE RESULT OF YOUR SECOND DCF ANALYSIS?

A. It is reported in Table 11. This additional analysis indicates the cost of equity for the water utilities sample falls in a range of 11.3% to 11.4% and the cost of equity for the Company falls in a range of 11.8% to 11.9%. In preparing this analysis, I used the dividend yields from Table 7 which I used in my primary analysis, and an average of growth rates determined in Table 3 (of 7.6%) and in Table 9 (of 8.6%) to get the average growth rate of 8.07% shown in Table 11.

V. <u>Cost of Equity Estimates Based on the Capital Asset Pricing Model</u>

Q. WHAT IS THE CAPITAL ASSET PRICING MODEL ("CAPM")?

A. The traditional CAPM is a model that is generally attributed to William Sharpe and John Lintner for their work in the mid-1960's, was tested with data for common stocks in the early 1970's and is now a common topic in college finance textbooks. In past GRCs I have reviewed, Staff gave a 50% weight to cost of equity estimates made with the DCF model and a 50% weight to cost of equity estimates made with the CAPM when it prepared its cost of equity estimates. The version of the CAPM relied upon by Staff in those past cases specifies the cost of equity is explained by the following relationship:

$$\text{Cost of Equity} = RF + \beta \times MRP,$$

where RF is a risk-free asset, the beta ("β") is the risk of the security at issue and the MRP ("market risk premium") is the additional return that is required by investors to hold an average risk asset instead of the risk-free asset. I make two CAPM cost of equity estimates.

Q. WHAT DO YOU ADOPT AS THE RETURN FOR THE RISK-FREE ASSET?

A. I adopt long-term Treasury bond rates as the measure of the risk-free return for use with both CAPM cost of equity estimates. Morningstar (formerly Ibbotson Associates) explains that the appropriate choice for RF is a return that is no less than the expected return for long-term Treasury securities.

> The horizon of the chosen Treasury security should match the horizon of whatever is being valued. When valuing a business that is being treated as a going concern, the appropriate Treasury security should be that of a long-term Treasury bond. Note that the horizon is a function of the investment, not the investor. If the investor plans to hold a stock in a company for only five years, the yield on a five-year Treasury note would not be appropriate since the company will continue to exist beyond those five years. . . .
>
> Companies are entities that generally have no defined life span; when determining a company's value, it is important to use a long-term discount rate because the life of the company is assumed to be infinite. Morningstar, *Ibbotson SBBI 2008 Valuation Yearbook*, page 59 and page 75.

When determining an estimate of the RF, it is appropriate to adopt a return that is no less than the expected return on the long-term Treasury bond rate. Both CAPM estimates are based on a projected estimate of the long-term RF for 2009-2010 of 4.90% developed in Table 12. The 2009-2010 period is the period when new rates will be put in place for the Company.

Q. WHAT DO YOU ADOPT AS YOUR MEASURE OF BETA RISK?

A. I have relied upon estimates of betas determined by Value Line to prepare both of the CAPM analyses. These beta estimates have been routinely relied upon by me and Staff in GRCs and are readily available to investors. An average risk common stock has a beta of 1.0 and companies with below average risk have betas less than 1.0. Other versions of CAPM include not only beta risk but also variables designed to reflect risks related to size of companies and possibly other

factors. Table 5 reports the average beta for the water utilities sample is currently 0.98, a beta which shows water utilities have become much more risky than in the past and are now just about as risky as an average risk common stock.

Q. IS THERE EVIDENCE THAT VALUE LINE BETA ESTIMATES MAY UNDERSTATE THE REAL, BUT UNOBSERVABLE, AVERAGE BETA FOR THE WATER UTILITIES SAMPLE?

A. Yes. Data used to compute the average beta of .98 for the water utilities sample are *Value Line* beta estimates reported in Table 5. There is an expected downward bias in *Value Line* beta estimates for small, infrequently-traded, companies. Some of the water utilities in the sample may be traded so infrequently that this issue becomes a concern[10]. Given this potential bias, the correct average beta for the water utilities sample may be larger than 0.98.

Q. HOW DID YOU DETERMINE YOUR ESTIMATES OF THE MRP?

A. For consistency, the MRP should be computed as the expected difference in returns for the market and the long-term Treasury security. I have prepared two CAPM cost of equity estimates which are reported in Tables 13 and 14. The estimates differ because I have relied upon two alternative estimates of the MRP.

Q. WHERE DO YOU REPORT YOUR FIRST ANALYSIS?

A. In Table 13. These CAPM costs of equity estimates of 11.8% for the water utilities sample and 12.3% for the Company are based on the long-horizon average MRP for the period 1926-2007 reported by Morningstar in Table 5-1 of the *Ibbotson SBBI 2008 Valuation Yearbook* of 7.1%. This MRP is a commonly reported estimate of the MRP and is well-known by investors and analysts.

Q. WHERE DO YOU REPORT YOUR SECOND CAPM ESTIMATE?

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[10] The reason there is such potential bias is discussed in my 2003 article published in the *Quarterly Review of Economics and Finance* which was referenced above at page 2 and an earlier analysis of Professor Richard Roll (1980), *A Possible Explanation Of The Small Firm Effect,* Unpublished manuscript, University of California at Los Angeles.

A. In Table 14. These CAPM costs of equity estimates of 12.5% for the water utilities sample and 13.0% for the Company are based on an average MRP of 7.7%. It is derived from data for the Value Line Industrial Composite during the shorter period of 1987 to 2007. Table 15 provides the data for the Industrial Composite which I used to determine the 1987-2007 expected MRP. Table 15 shows DCF estimates of equity costs and expected MRPs from forward-looking data *Value Line* presented in thirty different studies of its Industrial Composite for the period 1987 to 2007. The *Value Line* Industrial Composite is based on a wide cross-section of companies and thus is expected to reflect required returns for an average risk company. These data show the average risk premiums for the three recent periods reported at the bottom of Table 15 are above the long-term average of 7.1%.

Q. IS THERE OTHER EVIDENCE THAT INDICATES INVESTORS EXPECT A MRP THAT IS LARGER THAN 7.1%?

A. Yes. An article by Robert S. Harris, Felicia C. Marston, Dev R. Mishra and Thomas J. O'Brien found expected market risk premiums for the period 1983 to 1998 had an average of 7.2%, another market risk premium estimate above the long-term average of 7.1%. (*See* Table 1 "Ex Ante Cost of Equity Estimates of S&P 500 Firms: The Choice Between Global and Domestic CAPM," *Financial Management* Autumn 2003 pages 51-66.)

Q. ARE YOU AWARE OF POTENTIAL BIASES IN COST OF EQUITY ESTIMATES MADE WITH THIS VERSION OF THE CAPM?

A. Yes. This version of the CAPM may be incomplete and thus understates required returns on equity. Evidence provided by Morningstar and Fama and French, that I discussed above, indicates this simple version of CAPM will understate the required ROE for smaller stocks. Their studies found that the traditional CAPM should be modified to include a variable for size and that

smaller firms require higher ROEs than larger firms. All but one (Aqua America) of the water utilities stocks are micro-cap or low-cap stocks and thus this version of the CAPM understates required ROEs.

VI. Summary, Conclusions, and Perspective

Q. WHAT EQUITY RETURN DO YOU RECOMMEND THE COMMISSION APPROVE FOR THE COMPANY?

A. I recommend the Commission authorize an ROE for the Company of no less than 12.4%.

The fair rate of return for the Company should recognize specific risks created by the nature and degree of regulation in Arizona not faced by utilities in the water utilities sample. Those added risks include limitations on out-of-period adjustments, the possibility of unexpected costs in the period new rates are in effect that the Company will not be able to begin to recover until a new GRC is completed, reduced sales/revenues because of inverted rates with no adjustment in test year sales to account for the loss of revenues due to conservation, and an arsenic treatment cost recovery mechanism that does not provide an opportunity to recover all reasonable costs. The Company is also much smaller in terms of number of customers, operating revenues, and net plant than the average utility in the water utilities sample and has less financial flexibility than the utilities in the water utilities sample and thus is more risky. Based on my analyses and recognition of the Company's risks, I recommend that the Commission add no less than 50 basis points to the cost of equity estimates determined with data for the water utilities sample to account for those additional risks.

Q. HAVE YOU PREPARED A TABLE WHICH SUMMARIZES YOUR EQUITY COST ESTIMATES AND PRESENTS YOUR RECOMMENDATIONS?

A. Yes. The equity cost estimates and my recommendations are summarized in Table 16.

I determined two DCF equity cost ranges. The first is a DCF equity cost estimate made with the constant growth DCF model and forward-looking estimates of growth for the water utilities sample. Using those growth rates, the estimated benchmark equity cost falls in a range of 11.8% to 11.9% and the Company's indicated equity cost falls in a range of 12.3% to 12.4%. I also prepared a second DCF estimate with growth rates based on an approach adopted by the Staff in past cases in which it is assumed investors give equal weight to past and projected future growth. That analysis indicated a DCF equity cost range for the water utilities sample of 11.3% to 11.4% and indicated an equity cost range for the Company of 11.8% to 11.9%. An average of these two ranges of DCF equity cost estimates indicates a cost of equity for the Company of 12.1%.

I also determined two CAPM equity cost estimates. Both estimates were based on forecasted long-term Treasury bond rates for the initial period the Company's new rates will be in effect and an average of Value Line beta estimates for the water utilities sample of 0.98. One estimate assumed investors expect the future market risk premium to be the same as the average market risk premium during 1926-2007. The other assumed investors expect the future market risk premium to be the same as the average market risk premium for the Value Line Industrial Composite during the more recent period 1987-2007. An average of those CAPM estimates indicates a cost of equity for the water utilities sample of 12.1% and indicates a cost of equity for the Company of 12.6%.

In past cases, Staff has determined its recommended ROE as an average of its DCF and CAPM equity cost estimates. I use that approach in this case. An average of the high and low DCF and CAPM equity cost estimates indicates the Company has a cost of equity that falls in a range of 12.1% to 12.7% and the overall average equity cost estimate for the Company is 12.4%. *See* Table 16.

Based on my analysis, I recommend the Commission authorize a cost of equity for the Company of no less than 12.4%.

Q. DOES THIS COMPLETE YOUR PREFILED TESTIMONY?

A. Yes.

Arizona Water Company

Table 1

Selected Characteristics of the Water Utilities Sample

	Companies in Sample	Bond Ratings[a/] S&P	Bond Ratings[a/] Moody's	Percentage Revenue from Regulated Water Operations	Number of Customers (000)[b/]	Operating Revenues[a/] ($ millions)	Net Plant[a/] ($ millions)
1	American States Water	A	A2	78%	291	$294	$665
2	Aqua America	AA-	NR	79%	951	$590	$2,349
3	California Water Service	NR	A2	97%	488	$362	$877
4	Connecticut Water Service	AAA	NR	92%	84	$65	$271
5	Middlesex Water	A	NR	89%	105	$84	$294
6	SJW Corporation	NR	NR	95%	233	$204	$432
	Average	--	--	88%	359	$266	$815
	Arizona Water Company[c/]				83	$47	$273

Notes and Sources:
_a/ Source: AUS Utility Reports, February 2008.
_b/ 2007 10-K Reports for the various utilties.
_c/ Company data.

3/17/08

Arizona Water Company

Table 2

Capital Structures of Arizona Water Company and the Water Utilities Sample

	[A]	[B]	[C]
	Company	Debt	Common Equity
1	American States Water	52.2%	47.8%
2	Aqua America	54.5%	45.5%
3	California Water	45.1%	54.9%
4	Connecticut Water	46.5%	53.5%
5	Middlesex Water	54.7%	45.3%
6	SJW Corp	47.9%	52.1%
	Average of Water Utilities Sample	**50.1%**	**49.9%**
	Arizona Water Company	**50.0%**	**50.0%**

Source: Sample utilties from schedule SPI-3, Docket No. W-01303A-07-0209, dated October 15, 2007.

3/17/08

Arizona Water Company

Table 3

Comparison of Past and Future Estimates of Growth for the Water Utilities Sample

		Average Annual Changes in Last Five Years				
		Price-a/	BVPS-b/	DPS-d/	EPS-b/	Average
1	American States Water	10.7%	4.6%	1.9%	9.7%	8.3%
2	Aqua America	14.0%	11.1%	8.3%	4.2%	9.8%
3	California Water Service	10.4%	7.4%	0.7%	4.2%	7.4%
4	Connecticut Water Service	-1.1%	3.5%	1.2%	6.6%	3.0%
5	Middlesex Water	4.6%	6.5%	1.8%	4.4%	5.2%
6	SJW Corporation	24.3%	9.1%	5.5%	14.7%	16.0%
	Sample Average	10.5%	7.0%	3.2%	7.3%	8.3%

		Average Annual Changes in Last Ten Years				
		Price-a/	BVPS-c/	DPS-d/	EPS-c/	Average
1	American States Water	9.1%	4.6%	1.4%	7.7%	7.1%
2	Aqua America	13.6%	10.0%	7.2%	7.6%	10.4%
3	California Water Service	3.1%	4.5%	1.0%	0.2%	2.6%
4	Connecticut Water Service	6.3%	4.1%	1.2%	4.9%	5.1%
5	Middlesex Water	6.2%	5.4%	2.1%	4.2%	5.3%
6	SJW Corporation	18.3%	6.4%	4.7%	8.3%	11.0%
	Sample Average	9.4%	5.8%	2.9%	5.5%	6.9%

		Forecasted EPS Growth-e/
1	American States Water	6.4%
2	Aqua America	9.8%
3	California Water Service	8.1%
4	Connecticut Water Service-e/	15.0%
5	Middlesex Water	8.0%
6	SJW Corporation	10.0%
	Sample Average	9.5%

Notes and Sources:

a/ Average of changes in year-end prices ending in 2007.

b/ Derived from data in Annual Reports to Stockholders and 10-K Reports for period 2003-2007.

c/ Derived from data in Annual Reports to Stockholders and 10-K Reports for period 1998-2007.

d/ Not included in average historical growth rate for reasons discussed in testimony.

e/ Reported in Table 8. Connecticut Water Service included in average.

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Arizona Water Company

Table 4

Premiums Received by Investors from Mergers and Acquistions of Water Utilities during Last 10 Years

Company	Approximate Date of Aquisition or Merger	Price Prior to Announcement	Value at Time of Merger or Acquistion	Basis	Premium
United Water Resources	July 2000	$23.13	$35.30	cash	53%
E-Town	Year-end 2000	$50.38	$68.00	cash	35%
Dominguez	May 2000	$22.75	$33.75	stock	48%
Consumers Water	March 1999	$21.38	$33.10	stock	55%
American Water Works	January 2003	$34.00	$46.00	cash	35%
Average Premium					45%

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Arizona Water Company

Table 5

Betas of Companies in the Water Utilities Sample
2005 and 2008

		Value Line Beta Estimates		
		April 2005 a/	February 2008 b/	Percent Increase
1	American States	0.70	1.00	42.9%
2	Aqua America	0.75	0.95	26.7%
3	California Water	0.75	1.15	53.3%
4	Connecticut Water Service	0.65	0.80	23.1%
5	Middlesex Water	0.65	0.90	38.5%
6	SJW Corporation	0.55	1.10	100.0%
	Average	0.68	0.98	47.4%

Notes and Sources:

a/ Reported by Staff in W-01445A-04-0650, Schedule AXR-5 and AXR-8.

b/ Value Line, February 22, 2008.

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Arizona Water Company

Table 6

Evidence Showing Risk Increases as the Size of Companies Decrease

	Beta Risk	Size Risk Premium	Risk Premium for Companies the Size of Small Water Utilities[e/]
1. Evidence from Morningstar[a/]			
Mid-Cap Companies[b/]	1.13	0.84%	
Low-Cap Companies[c/]	1.26	1.37%	
Micro-Cap Companies[d/]	1.52	2.56%	1.19%

2. Evidence Published in Zepp Article[f/]

	Risk Premium for Small Water Utilities
Estimated risk premium for small water utilities	0.99%

Notes and Sources:

a/ Data from Table 7-11 of Morningstar, *Ibbotson SBBI 2008 Valuation Yearbook*.

b/ Companies with market capitalization between $2,412 million and $9,207 million included in the Morningstar 2008 study.

c/ Companies with market capitalization between $723 million and $2,412 million. included in the Morningstar 2008 study.

d/ Companies with market capitalization less than $723 million included in study.

e/ Computed as the difference between 2.56% and 1.37%. Does not reflect differences in risk due to differences in betas. Data provided in Table 7-10 of the same study, but based on betas estimated with a different method, indicate a size risk premium of 1.28%.

f/ From Table 2 in T.M. Zepp, "Utility Stocks and the Size Effect--Revisited," *The Quarterly Review of Economics and Finance*, 43 (2003), 578-582.

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Arizona Water Company

Table 7

Current Annualized Average Dividend Yields for the Water Utilities Sample

		3-Month Average D_0/P_0	12-Month Average D_0/P_0
1	American States	2.85%	2.76%
2	Aqua America	2.57%	2.43%
4	California Water	3.38%	3.20%
5	Connecticut Water Service	3.74%	3.79%
6	Middlesex Water	3.95%	3.91%
8	SJW Corporation	2.07%	1.99%
	Average	3.09%	3.01%

Source:
_a/ For periods ending in February 2008. Data Recognize time value of money.

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Arizona Water Company

Table 8

Comparison of Analysts' Forecasts of Future Growth With Estimates of Growth Based on Past Growth in DPS, EPS and Retained Earnings Made by California PUC Staff[a/]

		Application Number	Date	CPUC Staff Estimates of Growth Based on Past Data: Retained Earnings	CPUC Staff Estimates of Growth Based on Past Data: DPS and EPS Growth	Average of Analysts' Forecasts of Growth	Are Forecasts Comparable to Past Growth?
	Period: 1992 to 1998						
1	Valencia Water Company	A.92-01-022	June 1992	3.6%	5.9%	3.9%	yes
2	Dominguez Water Corp	A.92-03-040	June 1992	3.6%	5.9%	4.1%	yes
3	California-American Water	A.92-03-030	July 1992	3.6%	5.9%	4.1%	yes
4	San Gabriel Valley Water	A.92-09-032	April 1993	3.5%	6.0%	4.5%	yes
5	Park Water Company	A.94-03-038	June 1994	2.7%	4.5%	4.2%	yes
6	Valencia Water Company	A.94-04-033	Aug 1994	3.3%	4.5%	4.2%	yes
7	Southern Calif Water	A.95-03-013	July 1995	2.7%	4.6%	3.3%	yes
8	San Gabriel Valley Water	A.95-09-010	Dec 1995	3.6%	4.6%	4.0%	yes
9	California -American Water	A.95-02-016	May 1995	3.0%	4.6%	3.8%	yes
10	California -American Water	A:96-03-008	June 1996	2.8%	3.8%	3.6%	yes
11	Park Water Company	A.97-03-032	August 1997	2.9%	4.5%	3.4%	yes
12	Southern Calif Water	A.98-03-029	July 1998	2.7%	4.6%	3.6%	yes
	Period: 2000 to 2007						
1	California -American Water	A.00-04-023	Sept 2000	2.5%	4.8%	5.2%	no
2	California Water Servioce	A.01-09-062	March 2002	3.1%	4.2%	6.3%	no
3	Park Water	A.02-03-046	July 2002	3.3%	2.9%	5.4%	no
4	Valencia Water Company	A.02-05-013	Sept 2002	3.4%	2.9%	6.5%	no
5	California-American Water	A.02-09-030	March 2003	3.1%	2.4%	6.2%	no
6	Southern Calif Water	A.02-11-007	April 2003	3.1%	2.4%	5.6%	no
7	San Gabriel Valley Water	A.02-11-044	July 2003	3.0%	3.3%	6.2%	no
8	San Jose Water	A-03-05-035	November 2003	3.0%	3.3%	6.1%	no
9	California -American Water	A.03-07-036	January 2004	2.9%	3.4%	6.3%	no
10	California -American Water	A.04-03-023	July 2004	2.9%	2.8%	6.7%	no
11	California-American Water	A.04-04-040	November 2004	2.8%	2.9%	7.0%	no
12	Suburban Water System	A.05-08-034	November 2005	2.8%	4.2%	8.3%	no
13	San Jose Water	A.06-02-014	June 2006	2.4%	3.7%	7.9%	no
14	Golden State Water	A.07-01-009	May 2007	3.1%	5.0%	8.9%	no

Notes and Sources:

a/ All growth rates are growth rates based on data reported in CPUC Staff Cost of Capital Reports.

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Arizona Water Company

Table 9

Analysts' Forecasts of Growth for DCF Model

		Zack's-[a/]	First Call-[a/]	Reuters-[a/]	S&P-[b/]	Value Line-[c/]	Average
1	American States	na	6.6%	4.0%	5.0%	10.0%	6.4%
2	Aqua America	10.8%	10.2%	10.5%	10.0%	7.5%	9.8%
3	California Water	8.0%	9.1%	7.7%	8.0%	7.5%	8.1%
4	Connecticut Water Service-[d/]	na	15.0%	15.0%	15.0%	na	15.0%
5	Middlesex Water	8.0%	8.0%	na	8.0%	8.0%	8.0%
6	SJW Corporation	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
	Average of Reported Forecasts						8.6%

Sources and Notes:
a/ Reported on the Internet, February 29, 2008.
b/ S&P Earnings Guide for December 2007.
c/ As reported January 25, 2008.
d/ To be conservative, 15% forecasts for Connecticut Water Service not included in overall average.

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Arizona Water Company

Table 10

Conceptually Correct DCF Estimates for the Water Utilities Sample

	Analysts' Forecasts of Growth	
3-month Current Yield	3.09%	a/
Growth Rate	8.56%	b/
Expected Yield	3.36%	c/
ROE	11.9%	d/
12-month Current Yield	3.01%	a/
Growth Rate	8.56%	b/
Expected Yield	3.27%	c/
ROE	11.8%	d/

Range of ROE Estimates for the Water Utilities Sample	11.8%	to	11.9%
Adjust for Arizona Water Company's Added Risks	12.3%	to	12.4%

Notes and Sources:

a/ From Table 6.

b/ Average of estimated growth rates from Table 8.

c/ Expected yield = $D_1/P_0 = D_0/P_0 * (1 + g)$

d/ ROE = $D_1/P_0 + g$

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Arizona Water Company

Table 11

DCF Estimates Based on Staff Approach: Growth Rates Give Weight to Past and Forecasted Growth

	Average of Past and Forecasted Growth	
3-month Current Yield	3.09%	a/
Growth Rate	8.07%	b/
Expected Yield	3.34%	c/
ROE	11.4%	d/
12-month Current Yield	3.01%	a/
Growth Rate	8.07%	b/
Expected Yield	3.26%	c/
ROE	11.3%	d/

Range of ROE Estimates for the Water Utilities Sample	11.3%	to	11.4%
Adjust for Arizona Water Company's Added Risks	11.8%	to	11.9%

Notes and Sources:

a/ From Table 6.

b/ Average of estimated growth rates from Tables 2 and 8.

c/ Expected yield = $D_1/P_0 = D_0/P_0 * (1 + g)$

d/ ROE = $D_1/P_0 + g$

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Arizona Water Company

Table 12

Forecasts of Long-Term Treasury Bond Rates
2009 - 2010

Description	2009	2010	Average
Blue Chip Consensus Forecasts[a/]	4.90%	5.10%	5.00%
Value Line[b/]	4.20%	5.40%	4.80%
Average			4.90%

Sources and Notes:
a/ December 2007 Blue Chip consensus forecasts.
b/ Value Line Quarterly forecast, dated February 22, 2008.

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Arizona Water Company

Table 13

Estimate of the Cost of Equity for the Water Utilities Sample Based on Long-Term Average Market Risk Premium

Cost of Equity = RF + Beta x MRP

	CAPM Estimate
Risk Free Rate-[a/]	4.90%
Beta-[b/]	0.98
Market Risk Premium-[c/]	7.1%
Cost of Equity for the Water Utilities Sample	11.8%
Indicated Cost of Equity for Arizona Water Company	12.3%

Notes and Sources:

a/ From Table 11.

b/ From Table 4.

c/ Ibbotson's estimate of the historical equity risk premium. It is the long-horizon average of large company returns minus long-term government income returns. Table 5-6, Mornigstar, Ibbotson SBBI 2008 Valuation Yearbook.

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Arizona Water Company

Table 14

Estimate of the Cost of Equity for the Water Utilities Sample Based on Current Forecast of Market Risk Premium

Cost of Equity = RF + Beta x MRP

	CAPM Estimate
Risk Free Rate-[a/]	4.90%
Beta-[b/]	0.98
Market Risk Premium-[c/]	7.7%
Cost of Equity for the Water Utilities Sample	12.5%
Indicated Cost of Equity for AWC	13.0%

Notes and Sources:

a/ From Table 11.

b/ From Table 4.

c/ Average of recent equity risk premiums implied by DCF analysis of the Value Industrial Composite from 1987 to 2007. See Table 14.

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Arizona Water Company

Table 15

Determination of Average Risk Premiums Based on DCF Analyses of the Value Line Industrial Composite: 1987 to 2007

Study	Study Date	Dividend Yield	Sustainable growth	DCF Equity Cost	Long-term Treasury Lag 1 Mnth	Risk Premium
1	2/87	3.00%	9.39%	12.39%	7.39%	5.00%
2	2/88	3.10%	9.93%	13.03%	8.83%	4.20%
3	7/88	3.50%	7.77%	11.27%	9.00%	2.27%
4	2/89	3.50%	7.77%	11.27%	8.93%	2.34%
5	2/90	3.20%	7.77%	10.97%	8.26%	2.71%
6	1/91	3.70%	9.93%	13.63%	8.24%	5.39%
7	2/92	2.80%	9.39%	12.19%	7.58%	4.61%
8	2/93	2.90%	8.31%	11.21%	7.34%	3.87%
9	2/94	3.00%	8.31%	11.31%	6.39%	4.92%
10	2/95	2.70%	9.93%	12.63%	7.97%	4.66%
11	3/96	2.70%	10.48%	13.18%	6.03%	7.15%
12	2/97	2.40%	12.13%	14.53%	6.91%	7.62%
13	1/98	1.50%	14.92%	16.42%	6.07%	10.35%
14	1/99	1.30%	16.05%	17.35%	5.36%	11.99%
15	2/00	0.80%	16.05%	16.85%	6.86%	9.99%
16	7/00	1.00%	14.92%	15.92%	6.28%	9.64%
17	2/01	1.20%	13.79%	14.99%	5.65%	9.34%
18	7/01	1.20%	12.13%	13.33%	5.82%	7.51%
19	1/02	1.20%	12.13%	13.33%	5.76%	7.57%
20	8/02	1.60%	12.68%	14.28%	5.51%	8.77%
21	1/03	1.60%	12.13%	13.73%	5.01%	8.72%
22	7/03	1.50%	11.57%	13.07%	4.34%	8.73%
23	3/04	1.60%	12.13%	13.73%	4.94%	8.79%
24	10/04	1.80%	11.57%	13.37%	4.89%	8.48%
25	4/05	1.90%	11.57%	13.47%	4.89%	8.58%
26	11/05	2.10%	12.68%	14.78%	4.74%	10.04%
27	5/06	2.10%	12.68%	14.78%	5.22%	9.56%
28	11/06	2.20%	15.48%	17.68%	4.94%	12.74%
29	5/07	2.50%	14.92%	17.42%	4.87%	12.55%
30	11/07	1.60%	15.48%	17.08%	4.77%	12.31%

Averages for:

All years (1987-2007)	7.7%
Last 15 years (1993-2007)	8.9%
Last 10 years (1998-2007)	9.8%

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Arizona Water Company

Table 16

Summary Table: Estimated Cost of Equity for Arizona Water Company

	Estimated Equity Costs for the Water Utilities Sample			Estimates of Cost of Equity for Arizona Water Company[a/]		
DCF Estimates						
DCF analysis -- Table 10	11.8%	to	11.9%	12.3%	to	12.4%
DCF analysis -- Table 11	11.3%	to	11.4%	11.8%	to	11.9%
DCF Average		11.6%			12.1%	
CAPM Estimates						
CAPM -- Table 13		11.8%			12.3%	
CAPM -- Table 14		12.5%			13.0%	
CAPM Average		12.1%			12.6%	
Range of Equity Cost Estimates	11.6%	to	12.2%	12.1%	to	12.7%
Average Cost of Equity Estimate[b/]		11.9%			12.4%	

Notes:
a/ Equity Cost estimates include a 50 basis point risk premium for Arizona Water Company.
b/ Cost of Equity determined with Staff method of giving equal weight to DCF and CAPM estimates.

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ARIZONA WATER COMPANY

Docket No. W-01445A-08-0440

2008 RATE HEARING

For Test Year Ending 12/31/07

PREPARED

REBUTTAL TESTIMONY & EXHIBITS

OF

Thomas M. Zepp

EXHIBIT
A-42
ADMITTED

TABLE OF CONTENTS

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ARIZONA WATER COMPANY

Rebuttal Testimony of

THOMAS M. ZEPP

I. Introduction and Purpose of Testimony

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Thomas M. Zepp. My business address is 1500 Liberty Street, S.E., Suite 250, Salem, Oregon 97032.

Q. ARE YOU THE SAME THOMAS M. ZEPP THAT PREVIOUSLY PROVIDED DIRECT TESTIMONY IN THIS MATTER?

A. Yes. I previously filed direct testimony on the appropriate cost of equity. My professional background and experience are described in that testimony.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?

A. On behalf of the applicant, Arizona Water Company ("Arizona Water" or "the Company").

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of this rebuttal testimony is to address the direct testimony of David C. Parcell ("Parcell Dt.") on behalf of the Arizona Corporation Commission ("Commission"), Utilities Division ("Staff"), and the direct testimony of William A. Rigsby ("Rigsby Dt.") on behalf of the Residential Utility Consumer Office ("RUCO") dealing with Arizona Water's cost of equity. I have also updated my direct testimony and provide an update of Staff testimony from the Chaparral City Water case presented in Fall 2008.

Q. HAS YOUR RECOMMENDED COST OF EQUITY FOR ARIZONA WATER CHANGED BASED ON THE TESTIMONIES PRESENTED BY MR. PARCELL AND MR. RIGSBY?

A. No. It is my opinion that under the current circumstances, the Company should be authorized a return on equity of 12.4 %.

Q. PLEASE PROVIDE A SUMMARY OF YOUR REBUTTAL TESTIMONY.

A. My testimony is summarized below:

(1) An update of my direct testimony indicates Arizona Water's cost of equity now falls in a range of 12.4% to 12.9%. I continue to recommend a return on equity of 12.4%.

(2) An update of Staff's cost of capital model indicates the cost of equity for its sample of six water utilities is now 11.2%. Once Arizona Water's required risk premium of no less than 50 basis points is recognized, the Staff approach indicates Arizona Water requires an equity return of 11.7%.

(3) Mr. Parcell has advocated a number of techniques designed to bias downward his cost of equity estimates. Once those techniques are exposed and corrected, a restatement of his methods indicates the cost of equity for the water utilities sample normally used by the Commission and Staff falls in a range of 11.2% to 12.3%. Had Mr. Parcell recognized Arizona Water is more risky than this sample, his equity cost estimates would indicate the Company has an equity cost that falls in a range of 11.7% to 12.8%.

(4) Mr. Rigsby has adopted an incorrect concept to determine the risk-free rate in his capital asset pricing model ("CAPM") analysis and made several errors in the preparation of his equity cost estimates. Once his analyses are corrected and restated and a 50 basis point risk premium is included for Arizona Water, his methods indicate the Company's cost of equity falls in a range of 12.0% to 12.4%.

Q. HOW IS YOUR REBUTTAL TESTIMONY ORGANIZED?

A. In Section II, I present an update of my direct testimony and discuss concerns with implementation of the CAPM at this time. In Section III, I present an update of the cost of equity determined with the Staff models. In Section IV, I explain

why it is appropriate to rely on arithmetic annual averages instead of geometric annual averages when determining future growth rates and required ROEs from historical data. In Section V, I explain why the sample of six water utilities previously relied upon by Staff and the Commission should again be used to determine benchmark cost of equity estimates.

In Section VI, I respond to Mr. Parcell. I address a number of ways Mr. Parcell has constructed equity cost estimates that produce negatively biased estimates of cost of equity. These techniques include (1) including Southwest Water Company in two of his water utilities samples, (2) relying on geometric annual averages instead of conceptually correct arithmetic annual averages to compute growth rates and expected returns (3) failure to recognize the time value of money when he computes dividend yields, (4) failure to adopt an appropriate growth rate for the first year dividends are paid, (5) failure to reconcile his current 10% cost of equity estimate with the 11.2% cost of equity that is produced with a straight-forward update of Staff's cost of equity methods, (6) failure to include growth from external sources (called "vs growth") that both Staff (in the past), RUCO, and I have recognized should be included in sustainable growth rate estimates, (7) giving only a 20% weight to conceptually correct estimate of growth when estimating growth for the DCF model, (8) failure to compute a current risk premium to use in CAPM equity cost estimates that is easily constructed from the data he presents, (9) reliance on a comparable earnings method which has previously been rejected by this commission and (10) failure to recognize Arizona Water is more risky than his benchmark water utilities samples and requires a risk premium of at least 50 basis points.

In Section VII, I respond to Mr. Rigsby's equity cost estimates. I restate his DCF equity cost estimates with dividend yields that recognize the time value of money, corrected values of br growth, and estimates of "v" in "vs" growth based on Mr. Rigsby's data, and find his DCF sample indicates the benchmark

cost of equity is 11.5%. I also restate his CAPM approach with the correct concepts and available forecasts of long-term Treasury rates and find his CAPM equity cost is 11.9%. Again, because Arizona Water is more risky than the water utilities sample, it requires an ROE that is at least 50 basis point higher.

II. Update of Direct Testimony

Q. HAVE YOU UPDATED YOUR DIRECT TESTIMONY?

A. Yes.

Q. DO YOU HAVE A GENERAL STATEMENT THAT PUTS THE UPDATE OF YOUR DIRECT TESTIMONY IN PERSPECTIVE?

A. Yes. During the last year, as more and more problems in the financial sector became known, the Dow Jones average fell by 38%, the S&P 500 Index dropped by 40%, and the New York Stock Exchange Composite dropped by 43%. Not only has there been tremendous damage to the values of financial assets of investors, but the United States economy is in a severe recession. While there are some indications that we are now starting to pull out of the recession, the forecasted full recovery has been moving farther into the future. During this period, there has been a very obvious "flight to quality," which has led to the traditional spreads between required returns on Treasury securities and other assets increasing as investors have spurned common stocks and corporate bonds in favor of Treasury securities. *See* Rebuttal Table 1. Currently the spread between Baa bonds and long-term Treasury bonds is 298 basis points, 132 basis point higher than the average spread during 1990 to 2007. The current spread between Aaa bonds and long-term Treasury bonds has also increased from an historic average of 82 basis points to a current spread of 112 basis points.

As a result of this flight to quality, dismal outlook for the economy and lack of interest in corporate bonds and stocks, costs of equity for all stocks—including water utility stocks—have increased by significant amounts, even though yields

on Treasury securities decreased as concerned investors have clamored to buy them. Given this background, the Commission should recognize and expect that costs of equity for Arizona Water and other water utilities are higher now than they were last year when I prepared my direct testimony. Mr. Parcell's suggestion that the cost of equity has dropped as a result of the financial disaster in the stock market is erroneous and should be ignored.

Q. IS THERE QUANTITATIVE SUPPORT FOR THE COST OF EQUITY BEING HIGHER NOW THAN LAST YEAR?

A. Yes. Last year I estimated the cost of equity with the discounted cash flow ("DCF") model for the sample of six water utilities used by the ACC Staff in water and wastewater cases. At that point in time, when conceptually correct estimates of growth were used to make the estimate, the indicated cost of equity for the water utilities sample fell in a range of 11.8% to 11.9%, and Arizona Water's indicated cost of equity fell in a range of 12.3% to 12.4%. *See* Table 10 of Zepp direct testimony. As discussed below, that indicated cost of equity has increased to 12.8% for the water utilities sample and 13.3% for Arizona Water, an increase in the indicated cost of equity of over 100 basis points since last year. *See* Rebuttal Table 4 in Zepp Rebuttal testimony.

Last year, I also estimated the cost of equity for the ACC sample of six water utilities with DCF growth based on the ACC Staff approach, which gives weight to past growth as well as weight to forward-looking estimates of growth. With the ACC Staff approach, the indicated DCF cost of equity for the benchmark sample fell in a range of 11.3% to 11.4% and Arizona Water's cost of equity fell in a range of 11.8% to 11.9%. See Table 11 of Zepp direct testimony. I show below that if I update that analysis using the same method to determine growth I used in my direct testimony, the updated cost of equity for the benchmark sample falls in a range of 11.9% to 12.0% and the indicated cost of equity for Arizona Water falls in a range of 12.4% to 12.5%. This update indicates the Company's

cost of equity has increased by 60 basis point since the time I prepared my direct testimony.

Q. WHAT HAS HAPPENED TO THE COST OF EQUITY ESTIMATES MADE WITH THE CAPITAL ASSET PRICING MODEL?

A. Such updates are not straightforward and require more than a simple mechanical update to be useful. I discuss the difficulty with updates of the CAPM below.

Q. PLEASE BEGIN WITH YOUR UPDATES OF THE DCF MODEL. WHAT HAS HAPPENED TO DIVIDEND YIELDS?

A. They have increased. Rebuttal Table 2 shows the average dividend yields for the sample of six water utilities have increased to 3.82% for the most recent 3-month period and to 3.75% for the 12-month period ending in May 2009. I used the same method to determine dividend yields that I used in my direct testimony.

Q. WHAT HAS HAPPENED TO THE AVERAGE OF ANALYSTS' FORWARD-LOOKING ESTIMATES OF GROWTH?

A. In my direct testimony, to avoid over-stating the cost of equity based on the DCF model, I did not give any weight to the 15% growth forecast for Connecticut Water Service. If I again leave the forecast for Connecticut Water Service out of the average, the average of analysts' forecasts of growth increases slightly from 8.6% to 8.7% Compare Table 9 in my direct testimony to Rebuttal Table 3. If I include Connecticut Water Service in the average, the average growth rate is now 9.1%. To be conservative, I have again not included the growth forecast for Connecticut Water Service in the average used to make my update.

Q. WHERE DO YOU REPORT YOUR UPDATE OF THE DCF ESTIMATE PRESENTED IN TABLE 10 OF YOUR DIRECT TESTIMONY?

A. It is reported in Rebuttal Table 4. Based on updates of dividend yields reported in Rebuttal Table 2 and the current average of analysts' growth rates (excluding the forecasts for Connecticut Water Service) presented in Rebuttal Table 3,

Rebuttal Table 4 shows the DCF estimate of the cost of equity for the Commission sample of six water utilities is now 12.8% and the indicated cost of equity for the Company is 13.3%.

Q. DID YOU UPDATE TABLE 3 IN YOUR DIRECT TESTIMONY?

A. Yes. Table 3 in my direct testimony reports average annual growth in earnings per share ("EPS"), dividends per share ("DPS"), book value per share ("BVPS") and common stock prices per share ("price") for 5-year and 10-year periods ending in 2007. Rebuttal Table 5 reports the same information for periods ending in 2008. For convenience, I also report comparable data reported by Mr. Parcell for the most recent five-year period, which I discuss later.

Q. WHAT IS SHOWN IN REBUTTAL TABLE 6?

A. Rebuttal Table 6 is an update of Table 11 in my direct testimony. The average of historical growth rates based on data ending in 2008, which I report in Rebuttal Table 5, is lower than similar data ending in 2007. Thus, the growth rate in Rebuttal Table 6 is lower than I reported in Table 11 of my direct testimony. But since the average dividend yields for the period ending in May 2009 are much higher than in 2008, the DCF cost of equity estimate made in Table 11 increases from a range of 11.8% to 11.9% for Arizona Water to a range of 12.4% to 12.5%.

Q. IS THIS POINT IMPORTANT?

A. Yes, it is. The difference between the DCF cost of equity estimates made with the conceptually correct measures of growth presented in Table 10 of my direct testimony and Rebuttal Table 4, indicate the cost of equity for water utilities has increased by 100 basis points since last year. A comparison of Table 11 of my direct testimony and Rebuttal Table 6 shows the cost of equity has increased by only 60 basis points.

Rebuttal Table 6 gives an equal weight to growth in past 5-year and 10-year periods and the conceptually correct measures of forward-looking growth reported in Rebuttal Table 3. But, if indeed investors double-count past growth

and give it some weight, there is no way to know what periods of past growth are considered by investors or how much weight is given to past results instead of expected future growth. For example, if, as Mr. Parcell suggests in his analysis, investors look at past growth in recent five-year periods, a simple update of Table 11 would indicate the DCF cost of equity increased by approximately 80 basis points, not 60 basis points. This calculation is also presented in Rebuttal Table 6. Giving other weights to past growth would produce other differences.

Q. PLEASE TURN TO YOUR COMMENTS ABOUT THE CAPM. LET'S BEGIN WITH BETA ESTIMATES. HAS THE AVERAGE BETA FOR THE STAFF SAMPLE OF WATER UTILITIES DECREASED SINCE 2008?

A. Yes, it has decreased from 0.98 in March 2008 to 0.84 in April 2009.

Q. DOES THAT MEAN WATER UTILITIES NOW REQUIRE LOWER RETURNS THAN WERE REQUIRED LAST YEAR?

A. No. The simple CAPM equity cost estimate depends on the size of the market risk premium ("MRP") for the index used to estimate the beta, and the return required for a zero-beta asset ("RF"), as well as beta estimates. Beta is a relative measure of risk. Given the dramatic unexpected drop in the stock market, most stocks and certainly indexes like the S&P 500 used to estimate betas are viewed as more risky. In relative terms, the lower beta estimate for the Staff water utilities sample indicates water utilities are less risky, but risk and required return may be higher if the market risk premium and/or the return required for a zero-beta asset are higher now than last year. Thus, the risk of a water utility stock may drop relative to an index but still be just as risky, or riskier, than it was before the increase in risk of the market.

Q. DO YOU HAVE CONCERNS WITH IMPLEMENTATION OF THE CAPM AT THIS TIME?

A. Yes. Given the flight to quality and the tremendous drop in the stock market during the last year, I have concerns with (a) whether estimates of the zero-beta

asset return (RF) are appropriate to use when implementing the model and (b) whether it is possible to determine a reasonable estimate of the MRP now demanded by investors.

Q. WHAT ARE YOUR CONCERNS WITH OBTAINING A USEFUL ESTIMATE OF THE RETURN ON THE ZERO-BETA ASSET AT THIS TIME?

A. Conceptually, the return on the zero-beta asset should be the highest return an investor could expect to receive if he/she held an asset that has returns that are not correlated with market returns. In my direct testimony, I adopted a forecast of long-term Treasury bond rates as a conservative measure of this zero-beta asset return. Since the time I prepared that testimony, there has been a flight to quality and the spread between Baa bonds and Treasury bonds has increased. The spread is now 132 basis points above the average of that spread during the period 1990-2007. The spread between Aaa bonds and Treasury bonds has also increased. Given investors' current concerns with holding stocks and corporate bonds, they appear to be willing to take the risk of negative future returns from long-term Treasuries which may occur if higher inflation, higher Treasury rates and lower prices for Treasury bonds result from the huge amount of debt being issued by the United States government. Also, the beta for long-term Treasury securities may actually be negative at this time as prices for stocks dropped as investors sold stocks and bid up prices for Treasury securities. In 2008, Morningstar reports the total returns for stocks was a negative 37% while the total return on long-term Treasury bonds was a positive 25.87%. I am skeptical that the yield for long-term Treasury bonds is as high as the zero-beta return that is required by CAPM theory, particularly at this time.

Q. HAVE YOU UPDATED TABLE 12 IN YOUR DIRECT TESTIMONY?

A. Yes. That update is provided in Rebuttal Table 7. The average of the first two years being forecasted by Blue Chip combined with an update of the Value Line forecasts for those years indicates an expected future long-term Treasury bond

rate of 4.93%, a rate slightly higher than the rate I relied upon in my direct testimony.

Q. HAVE YOU ATTEMPTED TO ESTIMATE THE REQUIRED RETURN FOR THE ZERO-BETA ASSET?

A. No, I have not. For the reasons stated above, however, I believe the correct value for the zero-beta asset return is higher than 4.93% at this time.

Q. HAVE YOU UPDATED YOUR ESTIMATE OF THE MARKET RISK PREMIUM?

A. Yes. Morningstar correctly points out that annual MRPs have been random in the past and "the best estimate of the expected value of a variable that has behaved randomly in the past is the average (or arithmetic mean) of its past values".[1] But while such an average MRP, which has dropped from 7.1% in 2008 to 6.5% today, may be the best long-term measure of the MRP, investors expect a market recovery and also know that Value Line is forecasting a near-term market return premium of 13.6% for the next several years[2]. To implement the CAPM, we need to estimate what investors expect the average MRP to be in all future periods. If investors expect a 13.6% risk premium for four years and then 6.5% risk premium thereafter, the indicated current present value of future MRPs is 8.5%.

Q. DO YOU HAVE ANY CONCERNS WITH BETA AS THE MEASURE OF RISK FOR ARIZONA WATER?

A. Yes. While the average beta for the Staff water utilities sample has dropped from 0.98 in 2008 to 0.84 in April 2009, that drop must be considered in the context of how much investors view the risk of the stock market in general. If indeed, investors currently expect higher than average future returns for the stock market

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[1] (Morningstar, *Ibbotson SBBI 2009 Valuation Yearbook*, pp. 60-61).

[2] Determined as the difference between dividend yields of 2.4% and potential capital appreciation of 80% in four years and the current Treasury rate of 4.6%. Value Line Summary & Index (June 19, 2009)

index used to determine beta estimates, lower beta risk does not mean lower required ROEs.

Q. HAVE YOU UPDATED THE CAPM ESTIMATE YOU PROVIDED IN TABLE 13 OF YOUR DIRECT TESTIMONY?

A. Yes, while I continue to be concerned with CAPM estimates at this time, I did update that estimate. The update of 12.0% for the Staff sample and 12.5% for Arizona Water is reported in Rebuttal Table 8.

Q. DID YOU ALSO UPDATE THE CAPM ANALYSIS YOU PRESENTED IN TABLE 14 OF YOUR DIRECT TESTIMONY?

A. Yes. Rebuttal Table 9 provides that update. In this CAPM estimate I rely on the updated MRP estimate provided in Rebuttal Table 10. Rebuttal Table 10 is my update of Table 15 in my direct testimony. Based on this update, the indicated cost of equity for the Staff water utilities sample and Arizona Water are 11.9% and 12.4%, respectively.

Q. DO YOU PROVIDE A SUMMARY OF YOUR UPDATED EQUITY COST ESTIMATES?

A. Yes, that summary is presented in Rebuttal Table 11. Based on these updates, the indicated cost of equity for Arizona Water is now 12.7% instead of 12.4% I derived in 2008. This update adds support to my recommended ROE of 12.4% for Arizona Water.

III. <u>Update of ACC Staff Testimony</u>

Q. WHAT IS THE TOPIC OF THIS SECTION OF YOUR TESTIMONY?

A. In this section of my testimony I present an updated estimate of the cost of equity using the DCF and CAPM models, with the methods and inputs that have been used by Staff in prior water and wastewater utility rate cases, including the most recent rate cases for Arizona Water. Updates of the Staff tables estimates are reported in Tab 2. I used spot stock prices and other data available mid-June 2009, which were current data when this testimony was written, to be consistent

with the methods previously used by Staff. The DCF model using Staff's methods and inputs produces an indicated cost of equity of 9.8% and the CAPM produces an indicated cost of equity of 12.6%, resulting in an average cost of equity of 11.2%.

Q. WHY DID YOU PERFORM AN ESTIMATE OF THE COST OF EQUITY USING STAFF'S METHODS?

A. In prior Arizona rate cases in which I have testified, including Arizona Water's prior rate cases for its Western Group, Docket No. W-01445A-04-0650,[3] and its Eastern Group, Docket No. W-01445A-02-0619,[4] as well as Chaparral City Water Company's 2005 rate case, Docket No. W-02113A-04-0616,[5] Staff used the DCF and CAPM models to estimate the cost of equity. In each of these cases, Staff's particular methods and inputs were approved and adopted by the Commission.[6] The methods and inputs used by Mr. Parcell differ from those used by Staff, and they conflict with prior Commission decisions. Consequently, I have prepared an equity cost estimate using Staff's normal methods and inputs to determine what cost of equity would be indicated, and how such estimate compares to Mr. Parcell's recommendation. As stated, Staff's method produces a cost of equity of 11.2%, while Mr. Parcell recommends a cost of equity of only 10%.

Q. WHAT ARE THE CRITICAL DIFFERENCES BETWEEN MR. PARCELL'S APPROACH AND STAFF'S APPROACH?

A. There are several significant differences:

- Mr. Parcell uses samples of water utilities that differ from those used by

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[3] Direct Testimony of Alejandro Ramirez, Docket No. W-01445A-04-0650 (May 25, 2005); Surrebuttal Testimony of Alejandro Ramirez, Docket No. W-01445A-04-0650 (April 18, 2005).

[4] Direct Testimony of Joel M. Reiker, Docket No. W-01445A-02-0619 (July 8, 2003); Surrebuttal Testimony of Joel M. Reiker, Docket No. W-01445A-02-0619 (Sept. 3, 2003).

[5] Direct Testimony of Alejandro Ramirez, Docket No. W-02113A-04-0616 (March 22, 2005); Surrebuttal Testimony of Alejandro Ramirez, Docket No. W-02113A-04-0650 (May 18, 2005).

[6] *Ariz. Water Co.*, Decision No. 68302 (Nov. 17, 2005); *Ariz. Water Co.*, Decision No. 66849 (March 19, 2004); *Chaparral City Water Co.*, Decision No. 68176 (Sept. 30, 2005).

Staff and approved by the Commission in prior rate cases, including Arizona Water's prior rate cases.

- Mr. Parcell does not use spot stock prices and spot yields on Treasury securities, which conflicts with Staff's approach.
- Mr. Parcell does not use a multi-stage DCF model.
- Mr. Parcell has eliminated Staff's estimate of the current market risk premium from his CAPM estimate, and has substituted a second historic market risk premium, which double-counts historic market risk while ignoring current market risk.
- Mr. Parcell uses a geometric mean to estimate the historic market risk premium in his CAPM estimate, while Staff uses the conceptually correct arithmetic mean. I address this issue in Section IV.
- Mr. Parcell uses the historic total return on Treasuries rather than their historic income return to compute market risk premiums, while Staff uses the conceptually correct income return.
- Mr. Parcell uses a comparable earnings method to derive a third estimate of the cost of equity, even though the Commission and Staff have criticized the use of comparable earnings in prior rate cases, including Arizona Water's Western Group case.[7] In Section V, I show that, contrary to Mr. Parcell's conclusion, when the Comparable Earnings approach is combined with other data relied upon by Mr. Parcell, the indicated required ROE for water utilities falls in a range of 12.3% to 12.8%.

The bottom line is that the methods selected by Mr. Parcell appear to be specifically intended to depress the cost of equity, as shown by the fact that his 10.0% cost of equity is 120 basis points below the 11.2% cost of equity estimate produced by Staff's methods.

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[7] Decision No. 68302 at 37-38.

Q. DOES MR. PARCELL OR ANY OTHER STAFF WITNESS EXPLAIN WHY STAFF'S NORMAL METHODS AND INPUTS HAVE NOT BEEN USED IN THIS CASE?

A. No. No explanation has been given for this change in methods, nor has Mr. Parcell attempted to reconcile his methods with those used by Staff in Arizona Water's prior rate cases.

Q. IS IT APPROPRIATE TO SWITCH BACK AND FORTH BETWEEN METHODOLOGIES IN SETTING RATES?

A. No, it is not. The United States Supreme Court has stated that "a State's decision to arbitrarily switch back and forth between methodologies in a way that required investors to bear the risk of bad investments at some times while denying the benefit of good investments at others would raise serious constitutional questions."[8] The same principle is applicable here. After consistently using the same methods and inputs to estimate the cost of equity in prior water and wastewater rate cases, and after the Commission has approved those methods and inputs in prior rate cases (including the Company's prior cases), Staff is proposing different methods to lower the cost of equity. This is arbitrary and unfair, particularly given the recent instability in the financial markets and resulting increase in the cost of equity.

Q. DO YOU AGREE WITH STAFF'S METHODS AND INPUTS?

A. No. In prior rate cases I have explained that certain inputs Staff uses are inappropriate and depress the cost of equity. But even if Staff inputs are used, the resulting equity cost estimate is still substantially higher than Mr. Parcell's estimate, suggesting that the substitution of Mr. Parcell's methods is intended to depress the cost of equity below current market levels.

IV. Arithmetic and Geometric Annual Averages

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[8] *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 315 (1989).

Q. WHAT IS THE MAIN POINT YOU MAKE IN THIS SECTION OF YOUR REBUTTAL TESTIMONY?

A. The main point is that, to the extent that one believes historical data provide useful information for the determination of future growth rates and required returns on equity, the analyst should rely on arithmetic annual averages to make such growth projections and ROE determinations. Geometric annual averages routinely produce negatively biased estimates of future growth and negatively biased estimates of ROEs required by investors and thus should *never* be given any weight in cost of capital analyses. The latter point is especially important because in some instances, Mr. Parcell and Mr. Rigsby rely completely or in other cases rely partially on geometric annual averages in their determinations of growth rates and equity costs. As I explain in this section, no weight should be given to any growth rate or ROE estimate that is based in whole or in part on geometric annual averages of past data.

Q. WHEN SHOULD GEOMETRIC ANNUAL AVERAGES BE CONSIDERED BY INVESTORS?

A. Geometric annual averages provide a useful way to compare past performance of different assets during different periods of time. For example, T. Rowe Price offers investors an Emerging Markets Bond Fund and an International Bond Fund. Over the last 5-year and 10-year periods, the International Bond Fund provided total returns of 23.2% and 53.7%. But such returns are difficult for investors to understand and compare. Once those total returns are converted to annual average geometric returns, the returns are 4.26% and 4.39%, respectively, and investors would know that that fund provided similar returns over 5-year and 10-year periods. Geometric annual average returns are also useful for comparing past performances of different funds. Over the last five years, the Emerging Markets Bond Fund had a total return of 30.6% which would be difficult for investors to compare to the range of total returns of 23.2% to

53.7% for the International Bond Fund. If, however, the five-year returns for the Emerging Markets Bond Fund are restated as annual average geometric return of 5.49%, the investor can easily make a comparison of past performances of the different funds.

But though the geometric annual average provides a very useful way to examine what has happened in the past, it should not be used to determine estimates of expected future returns or future growth rates. Even if one believes that future growth for water utilities will be similar to growth in the past, an assumption the data I present in Tables 3 and Table 9 of my direct testimony and Rebuttal Tables 3 and 5 show is questionable, it is conceptually incorrect to use past geometric annual average growth rates to determine future growth or future returns in the future.

Q. WHAT IS THE EFFECT OF USING A GEOMETRIC ANNUAL AVERAGE TO CALCULATE GROWTH RATES AND MARKET RISK PREMIUMS?

A. It lowers the cost of equity estimates produced by the DCF model and CAPM, which is undoubtedly a factor that has been considered by Mr. Parcell and Mr. Rigsby in using that approach.

Q. WHAT IS THE RELATIONSHIP BETWEEN ARITHMETIC ANNUAL AVERAGE RETURNS AND GEOMETRIC ANNUAL AVERAGE RETURNS?

A. The relationship between arithmetic annual average returns (A) and geometric annual average returns (G) is approximately

$$A \approx G + Var(A)/2,$$

Where the arithmetic average annual return ("A") is approximately equal to the geometric annual average return ("G") plus the variance in the arithmetic return (Var(A)) divided by 2.[9]

If in the special case where a return or growth rate is exactly the same in

[9] Morningstar, *Ibbotson SBBI 2008 Valuation Yearbook*, p. 97.

every period, the variance would be zero and the two returns would be the same. However, this is not the case for risky assets. Thus, if one believes future growth (or future returns) and variance in future growth (returns) will be similar to what has occurred in the past, the arithmetic annual average growth rate must be used to determine equity costs or the utility will be unable to achieve the past geometric annual average growth. Mr. Parcell and Mr. Rigsby's proposal to consider past geometric annual average growth and past geometric annual averages of returns is a results-driven way to make sure a utility will not attain the forecasted growth or earn returns in the future that have occurred in the past.

Q. DO YOU HAVE A SIMPLE EXAMPLE WHICH ADDRESSES THE ISSUE?

A. Yes. I have attached Tab 3 to my testimony which is a copy of Appendix 4-A of Roger Morin's 2006 book *New Regulatory Finance*. Morin provides a thorough discussion of this issue and cites several academic studies which explain why the arithmetic annual average is the only concept to adopt when relying on past data to forecast future growth or required ROEs. One of the examples he provides is from Brealey, Myers and Allen's 2006 graduate textbook in corporate finance. Brealey, Myers and Allen provide an excellent example showing that with a possibility of annual returns of -10%, +10% and +30% for a fictional entity "Big Oil" that does not pay dividends, the expected return is 10% (an average of the three potential returns) and with an initial investment of $100 in that stock, the expected end-of period value of the stock is $110. Brealey, Myers and Allen show that this 10% return must be the discount rate used to determine the present value of the stock of $100. They also show that the compound average return of 8.8% ($100 x 1.1 x .9 x 1.3) = $108.77, (the geometric annual average return), is less than the opportunity cost of capital. Thus, if this were a utility stock (instead of "Big Oil") and a regulator set the return at only 8.8%, investors would not be willing to invest in that utility stock because the opportunity cost of investing elsewhere is 10%. Mr. Parcell and Mr. Rigsby recommend that the

equivalent of this 8.8% ROE be included in the average of ROEs they suggest are acceptable to investors when that is not the case. The 8.8% ROE is less than the opportunity cost of capital of 10%. Thus if the 8.8% is given *any* weight, even a 25% weight, the authorized ROE would be 9.7% which is less than cost of capital, 10%.

Q. IS THERE A HIDDEN FLAW IN APPROACHES THAT RELY ON GEOMETRIC ANNUAL AVERAGE RETURNS ON EQUITY AS A MEASURE OF FUTURE REQUIRED ROES?

A. Yes. The hidden flaw is that the approach assumes investors already know what will happen in the future when they do not. In effect, it assumes investors will know the final outcome when that is never the case with investments in common stocks. If an investor actually expected he/she would only get an 8.8% return when a 10% return is required, the investor would be better off investing in assets other than the regulated utility.

Q. DOES THE SAME CONCEPT APPLY TO ESTIMATED GROWTH RATES?

A. Yes, it also applies to the determination of forward-looking growth rates from historical data. Rebuttal Table 3 reports 5-year growth rates computed with arithmetic annual averages and Mr. Parcell's estimates of 5-year growth computed with geometric annual averages. A comparison of the differences between estimates of EPS growth for SJW Corp. using the conceptually correct arithmetic annual average of 10.8% and Mr. Parcell's reported growth of only 3.5% shows the magnitude of negative bias that occurs when using the wrong concept to prepare DCF growth estimates. By comparing SJW Corp.'s EPS in only two years, 2003 and 2008, Mr. Parcell's approach totally ignores the large variance in EPS experienced by SJW Corp.. If it is believed that past EPS growth is a harbinger of future growth, each of the annual changes in EPS growth during the entire 5-year period should be considered.

V. Problems Concerning The Sample Groups Chosen by Mr. Parcell and Mr. Rigsby

Q. WHAT SAMPLE GROUP DID YOU USE TO IMPLEMENT THE CAPM AND DCF MODELS?

A. I used the sample group of water utilities that have been consistently used by Staff for a number of years, American States Water, Aqua America, California Water Service, Connecticut Water Service, SJW Corp., and Middlesex Water Company. The Commission has repeatedly accepted that exact same sample group in determining the cost of equity for Arizona water and wastewater utilities. It did so, for example, in Arizona Water's prior rate cases for its Western and Eastern Groups.

Q. MR. PARCELL REFERS TO THESE SIX WATER UTILITIES AS THE "ZEPP WATER SAMPLE GROUP". IS THAT AN ACCURATE DESCRIPTION?

A. No. As stated, I used these water companies because they have been consistently used in estimating the cost of equity in this jurisdiction. A better description would be "Staff's Water Sample Group" to distinguish the water utilities sample from the other utilities that Mr. Parcell used.

Q. ARE THERE PROBLEMS WITH THE SAMPLE UTILITIES CHOSEN BY MR. PARCELL?

A. Yes. He has selected water utilities that have experienced financial problems or otherwise should not be used to estimate the cost of equity. For example, Mr. Parcell has included Southwest Water Company in two of his three samples despite the fact that less than 50% of Southwest Water's revenues are derived from regulated activities. According to the most recent AUS Utility Report (May 2009), only 45% of Southwest Water's revenues are derived from regulated activities. Put simply, it isn't a water utility.

Moreover, Southwest Water's financial condition is extremely poor. According to the May 2009 AUS Utility Report, for the 12-month period ended

June 30, 2008, Southwest Water had negative earnings per share, and its dividend payout ratio, return on common equity and return on total capital are described as "not meaningful." Finally, as Mr. Rigsby explains in his testimony, Value Line has suspended all projections and estimates for Southwest Water due to accounting and financial statement reporting errors.

Mr. Parcell also includes Artesian Resources and York Water in one of his samples. Mr. Parcell reports conceptually correct forward-looking estimates of growth for these utilities in Schedule 5 page 4 of 4. If one relies upon these conceptually correct estimates of growth, the DCF cost of equity estimates for them are 11.1% and 11.3%, respectively, which are substantially above his subjective determination of a cost of equity of 10%. But neither company can be included in his CAPM analysis because of data problems. Artesian cannot be considered because there is no beta estimate for it, and the beta for York Water cannot be considered because its stock is thinly traded and thus its beta estimate is known to be biased downward[10]. As a result, if the goal is to base all equity costs on the same sample, we are left with the sample of six water utilities traditionally relied upon by this Commission to determine cost of equity estimates.

Q. DO YOU AGREE WITH RUCO'S SAMPLES?

A. No, I do not. First, RUCO uses only three of Staff's sample water utilities, and does not consider data for Connecticut Water Service, SJW Corp., and Middlesex Water Company. This choice produces inefficient estimates of the cost of equity since useful data for twice as many water utilities are available, but not used by RUCO. Moreover, RUCO also uses a group of publicly traded gas companies as a proxy. This sample has previously been found by the Commission to be inappropriate.

[10] Richard Roll, " A Possible Explanation of the Small Firm Effect," *Journal of Finance,* Vol. XXXVI, No. 4 (Sept. 1981).

Q. WHY CAN'T MR. RIGSBY'S NATURAL GAS UTILITIES BE USED TO ESTIMATE ARIZONA WATER'S COST OF EQUITY?

A. At this time, RUCO's gas utilities sample has an average beta of 0.67, while RUCO's water utility sample has an average beta of 0.82.[11] Therefore, the water utilities sample has more market risk than the gas utilities sample, and equity costs for the gas utilities sample cannot be used to estimate the Company's cost of equity unless upward adjustments in costs of equity estimates for the gas utilities are made to account for the difference in risk. Mr. Rigsby does not make such upward adjustments.

Q. ARE YOU AWARE OF ANY PRIOR ATTEMPTS TO USE GAS UTILITIES TO ESTIMATE THE COST OF EQUITY IN A WATER UTILITY RATE CASE IN THIS STATE?

A. Yes. In Arizona Water's 2002 rate case for its Eastern Group, I proposed the use of a sample of gas utilities to estimate the cost of equity. At that time, the average betas of the water and gas sample groups were lower than they are today, with the average beta for the gas utility sample being 0.69 and the average for the water utility sample being only 0.59. Staff estimated that the equity cost for the sample gas utilities was approximately 100 basis points higher than the sample water utilities, requiring a downward adjustment to the gas utilities' cost of equity to make the two groups comparable.[12] Because of this difference in risk, the Commission rejected the use of the gas utilities.

In this docket, the difference between average betas of the two sample groups would require an upward adjustment in equity cost estimates for the gas utilities because the average beta of the gas sample group is now less than the average beta of the water utility sample group. In fact, the difference in the sample groups' betas is greater than the difference that existed in 2003, and

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[11] *See* Rigsby Dt., Sch. WAR-7.
[12] Decision No. 66849 at 21.

would require an upward adjustment of more than 100 basis points[13]. For this reason, the gas utilities are not comparable, and cannot be treated as such in implementing the DCF and CAPM models. In reality, RUCO has used them to depress the CAPM cost of equity estimates, not to provide a larger sample group.

VI. Additional Responses to Mr. Parcell

Q. DO YOU HAVE ANY OTHER RESPONSES TO MR. PARCELL'S TESTIMONY?

A. Yes. In addition to the comments I made above, I also restate and correct his DCF and CAPM equity cost estimates. I also show that if the Commission wants to change its prior position and give weight to a comparable earnings analysis, such an analysis indicates water utilities have required ROEs in a range of 12.3% to 12.8%.

Mr. Parcell's DCF Analysis

Q. PLEASE BEGIN WITH YOUR RESPONSES TO HIS DCF ESTIMATES? IS HIS CALCULATION OF THE AVERAGE CURRENT DIVIDEND YIELD APPROPRIATE?

A. No. Throughout my response to Mr. Parcell, I primarily respond to the equity cost estimates he has provided for the sample of six water utilities consistently used by the Commission to determine equity cost estimates. The current dividend yield he reports for this sample is 3.4% and the adjusted average yield is 3.5% (Schedule 5, page 4 of 4). The "adjusted average" yield is Mr. Parcell's estimate of D_1/P_0, the yield used in the DCF equation. Based on the Staff method reported in Tab 2, Schedule 1, the more appropriate value for D_1/P_0 is

[13] Using the intermediate term market risk premium of 7.0%, the upward adjustment would be 105 basis points [7% times (.82-.67)]. If the current market risk premium were relied upon, the indicated increase would be 204 basis points (13.6% times (.82-.67).

3.7%. Also, for comparison, my updated value for D_1/P_0 for the three month period relied upon by Mr. Parcell, is 3.82%. *See* Rebuttal Table 2, Tab 1.

Q. WHY IS MR. PARCELL'S ESTIMATE OF D_1/P_0 BIASED DOWNWARD?

A. It is biased downward for two reasons. First, Mr. Parcell disagrees with the Staff method and grows the current dividend by only one-half the growth rate. Equation (3) of my direct testimony shows that the valuation equation used to determine the DCF model requires a value for D_1 equal to the dividend a full year into the future, not one-half of a year into the future, to be consistent with growth in other future periods. The Staff method is also incorrect because it assumes first-year growth only three quarters into the future. While I think the Staff approach is biased, it is less biased than Mr. Parcell's aggressive choice of growing the current dividend by only half as much as should be used in the model.

Second, Mr. Parcell does not allow for the time value of money. As I explain at page 26 of my direct testimony, ignoring the time value of money is inconsistent with utilities paying dividends on a quarterly basis instead of once a year. Recognizing the time value of money increases D_1/P_0 by roughly 10 basis points.

Q. DO YOU HAVE ANY CONCERNS WITH THE METHOD HE USES TO DETERMINE GROWTH RATES?

A. Yes. First, Mr. Parcell waters down his estimates of growth by giving only a 20% weight to the conceptually appropriate value of growth provided by analysts' forecasts. Two of his estimates are based on incomplete estimates of sustainable growth. One is based on past growth of EPS, DPS and BVPS. The fourth looks at Value Line projections. When he does examine analysts' forecasts of EPS growth, he only relies on EPS growth rates reported by Yahoo! Finance and gives no weight to forecasts provided by Zacks. He also does not incorporate analysts' forecasts of growth reported by Value Line that are readily

available for SJW Corp. and Middlesex Water. By giving excessive weight to incomplete estimates of sustainable growth, and no weight to other available forecasts made by analysts, and excessive weight to past growth that would have already been recognized by analysts when they made their forecasts, he constructs anemic estimates of growth expected by investors.

Q. PLEASE EXPLAIN THE PROBLEM WITH MR. PARCELL'S ESTIMATES OF SUSTAINABLE GROWTH.

A. Mr. Parcell relies on past growth from earnings retention ("br growth") and projections of earnings retention growth as proxies for sustainable growth. At page 16, line 24, Mr. Parcell implies he is using the "Gordon DCF model" but when he implements the model, he ignores the fact that Professor Gordon emphasized that growth from both internal sources ("br growth") and from external sources ("vs growth", which results from the sale of common stock at prices above book value), should be recognized when determining estimates of sustainable growth for utilities.

Additionally, Mr. Parcell apparently ignores the fact that Staff and Mr. Rigsby routinely rely on estimates of sustainable growth, not just growth from internal sources, to make their estimates of sustainable growth. Based on the update of Staff's model, Mr. Parcell understated sustainable growth by 2.0%. *See* Table 3, Tab 2. And based on Mr. Rigsby's corrected growth rates discussed in Section VII, Mr. Parcell has understated sustainable growth by 1.83%.

Q. DO YOU HAVE ANY OTHER CONCERNS WITH MR. PARCELL'S GROWTH RATE ESTIMATES?

A. Yes, Mr. Parcell's reported estimates of EPS growth made by analysts are inefficient. Zacks as well as Yahoo! Finance report analysts' forecasts of expected future EPS growth. Value Line also reports analysts' forecasts of growth for water utilities included in its Expanded Edition. This information would

be known to investors and should be considered. When this additional information is considered, four of the six averages of analysts' forecasts increase and two stay the same or decrease. This additional information increases the average reported by Mr. Parcell from 8.5% to 9.7%. Mr. Parcell appears to have chosen his source of analysts' forecasts to bias downward his DCF equity cost estimate.

Q. HAVE YOU CONSTRUCTED A DCF ESTIMATE THAT INCORPORATES YOUR CONCERNS?

A. Yes. I report my restatement of his DCF analysis in Rebuttal Table 12. In making this restatement, I rely on dividend yields of 3.7% made with the ACC Staff model. This estimate of dividend yields is conservative because it does not recognize the time value of money. For my restatement I have also dropped Mr. Parcell's incomplete estimates of retention growth because such estimates are about 2.0% smaller than conceptually-correct estimates of sustainable growth. Third, I have used an average of analysts' forecasts of growth reported by Zacks, Yahoo! Finance and Value Line instead of the limited data Mr. Parcell used. Once these changes are made, Mr. Parcell's indicated DCF equity cost increases to 11.6%.

Mr. Parcell's CAPM Analysis

Q. HAVE YOU ALSO RESTATED MR. PARCELL'S CAPM ESTIMATE?

A. Yes. In making my restatement, I have relied on the beta estimates reported by Value Line in April and adopted by Mr. Parcell in his testimony. I have, however, revised the market risk premium and risk-free rate of interest required in the CAPM model.

Q. FOR PERSPECTIVE, HOW DOES THE STAFF NORMALLY IMPLEMENT THE CAPM?

A. Staff performs two estimates of the cost of equity using the CAPM, one of which uses an historical market risk premium ("MRP") and the other using a current

MRP. Both estimates use the same beta (ß) which represents the riskiness of the investment relative to the market as a whole. Staff's beta is equal to the average beta of the six sample water utilities. For the risk-free rate of interest in its historical MRP CAPM estimate, Staff uses the average spot yields on intermediate-term Treasuries. For the risk-free rate of interest in its current MRP CAPM estimate, Staff uses the spot yield on long-term Treasuries. The date Staff selects for these spot yields corresponds to the dates selected for the sample companies' stock spot market prices and other financial market inputs.

Q. HAS THE METHOD USED BY STAFF TO CALCULATE THE CURRENT MARKET RISK PREMIUM BEEN ADOPTED BY THE COMMISSION IN WATER AND WASTEWATER UTILITY RATE CASES?

A. Yes. In Arizona Water's Western Group rate case, for example, the Commission adopted Staff's CAPM estimate, explaining:

> [W]hile interest rates have gone up, the cost of equity for the market as a whole as decreased, while the cost of equity for utilities has remained relatively stable. Staff states that while its witness in [Arizona Water's prior rate case] estimated an overall market risk premium at 13.1%, its current estimate is 7.8% ..., and this relative change in the risks of utilities as compared to the overall market is reflected in Staff's increased beta estimate, from 0.59 in the [prior case] to 0.68 in this case.[14]

A similar discussion appears in Decision No. 69164, which involved a request for rate increases by an Arizona wastewater utility.[15] In that case, Staff's cost of capital witness testified that changes in interest rates do not mean that the cost of equity will also change or even move in the same direction as interest rates.

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[14] Decision No. 68302 at 38.

[15] *Black Mountain Sewer Corp.*, Decision No. 69164 (Dec. 5, 2006).

Thus, "while interest rates increased between the filing of [the Staff witness'] direct and surrebuttal testimonies, from 3.3% to 4.7%, Staff's current MRP declined from 13.1% to 5.7%, thereby offsetting the interest rate increase (Tr. 719-722)."[16] The same phenomenon is present in this case: While Treasury yields have declined, the betas of the water utilities in the sample group and the market risk premium have remained high, resulting in a cost of equity of approximately 13%.

Q. IS IT IMPORTANT TO CONSIDER THE CURRENT MARKET RISK PREMIUM IN ESTIMATING THE COST OF EQUITY?

A. Yes. At present, the financial markets have been impacted by a downturn in the business cycle and other, related economic events, which have increased the general market risk associated with investment. This is evidenced by the fact that spreads between Treasury securities and Baa investment-grade commercial bonds are 80% higher than the average spread during the period 1990 to 2007 and the current yield on Baa investment grade utility bonds is higher today than during the last seven years.[17]

Given these circumstances, current market risk must be considered in estimating the cost of equity. The version of the CAPM that utilizes an estimate of the current MRP provides an unbiased means for doing so.

Q. HOWEVER, YOU HAVE CRITICIZED STAFF'S METHOD OF ESTIMATING THE CURRENT MARKET RISK PREMIUM.

A. That is true. But my criticisms have related to the manner in which Staff normally estimates the current MRP, which is quite volatile and unstable. I estimated the current MRP, as I did in Direct Table 15, Rebuttal Table 8 and in past testimony before this Commission, with methods that eliminate the sharp increases and decreases in the market risk premium that result from Staff's method. The point

[16] Decision No. 69164 at 25.
[17] See Rebuttal Table 1 and Value Line *Selection & Opinion* (June 19, 2009).

is that current market conditions need to be considered in setting rates that will become effective later this year. Otherwise, the cost of equity is being estimated with historic data that fail to account for current market conditions and current capital costs.

Q. HOW DOES MR. PARCELL DETERMINE THE MRP?

A. Mr. Parcell determines the MRP as an average of three values. One is a 1978-2007 average of historic risk premiums of 6.45%. The other two are estimates of the long-term average MRP derived from data reported by Morningstar. The latter two are conceptually incorrect because both rely on differences in total returns and one is computed as a geometric annual average.

Q. HAVE YOU PREVIOUSLY EXPLAINED WHY GEOMETRIC ANNUAL AVERAGES ARE INAPPROPRIATE?

A. Yes. In Section IV, I explained why only arithmetic annual averages should be used to determine future risk premiums, future expected returns and future expected growth rates. Geometric annual averages do not, and as a consequence, they bias-downward appropriate estimates. Because Mr. Parcell uses a flawed concept, I give no weight to the estimate of the market risk premium of 3.9% reported at page 23 of his testimony and do not update it. In restating Mr. Parcell's testimony, I examine only the two market risk premiums which are not based on this flawed concept.

Q. ARE THERE PROBLEMS WITH HIS OTHER LONG-TERM MARKET RISK PREMIUM ESTIMATES?

A. Yes, both Mr. Parcell and Mr. Rigsby erroneously use total returns on Treasury securities in their risk premium calculations. This method also reduces that cost of equity estimate.

Q. IS THIS METHOD CORRECT?

A. No. The Morningstar, *Ibbotson SBBI 2009 Valuation Edition Yearbook*, at page 58 (attached at Tab 4), provides a helpful discussion of this issue. When a

Treasury security is used in the CAPM as the proxy for the risk-free rate of interest, the income return is the portion of the total return that results from the expected periodic cash flow, i.e., the bond coupon payment. The income return provides an unbiased estimate of the risk-less rate of return because an investor can hold the Treasury security to maturity and be entitled to the income return with no capital loss (or capital gain). Data for total returns reported by Morningstar, however, are derived by selling bonds before that maturity occurs and buying other bonds with the desired maturity to maintain a constant maturity portfolio. Such resulting positive or negative returns have nothing to do with the risk-free return expected at the time the Treasury security was purchased and thus are inconsistent with treating the Treasury security as a risk-free asset. Looking backward, and if costs of maintaining a constant maturity portfolio are ignored, total returns for Treasuries have turned out to be slightly higher than income returns. Thus, this choice by Mr. Parcell and Mr. Rigsby produces lower risk premiums than are conceptually correct. In making my restatements of their analyses, I have relied upon the conceptually correct income returns.

Q. HOW DID YOU DETERMINE YOUR RESTATEMENT OF MR. PARCELL'S MARKET RISK PREMIUM?

A. I determined my restatement of his MRP as an average of the long-term average of market risk premiums of 6.5% reported in Table 5-1 and Table 5-2 of Morningstar, *Ibbotson SBBI 2009 Valuation Yearbook* and an estimate of the recent market risk premium of 9.08% derived from current Treasury rates and data in Mr. Parcell's Schedule 6 and Schedule 9.

Q. IS THE 6.5% AN UPDATE OF THE 7.1% MRP REPORTED BY MORNINGSTAR IN 2008?

A. Yes.

Q. HOW IS THE 9.08% MRP DERIVED?

A. It is derived from data Mr. Parcell relied upon in Schedule 6 and 9 and his testimony at pages 26 where he states that when one forms an estimate of the current cost of equity, he/she should rely on two periods: 2002-2008 (the last business cycle) and 1992-2001 (the most recent complete business cycle). Initially, data for the two periods reported in Schedule 6 of Mr. Parcell's testimony are used to determine how risk premiums change as rates for 20-year Treasury rates change. Mr. Parcell's data indicate that as interest rates dropped by 155 basis points, risk premiums increased by 69 basis points. Mr. Parcell, however, has ignored that information even though he testifies that these two periods should be examined to determine current costs of equity.

I have used the relationship between changes in risk premiums and interest rates revealed in Mr. Parcell's Schedule 6 to determine an estimate of the current market risk premium. Combining the current 20-year Treasury rate of 4.67% with that information indicates the current market risk premium is 9.08%. The 1978-2007 average risk premium of 6.45% used by Mr. Parcell does not provide a useful estimate of the current market risk premium. See Rebuttal Table 13.

Q. HOW DID YOU DETERMINE THE RISK-FREE RATE FOR YOUR RESTATEMENT OF MR. PARCELL'S CAPM ANALYSIS?

A. Mr. Parcell adopts the 20-year Treasury rate in his analysis. In preparing this rebuttal, I also adopt it. This rate has increased since Mr. Parcell prepared his testimony. At this time, the 20-year Treasury rate is 4.67%. New rates for Arizona Water will not be set today, however, and thus it is appropriate to rely on expected Treasury yields for the future period when new rates will be in effect. I relied on an average of Blue Chip and Value Line's forecast of the future yield for long-term Treasury rates of 4.93% to update my equity cost estimates. The

4.93% is reported in Rebuttal Table 7. For my initial restatement of Mr. Parcell's analysis, however, I have used the current 20-year Treasury rate of 4.67%.

Q. WHERE DO YOU REPORT YOUR INITIAL RESTATEMENT OF MR. PARCELL'S CAPM EQUITY COST ESTIMATE?

A. It is reported in Rebuttal Table 14. The estimate in panel A is based on the current 20-year Treasury bond rate of 4.67%, the Value Line betas used by Mr. Parcell in his analysis, and a MRP of 7.79%. Based on those data, the CAPM equity costs range from 10.5% to 12.5% and have an average of 11.2%.

Q. SHOULD THE CAPM ESTIMATE BE BASED ON THE CURRENT TREASURY BOND RATE?

A. No. The CAPM estimate should be based on the long-term Treasury rate expected during the future period when the Company's new rates will be in effect. If that conceptually appropriate value for the RF were adopted, the indicated average CAPM equity cost estimate for the sample would be 11.5% and the indicated cost of equity for Arizona Water would be 12.0%. This calculation is shown in panel B of Rebuttal Table 14.

<u>Mr. Parcell's Comparable Earnings Analysis</u>

Q. DO YOU HAVE A RESPONSE TO HIS COMPARABLE EARNINGS ROE ESTIMATE?

A. Yes, I have four responses. First, the Commission has rejected the use of comparable earnings approaches in recent rate cases, including Arizona Water's most recent rate decision for its Western Group systems. In that case, the Commission rejected Arizona Water's risk premium estimate because it used authorized and realized rates of return, stating:

> In estimating its cost of equity, Arizona Water relied on a risk premium analysis methodology used by the [California] PUC staff, which uses comparisons to actual or authorized returns

on equity. This sort of "comparable earnings" analysis has long been discredited for several reasons. Market-based methods like the DCF model and the CAPM provide more reliable estimates of equity cost, because it is capital markets, not regulatory commissions that determine the cost of equity. Use of the risk premium analysis urged by the Company would circumvent the market forces that regulation attempts, as much as possible, to replicate. ... The risk premium analysis methodology erroneously assumes that accounting-based "actual" ROEs are equal to the cost of equity. [18]

Second, at page 24, Mr. Parcell states that the comparable earnings method provides a direct measure of the fair return because it is designed to measure returns expected to be earned on original cost book value of similar risk enterprises. While the Company in this case has chosen to use original cost as its measure of fair value rate base, in general, a measure of return on original cost will be unfair to Arizona utilities because fair value rate base is generally larger than original cost. Mr. Parcell apparently is unaware of regulatory requirements in Arizona that may or may not be appropriate in states that rely on original cost rate bases to determine rates for utilities. This Commission's rejection of cost of equity estimation techniques that rely on returns earned on utilities' book or accounting equity is also consistent with the fair value standard, which considers market values in setting rates rather historic, book investment in plant.

[18] Decision No. 68302 at 37-38. See also *Arizona-American Water Co.* , Decision No. 67093 (June 30, 2004) at 29 (rejecting the use of comparable earnings).

Third, at page 25, Mr. Parcell states that "It is possible to assess the degree to which a given level of return equates to the cost of capital "by" evaluating investor acceptance of [realized] returns by reference to the resulting market-to-book ratios.", But this is not the case. There are many reasons investors may bid up market prices for stocks above book values other than an expectation that a water utility will earn more than its cost of equity. Investors may expect a city or some other public entity to condemn all or part of a water utility and that the public entity will be required by the court to pay the utility the fair market value for it. Water utilities' assets typically have values based on reproduction costs that are well in excess of book value. I have testified on the values of water utility properties and electric utility properties in various court cases in California, Utah and Oregon. Based on my experience, in situations where only a portion of the utility is being condemned, valuations based on reproduction cost new less depreciation indicate utility property has a value well in excess of book value. Investors would be aware that courts may award potential condemnation values well in excess of book values even if the utility earns no more than its cost of equity.

Q. ARE THERE OTHER REASONS MARKET-TO-BOOK RATIOS DO NOT PROVIDE AN INDICATION OF INVESTOR ACCEPTANCE OF PAST EARNED RETURNS ON EQUITY?

A. Yes. Investors may anticipate a merger or acquisition that produces premium prices similar to those reported in Table 4 of my direct testimony, which have been well above book values. With such anticipated sale prices well above book values, a water utility would also be priced above book value even if the water utility made no more than its cost of equity. There are other reasons as well.[19]

[19] When John Thornton was a member of the Staff of the Oregon Public Utility Commission, he listed the following six reasons a market price could exceed book value even if the utility was expected to earn its Authorized ROE: (1) public utility commissions do not issue orders simultaneously in all jurisdictions, (2) not all of a company's earnings are regulated, (3) regulatory expenses, revenue and rate base

Q. WHAT IS YOUR FOURTH RESPONSE?

A. My fourth response is that to the extent any weight is to be given to the data in Mr. Parcell's schedules 9 and 10, those data indicate water utilities require higher returns than have been earned in the past. My Rebuttal Table 15 provides that demonstration. Panel A shows risk-free rates reported by Mr. Parcell in Schedule 6 for the two periods 2002-2007 and 1992-2001 shown at the bottom of Schedule 9, the earned ROEs Mr. Parcell reports for the S&P 500 in Schedule 9 for those periods, the indicated risk premium required by the index in those periods and the market-to-book ratios. Based on those data and my calculations in Rebuttal Table 13, the indicated risk premium for that market index was 8.27% in the 1992-2001 period, 8.96% in the 2002-2007 period and 9.08% when the 20-year Treasury rate is 4.67%.

At page 27, Mr. Parcell opines that "In order to apply these returns to the cost of equity for proxy utilities, however, it is necessary to compare the risk levels of the utility industry with those of the competitive sector". Panel B of Rebuttal Table 15 provides that comparison for two periods. During the period 1992-2007, assuming a 2005 beta of 0.68 (from Table 5 in my direct testimony) provides a reasonable proxy for beta risk, the average required ROE for the water utilities was 11.57% but the average of earned ROEs for those utilities was only 10.10%. Even with earnings below the required level, the average market-to-book ratio was 2.01. If the market-to-book ratio tells us anything, it suggests it would have been closer to 3.13 (the average for the market index) if the utilities had earned ROEs closer to the level required.

Panel B also provides a calculation of required average ROEs of 12.51% in the current period compared to an average of earned ROEs of 9.17%. Of special

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adjustments may cause accounting returns to differ from those calculated on a rate case basis, (4) actual sales do not equal sales assumed in a rate case, (5) market expected ROEs change frequently while rate case authorized ROEs do not, and (6) regulated subsidiaries constitute only a piece of a holding company pie. Testimony of John Thornton in Oregon Docket UM 903 (filed November 9, 1998).

note is that the data Mr. Parcell provides in schedules 6, 9 and 10 indicate the required ROE for the Staff water utilities sample is 12.3%, 230 basis points higher than the ROE he recommends.

And, to the extent that any weight is given to the market-to-book ratio and the difference between earned and required ROEs in this period, the difference between required ROEs and earned ROEs is larger than in the past and the market-to-book ratio is lower.

Q. PLEASE SUMMARIZE YOUR RESTATEMENTS AND CORRECTIONS OF MR. PARCELL'S TESTIMONY.

A. I present Rebuttal Tables 12, 13, 14 and 15 which respond to the three methods Mr. Parcell presents in support of his 10% ROE recommendation for the Company. My restatement indicates the cost of equity for the sample of six water utilities used by the Commission and Staff in past water and wastewater cases, falls in a range of 11.2% to 12.3%. The restated DCF estimate is 11.6%, the restated CAPM estimate averaged 11.2% based on current Treasury rates and 11.5% based on the conceptually correct rates expected in the future, and his comparable earnings approach indicates an appropriate ROE is 12.3%. Mr. Parcell does not incorporate a risk premium to reflect that Arizona Water is more risky than the sample utilities he uses to determine benchmark cost of equity estimates. If he had used the 50 basis point risk premium I recommended, the indicated cost of equity for the Company falls in a range of 11.7% to 12.8% and is consistent with my recommended ROE of 12.4%.

<u>Other Responses to Mr. Parcell</u>

Q. AT PAGES 33 TO 38, MR. PARCELL CRITICIZES THE GROWTH RATES YOU ADOPTED IN YOUR DCF ANALYSES. DO YOU HAVE ANY RESPONSES?

A. Yes, I have seven responses

(1) He ignored my testimony at pages 27-29 of my direct testimony in which I explained why it is reasonable to anticipate that investors expect higher growth in the future than has occurred in the past.

(2) He does not respond to the findings presented in the Gordon, Gordon and Gould article (cited at page 28 of my direct testimony) that analysts' forecasts provide the best forecasts for DCF calculations.

(3) At page 34, line 22, he mentions a 1998 article in which the author found analysts' forecasts of EPS growth were overly optimistic. I have two responses to this. First, it is easier for analysts to forecast EPS growth for utilities than stocks in general. Second, over the years I have made two studies that show claims like the one made by Mr. Parcell do not apply to utilities. The first study was a study of forecasted ROEs for gas distribution utilities during the period 1977 to 1998. *See* Rebuttal Table 16. In that study I found the actual realized real returns on equity were slightly higher—not lower—than the analysts had forecasted. The second study compared Value Line forecasts of br growth for electric utilities during the period 1982 to 2007. *See* Rebuttal Table 17. In that analysis I found that once the impact of errors in inflation forecasts was removed, Value Line's real forecasts of br growth were slightly lower than the br growth that actually occurred.

(4) I agree with his comments at page 34 of his testimony that there is a lot of information available to investors, but do not understand how that changes the logical conclusion that analysts also know about that information and take it into account when they prepare forecasts of EPS growth.

(5) At page 35 Mr. Parcell notes that analysts have done a poor job of forecasting profits during 2008 and 2009. I don't see his point. Historical data do not even attempt to predict future profits.

(6) He apparently agrees with me that analysts' forecasts of growth are conceptually correct. Since that is the case, it is appropriate to give such growth

rates the heaviest weight. Mr. Parcell, however, gives such conceptually correct growth rates only a 20% weight in his deliberations.

(7) At page 37 Mr. Parcell states that if historical growth is to be given any weight in a DCF analysis, growth in stock prices should be given no weight. Certainly Mr. Parcell is familiar with the fact that if the market to book ratio does not change, market prices are expected to grow at the same rate as book value and past growth in prices is simply a proxy for book value growth. His rejection of past stock price growth is in conflict with steady-state growth assumed with the constant growth DCF model and appears to be just one more convenient way to reduce his growth rate estimate to a level lower than what is expected by investors.

Q. DO YOU HAVE ANY RESPONSES TO MR. PARCELL'S CRITICISM OF YOUR CAPM ANALYSIS?

A. Yes. Risk-free rate: I disagree that the relevant risk free rate has dropped. Last year that rate was 4.90% and it is now 4.93%. Also, the current long-term Treasury rate is 4.67%, not the 3.83% rate Mr. Parcell adopted in his analysis.

Beta estimates: I agree with the fact that the average beta for the Staff sample is lower than when I prepared my direct testimony but any reasonable estimate of the market risk premium has increased which offsets the lower betas.

Market risk premium: I agree that the Morningstar estimate of the long-term average MRP has dropped from 7.1% to 6.5% and have used the updated value in my updated analysis. As discussed above, it is inappropriate to give any weight to geometric annual averages. The discussion in my testimony and the appendix from Dr. Morin's book (at Tab 3) explain why that is the case. Mr. Parcell's inclusion of geometric annual averages is apparently done to bias downward his cost of equity estimates. After the devastating fall in the stock market in recent months, it is reasonable for investors to expect higher than

average market risk premiums during the next several years. MRP estimates should incorporate that expectation.

Q. AT PAGES 41 AND 42, MR. PARCELL ARGUES THAT ARIZONA WATER IS NOT MORE RISKY THAN THE ACC STAFF WATER UTILITIES SAMPLE. DO YOU HAVE A RESPONSE?

A. Yes. Mr. Parcell argues that I have incorrectly compared Arizona Water's risks to the "total operations" of "larger water groups" (Parcell Dt. at 41-42). This argument erroneously assumes that Arizona Water is part of a "larger water group." While its common stock is owned by a parent, Arizona Water operates on a stand-alone basis. Thus, it is not part of larger "water group," in contrast, for example, to a utility like Arizona-American Water Company that is part of a much larger, integrated water system.

Q. YOU MENTIONED ARIZONA-AMERICAN WATER COMPANY. HAS MR. PARCELL RECENTLY ADDRESSED THE RISK OF THAT WATER COMPANY IN CONNECTION WITH SETTING RATES?

A. Yes. Mr. Parcell provided testimony on the cost of equity for the ACC Staff in Arizona-American Water Company's pending rate case, Docket Nos. W-01303A-08-0227 and SW-01303A-08-0227. In his surrebuttal testimony, dated March 3, 2009, at pages 5 to 6, Mr. Parcell criticized Arizona-American's cost of capital witness for focusing solely on risk resulting from the high percentage of debt in that company's capital structure and ignoring other firm-specific risks, including firm size. He argued that Arizona-American has lower risk because:

> [Arizona-American] is part of the AWW [American Water Works Company] system, and in fact substantially funded as an integral part of this system. AWW is the largest publicly-traded water system in the U.S. As a result, it generally faces lower risk than smaller water systems. In addition, the fact that AWW operates in a large number of states, with

multiple divisions in many states, indicates that it has less risk than less diversified water systems.[20]

Arizona Water, in contrast, does not have operations in states other than Arizona. Arizona Water raises capital on its own and issues its own debt. Moreover, as other Company witnesses have testified, many of Arizona Water's systems are very small, with limited customers and high capital investment per customer. Mr. Garfield has provided a detailed discussion of the characteristics of Arizona Water's systems and other factors that increase its investment risk in his direct testimony at pages 27 to 33.

Q. WHAT COST OF EQUITY DID MR. PARCELL PROPOSE FOR ARIZONA-AMERICAN WATER COMPANY?

A. He proposed a cost of equity of 10% for that water company, just as he has in this case, even though based on his testimony in the Arizona-American Water Company case, Arizona Water is riskier and has a higher cost of equity.

Q. MR. PARCELL CLAIMS THAT CONSIDERATION OF ARIZONA WATER'S BUSINESS RISKS WAS REJECTED BY THE COMMISION. HOW DO YOU RESPOND?

A. Just because one or more past Commissioners in Arizona were not convinced that Arizona Water has greater risks than the Staff water utilities sample, does not mean such greater risks do not exist. Mr. Parcell has argued that the Commission should consider firm size, diversification and other firm-specific risks in his testimony in the Arizona-American Water Company case. Given that testimony, I assume he agrees that Arizona Water's firm-specific risks should be considered in this case. Obviously, it would be arbitrary and unfair to consider firm-specific risks in one case and ignore them in another case.

[20] Surrebuttal Testimony of David C. Parcell, Docket Nos. W-01303A-08-0227 and SW-01303A-08-0227 (March 3, 2009) at 6.

As I explained in direct testimony (at pages 14 to 24), and as Mr. Garfield explained in his direct testimony, Arizona Water faces a number of risks that are not faced by the six publicly traded utilities in the ACC Staff sample. Investors would consider those risks in evaluating an investment in the Company. Therefore, those risks need to be taken into account in determining Arizona Water's cost of equity.

Q. DO YOU HAVE ANY FINAL RESPONSE TO MR. PARCELL?

A. Yes. At several places in his testimony, including page 30, Mr. Parcell makes the erroneous argument that the recession has depressed profits for most enterprises and thus the costs of equity for utilities have dropped. This conclusion flies in the face of obvious increases in DCF estimates of the cost of equity. As prices have dropped, dividend yields for water utilities have increased while forward-looking growth rates have stayed the same or are slightly higher. Even if one were to base a DCF estimate on historical data, all of those data, save data in 2008, are the same and thus there would be no basis to assume a drop in expected growth large enough to offset the increase in dividend yields.

At page 30, lines 11 to 17, Mr. Parcell also speculates that the measures the U. S. government has taken were designed to lower the cost of capital. Even if that were true, it does not mean the cost of equity is lower today than before the market turmoil began. Quantitative evidence provided by the DCF model shows water utilities have higher costs of equity today than last year. Thus, whatever measures have been enacted by government to offset increases in costs of capital have not been strong enough to bring down the cost of equity for water utilities to levels prevailing last year. The Commission said in Arizona Water's prior rate case that that capital costs are determined by the market, not

by regulators.[21] The results produced by the DCF, a market-based model, clearly show that the cost of equity has increased.

VII. Additional Responses to Mr. Rigsby

RUCO's DCF Analysis

Q. PLEASE TURN TO YOUR COMMENTS ABOUT MR. RIGSBY'S DCF APPROACH. WHAT ARE YOUR PRIMARY CONCERNS WITH HIS APPROACH?

A. I address four concerns. First, Mr. Rigsby used an inefficient sample of only three water utilities when useful data for three other water utilities normally included in the water utilities sample considered and approved by the Commission were available and should have been included in his analysis. I addressed this issue above.

Second, Mr. Rigsby fails to recognize the time value of money when he computed dividend yields.

Third, his estimates of "br" growth are subjective and understate projected br growth. His br growth rate estimates also fail to account for Value Line determining ROEs on year-end equity instead of average equity.

Fourth, in contrast to Mr. Parcell, Mr. Rigsby agrees that "vs" growth (external growth) and "br" growth (internal growth) should be recognized when determining sustainable growth rate estimates. However, he has not adopted estimates of "vs" growth investors would reasonably expect from water utilities.

Q. SHOULD DIVIDEND YIELDS ADOPTED IN DCF ANALYSES RECOGNIZE THE TIME VALUE OF MONEY?

A. Yes. I explained this point at page 26 of my direct testimony. Not recognizing the time value of money biases downward Mr. Rigsby's DCF cost of equity

[21] Decision No. 68302 at 38.

estimates by approximately 10 basis points. In my restatement of Mr. Rigsby's DCF approach, I make the proper calculation.

Q. HOW DOES MR. RIGSBY DETERMINE ESTIMATES OF "BR" GROWTH?

A. Mr. Rigsby considers historic and projected data from Value Line which he reports in Schedule WAR-5 and then makes subjective estimates of br growth for American States, California Water and Aqua America of 6.0%, 6.0% and 4.0%, respectively.

Q. ARE THESE ESTIMATES OF BR GROWTH CONSISTENT WITH THE UNDERLYING VALUE LINE DATA HE CONSIDERED?

A. No. Those estimates of br growth average 5.3%, but the underlying data reported by Value Line for the future period 2012- 2014 average 6.0%. Compare columns (a) and (b) in Rebuttal Table 18.

Q. ARE THE DATA IN COLUMN (B) APPROPRIATE FOR A DCF ANALYSIS?

A. No. Value Line computes ROEs from earnings divided by year-end equity when the appropriate denominator for a DCF growth rate calculation is average equity. After adjusting the estimates of br growth in column (b) with the Federal Energy Regulatory Commission ("FERC") formula to recognize the fact that Value Line computes ROEs on year-end equity, those "br" growth rates are 6.5%, 6.1% and 6.0%, respectively and average 6.2%. *See* Rebuttal Table 18, column (c).

Q. HOW DO THE ESTIMATES OF BR GROWTH COMPARE TO THE ESTIMATES OF PROJECTED BR GROWTH YOU DETERMINED WITH YOUR UPDATE OF THE ACC STAFF MODEL?

A. They are the same. These data are provided in Schedule TZ-4 in Tab 2.

Q. TURN TO MR. RIGSBY'S ESTIMATE OF "VS" GROWTH. ARE THERE PROBLEMS WITH THE FORMULA HE USES TO COMPUTE "V"?

A. Yes. In estimating the "v" in "vs" growth Mr. Rigsby has substituted his personal opinion for market data. He opines that ultimately, investors would expect stock prices for regulated utilities to drop to book value (Rigsby Dt. at 16). Thus,

instead of using the market prices to determine "v", Mr. Rigsby uses an average of the observed market-to-book ratio and a hypothetical market-to-book ratio of 1.0 to compute his estimate of "v" in "vs" growth. When the market-to-book ratio is 1.0, "v" is estimated to be zero and "vs" growth is also estimated to be zero. If one adopts the concept Mr. Rigsby espouses, it has the effect of assuming investors expect one-half as much "vs" growth as is revealed by market data. If markets are reasonably efficient, even if investors did expect movement of stock prices back to book values at some future time, market prices for utility stocks would already reflect potential movements back toward book values. Therefore, this adjustment is inappropriate and produces negatively biased estimate of growth.

Q. SHOULD MARKET PRICES MOVE TOWARD BOOK VALUES IF A UTILITY'S AUTHORIZED RETURN IS EQUAL TO THE COST OF EQUITY?

A. Not necessarily. I discuss this issue above and do not repeat that testimony again. Average market-to-book ratios for water utilities followed by AUS Utilities Reports have been above 1.0 since at least 1991.

Q. DID YOU PREPARE A RESTATEMENT OF MR. RIGSBY'S DCF APPROACH?

A. Yes. For this restatement, I relied upon the forward-looking estimates of "br" growth reported by Mr. Rigsby (but adjusted with the FERC formula (from Rebuttal Table 18)), my restatement of Mr. Rigsby's "vs" growth and Mr. Rigsby's dividend yields adjusted for the time value of money. Panel A of Rebuttal Table 19 shows that if sustainable growth is based on those dividend yields, adjusted "br" growth and the revised estimate of "vs" growth, the indicated cost of equity for his water utilities sample is 11.5%. Because Arizona Water is more risky, this analysis indicates the Company's cost of equity is at least 12.0%.

Q. DID YOU PREPARE A SECOND DCF ANALYSIS BASED ON THE DATA REPORTED BY MR. RIGSBY?

A. Yes. For this second analysis, I adopted the same dividend yields as in Panel A of Rebuttal Table 19, but adopted conceptually correct analysts' forecasts of growth reported by Zacks and included in Mr. Rigsby's Schedule WAR-6. This analysis indicates a benchmark cost of equity of 11.8% and an indicated cost of equity for Arizona Water of 12.3%. See Panel B of Rebuttal Schedule 19.

RUCO'S CAPM Estimates

Q. DO YOU HAVE ANY PRELIMINARY COMMENTS ABOUT RUCO'S CAPM ESTIMATES?

A. Yes. Even without any examination of how RUCO's CAPM results were derived, it is obvious Mr. Rigsby's estimates are too low to satisfy the attraction of capital standard. Mr. Rigsby's CAPM estimates range from 5.26% to 7.43%, and average only 6.28%.[22] By contrast, the yield on investment-grade utility bonds is currently 7.76%.[23] Likewise, the California Public Utilities Commission recently authorized California Water Service Company and Golden States Water Company (the primary subsidiary of American States Water) to borrow at an interest rate of 8.3%.[24] The results produced by RUCO's method are confiscatory because they are well below the cost of debt.

Q. TURN TO YOUR COMMENTS ABOUT MR. RIGSBY'S CAPM ESTIMATES. HAS HE USED A CORRECT CONCEPT TO DETERMINE THE VALUE FOR RF?

A. No. Mr. Rigsby uses a 5-year Treasury security rate in his CAPM approach. It is inappropriate to use either a short-term or intermediate-term Treasury security to determine the value for RF, the risk-free rate of return, for two reasons. First, intermediate-term Treasury rates understate the appropriate RF to use when analyzing long-lived assets such as common stocks. Morningstar (formerly

[22] Rigsby Dt., Sch. 1 at 3.
[23] Value Line Selection & Opinion (June 19, 2009).
[24] California Water Service, et al. (consolidated), Decision No. 09-05-019 (May 7, 2009).

Ibbotson Associates) explains that the appropriate choice for the zero-beta asset is a return that is no less than the expected return for long-term Treasury securities.

> The horizon of the chosen Treasury security should match the horizon of whatever is being valued. When valuing a business that is being treated as a going concern, the appropriate Treasury security should be that of a long-term Treasury bond. Note that the horizon is a function of the investment, not the investor. If the investor plans to hold a stock in a company for only five years, the yield on a five-year Treasury note would not be appropriate since the company will continue to exist beyond those five years. . . .
>
> Companies are entities that generally have no defined life span; when determining a company's value, it is important to use a long-term discount rate because the life of the company is assumed to be infinite.[25]

Second, shorter-term Treasury rates have been shown to understate the correct value for the "zero-beta" asset in the CAPM. The concepts underlying the CAPM require a risk-free return that has a zero beta (no correlation with market returns) that is the highest return for assets that have betas equal to zero. Empirical studies of CAPM show that rates for short-term and intermediate-term Treasury securities understate that risk-free return. At page 28, Mr. Rigsby notes Professor Sharpe was one of the scholars who developed the CAPM. In his book *Investments* (Prentice Hall, Third Edition, 1985, page 401), Professor

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[25] Morningstar, *Ibbotson SBBI 2009 Valuation Yearbook*, at 46, 57.

Sharpe advises readers that empirical analyses have shown the value for RF in the Sharpe-Lintner CAPM is significantly higher than short-term Treasury rates. The rate for long-term Treasury securities is simply a proxy for that RF. It is possible that long-term Treasury rates are lower than the return investors require for the zero-beta asset, but such returns are clearly a better proxy than intermediate-term rates.

Q. DO YOU HAVE ANY CONCERNS WITH HIS CHOICE OF A VALUE FOR THE MARKET RISK PREMIUM?

A. Yes. Mr. Rigsby relies on two flawed concepts to determine his market risk premiums. Those flawed concepts are the use of geometric annual average returns and the use of total returns for Treasury securities instead of conceptually correct income returns. Mr. Rigsby also relies solely on historic data, and does not consider current market risk. I discussed these issues above and will not repeat that discussion here. The MRP should be determined as an arithmetic annual average using long-term Treasury rates and, in this struggling stock market, should give weight to both long-term and current estimates of the MRP. I determined a reasonable value which recognizes these factors is a MRP of 8.5%. *See* Rebuttal Table 8.

Q. HAVE YOU RESTATED RUCO'S CAPM APPROACH WITH THE AVERAGE BETA FOR MR. RIGSBY'S SAMPLE AND CORRECTED VALUES FOR RF AND THE MRP?

A. Yes. I have restated Mr. Rigsby's CAPM equity cost with current and forecasted values of long-term Treasury rates as the measure of RF. The restatement indicates the cost of equity for his water utilities sample falls in a range of 11.6% to 11.9%, determined as follows:

$$\text{Equity cost} = RF + \beta \times MRP$$

Using current Treasury rates, the equity cost estimate is

$$11.6\% = 4.67\% + .82 \times 8.5\%,$$

and, using forecasted Treasury rates is

11.9% = 4.93% + .82 x 8.5%.

Recognizing Arizona Water is more risky than his water utilities sample, the indicated cost of equity for the Company falls in a range of 12.1% to 12.4%.

Q. PLEASE SUMMARIZE YOUR RESTATEMENTS AND CORRECTIONS OF RUCO'S DCF AND CAPM ANALYSES.

A. Mr. Rigsby presented RUCO's cost of equity testimony. Once his analyses are corrected and restated and a 50 basis point risk premium is allowed for the Company's above average risk, the range of DCF cost of equity estimates for his water utilities sample support the Company's cost of equity falling in a range of 11.5% to 11.9% and the indicated cost of equity for Arizona Water based on his CAPM approach falls in a range of 12.0% to 12.4%.

<u>Other Responses to Mr. Rigsby</u>

Q. DO YOU HAVE A RESPONSE TO HIS COMMENTS ABOUT DIFFERENCES IN YOUR DCF ESTIMATES AND HIS?

A. Yes. Mr. Rigsby states he believes the main reason for differences in our growth rate estimates is that I rely primarily on EPS forecasts and he relies on forecasts of future growth in EPS, DPS and BVPS. I do not agree. I discuss the differences in our approaches above. As I understand what he did, his focus was on determining estimates of br growth and vs growth, not forecasts of EPS, DPS and BVPS growth.

Q. HOW ABOUT DIFFERENCES IN HIS CAPM APPROACH AND YOURS?

A. One big difference is the choice of the security used to estimate the risk-free rate. Empirical tests of the CAPM have shown the simple CAPM which uses short-term Treasury rates as the risk-less rate of return are inadequate and that the CAPM actually requires a risk-less rate of return for a zero-beta asset that is higher. Professor Sharpe reports the results of CAPM tests by Fama and MacBeth ("Risk Return and Equilibrium: Empirical Tests", *Journal of Political*

Economy, (May/June 1973) pp. 607-636) in which Fama and MacBeth found the zero-beta asset return was 7.32% when short-term Treasury bill rates averaged 1.56%. Sharpe states "the difference was substantial and statistically significant".[26] The value for RF used by Mr. Rigsby of 1.87% is not very different from the rate for short-term Treasury securities at the time Fama and MacBeth made their study. Long-term Treasury rates are currently 4.67%, a value below the 7.32% found to be required by the zero-beta asset, but certainly provide a better proxy for RF than 1.87%. The quotation from Morningstar I provided above also explains why one should use a long-term Treasury return to determine required returns for an asset that has a long life. Utility stocks have lives longer than the time between rate cases.

Another important difference is Mr. Rigsby computed his market risk premium from conceptually incorrect data that relies on geometric annual averages as well as total returns for Treasury rates. I address those issues above and do not repeat that testimony here.

Q. DOES THIS COMPLETE YOUR REBUTTAL TESTIMONY?

A. Yes.

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[26] (William Sharpe, Third Edition of *Investments*, p. 401).

Arizona Water Company

Rebuttal Table 1

Past and Current Spreads Between Treasury Rates and Rates for Baa Bonds and Aaa Bonds

A. Past Actual Rates (1990 to 2007)[a/]

Year	30-Year Treasury Rates	Baa Rates	Baa Spread	Aaa Rates	Aaa Spread
1990	8.61%	10.36%	1.75%	9.32%	0.71%
1991	8.14%	9.80%	1.66%	8.77%	0.63%
1992	7.67%	8.98%	1.31%	8.14%	0.47%
1993	6.59%	7.93%	1.34%	7.22%	0.63%
1994	7.37%	8.63%	1.26%	7.97%	0.60%
1995	6.88%	8.20%	1.32%	7.59%	0.71%
1996	6.71%	8.05%	1.34%	7.37%	0.66%
1997	6.61%	7.87%	1.26%	7.27%	0.66%
1998	5.58%	7.22%	1.64%	6.53%	0.95%
1999	5.87%	7.88%	2.01%	7.05%	1.18%
2000	5.94%	8.37%	2.43%	7.62%	1.68%
2001	5.49%	7.95%	2.46%	7.08%	1.59%
2002	5.42%	7.80%	2.38%	6.49%	1.07%
2003	5.05%	6.76%	1.71%	5.66%	0.61%
2004	5.12%	6.39%	1.27%	5.63%	0.51%
2005	4.56%	6.06%	1.50%	5.23%	0.67%
2006	4.91%	6.48%	1.57%	5.59%	0.68%
2007	4.84%	6.48%	1.64%	5.56%	0.72%
Average	6.19%	7.85%	1.66%	7.01%	0.82%

B. Current Spread[b/]

	Baa bonds	Aaa bonds
30-Year Treasury	4.69%	4.69%
Bond rate	7.67%	5.81%
Spread	2.98%	1.12%

Notes and Sources:

a/ Source is Federal Reserve or as implied by rates for 20-year Treasury bonds when 30-year bonds are not available.

b/ As reported by the Federal Reserve on June 15, 2009

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Arizona Water Company

Rebuttal Table 2: Update of Table 7

Current Annualized Average Dividend Yields for Water Utilities Sample

		3-Month Average D_0/P_0	12-Month Average D_0/P_0
1	American States	3.09%	3.17%
2	Aqua America	3.12%	3.58%
4	California Water	3.23%	3.49%
5	Connecticut Water Service	4.74%	4.28%
6	Middlesex Water	5.61%	5.03%
8	SJW Corporation	3.15%	2.94%
	Average	3.82%	3.75%

Notes and Source:

_a/ For periods ending in May 2009. Data recognize time value of money.

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Arizona Water Company

Rebuttal Table 3: Update of Table 9

Analysts' Forecasts of Growth for DCF Model

		Zack's[a/]	First Call[a/]	Value Line[b/]	Average
1	American States	7.0%	4.0%	9.5%	6.8%
2	Aqua America	7.7%	7.5%	10.0%	8.4%
3	California Water	7.6%	7.5%	9.0%	8.0%
4	Connecticut Water Service	na	15.0%	na	15.0%
5	Middlesex Water	7.0%	8.0%	8.0%	7.7%
6	SJW Corporation	15.0%	10.0%	12.5%	12.5%
	Average of Reported Forecasts				9.1%
	Average without Connecticut Water Service[c/]				8.7%

Notes and Sources:

a/ Reported on the Internet, June 18, 2009.

b/ As reported April 24, 2009. Data for firms in Small and Mid-Cap edition are data reported by Value Line.

c/ Connecticut Water Service not included in average used in direct testimony or rebuttal.

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Arizona Water Company

Rebuttal Table 4: Update of Table 10

Coneptually Correct DCF Estimates for the Water Utilities Sample

		Analysts' Forecasts of Growth	
3-month Current Yield		3.82%	a/
Growth Rate		8.69%	b/
Expected Yield		4.16%	c/
ROE		12.8%	d/
12-month Current Yield		3.75%	a/
Growth Rate		8.69%	b/
Expected Yield		4.07%	c/
ROE		12.8%	d/
Range of ROE Estimates for Benchmark Utilities	12.8%	to	12.8%
Adjust for AWC's Added Risks	13.3%	to	13.3%

Notes and Sources:

a/ From Rebuttal Table 2.

b/ Average of estimated growth rates from Rebuttal Table 3.

c/ Expected yield = $D_1/P_0 = D_0/P_0 * (1 + g)$

d/ ROE = $D_1/P_0 + g$

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Arizona Water Company

Rebuttal Table 5: Update of Table 3

Comparison of Past and Future Estimates of Growth for the Water Utilites Sample
Periods Ending December 2008

		5-Year Growth As Estimated with 10-K Data				
		Price[a/]	BVPS[b/]	DPS[b/]	EPS[b/]	Average
1	American States Water	6.6%	5.2%	2.5%	17.3%	9.7%
2	Aqua America	6.6%	8.0%	8.5%	4.5%	6.3%
3	California Water Service	12.3%	6.2%	0.8%	10.2%	9.6%
4	Connecticut Water Service	-3.0%	3.2%	1.3%	7.4%	2.5%
5	Middlesex Water	-3.0%	6.5%	1.6%	8.2%	3.9%
6	SJW Corporation	18.7%	8.8%	6.0%	10.8%	12.8%
	Sample Average	6.4%	6.3%	3.5%	9.7%	7.5%

		5-Year Growth As reported by Mr. Parcell				
		Price[a/]	BVPS[d/]	DPS[d/]	EPS[d/]	Average
1	American States Water	na	5.1%	2.6%	14.7%	9.9%
2	Aqua America	na	7.9%	7.8%	5.1%	6.5%
3	California Water Service	na	6.1%	0.9%	9.4%	7.8%
4	Connecticut Water Service	na	3.2%	1.2%	-0.7%	1.2%
5	Middlesex Water	na	6.2%	1.5%	7.9%	7.0%
6	SJW Corporation	na	9.0%	5.8%	3.5%	6.2%
	Sample Average	na	6.3%	3.3%	6.6%	6.5%

		Average Annual Changes in Last Ten Years				
		Price[a/]	BVPS[c/]	DPS[c/]	EPS[c/]	Average
1	American States Water	7.0%	4.5%	1.8%	7.8%	6.4%
2	Aqua America	9.5%	9.4%	7.2%	6.4%	8.4%
3	California Water Service	5.1%	4.6%	0.9%	5.2%	5.0%
4	Connecticut Water Service	3.9%	4.0%	1.2%	5.4%	4.4%
5	Middlesex Water	4.5%	4.3%	2.0%	3.9%	4.2%
6	SJW Corporation	17.3%	6.3%	5.3%	10.0%	11.2%
	Sample Average	7.9%	5.5%	3.1%	6.5%	6.6%

		Forecasted EPS Growth[e/]
1	American States Water	6.8%
2	Aqua America	8.4%
3	California Water Service	8.0%
4	Connecticut Water Service	15.0%
5	Middlesex Water	7.7%
6	SJW Corporation	12.5%
	Sample Average	9.7%

Notes and Sources:
a/ Average of changes in year-end prices ending in 2008.
b/ Derived from data in Annual Reports to Stockholders and 10-K Reports for period 2004-2008.
c/ Derived from data in Annual Reports to Stockholders and 10-K Reports for period 1999-2008.
d/ From Mr. Parcell's Schedule 5.

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Arizona Water Company

Rebuttal Table 6: Update of Table 11

DCF Estimates Based on Staff Approach: Growth Rate Gives Equal Weight to Past and Forecasted Growth

	Update of Past and Forecasted Growth		Average of Past 5-year and Forecasted Growth	
3-month Current Yield	3.82%	a/	3.82%	a/
Growth Rate	7.86%	b/	8.08%	b/
Expected Yield	4.12%	c/	4.13%	c/
ROE	12.0%	d/	12.2%	d/
12-month Current Yield	3.75%	a/	3.75%	a/
Growth Rate	7.86%	b/	8.08%	b/
Expected Yield	4.04%	c/	4.05%	c/
ROE	11.9%	d/	12.1%	d/

Range of ROE Estimates for Benchmark Utilities	11.9%	to	12.0%	12.1%	to	12.2%
Adjust for AWC's Added Risks	12.4%	to	12.5%	12.6%	to	12.7%

Notes and Sources:

a/ From Rebuttal Table 2.

b/ Average of estimated growth rates from Rebuttal Tables 3 and 5.

c/ Expected yield = $D_1/P_0 = D_0/P_0 * (1 + g)$

d/ ROE = $D_1/P_0 + g$

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Arizona Water Company

Rebuttal Table 7: Update of Table 12

Expected 30-Year Treasury Bond Rates

	2011	2012	Average
Blue Chip Consensus Forecasts[a/]	4.90%	5.30%	5.10%
Value Line[b/]	4.50%	5.00%	4.75%
Average			4.93%

Sources and Notes:

a/ June 2009 Blue Chip consensus forecasts.

b/ Value Line Quarterly Forecasts, May 29, 2009.

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Arizona Water Company

Rebuttal Table 8: Update of Table 14

Estimate of the Cost of Equity for Benchmark Water Utilites Based on Long-Horizon Average Market Risk Premium

Cost of Equity = RF + Beta x MRP

	CAPM Estimate
Risk Free Rate[a/]	4.93%
Beta[b/]	0.84
Market Risk Premium[c/]	8.5%
Cost of Equity for Water Utilities Sample =	12.0%
Indicated Cost of Equity for AWC =	12.5%

Notes and Sources:

a/ From Rebuttal Table 7.

b/ From Value Line as of April 24, 2009.

c/ Update of long-horizon market risk preium reported by Morningstar Ibbotson SBBI, 2009 Valuation Yearbook, Table 5-1 adjusted to reflect iniital recovery of the stock market with a 13.6% risk premium

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Rebuttal Table 9: Update of Table 14

Estimate of the Cost of Equity for the Water Utilites Sample and Arizona Water Based on Recent Market Risk Premiums[c/]

Cost of Equity = RF + Beta x MRP

	CAPM Estimate
Risk Free Rate[a/]	4.93%
Beta[b/]	0.84
Market Risk Premium[c/]	8.3%
Cost of Equity for Water Utilities Sample =	11.9%
Indicated Cost of Equity for AWC =	12.4%

Notes and Sources:
a/ From Table 7.
b/ From Value Line as of April 24, 2009.
c/ Average of recent equity risk premiums implied by DCF analysis of the Value Industrial Composite from 1987 to 2009. See Rebuttal Table 10.

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Arizona Water Company

Rebuttal Table 10

Determination of Average Risk Premiums Based on DCF Analyses of the Value Line Industrial Composite: 1987 to 2007

Study	Study Date	Dividend Yield	Sustainable growth	DCF Equity Cost	Long-term Treasury Lag 1 Mnth	Risk Premium
1	2/87	3.00%	9.39%	12.39%	7.39%	5.00%
2	2/88	3.10%	9.93%	13.03%	8.83%	4.20%
3	7/88	3.50%	7.77%	11.27%	9.00%	2.27%
4	2/89	3.50%	7.77%	11.27%	8.93%	2.34%
5	2/90	3.20%	7.77%	10.97%	8.26%	2.71%
6	1/91	3.70%	9.93%	13.63%	8.24%	5.39%
7	2/92	2.80%	9.39%	12.19%	7.58%	4.61%
8	2/93	2.90%	8.31%	11.21%	7.34%	3.87%
9	2/94	3.00%	8.31%	11.31%	6.39%	4.92%
10	2/95	2.70%	9.93%	12.63%	7.97%	4.66%
11	3/96	2.70%	10.48%	13.18%	6.03%	7.15%
12	2/97	2.40%	12.13%	14.53%	6.91%	7.62%
13	1/98	1.50%	14.92%	16.42%	6.07%	10.35%
14	1/99	1.30%	16.05%	17.35%	5.36%	11.99%
15	2/00	0.80%	16.05%	16.85%	6.86%	9.99%
16	7/00	1.00%	14.92%	15.92%	6.28%	9.64%
17	2/01	1.20%	13.79%	14.99%	5.65%	9.34%
18	7/01	1.20%	12.13%	13.33%	5.82%	7.51%
19	1/02	1.20%	12.13%	13.33%	5.76%	7.57%
20	8/02	1.60%	12.68%	14.28%	5.51%	8.77%
21	1/03	1.60%	12.13%	13.73%	5.01%	8.72%
22	7/03	1.50%	11.57%	13.07%	4.34%	8.73%
23	3/04	1.60%	12.13%	13.73%	4.94%	8.79%
24	10/04	1.80%	11.57%	13.37%	4.89%	8.48%
25	4/05	1.90%	11.57%	13.47%	4.89%	8.58%
26	11/05	2.10%	12.68%	14.78%	4.74%	10.04%
27	5/06	2.10%	12.68%	14.78%	5.22%	9.56%
28	11/06	2.20%	15.48%	17.68%	4.94%	12.74%
29	5/07	2.50%	14.92%	17.42%	4.87%	12.55%
30	11/07	1.60%	15.48%	17.08%	4.77%	12.31%
31	5/08	1.80%	17.76%	19.56%	4.44%	15.12%
32	11/08	2.80%	15.48%	18.28%	4.17%	14.11%
33	5/09	2.80%	15.48%	18.28%	3.76%	14.52%

Averages for:

All years (1987-2009)	8.3%
Last 15 years (1995-2009)	10.0%
Last 10 years (2000-2009)	10.4%

06/23/09

Arizona Water Company

Rebuttal Table 11: Update of Table 16

Summary Table: Estimated Cost of Equity for Arizona Water Company

	Estimated Equity Costs for Benchmark Water Utilities Sample			Estimates of Equity Costs for Arizona Water[a/]		
DCF Estimates						
Update of Table 10	12.8%	to	12.8%	13.3%	to	13.3%
Update of Table 11	11.9%	to	12.2%	12.4%	to	12.7%
DCF Average		12.4%			12.9%	
CAPM Estimates						
Update of Table 13		12.0%			12.5%	
Update of Table 14		11.9%			12.4%	
CAPM Average		12.0%			12.5%	
Range of Equity Cost Estimates	11.9%	to	12.4%	12.4%	to	12.9%
Average Cost of Equity Estimate[b/]		12.2%			12.7%	

Notes:

a/ Equity Cost estimates include a 50 basis point risk premium for AWC.

b/ Cost of Equity determined with Staff method of giving equal weight to DCF and CAPM estimates,

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Arizona Water Company

Rebuttal Table 12: Restatement of Mr. Parcell's Schedule 5
Page 4 of 4 for the Staff Sample of 6 Water Utilties

PROXY WATER UTILITIES DCF COST RATES

COMPANY	ADJUSTED YIELD-a/	HISTORIC RETENTION GROWTH	PROSPECTIVE RETENTION GROWTH	HISTORIC PER SHARE GROWTH-c/	PROSPECTIVE PER SHARE GROWTH	PROJECTED EPS GROWTH	AVERAGE GROWTH	DCF RATES
American States Water Co.	3.4%	_b/	_b/	8.3%	5.8%	6.8%	7.0%	10.4%
Aqua America, Inc.	3.2%	_b/	_b/	7.0%	6.7%	8.4%	7.3%	10.6%
California Water Service Group	3.3%	_b/	_b/	5.7%	4.8%	8.0%	6.2%	9.5%
Connecticut Water Service, Inc.	4.5%	_b/	_b/	4.0%		15.0%	9.5%	14.0%
Middlesex Water	5.1%	_b/	_b/	5.4%		7.7%	6.5%	11.6%
SJW Corporation	3.0%	_b/	_b/	8.5%		12.5%	10.5%	13.5%
Mean	3.7%			6.5%	5.8%	9.7%	7.8%	11.6%

Notes and Sources
a/ Source is update of Tab "DivYld WP" used to prepare the Staff COC schedules.
b/ Not included because Mr. Parcell failed to include estimate of vs growth.
c/ Corrected historical growth rates based on arithmetic annual average growth. Reported in Rebuttal Table 5.

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Rebuttal Table 13: Analysis and Restatement of Mr. Parcell's Schedule 6

STANDARD & POOR'S 500 COMPOSITE
20-YEAR U.S. TREASURY BOND YIELDS
RISK PREMIUMS [a/]

Year	EPS	BVPS	ROE	20-YEAR T-BOND	RISK PREMIUM
1977		$79.07			
1978	$12.33	$85.35	15.00%	7.90%	7.10%
1979	$14.86	$94.27	16.55%	8.86%	7.69%
1980	$14.82	$102.48	15.06%	9.97%	5.09%
1981	$15.36	$109.43	14.50%	11.55%	2.95%
1982	$12.64	$112.46	11.39%	13.50%	-2.11%
1983	$14.03	$116.93	12.23%	10.38%	1.85%
1984	$16.64	$122.47	13.90%	11.74%	2.16%
1985	$14.61	$125.20	11.80%	11.25%	0.55%
1986	$14.48	$126.82	11.49%	8.98%	2.51%
1987	$17.50	$134.04	13.42%	7.92%	5.50%
1988	$23.75	$141.32	17.25%	8.97%	8.28%
1989	$22.87	$147.26	15.85%	8.81%	7.04%
1990	$21.73	$153.01	14.47%	8.19%	6.28%
1991	$16.29	$158.85	10.45%	8.22%	2.23%
Most recent complete businsess cycle [b/]					
1992	$19.09	$149.74	12.37%	7.26%	5.11%
1993	$21.89	$180.88	13.24%	7.17%	6.07%
1994	$30.60	$193.06	16.37%	6.59%	9.78%
1995	$33.96	$215.51	16.62%	7.60%	9.02%
1996	$38.73	$237.08	17.11%	6.18%	10.93%
1997	$39.72	$249.52	16.33%	6.64%	9.69%
1998	$37.71	$266.40	14.62%	5.83%	8.79%
1999	$48.17	$290.68	17.29%	5.57%	11.72%
2000	$50.00	$325.80	16.22%	6.50%	9.72%
2001	$24.69	$338.37	7.43%	5.53%	1.90%
Last busines cycle [b/]					
2002	$27.59	$321.72	8.36%	5.59%	2.77%
2003	$48.73	$367.17	14.15%	4.80%	9.35%
2004	$58.55	$414.75	14.98%	5.02%	9.96%
2005	$69.93	$453.06	16.12%	4.69%	11.43%
2006	$81.51	$504.39	17.03%	4.68%	12.35%
2007	$66.17	$529.59	12.80%	4.86%	7.94%
1978 - 2007 Average			14.09%	7.69%	6.45%
1992 - 2001 Average			14.76%	6.49%	8.27%
2002 - 2007 Average			13.90%	4.94%	8.96%
Changes betwe last two busines cycles			-0.86%	-1.55%	0.69%
Estimated slope = change in MRP/change in RF					-0.45
Current 20-year Treasury rate and Expected MRP				**4.67%**	**9.08%**

Notes and Sources:
a/ Data from Mr. Parcell's schedule 6.
b/ As stated in Mr. Parcell's testimony at page 26, lines 1 to 2.
c/ Current 20-year Treasury rate reported by the Federal Reserve as of June 15, 2009.

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Rebuttal Table 14: Update and Response to Mr. Parcell's Schedule 7
CAPM Estimates for the ACC Staff Water Utilities Sample

Panel A.	Current 20 Year RF[a/]	Beta[b/]	Average MRP[c/]	Equity Cost Estimate
American States Water Co.	4.67%	0.85	7.79%	11.3%
Aqua America, Inc.	4.67%	0.75	7.79%	10.5%
California Water Service Group	4.67%	0.85	7.79%	11.3%
Connecticut Water Service, Inc.	4.67%	0.80	7.79%	10.9%
Middlesex Water	4.67%	0.80	7.79%	10.9%
SJW Corporation	4.67%	1.00	7.79%	12.5%
Average				**11.2%**

Panel B.	Expected 20-Year RF[d/]	Beta[b/]	Average MRP[c/]	Equity Cost Estimate
American States Water Co.	4.93%	0.85	7.79%	11.5%
Aqua America, Inc.	4.93%	0.75	7.79%	10.8%
California Water Service Group	4.93%	0.85	7.79%	11.5%
Connecticut Water Service, Inc.	4.93%	0.80	7.79%	11.2%
Middlesex Water	4.93%	0.80	7.79%	11.2%
SJW Corporation	4.93%	1.00	7.79%	12.7%
Average				**11.5%**

Notes and Sources:

a/ Current 20-year Treasury rate as reported by the Federal Reserve on June 15, 2009.

b/ As reported by Mr. Parcell in Schedule 7.

c/ Average of long-term average MRP reported by Morningstar in 2009 Valuation Yearbook of 6.5% and estimate of current MRP reported in Rebuttal Table 13.

d/ Source is Rebuttal Table 7.

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Rebuttal Table 15: Analysis and Response to Mr. Parcell's Comparable Earnings Analysis

Panel A: Analysis of S&P Data

Line	Period	Risk-free Rate[b/]	Earned ROE[c/]	Risk Premium for S&P 500	Market to Book Ratio[c/]
1	1992-2001	6.49%	14.8%	8.27%	3.41
2	2002-2007	4.94%	13.9%	8.96%	2.84
3	Average (1992-2007)	5.71%	14.3%	8.62%	3.13
4	Current RF and MRP[a/]	4.67%		9.08%	

Panel B: Analyis of Mr. Parcell's Samples

		Large Value Line Utilites Sample	AUS Utility Reports Sample	ACC Staff Water Utilties Sample
	Past Period (Averages for 1992 -2007)			
4	Beta (2005)	0.68	0.68	0.68
5	RF	5.71%	5.71%	5.71%
6	MRP	8.62%	8.62%	8.62%
7	Required ROE	11.57%	11.57%	11.57%
8	Earned ROE	9.5%	10.2%	10.6%
9	Market to book ratio	1.99	2.00	2.04
	Current Period			
10	Beta[d/]	0.90	0.85	0.84
11	RF[e/]	4.67%	4.67%	4.67%
12	MRP[e/]	9.08%	9.08%	9.08%
14	Current Required ROE	12.85%	12.39%	12.30%
13	2008 Earned ROE	9.0%	9.1%	9.4%
15	2008 Market to Book Ratio	1.84	1.70	1.93

Notes and Sources:
a/ Source is Rebuttal Table 13.
b/ Mr. Parcell's Schedule 6.
c/ Mr. Parcell's Schedule 9.
d/ Mr. Parcell's Schedule 10, page 1 of 2.
e/ From line 4 of panel A.

Arizona Water Company

Rebuttal Table 16

Examination of Bias in Real and Nominal Value Line ROE Forecasts for 8 Natural Gas Utilities
1977 to 1998

		Nominal Returns			Inflation-c/			Real Returns		
	Date of Value Line Issue	Average Value Line Forecasted ROE (1977-1994)	Average Actual Earned ROE 4 Years Later (1981-1998)	Difference Between Forecasted and Actual Nominal ROEs	Expected Inflation	Actual Inflation	Difference Between Forecasted and Actual Inflation	Average Value Line Forecasted ROE (1977-1994)	Actual Earned ROE 4 Years Later (1981-1998)	Difference Between Forecasted and Actual Real ROEs
1	Oct-77	13.00%	11.32%	1.68%	5.50%	9.70%	-4.20%	7.50%	1.62%	5.88%
2	Jan-79	12.81%	11.91%	0.90%	5.50%	3.90%	1.60%	7.31%	8.01%	-0.70%
3	Oct-80	14.13%	15.86%	-1.73%	8.25%	3.70%	4.55%	5.88%	12.16%	-6.28%
4	Oct-81	15.06%	13.81%	1.25%	7.50%	3.20%	4.30%	7.56%	10.61%	-3.05%
5	Oct-82	14.00%	12.07%	1.93%	5.20%	2.60%	2.60%	8.80%	9.47%	-0.67%
6	Oct-83	13.94%	12.28%	1.66%	5.00%	3.00%	2.00%	8.94%	9.28%	-0.34%
7	Oct-84	15.13%	14.67%	0.46%	5.50%	3.70%	1.80%	9.63%	10.97%	-1.34%
8	Oct-85	15.56%	13.12%	2.44%	4.50%	4.20%	0.30%	11.06%	8.92%	2.14%
9	Oct-86	13.63%	12.41%	1.21%	3.80%	4.40%	-0.60%	9.83%	8.01%	1.81%
10	Oct-87	13.19%	11.62%	1.56%	4.50%	4.00%	0.50%	8.69%	7.62%	1.06%
11	Oct-88	13.13%	10.88%	2.24%	4.60%	2.70%	1.90%	8.53%	8.18%	0.34%
12	Oct-89	13.50%	12.58%	0.92%	4.60%	2.60%	2.00%	8.90%	9.98%	-1.08%
13	Oct-90	14.00%	11.71%	2.29%	4.30%	2.30%	2.00%	9.70%	9.41%	0.29%
14	Oct-91	14.13%	11.34%	2.78%	3.70%	2.50%	1.20%	10.43%	8.84%	1.58%
15	Oct-92	14.38%	13.08%	1.29%	3.90%	2.10%	1.80%	10.48%	10.98%	-0.51%
16	Dec-93	12.56%	12.62%	-0.06%	2.40%	2.00%	0.40%	10.16%	10.62%	-0.46%
17	Dec-94	12.19%	11.20%	0.99%	2.80%	1.30%	1.50%	9.39%	9.90%	-0.51%
	Average	13.78%	12.50%	1.28%	4.80%	3.41%	1.39%			-0.11%

Notes and Source:
a/ Source of Study: Testimony of T. Zepp in Oregon PUC Docket UG-132, Exhibit UG-132/NWN/5000.
b/ ROEs are annual averages for 8 natural gas distribution companies for each year.
c/ Based on forecasted and realized values for the GNP deflator.

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Rebuttal Table 17

Comparison of Forecasted and Realized Value Line Forecasts of br-growth for Electric Utility (Central) Industry
1982 to 2007

				Nominal - br growth[b/]			Consumer Price Index[a/]			Real - br growth		
Line	Year-end Date of Forecast	Future period	Future Mid-Year	Value Line Forecast of br Growth	Actual br Growth	Difference Between Forecasted and Actual	Forecast	Actual	Difference Between Forecasted and Actual	Forecast	Actual	Difference Between Forecasted and Actual
1	1982	1985 -1987	1986	3.00%	4.60%	-1.60%	5.00%	1.90%	3.10%	-2.00%	2.70%	-4.70%
2	1983	1986 -1988	1987	4.00%	4.40%	-0.40%	5.30%	3.70%	1.60%	-1.30%	0.70%	-2.00%
3	1984	1987 -1989	1988	4.50%	3.30%	1.20%	5.50%	4.10%	1.40%	-1.00%	-0.80%	-0.20%
4	1985	1988 -1990	1989	5.00%	2.90%	2.10%	5.00%	4.80%	0.20%	0.00%	-1.90%	1.90%
5	1986	1989 -1991	1990	5.00%	2.50%	2.50%	4.50%	5.40%	-0.90%	0.50%	-2.90%	3.40%
6	1987	1990 -1992	1991	4.70%	2.40%	2.30%	5.00%	4.20%	0.80%	-0.30%	-1.80%	1.50%
7	1988	1991 -1993	1992	4.00%	3.30%	0.70%	4.50%	3.00%	1.50%	-0.50%	0.30%	-0.80%
8	1989	1992 -1994	1993	3.70%	2.90%	0.80%	4.90%	3.00%	1.90%	-1.20%	-0.10%	-1.10%
9	1990	1993 -1995	1994	3.80%	2.50%	1.30%	4.70%	2.60%	2.10%	-0.90%	-0.10%	-0.80%
10	1991	1995 -1997	1996	3.70%	3.00%	0.70%	4.50%	2.90%	1.60%	-0.80%	0.10%	-0.90%
11	1992	1995 -1997	1996	3.50%	3.00%	0.50%	4.10%	2.90%	1.20%	-0.60%	0.10%	-0.70%
12	1993	1996 -1998	1997	3.10%	2.60%	0.50%	3.40%	2.30%	1.10%	-0.30%	0.30%	-0.60%
13	1994	1997 -1999	1998	3.00%	2.80%	0.20%	3.50%	1.60%	1.90%	-0.50%	1.20%	-1.70%
14	1995	1998 -2000	1999	3.20%	4.20%	-1.00%	3.30%	2.20%	1.10%	-0.10%	2.00%	-2.10%
15	1996	1999 -2001	2000	3.60%	0.10%	3.50%	3.30%	3.40%	-0.10%	0.30%	-3.30%	3.60%
16	1997	2000 -2002	2001	4.00%	5.40%	-1.40%	2.80%	2.80%	0.00%	1.20%	2.60%	-1.40%
17	1998	2001 -2003	2002	4.50%	2.50%	2.00%	2.80%	1.60%	1.20%	1.70%	0.90%	0.80%
18	1999	2002 -2004	2003	5.20%	4.80%	0.40%	2.80%	2.30%	0.50%	2.40%	2.50%	-0.10%
19	2000	2003 -2005	2004	6.00%	4.80%	1.20%	2.70%	2.70%	0.00%	3.30%	2.10%	1.20%
20	2001	2004 -2006	2005	6.00%	4.90%	1.10%	2.80%	3.40%	-0.60%	3.20%	1.50%	1.70%
21	2002	2005 -2007	2006	5.50%	5.50%	0.00%	2.80%	3.20%	-0.40%	2.70%	2.30%	0.40%
22	2003	2006 -2008	2007	5.50%	5.50%	0.00%	2.50%	2.90%	-0.40%	3.00%	2.60%	0.40%
		Column average		4.30%	3.54%	0.75%	3.90%	3.04%	0.85%	0.40%	0.50%	-0.10%

Notes and Sources:

a/ Forecasted and actual Consumer Price Index values which were correlated with Value Line estimates for the Electric Utility (Central) Industry.

b/ Acutal br-growth and forecasted br-growth as reported by Value Line in various year-end issues of Issue 5, Ratings & Reports for the Electric Utility (Central) Industry.

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Arizona Water Company

Rebuttal Table 18: Analysis of Mr. Rigsby's br and vs Growth Rates

	br Growth	[A] Adopted by Mr. Rigsby	[B] Calculated by Mr. Rigsby in Work Papers[a/]	[C] Calculated br Growth Adjusted with FERC Formula[b/]
1	American States Water Co.	6.0%	6.4%	6.5%
2	California Water Service Group	6.0%	5.9%	6.1%
3	Aqua America, Inc.	4.0%	5.8%	6.0%
4	Average	5.3%	6.0%	6.2%

	vs Growth	Adopted by Mr. Rigsby	Calculated vs with Formula[c/] used by Gordon
5	American States Water Co.	1.81%	3.61%
6	California Water Service Group	0.63%	1.27%
7	Aqua America, Inc.	0.30%	0.60%
8	Average	0.91%	1.83%

	br + vs Growth	Adopted by Mr. Rigsby	Revised and Corrected br + vs Growth
9	American States Water Co.	7.81%	10.16%
10	California Water Service Group	6.63%	7.37%
11	Aqua America, Inc.	4.30%	6.56%
12	Average	6.25%	8.03%

Notes and Sources:

a/ From Mr. Rigsby's electronic work paper titled "AWC Utilities C-sched Water Sample".

b/ FERC formula adjusts br growth estimates to reflect Value Line reporting ROEs calculated with year-end equity.

c/ Gordon formula computes "v" from current market prices.

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Arizona Water Company

Rebuttal Table 19

Revisons and Corrections of RUCO's DCF Analysis[a/]
Docket No. W-01445A-08-0440

Panel A. Revise and Correct RUCO br + vs growth

COMPANY	Corrected Dividend Yield[b/] (D_0/P_0)	DCF Dividend Yield[c/] (D_1/P_0)	Corrected BR + VS Growth Rate[b/]	DCF Cost of Equity Capital
AWR	3.12%	3.44%	10.16%	13.59%
CWT	3.33%	3.58%	7.37%	10.95%
WTR	3.13%	3.34%	6.56%	9.90%
			WATER COMPANY AVERAGE:	**11.5%**
			RECOGNIZE AWC'S REQUIRED RISK PREMIUM	**12.0%**

Panel B. Adopt forward-looking forecasts published by Zacks[a/]

COMPANY	Corrected Dividend Yield[b/] (D_0/P_0)	DCF Dividend Yield[c/] (D_1/P_0)	Zacks Growth Rates[a/]	DCF Cost of Equity Capital
AWR	3.12%	3.39%	8.70%	12.09%
CWT	3.33%	3.60%	8.00%	11.60%
WTR	3.13%	3.39%	8.30%	11.69%
			WATER COMPANY AVERAGE:	**11.8%**
			RECOGNIZE AWC'S REQUIRED RISK PREMIUM	**12.3%**

Notes and Sources:
a/ Data taken from RUCO's electronic work paper.
b/ Mr. Rigsby's dividend yields increased to reflect the time value of money.
c/ RUCO failed to use conceptually correct dividend growth in first year.

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Arizona Water Company
Final Cost of Equity Estimates
Sample Water Utilities

[A]	[B]		[C]		[D]		[E]
DCF Method			D_1/P_0 [1]	+	g [2]	=	k
Constant Growth DCF Estimate			3.7%	+	5.6%	=	9.3%
Multi-Stage DCF Estimate						=	10.3%
Average of DCF Estimates							**9.8%**
CAPM Method	Rf	+	β [5]	x	(Rp)	=	k
Historical Market Risk Premium[3]	3.3%	+	0.84	x	7.0% [6]	=	9.1%
Current Market Risk Premium[4]	4.6%	+	0.84	x	13.6% [7]	=	16.1%
Average of CAPM Estimates							**12.6%**
					Average		**11.2%**
					Financial risk adjustment		0.0%
					Total		**11.2%**

1 MSN Money and Value Line

2 Schedule TZ-6

3 Risk-free rate (Rf) for 5, 7, and 10 year Treasury rates from the U.S. Treasury Department at www.ustreas.gov 06/16/2009

4 Risk-free rate (Rf) for 30 Year Treasury bond rate from the U.S. Treasury Department at www.ustreas.gov 06/16/2009

5 Value Line

6 Historical Market Risk Premium (Rp) from Ibbotson Associates SBBI 2009 Yearbook, Table 5-1.

7 Value Line Investment Survey June 19, 2009

Arizona Water Company
Average Capital Structure of Sample Water Utilities

[A] Company	[B] Debt	[C] Common Equity	[D] Total
American States Water	45.6%	54.4%	100.0%
California Water	41.4%	58.6%	100.0%
Aqua America	53.6%	46.4%	100.0%
Connecticut Water	46.4%	53.6%	100.0%
Middlesex Water	45.0%	55.0%	100.0%
SJW Corp	46.4%	53.6%	100.0%
Average Sample Water Utilities	**46.4%**	**53.6%**	**100.0%**
Arizona Water Company	**50.0%**	**50.0%**	**100.0%**

Source:
Sample Water Companies from Value Line

Arizona Water Company
Growth in Earnings and Dividends
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]
Company	Dividends Per Share 1998-2008 DPS[1]	Dividends Per Share Projected DPS[1]	Earnings Per Share 1998-2008 EPS[1]	Earnings Per Share Projected EPS[1]
American States Water	1.8%	5.1%	3.7%	10.9%
California Water	0.9%	2.8%	2.7%	6.9%
Aqua America	7.0%	4.0%	6.2%	11.4%
Connecticut Water	1.2%	No Projection	0.8%	No Projection
Middlesex Water	1.9%	No Projection	2.3%	No Projection
SJW Corp	5.2%	No Projection	3.6%	No Projection
Average Sample Water Utilities	**3.0%**	**3.9%**	**3.2%**	**9.7%**

1 Value Line

Arizona Water Company
Sustainable Growth
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]
Company	Retention Growth **1998 to 2007** br	Retention Growth Projected br	Stock Financing Growth vs	Sustainable Growth **1998 to 2007** br + vs	Sustainable Growth Projected br + vs
American States Water	2.9%	6.5%	1.3%	4.2%	7.8%
California Water	1.9%	6.1%	3.9%	5.9%	10.0%
Aqua America	4.3%	6.0%	3.7%	8.1%	9.7%
Connecticut Water	2.5%	No Projection	1.0%	3.5%	No Projection
Middlesex Water	1.3%	No Projection	1.8%	3.1%	No Projection
SJW Corp	4.2%	No Projection	0.1%	4.3%	No Projection
Average Sample Water Utilities	**2.9%**	**6.2%**	**2.0%**	**4.8%**	**9.2%**

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

Arizona Water Company
Selected Financial Data of Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[G]
Company	Symbol	Spot Price 6/16/2009	Book Value	Mkt To Book	*Value Line* Beta β	Raw Beta βraw
American States Water	AWR	**32.59**	18.30	1.8	**0.85**	0.75
California Water	CWT	**35.36**	19.95	1.8	**0.85**	0.75
Aqua America	WTR	**16.79**	8.17	2.1	**0.75**	0.60
Connecticut Water	CTWS	**20.65**	12.77	1.6	**0.80**	0.67
Middlesex Water	MSEX	**13.77**	10.76	1.3	**0.80**	0.67
SJW Corp	SJW	**21.99**	14.09	1.6	**1.00**	0.97
Average				**1.7**	**0.84**	**0.73**

[C]: Msn Money

[D]: Value Line

[E]: [C] / [D]

[F]: Value Line April 24, 2009

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

Arizona Water Company
Calculation of Expected Infinite Annual Growth in Dividends
Sample Water Utilities

[A]	[B]
Description	g
DPS Growth - Historical[1]	3.0%
DPS Growth - Projected[1]	3.9%
EPS Growth - Historical[1]	3.2%
EPS Growth - Projected[1]	9.7%
Sustainable Growth - Historical[2]	4.8%
Sustainable Growth - Projected[2]	9.2%
Average	**5.6%**

1 Schedule TZ-3

2 Schedule TZ-4

Arizona Water Company
Multi-Stage DCF Estimates
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[H]	[I]
Company	Current Mkt. Price (P_o)[1] 6/16/2009	Projected Dividends[2] (Stage 1 growth) (D_t) d_1	d_2	d_3	d_4	Stage 2 growth[3] (g_n)	Equity Cost Estimate (K)[4]
American States Water	**32.6**	1.10	1.17	1.23	1.30	6.7%	10.0%
California Water	**35.4**	1.18	1.25	1.32	1.39	6.7%	9.9%
Aqua America	**16.8**	0.54	0.57	0.60	0.64	6.7%	9.8%
Connecticut Water	**20.7**	0.93	0.98	1.04	1.10	6.7%	11.1%
Middlesex Water	**13.8**	0.70	0.74	0.78	0.83	6.7%	11.6%
SJW Corp	**22.0**	0.65	0.69	0.73	0.77	6.7%	9.6%
						Average	**10.3%**

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

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

1 [B] see Schedule TZ-5

2 Derived from Value Line Information

3 Average annual growth in GDP 1929 - 2008 in current dollars.

4 Internal Rate of Return of Projected Dividends

3 http://www.bea.doc.gov/

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Roger A. Morin, PhD

2006
PUBLIC UTILITIES REPORTS, INC.
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Appendix 4-A
Arithmetic versus Geometric Means in Estimating the Cost of Capital

The use of the arithmetic mean appears counter-intuitive at first glance, because we commonly use the geometric mean return to measure the average annual achieved return over some time period. For example, the long-term performance of a portfolio is frequently assessed using the geometric mean return.

But performance appraisal is one thing, and cost of capital estimation is another matter entirely. In estimating the cost of capital, the goal is to obtain the rate of return that investors expect, that is, a target rate of return. On average, investors expect to achieve their target return. This target expected return is in effect an arithmetic average. The achieved or retrospective return is the geometric average. In statistical parlance, the arithmetic average is the unbiased measure of the expected value of repeated observations of a random variable, not the geometric mean. This appendix formally illustrates that only arithmetic averages can be used as estimates of cost of capital, and that the geometric mean is not an appropriate measure of cost of capital.

The geometric mean answers the question of what constant return you would have had to achieve in each year to have your investment growth match the return achieved by the stock market. The arithmetic mean answers the question of what growth rate is the best estimate of the future amount of money that will be produced by continually reinvesting in the stock market. It is the rate of return which, compounded over multiple periods, gives the mean of the probability distribution of ending wealth.

While the geometric mean is the best estimate of performance over a long period of time, this does not contradict the statement that the arithmetic mean compounded over the number of years that an investment is held provides the best estimate of the ending wealth value of the investment. The reason is that an investment with uncertain returns will have a higher ending wealth value than an investment which simply earns (with certainty) its compound or geometric rate of return every year. In other words, more money, or terminal wealth, is gained by the occurrence of higher than expected returns than is lost by lower than expected returns.

In capital markets, where returns are a probability distribution, the answer that takes account of uncertainty, the arithmetic mean, is the correct one for estimating discount rates and the cost of capital.

While the geometric mean is appropriate when measuring performance over a long time period, it is incorrect when estimating a risk premium to compute the cost of capital.

TABLE 4A-1
GEOMETRIC VS. ARITHMETIC RETURNS

	Stock A	Stock B
1996	50.0%	11.61%
1997	−54.7%	11.61%
1998	98.5%	11.61%
1999	42.2%	11.61%
2000	−32.3%	11.61%
2001	−39.2%	11.61%
2002	153.2%	11.61%
2003	−10.0%	11.61%
2004	38.9%	11.61%
2005	20.0%	11.61%
Standard Deviation	64.9%	0.0%
Arithmetic Mean	26.7%	11.6%
Geometric Mean	11.6%	11.6%

Theory

The geometric mean measures the magnitude of the returns, as the investor starts with one portfolio and ends with another. It does not measure the variability of the journey, as does the arithmetic mean. The geometric mean is backward looking. There is no difference in the geometric mean of two stocks or portfolios, one of which is highly volatile and the other of which is absolutely stable. The arithmetic mean, on the other hand, is forward-looking in that it does impound the volatility of the stocks.

To illustrate, Table 4A-1 shows the historical returns of two stocks, the first one is highly volatile with a standard deviation of returns of 65% while the second one has a zero standard deviation. It makes no sense intuitively that the geometric mean is the correct measure of return, one that implies that both stocks are equally risky since they have the same geometric mean. No rational investor would consider the first stock equally as risky as the second stock. Every financial model to calculate the cost of capital recognizes that investors are risk-averse and avoid risk unless they are adequately compensated for undertaking it. It is more consistent to use the mean that fully impounds risk (arithmetic mean) than the one from which risk has been removed (geometric mean). In short, the arithmetic mean recognizes the uncertainty in the stock market while the geometric mean removes the uncertainty by smoothing over annual differences.

Empirical Evidence

If both the geometric and arithmetic mean returns over the 1926–2004 data are regressed against the standard deviation of returns for the firms in the

deciles, the arithmetic mean outperforms the geometric mean in this statistical regression. Moreover, the constant of arithmetic mean regression matches the average Treasury bond rate and therefore makes economic sense while the constant for the geometric mean matches nothing in particular. This is simply because the geometric mean is stripped of volatility information and, as a result, does a poor job of forecasting returns based on volatility.

The following illustration is frequently invoked in defense of the geometric mean. Suppose that a stock's performance over a two-year period is representative of the probability distribution, doubling in one year ($r_1 = 100\%$) and halving in the next ($r_2 = -50\%$). The stock's price ends up exactly where it started, and the geometric average annual return over the two-year period, r_g, is zero:

$$
\begin{aligned}
1 + r_g &= [(1 + r_1)(1 + r_2)]^{1/2} \\
&= [(1 + 1)(1 - .50)]^{1/2} = 1 \\
r_g &= 0
\end{aligned}
$$

confirming that a zero year-by-year return would have replicated the total return earned on the stock. The expected annual future rate of return on the stock is not zero, however. It is the arithmetic average of 100% and −50%, $(100 - 50)/2 = 25\%$. There are two equally likely outcomes per dollar invested: either a gain of \$1 when $r = 100\%$ or a loss of \$0.50 when $r = -50\%$. The expected profit is $(\$1 - \$.50)/2 = \$.25$ for a 25% expected rate of return. The profit in the good year more than offsets the loss in the bad year, despite the fact that the geometric return is zero. The arithmetic average return thus provides the best guide to expected future returns.

What Academics Have to Say

Bodie, Kane, and Marcus (2005) cite:

> Which is the superior measure of investment performance, the arithmetic average or the geometric average? The geometric average has considerable appeal because it represents the constant rate of return we would have needed to earn in each year to match actual performance over some past investment period. It is an excellent measure of *past* performance. However, if our focus is on future performance, then the arithmetic average is the statistic of interest because it is an unbiased estimate of the portfolio's expected future return (assuming, of course, that the expected return does not change over time). In contrast, because the geometric return over a sample period is always less than the arithmetic mean,

> it constitutes a downward-biased estimator of the stock's expected return in any future year.
>
> Again, the arithmetic average is the better guide to future performance.

Another way of stating the Bodie, Kane, Marcus argument in favor of the arithmetic mean is that it is the best estimate of the future value of the return distribution because it represents the expected value of the distribution. It is most useful for determining the central tendency of a distribution at a particular time, that is, for cross-sectional analysis. The geometric mean, on the other hand, is best suited for measuring an investment's compound rate of return over time, that is, for time-series analysis. This is the same argument made by Ibbotson Associates (2005) where it is shown, using probability theory, that future terminal wealth is given by compounding the arithmetic mean, and not the geometric mean. In other words, if we accept the past as prologue, the best estimate of a future year's return based on a random distribution of the prior years' returns is the arithmetic average. Statistically, it is our best guess for the holding-period return in a given year.

Brigham and Ehrhardt (2005) in their widely used corporate finance text point out that the arithmetic average is more consistent with CAPM theory, as one of its key underpinning assumptions is that investors are supposed to focus, in their portfolio decisions, upon returns in the next period and the standard deviation of this return. To the extent that this next period is one year, the preference for the arithmetic mean, which derives from a set of single one year period returns, follows. It is also noteworthy that one of the crucial assumptions inherent in the CAPM is that investors are single-period expected utility of terminal wealth maximizers who choose among alternative portfolios on the basis of each portfolio's expected return and standard deviation.

Brealey, Myers, and Allen (2006) in their leading graduate textbook in corporate finance opt strongly for the arithmetic mean. The authors illustrate the distinction between arithmetic and geometric averages and conclude that arithmetic averages are appropriate when estimating the cost of capital:

> The proper uses of arithmetic and compound rates of return from past investments are often misunderstood. Therefore, we call a brief time-out for a clarifying example.
>
> Suppose that the price of Big Oil's common stock is \$100. There is an equal chance that at the end of the year the stock will be worth \$90, \$110, or \$130. Therefore, the return could be -10 percent, $+10$ percent or $+30$ percent (we assume that Big Oil does not pay a dividend). The expected return is $1/3(-10+10+30) = +10$ percent.

If we run the process in reverse and discount the expected cash flow by the expected rate of return, we obtain the value of Big Oil's stock:

$$PV = \frac{110}{1.10} = \$100$$

The expected return of 10 percent is therefore the correct rate at which to discount the expected cash flow from Big Oil's stock. It is also the opportunity cost of capital for investments which have the same degree of risk as Big Oil.

Now suppose that we observe the returns on Big Oil stock over a large number of years. If the odds are unchanged, the return will be -10 percent in a third of the years, $+10$ percent in a further third, and $+30$ percent in the remaining years. The arithmetic average of these yearly returns is

$$\frac{-10 + 10 + 30}{3} = +10\%$$

Thus the arithmetic average of the returns correctly measures the opportunity cost of capital for investments of similar risk to Big Oil stock.

The average compound annual return on Big Oil stock would be

$$(.9 \times 1.1 \times 1.3)^{1/3} - 1 = .088, \text{ or } 8.8\%$$

less than the opportunity cost of capital. Investors would not be willing to invest in a project that offered an 8.8 percent expected return if they could get an expected return of 10 percent in the capital markets. The net present value of such a project would be

$$NPV = -100 + \frac{108.8}{1.1} = -1.1$$

Moral: If the cost of capital is estimated from historical returns or risk premiums, use arithmetic averages, not compound annual rates of return (geometric averages).

(Richard A. Brealey, Stewart C. Myers, and Paul Allen, *Principles of Corporate Finance*, 8th Edition, Irwin McGraw-Hill, 2006, page 156–7.)

The widely cited Ibbotson Associates publication also contains a detailed and rigorous discussion of the impropriety of using geometric averages in estimating the cost of capital.[12]

[12] Ibbotson Associates, *Stocks, Bonds, Bills, and Inflation, 2005 Yearbook, Valuation Edition*, page 75.

> The arithmetic average equity risk premium can be demonstrated to be most appropriate when discounting future cash flows. For use as the expected equity risk premium in either the CAPM or the building block approach, the arithmetic mean or the simple difference of the arithmetic means of stock market returns and riskless rates is the relevant number. This is because both the CAPM and the building block approach are additive models, in which the cost of capital is the sum of its parts. The geometric average is more appropriate for reporting past performance, since it represents the compound average return.
>
> The argument for using the arithmetic average is quite straightforward. In looking at projected cash flows, the equity risk premium that should be employed is the equity risk premium that is expected to actually be incurred over the future time periods.
>
> The best estimate of the expected value of a variable that has behaved randomly in the past is the average (or arithmetic mean) of its past values.

In their widely publicized research on the market risk premium, Dimson, Marsh and Staunton (2002) state

> The arithmetic mean of a sequence of different returns is always larger than the geometric mean. To see this, consider equally likely returns of +25 and −20 percent. Their arithmetic mean is 2½ percent, since (25 − 20)/2 = 2½. Their geometric mean is zero, since (1 + 25/100) × (1 − 20/100) − 1 = 0. But which mean is the right one for discounting risky expected future cash flows? For forward-looking decisions, the arithmetic mean is the appropriate measure.
>
> To verify that the arithmetic mean is the correct choice, we can use the 2½ percent required return to value the investment we just described. A $1 stake would offer equal probabilities of receiving back $1.25 or $0.80. To value this, we discount the cash flows at the arithmetic mean rate of 2½ percent. The present values are respectively $1.25/1.015 = $1.22 and $0.80/1.025 = $0.78, each with equal probability, so the value is $1.22 × ½ + $0.80 × ½ = $1.00. If there were a sequence of equally likely returns of +25 and −20 percent, the geometric mean return will eventually converge on zero. The 2½ percent forward-looking arithmetic mean is required to compensate for the year-to-year volatility of returns.

Lastly, on the practical side, Bruner, Eades, Harris, and Higgins (1998) found that 71% of the texts and tradebooks in their extensive survey of practice supported use of an arithmetic mean for estimation of the cost of equity.

Mean Reversion Argument

Some academics have argued that if stock returns were expected to revert to a trend, this would suggest the use of a geometric mean since the geometric mean is, by definition, an estimate of a smoothed long-run trend increment. These same academics have argued that the historical estimate of the market risk premium (''MRP'') is upward-biased by the buoyant performance of the stock market prior to 2002, and because of the extraordinary and unusually high realized MRPs in those years, investors expect a return to lower MRPs in the future, bringing the average MPR to a more ''normal'' level.

The presence or absence of mean reversion is an empirical issue. The empirical findings are weak and highly contradictory; the empirical evidence is inconclusive and unconvincing, certainly not enough to support the ''mean reversion'' hypothesis. The weight of the empirical evidence on this issue is that the more sophisticated tests of mean reversion in the MRP demonstrate that the realized MRP over the last 75 years or so was almost perfectly free of mean reversion, and had no statistically identifiable time trend. It is also noteworthy that most of these studies were performed prior to the stock market's debacle in 2000–2002, years of extraordinary and unusually low realized MRPs. The stock market's dismal performance of 2000–2002 has certainly taken the wind out of the mean reversion school's sails.

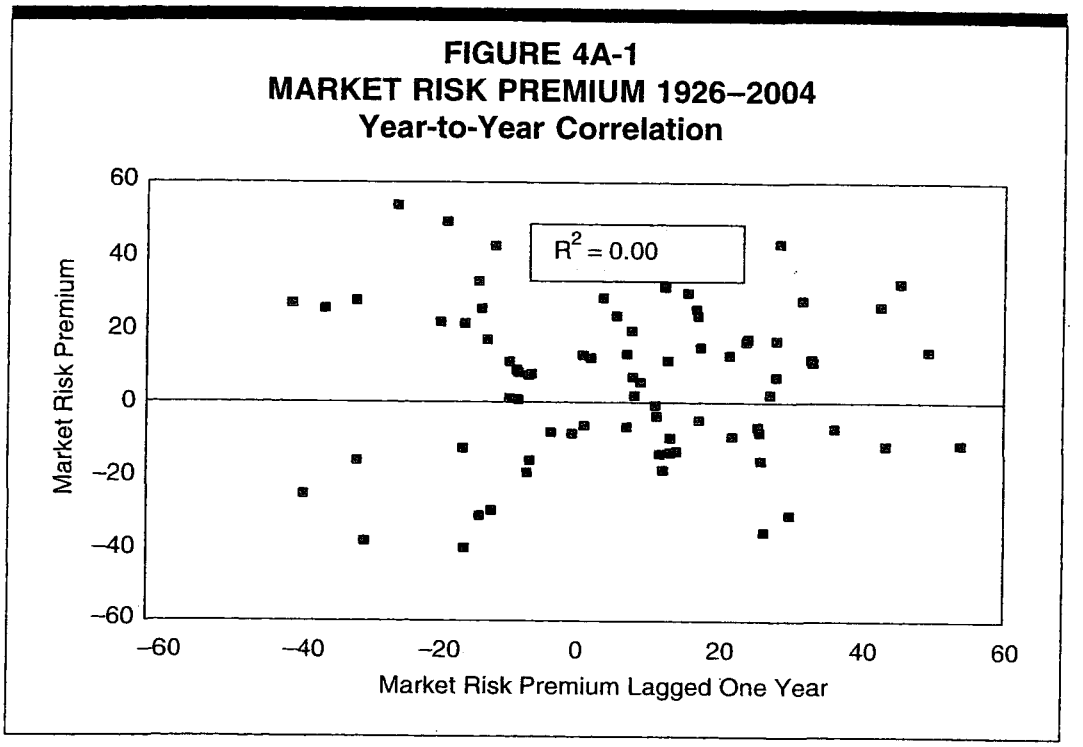
An examination of historical MRPs reveals that the MRP is random with no observable pattern. To the extent that the estimated historical equity risk premium follows what is known in statistics as a random walk, one should expect the equity risk premium to remain at its historical mean. Therefore, the best estimate of the future risk premium is the historical mean.

Ibbotson Associates (2005) find no evidence that the market price of risk or the amount of risk in common stocks has changed over time:

> Our own empirical evidence suggests that the yearly difference between the stock market total return and the U.S. Treasury bond income return in any particular year is random . . . there is no discernable pattern in the realized equity risk premium. (Ibbotson Associates, *Stocks, Bonds, Bills, and Inflation, 2005 Yearbook, Valuation Edition,* pages 74–75)

In statistical parlance, there is no significant serial correlation in successive annual market risk premiums, that is, no trend. Ibbotson Associates go on to state that it is reasonable to assume that these quantities will remain stable in the future (*Id.*):

> The best estimate of the expected value of a variable that has behaved randomly in the past is the average (or arithmetic mean)



of its past values. (Ibbotson Associates, *Stocks, Bonds, Bills, and Inflation, 2004 Yearbook, Valuation Edition*, page 75)

Nowhere is it suggested by Ibbotson Associates that the market risk premium has declined over time.

Because there is little evidence that the MRP has changed over time, it is reasonable to assume that these quantities will remain stable in the future. Figure 4A-1 shows the relationship, or the lack of relationship, between year-to-year MRPs reported in the Ibbotson Associates Valuation Yearbook, 2005 edition, for the 1926–2004 period. The relationship is virtually absent, as indicated by the low R^2 of zero between successive MRPs. In other words, there is no history in successive MRPs as indicated by the zero serial correlation coefficient.

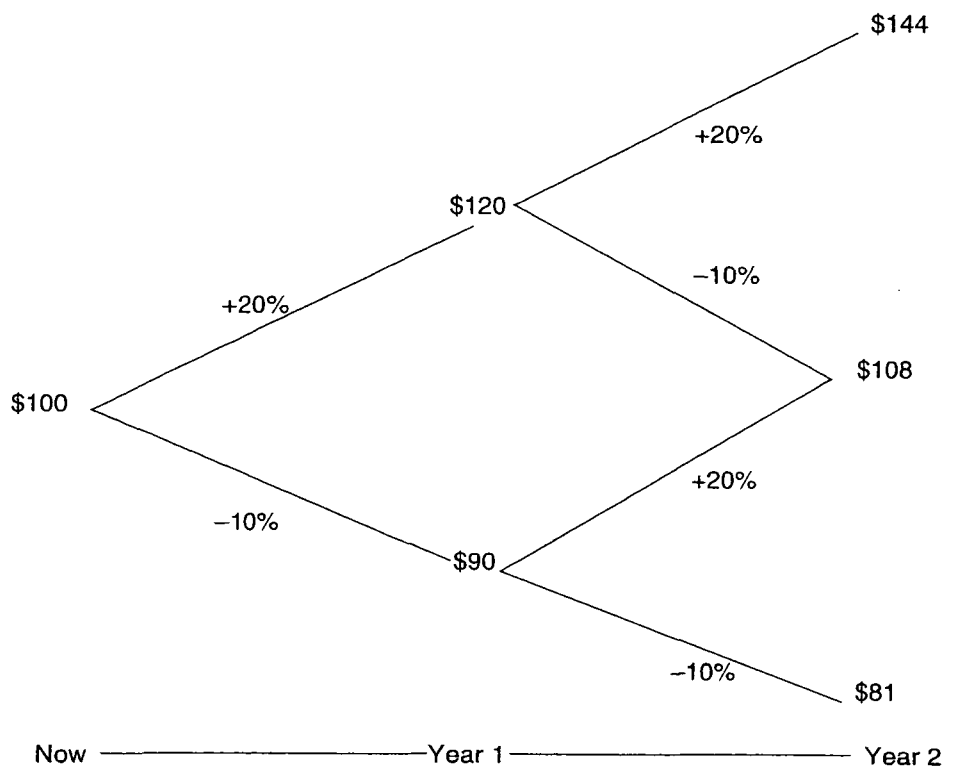
In short, the determination of the cost of capital with the CAPM requires an unbiased estimate of the expected annual return. The expected arithmetic return provides the appropriate measure for this purpose.

Formal Demonstration

This section shows why arithmetic rather than geometric means should be used for forecasting, discounting, and estimating the cost of capital.[13] By

[13] This section is adapted from a similar treatments and demonstration in Brealey, Myers, and Allen (2006) and Ibbotson Associates (2005).

FIGURE 4A-2
POSSIBLE STOCK PRICES



definition, the cost of equity capital is the annual discount rate that equates the discounted value of expected future cash flows (from dividends and the sale of the stock at the end of the investor's investment horizon) to the current market price of a share in the firm. The discount rate that equates the discounted value of future expected dividends and the end of period expected stock price to the current stock price is a prospective arithmetic, rather than a prospective geometric, mean rate of return. Since future dividends and stock prices cannot be predicted with certainty, the "expected" annual rate of return that investors require is an average "target" percentage rate around which the actual, year-by-year returns will vary. This target rate is, in effect, an arithmetic average.

A numerical illustration will clarify this important point. Consider a non-dividend paying stock trading for $100 which has, in every year, an equal chance of appreciating by 20% or declining by 10%. Thus, after one year, there is an equal chance that the stock's price will be $120 and an equal chance the price will be $90. Figure 4A-2 presents all possible eventualities after two periods have elapsed (the rates of return are presented at the end of the lines in the diagram).

The possible stock prices are shown in the following table.

TABLE 4A-2
STOCK PRICES AFTER TWO PERIODS

Price	Chance
$144	1 chance in 4
$108	2 chances in 4
$ 81	1 chance in 4

The expected future stock price after two periods is then:

$$1/4\ (\$144) + 2/4\ (\$108) + 1/4\ (\$81) = \$110.25$$

The cost of equity capital is calculated as the discount rate that equates the present value of the future expected cash flows to the current stock price. In the present simple example, the only cash flow is the gain from selling the stock after two periods have elapsed. Thus, using the expected stock price of $110.25 calculated above, the expected rate of return is that r, which solves the following equation:

$$\text{Current Stock Price} = \frac{\text{Expected Stock Price}}{(1 + r)^2}$$

The factor $(1 + r)^2$ discounts the expected stock price to the present. Substituting the numerical values, we have:

$$\$100 = \frac{\$110.25}{(1+r)^2}$$

$$r = 5\%$$

Thus, the cost of equity capital is 5%. This 5% cost of equity capital is equal to the prospective arithmetic mean rate of return, which is the probability-weighted average single period rate of return on equity. Since in every period there is an equal chance that the stock's return will be 20% or −10%, the probability-weighted average is:

$$1/2\ (20\%) + 1/2\ (-10\%) = 5\%$$

However, the 5% cost of equity capital is not equal to the prospective geometric mean rate of return, which is a probability-weighted average of the possible compounded rates of return over the two periods. Now consider the prospective geometric mean rate of return. Table 4A-3 shows the possible compounded rates of return over two periods, and the probability of each.

Thus, the prospective geometric mean rate of return is:

$$1/4\ (20\%) + 2/4\ (3.92\%) + 1/4\ (-10\%) = 4.46\%$$

TABLE 4A-3
STOCK PRICES AND RETURNS AFTER TWO PERIODS

Price	Chance	Compounded Return
$144	1 chance in 4	20.00%
$108	2 chances in 4	3.92%
$ 81	1 chance in 4	−10.00%

This return is not equal to the 5% cost of equity capital.

The example can easily be extended to include the case of a dividend-paying company and will reach the same conclusion: the implied discount rate calculated in the DCF model is an expected arithmetic rather than an expected geometric mean rate of return.

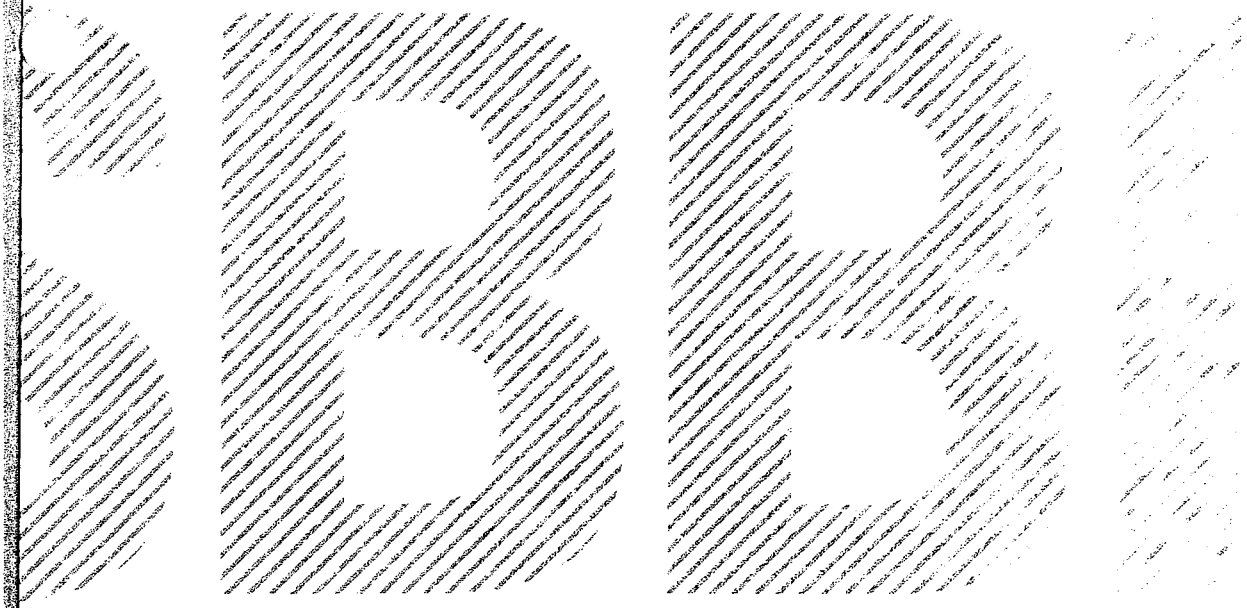
The foregoing analysis shows that it is erroneous to use a prospective multi-year geometric mean rate of return as a "target" rate of return for each year of the period. If, for example, investors currently require an expected future rate of return on an investment of 13% each year, then 13% is the appropriate annual rate of return on equity for ratemaking purposes. Consequently, in using a risk premium approach for the purposes of rate of return regulation, the single-year annual required rate of return should be estimated using arithmetic mean risk premiums.

It should be pointed out that the use of the arithmetic mean does not imply an investment holding period of one year. Rather, it is premised on the uncertainty with respect to each year's return during the holding period, however many years that may be. When computing the arithmetic average of historic annual returns in order to calculate the average return (expected value of the return), every achieved return outcome is one possible future outcome for each year the security will be held. Each historic return has an equal probability of occurring during each year of the holding period. The resulting expected value of the risk premium is the arithmetic average of all of the past premiums considered, regardless of the length of the expected holding period.

Ibbotson® SBBI®

2009 Valuation Yearbook

Market Results for
Stocks, Bonds, Bills, and Inflation
1926–2008



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Treasury bond; however, the Treasury currently does not issue a 20-year bond. The 30-year bond that the Treasury recently began issuing again is theoretically more correct due to the long-term nature of business valuation, yet Ibbotson Associates instead creates a series of returns using bonds on the market with approximately 20 years to maturity. The reason for the use of a 20-year maturity bond is that 30-year Treasury securities have only been issued over the relatively recent past, starting in February of 1977, and were not issued at all through the early 2000s.

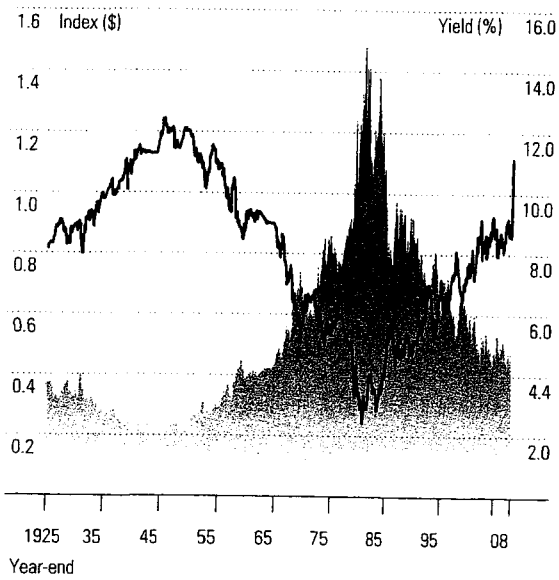
The same reason exists for why we do not use the 10-year Treasury bond—a long history of market data is not available for 10-year bonds. We have persisted in using a 20-year bond to keep the basis of the time series consistent.

Income Return

Another point to keep in mind when calculating the equity risk premium is that the income return on the appropriate-horizon Treasury security, rather than the total return, is used in the calculation. The total return is comprised of three return components: the income return, the capital appreciation return, and the reinvestment return. The income return is defined as the portion of the total return that results from a periodic cash flow or, in this case, the bond coupon payment. The capital appreciation return results from the price change of a bond over a specific period. Bond prices generally change in reaction to unexpected fluctuations in yields. Reinvestment return is the return on a given month's investment income when reinvested into the same asset class in the subsequent months of the year. The income return is thus used in the estimation of the equity risk premium because it represents the truly riskless portion of the return.[2]

Yields have generally risen on the long-term bond over the 1926–2008 period, so it has experienced negative capital appreciation over much of this time. This trend has turned around since the 1980s, however. Graph 5-2 illustrates the yields on the long-term government bond series compared to an index of the long-term government bond capital appreciation. In general, as yields rose, the capital appreciation index fell, and vice versa. Had an investor held the long-term bond to maturity, he would have realized the yield on the bond as the total return. However, in a constant maturity portfolio, such as those used to measure bond returns in this publication, bonds are sold before maturity (at a capital loss if the market yield has risen since the time of purchase). This negative return is associated with the risk of unanticipated yield changes.

Graph 5-2: Long-term Government Bond Yields versus Capital Appreciation Index



Data from 1925–2008.

For example, if bond yields rise unexpectedly, investors can receive a higher coupon payment from a newly issued bond than from the purchase of an outstanding bond with the former lower-coupon payment. The outstanding lower-coupon bond will thus fail to attract buyers, and its price will decrease, causing its yield to increase correspondingly, as its coupon payment remains the same. The newly priced outstanding bond will subsequently attract purchasers who will benefit from the shift in price and yield; however, those investors who already held the bond will suffer a capital loss due to the fall in price.

Anticipated changes in yields are assessed by the market and figured into the price of a bond. Future changes in yields that are not anticipated will cause the price of the bond to adjust accordingly. Price changes in bonds due to unanticipated changes in yields introduce price risk into the total return. Therefore, the total return on the bond series does not represent the riskless rate of return.The income return better represents the unbiased estimate of the purely riskless rate of return, since an investor can hold a bond to maturity and be entitled to the income return with no capital loss.

ARIZONA WATER COMPANY

Docket No. W-01445A-08-0440

2008 RATE HEARING

For Test Year Ending 12/31/07

PREPARED

REJOINDER TESTIMONY

OF

Thomas M. Zepp

EXHIBIT

A-43

ADMITTED

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ARIZONA WATER COMPANY

Rejoinder Testimony of

THOMAS M. ZEPP

I. INTRODUCTION AND PURPOSE OF TESTIMONY

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Thomas M. Zepp. My business address is 1500 Liberty Street, S.E., Suite 250, Salem, Oregon 97032.

Q. ARE YOU THE SAME THOMAS M. ZEPP THAT PREVIOUSLY PROVIDED DIRECT AND REBUTTAL TESTIMONY IN THIS MATTER?

A. Yes. I previously filed direct and rebuttal testimony on the appropriate cost of equity. My professional background and experience are described in my direct testimony.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?

A. On behalf of the applicant, Arizona Water Company ("Arizona Water" or "the Company").

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. The purpose of this rejoinder testimony is to address the August 7, 2009 surrebuttal testimonies of David C. Parcell, who testifies on behalf of the ACC Utilities Division Staff ("Staff"), and William A. Rigsby who testifies on behalf of the Residential Utility Consumer Office ("RUCO").

Q. HOW IS YOUR REJOINDER TESTIMONY ORGANIZED?

A. In section II, I respond to the surrebuttal testimony of Mr. Parcell and in section III respond to Mr. Rigsby.

Q. HAS YOUR RECOMMENDED COST OF EQUITY FOR ARIZONA WATER CHANGED BASED ON THE SURREBUTTAL TESTIMONIES OF MR. PARCELL AND MR. RIGSBY?

A. No, it has not. It remains my opinion that under the current circumstances, Arizona Water should be authorized a return on equity of 12.4%. Nothing presented in the surrebuttal testimonies of Mr. Parcell and Mr. Rigsby suggest that the cost of equity estimates I presented in my rebuttal testimony are erroneous or result in an unreasonable estimate of Arizona Water's current cost of equity. As explained below, the arguments presented by Mr. Parcell and Mr. Rigsby either lack any legitimate basis or are conceptually erroneous.

II. RESPONSES TO MR. PARCELL

Q. AT PAGE 2 AND OTHER PLACES, MR. PARCELL CRITICIZES YOU FOR CALLING YOUR UPDATE OF THE METHODS STAFF USED IN PAST CASES AS THE "STAFF APPROACH". DO YOU HAVE A RESPONSE?

A. Yes. The "Staff approach" that I used was an update of the spread sheets prepared and relied on by Staff in Chaparral City Water Company's pending rate case, Docket No. W-021113A-07-0551. That is a fact. Mr. Parcell never questioned the veracity of my update of the Staff approach, which is true to the methods Staff used in that case and in other water utility rate cases, including Arizona Water's previous rate cases, in which I testified on the cost of equity. The update using the Staff approach methodology and data raises serious questions about the credibility of the methods and data Mr. Parcell used to obtain a 10% cost of equity, which is substantially lower than the equity cost of 11.2% that is produced with the Staff approach and approved by the Commission in past cases.

The Commission should be concerned about the validity of Mr. Parcell's Discounted Cash flow ("DCF") and Capital Asset Pricing Model ("CAPM") analyses. Compared to the Staff approach, Mr. Parcell's DCF estimates are

flawed by his choice of samples, his decision to adjust the current dividend by only one-half of the growth rate, his decision to limit his analysis to the constant growth DCF model, and choices which water-down the growth rate to a level below what investors realistically expect. Compared to the Staff approach, Mr. Parcell's CAPM approach also understates the cost of equity. He ignores methods Staff routinely uses to determine the current as well as the long-horizon market risk premiums, and thus biases his equity cost estimates downward.

In my view, an equity cost estimate that is 120 basis points below what is produced by the "Staff approach" is not "fair and reasonable."

Q. AT PAGE 3 AND AT PAGE 5, MR. PARCELL STATES THAT HIS TESTIMONY WAS RELIED UPON BY STAFF IN THE CHAPARRAL CITY RATE CASE. WAS IT?

A. No. Not to my knowledge. I understand that Staff relied upon the methods I have called the "Staff approach" to determine its final position on the cost of equity in the Chaparral City rate case, and did not use Mr. Parcell's methods and data.

Q. AT PAGE 4, MR. PARCELL REITERATES HIS CONTENTION THAT LOWER EARNINGS RESULTING FROM THE RECESSION REDUCE THE OPPORTUNITY COST AND THUS REQUIRED RETURN ON EQUITY ("ROE") FOR ARIZONA WATER. DO YOU HAVE A RESPONSE?

A. Yes. His definition of "opportunity cost" is a measure of book earnings. He ignores the fact that with a severe recession, market prices for shares of common stock decrease, and if long-term estimates of growth remain the same or increase, the real "opportunity cost" in terms of market performance is higher – not lower – as a result of the recession. Water utilities are a clear case in point. Dividend yields are up (as stock prices have dropped) since this time last year, and analysts' forecasts of growth are the same or slightly higher than they were

last year. Thus, the opportunity cost of capital has increased. An opportunity cost should be determined by an examination of market values, not book returns.

Q. AT PAGE 6, MR. PARCELL STATES THAT THE SAME FACTORS THAT HAVE CAUSED THE DCF RESULTS TO INDICATE A HIGHER COST OF EQUITY HAVE ALSO CAUSED THE CAPM RESULTS TO SHOW LOWER COSTS OF EQUITY. DO YOU AGREE?

A. No. Mr. Parcell and I agree that the cost of equity estimated with the DCF model has increased. All of the appropriate inputs to the DCF model are easily updated. Analysts' forecasts of growth are readily available and easily updated. Dividend yields are also easy to update because prices and dividends are known. DCF estimates of the cost of equity are higher today than last year, as Mr. Parcell admits.

The CAPM, however, is not so transparent. The proxy for the zero beta asset is usually taken to be the yield on a long-term Treasury security. Rebuttal Table 1 in my rebuttal testimony, however, shows the spreads between Treasury securities and corporate bonds are not at normal levels at this time. To the extent that the spread between the zero-beta asset and corporate bonds has not changed, the choice of a Treasury security as the proxy for the zero-beta asset will understate the CAPM cost of equity for all stocks.

Moreover, Mr. Parcell fails to include a current estimate of the market risk premium ("MRP") in his CAPM approach. Consequently, he is unable to detect the upward movement in the MRP. As I show in my update of the Staff approach, an estimate of the current MRP – included in the Staff approach – shows that the current MRP is higher than the long-horizon estimate of the MRP at this time. Without an estimate of the current MRP, Mr. Parcell cannot say anything of substance about what has happened to CAPM estimates of the cost of equity after the financial crisis. Mr. Parcell's mechanical application of his CAPM approach leads him to draw an unsupportable conclusion about how

CAPM estimates have changed. Therefore, his testimony at page 6 lines 16 to 19 should be disregarded.

Q. AT THE BOTTOM OF PAGE 6, MR. PARCELL CONTENDS THAT ESTIMATES OF THE MRP BASED ON GEOMETRIC ANNUAL AVERAGES SHOULD BE GIVEN WEIGHT BECAUSE THE DATA ARE AVAILABLE TO INVESTORS. DO YOU HAVE A RESPONSE?

A. Yes. I agree knowledgeable investors would know about and use geometric annual averages to measure past performance. But those same knowledgeable investors would use the conceptually correct arithmetic annual average concept to determine what equity returns are expected in the future. I explain why this is true in my rebuttal testimony and refer the reader to that testimony. Mr. Parcell does not provide any substantive testimony to rebut my explanation of why arithmetic averages should be relied upon to determine estimates of future growth and returns. His testimony is conceptually incorrect and should be disregarded.

Q. AT PAGE 8, MR. PARCELL STATES RELIANCE ON ANALYSTS' FORECASTS OF EARNINGS PER SHARE ("EPS") GROWTH IN THE DCF MODEL IS PROBLEMATIC AND OF DUBIOUS BENEFIT TO INVESTORS. DO YOU HAVE A RESPONSE?

A. Yes. Again, I addressed this issue at length in my rebuttal testimony, and Mr. Parcell offers nothing of substance to rebut my analysis. In particular, no response to the two studies I performed that show analysts' forecasts for utilities are very accurate once we recognize forecasts of inflation were higher than actual realized inflation. Mr. Parcell also fails to respond to the fact that, though not perfect, analysts' forecasts are superior to other data that is available to forecast the future. He says that "this time a year ago very few, if any, analysts predicted the decline in corporate earnings and stock prices that actually

occurred." But he does not offer any evidence to show that other types of data provided better forecasts.

In disparaging the quality of analysts' forecasts, he implies there is something better, but he cannot tell the reader what it is because it does not exist. Obviously, it is not historical data. The recession and financial crisis are certainly significant departures from past trends revealed in historical data. Mr. Parcell does not tell us what other sources of data are better at forecasting the future. Thus his testimony on this issue should be disregarded.

Q. AT PAGE 30, LINES 12 TO 24, HE OFFERS TWO CRITIQUES OF YOUR CAPM DISCUSSION. DO YOU HAVE A RESPONSE?

A. Yes. I discuss the reason arithmetic annual returns should be relied upon and why income returns should be subtracted from total returns for stocks in my rebuttal testimony. I do not repeat that testimony, but refer to pages 16 to 20 and 30 to 31 of my rebuttal testimony. Additionally, I provided a copy of Dr. Morin's thorough discussion of the arithmetic/geometric average issue in Tab 3 of my rebuttal testimony. Mr. Parcell is unable to explain why his opinion should be accepted instead of the consensus of scholars discussed by Dr. Morin. In Tab 4 of my rebuttal, I also provided Morningstar's clear explanation of why the income return on Treasury securities should be used as the risk-free rate when determining long-horizon MRPs.[1] Mr. Parcell does not respond to either of these solid analyses, and thus his contentions should be disregarded.

Q. DO YOU HAVE ANY RESPONSE TO MR. PARCELL'S COMMENTS ABOUT YOUR REBUTTAL OF HIS COMPARABLE EARNINGS APPROACH?

A. Yes, I have three responses. First, he suggests that my determination of an implied MRP of 9.08% from his data is flawed when it is simply the result of

[1] Dr. Morin similarly explains in his textbook why the total return on a long-term treasury does not represent the risk-free rate of return. Roger A. Morin, *Regulatory Finance* 158 n. 10 (Public Utility Reports, Inc. 2006).

combining his data for the Standard & Poor's 500 (from Parcell Schedule 9), his betas (from Parcell Schedule 10) and the averages of Treasury rates he reports in Parcell Schedule 6. His data imply market risk premiums of 8.27% for 1992-2001 and 8.96% for 2002-2007. I will grant Mr. Parcel that I have broadened the determination of the MRP by recognizing that the implicit MRP is 9.08% when the current Treasury rate is lower than in the past, but my analysis does not depend on that calculation. If I had instead used the smallest MRP calculated directly from Mr. Parcell's data, 8.27% (see line 1 of Zepp Rebuttal Table 15), that MRP is substantially higher than the 5.6% MRP Mr. Parcell derives in his direct testimony using other methods. Contrary to Mr. Parcell's statement at page 11, line 10 of his surrebuttal, it is the 5.6% MRP that should be questioned, not the 8.27% MRP produced by the data in Mr. Parcell's schedules.

Second, if the smallest MRP of 8.27% is used in the analysis I presented in Rebuttal Table 15, the estimate of the required ROE I determined at line 14 of Rebuttal Table 15 drops from 12.30% to 11.81%. But 11.8% is still 180 basis points higher than the 10% ROE Mr. Parcell recommends and 240 basis points above the 9.4% ROE the Staff sample earned in 2008.

Finally, if the Commission decides to change policy and give weight to comparable earnings analyses when it determines Arizona Water's ROE, the data Mr. Parcell presents supports an ROE for the Staff sample of no less than 11.8% and a fair return for Arizona Water of no less than 12.3%.

III. RESPONSES TO MR. RIGSBY

Q. AT PAGE 6, MR. RIGSBY REITERATES THE POSITION HE TAKES IN HIS DIRECT TESTIMONY THAT A 5-YEAR TREASURY RATE SHOULD BE USED AS THE RISK-FREE RATE IN THE CAPM ANALYSIS. HAS HE ADDED ANY NEW SUPPORT FOR HIS CHOICE?

A. No. At page 46 of my rebuttal, I explain why Mr. Rigsby's CAPM equity cost estimate is simply not credible. His CAPM estimates ranged from 5.26% to

7.43% when the yield on investment grade utility bonds was 7.76%. One of the reasons his CAPM estimates are clearly unreasonable is they incorporate yields on 5-year Treasury bonds, which are much lower than the return investors require to hold the zero-beta asset in the CAPM. If adopted, Mr. Rigsby's recommendation would be confiscatory. It is common sense that the cost of common equity for a utility is greater than the cost of less risky investment grade bonds.

At page 47 of my rebuttal, I presented a citation from Morningstar which provides a logical explanation of why the infinitely long life of the common stock asset requires a long-term asset be used as the proxy for zero-beta asset. In his textbook on regulatory finance, Dr. Morin similarly explains that the yield on a long-term Treasury security is the preferred proxy for the risk-free rate in the CAPM.[2] It is the <u>life of the asset</u> that requires the use of a long-term asset, <u>not</u> (a) the length of the period an investor might hold the common stock, (b) the length of the period between rates cases, (c) the length of periods analysts use to forecasts growth rates or (d) the periods FERC uses to determine growth.

Additionally, empirical studies of the CAPM show that the required return for the zero-beta asset is much higher than the return on the 5-year Treasury security. In fact, even the expected yield on 30-year Treasuries may be too low at present. Mr. Rigsby never responds to these fundamental reasons the long-term Treasury is a better proxy for the risk-free rate than the 5-year Treasury security. His choice of the 5-year Treasury should not be adopted, and his recommendation that relies on data for 5-year Treasury securities should be disregarded. Moreover, it should be recognized that even the 30-year Treasury rate may understate the return required for the zero-beta asset at the present

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[2] *Regulatory Finance, supra,* at 151-52.

time, and thus its use may cause the CAPM to understate the current cost of equity.

Q. AT PAGE 8, MR. RIGSBY ARGUES THAT BOTH THE GEOMETRIC AS WELL AS THE ARITHMETIC ANNUAL AVERAGES SHOULD BE CONSIDERED WHEN ESTIMATING THE MRP. *DO YOU AGREE?*

A. No. This is an important issue. Thus, I devoted an entire section (Section IV) of my rebuttal testimony to it. I also attached an excerpt from Dr. Morin's textbook at Tab 3 to that testimony to show why no weight should be given to geometric annual averages. At page 8, lines 15-17, Mr. Rigsby says that consideration of geometric annual averages is "particularly relevant in the case of the return on the stock market, which has had it share of ups and downs." He is correct that the stock market has been volatile. But such volatility is only recognized by the arithmetic annual average. By contrast, the geometric annual average simply compares two observations – the one at the start of the period and the one at the end of the period. It ignores the variability in returns that occurred between the beginning and ending points, and therefore understates the risk associated with the market. A good illustration of this point is found in Dr. Morin's textbook on page 134, attached to my rebuttal testimony at Tab 3, which compares the historical returns of two stocks calculated using arithmetic and geometric averages.

Q. DOES MR. RIGSBY'S EXAMPLE ON PAGES 8 AND 9 OF HIS SURREBUTTAL TESTIMONY JUSTIFY USING GEOMETRIC ANNUAL AVERAGES TO FORECAST THE FUTURE?

A. No. His example shows that the geometric annual average is the best way to describe what has happened in the past, but our goal is to forecast what <u>may happen in the future</u>. When we are determining a forecast of the future from past data, we never know what the final outcome will be when we hold risky assets. Therefore, we look at an average of all of the annual returns from the past to try

and glean what may happen. If we actually know what is going to happen – as Mr. Rigsby assumes – the asset would be risk-less and not a risky asset like a common stock.

Q. AT PAGE 10, MR. RIGSBY CITES A BOOK BY COPELAND, KOLLER AND MURRIN ("CKM") TO SUPPORT HIS CLAIM THAT A TRUE MARKET RISK PREMIUM MAY LIE SOMEWHERE BETWEEN THE ARITHMETIC AND GEOMETRIC ANNUAL AVERAGES. DOES IT?

A. No. At page 219, the authors state:

> The arithmetic average is the best estimate of future expected returns because all possible paths are given equal weighting. The simple geometric average return is 0 percent [in exhibit 10.6], but this is the historical return along a single path that was realized by chance. Although the geometric return is the correct measure of historical performance, it is not forward-looking.

Q. AT PAGE 10, LINES 17-23, MR. RIGSBY ALSO CLAIMS THE CKM BOOK SHOWS THAT YEAR-TO-YEAR RETURNS ARE NOT INDEPENDENT, WHICH MEANS THAT THE ARITHMETIC AVERAGE BASED ON AN AVERAGE OF ANNUAL RETURNS HAS LESS CREDENCE. WHAT DOES CURRENT RESEARCH SHOW ON THIS POINT?

A. Morningstar provides updated evidence on this point. Morningstar has determined that the yearly difference between the stock market total return and the income return on long-term Treasury securities in any particular year is random, i.e., there is no serial correlation.[3] Therefore, the arithmetic average of those annual returns provides the best estimate of the average of all "possible paths" of concern to the authors. Also, if annual returns are independent of each

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[3] Morningstar, *Ibbotson SBBI 2009 Valuation Yearbook* 60.

other, it is appropriate to use annual periods, rather than a longer period such as two years or three years, as is suggested by Mr. Rigsby at page 11, to compute arithmetic averages.

Q. AT PAGE 11, MR. RIGSBY ALSO DISCUSSES OTHER POTENTIAL DATA PROBLEMS RAISED BY CKM AND STATES THAT AFTER CKM CONSIDERED THOSE PROBLEMS, THEIR ESTIMATE OF THE MRP WAS IN THE RANGE OF 4.0% TO 5.5%. IS HE CORRECT?

A. No. Based on the data in CKM Exhibit 10.8, they determined that the MRP based on arithmetic annual averages was 7.5%, which is consistent with Morningstar, Morin and other reliable sources. They then arbitrarily substitute an average based on two-year periods, 6.5%, and combine that average with a negative adjustment of 1.5% to 2.0% to account for their subjective view that U. S. stock markets will not do as well during the next 100 years as they have in the past, to determine a MRP range of 4.5% to 5.0%. Given the updated analysis in Morningstar, which shows that annual market returns are random and are not influenced by returns in the prior year, the correct MRP estimated by these authors is 7.5% if we do not apply their subjective downward adjustment. Mr. Rigsby should have relied upon the 7.5% MRP in his CAPM estimate.

Q. ARE THERE OTHER PROBLEMS WITH MR. RIGSBY'S CALCULATIONS AT PAGE 11?

A. Yes. He adds the risk premium range determined by CKM to a 5-year Treasury bond rate, when the MRP range computed by CKM was based on differences between returns for large company stocks and long-term government bonds. This inconsistency must be corrected if data from CKM are used to make the CAPM estimate. Without the correction, his choice of a 5-year Treasury bond rate biases downward the equity cost range.

Q. WHAT HAPPENS TO HIS CAPM EQUITY COST ESTIMATE AT PAGE 11, LINE 17 IF YOU MAKE THE TWO CORRECTIONS YOU HAVE IDENTIFIED?

A. It increases the equity cost, which Mr. Rigsby determined to fall in a range of 6.83% to 8.13%, to 12.17%. The 12.17% is found by adding together a current long-term Treasury rate of 4.67% from my Rebuttal Table 14 and the 7.5% MRP actually estimated by CKM. Mr. Rigsby notes that since utilities are generally somewhat less risky than the market as a whole, his 8.33% cost of equity is too high. If we combine his beta of .82 (from page 23) to account for this lower utility risk, his revised CAPM indicates the cost of equity for a typical water utility is 10.8%, found as

$$\text{Equity cost} = 4.67\% + [.82 \times 7.5\%] = 10.82\%$$

Recognizing Arizona Water is more risky than the sample utilities, the restatement of the CAPM based on CKM is 11.3%.

Q. AT PAGE 12, MR. RIGSBY CONTENDS THAT PRIOR TESTIMONY BY STEPHEN HILL SUPPORTS THE REASONABLENESS OF HIS MRP. DO YOU AGREE?

A. No, I do not. We have no knowledge what Mr. Hill would say is a reasonable current estimate of the MRP after the severe, once-in-a-generation financial crisis that has occurred since he wrote the 2006 testimony attached to Mr. Rigsby's testimony. I would expect Mr. Hill to say the current MRP is higher now than when he wrote his earlier testimony, but we have no way of knowing how much higher he would say it is. Mr. Hill has not filed testimony in this case and thus is not available for Arizona Water to test on this issue. To the extent that Mr. Rigsby's testimony relies on Mr. Hill's previous testimony, it should be disregarded.

Q. PLEASE TURN TO PAGE 13, WHERE MR. RIGSBY STATES HIS RECOLLECTION OF COMMENTS MADE BY PROFESSOR DAMODARAN AND PROFESSOR MARSTON AT A 2007 CONFERENCE HE SAYS HE ATTENDED. DO STUDIES MADE BY THOSE PROFESSORS LEAD YOU TO QUESTION WHETHER THEY WOULD ENDORSE A RANGE OF MRPS OF 4.0% TO 5.5% IN 2009?

A. Yes. I was not at the 2007 conference and do not know what was actually said and in what context. I am aware, however, of papers written by Dr. Marston and a 2009 estimate of the current MRP estimated by Professor Damodaran, which suggests these panelists would not say the current MRP falls in a range of 4.0% to 5.5%. First, with respect to Professor Damodaran, I am aware that his current estimate of the MRP is 6.43%. Work papers supporting that estimate were provided by Department of Ratepayer Advocates witness Professor J.R. Woolridge in California PUC Application 09-05-001, et al., which went to hearing in August 2009. I was a witness in that case and reviewed the work papers supporting the Damodaran estimate. Second, with respect to Professor Marston, I am aware of two papers she wrote with co-authors that indicate she believes the MRP is above 7.1%. The first paper was written with co-author Robert Harris in 2001. In that paper, Harris and Marston estimated the MRP to be 7.14%. In the more recent paper, "Ex Ante Cost of Equity Estimates of S&P 500 Firms: The Choice between Global and Domestic CAPM, published in *Financial Management* (Autumn 2003), co-authored with Robert Harris, Dev Mishra and Thomas O"Bien, Professor Marston estimated the MRP to be 7.2% based on data for a 16 year period ending in 1998.

Q. DO YOU HAVE ANY RESPONSE TO THE CAPM CALCULATIONS PRESENTED AT PAGE 14 BY MR. RIGSBY?

A. Yes. These calculations are simply mechanical applications of the simple version of the CAPM. They rely on the wrong interest rate concept and MRPs

attributed to someone who is not a witness in this case. There is no reason to believe the 4% or the 6% MRPs are reasonable at this time. Notwithstanding the fact that there is no support for either of these calculations, there are serious problems with Mr. Rigsby's claim that equity cost estimates of 5.91% and 7.55% are reasonable when the cost of Baa bonds was 7.67%. A reasonable estimate of the cost of equity must be higher than the cost of Baa bonds.

Q. DO YOU HAVE A RESPONSE TO MR. RIGSBY'S REFERENCE AT PAGE 15 TO A SEPTEMBER 2008 DAMODARAN PAPER WHICH FOUND THE MRP TO BE IN A RANGE OF 4.20% TO 6.39%?

A. Yes. Dr. Damodaran estimates the current market risk premium is 6.43% at this time. While I believe this value is much lower than investors expect in the near term, it is still higher than the 6.28% MRP Mr. Rigsby uses in his analysis. Dr. Damodaran's most recent study does not support Mr. Rigsby's MRP. Moreover, investors would be aware of Value Line's forecasts for the market, and I expect they would give those forecasts some weight. Value Line currently estimates the near-term MRP to be in excess of 17.5%[4] – not 6.43% or 6.28%.

Q. AT PAGE 16, MR. RIGSBY AGREES WITH YOUR POINT THAT COMMON SHAREHOLDERS EXPECT A HIGHER RETURN THAN THE RETURN ON INVESTMENT GRADE BONDS, BUT IS UNWILLING TO ELIMINATE ANY EQUITY COST ESTIMATE THAT DOES NOT MEET THAT TEST. DO YOU HAVE A RESPONSE?

A. Yes. Mr. Rigsby compares his final estimate of 8.33% to the cost of investment grade bonds to test if his recommendation is reasonable, but ignores the fact that each and every one of his CAPM equity cost estimates (5.26%, 6.04%, 6.39% and 7.43%) is lower than the cost of investment grade bonds of 7.76%. Mr.

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[4] At July 24, 2009, when the new water utilities data were published by Value Line, the median yield for dividend paying stocks was 2.6%, the indicated appreciation potential was 90% and thus the expected market return was 20%. With a 5-year Treasury yield of 2.51%, the indicated current MRP consistent with Mr. Rigsby's approach is 17.5%.

Rigsby refers to the FERC Cost-of-Service manual and attaches a portion of that manual as Attachment B to his testimony. The FERC eliminates <u>any</u> cost of equity estimates made with the DCF model if that estimate is lower than 40 basis points above the cost of A-rated bonds. At the time Mr. Rigsby prepared his testimony, the cost of A-rated utility bonds was 6.28% and thus the FERC test would eliminate from consideration any cost of equity estimate below 6.68%. That FERC test would eliminate all but one of his CAPM equity cost estimates.

Q. AT PAGE 34, MR. RIGSBY EXPLAINS THAT HE DETERMINED HIS 8.33% RATE AS AN AVERAGE OF HIS CAPM AND DCF ESTIMATES. WHAT WOULD THAT AVERAGE BE IF HE ELIMINATED THE CAPM ESTIMATES THAT ARE LESS THAN THE COST OF BAA BONDS?

A. The estimate would have to be based on the average of the two DCF estimates. None of the CAPM estimates would survive a test of reasonableness. The average of his two DCF estimates is 10.4%.

Q. AT PAGE 18, MR. RIGSBY IMPLIES HIS RECOMMEND ROE OF 8.33% IS REASONABLE BECAUSE IT IS MORE THAN THE 7.0% ROE VALUE LINE IS PROJECTING FOR THE "WATER UTILITIES INDUSTRY." DO YOU HAVE A RESPONSE?

A. Yes. That 7.0% number includes data for two water utilities that Mr. Rigsby correctly chose to exclude from the sample which he used to determine costs of equity. Those two companies are Southwest Water and American Water Works. The forecast of 6.0% ROE for American Water Works in particular is a problem because, due to American Water Works' size, that forecast dominates the average estimate for the "industry" and offsets Value Line's estimates of future earned ROEs for the utilities in Mr. Rigsby's sample, which range from 11.5% to 12.0%.

Q. WHAT IS THE AVERAGE PERCENTAGE RATE OF RETURN ON BOOK COMMON EQUITY FOR THE WATER UTILITIES SAMPLE MR. RIGSBY USES TO DETERMINE BENCHMARK COSTS OF EQUITY ESTIMATES?

A. That average rate of return is 11.83%. It is found as the average of Value Line's projected ROEs for American States of 12.0%, for Aqua America of 11.5% and California Water of 12.0%. Based on Mr. Rigsby's own water industry sample, the average ROE is 11.83%, not 7.0%.

Q. WHAT DO YOU CONCLUDE FROM MR. RIGSBY'S COMPARISON OF HIS 8.33% RECOMMENDED ROE TO VALUE LINE'S FORECASTED RETURNS FOR HIS WATER UTILITIES SAMPLE?

A. The correct comparison shows his 8.33% ROE recommendation is 350 basis point *below* – not 133 basis points above – a reasonable recommendation.

Q. AT PAGE 18, MR. RIGSBY REVISITS HIS CONTENTION THAT HIS ESTIMATES OF "VS" GROWTH SHOULD ASSUME MARKET-TO-BOOK RATIOS FOR UTILITIES WILL REVERT TO 1.0. DO YOU HAVE A RESPONSE?

A. Yes. There is no reason for this to happen. First, even if we assume that Mr. Rigsby is correct – and I dispute that he is – the price investors are willing to pay for the utilities' stock would already reflect the probability that the stock price may move back toward 1.0. Thus, his method of determining sustainable growth double-counts any movement back to 1.0 that is already anticipated by investors. Second, as I explain at pages 35, 44 and 45 of my rebuttal testimony, there are many reasons market-to- book ratios will be above 1.0 even if those utilities earn their costs of equity. Third, market-to-book ratios for utilities are already lower than market-to-book ratios for other publicly traded companies. This fact is consistent with investors expecting regulatory authorities to set rates based on book values in most jurisdictions, but other considerations keep market-to-book ratios above 1.0. Fourth, market-to-book ratios for water utilities have been

above 1.0 for at least 22 years.[5] His contention suggests regulators across the country have been duped into authorizing ROEs above the cost of equity for more than 20 years. His testimony at pages 18-20 does not reply to my rebuttal testimony, which addresses this point in greater detail.

Q. AT PAGE 20, LINE 19, MR. RIGSBY STATES HIS CAPM ESTIMATE OF 7.63% WOULD PRODUCE A MARKET PRICE EQUAL TO BOOK VALUE. DO YOU HAVE A RESPONSE?

A. I do not know what market-to-book ratio would be produced if the Commission authorized an ROE of 7.63% – a cost of equity that was below the cost of Baa-rated long-term debt of 7.76% when we prepared testimony. I do know that such a return would be confiscatory because it is below the cost of debt and thus is clearly unfair and unreasonable.

Q. AT PAGES 21-22 OF HIS SURREBUTTAL TESTIMONY, MR. RIGSBY STATES THAT A FORMULA PRESENTED BY DR. MORIN SUPPORTS HIS DCF GROWTH RATE ESTIMATES. DO YOU HAVE A RESPONSE?

A. Yes. Dr. Morin states the following:

Dividend growth = CAPM cost of equity – dividend yield.

Such a determination requires a reasonable estimate of the cost of equity with the CAPM model. As discussed above, Mr. Rigsby's CAPM equity cost estimates are not reasonable because they are below the cost of investment grade debt. In my rebuttal Table 14, I determined a reasonable estimate of the cost of equity using the CAPM to be 11.5% based on an appropriate restatement of Mr. Parcell's CAPM estimate. Inserting that CAPM estimate in the formula presented by Mr. Rigsby at page 22, we find the check on the reasonableness of the DCF growth rate indicates an 8.4% growth rate found as follows:

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[5] C.A. Turner, *Utility Reports*, July 1988.

$$g = \text{CAPM equity cost} - D_1/P_0.$$

Inserting Mr. Rigsby's dividend yield of 3.08%, the growth rate check is found to be

$$g = 11.5\% - 3.08\% = 8.4\%$$

The 8.4% growth rate is slightly above the average growth rate of 8.0% I determined in panel A of Rebuttal Table 19 and is about the same as the average growth rate presented in Panel, B of Rebuttal Table 19. Panel A of Rebuttal Table 19 restates Mr. Rigsby's DCF analysis with appropriate estimates of vs growth. Panel B of Rebuttal Table 19 relies on Zacks growth rates reported by Mr. Rigsby.

Q. DOES THIS COMPLETE YOUR REJOINDER TESTIMONY?

A. Yes.

BEFORE THE ARIZONA CORPORATION COMMISSION

MARC SPITZER
Chairman
JIM IRVIN
Commissioner
WILLIAM A. MUNDELL
Commissioner
JEFF HATCH-MILLER
Commissioner
MIKE GLEASON
Commissioner

IN THE MATTER OF THE APPLICAATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR UTILITY SERVICE FURNISHED BY ITS EASTERN GROUP AND FOR CERTAIN RELATED APPROVALS	DOCKET NO. W-01445A-02-0619

DIRECT

TESTIMONY

OF

JOEL M. REIKER

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

JULY 8, 2003

EXHIBIT
A-44
ADMITTED

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Arizona Water Company
Capital Structures of Sample Water Companies
31-Dec-02

Line No.	[A] Company	[B] Ticker Symbol	[C] Long-Term Debt	[D] Common Equity	[E] Total
1	American States Water	AWR	52.0%	48.0%	100.0%
2	California Water	CWT	55.7%	44.3%	100.0%
3	Connecticut Water Services	CTWS	44.8%	55.2%	100.0%
4	Middlesex Water	MSEX	53.3%	46.7%	100.0%
5	Philadelphia Suburban	PSC	54.2%	45.8%	100.0%
6	SJW Corp.	SJW	41.7%	58.3%	100.0%
7	Average		50.3%	49.7%	100.0%
8					
9	Arizona Water Company		29.9%	70.1%	100.0%
10					
11					
12					
13					
14					
15					
16	Source: 05/02/2003 Value Line				

Schedule JMR-1

Arizona Water Company
Docket No. W-01445A-02-0619

Arizona Water Company
Growth in Earnings and Dividends
Sample Water Companies

Line No.	[A] Company	[B] 10-Year Earnings EPS	[C] Projected Earnings EPS	[D] 10-Year Dividends DPS	[E] Projected Dividends DPS
1	American States Water	1.5%	6.7%	1.2%	2.4%
2	California Water	1.4%	9.3%	1.9%	1.0%
3	Connecticut Water Services	3.0%	No Projection	1.3%	No Projection
4	Middlesex Water	1.9%	No Projection	2.9%	No Projection
5	Philadelphia Suburban	8.7%	10.0%	5.0%	5.3%
6	SJW Corp.	2.6%	No Projection	2.6%	No Projection
7					
8	Average	3.2%	8.7%	2.5%	2.9%
9					
10					
11					
12	Source: Value Line				

Schedule JMR-2

Arizona Water Company
Docket No. W-01445A-02-0619

Arizona Water Company
Calculation of Intrinsic Growth
Sample Water Companies

Line No.	[A] Company	[B] 10-Year Retention Growth br	[C] Projected Retention Growth br	[D] Book Value BV	[E] Market Price MP	[F] v 1-[(BV)/(MP)]	[G] s	[H] Stock Financing Growth vs	[I] 10-Year Intrinsic Growth br + vs	[J] Projected Intrinsic Growth br + vs
1	American States Water	2.6%	5.0%	14.14	26.0	0.46	2.6%	1.2%	3.8%	6.2%
2	California Water	2.8%	4.0%	13.70	26.9	0.49	0.2%	0.1%	3.0%	4.1%
3	Connecticut Water Servic	2.9%	No Projection	9.78	25.4	0.61	1.5%	0.9%	3.8%	No Projection
4	Middlesex Water	1.8%	No Projection	10.06	22.1	0.54	5.8%	3.1%	4.9%	No Projection
5	Philadelphia Suburban	3.7%	8.0%	7.36	23.2	0.68	7.3%	5.0%	8.7%	13.0%
6	SJW Corp.	4.9%	No Projection	53.21	85.5	0.38	0.0%	0.0%	4.9%	No Projection
7										
8	Average	3.1%	5.7%				2.9%		4.8%	7.8%
9										
10										
11										
12										
13										
14										
15										
16	Book value per Schedule JMR-5									
17	Market Price per Schedule JMR-5									
18	s value = Funds raised from the sale of stock as a fraction of existing common equity over previous seven years.									

Schedule JMR-3

Arizona Water Company
Calculation of Expected Infinite Annual Growth in Dividends
Sample Water Companies

Line No.	[A]	[B] g
1	10-Year EPS Growth	3.2%
2	Projected EPS Growth	8.7%
3	10-Year DPS Growth	2.5%
4	Projected DPS Growth	2.9%
5	10-Year Intrinsic Growth	4.8%
6	Projected Intrinsic Growth	7.8%
7		
8	Average	4.98%
9		
10		
11		
12	Per Schedule JMR-2 and Schedule JMR-3	

Arizona Water Company
Docket No. W-01445A-02-0619

Arizona Water Company
Selected Financial Data of Sample Water Companies

Line No.	[A] Company	[B] Symbol	[C] Spot Price 5/6/03	[D] Book Value 5/6/03	[E] Mkt To Book	[F] Value Line Beta	[G] Raw Beta
1	American States Water	AWR	26.00	14.14	1.8	0.60	0.37
2	California Water	CWT	26.90	13.70	2.0	0.60	0.37
3	Connecticut Water Services	CTWS	25.36	9.78	2.6	0.60	0.37
4	Middlesex Water	MSEX	22.07	10.06	2.2	0.55	0.30
5	Philadelphia Suburban	PSC	23.15	7.36	3.1	0.70	0.52
6	SJW Corp.	SJW	85.50	53.21	1.6	0.50	0.22
7							
8	Average				2.2	0.59	0.36
9							
10							
11							
12							
13							
14							
15							
16							

Schedule JMR-5

Arizona Water Company
Multi-Stage DCF Estimates
Sample Water Companies

Line No.	[A]	[B] Current Mkt. Price (P_o)	[C] Projected Dividends[1] (stage 1 growth) (D_t) d_1	[D] d_2	[E] d_3	[F] d_4	[G] d_5	[H] Stage 2 growth[2] (g_n)	[I] Equity Cost Estimate (K)
1									
2	American States Water	26.0	0.88	0.91	0.93	0.96	0.99	6.5%	9.5%
3	California Water	26.9	1.12	1.13	1.15	1.16	1.17	6.5%	10.0%
4	Connecticut Water Services	25.4	0.85	0.88	0.90	0.93	0.96	6.5%	9.5%
5	Middlesex Water	22.1	0.88	0.91	0.94	0.97	1.00	6.5%	10.1%
6	Philadelphia Suburban	23.2	0.58	0.61	0.64	0.68	0.71	6.5%	8.9%
7	SJW Corp.	85.5	2.95	3.04	3.13	3.23	3.33	6.5%	9.6%
8								Average	9.6%
13									

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

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

[1] d_1 (*Value Line* Companies) = "Est'd Div'd next 12 mos." May 2, 2003, *Value Line* Selection & Opinion.
[1] d_1 (*VL Small Cap Editoin*) = Most recent annualized dividend times 1 plus average projected DPS growth rate.
[2] Average annual growth in GDP 1929 - 2002 in current dollars. http://www.bea.doc.gov/

Arizona Water Company
Docket No. W-01445A-02-0619

Arizona Water Company
Final Cost of Equity Estimates
Sample Water Companies

Line No.	[A]	[B]		[C]		[D]		[E]
	Constant Growth DCF			D_1/P_0	+	g	=	k
1	Constant Growth DCF Estimate			3.47%	+	4.98%	=	8.5%
2	Multi-Stage DCF Estimate						=	9.6%
3	Average of DCF Estimates							9.0%
4		Rf	+	β	x	(Rp)	=	k
5	CAPM Method							
6	Historical Market Risk Premium	3.3%	+	0.59	x	7.4%	=	7.7%
7	Current Market Risk Premium	3.3%	+	0.59	x	13.1%	=	11.1%
8	Average of CAPM Estimates							9.4%
9								
10						Average		9.2%
11								

Schedule JMR-7

Arizona Water Company
Capital Structure
And Weighted Cost of Capital

Line No.	[A]	[B] Weight (%)	[C] Cost	[D] Weighted Cost	[E] Gross Rev. Conv. Factor	[F] Grossed-Up Cost
1	Long-term Debt	28.24%	8.46%	2.39%	1.00	2.39%
2	Short-Term Debt	5.62%	4.00%	0.22%	1.00	0.22%
3	Common Equity	66.13%	9.0%	5.95%	1.63	9.71%
4		100.0%		8.6%		12.33%
	Pre-Tax Interest Coverage [4 ÷ (1 + 2)]					4.7

BEFORE THE ARIZONA CORPORATION COMMISSION

JEFF HATCH-MILLER
Chairman
WILLIAM A. MUNDELL
Commissioner
MARC SPITZER
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR UTILITY SERVICE FURNISHED BY ITS WESTERN GROUP AND FOR CERTAIN RELATED APPROVALS	)	DOCKET NO. W-01445A-04-0650

SURREBUTTAL

TESTIMONY

OF

ALEJANDRO RAMIREZ

PUBLIC UTILITIES ANALYST III

UTILITIES DIVISION

ARIZONA CORPORATION COMMMISSION

MAY 25, 2005

EXHIBIT
A-45
ADMITTED

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Intrinsic Growth for Sample Water Utilities AXR-4

Selected Financial Data of Sample Water Utilities AXR-5

Expected Infinite Annual Growth AXR-6

Multi-Stage DCF Estimates AXR-7

Final Cost of Equity Estimates for Sample Water Utilities AXR-8

Exhibit 1.

Arizona Water Company -Western Group-
Staff's Recommended
Capital Structure
And Weighted Cost of Capital

[A]	[B]	[C]	[D]
Description	Weight (%)	Cost	Weighted Cost
Long-term Debt	26.6%	8.4%	2.20%
Common Equity	73.4%	9.1%	6.70%
Weighted Average Cost of Capital/ROR			**8.9%**

Supporting Schedules: Schedule AXR-2, Schedule AXR-8

Arizona Water Company -Western Group-
Average Capital Structure of Sample Water Utilities

[A]	[B]	[C]	[D]
Company	Long-Term Debt	Common Equity	Total
American States Water	49.2%	50.8%	100.0%
California Water	49.7%	50.3%	100.0%
Aqua America	53.0%	47.0%	100.0%
Connecticut Water	43.1%	56.9%	100.0%
Middlesex Water	55.4%	44.6%	100.0%
SJW Corp	46.8%	53.2%	100.0%
Average Sample Water Utilities	**49.5%**	**50.5%**	**100.0%**
Arizona Water Company -Western Grou	**26.6%**	**73.4%**	**100.0%**

Source: Value Line, Arizona Water's application

Arizona Water Company -Western Group-
Growth in Earnings and Dividends
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]
Company	Dividends Per Share 1994 to 2004 DPS	Dividends Per Share Projected DPS	Earnings Per Share 1994 to 2004 EPS	Earnings Per Share Projected EPS
American States Water	1.1%	1.9%	2.2%	14.1%
California Water	1.3%	1.1%	1.8%	8.2%
Aqua America	5.8%	7.3%	9.3%	9.0%
Connecticut Water	1.4%	No Projection	2.5%	No Projection
Middlesex Water	2.3%	No Projection	0.9%	No Projection
SJW Corp	3.8%	No Projection	7.8%	No Projection
Average Sample Water Utilities	**2.6%**	**3.4%**	**4.1%**	**10.4%**

Source: Value Line, Zepp work papers

Arizona Water Company -Western Group-
Intrinsic Growth
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]
Company	Retention Growth 1994 to 2003 br	Retention Growth Projected br	Stock Financing Growth vs	Intrinsic Growth 1994 to 2003 br + vs	Intrinsic Growth Projected br + vs
American States Water	2.6%	5.6%	1.2%	3.8%	6.8%
California Water	2.4%	4.6%	1.7%	4.1%	6.3%
Aqua America	3.7%	6.1%	7.3%	11.0%	13.4%
Connecticut Water	2.9%	No Projection	0.5%	3.5%	No Projection
Middlesex Water	1.6%	No Projection	3.5%	5.1%	No Projection
SJW Corp	5.0%	No Projection	0.0%	5.0%	No Projection
Average Sample Water Utilities	**3.1%**	**5.4%**	**2.4%**	**5.4%**	**8.8%**

Source: Value Line, MSN Money

Arizona Water Company -Western Group-
Selected Financial Data of Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[G]
Company	Symbol	Spot Price 5/11/05	Book Value 5/11/05	Mkt To Book	*Value Line* Beta β	Raw Beta β *raw*
American States Water	AWR	27.18	14.90	1.8	0.70	0.52
California Water	CWT	35.75	15.51	2.3	0.75	0.60
Aqua America	WTR	27.84	7.40	3.8	0.75	0.60
Connecticut Water	CTWS	24.2	10.89	2.2	0.65	0.45
Middlesex Water	MSEX	18.97	7.74	2.5	0.65	0.45
SJW Corp	SJW	40.48	18.47	2.2	0.55	0.30
Average				**2.5**	**0.68**	**0.49**

Source: Msn Money, Value Line

Arizona Water Company -Western Group-
Calculation of Expected Infinite Annual Growth in Dividends
Sample Water Utilities

[A]	[B]
Description	g
DPS Growth - Historical	2.6%
DPS Growth - Projected	3.4%
EPS Growth - Historical	4.1%
EPS Growth - Projected	10.4%
Intrinsic Growth - Historical	5.4%
Intrinsic Growth - Projected	8.8%
Average	**5.8%**

Supporting Schedules: Schedule AXR-3 and Schedule AXR-4

Arizona Water Company -Western Group-
Multi-Stage DCF Estimates
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[H]	[I]
Company	Current Mkt. Price (P_o)	Projected Dividends[1] (stage 1 growth) (D_t)				Stage 2 growth[2] (g_n)	Equity Cost Estimate (K)
		d_1	d_2	d_3	d_4		
American States Water	27.2	0.90	0.92	0.94	0.96	6.5%	9.4%
California Water	35.8	1.14	1.15	1.17	1.18	6.5%	9.2%
Aqua America	27.8	0.52	0.56	0.60	0.65	6.5%	8.4%
Connecticut Water	24.2	0.86	0.90	0.93	0.96	6.5%	9.8%
Middlesex Water	19.0	0.68	0.71	0.73	0.76	6.5%	9.8%
SJW Corp	40.5	1.08	1.12	1.16	1.20	6.5%	9.0%
						Average	**9.3%**

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

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

1 d_1 = "Est'd Div'd next 12 mos." 05/13/2005, *Value Line* Summary & Index.

2 Average annual growth in GDP 1929 - 2004 in current dollars. http://www.bea.doc.gov/

Arizona Water Company -Western Group-
Final Cost of Equity Estimates
Sample Water Utilities

[A]	[B]		[C]		[D]		[E]
DCF Method			D_1/P_0	+	g	=	k
Constant Growth DCF Estimate			3.0%	+	5.8%	=	8.8%
Multi-Stage DCF Estimate						=	9.3%
Average of DCF Estimates							**9.0%**
CAPM Method	Rf	+	β	x	(Rp)	=	k
Historical Market Risk Premium	4.0%	+	0.68	x	7.6%	=	9.1%
Current Market Risk Premium	4.0%	+	0.68	x	7.8%	=	9.3%
Average of CAPM Estimates							**9.2%**
					Average		**9.1%**

Source: The Wall Street Journal, Value Line, Ibbotson Associates SBBI 2004 Yearbook

Supporting Schedules: Schedule AXR-7

ORIGINAL

BEFORE THE ARIZONA CORPORATION COMMISSION

RECEIVED

2009 JAN 21 P 4: 44

AZ CORP COMMISSION
DOCKET CONTROL

COMMISSIONERS

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

IN THE MATTER OF THE APPLICATION OF CHAPARRAL CITY WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.

DOCKET NO. W-02113A-07-0551

NOTICE OF FILING

The Utilities Division of the Arizona Corporation Commission ("Staff") hereby files its final post-hearing Schedules in the above-captioned matter. A copy of these schedules is attached hereto as Exhibit A.

RESPECTFULLY SUBMITTED this 21st day of January, 2009.

Arizona Corporation Commission
DOCKETED
JAN 21 2009
DOCKETED BY

Robin R. Mitchell, Staff Attorney
Amanda Ho, Staff Attorney
Wesley Van Cleve, Staff Attorney
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Original and thirteen (13) copies of the foregoing filed this 21st day of January, 2009 with:

Docket Control
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007

EXHIBIT
A-46
ADMITTED

Copies of the foregoing mailed this
22nd day of January, 2009 to:

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EXHIBIT A

EXHIBIT A

CHAPARRAL CITY WATER COMPANY, INC.
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

STAFF'S REVISED SCHEDULES

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Revised MEM-6	RCN Rate Base Adjustment #2 - Reclassify CAP Allotment to Land and Land Rights
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CHAPARRAL CITY WATER COMPANY, INC.
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

Revised Schedule MEM-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY FAIR VALUE	(B) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 28,768,975	$ 27,620,414
2	Adjusted Operating Income (Loss)	$ 797,271	$ 943,954
3	Current Rate of Return (L2 / L1)	2.77%	3.42%
4	Required Rate of Return	9.32%	7.60%
5	Required Operating Income (L4 * L1)	$ 2,681,268	$ 2,099,151
6	Operating Income Deficiency (L5 - L2)	$ 1,883,997	$ 1,155,198
7	Gross Revenue Conversion Factor	1.6286	1.6483
8	Required Revenue Increase (L7 * L6)	$ 3,068,317	**$ 1,904,143**
9	Adjusted Test Year Revenue	$ 7,446,700	$ 7,446,700
10	Proposed Annual Revenue (L8 + L9)	$ 10,515,017	$ 9,350,843
11	Required Increase in Revenue (%)	41.20%	25.57%

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Revised Schedule MEM-2

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
	Calculation of Gross Revenue Conversion Factor:				
1	Revenue	100.0000%			
2	Uncollecible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.3324%			
5	Subtotal (L3 - L4)	60.6676%			
6	**Revenue Conversion Factor (L1 / L5)**	1.648327			
	Calculation of Uncollecttible Factor:				
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 23)	38.5989%			
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0.0000%			
	Calculation of Effective Tax Rate:				
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	6.9680%			
14	Federal Taxable Income (L12 - L13)	93.0320%			
15	Applicable Federal Income Tax Rate (Line 55)	34.0000%			
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%			
17	Combined Federal and State Income Tax Rate (L13 +L16)		38.5989%		
	Calculation of Effective Property Tax Factor				
18	Unity	100.0000%			
19	Combined Federal and State Income Tax Rate (L17)	38.5989%			
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%			
21	Property Tax Factor (MEM-16, L21)	1.1947%			
22	Effective Property Tax Factor (L20*L21)		0.7335%		
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.3324%	
24	Required Operating Income (Schedule MEM-1, Line 5)	$ 2,099,151			
25	AdjustedTest Year Operating Income (Loss) (Schedule MEM-11, Line 28)	943,954			
26	Required Increase in Operating Income (L24 - L25)		$ 1,155,198		
27	Income Taxes on Recommended Revenue (Col. [E], L52)	$ 1,152,019			
28	Income Taxes on Test Year Revenue (Col. [B], L52)	425,822			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		726,197		
30	Recommended Revenue Requirement (Schedule MEM-1, Line 10)	$ 9,350,843			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncollectible Expense on Recommended Revenue (L30*L31)	$ -			
33	Adjusted Test Year Uncollectible Expense	$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)		-		
35	Property Tax with Recommended Revenue (MEM-16, Col B, L16)	$ 285,148			
36	Property Tax on Test Year Revenue (MEM-16, Col A, L16)	262,400			
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		22,748		
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)		$ 1,904,143		

		Test Year		Staff Recommended
	Calculation of Income Tax:			
39	Revenue (Schedule MEM-11, Col. [C], Line 5 & Sch. MEM-1, Col. [D] Line 10)	$ 7,446,700	$ 1,904,143	$ 9,350,843
40	Operating Expenses Excluding Income Taxes	$ 6,076,924		$ 6,099,673
41	Synchronized Interest (L56)	$ 266,579		$ 266,579
42	Arizona Taxable Income (L39 - L40 - L41)	$ 1,103,197		$ 2,984,592
43	Arizona State Income Tax Rate	6.9680%		6.9680%
44	Arizona Income Tax (L42 x L43)	$ 76,871		$ 207,966
45	Federal Taxable Income (L42 - L44)	$ 1,026,326		$ 2,776,626
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ 7,500		$ 7,500
47	Federal Tax on Second Income Bracket ($51,001 - $75,000) @ 25%	$ 6,250		$ 6,250
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ 8,500		$ 8,500
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ 91,650		$ 91,650
50	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ 235,051		$ 830,153
51	Total Federal Income Tax	$ 348,951		$ 944,053
52	Combined Federal and State Income Tax (L44 + L51)	$ 425,822		$ 1,152,019
53	Applicable Federal Income Tax Rate [Col. [E], L51 - Col. [B], L51] / [Col. [E], L45 - Col. [B], L45]			34.0000%

		Chapparral
	Calculation of Interest Synchronization:	
54	Rate Base (Schedule MEM-3, Col. (C), Line 17	$ 22,214,877
55	Weighted Average Cost of Debt (Schedule MEM-17, Col. [F], L1 + L2)	1.2000%
56	Synchronized Interest (L45 X L46)	$ 266,579

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Revised Schedule MEM FVRB -1

FAIR VALUE RATE BASE COMPARISON - COMPANY VS STAFF

LINE NO.		(A) COMPANY AS FILED	(B) STAFF AS ADJUSTED	(C) DIFFERENCE
1	Plant in Service	$ 66,310,296	$ 64,803,291	$ (1,507,005)
2	Less: Accumulated Depreciation	20,885,854	18,616,394	(2,269,460)
3	Net Plant in Service	$ 45,424,442	$ 46,186,897	$ 762,455
4				
5	*LESS:*			
6				
7	Contributions in Aid of Construction (CIAC)			
8	Less: Accumulated Amortization			
9	Net CIAC	$ 7,780,241	$ 7,780,241	$ (0)
10				
11	Advances in Aid of Construction (AIAC)	8,394,501	8,394,501	(0)
12				
13	Customer Meter Deposits	819,845	819,845	-
14				
15	Deferred Income Tax Credits	925,896	925,896	-
16				
17	Shared Gain on Well	646,000	646,000	-
18				
19	*ADD:*			
20				
21	Unamortized Debt Issuance Costs	424,010	-	(424,010)
22				
23	Prepayments	192,485	-	(192,485)
24				
25	Materials and Supplies	14,521	-	(14,521)
26				
27	Deferred Regulatory Assets	1,280,000	-	(1,280,000)
28				
29	Working Capital	-	-	-
30				
31				
32	**Original Cost Rate Base**	$ 28,768,975	$ 27,620,414	$ (1,148,560)

References:
Column (A), Company Schedule B-1
Column (B): Revised Schedule MEM FVRB-2
Column (C): Column (A) - Column (B)

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Revised Schedule MEM FVRB -2

FAIR VALUE RATE BASE COMPUTATION - COMPANY AND STAFF

LINE NO.		(A) COMPANY AS FILED	(B) STAFF AS ADJUSTED
1	OCN Rate Base per MEM-3	$ 22,770,304	$ 22,214,877
2	RCN Rate Base per MEM RCN -1	34,767,581	33,025,951
3			
4		$ 57,537,885	$ 55,240,828
5	OCN and RCN weighted 50% each to		
6	calculate Fair Value Rate Base (FVRB)	$ 28,768,943	$ 27,620,414

References:
Column (A), Revised Schedule MEM 3
Column (B): Revised Schedule MEM RCN-1

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Revised Schedule MEM FVRB -3

FAIR VALUE RATE BASE COMPUTATION - STAFF

LINE NO.		(A) STAFF OCN AS ADJUSTED	(B) STAFF RCN AS ADJUSTED	(C) STAFF FAIR VALUE RATE BASE
1	Plant in Service	$ 51,128,062	$ 78,478,520	$ 64,803,291
2	Less: Accumulated Depreciation	13,845,072	23,387,716	18,616,394
3	Net Plant in Service	$ 37,282,990	$ 55,090,804	$ 46,186,897
4				
5	*LESS:*			
6				
7	Contributions in Aid of Construction (CIAC)	$ -		$ -
8	Less: Accumulated Amortization	-		-
9	Net CIAC	$ 6,119,129	$ 9,441,352	$ 7,780,241
10		$ -		
11	Advances in Aid of Construction (AIAC)	6,557,243	10,231,760	8,394,502
12		-		
13	Customer Meter Deposits	819,845	819,845	819,845
14		-		
15	Deferred Income Tax Credits	925,896	925,896	925,896
16		-		
17	Well Settlement Proceeds	646,000	646,000	646,000
18				
19	*ADD:*	-	-	-
20				
21	Unamortized Debt Issuance Costs	-	-	-
22				
23	Prepayments	-	-	-
24				
25	Materials and Supplies	-	-	-
26				
27	Deferred Regulatory Assets	-	-	-
28				
29	Working Capital	-	-	-
30				
31				
32		$ 22,214,877	$ 33,025,951	$ 27,620,414

References:
Column (A), Revised Schedule MEM 3.2
Column (B): Revised Schedule MEM RCN-1
Column (C): Column (A) + Column (B) divided by 2

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Revised Schedule MEM-3

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	Adj. No.	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 51,804,423	$ (676,361)	2, 3, 6, 7	$ 51,128,062
2	Less: Accumulated Depreciation	15,877,022	(2,031,950)	4	13,845,072
3	Net Plant in Service	$ 35,927,401	$ 1,355,589		$ 37,282,990
	LESS:				
4	Contributions in Aid of Construction (CIAC)	$ -	$ -		$ 6,288,097
5	Less: Accumulated Amortization	-	-		168,968
6	Net CIAC	6,119,129	0		$ 6,119,129
7	Advances in Aid of Construction (AIAC)	6,557,243	-		6,557,243
8	Customer Meter Deposits	819,845	-		819,845
9	Deferred Income Tax Credits	925,896	-		925,896
10	Shared Gain on Well	646,000	-	1	646,000
	ADD:				
11	Unamortized Debt Issuance Costs	424,010	(424,010)	5	-
12	Prepayments	192,485	(192,485)	5	-
13	Materials and Supplies	14,521	(14,521)	5	-
14	Deferred Regulatory Assets	1,280,000	(1,280,000)	2	-
15	Working Capital	-	-		-
16	**Original Cost Rate Base**	$ 22,770,304	$ (555,427)		$ 22,214,877

References:
Column (A), Company Schedule B-1
Column (B): Revised Schedule MEM-4
Column (C): Column (A) + Column (B)

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Revised Schedule MEM-4

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Not Used ADJ #1	[C] CAP Allocation ADJ #2	[D] GO Plant ADJ #3	[E] Acc Depr ADJ #4	[F] Working Capital ADJ #5	[G] Capitalize Expenses ADJ #6	[H] Retire Wells ADJ #7	[I] STAFF ADJUSTED
		PLANT IN SERVICE:									
1											
2	301	Organization	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3	302	Franchises	-	-	-	-	-	-	-	-	-
4	303	Land and Land Rights	305,920	-	1,280,000	-	-	-	-	(34,062)	1,551,858
5	304	Structures & Improvements	1,518,648	-	-	-	-	-	11,590	(596)	1,529,642
6	305	Collecting & Impounding Reservoirs	6,548	-	-	-	-	-	-	(6,548)	-
7	306	Lakes, Rivers, Other Intakes	-	-	-	-	-	-	-	-	-
8	307	Wells and Springs	332,065	-	-	-	-	-	-	(172,438)	159,627
9	308	Infiltration Galleries and Tunnels	-	-	-	-	-	-	-	-	-
10	309	Supply Mains	-	-	-	-	-	-	-	-	-
11	310	Power Generation Equipment	-	-	-	-	-	-	-	-	-
12	311	Pumping Equipment	1,506,908	-	-	-	-	-	26,084	55,254	1,588,246
13	320	Water Treatment Plant	7,763,500	-	-	-	-	-	-	(1,976,860)	5,786,640
14	330	Distribution Reservoirs & Standpipes	8,170,420	-	-	-	-	-	-	(1,658,272)	6,512,148
15	331	Transmission & Distribution Mains	17,450,634	-	-	-	-	-	-	1,502,420	18,953,054
16	333	Services	7,389,930	-	-	-	-	-	-	106,409	7,496,339
17	334	Meters & Meter Installation	2,725,673	-	-	-	-	-	-	11,193	2,736,866
18	335	Hydrants	1,171,633	-	-	-	-	-	-	53,352	1,224,985
19	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-	-
20	339	Other Plant & Misc. Equipment	1,610,687	-	-	-	-	-	-	106,542	1,717,229
21	340	Office Furniture & Equipment	270,359	-	-	-	-	-	-	1,814	272,173
22	341	Transportation Equipment	535,315	-	-	-	-	-	-	-	535,315
23	342	Stores Equipment	-	-	-	-	-	-	-	-	-
24	343	Tools, Shop & Garage Equipment	149,365	-	-	-	-	-	-	-	149,365
25	344	Laboratory Equipment	-	-	-	-	-	-	-	-	-
26	345	Power Operated Equipment	-	-	-	-	-	-	-	-	-
27	346	Communication Equipment	39,105	-	-	-	-	-	-	-	39,105
28	347	Miscellaneous Equipment	106,542	-	-	-	-	-	-	(106,542)	-
29	348	Other Tangible Plant	-	-	-	-	-	-	-	-	-
30			51,053,252	-	1,280,000	-	-	-	37,674	(2,118,334)	50,252,592
31											
32											-
33			-		-	-	-	-	-	-	-
34	Add:	General Office Plant Allocation	751,171	-		124,299	-	-	-	-	875,470
35											-
36			-	-	-	-	-	-	-	-	-
37			-	-	-	-	-	-	-	-	-
38											
39		Total Plant in Service	$ 51,804,423	$ -	$ 1,280,000	$ 124,299	$ -	$ -	$ 37,674	$(2,118,334)	$ 51,128,062
40		Less: Accumulated Depreciation	15,877,022	-	-	-	(2,031,950)	-	-	-	13,845,072
41			-	-	-	-	-	-	-	-	-
42		Net Plant in Service (L39 - L 40)	$ 35,927,401	$ -	$ 1,280,000	$ 124,299	$ 2,031,950	$ -	$ 37,674	$(2,118,334)	$ 37,282,990
43											
44		*LESS:*									
45		Contributions in Aid of Construction (CIAC)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
46		Less: Accumulated Amortization	-	-	-	-	-	-	-	-	-
47		Net CIAC (L25 - L26)	6,119,129	-	-	-	0	-	-	-	6,119,129
48		Advances in Aid of Construction (AIAC)	6,557,243	-	-	-	-	-	-	-	6,557,243
49		Customer Meter Deposits	819,845	-	-	-	-	-	-	-	819,845
50		Deferred Income Taxes	925,896	-	-	-	-	-	-	-	925,896
51		Shared Gain on Well (Settlement Agreement Not to Use Wells)	646,000	-							646,000
52											
53		*ADD:*									
54		Unamortized Debt Issuance Costs	424,010	-	-	-	-	(424,010)	-	-	-
55		Prepayments	192,485	-	-	-	-	(192,485)	-	-	-
		Materials and Supplies	14,521					(14,521)			-
		Deferred Regulatory Assets	1,280,000		(1,280,000)						-
56		Working Capital	-	-	-	-	-	-	-		-
57											
58		Original Cost Rate Base	$ 22,770,304	$ -	$ -	$ 124,299	$ 2,031,950	$ (631,016)	$ 37,674	$(2,118,334)	$ 22,214,877

ADJ #		References:
1	Skipped	
2	CAP Allotment Reclassified to Account 303,.	Revised Schedule MEM-5
3	Increase General Office allocation to 4.0%.	Revised Schedule MEM-6
4	Recalculation of Accumulated Depreciation.	Revised Schedule MEM-7
5	Eliminate Working Capital Components	Revised Schedule MEM-8
6	Capitalize Outside Services Expenses	Revised Schedule MEM-9
7	Retire Wells 8 & 9 that are no longer used and useful	Revised Schedule MEM-10
		Revised Schedule MEM-11

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Revised Schedule MEM - 5

RATE BASE ADJUSTMENT #1 - Skipped

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Revised Schedule MEM-6

RATE BASE ADJUSTMENTS #2 - Reclassify additional CAP Allocation purchased that is an intangilbe asset in the form of a water right.

Line No.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Deferred Regulatory Assets	$ 1,280,000	$ (1,280,000)	$ -
2				
3				
4				
5	References:			
6	Col [A]: Company Schedeule B-1			
7	Col [B]: Col [C] - Col [A]			
8	Col [C]: Testimony - MEM.			
9				
10				
11	Explanation of Staff Adjustment			
12	Staff has determined that approximately 50% of the additional CAP Allocation of 1,931 acre feet of water purchased in 2007 will			
13	be used and useful by 2012. The contract with CAWCD and CAP for water deliveries is 100 years with renerwal provisions so			
14	the purchase has the characteristics of an intangible asset similar to water rights associated with land. Given its attributes, this			
15	purchase should not be treated as having a value which is consumed over time and benefits future periods. The purpose of this			
16	adjustment is to reclassify the cost of the CAP Allocation to NARUC Account #303, Land and Land Rights.			
17				
18	NOTE: This adjustment also applies to the RCN schedules.			
19				

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Revised Schedule MEM-7

RATE BASE ADJUSTMENT #3 - Reduce General Office plant for disallowed items and increase four-factor allocation to 4%.

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED	[D]	[E]
1		General office plant allocation	$ 751,171	$ 124,299	875,469		
2		Totals	$ 751,171	$ 124,299	$ 875,469		
3							
4							
5		[A]: Company Schedule B-2, Page 3 and B-3, Page 3 and below Line 26, Column C.					
6		[B]: Testimony - MEM and below calculations and Line 47, Column E.					
7		[C]: Col [B] + Col [A]					
8							
9		Explanation of Staff Adjustment					
10	As Originally Filed::						
11			Per Exhibit	Allocation	Original		
12	**Home Office Plant Allocated**		Schedule B-2, Page 3	Factor	Allocation		
13	301	Organization	16,452	3.21%	528		
14	302	Franchise Cost and Other Intangible Plant	1,089,237	3.21%	34,965		
15	304	Structures & Improvements	5,802,813	3.21%	186,270		
16	311	Electric Pumping Equipment	(916)	3.21%	(29)		
17	339	Other Plant & Misc. Equipment	847,382	3.21%	27,201		
18	340	Office Furniture & Equipment	14,268,765	3.21%	458,027		
19	341	Transportation Equipment	552,719	3.21%	17,742		
20	343	Tools, Ship & Garage Equipment	405,643	3.21%	13,021		
21	344	Laboratory Equipment	4,061	3.21%	130		
22	345	Power Operated Equipment	249,261	3.21%	8,001		
23	346	Communication Equipment	165,561	3.21%	5,315		
24		Note Below		3.21%	-		
25			23,400,978		751,171		
26							
27							
28			Per Exhibit	Staff	Adjusted for	Allocation	Staff
29	**Home Office Plant Allocated**		Schedule B-2, Page 3	Adjustment A	Allocation	Factor	Recommended
30	301	Organization	16,452		16,452	4.00%	658
31	302	Franchise Cost and Other Intangible Plant	1,089,237	(420,000)	669,237	4.00%	26,769
32	304	Structures & Improvements	5,802,813		5,802,813	4.00%	232,113
33	311	Electric Pumping Equipment	(916)		(916)	4.00%	(37)
34	339	Other Plant & Misc. Equipment	847,382	(820,254)	27,128	4.00%	1,085
35	340	Office Furniture & Equipment	14,268,765		14,268,765	4.00%	570,751
36	341	Transportation Equipment	552,719	(274,001)	278,718	4.00%	11,149
37	343	Tools, Ship & Garage Equipment	405,643		405,643	4.00%	16,226
38	344	Laboratory Equipment	4,061		4,061	4.00%	162
39	345	Power Operated Equipment	249,261		249,261	4.00%	9,970
40	346	Communication Equipment	165,561		165,561	4.00%	6,622
41		Note Below			-	4.00%	-
42			23,400,978	(1,514,255)	21,886,723		875,469
43						As originall filed	751,171
44							
45				Staff Adjustment to Increase General Office Plant			124,299
46							
47	Items Removed from General Office Plant in Staff Adjustment:						
48		CPUC Management Audit - Completed in 1995, thus not aaplicable to CCWC.		420,000			
49		Water Management Plans - Completed in 1998, thus not applicable to CCWC.		820,254			
50		Luxury Vehicles - Detail listed below.		274,001			
51				1,514,255			
52							
53							
54	Note: Consultant's schedule of GO Plant is $7,979 less than the listing in AWR's GL as furnished by the Company. Due to its immaterialty Staff did not investigate this difference.						
55							
56							
57							Accum.
58		Vehicles Found by Staff to be Imprudent	Date Acquired		Price		Depr.
59							
60		Ford Explorer - 2004	3/26/2004		$ 45,639	Per MEM DR 7.5	5,988
61							
62		Infiniti GX35 - 2004	8/13/2004		$ 40,039	Per MEM DR 7.5	5,253
63							
64		Ford Expedition - 2004	8/13/2004		$ 40,785	Per MEM DR 7.5	5,351
65							
66		Acura MDX 2001	11/21/2002		$ 38,319	Per MEM DR 7.5	10,055
67							
68		Infiniti QX4	12/11/2002		$ 50,077	Per MEM DR 7.5	13,140
69							
70		Audi S4 Avant - 2005	7/6/2005		$ 59,143	Per MEM DR 7.5	3,880
71							
72					$ 274,001		$ 43,667
73							
74							

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RATE BASE ADJUSTMENT #4 - ACCUMULATED DEPRECIATION

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENT A	[C] STAFF ADJUSTMENT B	[D] TOTAL OF STAFF ADJUSTMENTS	[E] STAFF RECOMMENDED
1	General office plant allocation	$ 15,877,022	$ 84,561	$ 2,116,511	$ (2,031,950)	13,845,072
2	Totals	$ 15,877,022	$ 84,561	$ 2,116,511	$ (2,031,950)	$ 13,845,072
3						
4						
5	[A]: Company Schedule B-2, Page 3 and B-3, Page 3 and below Line 63, Column C.					
6	[B]: Testimony - MEM and below calculations and Line 99, Column E.					
7	[C]: Testimony - MEM and below calculations and line 175, Column E.					
8	[D]: Col [B] + Col [C]					
9	[E]: Testimony - MEM					
10						

	Acct. No.	Description	CCWC Plant OCN Accum. Depr. Per Exh. Sch. B-2 Page 3d
11			
12			
13			
14			
15	301	Organization	-
16	302	Franchises	-
17	303	Land and Land Rights	-
18	304	Structures & Improvements	357,961
19	305	Collecting & Impounding Reservoirs	573
20	306	Lakes, Rivers, Other Intakes	-
21	307	Wells and Springs	183,252
22	308	Infiltration Galleries and Tunnels	-
23	309	Supply Mains	-
24	310	Power Generation Equipment	-
25	311	Pumping Equipment	879,456
26	320	Water Treatment Plant	2,304,464
27	330	Distribution Reservoirs & Standpipes	1,996,014
28	331	Transmission & Distribution Mains	7,154,728
29	333	Services	1,060,764
30	334	Meters & Meter Installation	990,763
31	335	Hydrants	235,514
32	336	Backflow Prevention Devices	-
33	339	Other Plant & Misc. Equipment	135,962
34	340	Office Furniture & Equipment	45,958
35	341	Transportation Equipment	60,636
36	342	Stores Equipment	-
37	343	Tools, Ship & Garage Equipment	34,980
38	344	Laboratory Equipment	25
39	345	Power Operated Equipment	-
40	346	Communication Equipment	883
41	347	Miscellaneous Equipment	31,899
42	348	Other Tangible Plant	-
43			15,473,832
44		Rounding	2
45		Total CCWC Plant Accumulated Depreciation Per Exhibit Schedule B-2. Page 3d.	15,473,834
46			
47			
48			

		General Office Plant Allocated - Accum Depr OCN	Per Exhibit Schedule B-4-A	Allocation Factor	Allocation
49					
50	301	Organization	3,046	3.21%	98
51	302	Franchise Cost and Other Intangible Plant	211,596	3.21%	6,792
52	304	Structures & Improvements	2,354,430	3.21%	75,577
53	311	Electric Pumping Equipment		3.21%	-
54	339	Other Plant & Misc. Equipment	162,569	3.21%	5,218
55	340	Office Furniture & Equipment	8,664,647	3.21%	278,135
56	341	Transportation Equipment	552,718	3.21%	17,742
57	343	Tools, Shop & Garage Equipment	192,488	3.21%	6,179
58	344	Laboratory Equipment	4,062	3.21%	130
59	345	Power Operated Equipment	249,257	3.21%	8,001
60	346	Communication Equipment	165,561	3.21%	5,315
61		Total GO Accum. Depr. - Exh. Sch. B-2. Pg 4, Line 33.	12,560,374		403,188
62					
63		Total Accumulated Depreciation Per Exhibit Schedule B-2. Page 1, Line 6.			15,877,022

64 **Explanation of Staff Adjustment A**

65 As Originally Filed::

			Per Exhibit Sch. B-2, Page 4	Allocation Factor	Original Allocation
66					
67	**Home Office Plant Accumulated Depreciation**				
68	301	Organization	3,046	3.21%	98
69	302	Franchise Cost and Other Intangible Plant	211,596	3.21%	6,792
70	304	Structures & Improvements	2,354,430	3.21%	75,577
71	311	Electric Pumping Equipment	-	3.21%	-
72	339	Other Plant & Misc. Equipment	162,569	3.21%	5,218
73	340	Office Furniture & Equipment	8,664,647	3.21%	278,135
74	341	Transportation Equipment	552,718	3.21%	17,742
75	343	Tools, Ship & Garage Equipment	192,488	3.21%	6,179
76	344	Laboratory Equipment	4,062	3.21%	130
77	345	Power Operated Equipment	249,257	3.21%	8,001
78	346	Communication Equipment	165,561	3.21%	5,315
79			12,560,374		403,188

80

81

			Per Exhibit Schedule B-2, Pa	Staff Adjustment A	Adjusted for Allocation	Allocation Factor	Staff Recommended
82							
83	**Home Office Plant Accumulated Depreciation**						
84	301	Organization	3,046	(3,046)	-	4.00%	-
85	302	Franchise Cost and Other Intangible Plant	211,596	(153,888)	57,708	4.00%	2,308
86	304	Structures & Improvements	2,354,430		2,354,430	4.00%	94,177
87	311	Electric Pumping Equipment	-		-	4.00%	-
88	339	Other Plant & Misc. Equipment	162,569	(166,019)	(3,450)	4.00%	(138)
89	340	Office Furniture & Equipment	8,664,647		8,664,647	4.00%	346,586
90	341	Transportation Equipment	552,718	(43,667)	509,051	4.00%	20,362
91	343	Tools, Ship & Garage Equipment	192,488		192,488	4.00%	7,700
92	344	Laboratory Equipment	4,062		4,062	4.00%	162
93	345	Power Operated Equipment	249,257		249,257	4.00%	9,970
94	346	Communication Equipment	165,561		165,561	4.00%	6,622
95			12,560,374	(366,620)	12,193,754		487,750
96					As originall filed		403,188
97		Add the rounding difference required to agree with the Exhibit					2
98		**Staff Adjustment A to increase General Office Plant Accumulated depreciation to Colun B, above**					84,561

99

100 Items Removed from General Office Plant Accumulated Depreciation In Staff Adjustment A: Accum Depr

101	CRC Valuation - Inappropriate accumulated depreciation for intangible	3,046	Per DR MEM 7.4 & 7.5
102	CPUC Management Audit - Completed in 1995, thus not aaplicable to CCWC.	153,888	
103	Water Management Plans - Completed in 1998, thus not applicable to CCWC.	166,019	
104	Luxury Vehicles - Detail listed below.	43,667	
105		366,620	

		Vehicles Found by Staff to be I	Date Acquired	Price	Accum. Depr.
106					
108	109	Ford Explorer - 2004	3/26/2004	$ 45,639	5,988
110	111	Infiniti GX35 - 2004	8/13/2004	$ 40,039	5,253
112	113	Ford Expedition - 2004	8/13/2004	$ 40,785	5,351
114	115	Acura MDX 2001	11/21/2002	$ 38,319	10,055
116	117	Infiniti QX4	12/11/2002	$ 50,077	13,140
118	119	Audi S4 Avant - 2005	7/6/2005	$ 59,143	3,880
120					
121				$ 274,001	$ 43,667

Explanation of Staff Adjustment B

Explanation of Adjustment:
Agreement signed 02/05/2005 with Fountain Hills Sanitation District to take Wells 8 & 9 out of service and retire other Plant identified by Staff as not being used and useful. Also to reclassify plant and accumulated depreciation.

Acct. No.	Description	Cost	Accum Depr
304	Staff adjustment to Structures and addition to accum depr based on half-year conve	11,590	(193)
304	Well No. 9 - Install exhaust fan	596	596
	Subtotal	12,186	403
307	Fully depreciated Cost of Well #8 per response to DR MEM-7.3	$ 49,329	$ 49,329
307	Fully depreciated Cost of Well #9 per response to DR MEM-7.3	54,139	54,139
307	Engine Well	3,348	3,348
	Subtotal	106,816	106,816
311	Staff adjustment to pumping equipment and addition to accum depr based on half-y	26,083	(1,630)
	Subtotal	26,083	(1,630)
320	CAP Plant #1 1988	1,320,562	1,320,562
320	CAP Plant #1 - Treatment Equipment 1987	288,612	288,612
320	CAP Plant #1 - Treatment Equipment 1989	397,339	397,339
320	CAP Plant #1 - Treatment Equipment 19889	4,409	4,409
	Subtotal	2,010,922	2,010,922
305	Collecting and Impounding Reservoirs	(6,548)	(1,801)
307	Wells and Springs (250 hp sub.)	(65,622)	(18,727)
311	Pumping Equipment (250 hp sub. In 1996 Less Fire hydrant in 1996 and DIP in 200	55,254	24,434
320	Water Treatment Equipment (Water Treatment Study in 2004)	34,062	2,908
330	Distribution Reservoirs and Standpipes (Water Services in 1996 and mains in 2005	(1,658,272)	(104,710)
331	Transmission and Distribution Mains (16" main in 2005 and fh Blvd main in 2006)	1,502,420	46,451
333	Services (Water Services in 1996 less Conference Room Table and Chairs in 1993	106,409	30,253
334	Meters and Meter Installation (Meter installation in 1973 less service line in 1994)	11,193	16,154
335	Hydrants (Fire hydrant in 1996 and DIP in 2005)	53,352	10,940
340	Office Furniture and Equipment (Conference Room Table and Chairs in 1993)	1,814	585
303	Land and Land Rights (A/C #348 for RCN)	(34,062)	(6,487)
		-	-
339	Other Plant & Misc. Equip.	106,542	31,889
347	Miscellaneous Equipment	(106,542)	(31,889)
		-	-
		$ 2,156,007	$ 2,116,511

Summary of Staff Adjustment B

Plant Additions -	Line 132	Structures and Improvements	(193)
	Line 141	Pumping equipment	(1,630)
		Subtotal of Additions	(1,823)
Plant Retirements -	Line 133	Structures and Improvements	596
	Line 139	Wells and Springs	106,816
	Line 148	Water Treatment Equipment	2,010,922
		Subtotal of Retirements	2,118,334
		Total reduction to Column C above	2,116,511

CHAPARRAL CITY WATER COMPANY, INC.
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

Revised Schedule MEM-9

RATE BASE ADJUSTMENT #5 - Eliminate Working Capital Elements

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Unamortized Debt Issuance Costs	$ 424,010	$ (424,010)	$ -
2	Prepayments	192,485	(192,485)	-
3	Materials and Supplies	14,521	(14,521)	$ -
		$ 631,016	$ (631,016)	$ -

References:
Col [A]: Company Schedeule B-2
Col [B]: Col [C] - Col [A]
Col [C]: MEM Testimony

CHAPARRAL CITY WATER COMPANY, INC.
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

Revised Schedule MEM-10

RATE BASE ADJUSTMENT #6 - Capitalize Outside Services Expenses

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	304	Structures and Improvements	$ -	$ 11,590	$ 11,590
2	311	Electric Pumping Equipment	$ -	$ 26,084	$ 26,084
3		TOTAL	$ -	$ 37,674	$ 37,674
4					
5					
6					
7					
8		References:			
9		Col [A]: Company Schedeule B-2			
10		Col [B]: Col [C] - Col [A]			
11		Col [C]: MEM Testimony			
12					
13		**PLANT COSTS REMOVED FROM OUTSIDE SERVICES (MEM 8.1)**			
14		Acct. No.	Description		Amount
15		304-Struct & Imprvmnts	New irrigation installation		$ 2,500
16		304-Struct & Imprvmnts	Installation of 30' x 6' fencing w/pane		$ 4,375
17		304-Struct & Imprvmnts	Professional survey for new fence lin		$ 4,715
18			Total for Structures and Improvements		$ 11,590
19					
20		311 - Elec Pumping Equip	Recondition motor		$ 7,448
21		311 - Elec Pumping Equip	Removal & repair of pump		$ 5,513
22		311 - Elec Pumping Equip	Removal & repair of motor and pump		$ 13,123
23			Total for Electric Pumping Equipment		$ 26,084
24					
25			**Total expensed plant**		**$ 37,674**

CHAPARRAL CITY WATER COMPANY, INC.
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Test Year Ended December 31, 2006

Revised Schedule MEM-11

RATE BASE ADJUSTMENT #7 - Retire Wells #8 and #9 and Other Plant that is not used and useful.
Also reclassify plant into more appropriate NARUC account categories.

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	304	Structures and Improvements	$ -	$ (596)	$ (596)
2	307	Wells and Springs	$ -	$ (106,816)	$ (106,816)
3	320	Water Treatment Equipment	$ -	(2,010,922)	$ (2,010,922)
4	305	Collecting and Impounding Reservoirs	$ -	(6,548)	$ (6,548)
5	307	Wells and Springs	$ -	(65,622)	$ (65,622)
6	311	Pumping Equipment	$ -	55,254	$ 55,254
7	320	Water Treatment Equipment	$ -	34,062	$ 34,062
8	330	Distribution Reservoirs and Standpipes	$ -	(1,658,272)	$ (1,658,272)
9	331	Transmission and Distribution Mains	$ -	1,502,420	$ 1,502,420
10	333	Services	$ -	106,409	$ 106,409
11	334	Meters and Meter Installation	$ -	11,193	$ 11,193
12	335	Hydrants	$ -	53,352	$ 53,352
13	340	Office Furniture and Equipment	$ -	1,814	$ 1,814
14	303	Land and Land Rights (A/C #348 for RCN)	$ -	(34,062)	$ (34,062)
15	339	Other Plant & Misc. Equip.	$ -	106,542	$ 106,542
16	347	Miscellaneous Equipment	$ -	(106,542)	$ (106,542)
17		TOTAL	$ -	$ (2,118,334)	$ (2,118,334)
18					
19					
20					
21		References:			
22		Col [A]: Company Schedeule B-2			
23		Col [B]: Col [C] - Col [A]			
24		Col [C]: MEM Testimony			
25					

26 Explanation of Adjustment:
27 Agreement signed 02/05/2005 with Fountain Hills Sanitation District to take Wells 8 & 9 out of service and retire other
28 Plant identified by Staff as not being used and useful. Also to reclassify plant and accumulated depreciation.
29

	Acct. No.	Description	Cost	Accum Depr
30				
31				
32	307	Fully depreciated Cost of Well #8 per response to DR MEM-7.3	$ 49,329	$ 49,329
33	307	Fully depreciated Cost of Well #9 per response to DR MEM-7.3	54,139	54,139
34	307	Engine Well	3,348	3,348
35		Subtotal	106,816	106,816
36	320	CAP Plant #1 1986	1,320,562	1,320,562
37	320	CAP Plant #1 - Treatment Equipment 1987	288,612	288,612
38	320	CAP Plant #1 - Treatment Equipment 1989	397,339	397,339
39	320	CAP Plant #1 - Treatment Equipment 19889	4,409	4,409
40		Subtotal	2,010,922	2,010,922
41	304	Well No. 9 - Install exhaust fan	596	596
42				
43	305	Collecting and Impounding Reservoirs	(6,548)	(1,801)
44	307	Wells and Springs (250 hp sub.)	(65,622)	(18,727)
45	311	Pumping Equipment (250 hp sub. In 1996 Less Fire hydrant in 1996 and DIP in	55,254	24,434
46	320	Water Treatment Equipment (Water Treatment Study in 2004)	34,062	2,908
47	330	Distribution Reservoirs and Standpipes (Water Services in 1996 and mains in 2	(1,658,272)	(104,710)
48	331	Transmission and Distribution Mains (16" main in 2005 and fh Blvd main in 200	1,502,420	46,451
49	333	Services (Water Services in 1996 less Conference Room Table and Chairs in 1	106,409	30,253
50	334	Meters and Meter Installation (Meter installation in 1973 less service line in 199	11,193	16,154
51	335	Hydrants (Fire hydrant in 1996 and DIP in 2005)	53,352	10,940
52	340	Office Furniture and Equipment (Conference Room Table and Chairs in 1993)	1,814	585
53	303	Land and Land Rights (A/C #348 for RCN)	(34,062)	(6,487)
54			-	-
55	339	Other Plant & Misc. Equip.	106,542	31,889
56	347		(106,542)	(31,889)
57				
58			$ 2,118,334	$ 2,118,334
59				

CHAPARRAL CITY WATER COMPANY, INC.
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Revised Schedule MEM RCN -1

RATE BASE - RECONSTRUCTION COST NEW

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	Adj. No.	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 80,816,104	(2,337,584)	2, 3, 5	$ 78,478,520
2	Less: Accumulated Depreciation	25,894,686	(2,506,970)	4	23,387,716
3	Net Plant in Service	$ 54,921,418	169,386		$ 55,090,804
4					
5	*LESS:*				
6					
7	Contributions in Aid of Construction (CIAC)	$ -	$ -		$ -
8	Less: Accumulated Amortization	-	-		-
9	Net CIAC	9,441,352	-		$ 9,441,352
10					
11	Advances in Aid of Construction (AIAC)	10,231,760			$ 10,231,760
12					
13	Customer Meter Deposits	819,845	-		$ 819,845
14					
15	Deferred Income Tax Credits	925,896	-		925,896
16					
17	Shared Gain on Well (Settlement Proceeds)	646,000	-	1	646,000
18					
19	*ADD:*				
20					
21	Unamortized Debt Issuance Costs	424,010	(424,010)	5	-
22					
23	Prepayments	192,485	(192,485)	5	-
24					
25	Materials and Supplies	14,521	(14,521)	5	-
26					
27	Deferred Regulatory Assets	1,280,000	(1,280,000)	2	-
28					
29	Working Capital	-	-		-
30					
31					
32		$ 34,767,581	$ (1,741,630)		$ 33,025,951
33					
34					

35 References:
36 Column (A), Company Schedule B-3
37 Column (B): Revised Schedule MEM RCN-2
38 Column (C): Column (A) + Column (B)

CHAPARRAL CITY WATER COMPANY, INC.
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Revised Schedule MEM RCN-2

SUMMARY OF RECONSTRUCTION COST (RCN) RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Well Settlement ADJ #1	[C] CAP Allocation ADJ #2	[D] GO Plant ADJ #3	[E] Acc Depr ADJ #4	[F] Working Capital ADJ #5	[G] Plant Adj. ADJ #6	[I] STAFF ADJUSTED
		PLANT IN SERVICE:								
1		Decision No. 68176 Plant adjusments not booked but included in Staff RCN balances	$ 32,536							
2	301	Organization	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3	302	Franchises	-	-	-	-	-	-	-	-
4	303	Land and Land Rights	305,920	-		-	-	-	1,245,937	1,551,857
5	304	Structures & Improvements	1,965,394	-	-	-	-	-	10,793	1,976,187
6	305	Collecting & Impounding Reservoirs	-	-	-	-	-	-	-	-
7	306	Lakes, Rivers, Other Intakes	-	-	-	-	-	-	-	-
8	307	Wells and Springs	908,287	-	-	-	-	-	(528,244)	380,043
9	308	Infiltration Galleries and Tunnels	-	-	-	-	-	-	-	-
10	309	Supply Mains	-	-	-	-	-	-	-	-
11	310	Power Generation Equipment	-	-	-	-	-	-	-	-
12	311	Pumping Equipment	3,160,902	-	-	-	-	-	105,725	3,266,627
13	320	Water Treatment Plant	9,969,130	-	-	-	-	-	(3,226,536)	6,742,594
14	330	Distribution Reservoirs & Standpipes	13,002,689	-	-	-	-	-	(1,932,296)	11,070,393
15	331	Transmission & Distribution Mains	31,920,448	-	-	-	-	-	1,601,082	33,521,530
16	333	Services	9,304,078	-	-	-	-	-	146,911	9,450,989
17	334	Meters & Meter Installation	3,981,833	-	-	-	-	-	16,310	3,998,143
18	335	Hydrants	2,192,653	-	-	-	-	-	77,763	2,270,416
19	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-
20	339	Other Plant & Misc. Equipment	1,814,021	-	-	-	-	-	-	1,814,021
21	340	Office Furniture & Equipment	349,449	-	-	-	-	-	2,544	351,993
22	341	Transportation Equipment	663,541	-	-	-	-	-	-	663,541
23	342	Stores Equipment	-	-	-	-	-	-	-	-
24	343	Tools, Ship & Garage Equipment	196,755	-	-	-	-	-	-	196,755
25	344	Laboratory Equipment	-	-	-	-	-	-	-	-
26	345	Power Operated Equipment	-	-	-	-	-	-	-	-
27	346	Communication Equipment	57,138	-	-	-	-	-	-	57,138
28	347	Miscellaneous Equipment	-	-	-	-	-	-	-	-
29	348	Other Tangible Plant	-	-	-	-	-	-	-	-
30			79,823,976	-	-	-	-	-	(2,480,011)	77,311,429
31										
32		Add:								-
33		General Office Plant Allocation	992,128	-	-	174,963	-	-	-	1,167,091
34		Less:								-
35			-	-	-	-	-	-	-	-
36			-	-	-	-	-	-	-	-
37										
38		Total Plant in Service	$ 80,816,104	$ -	$ -	$ 174,963	$ -	# $ -	# $ (2,480,011)	$ 78,478,520
39		Less: Accumulated Depreciation	25,894,686	-	-	-	(2,506,970)	-	-	23,387,716
40										
41		Net Plant in Service (L59 - L 60)	$ 54,921,418	$ -	$ -	$ 174,963	$ 2,506,970	$ -	$ (2,480,011)	$ 55,090,804
42										
43		*LESS:*								
44		Contributions in Aid of Construction (CIAC)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
45		Less: Accumulated Amortization	-	-	-	-	-	-	-	-
46		Net CIAC (L25 - L26)	10,231,760	-	-	-	0	-	-	10,231,760
47		Advances in Aid of Construction (AIAC)	9,441,352	-	-	-	-	-	-	9,441,352
48		Customer Meter Deposits	819,845	-	-	-	-	-	-	819,845
49		Deferred Income Taxes	925,896	-	-	-	-	-	-	925,896
50		Shared Gain on Well	646,000	-						646,000
51										
52		*ADD:*								
53		Unamortized Debt Issuance Costs	424,010	-	-	-	-	(424,010)	-	-
54		Prepayments	192,485	-	-	-	-	(192,485)	-	-
55		Materials and Supplies	14,521					(14,521)		-
56		Deferred Regulatory Assets	1,280,000		(1,280,000)	-	-	-	-	-
57		Working Capital	-	-	-	-	-	-	-	-
58										
59		Original Cost Rate Base	$ 34,787,581	$ -	$ (1,280,000)	$ 174,963	$ 2,506,970	$ (631,016)	$ (2,480,011)	$ 33,025,951
60										
61										
62										
63										
64										
65										
66										
67										
68										
69										

ADJ #		References:
1	Skipped	Revised Schedule MEM-5
2	CAP Allotment Reclassification.	Revised Schedule MEM-6
3	Increase General Office allocation	Revised Schedule MEM RCN 3
4	Recalculation of Accumulated Depreciation.	Revised Schedule MEM RCN 4
5	Eliminate Working Capital Components	Revised Schedule MEM-9
6	Plant Additions & Retirements per Staff Adjustments	Revised Schedule MEM RCN 5

70 References:
71 Column (A), Company Schedule B-3 and B-4
72 Column (B): Revised Schedule MEM RCN-2
73 Column (C): Column (A) + Column (B) through

CHAPARRAL CITY WATER COMPANY, INC.
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

Revised Schedule MEM RCN-3

RCN RATE BASE ADJUSTMENT #3 - Reduce General Office plant allocation for disallowed items and increase four-factor allocation to 4%.

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	General office plant allocation @ RCN	$ 992,128	$ 174,963	1,167,091
2	Totals	$ 992,128	$ 174,963	$ 1,167,091
3				
4				
5	[A]: Company Schedule B-3, Page 3 and B-4 and below Line 27, Column C.			
6	[B]: Testimony - MEM and below calculations and Line 48, Column E.			
7	[D]: Col [B] + Col [C]			
8				
9				
10				
11	**Explanation of Staff Adjustment**			
12	As Originally Filed::			
13		RCN Per Exhibit Schedule B-4-A	Allocation Factor	RCN Original Allocation
14	**Home Office Plant Allocated**			
15	308 Land	$ 172,003	3.21%	5,521
16	301 Organization	16,452	3.21%	528
17	303 Franchise Cost and Other Intangible Plant	917,234	3.21%	29,443
18	304 Structures & Improvements	9,379,730	3.21%	301,089
19	311 Electric Pumping Equipment	(1,860)	3.21%	(60)
20	339 Other Plant & Misc. Equipment	1,055,403	3.21%	33,878
21	340 Office Furniture & Equipment	17,188,237	3.21%	551,742
22	341 Transportation Equipment	606,575	3.21%	19,471
23	343 Tools, Shop & Garage Equipment	663,298	3.21%	21,292
24	344 Laboratory Equipment	15,358	3.21%	493
25	345 Power Operated Equipment	634,172	3.21%	20,357
26	346 Communication Equipment	260,818	3.21%	8,372
27		$ 30,907,420		992,128
28				
29				
30				
31		RCN Per Exhibit Schedule B-4-A	Staff Adjustment	Adjusted for Allocation	Allocation Factor	Staff Recommended
32	**Home Office Plant Allocated**					
33	308 Land	$ 172,003		172,003	4.00%	6,880
34	301 Organization	16,452		16,452	4.00%	658
35	303 Franchise Cost and Other Intangible Plant	917,234	(420,000)	497,234	4.00%	19,889
36	304 Structures & Improvements	9,379,730		9,379,730	4.00%	375,189
37	311 Electric Pumping Equipment	(1,860)		(1,860)	4.00%	(74)
38	339 Other Plant & Misc. Equipment	1,055,403	(1,015,146)	40,257	4.00%	1,610
39	340 Office Furniture & Equipment	17,188,237		17,188,237	4.00%	687,529
40	341 Transportation Equipment	606,575	(295,002)	311,573	4.00%	12,463
41	343 Tools, Shop & Garage Equipment	663,298		663,298	4.00%	26,532
42	344 Laboratory Equipment	15,358		15,358	4.00%	614
43	345 Power Operated Equipment	634,172		634,172	4.00%	25,367
44	346 Communication Equipment	260,818		260,818	4.00%	10,433
45		$ 30,907,420	(1,730,148)	29,177,272		1,167,091
46					As originall filed	992,128
47						
48			**Staff Adjustment to Increase General Office Plant**			174,964
49						
50	Items Removed from General Office Plant In Staff Adjustment A:		OCN	Cost RCN		
51	CPUC Management Audit - Completed in 1995, thus not aeplicable to CCW		420,000	420,000		
52	Water Management Plans - Completed in 1998, thus not applicable to CCW		820,254	1,015,146		
53	Luxury Vehicles - Detail listed below.		274,001	295,002		
54			1,514,255	1,730,148		
55						
56						
57			Date	RCN Per Exhibit Schedule B-4-A		
58	Vehicles Found by Staff to be Imprudent		Acquired			
59						
60	Ford Explorer - 2004		3/26/2004	$ 48,615		
61						
62	Infiniti GX35 - 2004		8/13/2004	$ 43,242		
63						
64	Ford Expedition - 2004		8/13/2004	$ 43,444		
65						
66	Acura MDX 2001		11/21/2002	$ 42,917		
67						
68	Infiniti QX4		12/11/2002	$ 56,086		
69						
70	Audi S4 Avant - 2005		7/6/2005	$ 60,698		
71						
72				$ 295,002		
73						

CHAPARRAL CITY WATER COMPANY, INC.
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

RCND RATE BASE ADJUSTMENT #4 - ACCUMULATED DEPRECIATION

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENT A	[C] STAFF ADJUSTMENT B	[D] TOTAL OF STAFF ADJUSTMENTS	[E] STAFF RECOMMENDED
1	RCN Accumulated Depreciation	$ 25,894,686	$ 113,818	$ (2,620,789)	$ (2,506,970)	23,387,716
2	Totals	$ 25,894,686	$ 113,818	$ (2,620,789)	$ (2,506,970)	$ 23,387,716
3						
4						
5	[A]: Company Schedule B-2, B-3 and B-4 and below Line 65, Column E.					
6	[B]: Testimony - MEM and below calculations and Line 145, Column E.					
7	[C]: Testimony - MEM and below calculations and line 193, Column E.					
8	[D]: Col [B] + Col [C]					
9	[E]: Col [A] + Col [D], and line 199, Column E.					
10						
11						

	Acct. No.	Description	CCWC Plant OCN Accum. Depr. Per Exh. Sch. B-2 Page 3d	CCWC Plant OCN Accum. Depr. Per Exh. Sch. B-4	Ratio of RCN to Original Cost Per Exh. Sch. B-4	RCN Accum. Depr. Per Exh. Sch. B-4
16	301	Organization	-	-		
17	302	Franchises	-	-		
18	303	Land and Land Rights	-	-		
19	304	Structures & Improvements	357,961	376,155	1.2942	486,820
20	305	Collecting & Impounding Reservoirs	573	-		
21	306	Lakes, Rivers, Other Intakes	-	-		
22	307	Wells and Springs	183,252	54,932	2.7353	150,255
23	308	Infiltration Galleries and Tunnels	-	-		
24	309	Supply Mains	-	-		
25	310	Power Generation Equipment	-	-		
26	311	Pumping Equipment	879,456	834,457	2.0976	1,750,363
27	320	Water Treatment Plant	2,304,464	2,099,307	1.2841	2,695,725
28	330	Distribution Reservoirs & Standpipes	1,996,014	1,431,816	1.5902	2,276,817
29	331	Transmission & Distribution Mains	7,154,728	7,103,657	1.8292	12,993,907
30	333	Services	1,060,764	1,228,978	1.2590	1,547,309
31	334	Meters & Meter Installation	990,763	1,032,186	1.4609	1,507,882
32	335	Hydrants	235,514	246,174	1.8716	460,745
33	336	Backflow Prevention Devices	-	-		
34	339	Other Plant & Misc. Equipment	135,962	262,340	1.0564	277,127
35	340	Office Furniture & Equipment	45,958	66,702	1.2925	86,215
36	341	Transportation Equipment	60,636	140,176	1.2395	173,753
37	342	Stores Equipment	-	-		
38	343	Tools, Ship & Garage Equipment	34,980	43,635	1.3106	57,187
39	344	Laboratory Equipment	25	-		
40	345	Power Operated Equipment	-	-		
41	346	Communication Equipment	883	25,603	1.4612	37,410
42	347	Miscellaneous Equipment	31,899	-		
43	348	Other Tangible Plant	-	639	1.0000	639
44			15,473,832	14,946,757		24,502,155
45		Rounding	2	-		(12)
46		Total CCWC Plant Accumulated Depreciation	15,473,834	14,946,757		24,502,143
47						

		General Office Plant Allocated - Accum Depr OCN	Per Exhibit Schedule B-4-A	Allocation Factor	Allocation	Ratio of RCN to Original Cost Per Exh. Sch. B-4-A	G. O. RCN Accum. Depr.
48							
49							
50							
51	301	Organization	3,046	3.21%	98	1.0000	98
52	302	Franchise Cost and Other Intangible Plant	211,596	3.21%	6,792	1.0000	6,792
53	304	Structures & Improvements	2,354,430	3.21%	75,577	1.6164	122,164
54	311	Electric Pumping Equipment	-	3.21%	-	0.0000	-
55	339	Other Plant & Misc. Equipment	162,569	3.21%	5,218	1.2455	6,500
56	340	Office Furniture & Equipment	8,664,647	3.21%	278,135	1.2046	335,043
57	341	Transportation Equipment	552,718	3.21%	17,742	1.0974	19,471
58	343	Tools, Shop & Garage Equipment	192,488	3.21%	6,179	1.6352	10,104
59	344	Laboratory Equipment	4,062	3.21%	130	3.7818	493
60	345	Power Operated Equipment	249,257	3.21%	8,001	2.5442	20,357
61	346	Communication Equipment	165,561	3.21%	5,315	1.5754	8,372
62		Total GO Accum. Depr. - Exh. Sch. B-2. Pg 4, Line 33.	12,560,374		403,188		529,393
63					15,877,022		25,031,536
64		Company Pro-forma RCN Rate Base Adjustment No. 1 for difference between General Ledger and Depreciation Detail Schedules.					863,150
65		Total RCN Accumulated Depreciation Per Exhibit Schedule B-2. Page 1, Line 7 - To Line 1, Column A above					25,894,686

Explanation of Staff Adjustment A

As Originally Filed::

		Per Exhibit Sch. B-2, Page 4	Allocation Factor	Original Allocation
Home Office Plant Accumulated Depreciation				
301	Organization	3,046	3.21%	98
302	Franchise Cost and Other Intangible Plant	211,596	3.21%	6,792
304	Structures & Improvements	2,354,430	3.21%	75,577
311	Electric Pumping Equipment	-	3.21%	-
339	Other Plant & Misc. Equipment	162,569	3.21%	5,218
340	Office Furniture & Equipment	8,664,647	3.21%	278,135
341	Transportation Equipment	552,718	3.21%	17,742
343	Tools, Ship & Garage Equipment	192,488	3.21%	6,179
344	Laboratory Equipment	4,062	3.21%	130
345	Power Operated Equipment	249,257	3.21%	8,001
346	Communication Equipment	165,561	3.21%	5,315
		12,560,374		403,188

		Per Exhibit Schedule B-2, Page 3	Staff Adjustment A	Adjusted for Allocation	Allocation Factor
Home Office Plant Accumulated Depreciation					
301	Organization	3,046	(3,046)	-	4.00%
302	Franchise Cost and Other Intangible Plant	211,596	(153,888)	57,708	4.00%
304	Structures & Improvements	2,354,430		2,354,430	4.00%
311	Electric Pumping Equipment	-		-	4.00%
339	Other Plant & Misc. Equipment	162,569	(166,019)	(3,450)	4.00%
340	Office Furniture & Equipment	8,664,647		8,664,647	4.00%
341	Transportation Equipment	552,718	(43,667)	509,051	4.00%
343	Tools, Ship & Garage Equipment	192,488		192,488	4.00%
344	Laboratory Equipment	4,062		4,062	4.00%
345	Power Operated Equipment	249,257		249,257	4.00%
346	Communication Equipment	165,561		165,561	4.00%
		12,560,374	(366,620)	12,193,754	

Items Removed from General Office Plant Accumulated Depreciation in Staff Adjustment A:

		Accum Depr
CRC Valuation - Inappropriate accumulated depreciation for intangible	3,046	Per DR MEM 7.4 & 7.5
CPUC Management Audit - Completed in 1995, thus not applicable to CCWC.	153,888	
Water Management Plans - Completed in 1998, thus not applicable to CCWC.	166,019	
Luxury Vehicles - Detail listed below.	43,667	
	366,620	

Vehicles Found by Staff to be Imprudent	Date Acquired	Price	Accum. Depr.
Ford Explorer - 2004	3/26/2004	$ 45,639	5,988
Infiniti GX35 - 2004	8/13/2004	$ 40,039	5,253
Ford Expedition - 2004	8/13/2004	$ 40,785	5,351
Acura MDX 2001	11/21/2002	$ 38,319	10,055
Infiniti QX4	12/11/2002	$ 50,077	13,140
Audi S4 Avant - 2005	7/6/2005	$ 59,143	3,880
		$ 274,001	$ 43,667

		Staff Adjusted	Ratio of RCN to Original Cost Per Exh. Sch. B-4-A	Staff Recommended G. O. RCN Accum. Depr.
301	Organization	-	1.0000	-
302	Franchise Cost and Other Intangible Plant	2,308	1.0000	2,308
304	Structures & Improvements	94,177	1.6164	152,228
311	Electric Pumping Equipment	-	0.0000	-
339	Other Plant & Misc. Equipment	(138)	1.2455	(172)
340	Office Furniture & Equipment	346,586	1.2046	417,497
341	Transportation Equipment	20,362	1.0974	22,345
343	Tools, Ship & Garage Equipment	7,700	1.6352	12,590
344	Laboratory Equipment	162	3.7818	614
345	Power Operated Equipment	9,970	2.5442	25,366
346	Communication Equipment	6,622	1.5754	10,433
		487,750		643,211
	As originally filed Per Exhibit Schedule B-3, Page 4, Line 37			529,393
	Staff Adjustment A to Reduce General Office Plant Accumulated depreciation for disallowed items and increase allocation to 4 percent. To line 1, Column B			113,818

145 **Explanation of Staff Adjustment B**

	Acct. No.	Description	CCWC Plant OCN Accum. Depr. Per Exh. Sch. B-2, Page 3	CCWC Plant OCN Accum. Depr. Adjustments Per Staff Sched. MEM-8	Ratio of RCN to Original Cost Per Exh. Sch. B-4	Staff Recommended CCWC RCN Accum. Depr.	RCN Accum. Depr. Per Exh. Sch. B-4	Difference - Staff Adjustment B
151	301	Organization	-	-		-		
152	302	Franchises	-	-		-		
153	303	Land and Land Rights	-	-		-		
154	304	Structures & Improvements	357,961	(403)	1.2942	462,752	486,820	(24,068)
155	305	Collecting & Impounding Reservoirs	573	(573)	1.0000	-		-
156	306	Lakes, Rivers, Other Intakes	-	-		-		-
157	307	Wells and Springs	183,252	(125,543)	2.7353	157,851	150,255	7,596
158	308	Infiltration Galleries and Tunnels	-	-		-		-
159	309	Supply Mains	-	-		-		-
160	310	Power Generation Equipment	-	-		-		-
161	311	Pumping Equipment	879,456	26,084	2.0976	1,899,419	1,750,363	149,056
162	320	Water Treatment Plant	2,304,464	(2,008,014)	1.2841	380,671	2,695,725	(2,315,054)
163	330	Distribution Reservoirs & Standpipes	1,996,014	(104,710)	1.5902	3,007,552	2,276,817	730,735
164	331	Transmission & Distribution Mains	7,154,728	46,451	1.8292	13,172,397	12,993,907	178,489
165	333	Services	1,060,764	30,253	1.2590	1,373,590	1,547,309	(173,719)
166	334	Meters & Meter Installation	990,763	16,154	1.4609	1,471,005	1,507,882	(36,876)
167	335	Hydrants	235,514	10,940	1.8716	461,263	460,745	518
168	336	Backflow Prevention Devices	-	-		-		-
169	339	Other Plant & Misc. Equipment	135,962	-	1.0564	143,630	277,127	(133,497)
170	340	Office Furniture & Equipment	45,958	585	1.2925	60,157	86,215	(26,059)
171	341	Transportation Equipment	60,636	-	1.2395	75,158	173,753	(98,595)
172	342	Stores Equipment	-	-		-		-
173	343	Tools, Ship & Garage Equipment	34,980	-	1.3106	45,845	57,187	(11,342)
174	344	Laboratory Equipment	25	-	1.0000	25		25
175	345	Power Operated Equipment	-	-		-		-
176	346	Communication Equipment	883	-	1.4612	1,290	37,410	(36,120)
177	347	Miscellaneous Equipment	31,899	-	1.0000	31,899		31,899
178	348	Other Tangible Plant	-	-	1.0000	-	639	(639)
179			15,473,832			22,744,505	24,502,155	(1,757,651)
180		Rounding	2			-	(12)	12
181			15,473,834					
182		Total CCWC Plant RCN Accumulated Depreciation				22,744,505	24,502,143	
183		Difference between detail plant schedules and General Ledger accumulated depreciation balances and						(1,757,639)
184		Company RCN ratios applied to detail balances.						
185		Less Company RCND Rate Base pro-forma adjustment No. 1 to account for the difference between General						
186		Ledger A/D and detail schedules.						863,150
187		Staff Adjustment B to decrease CCWC Plant RCN Accumulated Depreciation Based on Company Supplied						
188		RCN Rates. To Line 1, Column C						(2,620,789)
189								
190								

191 **Summary of Staff Recommended RCN Accumulated Deprecaition:**

192	Staff recommended CCWC RCN Accumulated Depreciation Calculated Below	22,744,505
193	Staff recommended General Office RCN Accumulated Depreciation	643,211
194	Staff recommended Total RCN Accumulated Depreciation to Column E, Line 1 above	23,387,716

CHAPARRAL CITY WATER COMPANY, INC.
Docket No. W-02113A-07-0551
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RCN RATE BASE ADJUSTMENT #6 - Record Plant Additions and Retirements per Staff Adjustments

LINE NO.		DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	301	Organization	$ -	-	-
2	302	Franchises	-	-	-
3	303	Land and Land Rights	305,920	1,245,937	1,551,857
4	304	Structures & Improvements	1,965,394	10,793	1,976,187
5	305	Collecting & Impounding Reservoirs	-	-	-
6	306	Lakes, Rivers, Other Intakes	-	-	-
7	307	Wells and Springs	908,287	(528,244)	380,043
8	308	Infiltration Galleries and Tunnels	-	-	-
9	309	Supply Mains	-	-	-
10	310	Power Generation Equipment	-	-	-
11	311	Pumping Equipment	3,160,902	105,725	3,266,627
12	320	Water Treatment Plant	9,969,130	(3,226,536)	6,742,594
13	330	Distribution Reservoirs & Standpipes	13,002,689	(1,932,296)	11,070,393
14	331	Transmission & Distribution Mains	31,920,448	1,601,082	33,521,530
15	333	Services	9,304,078	146,911	9,450,989
16	334	Meters & Meter Installation	3,981,833	16,310	3,998,143
17	335	Hydrants	2,192,853	77,763	2,270,616
18	336	Backflow Prevention Devices	-	-	-
19	339	Other Plant & Misc. Equipment	1,814,021	-	1,814,021
20	340	Office Furniture & Equipment	349,449	2,544	351,993
21	341	Transportation Equipment	663,541	-	663,541
22	342	Stores Equipment	-	-	-
23	343	Tools, Ship & Garage Equipment	195,755	-	195,755
24	344	Laboratory Equipment	-	-	-
25	345	Power Operated Equipment	-	-	-
26	346	Communication Equipment	57,138	-	57,138
27	347	Miscellaneous Equipment	-	-	-
28	348	Other Tangible Plant	-	-	-
29			79,791,438	(2,480,011)	77,311,427
30					
31					
32		[A]: Company Schedule B-4, and below Line 23 - 26, Column A.			
33		[B]: Testimony - MEM and Schedule MEM-6 and Schedule MEM-23.			
34		[C]: Col [B] + Col [C]			
35					

			Company RCN Per Exhibit Schedule B-4	Per Below Analysis Staff Adjusted RCN	Difference - Staff Adjustment
40	301	Organization	$ -	-	$ -
41	302	Franchises	-	-	-
42	303	Land and Land Rights	305,920	1,551,857	(1,245,937)
43	304	Structures & Improvements	1,965,394	1,976,187	(10,793)
44	305	Collecting & Impounding Reservoirs	-	-	-
45	306	Lakes, Rivers, Other Intakes	-	-	-
46	307	Wells and Springs	908,287	380,043	528,244
47	308	Infiltration Galleries and Tunnels	-	-	-
48	309	Supply Mains	-	-	-
49	310	Power Generation Equipment	-	-	-
50	311	Pumping Equipment	3,160,902	3,266,627	(105,725)
51	320	Water Treatment Plant	9,969,130	6,742,594	3,226,536
52	330	Distribution Reservoirs & Standpipes	13,002,689	11,070,393	1,932,296
53	331	Transmission & Distribution Mains	31,920,448	33,521,530	(1,601,082)
54	333	Services	9,304,078	9,450,989	(146,911)
55	334	Meters & Meter Installation	3,981,833	3,998,143	(16,310)
56	335	Hydrants	2,192,853	2,270,616	(77,763)
57	336	Backflow Prevention Devices	-	-	-
58	339	Other Plant & Misc. Equipment	1,814,021	1,814,021	-
59	340	Office Furniture & Equipment	349,449	351,993	(2,544)
60	341	Transportation Equipment	663,541	663,541	-
61	342	Stores Equipment	-	-	-
62	343	Tools, Ship & Garage Equipment	195,755	195,755	-
63	344	Laboratory Equipment	-	-	-
64	345	Power Operated Equipment	-	-	-
65	346	Communication Equipment	57,138	57,138	-
66	347	Miscellaneous Equipment	-	-	-
67	348	Other Tangible Plant	-	-	-
			79,791,438	77,311,427	2,480,011

CHAPARRAL CITY WATER COMPANY, INC.
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			Staff Adjusted RCN Per MSJ	From Sch MEM 23	From Rev Sch MEM-6	Staff Adjusted RCN
68	301	Organization	-			-
69	302	Franchises	-			-
70	303	Land and Land Rights	271,857		1,280,000	1,551,857
71	304	Structures & Improvements	1,964,597	11,590		1,976,187
72	305	Collecting & Impounding Reservoirs	-			-
73	306	Lakes, Rivers, Other Intakes	-			-
74	307	Wells and Springs	380,043			380,043
75	308	Infiltration Galleries and Tunnels	-			-
76	309	Supply Mains	-			-
77	310	Power Generation Equipment	-			-
78	311	Pumping Equipment	3,240,544	26,083		3,266,627
79	320	Water Treatment Plant	6,742,594			6,742,594
80	330	Distribution Reservoirs & Standpipes	11,070,393			11,070,393
81	331	Transmission & Distribution Mains	33,521,530			33,521,530
82	333	Services	9,450,989			9,450,989
83	334	Meters & Meter Installation	3,998,143			3,998,143
84	335	Hydrants	2,270,616			2,270,616
85	336	Backflow Prevention Devices	-			-
86	339	Other Plant & Misc. Equipment	1,814,021			1,814,021
87	340	Office Furniture & Equipment	351,993			351,993
88	341	Transportation Equipment	663,541			663,541
89	342	Stores Equipment	-			-
90	343	Tools, Ship & Garage Equipment	195,755			195,755
91	344	Laboratory Equipment	-			-
92	345	Power Operated Equipment	-			-
93	346	Communication Equipment	57,138			57,138
94	347	Miscellaneous Equipment	-			-
95	348	Other Tangible Plant	-			-
96			75,993,754	37,673	1,280,000	77,311,427

CHAPARRAL CITY WATER COMPANY, INC.
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Test Year Ended December 31, 2006

Revised Schedule MEM-12

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	*REVENUES:*						
2	Metered Water Sales	$ 7,364,411	$ -		$ 7,364,411	$ 1,904,143	$ 9,268,554
3	Water Sales - Unmetered	82,289	-		82,289	-	82,289
4	Intentionally Left Blank	-	-		-	-	-
5	**Total Operating Revenues**	$ 7,446,700	$ -		$ 7,446,700	$ 1,904,143	$ 9,350,843
6	*OPERATING EXPENSES:*						
7	Salaries and Wages	$ 969,244	$ -		$ 969,244	$ -	$ 969,244
10	Purchased Water	831,656	(20,306)	2	811,351	-	811,351
11	Purchased Power	602,982	-		602,982	-	602,982
13	Chemicals	127,457	(27,630)	7	99,827	-	99,827
14	Repairs and Maintenance	104,609	(19,018)	8	85,591	-	85,591
15	Office Supplies and Expense	19,800	-		19,800	-	19,800
16	Outside Sevices	266,544	(38,048)	10	228,496	-	228,496
17	Water Testing	43,458	(17,820)	11	25,638	-	25,638
18	Transportation	70,430	-		70,430	-	70,430
19	General Liability Insurance	(1,294)	1,294	9	-	-	-
20	Insurance - Health and Life	-	-		-	-	-
21	Regulatory Commission/Rate Case Expense	144,871	(61,538)	6	83,333	-	83,333
22	Miscellaneous Expense	1,259,948	37,214	4	1,297,162	-	1,297,162
23	Depreciation	1,608,019	(59,220)	3	1,548,799	-	1,548,799
24	Amortization of Gain on Well (Settlement Proc	(76,000)	-	1	(76,000)	-	(76,000)
25	Amortization of Additional CAP Allocation	64,000	(64,000)	5	-	-	-
26	Taxes other than Income	47,873	-		47,873	-	47,873
27	Property Taxes	295,813	(33,413)	12	262,400	22,748	285,148
28	Income Taxes	270,020	155,802	13	425,822	726,197	1,152,019
29	Intentionally Left Blank	-	-		-	-	-
30	**Total Operating Expenses**	$ 6,649,430	$ (146,684)		$ 6,502,746	$ 748,946	$ 7,251,692
31	**Operating Income (Loss)**	$ 797,270	$ 146,684		$ 943,954	$ 1,155,198	$ 2,099,151

References:
Column (A): Company Schedule C-1
Column (B): RevisedSchedule MEM-13
Column (C): Column (A) + Column (B)
Column (D): Revised Schedules MEM-1 and MEM-2
Column (E): Column (C) + Column (D)

CHAPARRAL CITY WATER COMPANY, INC.
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Revised Schedule MEM-13

SUMMARY OF OPERATING INCOME STATEMENT ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Not Used ADJ #1	[C] Purchased Water ADJ #2	[D] Depreciation ADJ #3	[E] Misc Exp ADJ #4	[G] CAP Amort. ADJ #5	[H] Rate Case Exp. ADJ #6	[I] Chemicals ADJ #7	[J] Repairs & Maint. ADJ #8	[K] Insurance ADJ #9	[L] Outside Services ADJ #10	[M] Water Testing ADJ #11	[N] Prop. Tax ADJ #12	[O] Inc. Tax ADJ #13	[T] STAFF ADJUSTED
1	*REVENUES:*															
2	Metered Water Sales	$ 7,364,411	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 7,364,411
3	Water Sales - Unmetered	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ -
4	Other Operating Revenue	82,289	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 82,289
5	Intentionally Left Blank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ -
6	Total Operating Revenues	$ 7,446,700	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 7,446,700
7																
8	*OPERATING EXPENSES:*															
9	Salaries and Wages	$ 969,244	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 969,244
10	Purchased Water	831,656	-	(20,306)	-	-	-	-	-	-	-	-	-	-	-	$ 811,351
11	Purchased Power	602,982	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 602,982
12	Chemicals	127,457	-	-	-	-	-	-	(27,630)	-	-	-	-	-	-	$ 99,827
13	Repairs and Maintenance	104,609	-	-	-	-	-	-	-	(19,018)	-	-	-	-	-	$ 85,591
14	Office Supplies and Expense	19,800	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 19,800
15	Outside Sevices	266,544	-	-	-	-	-	-	-	-	-	(38,048)	-	-		$ 228,496
16	Water Testing	43,456	-	-	-	-	-	-	-	-	-	-	(17,820)	-	-	$ 25,636
17	Transportation	70,430	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 70,430
18	General Liability Insurance	(1,294)	-	-	-	-	-	-	-	-	1,294	-	-	-	-	$ -
19	Insurance - Health and Life	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ -
20	Regulatory Commission/Rate Case Expense	144,871	-	-	-	-	-	(61,538)	-	-	-	-	-	-	-	$ 83,333
21	Miscellaneous Expense	1,259,948	-	-	-	37,214	-	-	-	-	-	-	-	-	-	$ 1,297,162
22	Depreciation	1,608,019	-	-	(59,220)	-	-	-	-	-	-	-	-	-	-	$ 1,548,799
23	Amortization of Gain on Well (Settlement Proceeds)	(76,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	$ (76,000)
24	Amortization of Additional CAP Allocation	64,000	-	-	-	-	(64,000)	-	-	-	-	-	-	-	-	$ -
25	Taxes other than Income	47,873	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 47,873
26	Property Taxes	295,813	-	-	-	-	-	-	-	-	-	-	-	(33,413)	-	$ 262,400
27	Income Taxes	270,020	-	-	-	-	-	-	-	-	-	-	-	-	155,802	$ 425,822
28	Intentionally Left Blank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ -
29	Total Operating Expenses	$ 6,649,430	$ -	$ (20,306)	$ (59,220)	$ 37,214	$ (64,000)	$ (61,538)	$ (27,630)	$ (19,018)	$ 1,294	$ (38,048)	$ (17,820)	$ (33,413)	$ 155,802	$ 6,502,746
30	Operating Income (Loss)	$ 797,270	$ -	$ 20,306	$ 59,220	$ (37,214)	$ 64,000	$ 61,538	$ 27,630	$ 19,018	$ (1,294)	$ 38,048	$ 17,820	$ 33,413	$(155,802)	$ 943,954

References:
Col [A] Company Schedule C-1 Pg. 1

ADJ #		References:
1	Skipped.	Revised Schedule MEM-14
2	Purchased Water Expense	Revised Schedule MEM-15
3	Depreciation Expenses	Revised Schedule MEM-16
4	Miscellaneous Expenses	Revised Schedule MEM-17
5	Additional CAP Allocation Amortization Reversal	Revised Schedule MEM-18
6	Normalization of Rate Case Expense	Revised Schedule MEM-19
7	Normalization of Chemicals Expense	Revised Schedule MEM-20
8	Normalization of Repairs and Maintenance Expense	Revised Schedule MEM-21
9	Normalization of Insurance Expense	Revised Schedule MEM-22
10	Outside Services Expense	Revised Schedule MEM-23
11	Water Testing	Revised Schedule MEM-24
12	Property Tax Expense	Revised Schedule MEM-25
13	Income Tax Expense	Revised Schedule MEM-26

CHAPARRAL CITY WATER COMPANY, INC.
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Revised Schedule MEM-14

OPERATING INCOME ADJUSTMENT #1 - Skipped

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Revised Schedule MEM-15

OPERATING INCOME ADJUSTMENT #2 - Decrease Purchased Water Cost

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Purchased Water Cost	$ 831,656	$ (20,306)	$ 811,350

References:
Col [A]: Company Schedule C-2
Col [B]: Col [C] - Col [A]
Col [C]: MEM Testimony

2	From Exhibit Schedule C-2, Page 6 (Proforma Adj #5)			
3			Company	Staff
4	CAP water allocation (acre feet)		6,978	6,978
5	Additional CAP allocation		1,931	965.5
6			8,909	7,944
7	2008 capital cost per acre foot		$ 21	$21
8	Total capital cost		$ 187,089	$166,814
9				
10				
11	CAP water delivered (acre feet) - 6,500 scheduled, 6,978 was delivered		6,978	6,978
12	Excess CAP water delivered		260	260
13	Additional acre feet in annualization		(705)	(705)
14			6,533	6,533
15	2008 delivery cost per acre foot		$92	$92
16	Total M&I cost		$601,036	$601,036
17				
18	Total CAP purchased water		788,125	767,850
19				
20	Ground water pumper in acre feet		260	260
21	Excess capacity percentage		0.67	0.67
22	Total projected gallons pumped		174	174
23	CAP Replentishment District assessment fee		$250	$250
24			$ 43,550	$ 43,500
25				
26	Total purchased water cost		$ 831,656	$ 811,350
27	Test year purchased water cost per GL		$ 934,095	$ 934,095
28	Increase(decrease)		(102,439)	(122,746)
29				(102,439)
30	Staff Adjusment to eliminate portion of expense not used and useful			(20,307)
31				
32				
33				
34	Purchased Water Expense per Company		$ 831,656	
35	Staff Adjusment to eliminate portion of expense not used and useful		(20,307)	
36	Adjusted Purchased Water Expense		$ 811,350	
37				
38				

Round to $20,306

CHAPARRAL CITY WATER COMPANY, INC.
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Revised Schedule MEM-16

OPERATING INCOME ADJUSTMENT #3 - DEPRECIATION EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Depreciation Expense	$ 1,608,019	$ (59,220)	$ 1,548,799

Explanation of Adjustment:

Line No.	Account No.	Description	Original Cost Amount	Depreciable Amount	Projected Rate	Expense
		Plant In Service				
2	301	Organization	-	$ -	0.00%	$ -
3	302	Franchises	-	-	0.00%	-
4	303	Land and Land Rights	1,551,858	1,551,858	0.00%	-
5	304	Structures & Improvements	1,529,642	1,529,642	3.33%	50,937
6	305	Collecting & Impounding Reservoirs	-	-	2.50%	-
7	306	Lakes, Rivers, Other Intakes	-	-	2.50%	-
8	307	Wells and Springs	159,627	159,627	3.33%	5,316
9	308	Infiltration Galleries and Tunnels	-	-	6.67%	-
10	309	Supply Mains	-	-	2.00%	-
11	310	Power Generation Equipment	-	-	5.00%	-
12	311	Pumping Equipment	1,588,246	1,588,246	12.50%	198,531
13	320	Water Treatment Plant	5,786,640	5,786,640	3.33%	192,695
14	330	Distribution Reservoirs & Standpipes	6,512,148	6,512,148	2.22%	144,570
15	331	Transmission & Distribution Mains	18,953,054	18,953,054	2.00%	379,061
16	333	Services	7,496,339	7,496,339	3.33%	249,628
17	334	Meters & Meter Installation	2,736,866	2,736,866	8.33%	227,981
18	335	Hydrants	1,224,985	1,224,985	2.00%	24,500
19	336	Backflow Prevention Devices	-	-	6.67%	-
20	339	Other Plant & Misc. Equipment	1,717,229	1,717,229	6.67%	114,539
21	340	Office Furniture & Equipment	272,173	272,173	6.67%	18,154
22	341	Transportation Equipment	535,315	535,315	20.00%	107,063
23	342	Stores Equipment	-	-	4.00%	-
24	343	Tools, Ship & Garage Equipment	149,365	149,365	5.00%	7,468
25	344	Laboratory Equipment	-	-	10.00%	-
26	345	Power Operated Equipment	-	-	5.00%	-
27	346	Communication Equipment	39,105	39,105	10.00%	3,911
28	347	Miscellaneous Equipment	-	-	10.00%	-
29	348	Other Tangible Plant	-	-	10.00%	-
30		Subtotal General	$ 50,252,592	$ 50,252,592		$ 1,724,353
31		Less: Non- depreciable Account(s) (L4)	1,551,858	1,551,858		
32		Depreciable Plant (L30-L31)	$ 48,700,734	$ 48,700,734		

			Adjusted Allocation			
		Home Office Plant Allocated				
33	301	Organization	658	0.00%	$ -	
34	302	Franchise Cost and Other Intangible Plant	26,769	0.00%	-	
35	304	Structures & Improvements	232,113	3.33%	7,729	
36	311	Electric Pumping Equipment	(37)	0.00%	-	
37	339	Other Plant & Misc. Equipment	1,085	6.67%	72	
38	340	Office Furniture & Equipment	570,751	6.67%	38,069	
39	341	Transportation Equipment	11,149	20.00%	2,230	Company Indic
40	343	Tools, Ship & Garage Equipment	16,226	5.00%	811	
41	344	Laboratory Equipment	162	10.00%	16	
42	345	Power Operated Equipment	9,970	5.00%	499	
43	346	Communication Equipment	6,622	10.00%	-	Company Indic
44					-	
		Subtotal General	$ 875,469		$ 49,427	
45		Less: Non- depreciable Account(s) (L33 and L34)	34,013			
46		Depreciable Plant (L44-L45)	$ 841,456			
47		Total Depreciable Plant and Depr. Expense before CIAC	$ 49,576,203		$ 1,773,779	
48		Contributions-in-Aid-of-Construction (CIAC)	$ 6,268,097			
49		Composite Depreciation/Amortization Rate	0.0358			
50		Less: Amortization of CIAC (L48 x L49)			$ 224,981	
51		Depreciation Expense - STAFF [Col. (C), L49 - L50]			$ 1,548,799	

CHAPARRAL CITY WATER COMPANY, INC.
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Revised Schedule MEM-17

OPERATING INCOME ADJUSTMENT #4 - MISCELLANEOUS EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENT A	[C] STAFF ADJUSTMENT B	[D] TOTAL OF STAFF ADJUSTMENTS	[E] STAFF RECOMMENDED
1	Miscellaneous Expense	$ 1,259,948	$ 38,164	$ (950)	37,214	1,297,162
2	Totals	$ 1,259,948	$ 38,164	$ (950)	$ 37,214	$ 1,297,162
3						
4						
5	[A]: Company Schedule B-2, Page 3 and B-3, Page 3 and below Line 26, Column C.					
6	[B]: Testimony - MEM and below calculations and Line 48, Column E.					
7	[C]: Testimony - MEM and below calculations and line 94, Column E.					
8	[D]: Col [B] + Col [C]					
9	[E]: Testimony - MEM and below Line 91, Column E.					
10						
11	**Explanation of Staff Adjusment A**					
12	Total Allocation Pool per worksheet from CCWC		34,557,114			
13	Subtract Memebership dues that only benefit California					
14	ratepayers and the dues used for lobbying listed below		(251,538)			
15	Investor related expenses listed below		(1,040,585)			
16						
17	Adjusted allocation pool		33,264,991			
18	Revised allocation factor		4.00%	Same percentage used to allocate GO plant.Discussed in		
19				MEM Testimony.		
20	Revised allocation of GO Expenses		1,330,600			
21						
22						
23						

	GO Expense Allocation Distribution by Account		Company	Staff Adjustment A	Staff Recommended
26	A&G Other XFR	8880.21	863,799	25,507	889,306
27	Cust Other XFR	8885.21	43,252	1,277	44,529
28	A&G Labor XFR	6960.00	237,614	7,016	244,630
29	Cust Labor XFR	6985.00	68,137	2,012	70,149
30	Miscellaneous	8700.00	79,634	2,351	81,985
31			1,292,436	38,164	1,330,600

32 Miscellaneous expense is being charged for all of this adjustment because this is where the Company made its last adjust ment for the GO allocation.

33

34 List of Investor related expenses:

	GL Acct No.		TYE Account Balance
37	7031.15	Printing Shareholder	93,342
38	7124.15	Supplies Shareholder	2,896
39	7134.15	OS Other Shareholder	298,596
40	7153.00	Postage Shareholder	56,478
41	8301.15	T&E Tran Shareholder	1,462
42	8301.16	T&E Tran Directors	2,938
43	8302.15	T&E Meal Directors	11,520
44	8303.15	T&E Meal Shareholder	2,794
45	8303.16	T&E Meal Directors	1,738
46	8304.15	T&E Other Directors	404
47	8700.16	Other Misc - Director's Fee	568,817
48		Total Investor related expenses	1,040,585

49

50 List of Memebership dues that only benefit California ratepayers and dues used for lobbying:

51	7061.00	Membership Dues Company:	
52		NAWC - 19% lobbying ($119,202x19%)	22,648
53		California Water Association — Does not benefit CCWC	48,824
54		California Water Association — Does not benefit CCWC	48,824
55		California Water Association — Does not benefit CCWC	48,824
56		California Water Association — Does not benefit CCWC	48,824
57		California Foundation — Does not benefit CCWC	15,000
58		California Urban Water Cons — Does not benefit CCWC	13,745
59		California Chamber of Commerce — Does not benefit CCWC	2,649
60		Los Angeles Chamber of Commerce — Does not benefit CCWC	2,230
61			251,568

62

63

64

65 **Explanation of Staff Adjusment B**

66

67 Staff AdjustmentB

68 Per Co. response to MEM DR #1.125, lobbying expenses of approximately $950 were included in dues

69 paid to Investor Owned Water Utility Assocaition and Water Utility Association of Arizona. $ 950

70 $ 950

71

CHAPARRAL CITY WATER COMPANY, INC.
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Revised Schedule MEM-18

OPERATING INCOME ADJUSTMENT #5 - Reversal of Company pro forma Adjustment #13, Amortizing Additional CAP Allocation

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Amortization of Additional CAP Allocation	$ 64,000	$ (64,000)	$ -

References:
Col [A]: Company Schedule C-1
Col [B]: Col [C] - Col [A]
Col [C]: MEM Testimony

CHAPARRAL CITY WATER COMPANY, INC.
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Revised Schedule MEM-19

OPERATING INCOME ADJUSTMENT #6 - Rate Case Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		$ 144,871	$ (61,538)	$ 83,333

References:
Col [A]: Company Schedeule C-1
Col [B]: Col [C] - Col [A]
Col [C]: MEM Testimony - Normalized Rate Case Expense (/3yrs.)

Rate case expense was amortized in the prior rate case, thus there is an unrecovered amount in the test year but this will have been fully absorbed by the time the rates for the current case become effective so no recognition is warranted.

2	Per Company:	
3	Remaining unrecovered rate case expense from the prior case	
4	per Exhibit Shedule C-2, Page 5:	154,613
5	Current Estimated rate case expense per C-2, Page 5	280,000
6		434,613
7	Amortized over 3 years	144,871
8		
9	Per Staff:	
10	Remaining unrecovered rate case expense from the prior case	
11	is not recognized because the cost will have beeen fully	
12	recovered by the time rates for this case become effective.	-
13	Remand case expenses per Company	100,000
14	Estimated current rate case expense based on the actual	
15	billings of $75,032 through October, 2007:	150,000
16	Noralized over 3 years as this has historically been	
17	the Company's rate increase request frequency:	83,333
18		
19		
20		
21		
22		

CHAPARRAL CITY WATER COMPANY, INC.
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Revised Schedule MEM-20

OPERATING INCOME ADJUSTMENT #7 - Normalization of Chemicals Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Normalization of Chemicals Expenses	$ 127,457	$ (27,630)	$ 99,827
2	Chemicals expenses - 2004			$ 66,210
3	Chemicals expenses - 2005			105,814
4	Chemicals expenses - 2006			127,457
5	Normalization of Chemicals Expenses - 3-Year Average			$ 99,827

References:
Col [A]: Company Schedeule C-1
Col [B]: Col [C] - Col [A]
Col [C]: Normalized Chemicals Expense Col [C] L5.

Chemicals for 2007 are $88,968. Two invoices totaling approximately $17,000 were dated in 12/2006 for the test year.

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Revised Schedule MEM-21

OPERATING INCOME ADJUSTMENT #8 - Repairs and Maintenance

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Repairs and Maintenance Expense	$ 104,609	$ (19,018)	$ 85,591

References:
Col [A]: Company Schedule C-1
Col [B]: Col [C] - Col [A]
Col [C]: MEM Testimony

Explanation of Staff Adjustment - To Normalize

R&M - 2004	96,152
R&M - 2005	72,640
R&M - 2006	104,609
Staff recpmmended R & M expense - Normalized.	91,134

Explanation of Staff Adjustment - To Remove the cost of Pepsi purchased as an employee benefit.

Payments to Pepsi Cola Company of Dallas	$ 5,543
Normalized expense net of Pepsi.	85,591

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Revised Schedule MEM-22

OPERATING INCOME ADJUSTMENT #9 - Correction of General Liability Insurance Expense.

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Insurance - General Liability Expense	$ (1,294)	$ 1,294	$ -
2	Staff originally normalized insurance expense because the Company's filing showed a negative amount, which did not make sense. The Company objected to Staff's normalization so Staff changed its position in Surrebuttal Testimony to revert to the negative amount. In Rejoinder Testimony, the Company admitted that the negative amount did not make sense and requested zero. Staff adopts CCWC's rejoinder position that expense should be zero.			

CHAPARRAL CITY WATER COMPANY, INC.
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Revised Schedule MEM-23

OPERATING INCOME ADJUSTMENT #10 -Outside Services Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Outside Services Expense	$ 266,544		$ 266,544
2	Expensed plant	-	(37,673)	(37,673)
3	Late Filing Penalty for 2005 ACC Annual Report	-	(45)	(45)
4	Rate case expense for appellate court	-	(330)	(330)
5		$ 266,544	$ (38,048)	$ 228,496
6				
7	References:			
8	Column A: Company Schedule C-1			
9	Column B: Testimony, MEM, Company Data Request Responses MEM 8.1, MEM 16.2			
10	Column C: Column [A] + Column [B]			
11				
12				
13	**PLANT COSTS REMOVED FROM OUTSIDE SERVICES (MEM 8.1)**			
14	Acct. No.	Description	Amount	
15	304-Struct & Imprvmnts	New irrigation installation	$	2,500.00
16	304-Struct & Imprvmnts	Installation of 30' x 6' fencing w/panels	$	4,375.00
17	304-Struct & Imprvmnts - See (A) below.	Professional survey for new fence line	$	4,715.00
18		Total for Structures and Improvements	$	11,590.00
19				
20	311 - Elec Pumping Equip	Recondition motor	$	7,448.00
21	311 - Elec Pumping Equip	Removal & repair of pump	$	5,512.62
22	311 - Elec Pumping Equip	Removal & repair of motor and pump	$	13,122.67
23		Total for Electric Pumping Equipment	$	26,083.29
24				
25		**Total expensed plant**	**$**	**37,673.29**
26				
27				
28	**DISALLOWED COSTS REMOVED FROM OUTSIDE SERVICES (MEM 8.1)**			
29	Type of Documentation	Description	Amount	
30	Check request - See (B) below.	Penalty for late filing ACC report	$	45.00
31	Invoice	Rate case expense for appellate court	$	330.00
32		**Total Disallowed Costs**	$	375.00
33				
34	(A) Fee paid to Morrison, Maierle, Inc. for property line surveying services that is a one-time expenditure.			
35	(B) Late filing penalty for 2005 Annual Report to the AZ Corporation Commission			

CHAPARRAL CITY WATER COMPANY, INC.
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

Revised Schedule MEM-24

OPERATING INCOME ADJUSTMENT #11 - Water Testing Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Normalization of Water Testing Expense per MSJ	$ 43,458	$ (17,820)	$ 25,638

References:
Col [A]: Company Schedeule C-1
Col [B]: Col [C] - Col [A]
Col [C]: Normalized Water Testing Expense Col [C] L1.

CHAPARRAL CITY WATER COMPANY, INC.
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

Revised Schedule MEM-25

OPERATING INCOME ADJUSTMENT #12 - Property Tax Expense

LINE NO.	Property Tax Calculation	(C) STAFF AS ADJUSTED	STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2006	$ 7,446,700	$ 7,446,700
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	14,893,400	$ 14,893,400
4	Staff Recommended Revenue, Per Schedule MEM-1	7,446,700	$ 9,353,232
5	Subtotal (Line 4 + Line 5)	22,340,100	24,246,632
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	7,446,700	$ 8,082,211
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	14,893,400	$ 16,164,421
10	Plus: 10% of CWIP -	224,140	224,140
11	Less: Net Book Value of Licensed Vehicles	474,678	$ 474,678
12	Full Cash Value (Line 9 + Line 10 - Line 11)	14,642,862	$ 15,913,883
13	Assessment Ratio	23.0%	23.0%
14	Assessment Value (Line 12 * Line 13)	3,367,858	$ 3,660,193
15	Composite Property Tax Rate (Per Company Schedule C-2, Page 3, Line 1	7.7913%	7.7913%
			$ -
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	$ 262,400	
17	Company Proposed Property Tax	295,813	
18	Staff Test Year Adjustment (Line 16-Line 17)	$ (33,413)	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		$ 285,177
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 262,400
21	Increase in Property Tax Expense Due to Increase in Revenue Requirement		$ 22,777
22	Increase to Property Tax Expense		$ 22,777
23	Increase in Revenue Requirement		1,906,532
24	Increase to Property Tax per Dollar Increase in Revenue (Line19/Line 20)		1.194666%

CHAPARRAL CITY WATER COMPANY, INC.
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

Revised Schedule MEM-26

OPERATING INCOME ADJUSTMENT #13 - TEST YEAR INCOME TAXES

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Income Tax Expense	$ 270,020	$ 154,891	$ 424,911

References:
Col [A]: Company Schedeule C-1
Col [B]: Col [C] - Col [A]
Col [C]: Schedule MEM-2, Line 52.

CHAPARRAL CITY WATER COMPANY, INC.
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

RATE DESIGN

Line No.			Present Rates	Company Proposed	Staff Recommended
1	Monthly Minimum				
2	3/4-inch Meter		$ 13.60	$ 18.56	$ 17.25
3	1-inch Meter		$ 22.70	$ 30.97	$ 28.75
4	1 1/2-inch Meter		$ 45.40	$ 71.95	$ 57.50
5	2-inch Meter		$ 73.00	$ 99.61	$ 92.00
6	3-inch Meter		$ 146.00	$ 199.21	$ 184.00
7	4-inch Meter		$ 227.00	$ 309.74	$ 287.50
8	6-inch Meter		$ 454.00	$ 619.47	$ 575.00
9	8-inch Meter		$ 730.00	$ 996.07	$ 920.00
10	10-inch Meter		$ 1,043.00	$ 1,423.15	$ 1,322.50
11	12-inch Meter		$ 1,980.00	$ 2,701.67	$ 2,472.50
12					
13	Fire Hydrants Basic Service				
14					
15	Fire Hydrants Used for Irrigation		Per Meter Size	Per Meter Size	Per Meter Size
16					
17	Monthly Service Charge for Fire Sprinkler				
18	4-inch or Smaller Meter		$ 10.00	$ 10.00	$ 10.00
19	6-inch Meter		$ 10.00	$ 10.00	$ 10.00
20	8-inch Meter		$ 10.00	$ 10.00	$ 10.00
21	10-inch Meter		$ 10.00	$ 10.00	$ 10.00
22	Larger than 10-inch Meter		$ 10.00	$ 10.00	$ 10.00
23					
24					
25	Gallons in the Minimum		-	-	-
26					
27					
28	Commodity Rates			Per 1,000 Gallons	
29	(Residential, Commercial, Industrial)	Block			
30					
31	3/4-inch Meter Residential	0 - 3,000 Gallons	$ 1.68	$ 2.292	$ 2.35
32		3,001 - 9,000 Gallons	$ 2.52	$ 3.438	$ 2.95
33		Over 9,000 Gallons	$ 3.03	$ 4.134	$ 3.75
34					
35	3/4-inch Meter Commercial and Industrial	0 to 9,000 Gallons	$ 2.52	$ 3.438	$ 2.95
36		Over 9,000 Gallons	$ 3.03	$ 4.134	$ 3.75
37					
38	1-inch Meter:	0 to 24,000 Gallons	$ 2.52	$ 3.438	$ 2.95
39		Over 24,000 Gallons	$ 3.03	$ 4.134	$ 3.75
40					
41	1 1/2-inch Meter:	0 to 60,000 Gallons	$ 2.52	$ 3.438	$ 2.95
42		Over 60,000 Gallons	$ 3.03	$ 4.134	$ 3.75
43					
44	2-inch Meter	0 to 100,000 Gallons	$ 2.52	$ 3.438	$ 2.95
45		Over 100,000 Gallons	$ 3.03	$ 4.134	$ 3.75
46					
47	3-inch Meter	0 to 225,000 Gallons	$ 2.52	$ 3.438	$ 2.95
48		Over 225,000 Gallons	$ 3.03	$ 4.134	$ 3.75
49					
50	4-inch Meter	0 to 350,000 Gallons	$ 2.52	$ 3.438	$ 2.95
51		Over 350,000 Gallons	$ 3.03	$ 4.134	$ 3.75
52					
53	6-inch Meter	0 to 725,000 Gallons	$ 2.52	$ 3.438	$ 2.95
54		Over 725,000 Gallons	$ 3.03	$ 4.134	$ 3.75
55					
56	8-inch Meter	0 to 1,125,000 Gallons	$ 2.52	$ 3.438	$ 2.95
57		Over 1,125,000 Gallons	$ 3.03	$ 4.134	$ 3.75
58					
59	10-inch Meter	0 to 1,500,000 Gallons	$ 2.52	$ 3.438	$ 2.95
60		Over 1,500,000 Gallons	$ 3.03	$ 4.134	$ 3.75
61					
62	12-inch Meter	0 to 2,250,000 Gallons	$ 2.52	$ 3.438	$ 2.95
63		Over 2,250,000 Gallons	$ 3.03	$ 4.134	$ 3.75
64					
65	Irrigation/Bulk	All Gallons	$ 1.56	$ 3.438	$ 2.95
66					
67	Fire Hydrant Irrigation/Construction	All Gallons	$ 1.56	$ 3.438	$ 2.95
68					
69	Standpipe (Fire Hydrants)	All Gallons	$ 2.52	$ 3.438	$ 2.95
70					
71	Fire Sprinklers	All Gallons	$ 2.52	$ 3.438	$ 2.95
72					
73			Present Rates	Company Proposed	Staff Recommended
74	Service Charges				
75	Establishment of Service:				
76	Regular Hours		$ 25.00	$ 25.00	$ 25.00
77	After Hours		$ 35.00	$ 35.00	$ 35.00
78	Re-establishment of Service within 12 Months:				
79	Monthly Minimum times Months Disconnected				
80	From the Water System [Per ACC Rule 14-2-403(D)]			*	*
81	Reconnection of Service (Delinquent):				
82	Regular Hours		$ 35.00	$ 35.00	$ 35.00
83	After Hours		$ 50.00	$ 50.00	$ 50.00
84	Water Meter Test (If Correct)		$ 35.00	$ 35.00	$ 35.00
85	Water Meter relocation as Customer Request [Per ACC Rule 14-2-405(B)]		Cost	Cost	Cost
86	Meter Re-Read (If Correct)		$ 25.00	$ 25.00	$ 25.00
87	NSF Check Charge		$ 25.00	$ 25.00	$ 25.00
88	Late Fee Charge		1.5% Per Mon	1.5% Per Mont	1.5% Per Month
89	Deferred Payment Finance Charge		1.5% Per Mon	1.5% Per Mont	1.5% Per Month
90	Service Call - After Hours [Per ACC Rule 14-2-403(D)]		Refer to above charges	Refer to above charges	Refer to above charges
91					
92					
93	Deposit Requirements Residential		**	**	**
94	Deposit Requirements Non-Residential		**	**	**
95	Deposit Interest		***	***	***
96					
97	** Residential - two times the average bill. Non-residential - two and one-half times the estimated *maximum* bill.				
98					
99	*** Interest per [Per ACC Rule 14-2-403(B)]				

Off-site Facilities Hook-up Fee:

5/8 x 3/4-inch Meter	****	$ 1,000.00	****
3/4-inch Meter	****	$ 1,500.00	****
1-inch Meter	****	$ 2,500.00	****
11/2-inch Meter	****	$ 5,000.00	****
2-inch Meter	****	$ 8,000.00	****
3-inch Meter	****	$ 16,000.00	****
4-inch Meter	****	$ 25,000.00	****
6-inch or Larger Meter	****	$ 50,000.00	****

**** The fee shall be variable, fixed on January 1 of each calendar year, computed by dividig $369,404.50 by the number of hook-ups during the previous calendar year, however, in no event shall the hook-up fee be higher than $1,000 nor less than $500.

2006 filing - New water installations. May be assessed only once per parcel, service connection, or lot within a subdivision. Purpose is to equitably apportion the costs of constructing additional off-site facilities to provide water production, delivery, storage, and pressure among all now service connections.

CAP Hook-up Fee: NONE

New water installations. May be assessed only once per parcel, service connection, or lot within a subdivision. Purpose is to recover the costs of additional 1,931 a.f. of CAP allocation. Fee will be recomputed annually to take into account carrying costs of unrecovered balance and annual payment.

	Present Service Line Charge	Present Meter Installation Charge	Total Present Charge	Proposed Service Line Charge	Proposed Meter Installation Charge	(a) Total Proposed Charge	Staff Proposed Service Line Charge	Staff Proposed Meter Installation Charge	Staff Total Proposed Charge
Meter and Service Line Installation Charges									
5/8 x 3/4-inch Meter	$ 385.00	$ 135.00	$ 520.00	$ 385.00	$ 135.00	$ 520.00	$ 385.00	$ 135.00	$ 520.00
3/4-inch Meter	$ 385.00	$ 215.00	$ 600.00	$ 385.00	$ 215.00	$ 600.00	$ 385.00	$ 215.00	$ 600.00
1-inch Meter	$ 435.00	$ 255.00	$ 690.00	$ 435.00	$ 255.00	$ 690.00	$ 435.00	$ 255.00	$ 690.00
11/2-inch Meter	$ 470.00	$ 465.00	$ 935.00	$ 470.00	$ 465.00	$ 935.00	$ 470.00	$ 465.00	$ 935.00
2-inch Turbine Meter	$ 630.00	$ 965.00	$ 1,595.00	$ 630.00	$ 965.00	$ 1,595.00	$ 630.00	$ 965.00	$ 1,595.00
2-inch Compound Meter	$ 630.00	$ 1,690.00	$ 2,320.00	$ 630.00	$ 1,690.00	$ 2,320.00	$ 630.00	$ 1,690.00	$ 2,320.00
3-inch Turbine Meter	$ 805.00	$ 1,470.00	$ 2,275.00	$ 805.00	$ 1,470.00	$ 2,275.00	$ 805.00	$ 1,470.00	$ 2,275.00
3-inch Compound Meter	$ 845.00	$ 2,265.00	$ 3,110.00	$ 845.00	$ 2,265.00	$ 3,110.00	$ 845.00	$ 2,265.00	$ 3,110.00
4-inch Turbine Meter	$ 1,170.00	$ 2,350.00	$ 3,520.00	$ 1,170.00	$ 2,350.00	$ 3,520.00	$ 1,170.00	$ 2,350.00	$ 3,520.00
4-inch Compound Meter	$ 1,230.00	$ 3,245.00	$ 4,475.00	$ 1,230.00	$ 3,245.00	$ 4,475.00	$ 1,230.00	$ 3,245.00	$ 4,475.00
6-inch Turbine Meter	$ 1,730.00	$ 4,545.00	$ 6,275.00	$ 1,730.00	$ 4,545.00	$ 6,275.00	$ 1,730.00	$ 4,545.00	$ 6,275.00
6-inch Compound Meter	$ 1,770.00	$ 6,280.00	$ 8,050.00	$ 1,770.00	$ 6,280.00	$ 8,050.00	$ 1,770.00	$ 6,280.00	$ 8,050.00
8-inch or Larger	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost

(a) As meters and service line are now taxable income for income purposes, the Company shall collect income taxes on the meter and service line charges. Any tax collected will berefunded each year as the meter deposit is refunded. NONE NONE NONE

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX PER COMMISSION RULE 14-2-409D(5).

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

CHAPARRAL CITY WATER COMPANY
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

Revised Schedule MEM-29

TYPICAL BILL ANALYSIS AVERAGE AND MEDIAN COST COMPARISONS

LINE NO.	CUSTOMER CLASS	CURRENT RATES			
		AVERAGE		MEDIAN	
		USAGE	DOLLARS	USAGE	DOLLARS
1	Residential 3/4"	8,450	$ 32.37	5,500	$ 24.94
2	Residential 1"	10,095	$ 48.14	7,500	$ 41.60
3	Residential 1.5"	29,821	$ 148.15	21,500	$ 99.58
4	Residential 2"	72,924	$ 256.77	91,500	$ 303.58
5	Residential 3"	70,226	$ 322.97	83,000	$ 355.16
6					
6	Commerical 3/4"	11,528	$ 43.94	4,501	$ 24.94
7	Commerical 1"	17,907	$ 67.83	5,500	$ 36.56
8	Commerical 1.5"	47,736	$ 165.69	13,500	$ 79.42
9	Commerical 2"	68,389	$ 245.34	21,500	$ 127.18
10	Commerical 3"	34,550	$ 233.07	11,500	$ 174.98
11	Commerical 4"	186,146	$ 696.09	79,500	$ 427.34
12					
13	Industrial 3/4"	5,375	$ 153.65	3,500	$ 13.60
14	Industrial 1"	-	$ 217.68	-	$ 22.70
15	Industrial 1.5"	8,000	$ 132.57	-	$ 45.50
16					
17	Irrigation 3/4"	16,732	$ 39.70	8,500	$ 26.86
18	Irrigation 1"	41,781	$ 87.88	15,500	$ 46.88
19	Irrigation 1.5"	76,173	$ 164.23	24,500	$ 83.62
20	Irrigation 2"	116,346	$ 254.50	63,000	$ 171.28
21	Irrigation 4"	1,813,070	$ 3,055.39	157,000	$ 471.92
22	Irrigation 6"	5,451,042	$ 8,957.63	1,312,000	$ 2,500.72
23					
24	Construction 3/4"	959	$ 15.10	-	$ 13.60
25	Construction 1"	11,803	$ 41.11	11,500	$ 40.64
26	Construction 2"	36,000	$ 129.16	59,000	$ 165.04
27	Construction 3"	180,662	$ 427.83	19,500	$ 176.42
28	Construction 4"	94,500	$ 374.42	106,000	$ 392.36
29					
30	Fire Hydrant (Standpipe) 3"	26,121	$ 211.82	9,500	$ 169.94
31	Fire Hydrant (Standpipe) 4"	516,917	$ 1,529.63	561,500	$ 1,641.98
32					
33	Fire Sprinkler 3/4"	3	$ 10.01	-	$ 10.00
34	Fire Sprinkler 1"	63	$ 10.16	-	$ 10.00
35	Fire Sprinkler 1.5"	28	$ 10.07	-	$ 10.00

CHAPARRAL CITY WATER COMPANY
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

Revised Schedule MEM-29

LINE NO.	CUSTOMER CLASS	COMPANY PROPOSED RATES			
		AVERAGE		MEDIAN	
		USAGE	DOLLARS	USAGE	DOLLARS
1	Residential 3/4"	8,450	$ 44.17	5,500	$ 34.03
2	Residential 1"	10,095	$ 65.68	7,500	$ 56.76
3	Residential 1.5"	29,821	$ 202.13	21,500	$ 145.87
4	Residential 2"	72,924	$ 350.32	91,500	$ 414.19
5	Residential 3"	70,226	$ 440.65	83,000	$ 484.56
6					
6	Commerical 3/4"	11,528	$ 59.95	4,501	$ 34.03
7	Commerical 1"	17,907	$ 92.53	5,500	$ 49.88
8	Commerical 1.5"	47,736	$ 236.07	13,500	$ 118.36
9	Commerical 2"	68,389	$ 334.73	21,500	$ 173.53
10	Commerical 3"	34,550	$ 317.99	11,500	$ 238.75
11	Commerical 4"	186,146	$ 949.71	79,500	$ 583.06
12					
13	Industrial 3/4"	5,375	$ 209.64	3,500	$ 18.56
14	Industrial 1"	-	$ 296.99	-	$ 30.97
15	Industrial 1.5"	8,000	$ 190.73	-	$ 71.95
16					
17	Irrigation 3/4"	16,732	$ 76.08	8,500	$ 47.78
18	Irrigation 1"	41,781	$ 174.61	15,500	$ 84.26
19	Irrigation 1.5"	76,173	$ 333.83	24,500	$ 156.18
20	Irrigation 2"	116,346	$ 499.61	63,000	$ 316.20
21	Irrigation 4"	1,813,070	$ 6,543.07	157,000	$ 849.51
22	Irrigation 6"	5,451,042	$ 19,360.15	1,312,000	$ 5,130.13
23					
24	Construction 3/4"	959	$ 21.86	-	$ 18.56
25	Construction 1"	11,803	$ 71.55	11,500	$ 70.51
26	Construction 2"	36,000	$ 223.38	59,000	$ 302.45
27	Construction 3"	180,662	$ 820.33	19,500	$ 266.25
28	Construction 4"	94,500	$ 634.63	106,000	$ 674.17
29					
30	Fire Hydrant (Standpipe) 3"	26,121	$ 289.01	9,500	$ 231.87
31	Fire Hydrant (Standpipe) 4"	516,917	$ 2,086.90	561,500	$ 2,240.18
32					
33	Fire Sprinkler 3/4"	3	$ 10.01	-	$ 10.00
34	Fire Sprinkler 1"	63	$ 10.22	-	$ 10.00
35	Fire Sprinkler 1.5"	28	$ 10.10	-	$ 10.00

CHAPARRAL CITY WATER COMPANY
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

Revised Schedule MEM-29

LINE NO.	CUSTOMER CLASS	STAFF RECOMMENDED RATES			
		AVERAGE		MEDIAN	
		USAGE	DOLLARS	USAGE	DOLLARS
1	Residential 3/4"	8,450	$ 40.38	5,500	$ 31.68
2	Residential 1"	10,095	$ 58.53	7,500	$ 50.88
3	Residential 1.5"	29,821	$ 179.97	21,500	$ 120.93
4	Residential 2"	72,924	$ 307.13	91,500	$ 361.93
5	Residential 3"	70,226	$ 391.17	83,000	$ 428.85
6					
6	Commerical 3/4"	11,528	$ 53.28	4,501	$ 30.53
7	Commerical 1"	17,907	$ 81.58	5,500	$ 44.98
8	Commerical 1.5"	47,736	$ 198.32	13,500	$ 97.33
9	Commerical 2"	68,389	$ 293.75	21,500	$ 155.43
10	Commerical 3"	34,550	$ 285.92	11,500	$ 217.93
11	Commerical 4"	186,146	$ 836.63	79,500	$ 522.03
12					
13	Industrial 3/4"	5,375	$ 189.06	3,500	$ 17.25
14	Industrial 1"	-	$ 266.01	-	$ 28.75
15	Industrial 1.5"	8,000	$ 159.42	-	$ 57.50
16					
17	Irrigation 3/4"	16,732	$ 66.61	8,500	$ 42.33
18	Irrigation 1"	41,781	$ 152.00	15,500	$ 74.48
19	Irrigation 1.5"	76,173	$ 282.21	24,500	$ 129.78
20	Irrigation 2"	116,346	$ 435.22	63,000	$ 277.85
21	Irrigation 4"	1,813,070	$ 5,636.06	157,000	$ 750.65
22	Irrigation 6"	5,451,042	$ 16,655.57	1,312,000	$ 4,445.40
23					
24	Construction 3/4"	959	$ 20.08	-	$ 17.25
25	Construction 1"	11,803	$ 63.57	11,500	$ 62.68
26	Construction 2"	36,000	$ 163.70	59,000	$ 231.55
27	Construction 3"	180,662	$ 624.95	19,500	$ 149.53
28	Construction 4"	94,500	$ 462.78	106,000	$ 496.70
29					
30	Fire Hydrant (Standpipe) 3"	26,121	$ 261.06	9,500	$ 212.03
31	Fire Hydrant (Standpipe) 4"	516,917	$ 1,812.41	561,500	$ 1,943.93
32					
33	Fire Sprinkler 3/4"	3	$ 10.01	-	$ 10.00
34	Fire Sprinkler 1"	63	$ 10.19	-	$ 10.00
35	Fire Sprinkler 1.5"	28	$ 10.08	-	$ 10.00

CHAPARRAL CITY WATER COMPANY, INC.
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

Revised Schedule MEM-28

Typical Bill Analysis
General Service 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	8,450	$ 32.37	$ 44.16	$ 11.79	36.41%
Median Usage	5,500	24.94	34.03	$ 9.09	36.43%
Staff Recommended					
Average Usage	8,450	$ 32.37	[redacted]		
Median Usage	5,500	24.94	[redacted]		

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

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff Recommended Rates	% Increase
-	$ 13.60	$ 18.56	36.47%	[redacted]	
1,000	15.28	20.85	36.47%		
2,000	16.96	23.14	36.46%		
3,000	18.64	25.44	36.46%		
4,000	21.16	28.87	36.45%		
5,000	23.68	32.31	36.44%		
5,500	24.94	34.03	36.43%		
6,000	26.20	35.74	36.43%		
7,000	28.72	39.18	36.42%		
8,000	31.24	42.62	36.41%		
9,000	33.76	46.05	36.41%		
8,450	32.37	44.16	36.41%		
10,000	36.79	50.19	36.41%		
11,000	39.82	54.32	36.41%		
12,000	42.85	58.45	36.42%		
13,000	45.88	62.59	36.42%		
14,000	48.91	66.72	36.42%		
15,000	51.94	70.86	36.42%		
16,000	54.97	74.99	36.42%		
17,000	58.00	79.12	36.42%		
18,000	61.03	83.26	36.42%		
19,000	64.06	87.39	36.42%		
20,000	67.09	91.53	36.42%		
25,000	82.24	112.20	36.43%		
30,000	97.39	132.87	36.43%		
35,000	112.54	153.54	36.43%		
40,000	127.69	174.21	36.43%		
45,000	142.84	194.88	36.43%		
50,000	157.99	215.55	36.43%		
75,000	233.74	318.90	36.43%		
100,000	309.49	422.25	36.43%		

Chaparral City Water Company, Inc.
Capital Structure
And Weighted Average Cost of Capital
Staff Recommended and Company Proposed

[A]	[B]	[C]	[D]
Description	Weight (%)	Cost	Weighted Cost
Staff Recommended Structure			
Debt	24.4%	5.0%	1.2%
Common Equity	75.6%	10.1%	7.6%
Weighted Average Cost of Capital			**8.8%**
Company Proposed Structure			
Debt	23.4%	5.5%	1.3%
Common Equity	76.6%	10.5%	8.0%
Weighted Average Cost of Capital			**9.3%**

[D] : [B] x [C]

Supporting Schedules: PMC-3 and PMC-4.

Chaparral City Water Company, Inc.
Inflation Adjustment (Accretion Return) and
Resulting Fair Value Rate of Return

Description		
Weighted Average Cost of Capital	8.8%	[1]
Minus: Modified Inflation Adjustment/Accretion Return	-1.2%	[2]
Fair Value Rate of Return	7.6%	

1: Schedule PMC-1

2: Calculation of Modified Inflation Adjustment/Accretion Return:

20-year Treasury Yield [3]	4.7%	
20-year Treasury Real Yield [3]	2.3%	
Return Required by Investors due to Inflation (Accretion Return)	2.5%	
Times a 50% Factor	0.5	[4]
Modified Inflation Adjustment/Accretion Return	1.2%	

3: http://www.ustreas.gov as of 8/6/08.

4: Direct Testimony of Mr. Gordon L. Fox.

Chaparral City Water Company, Inc.
Final Cost of Equity Estimates
Sample Water Utilities

[A]	[B]		[C]		[D]		[E]
DCF Method			D_1/P_0 [1]	+	g [2]	=	k
Constant Growth DCF Estimate			3.2%	+	5.9%	=	9.1%
Multi-Stage DCF Estimate						=	9.9%
Average of DCF Estimates							**9.5%**
CAPM Method	Rf	+	β [5]	x	(Rp)	=	k
Historical Market Risk Premium [3]	3.7%	+	1.01	x	7.5% [6]	=	11.2%
Current Market Risk Premium [4]	4.7%	+	1.01	x	12.6% [7]	=	17.4%
Average of CAPM Estimates							**14.3%**
					Average		**11.9%**
					Financial risk adjustment		-1.8%
					Total		**10.1%**

1 MSN Money and Value Line

2 Schedule PMC-8

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

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

5 Value Line

6 Historical Market Risk Premium (Rp) from Ibbotson Associates SBBI 2008 Yearbook

7 Testimony

Chaparral City Water Company, Inc.
Average Capital Structure of Sample Water Utilities

[A]	[B]	[C]	[D]
Company	Debt	Common Equity	Total
American States Water	50.9%	49.1%	100.0%
California Water	43.8%	56.2%	100.0%
Aqua America	55.0%	45.0%	100.0%
Connecticut Water	50.5%	49.5%	100.0%
Middlesex Water	51.5%	48.5%	100.0%
SJW Corp	47.6%	52.4%	100.0%
Average Sample Water Utilities	**49.9%**	**50.1%**	**100.0%**
Chaparral City Water Company, Inc.	**24.4%**	**75.6%**	**100.0%**

Source:
Sample Water Companies from Value Line

Chaparral City Water Company, Inc.
Growth in Earnings and Dividends
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]
Company	Dividends Per Share 1997 to 2007 DPS[1]	Dividends Per Share Projected DPS[1]	Earnings Per Share 1997 to 2007 EPS[1]	Earnings Per Share Projected EPS[1]
American States Water	1.5%	4.6%	4.5%	9.1%
California Water	0.9%	0.8%	-2.0%	9.4%
Aqua America	7.2%	7.2%	7.6%	11.1%
Connecticut Water	1.2%	No Projection	0.5%	No Projection
Middlesex Water	1.9%	No Projection	2.6%	No Projection
SJW Corp	4.8%	No Projection	2.7%	No Projection
Average Sample Water Utilities	**2.9%**	**4.2%**	**3.6%** [2]	**9.8%**

1 Value Line

2 Note that the figure -2.0% has been excluded from the calculation. This has been done as negative growth is inconsistent with the DCF model.

Chaparral City Water Company, Inc.
Sustainable Growth
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]
Company	Retention Growth 1998 to 2007 br	Retention Growth Projected br	Stock Financing Growth vs	Sustainable Growth 1998 to 2007 br + vs	Sustainable Growth Projected br + vs
American States Water	2.8%	7.3%	1.6%	4.5%	8.9%
California Water	1.8%	5.5%	4.5%	6.4%	10.0%
Aqua America	4.5%	5.3%	4.3%	8.8%	9.6%
Connecticut Water	2.6%	No Projection	1.2%	3.8%	No Projection
Middlesex Water	1.3%	No Projection	3.5%	4.7%	No Projection
SJW Corp	4.4%	No Projection	0.1%	4.5%	No Projection
Average Sample Water Utilities	**2.9%**	**6.0%**	**2.5%**	**5.4%**	**9.5%**

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

Chaparral City Water Company, Inc.
Selected Financial Data of Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[G]
Company	Symbol	Spot Price 8/6/2008	Book Value	Mkt To Book	*Value Line* Beta β	Raw Beta β *raw*
American States Water	AWR	**37.70**	17.62	2.1	**1.05**	1.04
California Water	CWT	**38.16**	18.94	2.0	**1.15**	1.19
Aqua America	WTR	**16.48**	7.66	2.2	**0.95**	0.90
Connecticut Water	CTWS	**25.50**	12.40	2.1	**0.85**	0.75
Middlesex Water	MSEX	**17.88**	10.31	1.7	**0.90**	0.82
SJW Corp	SJW	**26.23**	13.35	2.0	**1.15**	1.19
Average				**2.0**	**1.01**	**0.98**

[C]: Msn Money

[D]: Value Line

[E]: [C] / [D]

[F]: Value Line

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

Chaparral City Water Company, Inc.
Calculation of Expected Infinite Annual Growth in Dividends
Sample Water Utilities

[A]	[B]
Description	g
DPS Growth - Historical[1]	2.9%
DPS Growth - Projected[1]	4.2%
EPS Growth - Historical[1]	3.6%
EPS Growth - Projected[1]	9.8%
Sustainable Growth - Historical[2]	5.4%
Sustainable Growth - Projected[2]	9.5%
Average	**5.9%**

1 Schedule PMC-5

2 Schedule PMC-6

Chaparral City Water Company, Inc.
Multi-Stage DCF Estimates
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[H]	[I]
Company	Current Mkt. Price (P_o)[1] 8/6/2008	Projected Dividends[2] (Stage 1 growth) (D_t) d_1	d_2	d_3	d_4	Stage 2 growth[3] (g_n)	Equity Cost Estimate (K)[4]
American States Water	37.7	1.04	1.11	1.17	1.24	6.7%	9.4%
California Water	38.2	1.21	1.28	1.35	1.43	6.7%	9.8%
Aqua America	16.5	0.53	0.56	0.59	0.63	6.7%	9.9%
Connecticut Water	25.5	0.92	0.98	1.04	1.10	6.7%	10.3%
Middlesex Water	17.9	0.73	0.77	0.82	0.87	6.7%	10.7%
SJW Corp	26.2	0.66	0.70	0.74	0.79	6.7%	9.2%
						Average	**9.9%**

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

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

1 [B] see Schedule PMC-7
2 Derived from Value Line Information
3 Average annual growth in GDP 1929 - 2005 in current dollars.
4 Internal Rate of Return of Projected Dividends

Chaparral City Water Company, Inc.
Capitalization

	Interest Rate	Annual Interest	Amount outstanding as of 6/30/2008	Percentage of Capital Structure
Long-Term Debt				
Bonds due 2011	5.2%	$ 52,000	$ 1,000,000	
Bonds due 2022	5.4%	$ 248,940	4,610,000	
Bonds due 2022	5.3%	$ 51,675	975,000	
Long-Term Debt	5.4%	352,615	$ 6,585,000	18.6%
Short-Term Debt	3.8%	78,857	2,050,000	
Short-Term Debt	3.8%	78,857	$ 2,050,000	5.8%
Total Debt	5.0%	$ 431,472	$ 8,635,000.00	24.4%
Common Equity				
Common Shares Outstanding			4,603,000	
Paid in Capital			14,950,000	
Retained Earnings			7,137,000	
Total Common Equity			$ 26,690,000	75.6%
Total Capitalization			$ 35,325,000	100.0%

SOUTHWEST WATER NDQ-SWWC

RECENT PRICE **4.95** | P/E RATIO **NMF** (Trailing: 22.5 Median: 25.0) | RELATIVE P/E RATIO **NMF** | DIV'D YLD **2.0%** | VALUE LINE

TIMELINESS — Suspended 1/23/09
SAFETY 4 New 7/24/09
TECHNICAL — Suspended 1/23/09
BETA 1.15 (1.00 = Market)

High:	5.6	9.2	8.3	10.2	12.4	11.2	14.3	15.2	19.1	16.4	13.4	5.9
Low:	3.5	3.6	5.1	6.9	7.6	8.1	10.3	9.0	10.8	11.5	2.7	3.1

Target Price Range 2012 | 2013 | 2014

2012-14 PROJECTIONS

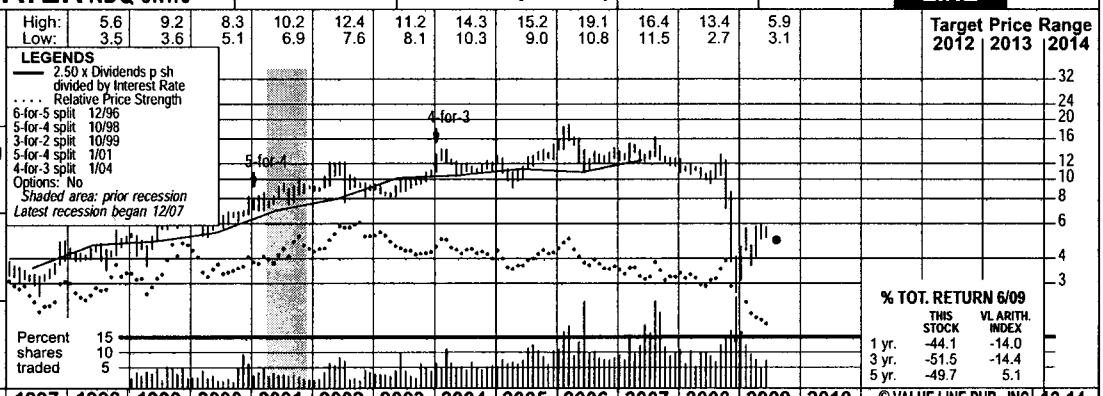
	Price	Gain	Ann'l Total Return
High	NMF	NMF	NMF
Low	NMF	NMF	NMF

Insider Decisions

	A	S	O	N	D	J	F	M	A
to Buy	0	0	1	0	0	0	0	0	0
Options	0	2	1	0	0	0	0	0	0
to Sell	0	3	0	0	0	0	0	0	0

Institutional Decisions

	3Q2008	4Q2008	1Q2009
to Buy	40	33	39
to Sell	26	42	38
Hld's(000)	13786	11260	11007



% TOT. RETURN 6/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	-44.1	-14.0
3 yr.	-51.5	-14.4
5 yr.	-49.7	5.1

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
4.03	4.20	4.84	5.31	5.61	5.63	6.16	7.49	8.15	9.12	10.70	9.23	9.10	9.42	8.96	8.88			Revenues per sh	
.38	.38	.44	.46	.53	.59	.65	.76	.87	.86	.91	.67	.78	.85	.69	.66			"Cash Flow" per sh	
.08	.09	.12	.15	.21	.25	.31	.38	.42	.39	.44	.23	.34	.40	.31	.04			Earnings per sh A	
.14	.08	.08	.09	.09	.10	.11	.13	.14	.15	.16	.18	.20	.21	.23	.20			Div'd Decl'd per sh B	
.60	.72	.84	.95	.74	.79	.53	.55	1.06	1.78	1.14	1.26	1.66	1.87	1.70	1.35	SEE	SEE	Cap'l Spending per sh	SEE
2.31	2.31	2.45	2.40	2.52	2.70	3.05	3.44	3.84	4.27	4.90	6.17	6.49	6.98	6.54	4.57	TEXT	TEXT	Book Value per sh D	TEXT
11.97	12.13	11.74	12.45	12.65	12.83	13.12	13.99	14.17	14.35	16.17	20.36	22.33	23.80	24.27	24.89			Common Shs Outst'g C	
35.8	22.3	14.6	16.5	16.9	17.2	19.6	17.0	19.8	24.8	21.2	51.6	35.5	34.8	42.1	NMF			Avg Ann'l P/E Ratio	
2.11	1.46	.98	1.03	.97	.89	1.12	1.11	1.01	1.35	1.21	2.73	1.89	1.88	2.23	NMF			Relative P/E Ratio	
4.7%	4.2%	4.7%	3.4%	2.7%	2.3%	1.8%	2.0%	1.7%	1.5%	1.7%	1.5%	1.6%	1.5%	1.8%	2.0%			Avg Ann'l Div'd Yield	
						80.9	104.7	115.5	130.8	173.0	188.0	203.2	224.2	217.3	220.9			Revenues ($mill)	
						4.2	5.4	6.2	6.0	7.2	4.5	7.3	9.3	5.1	1.0			Net Profit ($mill)	
						39.0%	37.0%	36.0%	34.9%	35.9%	36.1%	36.0%	35.0%	56.0%	NMF			Income Tax Rate	
						--	--	14.4%	3.2%	--	11.0%	9.5%	--	12.5%	10.0%			AFUDC % to Net Profit	
						45.2%	48.8%	51.4%	56.7%	47.9%	47.9%	44.7%	43.6%	47.7%	62.6%	SEE	SEE	Long-Term Debt Ratio	SEE
						54.1%	50.7%	48.2%	42.9%	51.8%	52.0%	55.1%	56.3%	52.1%	37.4%	TEXT	TEXT	Common Equity Ratio	TEXT
						73.9	95.0	113.0	142.8	152.8	242.0	262.9	295.2	304.5	304.4			Total Capital ($mill)	
						113.7	157.8	171.1	203.9	219.5	302.6	344.8	389.6	417.9	429.3			Net Plant ($mill)	
						7.6%	7.6%	7.6%	5.8%	6.2%	3.1%	4.1%	4.5%	2.9%	1.8%			Return on Total Cap'l	
						10.3%	11.1%	11.4%	9.7%	9.0%	3.6%	5.0%	5.6%	3.2%	.9%			Return on Shr. Equity	
						10.4%	11.1%	11.4%	9.7%	9.1%	3.6%	5.0%	5.6%	3.2%	.9%			Return on Com Equity	
						7.0%	7.8%	7.8%	6.3%	5.8%	.8%	2.1%	2.6%	NMF	NMF			Retained to Com Eq	
						33%	31%	32%	36%	36%	78%	58%	54%	112%	NMF			All Div'ds to Net Prof	

CAPITAL STRUCTURE as of 12/31/08
Total Debt $192.8 mill. **Due in 5 Yrs** $119.1 mill.
LT Debt $190.6 mill. **LT Interest** $9.0 mill.
(Total interest coverage: 2.7x) (48% of Cap'l)

Leases, Uncapitalized: Annual rentals $5.5 mill.
Pension Liability None

Pfd Stock $.458 mill. **Pfd Div'd** $.020 mill.
Common Stock 24,888,745 shs.
as of 5/31/09

MARKET CAP: $125 million (Small Cap)

CURRENT POSITION ($MILL.)	2006	2007	12/31/08
Cash Assets	4.3	2.9	1.1
Receivables	27.5	26.0	29.7
Inventory (Avg Cst)	--	--	--
Other	16.5	32.7	26.9
Current Assets	48.3	61.6	57.7
Accts Payable	12.7	14.9	16.1
Debt Due	1.4	1.9	2.2
Other	21.7	29.4	28.4
Current Liab.	35.8	46.2	46.7

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '05-'07 to '12-'14
Revenues	5.5%	2.0%	NMF
"Cash Flow"	5.0%	-1.5%	NMF
Earnings	8.0%	-2.5%	NMF
Dividends	9.5%	9.0%	NMF
Book Value	10.5%	11.5%	NMF

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2006	50.8	55.4	60.1	57.9	224.2
2007	48.1	55.0	57.4	56.8	217.3
2008	49.6	56.9	60.4	54.0	220.9
2009	SEE	TEXT			
2010					

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2006	.03	.08	.16	.13	.40
2007	.03	.09	.09	.11	.31E
2008	d.04	.03	d.02	.07	.04
2009	SEE	TEXT			
2010					

Cal-endar	QUARTERLY DIVIDENDS PAID B Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.048	.048	.048	.052	.20
2006	.052	.052	.052	.058	.21
2007	.058	.058	.058	.058	.23
2008	.06	.06	.06	.06	.24
2009	.025	.025			

BUSINESS: SouthWest Water Company provides a broad range of services including water production, treatment and distribution; wastewater collection and treatment; utility billing and collection; and utility infrastructure. It operates four groups, Utility, 32% of 2008 revenues; Texas Utility, 16%; O&M Services, 18%; Texas MUD Services, 34%. Utility and Texas Utility own and manage rate-regulated public water utilities in California, Alabama, Oklahoma, and Texas. O&M and Texas MUD Services maintain projects on a contract and fee basis. Off./dir. own 6.4% of com. shs.; Stein Roe IC, 9.2% (4/08 proxy). CEO/Chrmn: Mark Swatek. Inc.: DE. Addr.: One Wilshire Building, 624 S. Grand Ave. Ste. 2900, Los Angeles, CA 90017. Tel.: 213-929-1800. Internet: www.swwc.com.

SouthWest Water Company finally reported its 2008 financial results. The company registered a share-net loss of $1.31 last year on a GAAP basis. This was largely due to nonrecurring and impairment charges. Excluding these noncash expenses, SouthWest reported a profit of $0.04 a share, on a revenue increase of about 2%. The company has yet to file its results for the recent first quarter. Therefore, we have suspended our estimates for the time being.

The company has restructured its operations. The most noticeable change has been a realignment of its operating segments, moving from two to four divisions: Utilities, Texas Utilities, O&M Services, and Texas MUD Services. The company has also consolidated many of its departments that provide common support functions. This should enable SouthWest to achieve better operating leverage.

SouthWest will continue to look for growth opportunities. A key to near-term and long-term success will be SouthWest's ability to increase its customer base. In the Utilities segments, the company will look to build its service area outside of California, where SWWC has a large existing presence and where there has been little change in connection count over the past few years. The company has amplified its focus in Texas by making various small acquisitions in the state over the past few years, particularly in rural areas. We expect it to continue to add more service connections in the region as the infrastructure there improves.

Rate hikes are probably in the works. The company has been actively pursuing increases in California, Texas and Alabama. We believe broad economic troubles will pressure near-term pricing leverage to a degree in most states. That said, we expect the cash-strapped California legislature to be more willing to provide favorable rates to relieve some of the burden on the state government.

SouthWest's Timeliness rank remains suspended.

Garrett Sussman *July 24, 2009*

CASH POSITION	5-Year Av'g	12/31/08
Current Assets to Current Liabilities:	125%	180%
Cash & Equiv's to Current Liabilities:	10%	2%
Working Capital to Sales:	5%	5%

(A) Diluted earnings. Excludes nonrecurring gains (losses): '00, (3¢); '01, (5¢); '02, 1¢; '05, (23¢); '07, (54¢); '08, ($1.35) . Next earnings report pending.
(B) Dividends historically paid in late January, April, July, and October.
(C) In millions, adjusted for splits.
(D) Includes intangibles. In 2008: $19.3 million, $0.83/share.
(E) Earnings may not add due to rounding.

Company's Financial Strength	C++
Stock's Price Stability	45
Price Growth Persistence	50
Earnings Predictability	60

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EXHIBIT
A-47
ADMITTED

AMER. STATES WATER NYSE-AWR

RECENT PRICE 35.93 | P/E RATIO 21.1 (Trailing: 24.0 Median: 22.0) | RELATIVE P/E RATIO 1.40 | DIV'D YLD 2.8% | VALUE LINE

TIMELINESS 3 Lowered 6/5/09
SAFETY 3 New 2/4/00
TECHNICAL 3 Raised 7/10/09
BETA .80 (1.00 = Market)

High:	19.5	26.5	25.3	26.4	29.0	29.0	26.8	34.6	43.8	46.1	42.0	38.8
Low:	14.1	14.8	16.7	19.0	20.3	21.6	20.8	24.3	30.3	33.6	27.0	29.8

Target Price Range 2012 | 2013 | 2014

2012-14 PROJECTIONS

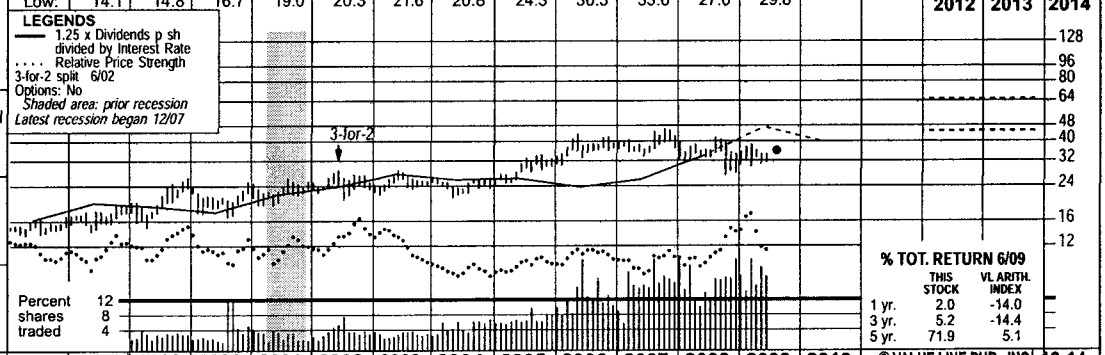
	Price	Gain	Ann'l Total Return
High	65	(+80%)	18%
Low	45	(+25%)	9%

Insider Decisions

	A	S	O	N	D	J	F	M	A
to Buy	0	0	0	0	0	0	0	0	0
Options	3	0	0	0	0	0	0	0	0
to Sell	3	0	0	1	2	0	0	1	0

Institutional Decisions

	3Q2008	4Q2008	1Q2009
to Buy	48	64	55
to Sell	54	52	66
Hld's(000)	9411	8980	9283



% TOT. RETURN 6/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	2.0	-14.0
3 yr.	5.2	-14.4
5 yr.	71.9	5.1

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
9.27	10.43	11.03	11.37	11.44	11.02	12.91	12.17	13.06	13.78	13.98	13.61	14.06	15.76	17.49	18.42	18.65	19.20	Revenues per sh	21.75
1.67	1.68	1.75	1.75	1.85	2.04	2.26	2.20	2.53	2.54	2.08	2.23	2.64	2.89	3.31	3.37	3.50	3.75	"Cash Flow" per sh	4.65
1.11	.95	1.03	1.13	1.04	1.08	1.19	1.28	1.35	1.34	.78	1.05	1.32	1.33	1.62	1.55	1.70	1.90	Earnings per sh A	2.60
.79	.80	.81	.82	.83	.84	.85	.86	.87	.87	.88	.89	.90	.91	.96	1.00	1.04	1.10	Div'd Decl'd per sh B■	1.28
1.90	2.43	2.19	2.40	2.58	3.11	4.30	3.03	3.18	2.68	3.76	5.03	4.24	3.91	2.89	4.45	4.25	4.30	Cap'l Spending per sh	4.50
9.95	10.07	10.29	11.01	11.24	11.48	11.82	12.74	13.22	14.05	13.97	15.01	15.72	16.64	17.53	17.95	18.80	18.95	Book Value per sh	22.00
11.71	11.77	11.77	13.33	13.44	13.44	13.44	15.12	15.12	15.18	15.21	16.75	16.80	17.05	17.23	17.30	18.50	18.75	Common Shs Outst'g C	20.00
13.4	12.8	11.6	12.6	14.5	15.5	17.1	15.9	16.7	18.3	31.9	23.2	21.9	27.7	24.0	22.6	Bold figures are		Avg Ann'l P/E Ratio	21.0
.79	.84	.78	.79	.84	.81	.97	1.03	.86	1.00	1.82	1.23	1.17	1.50	1.27	1.37	Value Line		Relative P/E Ratio	1.40
5.3%	6.6%	6.7%	5.8%	5.5%	5.0%	4.2%	4.2%	3.9%	3.6%	3.5%	3.6%	3.1%	2.5%	2.5%	2.9%	estimates		Avg Ann'l Div'd Yield	2.2%
						173.4	184.0	197.5	209.2	212.7	228.0	236.2	268.6	301.4	318.7	345	360	Revenues ($mill)	435
						16.1	18.0	20.4	20.3	11.9	16.5	22.5	23.1	28.0	26.8	32.0	36.0	Net Profit ($mill)	53.0
						46.0%	45.7%	43.0%	38.9%	43.5%	37.4%	47.0%	40.5%	42.6%	37.8%	35.0%	37.5%	Income Tax Rate	40.0%
						--	--	--	--	--	--	--	12.2%	8.5%	6.9%	5.0%	5.0%	AFUDC % to Net Profit	5.0%
						51.0%	47.5%	54.9%	52.0%	52.0%	47.7%	50.4%	48.6%	46.9%	46.2%	46.5%	47.5%	Long-Term Debt Ratio	46.5%
						48.4%	51.9%	44.7%	48.0%	48.0%	52.3%	49.6%	51.4%	53.1%	53.8%	53.5%	52.5%	Common Equity Ratio	53.5%
						328.2	371.1	447.6	444.4	442.3	480.4	532.5	551.6	569.4	577.0	650	680	Total Capital ($mill)	825
						449.6	509.1	539.8	563.3	602.3	664.2	713.2	750.6	776.4	825.3	870	915	Net Plant ($mill)	1025
						6.6%	6.4%	6.1%	6.5%	4.6%	5.2%	5.4%	6.0%	6.7%	6.4%	6.5%	7.5%	Return on Total Cap'l	8.5%
						10.0%	9.2%	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	9.3%	8.6%	9.0%	10.0%	Return on Shr. Equity	12.0%
						10.1%	9.3%	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	9.3%	8.6%	9.0%	10.0%	Return on Com Equity	12.0%
						2.9%	3.0%	3.6%	3.3%	NMF	1.0%	2.8%	2.7%	3.9%	3.1%	3.5%	4.5%	Retained to Com Eq	6.0%
						72%	68%	65%	65%	113%	84%	67%	67%	58%	64%	60%	57%	All Div'ds to Net Prof	48%

CAPITAL STRUCTURE as of 3/31/09
Total Debt $361.5 mill. **Due in 5 Yrs** $33.0 mill.
LT Debt $306.5 mill. **LT Interest** $21.0 mill.
(LT interest earned: 3.6x: total interest coverage: 3.4x) (50% of Cap'l)

Leases, Uncapitalized: Annual rentals $2.9 mill.
Pension Assets-12/08 $54.2 mill.
Oblig. $94.5 mill.
Pfd Stock None.

Common Stock 17,326,742 shs.
MARKET CAP: $625 million (Small Cap)

CURRENT POSITION ($MILL.)	2007	2008	3/31/09
Cash Assets	1.7	7.3	24.9
Receivables	16.1	14.3	13.6
Inventory (Avg Cst)	1.6	2.1	1.9
Other	43.7	66.9	66.9
Current Assets	63.1	90.6	107.3
Accts Payable	29.1	36.6	36.0
Debt Due	37.8	75.3	55.0
Other	27.4	25.5	40.3
Current Liab.	94.3	137.4	131.3
Fix. Chg. Cov.	314%	293%	

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	4.5%	5.0%	4.0%
"Cash Flow"	5.5%	6.0%	6.5%
Earnings	3.5%	5.5%	9.5%
Dividends	1.5%	2.0%	5.0%
Book Value	4.5%	5.0%	4.0%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2006	64.3	63.0	75.0	66.3	268.6
2007	72.3	79.3	75.8	74.0	301.4
2008	68.9	80.3	85.3	84.2	318.7
2009	79.6	86.4	90.0	89.0	345
2010	82.0	89.0	95.0	94.0	360

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2006	.35	.36	.32	.30	1.33
2007	.40	.42	.44	.35	1.62
2008	.30	.53	.26	.43	1.55
2009	.28	.46	.50	.46	1.70
2010	.30	.50	.65	.45	1.90

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.225	.225	.225	.225	.90
2006	.225	.225	.225	.235	.91
2007	.235	.235	.235	.250	.96
2008	.250	.250	.250	.250	1.00
2009	.250	.250			

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Company, it supplies water to more than 250,000 customers in 75 communities in 10 counties. Service areas include the greater metropolitan areas of Los Angeles and Orange Counties. The company also provides electric utility services to nearly 23,250 customers in the city of Big Bear Lake and in areas of San Bernardino County. Acquired Chaparral City Water of Arizona (10/00). Has roughly 675 employees. Officers & directors own 2.5% of common stock (4/09 Proxy). Chairman: Lloyd Ross. President & CEO: Floyd Wicks. Inc: CA. Addr.: 630 East Foothill Boulevard, San Dimas, CA 91773. Tele.: 909-394-3600. Internet: www.aswater.com.

American States Water has received some favorable backing from California's regulatory board. The water utility provider posted a 15% top-line gain in the first quarter, benefiting from the California Public Utilities Commission's (CPUC) November decision to implement the water revenue adjustment mechanism, modified cost balancing accounting methodology, and tiered rates laid out in the Water Action Plan. The use of these mechanisms is expected to produce smoother and more predictable growth, while stabilizing costs via removing outside influences, such as weather, on demand.

Nevertheless, the benefits were not enough. The water utility provider reported earnings of $0.28 a share, a couple of pennies off last year's mark. Despite the top-line improvement and a tax benefit, which added roughly $0.08 to the bottom line, the company was unable to offset higher operating costs specifically those associated with the expansion of its nonregulated business. Construction projects at Fort Bliss and military bases in Virginia cost American $0.05 a share.

We've trimmed our full-year earnings estimate by a dime, to $1.70 a share . . . Operating costs are expected to continue mounting in the months ahead, as aging infrastructure requires heavier investment in order to meet increasingly stringent FDA codes.

. . . and our 2010 figure by a nickel, to $1.90. With infrastructures growing older, higher expenses are not a passing fad. The cash-strapped company will have to seek help to make many of the needed improvements, opening up its bottom line to dilution, whether by higher share counts or increased interest rate costs. American recently made a stock offering of 1.15 million shares, netting nearly $35 million. Even still, similar financing activity will probably be required based on our forecasts.

These shares do not stand out for appreciation potential. Infrastructure costs limit their six- to 12- month allure as well as their 3- to 5-year appeal. **Nevertheless, the stock may well interest risk-averse investors looking to add a steady stream of income to their portfolios.**

Andre J. Costanza *July 24, 2009*

(A) Primary earnings. Excludes nonrecurring gains/(losses): '04, 14¢; '05, 25¢; '06, 6¢; '08, (27¢). Next earnings report due early Aug. May not add due to rounding.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for splits.

Company's Financial Strength	B++
Stock's Price Stability	80
Price Growth Persistence	75
Earnings Predictability	65

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EXHIBIT
A-48
ADMITTED

AQUA AMERICA NYSE-WTR

RECENT PRICE 17.47 | P/E RATIO 20.6 (Trailing: 23.9 Median: 25.0) | RELATIVE P/E RATIO 1.36 | DIV'D YLD 3.1% | VALUE LINE

TIMELINESS 3 Lowered 6/26/09
SAFETY 3 Lowered 8/1/03
TECHNICAL 4 Raised 7/10/09
BETA .65 (1.00 = Market)

High:	11.5	11.5	12.0	14.8	15.0	16.8	18.5	29.2	29.8	26.6	22.0	21.5
Low:	7.2	7.6	6.3	9.4	9.6	11.8	14.2	17.5	20.1	18.9	12.2	16.1

Target Price Range 2012 | 2013 | 2014

2012-14 PROJECTIONS

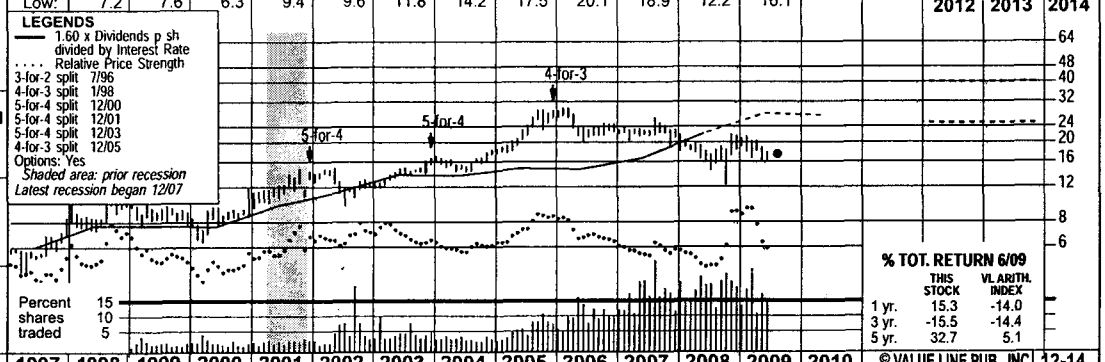
	Price	Gain	Ann'l Total Return
High	40	(+130%)	26%
Low	25	(+45%)	13%

Insider Decisions

	A	S	O	N	D	J	F	M	A
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	1	0	1	0	0
to Sell	0	0	0	0	1	0	0	0	0

Institutional Decisions

	3Q2008	4Q2008	1Q2009
to Buy	103	131	130
to Sell	108	131	134
Hld's(000)	62150	60996	63551



% TOT. RETURN 6/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	15.3	-14.0
3 yr.	-15.5	-14.4
5 yr.	32.7	5.1

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
1.70	1.82	1.84	1.86	2.02	2.09	2.41	2.46	2.70	2.85	2.97	3.48	3.85	4.03	4.52	4.63	*5.00*	*5.30*	Revenues per sh	*6.50*
.42	.42	.47	.50	.56	.61	.72	.76	.86	.94	.96	1.09	1.21	1.26	1.37	1.42	*1.55*	*1.65*	"Cash Flow" per sh	*2.10*
.24	.26	.29	.30	.34	.40	.42	.47	.51	.54	.57	.64	.71	.70	.71	.73	*.85*	*.90*	Earnings per sh A	*1.25*
.21	.21	.22	.23	.24	.26	.27	.28	.30	.32	.35	.37	.40	.44	.48	.51	*.54*	*.56*	Div'd Decl'd per sh B■	*.65*
.47	.46	.52	.48	.58	.82	.90	1.16	1.09	1.20	1.32	1.54	1.84	2.05	1.79	1.98	*2.10*	*2.20*	Cap'l Spending per sh	*2.75*
2.29	2.41	2.46	2.69	2.84	3.21	3.42	3.85	4.15	4.36	5.34	5.89	6.30	6.96	7.32	7.82	*8.05*	*8.35*	Book Value per sh	*10.60*
59.40	59.77	63.74	65.75	67.47	72.20	106.80	111.82	113.97	113.19	123.45	127.18	128.97	132.33	133.40	135.37	*136.00*	*136.50*	Common Shs Outst'g C	*138.00*
14.4	13.5	12.0	15.6	17.8	22.5	21.2	18.2	23.6	23.6	24.5	25.1	31.8	34.7	32.0	24.9	*Bold figures are*		Avg Ann'l P/E Ratio	*25.0*
.85	.89	.80	.98	1.03	1.17	1.21	1.18	1.21	1.29	1.40	1.33	1.69	1.87	1.70	1.50	*Value Line*		Relative P/E Ratio	*1.65*
5.9%	6.0%	6.2%	4.9%	3.9%	2.9%	3.0%	3.3%	2.5%	2.5%	2.5%	2.3%	1.8%	1.8%	2.1%	2.8%	*estimates*		Avg Ann'l Div'd Yield	*2.0%*

CAPITAL STRUCTURE as of 3/31/09
Total Debt $1338.1 mill. **Due in 5 Yrs** $243.9 mill.
LT Debt $1226.2 mill. **LT Interest** $65.0 mill.
(LT interest earned: 3.4x; total interest coverage: 3.4x) (54% of Cap'l)

Pension Assets-12/08 $112.2 mill. **Oblig.** $204.7 mill.

Pfd Stock None
Common Stock 135,649,486 shares as of 4/24/09

MARKET CAP: $2.4 billion (Mid Cap)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		12-14
257.3	275.5	307.3	322.0	367.2	442.0	496.8	533.5	602.5	627.0	*680*	*725*	Revenues ($mill)	*900*
45.0	50.7	58.5	62.7	67.3	80.0	91.2	92.0	95.0	97.9	*115*	*125*	Net Profit ($mill)	*170*
38.4%	38.9%	39.3%	38.5%	39.3%	39.4%	38.4%	39.6%	38.9%	39.7%	*39.0%*	*39.0%*	Income Tax Rate	*39.0%*
--	--	--	--	--	--	--	--	2.9%	3.1%	*3.5%*	*3.2%*	AFUDC % to Net Profit	*2.5%*
52.9%	52.0%	52.2%	54.2%	51.4%	50.0%	52.0%	51.6%	55.4%	54.1%	*54.0%*	*54.0%*	Long-Term Debt Ratio	*49.0%*
46.7%	47.8%	47.7%	45.8%	48.6%	50.0%	48.0%	48.4%	44.6%	45.9%	*46.0%*	*46.0%*	Common Equity Ratio	*51.0%*
782.7	901.1	990.4	1076.2	1355.7	1497.3	1690.4	1904.4	2191.4	2306.6	*2385*	*2470*	Total Capital ($mill)	*2865*
1135.4	1251.4	1368.1	1490.8	1824.3	2069.8	2280.0	2506.0	2792.8	2997.4	*3150*	*3300*	Net Plant ($mill)	*3600*
7.6%	7.4%	7.8%	7.6%	6.4%	6.7%	6.9%	6.4%	5.9%	5.7%	*6.5%*	*6.5%*	Return on Total Cap'l	*6.5%*
12.2%	11.7%	12.3%	12.7%	10.2%	10.7%	11.2%	10.0%	9.7%	9.3%	*10.5%*	*11.0%*	Return on Shr. Equity	*11.5%*
12.3%	11.7%	12.4%	12.7%	10.2%	10.7%	11.2%	10.0%	9.7%	9.3%	*10.5%*	*11.0%*	Return on Com Equity	*11.5%*
4.3%	4.7%	5.1%	5.2%	4.2%	4.6%	4.9%	3.7%	3.2%	2.8%	*4.0%*	*4.5%*	Retained to Com Eq D	*5.5%*
65%	60%	59%	59%	59%	57%	56%	63%	67%	70%	*64%*	*61%*	All Div'ds to Net Prof	*53%*

CURRENT POSITION ($MILL.)	2007	2008	3/31/09
Cash Assets	14.5	14.9	16.7
Receivables	82.9	84.5	77.3
Inventory (AvgCst)	8.8	9.8	9.4
Other	9.3	11.8	11.3
Current Assets	115.5	121.0	114.7
Accts Payable	45.8	50.0	27.2
Debt Due	80.8	87.9	111.9
Other	56.6	55.3	52.9
Current Liab.	183.2	193.2	192.0
Fix. Chg. Cov.	323%	329%	325%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	8.0%	9.0%	*6.5%*
"Cash Flow"	9.5%	8.0%	*7.5%*
Earnings	7.5%	5.5%	*10.0%*
Dividends	7.0%	8.0%	*4.5%*
Book Value	9.5%	10.0%	*6.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	117.9	131.7	147.0	136.9	533.5
2007	137.3	150.6	165.5	149.1	602.5
2008	139.3	151.0	177.1	159.6	627.0
2009	154.5	*167*	*185*	*173.5*	*680*
2010	*168*	*181*	*195*	*181*	*725*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.13	.17	.21	.19	.70
2007	.13	.17	.22	.19	.71
2008	.11	.17	.26	.19	.73
2009	.14	*.20*	*.28*	*.23*	*.85*
2010	*.15*	*.22*	*.30*	*.23*	*.90*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.098	.098	.098	.107	.40
2006	.107	.107	.115	.115	.44
2007	.115	.115	.125	.125	.48
2008	.125	.125	.125	.135	.51
2009	.135	.135			

BUSINESS: Aqua America, Inc. is the holding company for water and wastewater utilities that serve approximately three million residents in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Florida, Indiana, and five other states. Divested three of four non-water businesses in '91; telemarketing group in '93; and others. Acquired AquaSource, 7/03; Consumers Water, 4/99; and others. Water supply revenues '08: residential, 60%; commercial, 14%; industrial & other, 26%. Officers and directors own 1.3% of the common stock (4/09 Proxy). Chairman & Chief Executive Officer: Nicholas DeBenedictis. Incorporated: Pennsylvania. Address: 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010. Telephone: 610-525-1400. Internet: www.aquaamerica.com.

Aqua America has posted good results thus far in 2009. That can be attributed partly to the completion of key rate cases over the past year. An expanded customer base, made possible by acquisitions, has also helped the water provider (although the slowdown in the housing industry and the sale of two operations in 2008 have provided a bit of an offset). At this juncture, share net stands to climb around 16%, to $0.85, this year. Further expansion in operating margins ought to enable the bottom line to advance another 6%, to $0.90 a share, in 2010.

The company remains an active participant in the ongoing consolidation within the water-service industry. The cost and technical expertise required for compliance with quality standards for drinking water have risen to the point where a number of the many small water suppliers in the United States have been struggling financially. This has resulted in a buyer's market whereby a well-capitalized company, like Aqua America, can enlarge its customer base at relatively low cost. The latest additions to its portfolio include Clarendon Water Company, serving 1,200 residents in Warren County, Pennsylvania; the water and wastewater assets of W.P. Water Company and W.P. Sanitary Company, which serve roughly 550 customers, combined, in Wyoming County and Luzerne County, Pennsylvania; and the Kratzerville Municipal Authority water system, serving roughly 400 residents in Snyder County, Pennsylvania. Even excluding future acquisitions (because of the many uncertainties associated with that strategy), we think Aqua America is capable of registering healthy, annual bottom-line gains over the 2012-2014 horizon.

The stock's risk-adjusted, total return possibilities are decent, reflecting the steady (albeit unspectacular) dividend growth we envision for the company going forward. Note, also, the high Price Stability rating and lower-than-market Beta coefficient. Conservative investors may want to take a look here.

But for the coming six to 12 months, these shares are ranked to perform only in line with the broader market averages.

Frederick L. Harris, III *July 24, 2009*

(A) Primary shares outstanding through '96; diluted thereafter. Excl. nonrec. gains (losses): '99, (11¢); '00, 2¢; '01, 2¢; '02, 5¢; '03, 4¢. Excl. gain from disc. operations: '96, 2¢. Next earnings report due early Aug. (B) Dividends historically paid in early March, June, Sept. & Dec. ■ Div'd. reinvestment plan available (5% discount). (C) In millions, adjusted for stock splits.

Company's Financial Strength	B+
Stock's Price Stability	95
Price Growth Persistence	75
Earnings Predictability	100

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CALIFORNIA WATER NYSE-CWT

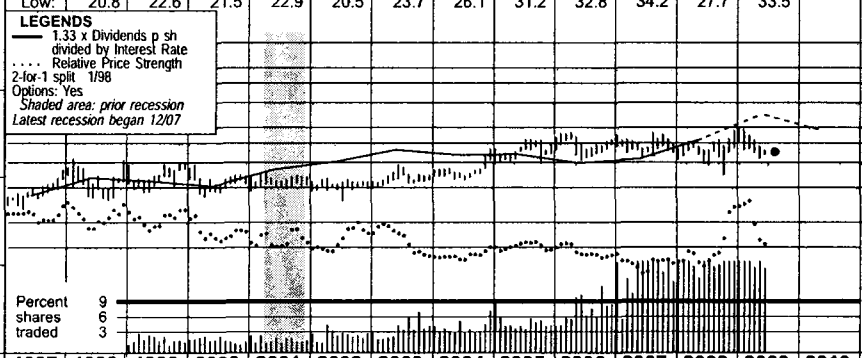
RECENT PRICE	36.27	P/E RATIO	17.3 (Trailing: 18.0 Median: 22.0)	RELATIVE P/E RATIO	1.15	DIV'D YLD	3.3%	VALUE LINE

TIMELINESS 3 Lowered 7/3/09
SAFETY 3 Lowered 7/27/07
TECHNICAL 4 Raised 7/10/09
BETA .80 (1.00 = Market)

High:	33.8	32.0	31.4	28.6	26.9	31.4	37.9	42.1	45.8	45.4	46.6	48.3
Low:	20.8	22.6	21.5	22.9	20.5	23.7	26.1	31.2	32.8	34.2	27.7	33.5

Target Price Range
2012 | 2013 | 2014

LEGENDS
— 1.33 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 1/98
Options: Yes
Shaded area: prior recession
Latest recession began 12/07



2012-14 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	65	(+80%)	18%
Low	45	(+25%)	9%

Insider Decisions

	A	S	O	N	D	J	F	M	A
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	1	0	0	0	0	0

Institutional Decisions

	3Q2008	4Q2008	1Q2009
to Buy	49	107	83
to Sell	58	46	81
Hld's(000)	9891	9799	10000

Percent shares traded 9 6 3

% TOT. RETURN 6/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	15.9	-14.0
3 yr.	12.2	-14.4
5 yr.	55.3	5.1

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
13.34	12.59	13.17	14.48	15.48	14.76	15.96	16.16	16.26	17.33	16.37	17.18	17.44	16.20	17.76	19.80	*21.45*	*22.10*	Revenues per sh	*24.45*
2.25	2.02	2.07	2.50	2.92	2.60	2.75	2.52	2.20	2.65	2.51	2.83	3.03	2.71	3.12	3.72	*4.15*	*4.35*	"Cash Flow" per sh	*4.65*
1.35	1.22	1.17	1.51	1.83	1.45	1.53	1.31	.94	1.25	1.21	1.46	1.47	1.34	1.50	1.90	*2.10*	*2.20*	Earnings per sh A	*2.65*
.96	.99	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.12	1.12	1.13	1.14	1.15	1.16	1.17	*1.18*	*1.19*	Div'd Decl'd per sh B ■	*1.34*
2.53	2.26	2.17	2.83	2.61	2.74	3.44	2.45	4.09	5.82	4.39	3.73	4.01	4.28	3.68	4.82	*4.75*	*4.80*	Cap'l Spending per sh	*5.00*
10.90	11.56	11.72	12.22	13.00	13.38	13.43	12.90	12.95	13.12	14.44	15.66	15.79	18.15	18.50	19.44	*19.95*	*20.60*	Book Value per sh C	*22.20*
11.38	12.49	12.54	12.62	12.62	12.62	12.94	15.15	15.18	15.18	16.93	18.37	18.39	20.66	20.67	20.72	*21.00*	*21.25*	Common Shs Outst'g D	*22.50*
13.6	14.1	13.7	11.9	12.6	17.8	17.8	19.6	27.1	19.8	22.1	20.1	24.9	29.2	26.1	19.8	*Bold figures are*		Avg Ann'l P/E Ratio	*21.0*
.80	.92	.92	.75	.73	.93	1.01	1.27	1.39	1.08	1.26	1.06	1.33	1.58	1.39	1.20	*Value Line*		Relative P/E Ratio	*1.40*
5.2%	5.8%	6.4%	5.8%	4.6%	4.2%	4.0%	4.3%	4.4%	4.5%	4.2%	3.9%	3.1%	2.9%	3.0%	3.1%	*estimates*		Avg Ann'l Div'd Yield	*2.4%*

CAPITAL STRUCTURE as of 3/31/09
Total Debt $342.1 mill. **Due in 5 Yrs** $80.0 mill.
LT Debt $287.2 mill. **LT Interest** $21.0 mill.

(LT interest earned: 4.6x; total int. cov.: 4.4x)

Pension Assets-12/08 $66.9 mill. **Oblig.** $192.9 mill.

Pfd Stock None

Common Stock 20,744,952 shs. **as of 5/1/09**

MARKET CAP: $750 million (Small Cap)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		12-14
206.4	244.8	246.8	263.2	277.1	315.6	320.7	334.7	367.1	410.3	*450*	*470*	Revenues ($mill) E	*550*
19.9	20.0	14.4	19.1	19.4	26.0	27.2	25.6	31.2	39.8	*45.0*	*47.0*	Net Profit ($mill)	*60.0*
37.9%	42.3%	39.4%	39.7%	39.9%	39.6%	42.4%	37.4%	39.9%	37.7%	*37.5%*	*38.0%*	Income Tax Rate	*39.0%*
--	--	--	--	10.3%	3.2%	3.3%	10.6%	8.3%	8.6%	*8.5%*	*8.5%*	AFUDC % to Net Profit	*8.5%*
46.9%	48.9%	50.3%	55.3%	50.2%	48.6%	48.3%	43.5%	42.9%	41.6%	*48.0%*	*47.5%*	Long-Term Debt Ratio	*45.0%*
52.0%	50.2%	48.8%	44.0%	49.1%	50.8%	51.1%	55.9%	56.6%	58.4%	*52.0%*	*52.5%*	Common Equity Ratio	*55.0%*
333.8	388.8	402.7	453.1	498.4	565.9	568.1	670.1	674.9	690.4	*805*	*835*	Total Capital ($mill)	*950*
515.4	582.0	624.3	697.0	759.5	800.3	862.7	941.5	1010.2	1112.4	*1175*	*1235*	Net Plant ($mill)	*1425*
7.8%	6.8%	5.3%	5.9%	5.6%	6.1%	6.3%	5.2%	5.9%	7.1%	*7.0%*	*7.0%*	Return on Total Cap'l	*8.0%*
11.2%	10.0%	7.2%	9.4%	7.8%	8.9%	9.3%	6.8%	8.1%	9.9%	*10.5%*	*10.5%*	Return on Shr. Equity	*12.0%*
11.4%	10.1%	7.2%	9.5%	7.9%	9.0%	9.3%	6.8%	8.1%	9.9%	*10.5%*	*10.5%*	Return on Com Equity	*12.0%*
3.5%	1.8%	NMF	1.0%	.7%	2.1%	2.1%	1.0%	1.8%	3.8%	*5.0%*	*5.0%*	Retained to Com Eq	*6.0%*
70%	82%	119%	90%	91%	77%	78%	86%	77%	61%	*55%*	*54%*	All Div'ds to Net Prof	*50%*

CURRENT POSITION ($MILL.)	2007	2008	3/31/09
Cash Assets	6.7	13.9	5.3
Other	53.3	65.9	67.0
Current Assets	60.0	79.8	72.3
Accts Payable	36.7	41.8	38.0
Debt Due	2.7	42.8	54.9
Other	30.3	35.8	37.2
Current Liab.	69.7	123.2	130.1
Fix. Chg. Cov.	333%	398%	*482%*

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	2.0%	1.5%	*5.5%*
"Cash Flow"	2.0%	5.5%	*6.5%*
Earnings	--	7.0%	*9.0%*
Dividends	1.0%	0.5%	*2.5%*
Book Value	4.0%	6.5%	*3.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.)E Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	65.2	81.1	107.8	80.6	334.7
2007	71.6	95.8	113.8	85.9	367.1
2008	72.9	105.6	131.7	100.1	410.3
2009	86.7	*115.3*	*140*	*108*	*450*
2010	*90.0*	*120*	*145*	*115*	*470*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.04	.31	.68	.31	1.34
2007	.07	.37	.67	.39	1.50
2008	.01	.48	1.06	.35	1.90
2009	.12	*.54*	*1.05*	*.39*	*2.10*
2010	*.13*	*.56*	*1.09*	*.42*	*2.20*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.285	.285	.285	.285	1.14
2006	.2875	.2875	.2875	.2875	1.15
2007	.290	.290	.290	.290	1.16
2008	.293	.293	.293	.293	1.17
2009	.295	.295			

BUSINESS: California Water Service Group provides regulated and nonregulated water service to roughly 463,600 customers in 83 communities in California, Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Rio Grande Corp; West Hawaii Utilities (9/08). Revenue breakdown, '08: residential, 69%; business, 18%; public authorities, 5%; industrial, 5%; other, 3%. '08 reported depreciation rate: 2.4%. Has roughly 929 employees. Chairman: Robert W. Foy. President & CEO: Peter C. Nelson (4/09 Proxy). Inc.: Delaware. Address: 1720 North First Street, San Jose, California 95112-4598. Telephone: 408-367-8200. Internet: www.calwatergroup.com.

Recent changes on the regulatory front are already benefiting California Water Service Group. Late last year, the California Public Utilities Commission (CPUC), which oversees the actions of utilities in the Golden State to ensure fair business practices, implemented some guidelines proposed in the Water Action Plan that essentially create a more business-friendly landscape. The board established a water revenue adjustment mechanism (WRAM), implemented a modified cost-balancing account (MCBA) methodology, and introduced tiered rates. These moves ought to streamline the review process of general rate cases and remove many unexpected costs of doing business due to outside factors, such as weather, beyond the companies' control such. In its first full quarter with such initiatives in place, CWT posted earnings of $0.12 a share, far better than the penny earned last year. Revenues rose roughly 19% to $86.6 million, with 83% of the increase coming from rate increases.

Growth is likely to slow in the months ahead, however. Despite the more favorable regulatory climate, operating expenses are likely to continue escalating as deteriorating infrastructures and increasingly stringent EPA requirements result in higher maintenance costs. Meanwhile, the debt-riddled company is light on cash, and will probably need to look to outside financiers to make some of the necessary improvements. Thus, the increased interest expense and higher share count are likely to thwart earnings growth heading forward.

The stock has lost some appeal since our April review. It has slipped a notch for Timeliness and is now pegged to mirror the broad market for the coming six to 12 months. Its longer-term lure, meanwhile, remains below average, as the aforementioned financing costs are likely to limit shareholder gains out to 2012-2014.

It may pique the interest of conservative investors with a penchant for income, though. The company has a long-standing history of delivering steady dividend growth, which is an attractive attribute in times of economic volatility. WRAM and MCBA ought to make for more predictable earnings growth too.

Andre J. Costanza *July 24, 2009*

(A) Basic EPS. Excl. nonrecurring gain (loss): '00, (7¢); '01, 4¢; '02, 8¢. Next earnings report due early Aug.
(B) Dividends historically paid in mid-Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available.
(C) Incl. deferred charges. In '08: $3.9 mill., $.19/sh.
(D) In millions, adjusted for split.
(E) Excludes non-reg. rev.

Company's Financial Strength	B++
Stock's Price Stability	80
Price Growth Persistence	70
Earnings Predictability	75

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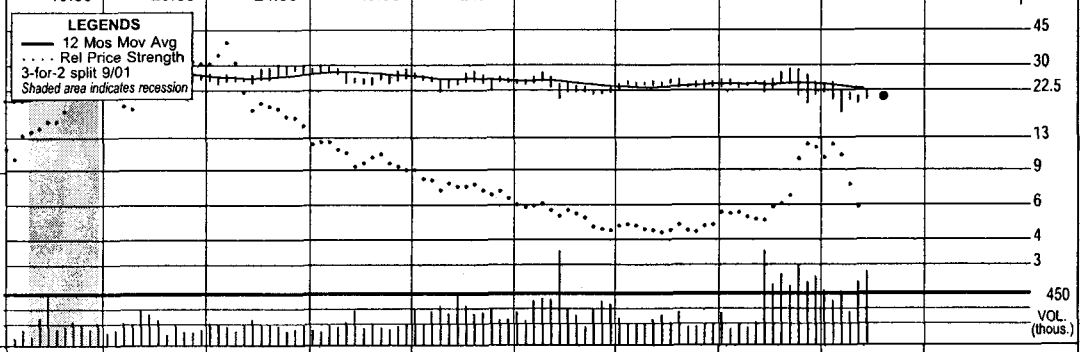
CONN. WATER SERVICES NDQ--CTWS

RECENT PRICE	TRAILING P/E RATIO	RELATIVE P/E RATIO	DIV'D YLD	
20.87	20.1	1.46	4.3%	VALUE LINE

RANKS		
PERFORMANCE	3	Average
Technical	3	Average
SAFETY	2	Above Average
BETA .85	(1.00 = Market)	
Financial Strength	B+	
Price Stability	90	
Price Growth Persistence	35	
Earnings Predictability	80	

32.21	31.09	30.41	29.76	28.17	27.71	25.61	28.95	24.76	High
19.50	20.35	24.00	23.83	21.91	20.29	22.40	19.26	17.31	Low



© VALUE LINE PUBLISHING, INC.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010/2011
SALES PER SH	5.93	5.77	5.91	6.04	5.81	5.68	7.05	7.24	--	
"CASH FLOW" PER SH	1.78	1.78	1.89	1.91	1.62	1.52	1.90	1.95	--	
EARNINGS PER SH	1.13	1.12	1.15	1.16	.88	.81	1.05	1.11	*1.06* [A,B]	*1.11* [C]/NA
DIV'DS DECL'D PER SH	.80	.81	.83	.84	.85	.86	.87	.88	--	
CAP'L SPENDING PER SH	1.86	1.98	1.49	1.58	1.96	1.96	2.24	2.44	--	
BOOK VALUE PER SH	9.25	10.06	10.46	10.94	11.52	11.60	11.95	12.23	--	
COMMON SHS OUTST'G (MILL)	7.65	7.94	7.97	8.04	8.17	8.27	8.38	8.46	--	
AVG ANN'L P/E RATIO	21.5	24.3	23.5	22.9	28.6	29.0	23.0	22.2	*19.7*	*18.8/NA*
RELATIVE P/E RATIO	1.10	1.33	1.34	1.21	1.51	1.57	1.22	1.34	--	
AVG ANN'L DIV'D YIELD	3.3%	3.0%	3.0%	3.1%	3.4%	3.6%	3.6%	3.6%	--	
SALES ($MILL)	45.4	45.8	47.1	48.5	47.5	46.9	59.0	61.3	--	*Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.*
OPERATING MARGIN	56.1%	57.7%	52.1%	51.0%	48.3%	43.7%	40.8%	49.0%	--	
DEPRECIATION ($MILL)	5.0	5.4	5.9	6.0	6.1	5.9	7.2	7.1	--	
NET PROFIT ($MILL)	8.7	8.8	9.2	9.4	7.2	6.7	8.8	9.4	--	
INCOME TAX RATE	36.1%	33.8%	17.9%	22.9%	--	23.5%	32.4%	27.2%	--	
NET PROFIT MARGIN	19.1%	19.2%	19.5%	19.4%	15.1%	14.3%	14.9%	15.4%	--	
WORKING CAP'L ($MILL)	d3.3	d5.1	d3.9	d.7	13.0	1.2	8.1	d3.3	--	
LONG-TERM DEBT ($MILL)	64.0	64.8	64.8	66.4	77.4	77.3	92.3	92.2	--	
SHR. EQUITY ($MILL)	71.6	80.7	84.2	88.7	94.9	96.7	100.9	104.2	--	
RETURN ON TOTAL CAP'L	7.9%	7.4%	7.5%	7.0%	5.0%	4.9%	5.5%	5.9%	--	
RETURN ON SHR. EQUITY	12.1%	10.9%	10.9%	10.6%	7.5%	6.9%	8.7%	9.0%	--	
RETAINED TO COM EQ	3.6%	3.1%	3.2%	3.1%	.3%	NMF	1.6%	1.9%	--	
ALL DIV'DS TO NET PROF	71%	72%	71%	71%	95%	105%	82%	79%	--	

[A]*No. of analysts changing earn. est. in last 11 days: 0 up, 0 down, consensus 5-year earnings growth not available.* [B]*Based upon 2 analysts' estimates.* [C]*Based upon 2 analysts' estimates.*

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	2.5%	2.5%
"Cash Flow"	-0.5%	2.5%
Earnings	-2.5%	5.5%
Dividends	1.5%	1.0%
Book Value	3.5%	2.5%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/07	13.2	14.4	17.0	14.4	59.0
12/31/08	13.6	16.0	17.0	14.7	61.3
12/31/09	13.4				
12/31/10					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/06	.21	.12	.45	.03	.81
12/31/07	.18	.22	.46	.19	1.05
12/31/08	.20	.35	.34	.22	1.11
12/31/09	.13	*.29*	*.43*	*.21*	
12/31/10					

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2006	.213	.213	.215	.215	.86
2007	.215	.215	.218	.218	.87
2008	.218	.218	.222	.222	.88
2009	.222	.222			

INSTITUTIONAL DECISIONS

	3Q'08	4Q'08	1Q'09
to Buy	38	28	31
to Sell	17	27	24
Hld's(000)	2880	2677	2678

ASSETS ($mill.)	2007	2008	3/31/09
Cash Assets	8.6	.7	.8
Receivables	11.1	12.0	10.9
Inventory (Avg cost)	1.0	1.1	1.2
Other	2.3	2.0	3.7
Current Assets	23.0	15.8	16.6
Property, Plant & Equip, at cost	392.5	418.1	--
Accum Depreciation	108.2	115.8	--
Net Property	284.3	302.3	310.2
Other	53.5	54.3	51.2
Total Assets	360.8	372.4	378.0
LIABILITIES ($mill.)			
Accts Payable	6.0	5.7	5.3
Debt Due	6.5	12.1	16.2
Other	2.4	1.3	1.2
Current Liab	14.9	19.1	22.7

LONG-TERM DEBT AND EQUITY as of 3/31/09

Total Debt $108.4 mill. **Due in 5 Yrs.** NA
LT Debt $92.2 mill.
Including Cap. Leases NA (47% of Cap'l)

Leases, Uncapitalized Annual rentals NA

Pension Liability $16.7 mill. in '08 vs. None in '07

Pfd Stock $.8 mill. **Pfd Div'd Paid** NMF

Common Stock 8,505,395 shares (53% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: Connecticut Water Service, Inc. primarily operates as a water utility company in Connecticut. It operates through three segments: Water Activities, Real Estate Transactions, and Services and Rentals. The Water Activities segment supplies public drinking water to its customers. The Real Estate Transactions segment involves in the sale of its limited excess real estate holdings. The Services and Rentals segment provides contracted services to water and wastewater utilities and other clients, as well as leases certain of its properties to third parties. This segment's services include contract operations of water and wastewater facilities; Linebacker, its service line protection plan for public drinking water customers; and provision of bulk deliveries of emergency drinking water to businesses and residences via tanker truck. As of July 8, it provided water to to more than 88,000 customers, or about 300,000 people, in 54 towns throughout Connecticut. Has 226 employees. Chairman, C.E.O. & President: Eric W. Thornburg. Inc.: CT. Address: 93 West Main Street, Clinton, CT 06413. Tel.: (860) 669-8636. Internet: http://www.ctwater.com. *M.W.*

July 24, 2009

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 6/30/2009

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
8.12%	-6.12%	0.69%	3.52%	0.33%

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MIDDLESEX WATER NDQ--MSEX

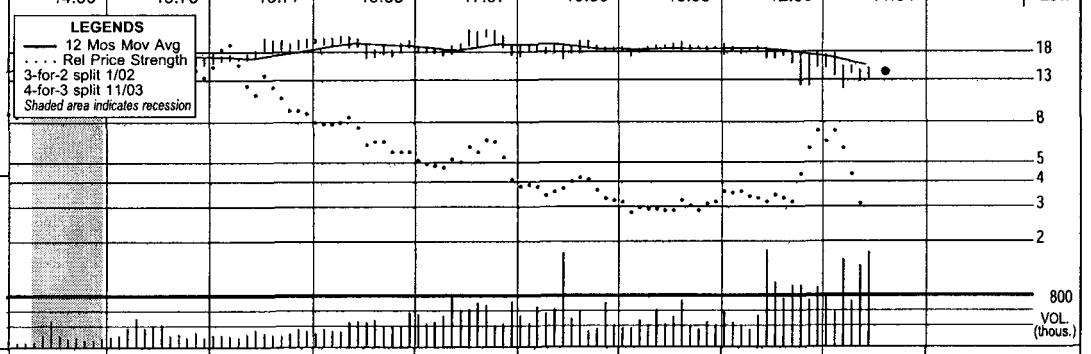
RECENT PRICE	TRAILING P/E RATIO	RELATIVE P/E RATIO	DIV'D YLD	
14.24	17.0	1.23	5.0%	VALUE LINE

RANKS

PERFORMANCE	3	Average
Technical	3	Average
SAFETY	2	Above Average
BETA .80	(1.00 = Market)	

Financial Strength	B+
Price Stability	95
Price Growth Persistence	45
Earnings Predictability	90

18.73	20.04	21.23	21.81	23.47	20.50	20.24	19.83	17.71	High
14.69	13.73	15.77	16.65	17.07	16.50	16.93	12.05	11.64	Low



© VALUE LINE PUBLISHING, INC.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010/2011
SALES PER SH	5.87	5.98	6.12	6.25	6.44	6.16	6.50	6.79	--	
"CASH FLOW" PER SH	1.18	1.20	1.15	1.28	1.33	1.33	1.49	1.53	--	
EARNINGS PER SH	.66	.73	.61	.73	.71	.82	.87	.89	*.76* [A,B]	*.78* [C]*/NA*
DIV'DS DECL'D PER SH	.62	.63	.65	.66	.67	.68	.69	.70	--	
CAP'L SPENDING PER SH	1.25	1.59	1.87	2.54	2.18	2.31	1.66	2.12	--	
BOOK VALUE PER SH	7.11	7.39	7.60	8.38	8.60	9.82	10.05	10.28	--	
COMMON SHS OUTST'G (MILL)	10.17	10.36	10.48	11.36	11.58	13.17	13.25	13.40	--	
AVG ANN'L P/E RATIO	24.6	23.5	30.0	26.4	27.4	22.7	21.6	19.8	*18.7*	*18.3/NA*
RELATIVE P/E RATIO	1.26	1.28	1.71	1.39	1.45	1.23	1.15	1.19	--	
AVG ANN'L DIV'D YIELD	3.8%	3.7%	3.5%	3.4%	3.5%	3.7%	3.7%	4.0%	--	
SALES ($MILL)	59.6	61.9	64.1	71.0	74.6	81.1	86.1	91.0	--	*Bold figures*
OPERATING MARGIN	47.2%	47.1%	44.0%	44.4%	44.4%	47.4%	47.0%	46.9%	--	*are consensus*
DEPRECIATION ($MILL)	5.3	5.0	5.6	6.4	7.2	7.8	8.2	8.5	--	*earnings*
NET PROFIT ($MILL)	7.0	7.8	6.6	8.4	8.5	10.0	11.8	12.2	--	*estimates*
INCOME TAX RATE	34.8%	33.3%	32.8%	31.1%	27.6%	33.4%	32.6%	33.2%	--	*and, using the*
NET PROFIT MARGIN	11.7%	12.5%	10.3%	11.9%	11.4%	12.4%	13.8%	13.4%	--	*recent prices,*
WORKING CAP'L ($MILL)	d.9	d9.3	d13.3	d11.8	d4.5	2.8	d9.6	d40.9	--	*P/E ratios.*
LONG-TERM DEBT ($MILL)	88.1	87.5	97.4	115.3	128.2	130.7	131.6	118.2	--	
SHR. EQUITY ($MILL)	76.4	80.6	83.7	99.2	103.6	133.3	137.1	141.2	--	
RETURN ON TOTAL CAP'L	5.6%	6.0%	5.0%	5.1%	5.0%	5.1%	5.6%	5.8%	--	
RETURN ON SHR. EQUITY	9.1%	9.6%	7.9%	8.5%	8.2%	7.5%	8.6%	8.6%	--	
RETAINED TO COM EQ	.5%	1.3%	NMF	.9%	.5%	1.2%	1.8%	1.9%	--	
ALL DIV'DS TO NET PROF	94%	87%	106%	90%	94%	84%	79%	78%	--	

[A] *No. of analysts changing earn. est. in last 11 days: 0 up, 0 down, consensus 5-year earnings growth 7.0% per year.* [B] *Based upon 2 analysts' estimates.* [C] *Based upon 2 analysts' estimates.*

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	1.5%	4.5%
"Cash Flow"	4.5%	2.5%
Earnings	5.5%	2.5%
Dividends	2.0%	1.5%
Book Value	6.5%	2.5%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/07	19.0	21.8	24.1	21.2	86.1
12/31/08	20.8	23.0	25.7	21.5	91.0
12/31/09	20.6				
12/31/10					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/06	.15	.25	.28	.14	.82
12/31/07	.13	.24	.31	.19	.87
12/31/08	.15	.26	.35	.13	.89
12/31/09	.10	*.24*	*.31*	*.12*	
12/31/10					

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2006	.17	.17	.17	.173	.68
2007	.173	.173	.173	.175	.69
2008	.175	.175	.175	.178	.70
2009	.178	.178			

INSTITUTIONAL DECISIONS

	3Q'08	4Q'08	1Q'09
to Buy	36	35	41
to Sell	30	24	27
Hld's(000)	5083	4997	4505

ASSETS ($mill.)	2007	2008	3/31/09
Cash Assets	2.0	3.3	3.2
Receivables	12.8	14.3	13.3
Inventory (Avg cost)	1.2	1.5	1.5
Other	1.4	1.5	1.0
Current Assets	17.4	20.6	19.0
Property, Plant & Equip, at cost	398.6	436.8	--
Accum Depreciation	64.7	70.5	--
Net Property	333.9	366.3	371.5
Other	41.4	53.1	52.9
Total Assets	392.7	440.0	443.4
LIABILITIES ($mill.)			
Accts Payable	6.5	5.7	5.0
Debt Due	9.0	43.9	40.3
Other	11.5	11.9	12.7
Current Liab	27.0	61.5	58.0

LONG-TERM DEBT AND EQUITY as of 3/31/09

Total Debt $164.7 mill. **Due in 5 Yrs.** NA
LT Debt $124.4 mill.
Including Cap. Leases NA (47% of Cap'l)

Leases, Uncapitalized Annual rentals NA

Pension Liability $25.5 mill. in '08 vs. $13.3 mill. in '07

Pfd Stock None **Pfd Div'd Paid** None

Common Stock 13,425,000 shares (53% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey (NJ) and Delaware, and a regulated wastewater utility in NJ. It offers contract operations services and a service line maintenance program through its nonregulated subsidiary, Utility Service Affiliates, Inc. Its water utility system treats, stores, and distributes water for residential, commercial, industrial, and fire prevention purposes. It also provides water treatment and pumping services to the Township of East Brunswick. Its other NJ subsidiaries offer water and wastewater services to residents in Southampton Township. Its Delaware subsidiaries provide water services to retail customers in New Castle, Kent, and Sussex counties. In July, it was approved to implement a Purchased Water Adjustment Clause, which is a pass-through charge that enables the company to recover the increased unit cost of raw or finished water purchased from external sources. Has 269 employees. Chairman: J. Richard Tompkins. Address: 1500 Ronson Rd, P.O. BOX 1500, Iselin, NJ 08830. Tel.: 732-634-1500. Internet: http://www.middlesexwater.com. *M.W.*

July 24, 2009

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 6/30/2009

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
1.69%	-14.10%	-8.88%	-14.84%	-10.85%

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SJW CORP. NYSE-SJW

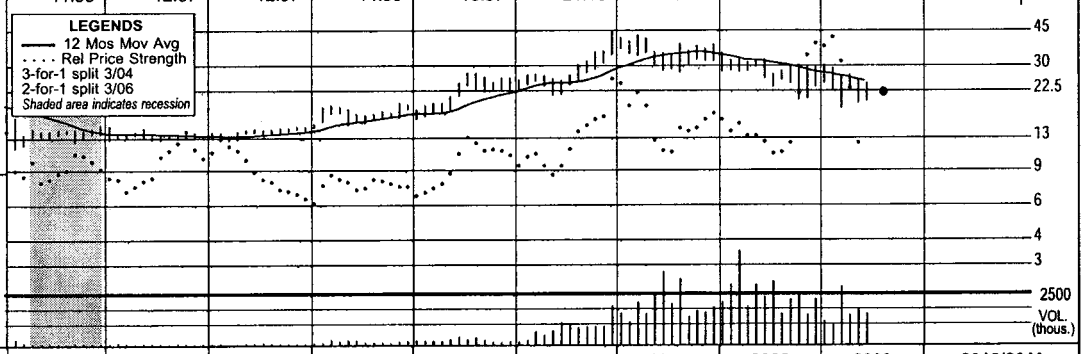
RECENT PRICE	TRAILING P/E RATIO	RELATIVE P/E RATIO	DIV'D YLD	
22.12	24.0	1.75	3.0%	VALUE LINE

RANKS

PERFORMANCE	4	Below Average
Technical	4	Below Average
SAFETY	3	Average
BETA 1.00	(1.00 = Market)	

Financial Strength	B+
Price Stability	65
Price Growth Persistence	75
Earnings Predictability	90

17.83	15.07	14.95	19.64	27.80	45.33	43.00	35.11	30.44	High
11.58	12.67	12.57	14.60	16.07	21.16	27.65	20.05	18.22	Low



© VALUE LINE PUBLISHING, INC.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010/2011
SALES PER SH	7.45	7.97	8.20	9.14	9.86	10.35	11.25	12.12	--	
"CASH FLOW" PER SH	1.49	1.55	1.75	1.89	2.21	2.38	2.30	2.44	--	
EARNINGS PER SH	.77	.78	.91	.87	1.12	1.19	1.04	1.08	*.99* [A,B]	*1.31* [C]*/NA*
DIV'DS DECL'D PER SH	.43	.46	.49	.51	.53	.57	.61	.65	--	
CAP'L SPENDING PER SH	2.63	2.06	3.41	2.31	2.83	3.87	6.62	3.79	--	
BOOK VALUE PER SH	8.17	8.40	9.11	10.11	10.72	12.48	12.90	13.99	--	
COMMON SHS OUTST'G (MILL)	18.27	18.27	18.27	18.27	18.27	18.28	18.36	18.18	--	
AVG ANN'L P/E RATIO	18.5	17.3	15.4	19.6	19.7	23.5	33.4	26.2	*22.3*	*16.9/NA*
RELATIVE P/E RATIO	.95	.94	.88	1.04	1.04	1.27	1.77	1.58	--	
AVG ANN'L DIV'D YIELD	3.0%	3.4%	3.5%	3.0%	2.4%	2.0%	1.7%	2.3%	--	
SALES ($MILL)	136.1	145.7	149.7	166.9	180.1	189.2	206.6	220.3	--	*Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.*
OPERATING MARGIN	64.4%	63.7%	56.0%	56.4%	55.9%	57.0%	41.8%	42.4%	--	
DEPRECIATION ($MILL)	13.2	14.0	15.2	18.5	19.7	21.3	22.9	24.0	--	
NET PROFIT ($MILL)	14.0	14.2	16.7	16.0	20.7	22.2	19.3	20.2	--	
INCOME TAX RATE	34.5%	40.4%	36.2%	42.1%	41.6%	40.8%	39.4%	39.5%	--	
NET PROFIT MARGIN	10.3%	9.8%	11.2%	9.6%	11.5%	11.7%	9.4%	9.2%	--	
WORKING CAP'L ($MILL)	d3.8	d4.9	12.0	13.0	10.8	22.2	d1.4	d11.3	--	
LONG-TERM DEBT ($MILL)	110.0	110.0	139.6	143.6	145.3	163.6	216.3	216.6	--	
SHR. EQUITY ($MILL)	149.4	153.5	166.4	184.7	195.9	228.2	236.9	254.3	--	
RETURN ON TOTAL CAP'L	6.7%	6.9%	6.9%	6.5%	7.6%	7.0%	5.7%	5.8%	--	
RETURN ON SHR. EQUITY	9.4%	9.3%	10.0%	8.7%	10.6%	9.7%	8.2%	8.0%	--	
RETAINED TO COM EQ	4.1%	3.8%	4.7%	3.6%	5.6%	5.2%	3.5%	3.3%	--	
ALL DIV'DS TO NET PROF	56%	59%	53%	58%	47%	46%	57%	59%	--	

[A] *No. of analysts changing earn. est. in last 11 days: 0 up, 0 down, consensus 5-year earnings growth 10.0% per year.* [B] *Based upon 2 analysts' estimates.* [C] *Based upon 2 analysts' estimates.*

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	7.5%	7.5%
"Cash Flow"	8.5%	6.0%
Earnings	6.0%	4.0%
Dividends	5.5%	6.5%
Book Value	9.0%	8.5%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/07	39.0	55.1	64.9	47.6	206.6
12/31/08	41.3	60.0	69.5	49.5	220.3
12/31/09	40.0				
12/31/10					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/06	.14	.35	.48	.22	1.19
12/31/07	.12	.29	.43	.20	1.04
12/31/08	.15	.34	.44	.15	1.08
12/31/09	d.01	*.36*	*.44*	*.18*	
12/31/10					

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2006	.141	.141	.141	.141	.56
2007	.151	.151	.151	.151	.60
2008	.161	.161	.161	.161	.64
2009	.165	.165			

INSTITUTIONAL DECISIONS

	3Q'08	4Q'08	1Q'09
to Buy	35	34	45
to Sell	36	39	32
Hld's(000)	8399	8286	8505

ASSETS ($mill.)	2007	2008	3/31/09
Cash Assets	2.4	3.4	2.4
Receivables	23.0	24.5	21.7
Inventory	.8	.9	1.0
Other	5.4	3.2	4.3
Current Assets	31.6	32.0	29.4
Property, Plant & Equip, at cost	904.3	958.7	--
Accum Depreciation	258.8	274.5	--
Net Property	645.5	684.2	699.6
Other	90.2	134.7	125.4
Total Assets	767.3	850.9	854.4
LIABILITIES ($mill.)			
Accts Payable	9.3	5.8	7.7
Debt Due	5.6	19.1	17.4
Other	18.1	18.4	15.6
Current Liab	33.0	43.3	40.7

LONG-TERM DEBT AND EQUITY as of 3/31/09

Total Debt $243.8 mill. **Due in 5 Yrs.** NA
LT Debt $226.4 mill.
Including Cap. Leases NA
(48% of Cap'l)

Leases, Uncapitalized Annual rentals NA

Pension Liability $42.3 mill. in '08 vs. $23.4 mill. in '07

Pfd Stock None **Pfd Div'd Paid** None

Common Stock 18,475,597 shares
(52% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: SJW Corporation, through its subsidiaries, engages in the production, purchase, storage, purification, distribution, and retail sale of water. The company offers nonregulated water-related services, including water system operations, cash remittances, and maintenance contract services. SJW also owns undeveloped land; a 70% limited partnership interest in 444 West Santa Clara Street, L.P.; and operates commercial buildings in Arizona, California, Connecticut, Florida, Tennessee, and Texas. As of December 31, 2008, SJW provided water service to approximately 226,000 connections that served a population of approximately one million people in the San Jose area. It also provides water service to approximately 8,700 connections that serve approximately 36,000 residents in a service area in the region between San Antonio and Austin, Texas. Has 379 employees. Chairman: Charles J. Toeniskoetter. Inc.: CA. Address: 110 W. Taylor Street, San Jose, CA 95110. Tel.: (408) 279-7800. Internet: http://www.sjwater.com.

M.W.

July 24, 2009

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 6/30/2009

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
-10.04%	-23.14%	-11.75%	-4.83%	50.09%

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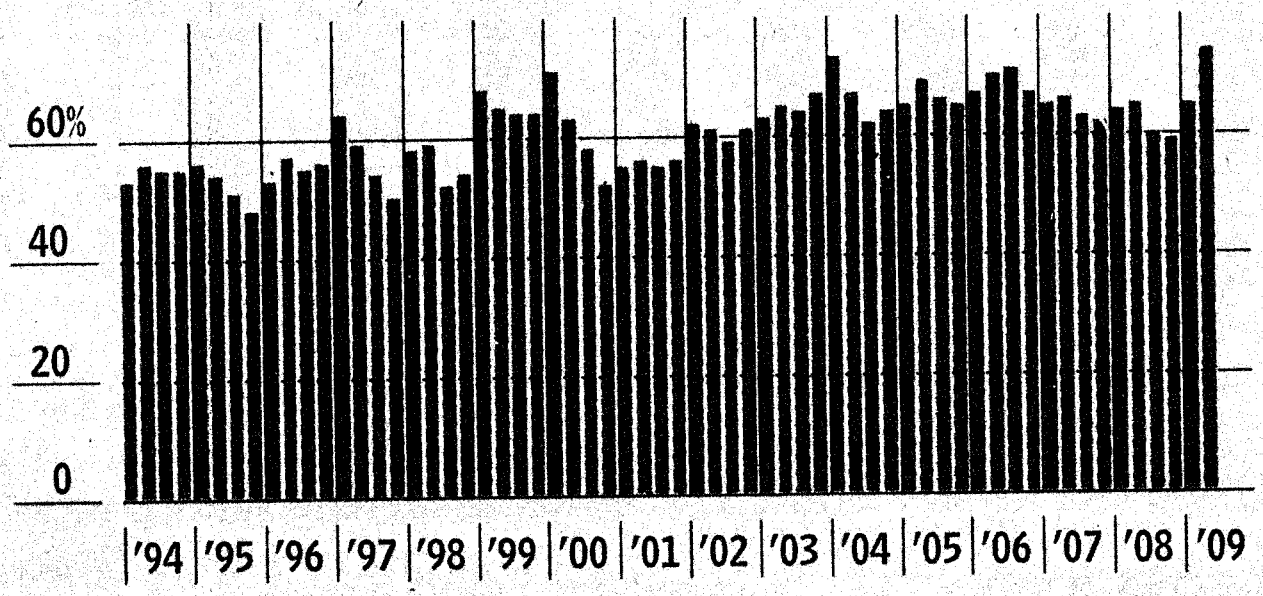
THE WALL STREET JOURNAL.

MONDAY, AUGUST 3, 2009 - VOL. CCLIV NO. 28

Vital Signs

Percentage of companies in the S&P 500 whose results came in above analyst estimates



Source: Thomson Reuters

Company results are trumping analyst expectations. Three-quarters of the companies in the S&P 500 index that have reported second quarter results so far have topped analyst estimates—the most ever in data going back to 1994. That is less a sign of an improving economy than of how deeply businesses have cut costs in response to the downturn.

EXHIBIT
A-49
ADMITTED

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

MIKE GLEASON, Chairman
WILLIAM A. MUNDELL
JEFF HATCH-MILLER
KRISTIN K. MAYES
GARY PIERCE

IN THE MATTER OF THE APPLICATION OF CHAPARRAL CITY WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO. W-02113A-07-0551 **STAFF'S NOTICE OF FILING SURREBUTTAL TESTIMONY**

Staff of the Arizona Corporation Commission ("Staff") hereby files the Surrebuttal Testimony of David C. Parcell of Technical Associates, Inc. in the above-referenced matter.

RESPECTFULLY SUBMITTED this 3rd day of December, 2008.

Robin Mitchell, Staff Attorney
Amanda Ho, Staff Attorney
Wesley Van Cleve, Staff Attorney
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Original and thirteen (13) copies of the foregoing filed this 3rd day of December, 2008 with:

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Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007

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EXHIBIT
A-50
ADMITTED

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BEFORE THE ARIZONA CORPORATION COMMISSION

MIKE GLEASON
Chairman
WILLIAM A. MUNDELL
Commissioner
JEFF HATCH-MILLER
Commissioner
KRISTIN K. MAYES
Commissioner
GARY PIERCE
Commissioner

IN THE MATTER OF THE APPLICATION OF CHAPARRAL CITY WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	)	DOCKET NO. W-02113A-07-0551

SURREBUTTAL

TESTIMONY

OF

DAVID C. PARCELL

TECHNICAL ASSOCIATES, INC.

DECEMBER 3, 2008

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I. INTRODUCTION

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

A. My name is David C. Parcell. I am President and Senior Economist of Technical Associates, Inc. My business address is 1051 East Cary Street, Suite 601, Richmond, VA 23219.

Q. Please summarize your educational background and professional experience.

A. I hold B.A. (1969) and M.A. (1970) degrees in economics from Virginia Polytechnic Institute and State University (VA Tech) and an MBA (1985) from Virginia Commonwealth University. I have been a consulting economist with Technical Associates since 1970. The majority of my consulting experience has involved the provision of cost of capital studies and related expert testimony in public utility rate proceedings. In connection with this, I have prepared and filed testimony in over 400 utility rate proceedings before more than 40 regulatory agencies in the United States and Canada. I have previously testified in a number of utility rate proceedings before this Commission, including several over the past few years.

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

A. I have been retained by the Utilities Division Staff ("Staff") to review the Direct Testimony filed on October 3, 2008 by Staff Witness Pedro M. Chaves. I am also offering my own expert judgment as to the proper cost of capital for Chaparral City Water Company, Inc. ("Chaparral" or "Company") relative to this proceeding.

Q. What do you mean in the previous answer when you state that you have reviewed Staff's direct testimony?

A. I have reviewed all of Mr. Chavez's Direct Testimony ("Staff Testimony") and I agree fully with and support his proposed 10.0 percent cost of equity for Chaparral, as well as his proposed 8.8 percent weighted cost of capital for the Company. I also note that I consider Staff's Direct Testimony to be well reasoned and properly provides a balance

between the interests of ratepayers and investors. However, there are a few inputs in Staff's discounted cash flow ("DCF") and capital asset pricing model ("CAPM") analyses that I have not supported in prior testimonies and, as a result, I am not specifically sponsoring in this proceeding. I emphasize, on the other hand, that my alternative use of certain inputs does not degrade either the integrity or ultimate results of the Staff's analysis and conclusions.

Q. Are you adopting Staff's testimony as your own testimony?

A. I am adopting portions of Staff's Testimony, but I am not adopting all of the DCF and CAPM data inputs utilized in the Staff Testimony. Throughout my Rebuttal Testimony, I indicate the specific portions of Staff Testimony that I am adopting, as well as the reasons for not adopting other positions.

Q. Did you state above that you are in agreement with Staff's 10.0 percent cost of equity recommendation for Chaparral?

A. Yes, I did state that. I believe that a 10.0 percent cost of equity presently represents the cost of equity for a regulated water utility such as Chaparral. I note, in this regard, that I have recently testified in several Arizona proceedings involving electric and natural gas distribution utilities in which my cost of equity recommendation was about 10.0 percent. These include proceedings involving UNS Gas (Docket No. G-01345A-05-0463), UNS Electric (Docket No. E-0404A-06-0783), and Southwest Gas (Docket No. G-01551A-07-0504). In addition, I have recently filed cost of capital testimony in a Delaware Public Service Commission proceeding involving Artesian Water Company (Docket No. 08-96) in which I recommended a cost of equity of 10.125 percent, applicable to a capital structure containing 46.53 percent common equity.

Q. Mr. Parcell, how long have you been providing cost of capital testimony in rate proceedings for utilities?

A. I have been testifying since 1972. As I indicated previously, I have testified in over 400 utility rate proceedings before more than 40 regulatory agencies.

Q. Is it your belief that the concept of cost of capital has remained the same over the period of your experience?

A. No, it has not remained the same over the past forty years. New methods, such as CAPM, have come into existence. In addition, the formulation of all the models is not static, but evolving. For example, years ago there were fewer sources of projections of individual company data; this indicates that the debate over exclusive use of a single statistic such as EPS forecasts as the growth rate was not as prevalent as it is today. In addition, the impact of the business cycle and the trends in corporate profits and interest rates indicates that the determination of the fair cost of capital is not static.

Q. Are you aware of any authoritative sources that support this relationship between economic conditions and the cost of capital for a utility?

A. Yes, I can. A landmark U.S. Supreme Court decision in the *Bluefield Water Works and Improvement Co. v. Public Serv. Comm'n of West Virginia*, 262 U.S. 679 (1923) established the following links between the cost of capital and economic conditions. In this decision, the Court stated

> What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of fair and enlightened judgment, having regard to all relevant facts....A rate of return may be reasonable at on time, and become too high or too low by changes affecting opportunities for investment, the money market, and business conditions generally.

Q. What is the significance of this observation?

A. The significance is that a cost of capital analysis is not a mathematical exercise that uses the same formulas and data input (weightings) in all types of economic circumstances. A cost of capital analyst necessarily needs to apply professional judgment in performing his/her analyses. This is particularly true at the current time which is characterized by extreme capital market volatility and the formal acceptance that we are in a recession.

Q. How is your testimony organized?

A. My testimony is organized into seven sections, as follows:

- Proxy Group,
- DCF Analyses,
- CAPM Analyses,
- Total Cost of Capital,
- Fair Value Rate of Return,
- Response to Chaparral Rebuttal Testimony,
- Impact of Current Capital Market Conditions on Cost of Capital.

II. PROXY GROUP

Q. What is the purpose of a proxy group in developing a cost of capital analysis?

A. The purpose of a proxy group is to develop cost of capital models and capital structure evaluation. A proxy group is determined and utilized in order to consider the cost of capital and capital structure of publicly-traded utilities that are similar in risk and operations to the subject company.

Q. What proxy group did Staff utilize in its Direct Testimony?

A. Staff utilized the following proxy group companies, as is shown on Schedule PMC-4:

American States Water;
California Water;
Aqua America;
Connecticut Water;
Middlesex Water; and,
SJW Corp.

Q. Do you approve of this group of proxy water companies?

A. Yes, I do. I concur with Staff's selection of this proxy group. This group of publicly-traded water companies is a representative sample of water utilities and is similar to the proxy group(s) that I have recently utilized in my water utility cost of capital analyses. I regard this as an appropriate sample of proxy companies for comparison to Chaparral and

I adopt the use of this proxy group. I also note that Chaparral witness Bourassa uses this proxy group in his cost of capital analyses.

Q. The Staff Testimony applied the DCF and CAPM methodologies to the proxy group. Are these methodologies proper methodologies to estimate the cost of equity for regulated utilities?

A. Yes, they are. I routinely use both the DCF and CAPM methodologies in my cost of capital analyses for water and other utilities.

III. DISCOUNTED CASH FLOW ANALYSES

Q. Please describe your understanding of Staff's DCF analyses.

A. Staff performed two DCF analyses – a constant-growth DCF and a multi-stage DCF. The constant-growth DCF analysis uses the following inputs:

Yield – Spot stock price for each proxy company as of August 6, 2008 and expected dividends per share (DPS) over the next year.

Growth – average of six different growth rates:

- Historic DPS growth over past ten years;
- Projected DPS growth rates from data provided in Value Line;
- Historic EPS growth over the past ten years;
- Projected EPS growth rates from data provided in Value Line;
- Historic sustainable growth rates over the past ten years; and,
- Projected sustainable growth rates from data provided in Value Line.

Staff's multi-stage DCF uses the following inputs:

Yield – Spot stock price for each proxy company as of August 6, 2008 and expected dividends per share over next year.

Growth – projections of short-term dividend growth for each proxy company over two periods

Next year – projections from Value Line,

Years 2-4 – projections using average dividend growth rate calculated in Staff's constant growth DCF analysis,

Long-term growth – 1926-2007 arithmetic average growth rate of gross domestic product (GDP).

The results of each of these sets of DCF conclusions for the proxy group can be summarized as follows:

Constant growth DCF	8.8%
Multi-stage DCF	9.8%
Average DCF	9.3%

Q. Please provide your comments about Staff's constant growth DCF analysis.

A. Staff's constant growth DCF yield uses a spot stock price in the calculation of the dividend yield, rather than a three-month average stock price that I normally use in my DCF analyses. In the instant case, however, this distinction is not significant. I have calculated dividend yields using a three-month average stock price (June-August, 2008) and have found the results to be very similar to those in the Staff analyses. As a result, I am adopting the yields in the Staff testimony. I note however, that because I normally use a 3 month average stock price, I would not use a spot price as is done in the Staff testimony.

I note that, in my own DCF analyses, I also use both historic and prospective growth rates of DPS, EPS, and sustainable growth. I normally use a five-year historic growth rate for DPS, EPS and sustainable growth, whereas the Staff Testimony uses ten-year historic growth. I regard this difference as a matter of professional judgment and do not take issue with the Staff Testimony and I correspondingly adopt these historic growth rates.

I also routinely use Value Line projections of DPS, EPS and sustainable growth. The Staff Testimony calculates projections of growth from Value Line data, whereas I normally use Value Line's published projections. However, I do not regard this as a meaningful distinction and I adopt the Staff Testimony's projected growth rates.

Q. Do you accept and adopt the 8.8 percent constant growth DCF conclusion contained in the Staff Testimony?

A. Yes, I do.

Q. What are your comments concerning the multi-stage DCF analysis in the Staff Testimony?

A. I note, first, that I do not routinely use a multi-stage DCF analysis in preparing cost of capital testimony. There is an exception to this in preparing cost of capital testimony for interstate natural gas pipelines before the Federal Energy Regulatory Commission (FERC). The FERC has established a preferred cost of capital methodology that uses a two-stage DCF model. When I submit natural gas pipeline testimony before the FERC, I use a multi-stage DCF model. As a result, I accept the use of a multi-stage DCF model in the Staff Testimony.

The first stage of the multi-stage DCF analysis in the Staff Testimony uses projections of DPS for the proxy group. I accept this as a valid estimate of the short-term or first stage of the multi-stage DCF analysis.

The second stage of the multi-stage DCF analysis in the Staff Testimony uses the historic (i.e., 1926-2007) average growth rate of GDP, which is 6.7 percent. My two-stage DCF analysis, which mirrors the FERC procedure, uses the projections of GDP by the Social Security Administration (SSA) and Energy Information Administration (EIA). Long-term projections of GDP by these two U.S. government agencies are as follows:

SSA 4.4%
EIA 4.8%

It is my preference to use projections of GDP growth, rather than historic GDP growth. As an alternative, both the historic and projected GDP growth could be used. In any event, I believe that the Staff Testimony's use of historic GDP growth may over-state the multi-stage DCF results for the proxy group.

IV. CAPITAL ASSET PRICING MODEL ANALYSES

Q. What is your understanding of the CAPM analyses and conclusions of the Staff Testimony?

A. The Staff Testimony performs two sets of the traditional CAPM methodology. The first set is a "historical" risk premium CAPM model that employs the following inputs:

Risk-free rate (Rf) – average of yields of five-year, seven-year, and ten-year U.S. Treasury notes as of August 6, 2008,

Beta (β) – Value Line betas for each proxy group company,

Risk-premium (Rm-Rf) – differentials between arithmetic averages of long-term (1926-2007) returns of the S&P 500 stock index and intermediate-term government bond income returns.

The second set of CAPM calculations in the Staff Testimony is a "current" market risk premium model. This model employs the following inputs:

Risk-free rate (Rf) – yield on 30-year U.S. Treasury bonds as of August 6, 2008,

Beta (β) – Value Line betas for each proxy group company,

Risk-premium (Rm-Rf) – differential between a DCF return (expected dividend yield plus annual per share growth rate for all dividend-paying stocks in Value Line) and current yield on 30-year U.S. Treasury bonds.

Q. What are your comments concerning the historic risk premium CAPM analyses and conclusions in the Staff Testimony?

A. I fully support the use of Value Line betas, as used in both the historic and current risk premium CAPM models. For the risk-free rate, I routinely use yields on 20-year U.S.

Treasury bonds, as opposed to the average of five-year, seven-year and ten-year U.S. Treasury bonds yields. The yields on 20-year U.S. Treasury bonds are higher than the shorter maturities. This implies that my preferred risk-free rate would be higher than that used in the Staff Testimony.

I also note, as I did in my discussion of the DCF model, that I prefer to use a three-month average of U.S. Treasury yields, as opposed to use of a spot yield as proposed in the Staff Testimony. However, my comparison of three-month average yields for the three-month period June-August, 2008 is not significantly different from the August 6, 2008 yield used in the Staff Testimony. As a result, I do not regard this as a meaningful result in this instance and correspondingly adopt the risk-free rates in the Staff Testimony. As was the case in the dividend yield discussion in my DCF comments, use of a spot risk-free rate could produce inappropriate results.

For the risk premium, on the other hand, the Staff Testimony uses the differential between returns on the S&P 500 and intermediate-term government bonds, whereas I use the differential between the S&P 500 and long-term government bonds. Since long-term government bonds have higher long-term returns than intermediate-term government bonds, this means that the risk differential for intermediate government bonds (i.e., Staff Testimony) is less than the risk differential for long-term government bonds (i.e., my preferred methodology). This indicates that there are off-setting impacts of the Staff Testimony methodology (i.e., use of intermediate-term yields and risk premiums using intermediate notes) and my preferred methodology (i.e., use of long-term yields and risk premiums using long-term bonds). As a result, I regard this differential as somewhat of a "wash" and adopt the use of intermediate-term yields and risk premiums developed using intermediate-term government securities.

I do have two technical concerns with the development of the historic risk premium in the Staff Testimony.

Use of arithmetic averages (as opposed to use of both arithmetic and geometric averages) of historic returns; and,

Use of the income return on bonds, as opposed to the total returns, in developing the risk premium.

The Staff Testimony uses, as a component of its historic risk premium, the arithmetic average values of total return for the S&P 500 and the arithmetic average values of income return for government securities. I routinely use both arithmetic and geometric averages in my calculations of the risk premium. I believe that geometric averages are relevant, along with arithmetic averages, because investors are regularly provided with these returns in both reports/prospectuses by mutual funds (as required by the Securities and Exchange Commission) and by prominent investment advisory services such as Value Line. In my judgment, investors use both arithmetic and geometric average returns and both should be considered in the development of a risk premium. I note that arithmetic averages exceed geometric averages, meaning that exclusive use of arithmetic averages provide for a higher, and potentially excessive, risk premium. Because of this, the risk premium, and thus CAPM results, as used in the Staff Testimony may overstate the cost of capital for the proxy group.

I also note that the Staff Testimony uses income returns on bonds and total returns for the S&P 500. The significance of this is that the total returns for the S&P 500 includes both dividends and capital gains, whereas the income returns on bonds only includes interest income (and excludes capital gains). My normal practice is to consider total returns for both the S&P 500 and bonds in my risk premium calculations, which treats the S&P 500 and bonds on a consistent basis. I note that the use of only income returns on bonds, in this context, has the impact of creating a higher risk premium, and thus higher CAPM results than the method I routinely use.

The impact of these two factors has the effect of creating a higher risk premium, and higher CAPM cost rate, than does the methodology I employ in my CAPM analyses.

Q. Do you have any comments concerning the current risk premium as used in the Staff Testimony?

A. Yes, I do. I cannot support, or adopt, the current risk premium as contained in the Staff Testimony. My primary concern with the current risk premium CAPM is the use of a DCF-derived return on equity (ROE) for "all dividend-paying stocks" as reported in Value Line. The growth component of this DCF-derived ROE is the "appreciation potential" of all 1700 stocks covered by Value Line, where the appreciation potential refers to the "estimated median price" of these stocks in the "hypothesized economic environment of 3 of 5 years hence." In other words, the growth component of this DCF analysis is based upon a potential increase in stock prices for the 1700 stocks covered by Value Line.

I have two concerns with this procedure for estimating the cost of equity for the "market" (i.e., Rm component of risk premium). First, I do not believe that it is appropriate to determine utility rates based upon an anticipated increase in stock prices for a group of largely unregulated firms. This is speculative. Second, even if it were deemed appropriate to use such a methodology, its use at the current time (i.e., August of 2008) is from a low base as a result of the significant decline in stock prices in 2008. As a result, use of a appreciation potential from a low base naturally reflects a higher-than-normal growth rate, as evidenced by the 15.02 percent annual potential appreciation over the next four years, as assumed in the Staff testimony. As an example of this, consider that the historic (i.e., 1926-2007) average total returns for the S&P 500 (i.e., dividends plus capital appreciation) has only been 12.3 percent on an arithmetic basis and 10.4 percent on a geometric basis.

Q. Please describe, in detail, using your professional judgment, how you arrived at a 10.0 percent cost of equity for Chaparral, without adjusting for financial risk.

A. I have accepted the proxy group from the Staff Testimony (as does Chaparral). I have also accepted the 9.3 percent DCF conclusion in the Staff Testimony, although I note that the multi-stage DCF may slightly over-state the second-stage growth rate. I generally adopt the historical risk premium CAPM of the Staff Testimony (11.2 percent) but I do not agree with: (1) use of only arithmetic averages in deriving the risk premium, rather preferring to use both arithmetic and geometric averages; and, (2) using only the income return on bonds, rather than total returns, in deriving the risk premium. As a result, I propose a historical risk premium CAPM result of 10.75 percent, a slight reduction from the 11.2 percent conclusion in the Staff Testimony.

In addition, by combining my adopted 9.3 percent DCF result and 10.75 percent modified CAPM, I arrived at a 10.0 percent cost of equity recommendation. I note that this 10.0 percent cost of equity recommendation does not include an adjustment for the very high equity ratio (i.e., lower risk) of Chaparral.

V. TOTAL COST OF CAPITAL

Q. Please describe the total cost of capital derived in the Staff Testimony.

A. The Staff Testimony develops an 8.8 percent total cost of capital, as is summarized below:

Capital Item	Percent	Cost	Wgt. Cost
Debt	24.4%	5.0%	1.2%
Common Equity	75.6%	10.0%	7.6%
WACC	100.0%		8.8%

The capital structure and cost of debt reflected in the Staff Testimony, as well as in the Chaparral filing, are hypothetical in nature since the Company receives all of its equity financing from its parent American States Water. The Staff Testimony and Chaparral

filing differ slightly on the capital structure ratios, as a result of the Staff using more current (i.e., June 30, 2008) information. I accept the capital structure ratios in the Staff Testimony, although I agree with the position taken in the Staff Testimony that the equity ratio of Chaparral (i.e., over 75 percent) is much higher than the actual capital structures for publicly-traded water utilities (i.e., about 50 percent equity). I note that a case could be made that the proper capital structure for Chaparral should be that of its consolidated parent, which contains about a 50 percent equity ratio.

I also accept the 5.0 percent cost of debt contained in the Staff Testimony. This differs slightly from the 5.1 percent contained in the Chaparral rebuttal filing.

Q. Do you agree with the Staff Testimony's proposal to recognize the very high equity ratio of Chaparral in the determination of the cost of equity for the Company?

A. Yes, I do. Chaparral's common equity ratio, as noted above, is about 75 percent common equity, which is about 1 and a half times the 50 percent norm for publicly-traded water utilities. This is a very significant difference in the capital structures for Chaparral versus the proxy group that is used to develop its cost of equity. This significant difference in common equity ratios is reflective in a risk differential between Chaparral and the proxy group - a risk differential that should be recognized in the cost of equity for the Company. I also note that Chaparral's parent company, American States Water, has a common equity ratio that is similar to the proxy group (i.e., about 50 percent equity) and is much less equity than is the case for Chaparral.

Q. Do you endorse and adopt the 8.8 percent total cost of capital as proposed in the Staff Testimony?

A. Yes, I do.

VI. RESPONSE TO CHAPARRAL REBUTTAL TESTIMONY

Q. Have you reviewed the Rebuttal Testimony of Chaparral witness Bourassa that addresses the Staff Testimony on Cost of Capital Issues?

A. Yes, I have.

Q. Do you wish to respond to any of the assertions made by Mr. Bourassa in his Rebuttal Testimony?

A. Yes, I do. I have a number of comments concerning the assertions made by Mr. Bourassa. These include the following topics:

His updated cost of capital analyses, which use spot yields as of October 2, 2008,

His use of stock price growth as the growth component in his DCF analyses,

His conclusion that Chaparral's cost of equity has increased over the past year by 100 basis points, notwithstanding the fact that current economic conditions have decreased returns for virtually all other types of companies, and

His position that a the Company's cost of capital be applied to its fair value rate base.

Q. What is your response to Mr. Bourassa's updated cost of capital analyses?

A. Mr. Bourassa's updated DCF analyses have a number of flaws, all of which cause him to over-state the cost of equity for Chaparral. These include:

His updated dividend yield uses spot stock prices as of October 2, 2008, a date in the middle of the market volatility. In fact, by using the closing prices as of this date, he used only a single moment in time, not even a day in time.

His growth rate relies heavily on the historical growth in stock prices. As I indicated previously, growth in stock prices is not a proper measure of the DCF growth rate, especially during a period of market volatility.

His "total market returns" (Exhibit 2) and "capital appreciation returns" (Exhibit 3) end in 2007 – the latest available calendar year. While this is generally appropriate, it should be noted that 2008 is an abysmal year for the stock markets

and, when market compound growth rates are updated for 2008, the results will undoubtedly be much lower, and perhaps near zero or even negative. Given that the cost of capital is forward-looking, this is information that should be considered in a DCF analysis at this time, especially one described as "updated."

Mr. Bourassa's updated CAPM analyses also overstate the cost of capital. This is true for the following reasons:

His historical market risk premium CAPM

His current market premium CAPM suffers from the same flaw as his DCF growth rates – the reliance on growth in stock prices.

Q. Why do you take issue with Mr. Bourassa's contention that Chaparral's cost of equity has increased over the past year?

A. As I noted above, Mr. Bourassa's DCF and CAPM analyses rely heavily on growth in stock prices for various periods ending in 2007. Therefore, his claim that the cost of capital has increased over the past year really applies to 2007, not 2008.

Q. Are there any other aspects of Mr. Bourassa's rebuttal testimony that you wish to respond to?

A. Yes. The bulk of Mr. Bourassa's rebuttal testimony relates to the issue of Fair Value Rate Base ("FVRB") and the proper Fair Value Rate of Return ("FVROR"). Mr. Bourassa maintains that Chaparral's weighted average capital cost ("WACC") should be applied to its FVRB. This issue has been recently examined by the Commission in the remand phase of Docket No. W-02113A-04-0616, a proceeding in which both Mr. Bourassa and I testified. In its decision in that proceeding, the Commission determined that inflation should be removed from the cost of capital in order to determine a FVROR to be applicable to a FVRB. I will not repeat all of my testimony on this subject in this present testimony, but do call the Commission's attention to the arguments I raised in that proceeding.

VII. IMPACT OF CURRENT CAPITAL MARKET CONDITIONS ON COST OF CAPITAL

Q. Please indicate your views as to the impact of the current state of the economy and the financial markets as they relate to the cost of capital for Chaparral and other public utilities.

A. The current state of the economy and financial markets can be generally characterized by the following:

The U.S. and global economies are presently in a recession, perhaps the most serious recession in many years. This recession is characterized by:

High unemployment, as the current unemployment rate is the highest in recent years;

Declining housing values and potentially deflation across broad sectors of the economy;

Widespread foreclosures on residential and commercial properties;

A somewhat devastated financial sector, as evidenced by the failure and/or bail-outs of venerable financial institutions such as Fannie Mae, Freddie Mac, Bear Stearns, Merrill Lynch, AIG and Wachovia, with the potential list growing;

Potential bail-outs expected for several other sectors of the economy;

Stock prices that have declined precipitously in 2008; and,

Very low short-term U.S. Treasury rates, low U.S. Treasury intermediate- and long-term rates, but high corporate bond rates, reflecting a "flight to quality"; and,

Unprecedented actions being taken by the U.S. and global governments to hopefully minimize the impacts of this recession and avoid a more serious worldwide depression.

Against this backdrop, it is important to understand the implications of current economic and financial conditions on capital costs in general and as they pertain to Chaparral. Any consideration of current economic and financial conditions should consider their impact on regulated utilities from two perspectives: 1) how these conditions impact utility

ratepayers and the extent to which utilities should be insulated from the negative impacts that affect their ratepayers; and 2) the extent to which these conditions are temporary and not representative of the period that utility rates will be in effect.

Q. Please describe this first perspective.

A. The current economic downturn appears to be the worst in recent memory and the implications are global. It is clear that Chaparral's ratepayers are negatively impacted by this downturn. For example, working ratepayers face the prospects of lower earnings/unemployment/uncertainty while retired ratepayers face the likelihood of significantly reduced value of retirement income due to declines in the stock market which negatively impact their 401-K or IRA values. It would be unfair for Chaparral to claim that its risk and/or required return should be higher at this time, which would create a doubly negative impact on its ratepayers. Stated differently, Chaparral's cost of capital and water/wastewater rates should not be higher due to the economic downturn. Such a situation would clearly not be a balancing of the interests of ratepayers and investors as is dictated by the Bluefield and Hope decisions.

I note that this perspective can be referred to as the "fairness" perspective. In essence, it indicates that the conditions that contribute to the misfortunes of the utility's ratepayers should not be used as a rationale to provide higher returns to the utility, in essence insulating it from the economic conditions that affect virtually all other aspects of the economy, both individuals and businesses.

Q. What do you mean by the second perspective stated above?

A. It is widely recognized that the cost of capital concept, whether for a regulated utility or a competitive firm, is prospective in nature. The prospective nature of cost of capital is partially based on the concept that current capital market conditions reflect expectations of the future. At the present time, there is unprecedented uncertainly in the capital markets, as is evidenced by the extreme volatility in stock prices and yields on debt

1 securities. This volatility reflects and incorporates the reaction to the seemingly never-
2 ending stream of negative news about the world-wide economies.
3
4 At the present time, no one knows the length and severity of the downturn, but what
5 should be clear is that the present situation should not be accepted as the norm for the
6 future. It must be assumed that the economy will turn around sometime within the next
7 year, especially with the unprecedented stimulus that has and is being applied by U.S.
8 and global governments. As a result, it is proper to take a more "long-term" view of
9 economic and financial conditions at this time. I believe that my recommendations in
10 this proceeding, as well as the impact of the Staff Testimony perspective, is proper in this
11 account. This is the case since both the Staff Testimony and my recommendation are not
12 overly-reflective of the unusual and transitory conditions of the past two months.
13
14 I do not, on the other hand, think it is proper to focus on very short-term perspectives,
15 such as stock prices and corporate interest rates over the past two months. This is the
16 case since these prices and rates are overly influenced by the turmoil and uncertainty
17 associated with the global economic crisis.
18
19 **Q. You have stated that current and recent economic conditions are not normal, but**
20 **are unusual and transitory. Can you provide any examples of why this is so?**
21 A. Yes, I can. As an example of the seriousness of the current economic/financial situation,
22 the Federal Reserve and U.S. government have taken extraordinary actions to minimize
23 the impacts of the financial crisis and to attempt to stabilize the U.S. and global
24 economies. The U.S. Congress authorized $700 billion as a "bail out" of the financial
25 system in order to create confidence in the financial system and encourage lending in the
26 economy. The Federal Reserve and U.S. government have taken the following actions:
27 Fannie Mae and Freddie Mac were effectively nationalized in an effort to
28 strengthen the housing market,
29 AIG received over $100 billion in loans to AIG, essentially bailing it out of
30 potential bankruptcy,

1 Goldman Sachs and Morgan Stanley were allowed to become bank holding
2 companies, making them eligible for federal loans and direct investments from the
3 federal government,
4 The Federal Funds rate has been lowered in a number of steps, to a level of 1.0
5 percent, the lowest level ever,
6 Mergers were arranged on an emergency basis to keep Wachovia from potentially
7 failing, and
8 CitiGroup received loan guarantees in order to prevent its potential failing.
9
10 **Q. What is the purpose of all these extraordinary actions?**
11 A. The purpose of all of these actions, as well as a number of other actions by the federal
12 government and Federal Reserve, is to:
13 Provide liquidity to the banking system,
14 Encourage banks to make loans to stimulate the economy,
15 Re-establish confidence in the financial system, and
16 Keep major financial institutions from failing.
17
18 The significance of these actions is that they are collectively designed to lower the cost of
19 capital in the U.S. and worldwide in order to get the economies back on a growth tract.
20 Clearly, these actions should not be used as a rationale to make utilities insulated from
21 the negative impacts of the downturn and raise their cost of capital at the same time that
22 efforts are being undertaken to lower the cost of capital.
23
24
25 **Q. Does this conclude your surrebuttal testimony?**
26 A. Yes, it does.

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Value Line Investment Survey *for Windows®* Version 3.0

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The Value Line Investment Survey

The Value Line Investment Survey *for Windows®*

What's New in Version 3.0

Value Line Technical Support

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Value Line was founded in New York in 1931 by Arnold Bernhard, then a young analyst, amidst the crisis of confidence wrought by the Great Depression. His goal was to help investors in their quest to achieve superior returns from stocks by providing access to the same information that professionals had at their fingertips. His vision grew into one of the most enduring and trusted institutions in the financial world. Backed by disciplined, objective analytic methodologies that have been proven over six decades, and by one of the world's largest independent research staffs, including over 100 professional securities analysts, statisticians and economists, Value Line has become an indispensable source for investors around the globe. Value Line's businesses are broad-based, including financial publications and electronic data services, a family of no-load mutual funds, and asset management for retirement and endowment accounts. Its research services include domestic stocks, Canadian stocks, mutual funds, convertibles, and options, which are available in both print and electronic form.

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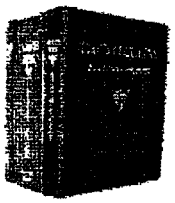

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EXHIBIT

A-51

ADMITTED

Appendix B

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index, and the risk-free rate of return of a three-month Treasury Bill. For example, if a stock has a beta of 1.5, it would be expected to gain 15% when the index gains 10%. If however, the stock actually gains 20%, this excess return represents the stock's alpha. Value Line expresses alpha as an annualized figure.

American Depository Receipts (ADRs) - Since most other nations do not allow stock certificates to leave the country, a foreign company will arrange for a trustee (typically a large bank) to issue ADRs (sometimes called American Depository Shares, or ADSs) representing the actual, or underlying, shares. Each ADR is equivalent to a specified number of shares (the ratio is shown in a footnote on the Value Line page).

American Stock Exchange Composite - A market-capitalization weighted index of the prices of the stocks traded on the American Stock Exchange.

Annual Change D-J Industrials - The annual change from year end to year end in the Dow Jones Industrial Average, expressed as a percentage.

Annual Change in Net Asset Value (Investment Companies) - The change in percentage terms of the net asset value per share at the end of any given year from what it was at the end of the preceding year, adjusted for any capital gains distributions made during the year.

Annual Rates of Change (Per Share) - Compounded annual rates of change of pershare sales, cash flow, earnings, dividends, and book value (or other industry-specific per-share figures) over the past ten years and five years and estimated over the coming three to five years. All forecasted rates of change are computed from the average figure for the past three-year period to an average for a future three-year period. If data for a three-year base period are not available, a two- or one-year base may be used.

Arbitrage - The simultaneous purchase of an asset in one market and sale of the same asset, or assets equivalent to the asset purchased, in another market. Often referred to as "classical arbitrage," this type of transaction should result in a risk-free profit. Risk Arbitrage refers to transactions in stocks involved in takeover activity.

Arbitrageur - A person or organization that engages in arbitrage activity.

ARIZONA WATER COMPANY

DOCKET NO. W-01445A-02-0619

COST OF CAPITAL
DIRECT TESTIMONY

OF

WILLIAM A. RIGSBY

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

EXHIBIT
A-52
ADMITTED

JULY 8, 2003

INTRODUCTION

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

A. My Name is William A. Rigsby. I am a Public Utilities Analyst V employed by the Residential Utility Consumer Office ("RUCO") located at 1110 W. Washington, Suite 220, Phoenix, Arizona 85007.

Q. Please state your educational background and your qualifications in the field of utilities regulation.

A. Appendix I, which is attached to this testimony, describes my educational background and also includes a list of the rate cases and regulatory matters that I have been involved with.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present recommendations that are based on my analysis of Arizona Water Company's ("Arizona Water" or "Company") application for a permanent rate increase ("Application") for the Company's Eastern Group. The Eastern Group is comprised of the Company's Apache Junction, Bisbee, Miami, Oracle, San Manuel, Sierra Vista, Superior, and Winkelman systems. Arizona Water's Application was filed with the Arizona Corporation Commission ("ACC" or "Commission") on August 14, 2002. During the 2001 test year ("Test

stock. The eight-week average price is based on the daily closing stock prices for each utility for the period April 21, 2003 to June 13, 2003.

Q. Based on the results of your DCF analysis, what is your cost of equity capital estimate for the water utilities included in your sample?

A. As shown in Schedule WAR-3, the cost of equity capital derived from my analysis is 9.18 percent.

Capital Asset Pricing Model (CAPM) Method

Q. Please explain the theory behind the capital asset pricing model ("CAPM") and why you decided to use it as an equity capital valuation method in this proceeding.

A. CAPM is a mathematical tool that was developed during the early 1960's by William F. Sharpe.[8] The CAPM model is used to analyze the relationships between rates of return on various assets and risk as measured by beta.[9] In this regard, CAPM can help an investor to determine how much risk is associated with a given investment so that he or she can decide if that investment meets their individual preferences.

[8] William F. Sharpe, "A Simplified Model of Portfolio Analysis," Management Science, Vol. 9, No. 2 (January 1963), pp. 277-93.

[9] Beta is defined as an index of volatility, or risk, in the return of an asset relative to the return of a market portfolio of assets. It is a measure of systematic or non-diversifiable risk. The returns on a stock with a beta of 1.0 will mirror the returns of the overall stock market. The returns on stocks with betas greater than 1.0 are more volatile or riskier than those of the overall stock market; and if a stock's beta is less than 1.0, its returns are less volatile or riskier than the overall stock market.

Finance theory has always held that as the risk associated with a given investment increases, so should the expected rate of return on that investment and vice versa. According to CAPM theory, risk can be classified into two specific forms: nonsystematic or diversifiable risk, and systematic or non-diversifiable risk. While nonsystematic risk can be virtually eliminated through diversification (i.e. by including stocks of various companies in various industries in a portfolio of securities), systematic risk, on the other hand, cannot be eliminated by diversification. Thus, systematic risk is the only risk of importance to investors. Simply stated, the underlying theory behind CAPM states that the expected return on a given investment is the sum of a risk-free rate of return plus a market risk premium that is proportional to the systematic (non-diversifiable risk) associated with that investment. In mathematical terms, the formula is as follows:

$$k = r_f + [\beta (r_m - r_f)]$$

where:

k	=	cost of capital of a given security,
r_f	=	risk-free rate of return,
β	=	beta coefficient, a statistical measurement of a security's systematic risk,
r_m	=	average market return (e.g. S&P 500), and
$r_m - r_f$	=	market risk premium.

Q. What security did you use for a risk-free rate of return in your CAPM?

A. I used an average of a 91-day Treasury Bill ("T-Bill") rate[10] and the 91-day T-Bill futures rate that appeared in the June 20, 2003 issue of The Wall Street Journal ("WSJ"). This resulted in a risk-free (r_f) rate of return of 0.91 percent.

Q. Why did you use the short-term T-Bill rate as opposed to the yield on an intermediate 5-year Treasury note or a long-term 30-year Treasury bond?

A. Because a 91-day T-Bill presents the lowest possible total risk to an investor. As citizens and investors, we would like to believe that U.S. Treasury securities (which are backed by the full faith and credit of the United States Government) pose no threat of default no matter what their maturity dates are. However, a comparison of various Treasury instruments will reveal that those with longer maturity dates do have slightly higher yields. Treasury yields are comprised of two separate components,[11] a true rate of interest (believed to be approximately 2.00 percent) and an inflationary expectation. When the true rate of interest is subtracted from the total treasury yield, all that remains is the inflationary expectation. Because increased inflation represents a potential capital

[10] A six-week average was computed for the current rate using 91-day T-Bill quotes listed in Value Line's Selection and Opinion newsletter from May 16, 2003 to June 20, 2003.

[11] As a general rule of thumb, there are three components that make up a given interest rate or rate of return on a security: the true rate of interest, an inflationary expectation, and a risk premium. The approximate risk premium of a given security can be determined by simply subtracting a 91-day T-Bill rate from the yield on the security.

loss, or risk, to investors, a higher inflationary expectation by itself represents a degree of risk to an investor. Another way of looking at this is from an opportunity cost standpoint. When an investor locks up funds in long-term T-Bonds, compensation must be provided for future investment opportunities foregone. This is often described as maturity or interest rate risk and it can affect an investor adversely if market rates increase before the instrument matures (a rise in interest rates would decrease the value of the debt instrument). As discussed earlier in the DCF portion of my testimony, this compensation translates into higher rates of returns to the investor. Since a 91-day T-Bill presents the lowest possible total risk to an investor, it more closely meets the definition of a risk-free rate of return and is the more appropriate instrument to use in a CAPM analysis.

Q. How did you calculate the market risk premium used in your CAPM analysis?

A. I used both a geometric and an arithmetic mean of the historical returns on the S&P 500 index from 1926 to 2002 as the proxy for the market rate of return (r_m). The risk premium (r_m - r_f) that results by using the geometric mean calculation for r_m is equal to 9.29 percent (10.20 percent – 0.91 percent). The risk premium that results by using the arithmetic mean calculation for r_m is 11.29 percent (12.20 percent – 0.91 percent).

Q. How did you select the beta coefficients that were used in your CAPM analysis?

A. The beta coefficients (β), for the individual utilities used in my sample, were calculated by Value Line and were current as of May 2, 2003. Value Line calculates its betas by using a regression analysis between weekly percentage changes in the market price of the security being analyzed and weekly percentage changes in the NYSE Composite Index over a five-year period. The betas are then adjusted by Value Line for their long-term tendency to converge toward 1.00. The beta coefficients for the water utilities included in my sample ranged from 0.60 to 0.70 with an average beta of 0.63.

Q. What are the results of your CAPM analysis?

A. As shown on Pages 1 and 2 of Schedule WAR-8, my CAPM calculation using a geometric mean for r_m results in an average expected return of 6.79 percent. My calculation using the arithmetic mean results in an average expected return of 8.06 percent. The consensus among financial analysts is that the arithmetic mean is the better of the two averages. For this reason, I believe that the 8.06 percent figure is the better check on the results of my DCF analysis.

Q. Please summarize the results derived under each of the methodologies presented in your testimony.

A. The following is a summary of the cost of equity capital derived under each methodology used:

METHOD	RESULTS
DCF	9.18%
CAPM	6.79% – 8.06%

Based on these results, my best estimate of an appropriate range for the cost of equity is 6.79 percent to 9.18 percent. My final recommendation is a 9.18 percent return for Arizona Water's cost of equity capital.

Current Economic Environment

Q. Please explain why it is necessary to consider the current economic environment when performing a cost of equity capital analysis for a regulated utility.

A. Consideration of the economic environment is necessary because trends in interest rates, present and projected levels of inflation, and the overall state of the U.S. economy determine the rates of return that investors earn on their invested funds. Each of these factors represent potential risks that must be weighed when estimating the cost of equity capital for a

ARIZONA WATER COMPANY

DOCKET NO. W-01445A-04-0650

DIRECT TESTIMONY

OF

WILLIAM A. RIGSBY

COST OF CAPITAL

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

EXHIBIT
A-53
ADMITTED

APRIL 20, 2005

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INTRODUCTION

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

A. My Name is William A. Rigsby. I am a Public Utilities Analyst V employed by the Residential Utility Consumer Office ("RUCO") located at 1110 W. Washington, Suite 220, Phoenix, Arizona 85007.

Q. Please state your educational background and your qualifications in the field of utilities regulation.

A. Appendix I, which is attached to this testimony, describes my educational background and also includes a list of the rate cases and regulatory matters that I have been involved with.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present recommendations that are based on my analysis of Arizona Water Company's ("Arizona Water" or "Company") application for a permanent rate increase ("Application") for the Company's Western Group. The Western Group is comprised of the Company's Ajo Heights, Casa Grande, Coolidge, Stanfield, and White Tank systems. Arizona Water's Application was filed with the Arizona Corporation Commission ("ACC" or "Commission") on August 14, 2004. During the 2003 test year ("Test Year") the Company's Western Group provided water service to 20,266 customers.

Capital Asset Pricing Model (CAPM) Method

Q. Please explain the theory behind the capital asset pricing model ("CAPM") and why you decided to use it as an equity capital valuation method in this proceeding.

A. CAPM is a mathematical tool that was developed during the early 1960's by William F. Sharpe, Ph.D.[11] The CAPM model is used to analyze the relationships between rates of return on various assets and risk as measured by beta.[12] In this regard, CAPM can help an investor to determine how much risk is associated with a given investment so that he or she can decide if that investment meets their individual preferences. Finance theory has always held that as the risk associated with a given investment increases, so should the expected rate of return on that investment and vice versa. According to CAPM theory, risk can be classified into two specific forms: nonsystematic or diversifiable risk, and systematic or non-diversifiable risk. While nonsystematic risk can be virtually eliminated through diversification (i.e. by including stocks of various companies in various industries in a portfolio of securities), systematic risk, on the other hand, cannot be eliminated by diversification. Thus, systematic risk is the only risk of importance to investors. Simply

[11] William F. Sharpe, "A Simplified Model of Portfolio Analysis," Management Science, Vol. 9, No. 2 (January 1963), pp. 277-93.

[12] Beta is defined as an index of volatility, or risk, in the return of an asset relative to the return of a market portfolio of assets. It is a measure of systematic or non-diversifiable risk. The returns on a stock with a beta of 1.0 will mirror the returns of the overall stock market. The returns on stocks with betas greater than 1.0 are more volatile or riskier than those of the overall stock market; and if a stock's beta is less than 1.0, its returns are less volatile or riskier than the overall stock market.

stated, the underlying theory behind CAPM states that the expected return on a given investment is the sum of a risk-free rate of return plus a market risk premium that is proportional to the systematic (non-diversifiable risk) associated with that investment. In mathematical terms, the formula is as follows:

$$k = r_f + [\beta (r_m - r_f)]$$

where:

k	=	cost of capital of a given security,
r_f	=	risk-free rate of return,
β	=	beta coefficient, a statistical measurement of a security's systematic risk,
r_m	=	average market return (e.g. S&P 500), and
$r_m - r_f$	=	market risk premium.

Q. What security did you use for a risk-free rate of return in your CAPM analysis?

A. I used a six-week average on a 91-day Treasury Bill ("T-Bill") rate.[13] This resulted in a risk-free (r_f) rate of return of 2.70 percent.

[13] A six-week average was computed for the current rate using 91-day T-Bill quotes listed in Value Line's Selection and Opinion newsletter from January 21, 2005 to February 25, 2005.

Q. Why did you use the short-term T-Bill rate as opposed to the yield on an intermediate 5-year Treasury note or a long-term 30-year Treasury bond?

A. Because a 91-day T-Bill presents the lowest possible total risk to an investor. As citizens and investors, we would like to believe that U.S. Treasury securities (which are backed by the full faith and credit of the United States Government) pose no threat of default no matter what their maturity dates are. However, a comparison of various Treasury instruments will reveal that those with longer maturity dates do have slightly higher yields. Treasury yields are comprised of two separate components,[14] a true rate of interest (believed to be approximately 2.00 percent) and an inflationary expectation. When the true rate of interest is subtracted from the total treasury yield, all that remains is the inflationary expectation. Because increased inflation represents a potential capital loss, or risk, to investors, a higher inflationary expectation by itself represents a degree of risk to an investor. Another way of looking at this is from an opportunity cost standpoint. When an investor locks up funds in long-term T-Bonds, compensation must be provided for future investment opportunities foregone. This is often described as maturity or interest rate risk and it can affect an investor adversely if market rates increase before the instrument matures (a rise in interest rates would decrease the value of the debt instrument). As discussed earlier in the DCF portion of my

[14] As a general rule of thumb, there are three components that make up a given interest rate or rate of return on a security: the true rate of interest, an inflationary expectation, and a risk premium. The approximate risk premium of a given security can be determined by simply subtracting a 91-day T-Bill rate from the yield on the security.

testimony, this compensation translates into higher rates of returns to the investor. Since a 91-day T-Bill presents the lowest possible total risk to an investor, it more closely meets the definition of a risk-free rate of return and is the more appropriate instrument to use in a CAPM analysis.

Q. How did you calculate the market risk premium used in your CAPM analysis?

A. I used both a geometric and an arithmetic mean of the historical returns on the S&P 500 index from 1926 to 2003 as the proxy for the market rate of return (r_m). The risk premium (r_m - r_f) that results by using the geometric mean calculation for r_m is equal to 7.70 percent (10.40% - 2.70% = 7.70%). The risk premium that results by using the arithmetic mean calculation for r_m is 9.70 percent (12.40% - 2.70% = 9.70%).

Q. How did you select the beta coefficients that were used in your CAPM analysis?

A. The beta coefficients (ß), for the individual utilities used in my sample, were calculated by Value Line and were current as of January 28, 2005. Value Line calculates its betas by using a regression analysis between weekly percentage changes in the market price of the security being analyzed and weekly percentage changes in the NYSE Composite Index over a five-year period. The betas are then adjusted by Value Line for their long-term tendency to converge toward 1.00. The beta coefficients

for the water utilities included in my sample ranged from 0.70 to 0.75 with an average beta of 0.73.

Q. What are the results of your CAPM analysis?

A. As shown on Pages 1 and 2 of Schedule WAR-7, my CAPM calculation using a geometric mean for r_m results in an average expected return of 8.35 percent. My calculation using the arithmetic mean results in an average expected return of 9.81 percent. Although there is some debate on this point, I believe that the consensus among financial analysts appears to be that the arithmetic mean is the better of the two averages. For this reason, I believe that the 9.81 percent figure is the better check on the result of my DCF analysis.

Q. Please summarize the results derived under each of the methodologies presented in your testimony.

A. The following is a summary of the cost of equity capital derived under each methodology used:

METHOD	RESULTS
DCF	9.44%
CAPM	8.35% – 9.81%

Based on these results, my best estimate of an appropriate range for the cost of equity is from 8.35 percent to 9.81 percent. My final recommendation is a 9.44 percent return for Arizona Water's cost of equity capital.

Q How did you arrive at your recommended 9.44 percent cost of common equity?

A. My recommended 9.44 percent cost of common equity is the unadjusted result of my DCF analysis

Q. Is this the method that you have typically used to determine the cost of equity capital in prior rate case proceedings?

A. Yes. As I stated earlier in my testimony, the DCF model is the one that I rely on the most. Typically, as in this case, my recommended cost of equity is derived primarily from my DCF analysis.

Q. Why is your typical practice of relying primarily on your DCF appropriate in this proceeding?

A. My recommended capital structure for Arizona Water is comprised of approximately 73 percent common equity capital and 27 percent debt. This capital structure has a larger percentage of equity than the capital structures of the three water utilities that I included in my DCF and CAPM proxies, which had an average capital structure of 56 percent common

equity and 44 percent debt. Although an argument could be made that, because Arizona Water is not as leveraged and therefore faces a lower level of financial risk (i.e. the risk of not being able to meet debt service obligations) than the companies in my proxy, a lower cost of equity is warranted, I have decided not to make such an adjustment. My reason for this is that my CAPM analysis, using an arithmetic mean is producing an expected rate of return that is approximately 37 basis points higher than the 9.44 percent estimate derived by the DCF formula. After weighing this fact, and other considerations that I will discuss later in my testimony, I have come to the conclusion that a downward adjustment to my 9.44 recommended cost of equity capital would not be warranted at this particular point in time.

Q. Have you made adjustments to your DCF results in prior cases?

A. Yes. I adjusted my DCF results in three of the last four rate cases that I testified in. In the first of those cases, I increased my DCF result by 50 basis points to recognize the additional financial risk faced by Arizona-American Water Company ("Arizona-American"). My 50 basis point adjustment in that case took into consideration Arizona-American's leveraged capital structure (which was comprised of 60 percent debt and 40 percent equity). The second case involved Rio Rico, Utilities, Inc. ("Rio Rico"), a water and wastewater provider with a capital structure comprised of 100 percent common equity. In Rio Rico's case, I averaged the results

of my DCF and CAPM analyses to arrive at a cost of equity of 8.83 percent. This adjustment resulted in a 42 basis point downward adjustment to my 9.04 percent DCF estimate. In the Rio Rico proceeding, the Commission eventually adopted a cost of common equity that was slightly lower than the 8.83 percent that I recommended. In the third case, I used the same methodology that I used in the Rio Rico Case to arrive at my recommended cost of equity of 11.50 percent for heavily leveraged Qwest Corporation (25 percent equity 75 percent debt). In my most recent case involving Chaparral City Water Company of Fountain Hills ("Chaparral City"), I made no adjustment despite the fact that Chaparral City had slightly more equity in its capital structure than the water utilities included in my sample. In that case the expected rate of return produced by the CAPM model, using an arithmetic mean, also exceeded the rate of return produced by my DCF model.

Current Economic Environment

Q. Please explain why it is necessary to consider the current economic environment when performing a cost of equity capital analysis for a regulated utility.

A. Consideration of the economic environment is necessary because trends in interest rates, present and projected levels of inflation, and the overall state of the U.S. economy determine the rates of return that investors earn on their invested funds. Each of these factors represent potential risks

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Market Results for
Stocks, Bonds, Bills, and Inflation
1926–2008

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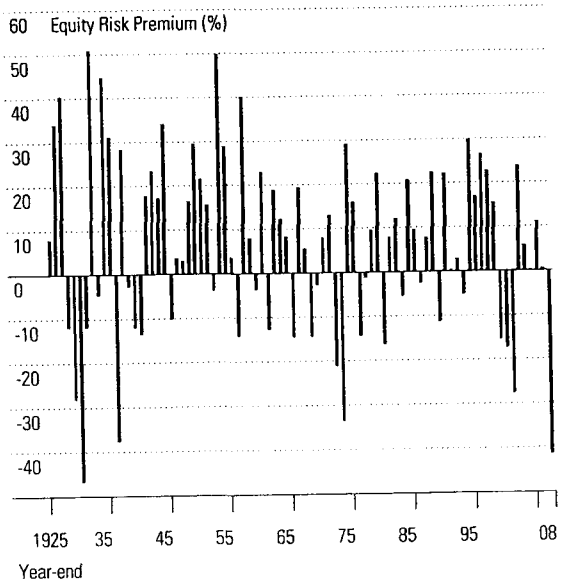
Arithmetic versus Geometric Means

The equity risk premium data presented in this book are arithmetic average risk premia as opposed to geometric average risk premia. The arithmetic average equity risk premium can be demonstrated to be most appropriate when discounting future cash flows. For use as the expected equity risk premium in either the CAPM or the building block approach, the arithmetic mean or the simple difference of the arithmetic means of stock market returns and riskless rates is the relevant number. This is because both the CAPM and the building block approach are additive models, in which the cost of capital is the sum of its parts. The geometric average is more appropriate for reporting past performance, since it represents the compound average return.

The argument for using the arithmetic average is quite straightforward. In looking at *projected cash flows*, the equity risk premium that should be employed is the equity risk premium that is expected to actually be incurred over the future time periods. Graph 5-3 shows the realized equity risk premium for each year based on the returns of the S&P 500 and the income return on long-term government bonds. (The actual, observed difference between the return on the stock market and the riskless rate is known as the realized equity risk premium.) There is considerable volatility in the year-by-year statistics. At times the realized equity risk premium is even negative.

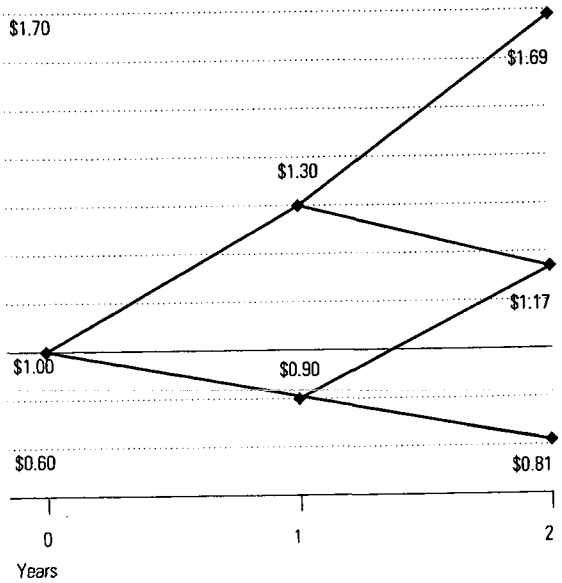
Graph 5-3: Realized Equity Risk Premium Per Year



Data from 1926–2008.

To illustrate how the arithmetic mean is more appropriate than the geometric mean in discounting cash flows, suppose the expected return on a stock is 10 percent per year with a standard deviation of 20 percent. Also assume that only two outcomes are possible each year: +30 percent and –10 percent (i.e., the mean plus or minus one standard deviation). The probability of occurrence for each outcome is equal. The growth of wealth over a two-year period is illustrated in Graph 5-4.

Graph 5-4: Growth of Wealth Example



The most common outcome of $1.17 is given by the geometric mean of 8.2 percent. Compounding the possible outcomes as follows derives the geometric mean:

$$\left[(1+0.30)\times(1-0.10)\right]^{1/2}-1=0.082$$

However, the expected value is predicted by compounding the arithmetic, not the geometric, mean. To illustrate this, we need to look at the probability-weighted average of all possible outcomes:

(0.25 × $1.69) =	$0.4225
+ (0.50 × $1.17) =	$0.5850
+ (0.25 × $0.81) =	$0.2025
Total	$1.2100

Therefore, $1.21 is the probability-weighted expected value. The rate that must be compounded to achieve the terminal value of $1.21 after 2 years is 10 percent, the arithmetic mean:

$$\$1\times(1+0.10)^2=\$1.21$$

The geometric mean, when compounded, results in the median of the distribution:

$$\$1\times(1+0.082)^2=\$1.17$$

The arithmetic mean equates the expected future value with the present value; it is therefore the appropriate discount rate.

Appropriate Historical Time Period

The equity risk premium can be estimated using any historical time period. For the U.S., market data exists at least as far back as the late 1800s. Therefore, it is possible to estimate the equity risk premium using data that covers roughly the past 100 years.

Our equity risk premium covers the time period from 1926 to the present. The original data source for the time series comprising the equity risk premium is the Center for Research in Security Prices. CRSP chose to begin their analysis of market returns with 1926 for two main reasons. CRSP determined that the time period around 1926 was approximately when quality financial data became available. They also made a conscious effort to include the period of extreme market volatility from the late twenties and early thirties; 1926 was chosen because it includes one full business cycle of data before the market crash of 1929. These are the most basic reasons why our equity risk premium calculation window starts in 1926.

Implicit in using history to forecast the future is the assumption that investors' expectations for future outcomes conform to past results. This method assumes that the price of taking on risk changes only slowly, if at all, over time. This "future equals the past" assumption is most applicable to a random time-series variable. A time-series variable is random if its value in one period is independent of its value in other periods.

Does the Equity Risk Premium Revert to Its Mean Over Time?

Some have argued that the estimate of the equity risk premium is upwardly biased since the stock market is currently priced high. In other words, since there have been several years with extraordinarily high market returns and realized equity risk premia, the expectation is that returns and realized equity risk premia will be lower in the future, bringing the average back to a normalized level. This argument relies on several studies that have tried to determine whether reversion to the mean exists in stock market prices and the equity risk premium.[3] Several academics contradict each other on this topic; moreover, the evidence supporting this argument is neither conclusive nor compelling enough to make such a strong assumption.

Our own empirical evidence suggests that the yearly difference between the stock market total return and the U.S. Treasury bond income return in any particular year is random. Graph 5-3, presented earlier, illustrates the randomness of the realized equity risk premium.

A statistical measure of the randomness of a return series is its serial correlation. Serial correlation (or autocorrelation) is defined as the degree to which the return of a given series is related from period to period. A serial correlation near positive one indicates that returns are predictable from one period to the next period and are positively related. That is, the returns of one period are a good predictor of the returns in the next period. Conversely, a serial correlation near negative one indicates that the returns in one period are inversely related to those of the next period. A serial correlation near zero indicates that the returns are random or unpredictable from one period to the next. Table 5-3 contains the serial correlation of the market total returns, the realized long-horizon equity risk premium, and inflation.

Table 5-3: Interpretation of Annual Serial Correlations

Series	Serial Correlation	Interpretation
Large Company Stock Total Returns	0.04	Random
Equity Risk Premium	0.04	Random
Inflation Rates	0.64	Trend

Data from 1926–2008

BEFORE THE ARIZONA CORPORATION COMMISSION

MIKE GLEASON
Chairman
WILLIAM A. MUNDELL
Commissioner
JEFF HATCH-MILLER
Commissioner
KRISTIN K. MAYES
Commissioner
GARY PIERCE
Commissioner

IN THE MATTER OF THE APPLICATION OF CHAPARRAL CITY WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY BASED THEREON	)	DOCKET NO. W-02113A-07-0551

DIRECT

TESTIMONY

OF

MARVIN E. MILLSAP

PUBLIC UTILITIES ANALYST IV

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

OCTOBER 03, 2008

EXHIBIT
A-55
ADMITTED

Q. Why is Staff recommending removal of the cost of studies included in GO plant?

A. In both cases the studies were completed before the acquisition of CCWC and were ordered by the CPUC or mandated by California Statutes. One is a management audit ordered by the CPUC that was completed in 1995 and cost $420,000. The other cost, $820,254, to be excluded is for water management plans completed in 1998 in conjunction with California Water Code Sections 10610 through 10657.

Q. What is the amount of Staff's adjustment to increase the allocation of GO plant to CCWC?

A. After removing the cost of the luxury vehicles and the studies that do not benefit Arizona ratepayers and applying the 4.0 allocation percentage, GO plant in service original cost is increased by $124,299, or $174,963 RCN. Thus, $875,470, or $1,167,091 RCN, of GO plant is included in CCWC's rate base. The details of this adjustment are presented on Schedule MEM-7.

Rate Base Adjustment No. 4 – Accumulated Depreciation

Q. Would you please explain Staff's rate base adjustment No. 4.

A. Staff's adjustment reduces Accumulated Depreciation by $2,031,950 from the Company's amount of $15,877,022 to reflect Staff's calculated Accumulated Depreciation of $13,845,072. The reason for this difference is related to Staff using the 4.0 GO plant allocation percentage and the plant additions and retirements discussed in Rate Base Adjustments No. 6 and No. 7. Changing the GO allocation increased accumulated depreciation by $84,561. Plant additions increased accumulated deprecation by $1,823 and retirements decreased accumulated depreciation by $2,118,334 as shown on Schedule MEM-8. Plant additions and retirements are discussed on Schedule MEM-10 and MEM-11.

CHAPARRAL CITY WATER COMPANY, INC.
Docket No. W-02113A-07-0551
Test Year Ended December 31, 2006

Schedule MEM-11

RATE BASE ADJUSTMENT #7 - Retire Wells #8 and #9 and Other Plant that is not used and useful.
Also reclassify plant into more appropriate NARUC account categories.

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	304	Structures and Improvements	$ -	$ (596)	$ (596)
2	307	Wells and Springs	$ -	$ (106,816)	$ (106,816)
3	320	Water Treatment Equipment	$ -	(2,010,922)	$ (2,010,922)
4	305	Collecting and Impounding Reservoirs	$ -	(6,548)	$ (6,548)
5	307	Wells and Springs	$ -	(65,622)	$ (65,622)
6	311	Pumping Equipment	$ -	55,254	$ 55,254
7	320	Water Treatment Equipment	$ -	34,062	$ 34,062
8	330	Distribution Reservoirs and Standpipes	$ -	(1,658,272)	$ (1,658,272)
9	331	Transmission and Distribution Mains	$ -	1,502,420	$ 1,502,420
10	333	Services	$ -	106,409	$ 106,409
11	334	Meters and Meter Installation	$ -	11,193	$ 11,193
12	335	Hydrants	$ -	53,352	$ 53,352
13	340	Office Furniture and Equipment	$ -	1,814	$ 1,814
14	303	Land and Land Rights (A/C #348 for RCN)	$ -	(34,062)	$ (34,062)
15	339	Other Plant & Misc. Equip.	$ -	106,542	$ 106,542
16	347	Miscellaneous Equipment	$ -	(106,542)	$ (106,542)
17		TOTAL	$ -	$ (2,118,334)	$ (2,118,334)
18					
19					
20					
21		References:			
22		Col [A]: Company Schedeule B-2			
23		Col [B]: Col [C] - Col [A]			
24		Col [C]: MEM Testimony			
25					

26 Explanation of Adjustment:
27 Agreement signed 02/05/2005 with Fountain Hills Sanitation District to take Wells 8 & 9 out of service and retire other
28 Plant identified by Staff as not being used and useful. Also to reclassify plant and accumulated depreciation.
29

	Acct. No.	Description	Cost	Accum Depr
32	307	Fully depreciated Cost of Well #8 per response to DR MEM-7.3	$ 49,329	$ 49,329
33	307	Fully depreciated Cost of Well #9 per response to DR MEM-7.3	54,139	54,139
34	307	Engine Well	3,348	3,348
35		Subtotal	106,816	106,816
36	320	CAP Plant #1 1986	1,320,562	1,320,562
37	320	CAP Plant #1 - Treatment Equipment 1987	288,612	288,612
38	320	CAP Plant #1 - Treatment Equipment 1989	397,339	397,339
39	320	CAP Plant #1 - Treatment Equipment 19889	4,409	4,409
40		Subtotal	2,010,922	2,010,922
41	304	Well No. 9 - Install exhaust fan	596	596
42				
43	305	Collecting and Impounding Reservoirs	(6,548)	(1,801)
44	307	Wells and Springs (250 hp sub.)	(65,622)	(18,727)
45	311	Pumping Equipment (250 hp sub. In 1996 Less Fire hydrant in 1996 and DIP in	55,254	24,434
46	320	Water Treatment Equipment (Water Treatment Study in 2004)	34,062	2,908
47	330	Distribution Reservoirs and Standpipes (Water Services in 1996 and mains in 2	(1,658,272)	(104,710)
48	331	Transmission and Distribution Mains (16" main in 2005 and fh Blvd main in 200	1,502,420	46,451
49	333	Services (Water Services in 1996 less Conference Room Table and Chairs in 1	106,409	30,253
50	334	Meters and Meter Installation (Meter installation in 1973 less service line in 199	11,193	16,154
51	335	Hydrants (Fire hydrant in 1996 and DIP in 2005)	53,352	10,940
52	340	Office Furniture and Equipment (Conference Room Table and Chairs in 1993)	1,814	585
53	303	Land and Land Rights (A/C #348 for RCN)	(34,062)	(6,487)
54			-	-
55	339	Other Plant & Misc. Equip.	106,542	31,889
56	347		(106,542)	(31,889)
57				
58			$ 2,118,334	$ 2,118,334
59				

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Analysis of Typical Residential Bills
at Different Rate Designs

Summary of Rate Design Scenarios at Standardized Usage of 7,500 Gallons

Line No.		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]
		Scenario A Co. Proposed Rate Design			Scenario B Full Rate Consolidation			Scenario C Consolidated Basic Service Charge			Scenario D Consolidation by Group		
1		Proposed Typical Bill	Proposed Increase / (Decrease)	Percent Increase / (Decrease)	Proposed Typical Bill	Proposed Increase / (Decrease)	Percent Increase / (Decrease)	Proposed Typical Bill	Proposed Increase / (Decrease)	Percent Increase / (Decrease)	Proposed Typical Bill	Proposed Increase / (Decrease)	Percent Increase / (Decrease)
4	Eastern Group												
5	Supersition												
6	Apache Junction	$ 39.69	$ 5.63	16.5%	$ 35.73	$ 1.67	4.9%	$ 37.94	$ 3.88	11.4%	$ 40.75	$ 6.69	19.6%
7	Superior	$ 39.69	$ 3.90	10.9%	$ 35.73	$ (0.06)	-0.2%	$ 37.94	$ 2.14	6.0%	$ 40.75	$ 4.96	13.8%
8	Bisbee	$ 45.02	$ 9.24	25.8%	$ 35.73	$ (0.04)	-0.1%	$ 37.94	$ 2.17	6.1%	$ 40.75	$ 4.98	13.9%
9	Sierra Vista	$ 27.50	$ 0.01	0.0%	$ 35.73	$ 8.24	30.0%	$ 33.50	$ 6.01	21.9%	$ 40.75	$ 13.26	48.3%
10	San Manuel	$ 46.83	$ 5.83	14.2%	$ 35.73	$ (5.27)	-12.8%	$ 40.12	$ (0.88)	-2.1%	$ 40.75	$ (0.25)	-0.6%
11	Oracle	$ 59.69	$ 2.99	5.3%	$ 35.73	$ (20.96)	-37.0%	$ 57.56	$ 0.87	1.5%	$ 40.75	$ (15.94)	-28.1%
12	Winkelman	$ 29.87	$ 8.40	39.1%	$ 35.73	$ 14.26	66.4%	$ 28.63	$ 7.16	33.3%	$ 40.75	$ 19.28	89.8%
13	Miami	$ 39.69	$ 0.70	1.8%	$ 35.73	$ (3.26)	-8.4%	$ 38.25	$ (0.74)	-1.9%	$ 40.75	$ 1.76	4.5%
15	Western Group												
16	Casa Grande	$ 30.36	$ 5.86	23.9%	$ 35.73	$ 11.23	45.8%	$ 33.08	$ 8.58	35.0%	$ 31.15	$ 6.64	27.1%
17	Stanfield	$ 37.52	$ 0.11	0.3%	$ 35.73	$ (1.68)	-4.5%	$ 38.22	$ 0.81	2.2%	$ 31.15	$ (6.27)	-16.8%
18	White Tank	$ 40.75	$ 2.59	6.8%	$ 35.73	$ (2.43)	-6.4%	$ 37.94	$ (0.22)	-0.6%	$ 31.15	$ (7.02)	-18.4%
19	Ajo	$ 69.34	$ 10.05	16.9%	$ 35.73	$ (23.56)	-39.7%	$ 59.97	$ 0.68	1.1%	$ 31.15	$ (28.14)	-47.5%
20	Coolidge	$ 30.36	$ 5.99	24.6%	$ 35.73	$ 11.36	46.6%	$ 33.08	$ 8.71	35.8%	$ 31.15	$ 6.78	27.8%
22	Northern Group												
23	Lakeside	$ 53.91	$ 4.67	9.5%	$ 35.73	$ (13.50)	-27.4%	$ 49.16	$ (0.07)	-0.1%	$ 43.44	$ (5.79)	-11.8%
24	Overgaard	$ 53.91	$ 2.06	4.0%	$ 35.73	$ (16.12)	-31.1%	$ 53.48	$ 1.63	3.1%	$ 43.44	$ (8.41)	-16.2%
25	Sedona	$ 40.20	$ 8.84	28.2%	$ 35.73	$ 4.37	13.9%	$ 37.94	$ 6.58	21.0%	$ 43.44	$ 12.08	38.5%
26	Pinewood	$ 50.54	$ 2.40	5.0%	$ 35.73	$ (12.40)	-25.8%	$ 52.02	$ 3.89	8.1%	$ 43.44	$ (4.69)	-9.7%
27	Rimrock	$ 50.54	$ (0.81)	-1.6%	$ 35.73	$ (15.62)	-30.4%	$ 52.73	$ 1.38	2.7%	$ 43.44	$ (7.91)	-15.4%

EXHIBIT
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ADMITTED

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Analysis of Typical Residential Bills
at Different Rate Designs

	Rate Design Scenario A - Company Proposed Rate Design (See Note A Below)									
	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
	At Actual Monthly Usage					At Standardized Monthly Usage of 7,500 Gallons				
Line No.	Average Monthly Usage (Sch. H-2)	Avg. Monthly Bill - Present Rates (Sch. H-4)	Avg. Monthly Bill - Proposed Rates	Proposed Increase / (Decrease) (C - B)	Percent Increase / (Decrease)	Standardized Usage - Gals.	Avg. Bill Pres. Rates Standardized Usage	Avg. Bill Proposed Rates - Std. Usage	Proposed Increase / (Decrease) (H - G)	Percent Increase / (Decrease)
1										
2										
3										
4 Eastern Group										
5 Supersition										
6 Apache Junction	7,438	$ 33.91	$ 39.51	$ 5.59	16.5%	7,500	$ 34.06	$ 39.69	$ 5.63	16.5%
7 Superior	6,278	$ 32.58	$ 36.03	$ 3.45	10.6%	7,500	$ 35.80	$ 39.69	$ 3.90	10.9%
8 Bisbee	5,215	$ 29.85	$ 34.75	$ 4.90	16.4%	7,500	$ 35.78	$ 45.02	$ 9.24	25.8%
9 Sierra Vista	8,924	$ 29.79	$ 30.28	$ 0.50	1.7%	7,500	$ 27.49	$ 27.50	$ 0.01	0.0%
10 San Manuel	8,744	$ 43.75	$ 51.22	$ 7.47	17.1%	7,500	$ 41.00	$ 46.83	$ 5.83	14.2%
11 Oracle	5,605	$ 47.25	$ 49.41	$ 2.16	4.6%	7,500	$ 56.70	$ 59.69	$ 2.99	5.3%
12 Winkelman	9,459	$ 23.70	$ 33.74	$ 10.04	42.4%	7,500	$ 21.47	$ 29.87	$ 8.40	39.1%
13 Miami	5,995	$ 34.26	$ 35.18	$ 0.91	2.7%	7,500	$ 38.99	$ 39.69	$ 0.70	1.8%
14										
15 Western Group										
16 Casa Grande	8,843	$ 26.79	$ 32.91	$ 6.13	22.9%	7,500	$ 24.50	$ 30.36	$ 5.86	23.9%
17 Stanfield	9,162	$ 42.61	$ 42.40	$ (0.20)	-0.5%	7,500	$ 37.42	$ 37.52	$ 0.11	0.3%
18 White Tank	15,648	$ 60.80	$ 62.54	$ 1.75	2.9%	7,500	$ 38.16	$ 40.75	$ 2.59	6.8%
19 Ajo	5,185	$ 46.55	$ 54.80	$ 8.24	17.7%	7,500	$ 59.29	$ 69.34	$ 10.05	16.9%
20 Coolidge	8,134	$ 25.61	$ 31.57	$ 5.95	23.2%	7,500	$ 24.37	$ 30.36	$ 5.99	24.6%
21										
22 Northern Group										
23 Lakeside	4,312	$ 35.88	$ 35.73	$ (0.14)	-0.4%	7,500	$ 49.24	$ 53.91	$ 4.67	9.5%
24 Overgaard	2,765	$ 30.73	$ 27.14	$ (3.60)	-11.7%	7,500	$ 51.85	$ 53.91	$ 2.06	4.0%
25 Sedona	10,264	$ 36.42	$ 47.54	$ 11.11	30.5%	7,500	$ 31.36	$ 40.20	$ 8.84	28.2%
26 Pinewood	2,407	$ 28.94	$ 30.19	$ 1.25	4.3%	7,500	$ 48.14	$ 50.54	$ 2.40	5.0%
27 Rimrock	6,165	$ 46.40	$ 45.08	$ (1.32)	-2.9%	7,500	$ 51.35	$ 50.54	$ (0.81)	-1.6%
28										
29										
30										
31										

32 Note A - Company proposed revenue requirement and Company proposed rate design.
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34 - Fully consolidates Superstition & Miami
35 Next rate case to be filed with consolidated rate base & income statement for Superstition & Miami
36 - Fully consolidates Lakeside & Overgaard
37 Next rate case to be filed with consolidated rate base & income statement for Lakeside & Overgaard
38 - Partially consolidates Sedona, Pinewood, & Rimrock
39 Sedona, Pinewood, & Rimrock all have the same basic service charge
40 Pinewood & Rimrock have same basic service charge and same commodity rate
41 Next rate case to be filed with consolidated rate base & income statement for Sedona, Pinewood, & Rimrock
42 - Partially consolidates Casa Grande, Coolidge, & Stanfield
43 Casa Grande, Coolidge, & Stanfield all have the same basic service charge
44 Casa Grande & Coolidge have same basic service charge and same commodity rate
45 Next rate case to be filed with consolidated rate base & income statement for Casa Grande, Coolidge, & Stanfield
46 - Partially consolidates Bisbee & Sierra Vista
47 Next rate case to be filed with consolidated rate base & income statement for Bisbee & Sierra Vista
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ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Analysis of Typical Residential Bills
at Different Rate Designs

Rate Design Scenario B - Full Rate Consolidation (See Note B Below)

Line No.		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
		At Actual Monthly Usage					At Standardized Monthly Usage of 7,500 Gallons				
		Average Monthly Usage (Sch. H-2)	Avg. Monthly Bill - Present Rates (Sch. H-4)	Avg. Monthly Bill - Proposed Rates	Proposed Increase / (Decrease) (C - B)	Percent Increase / (Decrease)	Standardized Usage - Gals.	Avg. Bill Pres. Rates Standardized Usage	Avg. Bill Proposed Rates - Std. Usage	Proposed Increase / (Decrease) (H - G)	Percent Increase / (Decrease)
4	Eastern Group										
5	Supersition										
6	Apache Junction	7,438	$ 33.91	$ 35.57	$ 1.66	4.9%	7,500	$ 34.06	$ 35.73	$ 1.67	4.9%
7	Superior	6,278	$ 32.58	$ 32.59	$ 0.02	0.1%	7,500	$ 35.80	$ 35.73	$ (0.06)	-0.2%
8	Bisbee	5,215	$ 29.85	$ 29.86	$ 0.01	0.0%	7,500	$ 35.78	$ 35.73	$ (0.04)	-0.1%
9	Sierra Vista	8,924	$ 29.79	$ 39.39	$ 9.61	32.3%	7,500	$ 27.49	$ 35.73	$ 8.24	30.0%
10	San Manuel	8,744	$ 43.75	$ 38.93	$ (4.81)	-11.0%	7,500	$ 41.00	$ 35.73	$ (5.27)	-12.8%
11	Oracle	5,605	$ 47.25	$ 30.86	$ (16.39)	-34.7%	7,500	$ 56.70	$ 35.73	$ (20.96)	-37.0%
12	Winkelman	9,459	$ 23.70	$ 40.77	$ 17.07	72.0%	7,500	$ 21.47	$ 35.73	$ 14.26	66.4%
13	Miami	5,995	$ 34.26	$ 31.87	$ (2.40)	-7.0%	7,500	$ 38.99	$ 35.73	$ (3.26)	-8.4%
14											
15	Western Group										
16	Casa Grande	8,843	$ 26.79	$ 39.18	$ 12.40	46.3%	7,500	$ 24.50	$ 35.73	$ 11.23	45.8%
17	Stanfield	9,162	$ 42.61	$ 40.00	$ (2.60)	-6.1%	7,500	$ 37.42	$ 35.73	$ (1.68)	-4.5%
18	White Tank	15,648	$ 60.80	$ 60.30	$ (0.49)	-0.8%	7,500	$ 38.16	$ 35.73	$ (2.43)	-6.4%
19	Ajo	5,185	$ 46.55	$ 29.78	$ (16.77)	-36.0%	7,500	$ 59.29	$ 35.73	$ (23.56)	-39.7%
20	Coolidge	8,134	$ 25.61	$ 37.36	$ 11.75	45.9%	7,500	$ 24.37	$ 35.73	$ 11.36	46.6%
21											
22	Northern Group										
23	Lakeside	4,312	$ 35.88	$ 27.54	$ (8.34)	-23.2%	7,500	$ 49.24	$ 35.73	$ (13.50)	-27.4%
24	Overgaard	2,765	$ 30.73	$ 23.69	$ (7.05)	-22.9%	7,500	$ 51.85	$ 35.73	$ (16.12)	-31.1%
25	Sedona	10,264	$ 36.42	$ 43.01	$ 6.58	18.1%	7,500	$ 31.36	$ 35.73	$ 4.37	13.9%
26	Pinewood	2,407	$ 28.94	$ 22.95	$ (5.99)	-20.7%	7,500	$ 48.14	$ 35.73	$ (12.40)	-25.8%
27	Rimrock	6,165	$ 46.40	$ 32.30	$ (14.10)	-30.4%	7,500	$ 51.35	$ 35.73	$ (15.62)	-30.4%

32 Note B - Company proposed revenue requirement and full rate consolidation

34 - All systems have the same basic service charge and same commodity rates
35 Next rate case to be filed for entire company with consolidated rate base & income statement

ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Analysis of Typical Residential Bills
at Different Rate Designs

		Rate Design Scenario C - Consolidated Basic Service Charge (See Note C Below)									
		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
		At Actual Monthly Usage					At Standardized Monthly Usage of 7,500 Gallons				
Line No.		Average Monthly Usage (Sch. H-2)	Avg. Monthly Bill - Present Rates (Sch. H-4)	Avg. Monthly Bill - Proposed Rates	Proposed Increase / (Decrease) (C - B)	Percent Increase / (Decrease)	Standardized Usage - Gals.	Avg. Bill Pres. Rates Standardized Usage	Avg. Bill Proposed Rates - Std. Usage	Proposed Increase / (Decrease) (H - G)	Percent Increase / (Decrease)
1											
2											
3											
4	Eastern Group										
5	Supersition										
6	Apache Junction	7,438	$ 33.91	$ 37.78	$ 3.86	11.4%	7,500	$ 34.06	$ 37.94	$ 3.88	11.4%
7	Superior	6,278	$ 32.58	$ 34.76	$ 2.19	6.7%	7,500	$ 35.80	$ 37.94	$ 2.14	6.0%
8	Bisbee	5,215	$ 29.85	$ 32.00	$ 2.15	7.2%	7,500	$ 35.78	$ 37.94	$ 2.17	6.1%
9	Sierra Vista	8,924	$ 29.79	$ 36.28	$ 6.50	21.8%	7,500	$ 27.49	$ 33.50	$ 6.01	21.9%
10	San Manuel	8,744	$ 43.75	$ 43.75	$ 0.00	0.0%	7,500	$ 41.00	$ 40.12	$ (0.88)	-2.1%
11	Oracle	5,605	$ 47.25	$ 47.25	$ (0.00)	0.0%	7,500	$ 56.70	$ 57.56	$ 0.87	1.5%
12	Winkelman	9,459	$ 23.70	$ 31.07	$ 7.38	31.1%	7,500	$ 21.47	$ 28.63	$ 7.16	33.3%
13	Miami	5,995	$ 34.26	$ 34.27	$ 0.01	0.0%	7,500	$ 38.99	$ 38.25	$ (0.74)	-1.9%
14											
15	Western Group										
16	Casa Grande	8,843	$ 26.79	$ 35.63	$ 8.84	33.0%	7,500	$ 24.50	$ 33.08	$ 8.58	35.0%
17	Stanfield	9,162	$ 42.61	$ 42.61	$ 0.01	0.0%	7,500	$ 37.42	$ 38.22	$ 0.81	2.2%
18	White Tank	15,648	$ 60.80	$ 62.80	$ 2.00	3.3%	7,500	$ 38.16	$ 37.94	$ (0.22)	-0.6%
19	Ajo	5,185	$ 46.55	$ 46.56	$ 0.00	0.0%	7,500	$ 59.29	$ 59.97	$ 0.68	1.1%
20	Coolidge	8,134	$ 25.61	$ 34.29	$ 8.67	33.9%	7,500	$ 24.37	$ 33.08	$ 8.71	35.8%
21											
22	Northern Group										
23	Lakeside	4,312	$ 35.88	$ 35.88	$ 0.00	0.0%	7,500	$ 49.24	$ 49.16	$ (0.07)	-0.1%
24	Overgaard	2,765	$ 30.73	$ 30.74	$ 0.00	0.0%	7,500	$ 51.85	$ 53.48	$ 1.63	3.1%
25	Sedona	10,264	$ 36.42	$ 45.30	$ 8.87	24.4%	7,500	$ 31.36	$ 37.94	$ 6.58	21.0%
26	Pinewood	2,407	$ 28.94	$ 28.94	$ 0.00	0.0%	7,500	$ 48.14	$ 52.02	$ 3.89	8.1%
27	Rimrock	6,165	$ 46.40	$ 46.40	$ (0.00)	0.0%	7,500	$ 51.35	$ 52.73	$ 1.38	2.7%
28											
29											
30											
31											

32 Note C - Company proposed revenue requirement and consolidated basic service charge of $20.00 with varying commodity rates
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34 - No customers receive a rate decrease
35 - Moves rates for different systems closer together at standardized usage
36 - Next rate case to be filed with consolidated rate base & income statement.
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ARIZONA WATER COMPANY
Test Year Ended December 31, 2007
Analysis of Typical Residential Bills
at Different Rate Designs

Rate Design Scenario D - Group Consolidation (See Note D Below)

Line No.		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
		At Actual Monthly Usage					At Standardized Monthly Usage of 7,500 Gallons				
		Average Monthly Usage (Sch. H-2)	Avg. Monthly Bill - Present Rates (Sch. H-4)	Avg. Monthly Bill - Proposed Rates	Proposed Increase / (Decrease) (C - B)	Percent Increase / (Decrease)	Standardized Usage - Gals.	Avg. Bill Pres. Rates Standardized Usage	Avg. Bill Proposed Rates - Std. Usage	Proposed Increase / (Decrease) (H - G)	Percent Increase / (Decrease)
1											
2											
3											
4	Eastern Group										
5	Supersition										
6	Apache Junction	7,438	$ 33.91	$ 40.57	$ 6.65	19.6%	7,500	$ 34.06	$ 40.75	$ 6.69	19.6%
7	Superior	6,278	$ 32.58	$ 37.08	$ 4.50	13.8%	7,500	$ 35.80	$ 40.75	$ 4.96	13.8%
8	Bisbee	5,215	$ 29.85	$ 33.88	$ 4.03	13.5%	7,500	$ 35.78	$ 40.75	$ 4.98	13.9%
9	Sierra Vista	8,924	$ 29.79	$ 45.04	$ 15.25	51.2%	7,500	$ 27.49	$ 40.75	$ 13.26	48.3%
10	San Manuel	8,744	$ 43.75	$ 44.50	$ 0.75	1.7%	7,500	$ 41.00	$ 40.75	$ (0.25)	-0.6%
11	Oracle	5,605	$ 47.25	$ 35.05	$ (12.20)	-25.8%	7,500	$ 56.70	$ 40.75	$ (15.94)	-28.1%
12	Winkelman	9,459	$ 23.70	$ 46.65	$ 22.95	96.9%	7,500	$ 21.47	$ 40.75	$ 19.28	89.8%
13	Miami	5,995	$ 34.26	$ 36.23	$ 1.96	5.7%	7,500	$ 38.99	$ 40.75	$ 1.76	4.5%
14											
15	Western Group										
16	Casa Grande	8,843	$ 26.79	$ 33.85	$ 7.06	26.4%	7,500	$ 24.50	$ 31.15	$ 6.64	27.1%
17	Stanfield	9,162	$ 42.61	$ 34.49	$ (8.11)	-19.0%	7,500	$ 37.42	$ 31.15	$ (6.27)	-16.8%
18	White Tank	15,648	$ 60.80	$ 50.40	$ (10.39)	-17.1%	7,500	$ 38.16	$ 31.15	$ (7.02)	-18.4%
19	Ajo	5,185	$ 46.55	$ 26.48	$ (20.07)	-43.1%	7,500	$ 59.29	$ 31.15	$ (28.14)	-47.5%
20	Coolidge	8,134	$ 25.61	$ 32.42	$ 6.81	26.6%	7,500	$ 24.37	$ 31.15	$ 6.78	27.8%
21											
22	Northern Group										
23	Lakeside	4,312	$ 35.88	$ 32.31	$ (3.57)	-9.9%	7,500	$ 49.24	$ 43.44	$ (5.79)	-11.8%
24	Overgaard	2,765	$ 30.73	$ 27.05	$ (3.69)	-12.0%	7,500	$ 51.85	$ 43.44	$ (8.41)	-16.2%
25	Sedona	10,264	$ 36.42	$ 53.28	$ 16.86	46.3%	7,500	$ 31.36	$ 43.44	$ 12.08	38.5%
26	Pinewood	2,407	$ 28.94	$ 26.01	$ (2.93)	-10.1%	7,500	$ 48.14	$ 43.44	$ (4.69)	-9.7%
27	Rimrock	6,165	$ 46.40	$ 38.78	$ (7.62)	-16.4%	7,500	$ 51.35	$ 43.44	$ (7.91)	-15.4%
28											
29											
30											
31											
32	Note D - Company proposed revenue requirement and consolidated rates by group (i.e. Eastern, Western, & Northern)										
33											
34	- Next rate case to be filed with consolidated rate base & income statement by group										
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ARIZONA WATER COMPANY'S RESPONSES TO
ARIZONA CORPORATION COMMISSION
STAFF'S THIRD SET OF DATA REQUESTS TO
ARIZONA WATER COMPANY
DOCKET NO. W-01445A-08-0440

November 7, 2008

Company Response Number: AII 3-3

Q. **Work Papers- Please provide a copy of all the work papers created/utilized to develop the rate application, and any updates or revisions throughout the rate case processes.**

A. Copies of all work papers were previously provided to Staff in Excel 2003 and Excel 2007 formats on August 25, 2008. All work papers and schedules are also provided in Excel 2003 and Excel 2007 formats in the folder labeled \AII 3-3\ on the disk provided in response to this data request.

Response provided by:	Joel M. Reiker
Title:	Manager – Rates
Address:	3805 North Black Canyon Highway Phoenix, AZ 85015

EXHIBIT
A-67
ADMITTED

ARIZONA WATER COMPANY'S RESPONSES TO
ARIZONA CORPORATION COMMISSION
STAFF'S EIGHTH SET OF DATA REQUESTS TO
ARIZONA WATER COMPANY
DOCKET NO. W-01445A-08-0440

April 16, 2009

Company Response Number: GTM 8-8

Q. Please provide a copy of the 2008 study of tank maintenance requirements and associated costs referred to on page 26 of Mr. Schneider's direct testimony.

A. This information has already been provided to Staff. Please see the work papers \Tank Accrual Calculations without inflation factor 2008.xls\ and \Tank Maintenance Accrual Adjustment.xls\. These work papers are provided again on the enclosed disk.

Response provided by:	Fredrick K. Schneider, Vice President – Engineering Joel M. Reiker, Manager – Rates
Address:	3805 North Black Canyon Highway Phoenix, AZ 85015

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	CAPACITY GALLONS	BUILT	LAST INT. TANK	LAST EXT. TANK	INTERIOR SQ. FT.	EXTERIOR SQ. FT.	COST INT.	COST EXT.		TOTAL	INTERIOR NEXT DUE
1	AJ	BASELINE SETTLING TANK	150,000	2007	2007	2007	4,753	3,217	$20,057.66	$5,404.56		$25,462.22	2021
2	AJ	BASELINE TANK	1,400,000	2005	2006	2006	30,390	15,390	$116,393.70	$24,316.20		$140,709.90	2019
3	AJ	COUNTY LINE TANK #1	1,000,000	1977	2008	2006	18,421	12,094	$70,552.43	$19,108.52		$89,660.95	2022
4	AJ	COUNTY LINE TANK #2	4,000,000	1984	2006	2006	58,113	33,146	$222,572.79	$52,370.68		$274,943.47	2020
5	AJ	GOLD CANYON	500,000	1986	1986	1991	11,743	7,584	$44,975.69	$11,982.72		$56,958.41	2009
6	AJ	LOWER ZONE TANK	2,000,000	1998	1998	1998	37,926	21,288	$145,256.58	$33,635.04		$178,891.62	2010
7	AJ	MINING CAMP TANK #1	150,000	1981	1990	2002	4,387	3,481	$18,513.14	$5,848.08		$24,361.22	2010
8	AJ	MINING CAMP TANK #2	1,000,000	1990	1990	2002	16,641	11,759	$63,735.03	$18,579.22		$82,314.25	2010
9	AJ	OASIS	550,000	1960	2008	1998	11,673	8,007	$44,707.59	$12,651.06		$57,358.65	2022
10	AJ	OASIS SETTLING TANK	90,000	2007	2007	2007	3,313	2,376	$13,980.86	$3,991.68		$17,972.54	2021
11	AJ	SUPERSTITION	300,000	1960	1988	1998	7,446	5,327	$28,518.18	$8,416.66		$36,934.84	2009
12	AJ	UDC TANK	2,000,000	1998	1998	1998	37,371	23,252	$143,130.93	$36,738.16		$179,869.09	2009
13	AJ	UNIVERSITY TANK #1	500,000	1973	1991	1998	10,937	7,568	$41,888.71	$11,957.44		$53,846.15	2008
14	AJ	UNIVERSITY TANK #2	1,000,000	1987	1991	1998	18,421	12,094	$70,552.43	$19,108.52		$89,660.95	2008
15	AJ	UNIVERSITY TANK #3	4,000,000	1987	2000	2000	50,228	30,701	$79,360.24	$48,507.58		$127,867.82	2017
16	AJ	VISTA DEL CORAZON	1,000,000	2002	2002	2002	19,074	12,427	$73,053.42	$19,634.66		$92,688.08	2016
		APACHE JUNCTION	18,090,000						$987,744.60	$282,895.36		###########	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

1	AJ	BASELINE SETTLING TANK	150,000	2014	2021			-
2	AJ	BASELINE TANK	1,400,000	2012	2019			-
3	AJ	COUNTY LINE TANK #1	1,000,000	2013	2020			-
4	AJ	COUNTY LINE TANK #2	4,000,000	2013	2020			-
5	AJ	GOLD CANYON	500,000	2009	2016			-
6	AJ	LOWER ZONE TANK	2,000,000	2010	2017			-
7	AJ	MINING CAMP TANK #1	150,000	2010	2017			-
8	AJ	MINING CAMP TANK #2	1,000,000	2010	2017			-
9	AJ	OASIS	550,000	2015	2022			-
10	AJ	OASIS SETTLING TANK	90,000	2014	2021			-
11	AJ	SUPERSTITION	300,000	2009	2016			-
12	AJ	UDC TANK	2,000,000	2009	2016			-
13	AJ	UNIVERSITY TANK #1	500,000	2008	2015	48,889	11,957	60,846
14	AJ	UNIVERSITY TANK #2	1,000,000	2008	2015	77,552	19,109	96,661
15	AJ	UNIVERSITY TANK #3	4,000,000	2010	2017			-
16	AJ	VISTA DEL CORAZON	1,000,000	2009	2016			-
		APACHE JUNCTION	18,090,000			126,441	31,066	157,507

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GALLONS									
1	AJ	BASELINE SETTLING TANK	150,000			-			-			-
2	AJ	BASELINE TANK	1,400,000			-			-			-
3	AJ	COUNTY LINE TANK #1	1,000,000			-			-			-
4	AJ	COUNTY LINE TANK #2	4,000,000			-			-			-
5	AJ	GOLD CANYON	500,000	51,976	11,983	63,958			-			-
6	AJ	LOWER ZONE TANK	2,000,000			-	152,257	33,635	185,892			-
7	AJ	MINING CAMP TANK #1	150,000			-	22,013	5,848	27,861			-
8	AJ	MINING CAMP TANK #2	1,000,000			-	70,735	18,579	89,314			-
9	AJ	OASIS	550,000			-			-			-
10	AJ	OASIS SETTLING TANK	90,000			-			-			-
11	AJ	SUPERSTITION	300,000	35,518	8,417	43,935			-			-
12	AJ	UDC TANK	2,000,000	150,131	36,738	186,869			-			-
13	AJ	UNIVERSITY TANK #1	500,000			-			-			-
14	AJ	UNIVERSITY TANK #2	1,000,000			-			-			-
15	AJ	UNIVERSITY TANK #3	4,000,000			-		48,508	48,508			-
16	AJ	VISTA DEL CORAZON	1,000,000		19,635	19,635			-			-
		APACHE JUNCTION	18,090,000	237,625	76,772	314,397	245,005	106,570	351,575	-	-	-

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GALLONS	2012 Int. Coat	2012 Ext. Coat	2012 TOTAL	2013 Int. Coat	2013 Ext. Coat	2013 TOTAL	2014 Int. Coat	2014 Ext. Coat	2014 TOTAL	2015 Int. Coat
1	AJ	BASELINE SETTLING TANK	150,000			-			-		5,405	5,405	
2	AJ	BASELINE TANK	1,400,000		24,316	24,316			-			-	
3	AJ	COUNTY LINE TANK #1	1,000,000			-		19,109	19,109			-	
4	AJ	COUNTY LINE TANK #2	4,000,000			-		52,371	52,371			-	
5	AJ	GOLD CANYON	500,000			-			-			-	
6	AJ	LOWER ZONE TANK	2,000,000			-			-			-	
7	AJ	MINING CAMP TANK #1	150,000			-			-			-	
8	AJ	MINING CAMP TANK #2	1,000,000			-			-			-	
9	AJ	OASIS	550,000			-			-			-	
10	AJ	OASIS SETTLING TANK	90,000			-			-		3,992	3,992	
11	AJ	SUPERSTITION	300,000			-			-			-	
12	AJ	UDC TANK	2,000,000			-			-			-	
13	AJ	UNIVERSITY TANK #1	500,000			-			-			-	
14	AJ	UNIVERSITY TANK #2	1,000,000			-			-			-	
15	AJ	UNIVERSITY TANK #3	4,000,000			-			-			-	
16	AJ	VISTA DEL CORAZON	1,000,000			-			-			-	
		APACHE JUNCTION	18,090,000	-	24,316	24,316	-	71,479	71,479	-	9,396	9,396	-

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

1	AJ	BASELINE SETTLING TANK	150,000		-			-			-		
2	AJ	BASELINE TANK	1,400,000		-			-			-		
3	AJ	COUNTY LINE TANK #1	1,000,000		-			-			-		
4	AJ	COUNTY LINE TANK #2	4,000,000		-			-			-		
5	AJ	GOLD CANYON	500,000		-		11,983	11,983			-		
6	AJ	LOWER ZONE TANK	2,000,000		-			-		33,635	33,635		
7	AJ	MINING CAMP TANK #1	150,000		-			-		5,848	5,848		
8	AJ	MINING CAMP TANK #2	1,000,000		-			-		18,579	18,579		
9	AJ	OASIS	550,000	12,651	12,651			-			-		
10	AJ	OASIS SETTLING TANK	90,000		-			-			-		
11	AJ	SUPERSTITION	300,000		-		8,417	8,417			-		
12	AJ	UDC TANK	2,000,000		-		36,738	36,738			-		
13	AJ	UNIVERSITY TANK #1	500,000	11,957	11,957			-			-		
14	AJ	UNIVERSITY TANK #2	1,000,000	19,109	19,109			-			-		
15	AJ	UNIVERSITY TANK #3	4,000,000		-			-	86,360	48,508	134,868		
16	AJ	VISTA DEL CORAZON	1,000,000		-	80,053	19,635	99,688			-		
		APACHE JUNCTION	18,090,000	43,717	43,717	80,053	76,772	156,826	86,360	106,570	192,930	-	-

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GALLONS	TOTAL	2019 Int. Cost	2019 Ext. Cost	2019 TOTAL	2020 Int. Cost	2020 Ext. Cost	2020 TOTAL	2021 Int. Cost	2021 Ext. Cost
1	AJ	BASELINE SETTLING TANK	150,000	-			-			-	23,558	5,405
2	AJ	BASELINE TANK	1,400,000	-	123,394	24,316	147,710			-		
3	AJ	COUNTY LINE TANK #1	1,000,000	-		19,109	19,109			-		
4	AJ	COUNTY LINE TANK #2	4,000,000	-			-	229,573	52,371	281,943		
5	AJ	GOLD CANYON	500,000	-			-			-		
6	AJ	LOWER ZONE TANK	2,000,000	-			-			-		
7	AJ	MINING CAMP TANK #1	150,000	-			-			-		
8	AJ	MINING CAMP TANK #2	1,000,000	-			-			-		
9	AJ	OASIS	550,000	-			-			-		
10	AJ	OASIS SETTLING TANK	90,000	-			-			-	17,481	3,992
11	AJ	SUPERSTITION	300,000	-			-			-		
12	AJ	UDC TANK	2,000,000	-			-			-		
13	AJ	UNIVERSITY TANK #1	500,000	-			-			-		
14	AJ	UNIVERSITY TANK #2	1,000,000	-			-			-		
15	AJ	UNIVERSITY TANK #3	4,000,000	-			-			-		
16	AJ	VISTA DEL CORAZON	1,000,000	-			-			-		
		APACHE JUNCTION	18,090,000	-	123,394	43,425	166,818	229,573	52,371	281,943	41,039	9,396

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GALLONS	TOTAL	2022 Int. Coat	2022 Ext. Coat	2022 TOTAL
1	AJ	BASELINE SETTLING TANK	150,000	28,962			-
2	AJ	BASELINE TANK	1,400,000	-			-
3	AJ	COUNTY LINE TANK #1	1,000,000	-	77,552		77,552
4	AJ	COUNTY LINE TANK #2	4,000,000	-			-
5	AJ	GOLD CANYON	500,000	-			-
6	AJ	LOWER ZONE TANK	2,000,000	-			-
7	AJ	MINING CAMP TANK #1	150,000	-			-
8	AJ	MINING CAMP TANK #2	1,000,000	-			-
9	AJ	OASIS	550,000	-	51,708	12,651	64,359
10	AJ	OASIS SETTLING TANK	90,000	21,473			-
11	AJ	SUPERSTITION	300,000	-			-
12	AJ	UDC TANK	2,000,000	-			-
13	AJ	UNIVERSITY TANK #1	500,000	-			-
14	AJ	UNIVERSITY TANK #2	1,000,000	-			-
15	AJ	UNIVERSITY TANK #3	4,000,000	-			-
16	AJ	VISTA DEL CORAZON	1,000,000	-			-
		APACHE JUNCTION	18,090,000	50,435	129,260	12,651	141,911

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	CAPACITY GALS	BUILT	LAST INT PAINT	LAST EXT PAINT	INTERIOR SQ FT	EXTERIOR SQ FT	INT COST	EXT COST		TOTAL	NEXT DUE
17	BE	MT RANCH ESTATES TANK #1	10,000	1976	1991	1991	733	610	$3,093.26	$1,024.80		$4,118.06	2009
18	BE	MT RANCH ESTATES TANK #2	10,000	N/A	1991	2000	733	610	$3,093.26	$1,024.80		$4,118.06	2009
19	BE	NACO PLANT	100,000	1959	1992	1992	3,523	3,014	$14,867.06	$5,063.52		$19,930.58	2010
20	BE	NACO ROAD	600,000	1959	2006	2006	11,957	8,833	$45,795.31	$13,956.14		$59,751.45	2020
21	BE	SPRING CANYON	100,000	1954	2006	2006	3,920	2,585	$16,542.40	$4,342.80		$20,885.20	2020
22	BE	SPRING CANYON #2	11,000	2000	2006	2006	829	648	$3,498.38	$1,088.64		$4,587.02	2020
23	BE	TIN TOWN	1,000,000	1955	1985	1985	17,567	11,410	$67,281.61	$18,027.80		$85,309.41	2009
24	BE	TOMBSTONE CANYON	450,000	1983	1998	1998	10,813	7,059	$41,413.79	$11,153.22		$52,567.01	2012
25	BE	WARREN #3	100,000	2000	2000	2000	3,920	2,585	$16,542.40	$4,342.80		$20,885.20	2015
		BISBEE	2,381,000						$212,127.47	$60,024.52		$272,151.99	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

							2008	
	SYSTEM	[illegible]	[illegible]	[illegible]	[illegible]	Int. Cost	Ext. Cost	TOTAL
17	BE	MT RANCH ESTATES TANK #1	10,000	2009	2016			0
18	BE	MT RANCH ESTATES TANK #2	10,000	2009	2016			0
19	BE	NACO PLANT	100,000	2010	2017			0
20	BE	NACO ROAD	600,000	2013	2020			0
21	BE	SPRING CANYON	100,000	2013	2020			0
22	BE	SPRING CANYON #2	11,000	2013	2020			0
23	BE	TIN TOWN	1,000,000	2009	2016			0
24	BE	TOMBSTONE CANYON	450,000	2012	2019			0
25	BE	WARREN #3	100,000	2008	2015		4,343	4,343
		BISBEE	2,381,000			0	4,343	4,343

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2009			2010			2011		
	SYSTEM	NAME	CAPACITY	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL
17	BE	MT RANCH ESTATES TANK #1	10,000	6,593	1,025	7,618			0			0
18	BE	MT RANCH ESTATES TANK #2	10,000	6,593	1,025	7,618			0			0
19	BE	NACO PLANT	100,000			0	18,367	5,064	23,431			0
20	BE	NACO ROAD	600,000			0			0			0
21	BE	SPRING CANYON	100,000			0			0			0
22	BE	SPRING CANYON #2	11,000			0			0			0
23	BE	TIN TOWN	1,000,000	74,282	18,028	92,309			0			0
24	BE	TOMBSTONE CANYON	450,000			0			0			0
25	BE	WARREN #3	100,000			0			0			0
		BISBEE	2,381,000	87,468	20,077	107,546	18,367	5,064	23,431	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2011			2012			2013			2014
	SYSTEM	NAME	YEAR GALS	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat
17	BE	MT RANCH ESTATES TANK #1	10,000			0			0			0	
18	BE	MT RANCH ESTATES TANK #2	10,000			0			0			0	
19	BE	NACO PLANT	100,000			0			0			0	
20	BE	NACO ROAD	600,000			0		13,956	13,956			0	
21	BE	SPRING CANYON	100,000			0		4,343	4,343			0	
22	BE	SPRING CANYON #2	11,000			0		1,089	1,089			0	
23	BE	TIN TOWN	1,000,000			0			0			0	
24	BE	TOMBSTONE CANYON	450,000	48,414	11,153	59,567			0			0	
25	BE	WARREN #3	100,000			0			0			0	20,042
		BISBEE	2,381,000	48,414	11,153	59,567	0	19,388	19,388	0	0	0	20,042

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2015			2016			2017			2018	
	SYSTEM	NAME	CAPACITY CALC	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost
17	BE	MT RANCH ESTATES TANK #1	10,000		0		1,025	1,025			0		
18	BE	MT RANCH ESTATES TANK #2	10,000		0		1,025	1,025			0		
19	BE	NACO PLANT	100,000		0			0		5,064	5,064		
20	BE	NACO ROAD	600,000		0			0			0		
21	BE	SPRING CANYON	100,000		0			0			0		
22	BE	SPRING CANYON #2	11,000		0			0			0		
23	BE	TIN TOWN	1,000,000		0		18,028	18,028			0		
24	BE	TOMBSTONE CANYON	450,000		0			0			0		
25	BE	WARREN #3	100,000	4,343	24,385			0			0		
		BISBEE	2,381,000	4,343	24,385	0	20,077	20,077	0	5,064	5,064	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2019			2020			2021	
	SYSTEM	NAME	CAPACITY GALS	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat
17	BE	MT RANCH ESTATES TANK #1	10,000	0			0			0		
18	BE	MT RANCH ESTATES TANK #2	10,000	0			0			0		
19	BE	NACO PLANT	100,000	0			0			0		
20	BE	NACO ROAD	600,000	0			0	52,795	13,956	66,751		
21	BE	SPRING CANYON	100,000	0			0	20,042	4,343	24,385		
22	BE	SPRING CANYON #2	11,000	0			0	6,998	1,089	8,087		
23	BE	TIN TOWN	1,000,000	0			0			0		
24	BE	TOMBSTONE CANYON	450,000	0		11,153	11,153			0		
25	BE	WARREN #3	100,000	0			0			0		
		BISBEE	2,381,000	0	0	11,153	11,153	79,836	19,388	99,224	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

						2022	
	SYSTEM	NAME	CAPACITY GALS	TOTAL	Internal	Ext. Coat	TOTAL
17	BE	MT RANCH ESTATES TANK #1	10,000	0			0
18	BE	MT RANCH ESTATES TANK #2	10,000	0			0
19	BE	NACO PLANT	100,000	0			0
20	BE	NACO ROAD	600,000	0			0
21	BE	SPRING CANYON	100,000	0			0
22	BE	SPRING CANYON #2	11,000	0			0
23	BE	TIN TOWN	1,000,000	0			0
24	BE	TOMBSTONE CANYON	450,000	0			0
25	BE	WARREN #3	100,000	0			0
		BISBEE	2,381,000	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	CAPACITY GALS	BUILT	LAST INT PAINT	LAST EXT PAINT	INTERIOR SQ FT	EXTERIOR SQ FT	Int. Coat	Ext. Coat		TOTAL	NEXT DUE
26	SV	FULLER TANK #1	1,000,000	1976	1992	1995	20,898	12,550	$80,039.34	$19,829.00		$99,868.34	2008
27	SV	FULLER TANK #2	130,000	1992	1992	1992	4,067	3,027	$17,162.74	$5,085.36		$22,248.10	2008
28	SV	SULGER EAST TANK #1	10,000	1980	1992	1992	703	588	$2,966.66	$987.84		$3,954.50	2010
29	SV	SULGER EAST TANK #2	12,000	N/A	1995	1995	796	656	$3,359.12	$1,102.08		$4,461.20	2010
30	SV	SULGER WEST	100,000	1972	1992	1992	3,622	2,737	$15,284.84	$4,598.16		$19,883.00	2010
31	SV	VILLAGE MEADOWS	250,000	1969	2006	2006	6,827	4,740	$28,809.94	$7,963.20		$36,773.14	2020
		SIERRA VISTA	1,502,000						$147,622.64	$39,565.64		$187,188.28	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

							2008	
	SYSTEM	NAME	CAPACITY GALS	Ext. Next Due	Ext. 2nd Due	Int. Coat	Ext. Coat	TOTAL
26	SV	FULLER TANK #1	1,000,000	2008	2015	87,039	19,829	106,868
27	SV	FULLER TANK #2	130,000	2006	2015	20,663	5,085	25,748
28	SV	SULGER EAST TANK #1	10,000	2010	2017			0
29	SV	SULGER EAST TANK #2	12,000	2010	2017			0
30	SV	SULGER WEST	100,000	2006	2013			0
31	SV	VILLAGE MEADOWS	250,000	2013	2020			0
		SIERRA VISTA	1,502,000			107,702	24,914	132,616

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2008			2009			2010		
	SYSTEM	NAME	CAPACITY GALS	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL
26	SV	FULLER TANK #1	1,000,000			0			0			0
27	SV	FULLER TANK #2	130,000			0			0			0
28	SV	SULGER EAST TANK #1	10,000			0	6,467	988	7,455			0
29	SV	SULGER EAST TANK #2	12,000			0	6,859	1,102	7,961			0
30	SV	SULGER WEST	100,000			0	18,785	4,598	23,383			0
31	SV	VILLAGE MEADOWS	250,000			0			0			0
		SIERRA VISTA	1,502,000	0	0	0	32,111	6,688	38,799	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	SV	FULLER TANK #1	1,000,000			0			0			0	
27	SV	FULLER TANK #2	130,000			0			0			0	
28	SV	SULGER EAST TANK #1	10,000			0			0			0	
29	SV	SULGER EAST TANK #2	12,000			0			0			0	
30	SV	SULGER WEST	100,000			0			0			0	
31	SV	VILLAGE MEADOWS	250,000			0		7,963	7,963			0	
		SIERRA VISTA	1,502,000	0	0	0	0	7,963	7,963	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY										
26	SV	FULLER TANK #1	1,000,000	19,829	19,829			0			0		
27	SV	FULLER TANK #2	130,000	5,085	5,085			0			0		
28	SV	SULGER EAST TANK #1	10,000		0			0		988	988		
29	SV	SULGER EAST TANK #2	12,000		0			0		1,102	1,102		
30	SV	SULGER WEST	100,000		0			0		4,598	4,598		
31	SV	VILLAGE MEADOWS	250,000		0			0			0		
		SIERRA VISTA	1,502,000	24,914	24,914	0	0	0	0	6,688	6,688	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2019			2020			2021	
	SYSTEM	NAME**	CAPACITY GALS	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost
26	SV	FULLER TANK #1	1,000,000	0			0			0		
27	SV	FULLER TANK #2	130,000	0			0			0		
28	SV	SULGER EAST TANK #1	10,000	0			0			0		
29	SV	SULGER EAST TANK #2	12,000	0			0			0		
30	SV	SULGER WEST	100,000	0			0			0		
31	SV	VILLAGE MEADOWS	250,000	0			0	35,810	7,963	43,773		
		SIERRA VISTA	1,502,000	0	0	0	0	35,810	7,963	43,773	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

						2022		
	SYSTEM	NAME	CAPACITY GALS	TOTAL	Int. Cost	Ext. Cost	TOTAL
26	SV	FULLER TANK #1	1,000,000	0			0
27	SV	FULLER TANK #2	130,000	0			0
28	SV	SULGER EAST TANK #1	10,000	0			0
29	SV	SULGER EAST TANK #2	12,000	0			0
30	SV	SULGER WEST	100,000	0			0
31	SV	VILLAGE MEADOWS	250,000	0			0
		SIERRA VISTA	1,502,000	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.68	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	CAPACITY	[illegible]	LAST INT PAINT	LAST EXT PAINT	INTERIOR SQ FT	EXTERIOR SQ FT	[illegible]	[illegible]		[illegible]	INDEX DUE
32	AO	AJO TOWN TANK #1	500,000	1981	2005	2005	11,743	7,584	$44,975.69	$11,982.72		$56,958.41	2019
33	AO	AJO TOWN TANK #2	250,000	1956	1991	1991	6,704	4,666	$28,290.88	$7,838.88		$36,129.76	2008
		AJO	750,000						$73,266.57	$19,821.60		$93,088.17	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

							2009	
	SYSTEM	NAME	CAPACITY GALS	Next Due	2nd Due	Int. Cost	Ext. Cost	TOTAL
32	AO	AJO TOWN TANK #1	500,000	2012	2019			-
33	AO	AJO TOWN TANK #2	250,000	2012	2019	31,791		31,791
		AJO	750,000			31,791	0	31,791

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2009			2010			2011		
	SYSTEM	NAME	CAPACITY GALS	Int.Cost	Ext.Cost	TOTAL	Int.Cost	Ext.Cost	TOTAL	Int.Cost	Ext.Cost	TOTAL
32	AO	AJO TOWN TANK #1	500,000			-			-			-
33	AO	AJO TOWN TANK #2	250,000			-			-			-
		AJO	750,000	0	0	0	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2011			2012							
	SYSTEM	NAME	CAPACITY GALS	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost
32	AO	AJO TOWN TANK #1	500,000		11,983	11,983			-			-	
33	AO	AJO TOWN TANK #2	250,000		7,839	7,839			-			-	
		AJO	750,000	0	19,822	19,822	0	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2013			2015			2017			2018	
	SYSTEM	NAME	CAPACITY GALS	EXT. COST	TOTAL	INT. COST	EXT. COST	TOTAL	INT. COST	EXT. COST	TOTAL	INT. COST	EXT. COST
32	AO	AJO TOWN TANK #1	500,000		-			-			-		
33	AO	AJO TOWN TANK #2	250,000		-			-			-		
		AJO	750,000	0	0	0	0	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2019			2020			2021	
	SYSTEM	NAME	CAPACITY GALS	TOTAL	Int Cost	Ext Cost	TOTAL	Int Cost	Ext Cost	TOTAL	Int Cost	Ext Cost
32	AO	AJO TOWN TANK #1	500,000	-	51,976	11,983	63,958			-		
33	AO	AJO TOWN TANK #2	250,000	-		7,839	7,839			-		
		AJO	750,000	0	51,976	19,822	71,797	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2022		
	SYSTEM	NAME	CAPACITY GALS	TOTAL	Int. Cost	Ext. Cost	TOTAL
32	AO	AJO TOWN TANK #1	500,000	-			-
33	AO	AJO TOWN TANK #2	250,000	-			-
		AJO	750,000	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	[illegible]	BUILT	LAST INT PAINT	LAST EXT PAINT	INTERIOR SQ FT	EXTERIOR SQ FT	[illegible]	[illegible]		[illegible]	Of Next Due
34	CG	BURGESS PEAK	2,000,000	1969	2007	2007	28,973	18,980	$110,966.59	$29,988.40		$140,954.99	2021
35	CG	CASA GRANDE MTN	5,000,000	1978	2006	2001	61,807	36,840	$236,720.81	$58,207.20		$294,928.01	2020
36	CG	COTTONWOOD	1,000,000	1961	1993	1994	18,421	12,094	$70,552.43	$19,108.52		$89,660.95	2009
37	CG	COTTONWOOD SETTLING	190,000	2007	2007	2007	5,599	3,965	$23,627.78	$6,661.20		$30,288.98	2021
38	CG	GOLF COURSE TANK #2	115,000	N/A	2001	2001	4,279	2,837	$18,057.38	$4,766.16		$22,823.54	2015
39	CG	HENESS ROAD SETTLING	70,000	2007	2007	2007	3,000	2,061	$12,660.00	$3,462.48		$16,122.48	2021
40	CG	INDIAN HILLS	100,000	1978	2002	2002	3,498	2,655	$14,761.56	$4,460.40		$19,221.96	2017
41	CG	NORTH PARK TANK #1	650,000	1985	2004	2004	11,461	8,715	$43,895.63	$13,769.70		$57,665.33	2018
42	CG	NORTH PARK TANK #2	35,000	1963	2004	2004	1,564	1,369	$6,600.08	$2,299.92		$8,900.00	2018
43	CG	SCOTT DRIVE TANK #1	110,000	1984	2002	2001	3,828	3,411	$16,154.16	$5,730.48		$21,884.64	2016
44	CG	SCOTT DRIVE TANK #2	5,000,000	1987	2003	2001	53,767	34,837	$205,927.61	$55,042.46		$260,970.07	2016
45	CG	TIERRA GRANDE TANK #2	10,000	N/A	2001	2001	778	674	$3,283.16	$1,132.32		$4,415.48	2015
46	CG	TIERRA GRANDE TANK #3	250,000	1987	2001	2001	6,950	4,814	$29,329.00	$8,087.52		$37,416.52	2015
47	CG	HENNESS ROAD TANK	1,100,000	2006	2006	2006	25,294	13,144	$96,876.02	$20,767.52		$117,643.54	2020
48	CG	WELL #27 SETTLING	4,000	2008	2008	2008	511	361	$2,156.42	$606.48		$2,762.90	2022
49	CG	WELL #28 SETTLING	35,000	2008	2008	2008	1,828	1,315	$7,714.16	$2,209.20		$9,923.36	2022
50	CG	WELL #29 SETTLING	31,000	2008	2008	2008	1,712	1,199	$7,224.64	$2,014.32		$9,238.96	2022
		CASA GRANDE	15,700,000						$906,507.43	$238,314.28		###########	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GALS	Est. Next Date	Est. 2nd Date	2009 Int. Cost	2009 Ext. Cost	TOTAL
34	CG	BURGESS PEAK	2,000,000	2014	2021			0
35	CG	CASA GRANDE MTN	5,000,000	2008	2015		58,207	58207.2
36	CG	COTTONWOOD	1,000,000	2009	2016			0
37	CG	COTTONWOOD SETTLING	190,000	2014	2021			0
38	CG	GOLF COURSE TANK #2	115,000	2008	2015		4,766	4766.16
39	CG	HENESS ROAD SETTLING	70,000	2014	2021			0
40	CG	INDIAN HILLS	100,000	2010	2017			0
41	CG	NORTH PARK TANK #1	650,000	2011	2018			0
42	CG	NORTH PARK TANK #2	35,000	2011	2018			0
43	CG	SCOTT DRIVE TANK #1	110,000	2009	2016			0
44	CG	SCOTT DRIVE TANK #2	5,000,000	2009	2016			0
45	CG	TIERRA GRANDE TANK #2	10,000	2008	2015		1,132	1132.32
46	CG	TIERRA GRANDE TANK #3	250,000	2008	2015		8,088	8087.52
47	CG	HENNESS ROAD TANK	1,100,000	2013	2020			0
48	CG	WELL #27 SETTLING	4,000	2015	2022			0
49	CG	WELL #28 SETTLING	35,000	2015	2022			0
50	CG	WELL #29 SETTLING	31,000	2015	2022			0
		CASA GRANDE	15,700,000			0	72,193	72,193

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2009			2010			2011		
	SYSTEM	NAME	CAPACITY GALS	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL
34	CG	BURGESS PEAK	2,000,000			0			0			0
35	CG	CASA GRANDE MTN	5,000,000			0			0			0
36	CG	COTTONWOOD	1,000,000	77,552	19,109	96660.95			0			0
37	CG	COTTONWOOD SETTLING	190,000			0			0			0
38	CG	GOLF COURSE TANK #2	115,000			0			0			0
39	CG	HENESS ROAD SETTLING	70,000			0			0			0
40	CG	INDIAN HILLS	100,000			0		4,460	4460.4			0
41	CG	NORTH PARK TANK #1	650,000			0			0		13,770	13769.7
42	CG	NORTH PARK TANK #2	35,000			0			0		2,300	2299.92
43	CG	SCOTT DRIVE TANK #1	110,000		5,730	5730.48			0			0
44	CG	SCOTT DRIVE TANK #2	5,000,000		55,042	55042.46			0			0
45	CG	TIERRA GRANDE TANK #2	10,000			0			0			0
46	CG	TIERRA GRANDE TANK #3	250,000			0			0			0
47	CG	HENNESS ROAD TANK	1,100,000			0			0			0
48	CG	WELL #27 SETTLING	4,000			0			0			0
49	CG	WELL #28 SETTLING	35,000			0			0			0
50	CG	WELL #29 SETTLING	31,000			0			0			0
		CASA GRANDE	15,700,000	77,552	79,881	157,434	0	4,460	4,460	0	16,070	16,070

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GALS	2008			2009			2010			2011
				Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost
34	CG	BURGESS PEAK	2,000,000			0			0		29,988	29988.4	
35	CG	CASA GRANDE MTN	5,000,000			0			0			0	
36	CG	COTTONWOOD	1,000,000			0			0			0	
37	CG	COTTONWOOD SETTLING	190,000			0			0		6,661	6661.2	
38	CG	GOLF COURSE TANK #2	115,000			0			0			0	21,557
39	CG	HENESS ROAD SETTLING	70,000			0			0		3,462	3462.48	
40	CG	INDIAN HILLS	100,000			0			0			0	
41	CG	NORTH PARK TANK #1	650,000			0			0			0	
42	CG	NORTH PARK TANK #2	35,000			0			0			0	
43	CG	SCOTT DRIVE TANK #1	110,000			0			0			0	
44	CG	SCOTT DRIVE TANK #2	5,000,000			0			0			0	
45	CG	TIERRA GRANDE TANK #2	10,000			0			0			0	6,783
46	CG	TIERRA GRANDE TANK #3	250,000			0			0			0	32,829
47	CG	HENNESS ROAD TANK	1,100,000			0		20,768	20767.52			0	
48	CG	WELL #27 SETTLING	4,000			0			0			0	
49	CG	WELL #28 SETTLING	35,000			0			0			0	
50	CG	WELL #29 SETTLING	31,000			0			0			0	
		CASA GRANDE	15,700,000	0	0	0	0	20,768	20,768	0	40,112	40,112	61,170

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2015			2016			2017			2018	
	SYSTEM	NAME	CAPACITY GALS	INT. COAT	TOTAL	INT. COAT	EXT. COAT	TOTAL	INT. COAT	EXT. COAT	TOTAL	INT. COAT	EXT. COAT
34	CG	BURGESS PEAK	2,000,000		0			0			0		
35	CG	CASA GRANDE MTN	5,000,000	58,207	58207.2			0			0		
36	CG	COTTONWOOD	1,000,000		0		19,109	19108.52			0		
37	CG	COTTONWOOD SETTLING	190,000		0			0			0		
38	CG	GOLF COURSE TANK #2	115,000	4,766	26323.54			0			0		
39	CG	HENESS ROAD SETTLING	70,000		0			0			0		
40	CG	INDIAN HILLS	100,000		0			0	18,262	4,460	22721.96		
41	CG	NORTH PARK TANK #1	650,000		0			0			0	50,896	13,770
42	CG	NORTH PARK TANK #2	35,000		0			0			0	10,100	2,300
43	CG	SCOTT DRIVE TANK #1	110,000		0	19,654	5,730	25384.64			0		
44	CG	SCOTT DRIVE TANK #2	5,000,000		0	212,928	55,042	267970.07			0		
45	CG	TIERRA GRANDE TANK #2	10,000	1,132	7915.48			0			0		
46	CG	TIERRA GRANDE TANK #3	250,000	8,088	40916.52			0			0		
47	CG	HENNESS ROAD TANK	1,100,000		0			0			0		
48	CG	WELL #27 SETTLING	4,000	606	606.48			0			0		
49	CG	WELL #28 SETTLING	35,000	2,209	2209.2			0			0		
50	CG	WELL #29 SETTLING	31,000	2,014	2014.32			0			0		
		CASA GRANDE	15,700,000	77,023	138,193	232,582	79,881	312,463	18,262	4,460	22,722	60,996	16,070

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2019			2020			2021		
	SYSTEM	NAME	CAPACITY GALS	TOTAL	INT COST	EXT COST	TOTAL	INT COST	EXT COST	TOTAL	INT COST	EXT COST
34	CG	BURGESS PEAK	2,000,000	0			0			0	117,967	29,988
35	CG	CASA GRANDE MTN	5,000,000	0			0	240,221		240220.81		
36	CG	COTTONWOOD	1,000,000	0			0			0		
37	CG	COTTONWOOD SETTLING	190,000	0			0			0	27,128	6,661
38	CG	GOLF COURSE TANK #2	115,000	0			0			0		
39	CG	HENESS ROAD SETTLING	70,000	0			0			0	16,160	3,462
40	CG	INDIAN HILLS	100,000	0			0			0		
41	CG	NORTH PARK TANK #1	650,000	64665.33			0			0		
42	CG	NORTH PARK TANK #2	35,000	12400			0			0		
43	CG	SCOTT DRIVE TANK #1	110,000	0			0			0		
44	CG	SCOTT DRIVE TANK #2	5,000,000	0			0			0		
45	CG	TIERRA GRANDE TANK #2	10,000	0			0			0		
46	CG	TIERRA GRANDE TANK #3	250,000	0			0			0		
47	CG	HENNESS ROAD TANK	1,100,000	0			0	103,876	20,768	124643.54		
48	CG	WELL #27 SETTLING	4,000	0			0			0		
49	CG	WELL #28 SETTLING	35,000	0			0			0		
50	CG	WELL #29 SETTLING	31,000	0			0			0		
		CASA GRANDE	15,700,000	77,065	0	0	0	344,097	20,768	364,864	161,254	40,112

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

						2022		
	SYSTEM	NAME	CAPACITY GALS	TOTAL	Int. Cost	Ext. Cost	TOTAL
34	CG	BURGESS PEAK	2,000,000	147954.99			0
35	CG	CASA GRANDE MTN	5,000,000	0			0
36	CG	COTTONWOOD	1,000,000	0			0
37	CG	COTTONWOOD SETTLING	190,000	33788.98			0
38	CG	GOLF COURSE TANK #2	115,000	0			0
39	CG	HENESS ROAD SETTLING	70,000	19622.48			0
40	CG	INDIAN HILLS	100,000	0			0
41	CG	NORTH PARK TANK #1	650,000	0			0
42	CG	NORTH PARK TANK #2	35,000	0			0
43	CG	SCOTT DRIVE TANK #1	110,000	0			0
44	CG	SCOTT DRIVE TANK #2	5,000,000	0			0
45	CG	TIERRA GRANDE TANK #2	10,000	0			0
46	CG	TIERRA GRANDE TANK #3	250,000	0			0
47	CG	HENNESS ROAD TANK	1,100,000	0			0
48	CG	WELL #27 SETTLING	4,000	0	5,656	606	6262.9
49	CG	WELL #28 SETTLING	35,000	0	11,214	2,209	13423.36
50	CG	WELL #29 SETTLING	31,000	0	10,725	2,014	12738.96
		CASA GRANDE	15,700,000	201,366	27,595	4,830	32,425

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	CAPACITY GALS	BUILT	LAST INT PAINT	LAST EXT PAINT	INTERIOR SQ FT	EXTERIOR SQ FT	INT COST	EXT COST		TOTAL	INT RECOAT
51	ST	STANFIELD TANK #2	100,000	1976	2006	2006	3,498	2,655	$14,761.56	$4,460.40		$19,221.96	2020
52	ST	STANFIELD TANK #3	20,000	N/A	1987	2006	1,290	1,162	$5,443.80	$1,952.16		$7,395.96	2013
53	ST	TABLETOP	16,000	1952	1990	1990	1,020	840	$4,304.40	$1,411.20		$5,715.60	2009
		STANFIELD	136,000						$24,509.76	$7,823.76		$32,333.52	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

						2008		
	SYSTEM	NAME	CAPACITY GALS	Ext. Next Due	Ext. 2nd Due	Int. Coat	Ext. Coat	TOTAL
51	ST	STANFIELD TANK #2	100,000	2013	2020			0
52	ST	STANFIELD TANK #3	20,000	2013	2020			0
53	ST	TABLETOP	16,000	2009	2016			0
		STANFIELD	136,000			0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2009			2010			2011		
	SYSTEM	NAME	CAPACITY GALS	INT COST	EXT COST	TOTAL	INT COST	EXT COST	TOTAL	INT COST	EXT COST	TOTAL
51	ST	STANFIELD TANK #2	100,000			0			0			0
52	ST	STANFIELD TANK #3	20,000			0			0			0
53	ST	TABLETOP	16,000	7,804	1,411	9,216			0			0
		STANFIELD	136,000	7,804	1,411	9,216	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.68

	SYSTEM	NAME											
51	ST	STANFIELD TANK #2	100,000			0		4,460	4,460			0	
52	ST	STANFIELD TANK #3	20,000			0	8,944	1,952	10,896			0	
53	ST	TABLETOP	16,000			0			0			0	
		STANFIELD	136,000	0	0	0	8,944	6,413	15,356	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2015			2016			2017			2018	
	SYSTEM	NAME	CAPACITY GALS	INT. COST	EXT. COST	TOTAL	INT. COST	EXT. COST	TOTAL	INT. COST	EXT. COST	TOTAL	INT. COST	EXT. COST
51	ST	STANFIELD TANK #2	100,000		0			0				0		
52	ST	STANFIELD TANK #3	20,000		0			0				0		
53	ST	TABLETOP	16,000		0		1,411	1,411				0		
		STANFIELD	136,000	0	0	0	1,411	1,411	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME										
51	ST	STANFIELD TANK #2	100,000	0			0	18,262	4,460	22,722		
52	ST	STANFIELD TANK #3	20,000	0			0		1,952	1,952		
53	ST	TABLETOP	16,000	0			0			0		
		STANFIELD	136,000	0	0	0	0	18,262	6,413	24,674	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2009		
	SYSTEM	NAME	CAPACITY GALS	TOTAL	INT. COST	EXT. COST	TOTAL
51	ST	STANFIELD TANK #2	100,000	0			0
52	ST	STANFIELD TANK #3	20,000	0			0
53	ST	TABLETOP	16,000	0			0
		STANFIELD	136,000	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	CAPACITY GALS	BUILT	LAST INT PAINT	LAST EXT PAINT	INTERIOR SQ FT	EXTERIOR SQ FT	[illegible]	[illegible]		TOTAL	[illegible]
54	WT	BEAUTIFUL AZ ESTATES #1	500,000	1982	1990	2002	10,255	7,518	$39,276.65	$11,878.44		$51,155.09	2010
55	WT	BEAUTIFUL AZ ESTATES #2	1,000,000	2002	2002	2002	16,233	11,251	$62,172.39	$17,776.58		$79,948.97	2016
56	WT	BLUE HORIZON SETTLING	106,000	2008	2008	2008	4,393	2,556	$18,538.46	$4,294.08		$22,832.54	2022
57	WT	BLUE HORIZON TANK #1	1,000,000	2008	2008	2008	29,942	13,718	$114,677.86	$21,674.44		$136,352.30	2022
58	WT	MONTE VISTA SETTLING	21,000	2008	2008	2008	1,328	968	$5,604.16	$1,626.24		$7,230.40	2022
59	WT	MONTE VISTA TANK #1	50,000	1967	1991	1991	2,157	1,739	$9,102.54	$2,921.52		$12,024.06	2009
60	WT	MONTE VISTA TANK #2	100,000	1972	1991	1991	3,683	2,778	$15,542.26	$4,667.04		$20,209.30	2009
		WHITE TANKS	2,777,000						$264,914.32	$64,838.34		$329,752.66	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

						2008		
	SYSTEM	NAME	CAPACITY GALS	Ext. Next Due	Ext. 2nd Due	Int. Coat	Ext. Coat	TOTAL
54	WT	BEAUTIFUL AZ ESTATES #1	500,000	2010	2017			0
55	WT	BEAUTIFUL AZ ESTATES #2	1,000,000	2009	2016			0
56	WT	BLUE HORIZON SETTLING	106,000	2015	2022			0
57	WT	BLUE HORIZON TANK #1	1,000,000	2015	2022			0
58	WT	MONTE VISTA SETTLING	21,000	2015	2022			0
59	WT	MONTE VISTA TANK #1	50,000	2009	2016			0
60	WT	MONTE VISTA TANK #2	100,000	2009	2016			0
		WHITE TANKS	2,777,000			0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
54	WT	BEAUTIFUL AZ ESTATES #1	500,000			0	46,277	11,878	58,155			0
55	WT	BEAUTIFUL AZ ESTATES #2	1,000,000		17,777	17,777			0			0
56	WT	BLUE HORIZON SETTLING	106,000			0			0			0
57	WT	BLUE HORIZON TANK #1	1,000,000			0			0			0
58	WT	MONTE VISTA SETTLING	21,000			0			0			0
59	WT	MONTE VISTA TANK #1	50,000	12,603	2,922	15,524			0			0
60	WT	MONTE VISTA TANK #2	100,000	19,042	4,667	23,709			0			0
		WHITE TANKS	2,777,000	31,645	25,365	57,010	46,277	11,878	58,155	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2012			2013			2014				
	SYSTEM	NAME	REPLACEMENT COST	INT. COST	EXT. COST	TOTAL	INT. COST	EXT. COST	TOTAL	INT. COST	EXT. COST	TOTAL	INT. COST	EXT. COST
54	WT	BEAUTIFUL AZ ESTATES #1	500,000			0			0			0		
55	WT	BEAUTIFUL AZ ESTATES #2	1,000,000			0			0			0		
56	WT	BLUE HORIZON SETTLING	106,000			0			0			0		
57	WT	BLUE HORIZON TANK #1	1,000,000			0			0			0		
58	WT	MONTE VISTA SETTLING	21,000			0			0			0		
59	WT	MONTE VISTA TANK #1	50,000			0			0			0		
60	WT	MONTE VISTA TANK #2	100,000			0			0			0		
		WHITE TANKS	2,777,000	0	0	0	0	0	0	0	0	0	0	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	[illegible]	[illegible]	[illegible]	Int. Coat	Ext. Coat	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
54	WT	BEAUTIFUL AZ ESTATES #1	500,000		0			0		11,878	11,878		
55	WT	BEAUTIFUL AZ ESTATES #2	1,000,000		0	69,172	17,777	86,949			0		
56	WT	BLUE HORIZON SETTLING	106,000	4,294	4,294			0			0		
57	WT	BLUE HORIZON TANK #1	1,000,000	21,674	21,674			0			0		
58	WT	MONTE VISTA SETTLING	21,000	1,626	1,626			0			0		
59	WT	MONTE VISTA TANK #1	50,000		0		2,922	2,922			0		
60	WT	MONTE VISTA TANK #2	100,000		0		4,667	4,667			0		
		WHITE TANKS	2,777,000	27,595	27,595	69,172	25,365	94,538	0	11,878	11,878	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

								2020			2021	
	SYSTEM	NAME	CAPACITY SALE	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat
54	WT	BEAUTIFUL AZ ESTATES #1	500,000	0			0			0		
55	WT	BEAUTIFUL AZ ESTATES #2	1,000,000	0			0			0		
56	WT	BLUE HORIZON SETTLING	106,000	0			0			0		
57	WT	BLUE HORIZON TANK #1	1,000,000	0			0			0		
58	WT	MONTE VISTA SETTLING	21,000	0			0			0		
59	WT	MONTE VISTA TANK #1	50,000	0			0			0		
60	WT	MONTE VISTA TANK #2	100,000	0			0			0		
		WHITE TANKS	2,777,000	0	0	0	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY COST	[illegible]	[illegible]	[illegible]	[illegible]
54	WT	BEAUTIFUL AZ ESTATES #1	500,000	0			0
55	WT	BEAUTIFUL AZ ESTATES #2	1,000,000	0			0
56	WT	BLUE HORIZON SETTLING	106,000	0	22,038	4,294	26,333
57	WT	BLUE HORIZON TANK #1	1,000,000	0	121,678	21,674	143,352
58	WT	MONTE VISTA SETTLING	21,000	0	9,104	1,626	10,730
59	WT	MONTE VISTA TANK #1	50,000	0			0
60	WT	MONTE VISTA TANK #2	100,000	0			0
		WHITE TANKS	2,777,000	0	152,820	27,595	180,415

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	CAPACITY CALC	BUILT	LAST INT PAINT	LAST EXT PAINT	INTERIOR SQ FT	EXTERIOR SQ FT	[illegible]	[illegible]		TOTAL	[illegible]
61	CL	DEARATION TANK (WELL9&10)	35,500	1986	2003	2003	1,872	1,706	$7,899.84	$2,866.08		$10,765.92	2017
62	CL	METER SHOP ELEVATED	100,000	1929	1992	2007	3,398	2,617	$14,339.56	$4,396.56		$18,736.12	2010
63	CL	[illegible] 9&10)	116,000	1985	2003	2003	6,270	3,382	$26,459.40	$5,681.76		$32,141.16	2017
64	CL	VALLEY FARMS	15,000	1951	1983	1983	975	799	$4,114.50	$1,342.32		$5,456.82	2009
65	CL	WELL #7 1 MILLION	1,000,000	1978	2000	2007	17,351	11,851	$66,454.33	$18,724.58		$85,178.91	2014
66	CL	WELL #7 1/2 MILLION	500,000	1950	2007	2007	10,200	7,538	$39,066.00	$11,910.04		$50,976.04	2021
		COOLIDGE	1,766,500						$158,333.63	$44,921.34		$203,254.97	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

						2008		
	SYSTEM	NAME	CAPACITY GALS	Ext. Next Due	Ext. 2nd Due	Int. Coat	Ext. Coat	TOTAL
61	CL	DEARATION TANK (WELL9&10)	35,500	2010	2017			0
62	CL	METER SHOP ELEVATED	100,000	2014	2021			0
63	CL	[illegible] 9&10)	116,000	2010	2017			0
64	CL	VALLEY FARMS	15,000	2009	2016			0
65	CL	WELL #7 1 MILLION	1,000,000	2014	2021			0
66	CL	WELL #7 1/2 MILLION	500,000	2014	2021			0
		COOLIDGE	1,766,500			0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	[illegible]	2009			2010			2011		
				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
61	CL	DEARATION TANK (WELL9&10)	35,500			0		2,866	2866.08			0
62	CL	METER SHOP ELEVATED	100,000			0	17,840		17839.56			0
63	CL	[illegible] 9&10)	116,000			0		5,682	5681.76			0
64	CL	VALLEY FARMS	15,000	7,615	1,342	8956.82			0			0
65	CL	WELL #7 1 MILLION	1,000,000			0			0			0
66	CL	WELL #7 1/2 MILLION	500,000			0			0			0
		COOLIDGE	1,766,500	7,615	1,342	8,957	17,840	8,548	26,387	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2012			2013			2014			
	SYSTEM	NAME	TOTAL COST	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost
61	CL	DEARATION TANK (WELL9&10)	35,500			0			0			0	
62	CL	METER SHOP ELEVATED	100,000			0			0		4,397	4396.56	
63	CL	STORAGE TANK (WELL 9&10)	116,000			0			0			0	
64	CL	VALLEY FARMS	15,000			0			0			0	
65	CL	WELL #7 1 MILLION	1,000,000			0			0	73,454	18,725	92178.91	
66	CL	WELL #7 1/2 MILLION	500,000			0			0		11,910	11910.04	
		COOLIDGE	1,766,500	0	0	0	0	0	0	73,454	35,031	108,486	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GAL	2015		2016			2017			2018	
				Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost
61	CL	DEARATION TANK (WELL9&10)	35,500		0			0	11,400	2,866	14265.92		
62	CL	METER SHOP ELEVATED	100,000		0			0			0		
63	CL	STORAGE TANK (WELL 9&10)	116,000		0			0	29,959	5,682	35641.16		
64	CL	VALLEY FARMS	15,000		0		1,342	1342.32			0		
65	CL	WELL #7 1 MILLION	1,000,000		0			0			0		
66	CL	WELL #7 1/2 MILLION	500,000		0			0			0		
		COOLIDGE	1,766,500	0	0	0	1,342	1,342	41,359	8,548	49,907	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2019			2020			2021	
	SYSTEM	NAME	CAPACITY CALS	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat
61	CL	DEARATION TANK (WELL9&10)	35,500	0			0			0		
62	CL	METER SHOP ELEVATED	100,000	0			0			0		4,397
63	CL	[illegible] 9&10)	116,000	0			0			0		
64	CL	VALLEY FARMS	15,000	0			0			0		
65	CL	WELL #7 1 MILLION	1,000,000	0			0			0		18,725
66	CL	WELL #7 1/2 MILLION	500,000	0			0			0	46,066	11,910
		COOLIDGE	1,766,500	0	0	0	0	0	0	0	46,066	35,031

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

						2022		
	SYSTEM	NAME	CAPACITY GALS	TOTAL	Int. Cost	Ext. Cost	TOTAL
61	CL	DEARATION TANK (WELL9&10)	35,500	0			0
62	CL	METER SHOP ELEVATED	100,000	4396.56			0
63	CL	SETTLING TANK (WELL 9&10)	116,000	0			0
64	CL	VALLEY FARMS	15,000	0			0
65	CL	WELL #7 1 MILLION	1,000,000	18724.58			0
66	CL	WELL #7 1/2 MILLION	500,000	57976.04			0
		COOLIDGE	1,766,500	81,097	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

FOR RECOAT YEAR GO TO CELL CT90

FOR SUMMARY, GO TO CELL BG6
FOR NORTHERN GROUP SUMMARY GO TO CELL CA5

	SYSTEM	NAME	CAPACITY GALS	BUILT	LAST INT PAINT	LAST EXT PAINT	INTERIOR SQ FT	EXTERIOR SQ FT	INT COST	EXT COST		TOTAL	NEXT RECOAT
67	LK	MOONRIDGE #1	350,000	1987	1987	1999	9,522	6,027	$36,469.26	$9,522.66		$45,991.92	2013
68	LK	MOONRIDGE #2	350,000	1999	1999	1999	9,522	6,027	$36,469.26	$9,522.66		$45,991.92	2013
69	LK	PINE LAKES TANK #3	500,000	1993	1992	1992	10,024	7,579	$38,391.92	$11,974.82		$50,366.74	2009
70	LK	PINETOP LAKES TANK #1	310,000	1973	1991	1991	7,974	5,421	$30,540.42	$8,565.18		$39,105.60	2010
71	LK	PINETOP LAKES TANK #2	1,000,000	1985	1985	1998	16,027	12,657	$61,383.41	$19,998.06		$81,381.47	2010
72	LK	RIM ROAD TANK #1	500,000	1972	1994	1998	10,650	7,526	$40,789.50	$11,891.08		$52,680.58	2014
73	LK	RIM ROAD TANK #2	41,000	1966	1998	1998	1,976	1,750	$8,338.72	$2,940.00		$11,278.72	2014
74	LK	WOODLAND PARK	100,000	1973	1987	1987	3,843	2,584	$16,217.46	$4,341.12		$20,558.58	2008
		LAKESIDE	3,151,000						$268,599.95	$78,755.58		$347,355.53	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

						2008		
	SYSTEM	NAME	CAPACITY GALS	Ext. Next Due	Ext. 2nd Due	Int. Cost	Ext. Cost	TOTAL
67	LK	MOONRIDGE #1	350,000	2013	2020			-
68	LK	MOONRIDGE #2	350,000	2013	2020			-
69	LK	PINE LAKES TANK #3	500,000	2009	2016			-
70	LK	PINETOP LAKES TANK #1	310,000	2010	2017			-
71	LK	PINETOP LAKES TANK #2	1,000,000	2010	2017			-
72	LK	RIM ROAD TANK #1	500,000	2014	2021			-
73	LK	RIM ROAD TANK #2	41,000	2014	2021			-
74	LK	WOODLAND PARK	100,000	2008	2015	19,717	4,341	24,059
		LAKESIDE	3,151,000			19,717	4,341	24,059

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2009			2010			2011		
	SYSTEM	NAME		Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL
67	LK	MOONRIDGE #1	350,000			-			-			-
68	LK	MOONRIDGE #2	350,000			-			-			-
69	LK	PINE LAKES TANK #3	500,000	45,392	11,975	57,367			-			-
70	LK	PINETOP LAKES TANK #1	310,000			-	37,540	8,565	46,106			-
71	LK	PINETOP LAKES TANK #2	1,000,000			-	68,383	19,998	88,381			-
72	LK	RIM ROAD TANK #1	500,000			-			-			-
73	LK	RIM ROAD TANK #2	41,000			-			-			-
74	LK	WOODLAND PARK	100,000			-			-			-
		LAKESIDE	3,151,000	45,392	11,975	57,367	105,924	28,563	134,487	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2012			2013			2014			
	SYSTEM	NAME	CAPACITY GALS	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat
67	LK	MOONRIDGE #1	350,000			-	43,469	9,523	52,992			-	
68	LK	MOONRIDGE #2	350,000			-	43,469	9,523	52,992			-	
69	LK	PINE LAKES TANK #3	500,000			-			-			-	
70	LK	PINETOP LAKES TANK #1	310,000			-			-			-	
71	LK	PINETOP LAKES TANK #2	1,000,000			-			-			-	
72	LK	RIM ROAD TANK #1	500,000			-			-	47,790	11,891	59,681	
73	LK	RIM ROAD TANK #2	41,000			-			-	11,839	2,940	14,779	
74	LK	WOODLAND PARK	100,000			-			-			-	
		LAKESIDE	3,151,000	0	0	0	86,939	19,045	105,984	59,628	14,831	74,459	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY									
67	LK	MOONRIDGE #1	350,000		-			-			-		
68	LK	MOONRIDGE #2	350,000		-			-			-		
69	LK	PINE LAKES TANK #3	500,000		-		11,975	11,975			-		
70	LK	PINETOP LAKES TANK #1	310,000		-			-		8,565	8,565		
71	LK	PINETOP LAKES TANK #2	1,000,000		-			-		19,998	19,998		
72	LK	RIM ROAD TANK #1	500,000		-			-			-		
73	LK	RIM ROAD TANK #2	41,000		-			-			-		
74	LK	WOODLAND PARK	100,000	4,341	4,341			-			-		
		LAKESIDE	3,151,000	4,341	4,341	0	11,975	11,975	0	28,563	28,563	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2009							2020
	SYSTEM	TANK			Int. Cost	Ext. Cost	TOTAL	Int. Cost				Ext. Cost
67	LK	MOONRIDGE #1	350,000	-			-		9,523	9,523		
68	LK	MOONRIDGE #2	350,000	-			-		9,523	9,523		
69	LK	PINE LAKES TANK #3	500,000	-			-			-		
70	LK	PINETOP LAKES TANK #1	310,000	-			-			-		
71	LK	PINETOP LAKES TANK #2	1,000,000	-			-			-		
72	LK	RIM ROAD TANK #1	500,000	-			-			-		11,891
73	LK	RIM ROAD TANK #2	41,000	-			-			-		2,940
74	LK	WOODLAND PARK	100,000	-			-			-		
		LAKESIDE	3,151,000	0	0	0	0	0	19,045	19,045	0	14,831

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GAL				
67	LK	MOONRIDGE #1	350,000	-			-
68	LK	MOONRIDGE #2	350,000	-			-
69	LK	PINE LAKES TANK #3	500,000	-			-
70	LK	PINETOP LAKES TANK #1	310,000	-			-
71	LK	PINETOP LAKES TANK #2	1,000,000	-			-
72	LK	RIM ROAD TANK #1	500,000	11,891			-
73	LK	RIM ROAD TANK #2	41,000	2,940			-
74	LK	WOODLAND PARK	100,000	-			-
		LAKESIDE	3,151,000	14,831	0	0	0

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	CAPACITY GALS	BUILT	LAST INT PAINT	LAST EXT PAINT	INTERIOR SQ FT	EXTERIOR SQ FT	Int Coat	Ext Coat		TOTAL	Int Next Coat
75	OV	SECTION 31	250,000	1986	1986	2007	6,341	4,802	$26,759.02	$8,067.36		$34,826.38	2010
76	OV	SECTION 31 #2	315,000	2007	2007	2007	7,963	5,441	$30,498.29	$8,596.78		$39,095.07	2021
77	OV	TIMBERLAKE PINE TANK #1	100,000	1981	1992	1991	3,816	3,442	$16,103.52	$5,782.56		$21,886.08	2009
78	OV	TIMBERLAKE PINE TANK #2	1,000,000	1990	1991	1991	15,742	12,247	$60,291.86	$19,350.26		$79,642.12	2009
79	OV	ZANE GREY TANK #1	25,000	N/A	1999	1999	1,449	1,222	$6,114.78	$2,052.96		$8,167.74	2015
80	OV	ZANE GREY TANK #2	100,000	N/A	1999	1999	3,498	2,655	$14,761.56	$4,460.40		$19,221.96	2015
		OVERGAARD	1,790,000						$154,529.03	$48,310.32		$202,839.35	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

						2008		
	SYSTEM	NAME	CAPACITY CALS	Ext. Next Due	Ext. 2nd Due	Int. Cost	Ext. Cost	TOTAL
75	OV	SECTION 31	250,000	2014	2021			0
76	OV	SECTION 31 #2	315,000	2014	2021			0
77	OV	TIMBERLAKE PINE TANK #1	100,000	2009	2016			0
78	OV	TIMBERLAKE PINE TANK #2	1,000,000	2009	2016			0
79	OV	ZANE GREY TANK #1	25,000	2008	2015		2,053	2,053
80	OV	ZANE GREY TANK #2	100,000	2008	2015		4,460	4,460
		OVERGAARD	1,790,000			0	6,513	6,513

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2009			2010			2011		
	SYSTEM	NAME	CAPACITY GALS	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL
75	OV	SECTION 31	250,000			0	30,259		30,259			0
76	OV	SECTION 31 #2	315,000			0			0			0
77	OV	TIMBERLAKE PINE TANK #1	100,000	19,604	5,783	25,386			0			0
78	OV	TIMBERLAKE PINE TANK #2	1,000,000	67,292	19,350	86,642			0			0
79	OV	ZANE GREY TANK #1	25,000			0			0			0
80	OV	ZANE GREY TANK #2	100,000			0			0			0
		OVERGAARD	1,790,000	86,895	25,133	112,028	30,259	0	30,259	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2012			2013			2014			
	SYSTEM	NAME	CAPACITY GALS	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat
75	OV	SECTION 31	250,000			0			0		8,067	8,067	
76	OV	SECTION 31 #2	315,000			0			0		8,597	8,597	
77	OV	TIMBERLAKE PINE TANK #1	100,000			0			0			0	
78	OV	TIMBERLAKE PINE TANK #2	1,000,000			0			0			0	
79	OV	ZANE GREY TANK #1	25,000			0			0			0	9,615
80	OV	ZANE GREY TANK #2	100,000			0			0			0	21,762
		OVERGAARD	1,790,000	0	0	0	0	0	0	0	16,664	16,664	31,376

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2015		2016			2017			2018	
	SYSTEM	NAME	CAPACITY GAL	Ext Cost	TOTAL	Int Cost	Ext Cost	TOTAL	Int Cost	Ext Cost	TOTAL	Int Cost	Ext Cost
75	OV	SECTION 31	250,000		0			0			0		
76	OV	SECTION 31 #2	315,000		0			0			0		
77	OV	TIMBERLAKE PINE TANK #1	100,000		0		5,783	5,783			0		
78	OV	TIMBERLAKE PINE TANK #2	1,000,000		0		19,350	19,350			0		
79	OV	ZANE GREY TANK #1	25,000	2,053	11,668			0			0		
80	OV	ZANE GREY TANK #2	100,000	4,460	26,222			0			0		
		OVERGAARD	1,790,000	6,513	37,890	0	25,133	25,133	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GALS	TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
75	OV	SECTION 31	250,000	0			0			0		8,067
76	OV	SECTION 31 #2	315,000	0			0			0	37,498	8,597
77	OV	TIMBERLAKE PINE TANK #1	100,000	0			0			0		
78	OV	TIMBERLAKE PINE TANK #2	1,000,000	0			0			0		
79	OV	ZANE GREY TANK #1	25,000	0			0			0		
80	OV	ZANE GREY TANK #2	100,000	0			0			0		
		OVERGAARD	1,790,000	0	0	0	0	0	0	0	37,498	16,664

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2002		
	SYSTEM	NAME	CAPACITY GALLONS	TOTAL SQ. FT.	Int. Cost	Ext. Cost	TOTAL
75	OV	SECTION 31	250,000	8,067			0
76	OV	SECTION 31 #2	315,000	46,095			0
77	OV	TIMBERLAKE PINE TANK #1	100,000	0			0
78	OV	TIMBERLAKE PINE TANK #2	1,000,000	0			0
79	OV	ZANE GREY TANK #1	25,000	0			0
80	OV	ZANE GREY TANK #2	100,000	0			0
		OVERGAARD	1,790,000	54,162	0	0	0

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	CAPACITY GA	YR BUILT	LAST INT PAINT	LAST EXT PAINT	INTERIOR SQ FT	EXTERIOR SQ FT	INT COST	EXT COST		TOTAL	NEXT DUE
81	MI	BANDY HEIGHTS	40,000	1973	1990	1990	1,892	1,682	$7,984.24	$2,825.76		$10,810.00	2009
82	MI	CENTRAL HEIGHTS TANK #1	120,000	1956	1993	1989	3,969	3,188	$16,749.18	$5,355.84		$22,105.02	2009
83	MI	CENTRAL HEIGHTS TANK #2	250,000	1963	1984	1989	6,195	4,780	$26,142.90	$8,030.40		$34,173.30	2009
84	MI	CENTRAL HEIGHTS TANK #3	500,000	1975	1987	1989	10,233	8,243	$39,192.39	$13,023.94		$52,216.33	2009
85	MI	CLAYPOOL	100,000	N/A	1994	1994	3,498	2,655	$14,761.56	$4,460.40		$19,221.96	2010
86	MI	CLAYPOOL - COTTONWOOD	200,000	1968	1994	1998	5,949	4,802	$25,104.78	$8,067.36		$33,172.14	2010
87	MI	DALTON	15,000	N/A	1991	1990	955	839	$4,030.10	$1,409.52		$5,439.62	2006
88	MI	MIAMI TOWN TANK	500,000	1953	2002	2002	10,650	7,526	$40,789.50	$11,891.08		$52,680.58	2017
89	MI	PERSHING	20,000	1960	2002	2002	1,188	1,031	$5,013.36	$1,732.08		$6,745.44	2017
90	MI	WELLS #18 & #20 - TANK #1	44,000	N/A	1995	1990	2,152	1,926	$9,081.44	$3,235.68		$12,317.12	2011
91	MI	WELLS #18 & #20 - TANK#2	1,000,000	1992	1992	1992	16,641	11,759	$63,735.03	$18,579.22		$82,314.25	2011
		MIAMI	2,789,000						$252,584.48	$78,611.28		$331,195.76	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

						2008		
	SYSTEM	NAME	CAPACITY GALS	Ext. Next Due	Ext. 2nd Due	Int. Cost	Ext. Cost	TOTAL
81	MI	BANDY HEIGHTS	40,000	2009	2016	7,984	2,826	10,810
82	MI	CENTRAL HEIGHTS TANK #1	120,000	2009	2016			0
83	MI	CENTRAL HEIGHTS TANK #2	250,000	2009	2016			0
84	MI	CENTRAL HEIGHTS TANK #3	500,000	2009	2016			0
85	MI	CLAYPOOL	100,000	2010	2017			0
86	MI	CLAYPOOL - COTTONWOOD	200,000	2010	2017			0
87	MI	DALTON	15,000	2006	2013	4,030	1,410	5,440
88	MI	MIAMI TOWN TANK	500,000	2010	2017			0
89	MI	PERSHING	20,000	2010	2017			0
90	MI	WELLS #18 & #20 - TANK #1	44,000	2011	2018			0
91	MI	WELLS #18 & #20 - TANK#2	1,000,000	2011	2018			0
		MIAMI	2,789,000			12,014	4,235	16,250

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	COST	2009 Int. Coat	2009 Ext. Coat	2009 TOTAL	2010 Int. Coat	2010 Ext. Coat	2010 TOTAL	2011 Int. Coat	2011 Ext. Coat	2011 TOTAL
81	MI	BANDY HEIGHTS	40,000			0			0			0
82	MI	CENTRAL HEIGHTS TANK #1	120,000	20,249	5,356	25,605			0			0
83	MI	CENTRAL HEIGHTS TANK #2	250,000	29,643	8,030	37,673			0			0
84	MI	CENTRAL HEIGHTS TANK #3	500,000	46,192	13,024	59,216			0			0
85	MI	CLAYPOOL	100,000			0	18,262	4,460	22,722			0
86	MI	CLAYPOOL - COTTONWOOD	200,000			0	28,605	8,067	36,672			0
87	MI	DALTON	15,000			0			0			0
88	MI	MIAMI TOWN TANK	500,000			0		11,891	11,891			0
89	MI	PERSHING	20,000			0		1,732	1,732			0
90	MI	WELLS #18 & #20 - TANK #1	44,000			0			0	12,581	3,236	15,817
91	MI	WELLS #18 & #20 - TANK#2	1,000,000			0			0	70,735	18,579	89,314
		MIAMI	2,789,000	96,084	26,410	122,495	46,866	26,151	73,017	83,316	21,815	105,131

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY	2007			2008			2009			
				Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost
81	MI	BANDY HEIGHTS	40,000			0			0			0	
82	MI	CENTRAL HEIGHTS TANK #1	120,000			0			0			0	
83	MI	CENTRAL HEIGHTS TANK #2	250,000			0			0			0	
84	MI	CENTRAL HEIGHTS TANK #3	500,000			0			0			0	
85	MI	CLAYPOOL	100,000			0			0			0	
86	MI	CLAYPOOL - COTTONWOOD	200,000			0			0			0	
87	MI	DALTON	15,000			0			0			0	
88	MI	MIAMI TOWN TANK	500,000			0			0			0	
89	MI	PERSHING	20,000			0			0			0	
90	MI	WELLS #18 & #20 - TANK #1	44,000			0			0			0	
91	MI	WELLS #18 & #20 - TANK#2	1,000,000			0			0			0	
		MIAMI	2,789,000	0	0	0	0	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2015		2016			2017			2018	
	SYSTEM	NAME	CAPACITY GALS	Int. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost
81	MI	BANDY HEIGHTS	40,000	2,826	2,826			0			0		
82	MI	CENTRAL HEIGHTS TANK #1	120,000		0			0			0		
83	MI	CENTRAL HEIGHTS TANK #2	250,000		0			0			0		
84	MI	CENTRAL HEIGHTS TANK #3	500,000		0			0			0		
85	MI	CLAYPOOL	100,000		0			0		4,460	4,460		
86	MI	CLAYPOOL - COTTONWOOD	200,000		0			0		8,067	8,067		
87	MI	DALTON	15,000	1,410	1,410			0			0		
88	MI	MIAMI TOWN TANK	500,000		0			0	47,790	11,891	59,681		
89	MI	PERSHING	20,000		0			0	8,513	1,732	10,245		
90	MI	WELLS #18 & #20 - TANK #1	44,000		0			0			0		3,236
91	MI	WELLS #18 & #20 - TANK#2	1,000,000		0			0			0		18,579
		MIAMI	2,789,000	4,235	4,235	0	0	0	56,303	26,151	82,454	0	21,815

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME										
81	MI	BANDY HEIGHTS	40,000	0			0			0		
82	MI	CENTRAL HEIGHTS TANK #1	120,000	0			0			0		
83	MI	CENTRAL HEIGHTS TANK #2	250,000	0			0			0		
84	MI	CENTRAL HEIGHTS TANK #3	500,000	0			0			0		
85	MI	CLAYPOOL	100,000	0			0			0		
86	MI	CLAYPOOL - COTTONWOOD	200,000	0			0			0		
87	MI	DALTON	15,000	0			0			0		
88	MI	MIAMI TOWN TANK	500,000	0			0			0		
89	MI	PERSHING	20,000	0			0			0		
90	MI	WELLS #18 & #20 - TANK #1	44,000	3,236			0			0		
91	MI	WELLS #18 & #20 - TANK#2	1,000,000	18,579			0			0		
		MIAMI	2,789,000	21,815	0	0	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GALS	TOTAL	[illegible]	[illegible]	[illegible]
81	MI	BANDY HEIGHTS	40,000	0			0
82	MI	CENTRAL HEIGHTS TANK #1	120,000	0			0
83	MI	CENTRAL HEIGHTS TANK #2	250,000	0			0
84	MI	CENTRAL HEIGHTS TANK #3	500,000	0			0
85	MI	CLAYPOOL	100,000	0			0
86	MI	CLAYPOOL - COTTONWOOD	200,000	0			0
87	MI	DALTON	15,000	0			0
88	MI	MIAMI TOWN TANK	500,000	0			0
89	MI	PERSHING	20,000	0			0
90	MI	WELLS #18 & #20 - TANK #1	44,000	0			0
91	MI	WELLS #18 & #20 - TANK#2	1,000,000	0			0
		MIAMI	2,789,000	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	CAPACITY GALS	BUILT	LAST INT PAINT	LAST EXT PAINT	INTERIOR SQ FT	EXTERIOR SQ FT	INT COST	EXT COST		TOTAL	NEXT DUE
92	PW	NORTHERN AIRE(GOLF COURSE	40,000	1958	2007	2007	2,559	1,519	$10,798.98	$2,551.92		$13,350.90	2022
93	PW	UNIT #11-A	100,000	1969	2007	2007	3,523	3,014	$14,867.06	$5,063.52		$19,930.58	2022
94	PW	UNIT #16 (UPPER ZONE)	500,000	1976	1999	1995	10,336	7,784	$39,586.88	$12,298.72		$51,885.60	2016
95	PW	UNIT #9 - TANK #1 (LOWER ZONE)	100,000	1969	1983	1983	3,498	2,655	$14,761.56	$4,460.40		$19,221.96	2010
96	PW	UNIT #9 - TANK #2	500,000	1988	1988	1988	11,171	7,418	$42,784.93	$11,720.44		$54,505.37	2010
		PINEWOOD	1,240,000						$122,799.41	$36,095.00		$158,894.41	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

						2008		
	SYSTEM	NAME	[illegible]	[illegible]	[illegible]	Int. Cost	Ext. Cost	TOTAL
92	PW	NORTHERN AIRE(GOLF COURSE	40,000	2015	2022			0
93	PW	UNIT #11-A	100,000	2015	2022			0
94	PW	UNIT #16 (UPPER ZONE)	500,000	2009	2016			0
95	PW	UNIT #9 - TANK #1 (LOWER ZONE)	100,000	2010	2017			0
96	PW	UNIT #9 - TANK #2	500,000	2010	2017			0
		PINEWOOD	1,240,000			0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2009			2010			2011		
	SYSTEM	NAME	CAPACITY GALS	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL
92	PW	NORTHERN AIRE(GOLF COURSE	40,000			0			0			0
93	PW	UNIT #11-A	100,000			0			0			0
94	PW	UNIT #16 (UPPER ZONE)	500,000		12,299	12,299			0			0
95	PW	UNIT #9 - TANK #1 (LOWER ZONE)	100,000			0	18,262	4,460	22,722			0
96	PW	UNIT #9 - TANK #2	500,000			0	49,785	11,720	61,505			0
		PINEWOOD	1,240,000	0	12,299	12,299	68,046	16,181	84,227	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	TANK NAME											
92	PW	NORTHERN AIRE(GOLF COURSE	40,000			0			0			0	
93	PW	UNIT #11-A	100,000			0			0			0	
94	PW	UNIT #16 (UPPER ZONE)	500,000			0			0			0	
95	PW	UNIT #9 - TANK #1 (LOWER ZONE)	100,000			0			0			0	
96	PW	UNIT #9 - TANK #2	500,000			0			0			0	
		PINEWOOD	1,240,000	0	0	0	0	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2015			2016			2017			2018	
	SYSTEM	NAME	CAPACITY GALS	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat
92	PW	NORTHERN AIRE(GOLF COURSE	40,000	2,552	2,552			0			0			
93	PW	UNIT #11-A	100,000	5,064	5,064			0			0			
94	PW	UNIT #16 (UPPER ZONE)	500,000		0	46,587	12,299	58,886			0			
95	PW	UNIT #9 - TANK #1 (LOWER ZONE)	100,000		0			0		4,460	4,460			
96	PW	UNIT #9 - TANK #2	500,000		0			0		11,720	11,720			
		PINEWOOD	1,240,000	7,615	7,615	46,587	12,299	58,886	0	16,181	16,181	0	0	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

92	PW	NORTHERN AIRE(GOLF COURSE	40,000	0			0			0		
93	PW	UNIT #11-A	100,000	0			0			0		
94	PW	UNIT #16 (UPPER ZONE)	500,000	0			0			0		
95	PW	UNIT #9 - TANK #1 (LOWER ZONE)	100,000	0			0			0		
96	PW	UNIT #9 - TANK #2	500,000	0			0			0		
		PINEWOOD	1,240,000	0	0	0	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GALLONS	TOTAL	2012 Int. Cost	2012 Ext. Cost	2012 TOTAL
92	PW	NORTHERN AIRE(GOLF COURSE	40,000	0	14,299	2,552	16,851
93	PW	UNIT #11-A	100,000	0	18,367	5,064	23,431
94	PW	UNIT #16 (UPPER ZONE)	500,000	0			0
95	PW	UNIT #9 - TANK #1 (LOWER ZONE)	100,000	0			0
96	PW	UNIT #9 - TANK #2	500,000	0			0
		PINEWOOD	1,240,000	0	32,666	7,615	40,281

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	CAPACITY GALS	BUILT	LAST INT PAINT	LAST EXT PAINT	INTERIOR SQ FT	EXTERIOR SQ FT	Int Coat	Ext Coat		TOTAL	Int Next Due
97	RR	MONTEZUMA HILLS	160,000	1985	1985	1995	4,882	3,546	$20,602.04	$5,957.28		$26,559.32	2009
98	RR	WICKIUP MESA #1	100,000	1972	2000	1995	3,843	2,584	$16,217.46	$4,341.12		$20,558.58	2015
99	RR	WICKIUP MESA #2	200,000	1996	1995	1995	6,556	4,111	$27,666.32	$6,906.48		$34,572.80	2010
		RIMROCK	460,000						$64,485.82	$17,204.88		$81,690.70	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

							2008	
	SYSTEM	NAME	[illegible]	[illegible]	[illegible]	Int. Cost	Ext. Cost	TOTAL
97	RR	MONTEZUMA HILLS	160,000	2009	2016			0
98	RR	WICKIUP MESA #1	100,000	2008	2015		4,341	4,341
99	RR	WICKIUP MESA #2	200,000	2010	2017			0
		RIMROCK	460,000			0	4,341	4,341

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2009				2010				2011	
	SYSTEM	NAME	CAPACITY GALS	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL
97	RR	MONTEZUMA HILLS	160,000	24,102	5,957	30,059			0			0
98	RR	WICKIUP MESA #1	100,000			0			0			0
99	RR	WICKIUP MESA #2	200,000			0	31,166	6,906	38,073			0
		RIMROCK	460,000	24,102	5,957	30,059	31,166	6,906	38,073	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2012			2013			2014			
	SYSTEM	NAME	CAPACITY GALS	Int. Cost	Ext. Cost	TOTALS	Int. Cost	Ext. Cost	TOTALS	Int. Cost	Ext. Cost	TOTALS	Total Accrual
97	RR	MONTEZUMA HILLS	160,000			0			0			0	
98	RR	WICKIUP MESA #1	100,000			0			0			0	19,717
99	RR	WICKIUP MESA #2	200,000			0			0			0	
		RIMROCK	460,000	0	0	0	0	0	0	0	0	0	19,717

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2015			2016						2018	
	SYSTEM	NAME	SQ. FT.	Int. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost
97	RR	MONTEZUMA HILLS	160,000		0		5,957	5,957			0		
98	RR	WICKIUP MESA #1	100,000	4,341	24,059			0			0		
99	RR	WICKIUP MESA #2	200,000		0			0		6,906	6,906		
		RIMROCK	460,000	4,341	24,059	0	5,957	5,957	0	6,906	6,906	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	[illegible]	TOTAL	[illegible]	[illegible]	TOTAL	[illegible]	[illegible]	TOTAL	[illegible]	[illegible]
97	RR	MONTEZUMA HILLS	160,000	0			0			0		
98	RR	WICKIUP MESA #1	100,000	0			0			0		
99	RR	WICKIUP MESA #2	200,000	0			0			0		
		RIMROCK	460,000	0	0	0	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2022		
	SYSTEM	SYM	[illegible]	[illegible]	Int. Coat	Ext. Coat	TOTAL
97	RR	MONTEZUMA HILLS	160,000	0			0
98	RR	WICKIUP MESA #1	100,000	0			0
99	RR	WICKIUP MESA #2	200,000	0			0
		RIMROCK	460,000	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	CAPACITY GALS	BUILT	LAST INT PAINT	LAST EXT PAINT	INTERIOR SQ FT	EXTERIOR SQ FT	Int Cost	Ext Cost		TOTAL	Int Next Due
100	SD	HARMONY HIGH PARK	1,000,000	1977	2000	1995	18,421	12,094	$70,552.43	$19,108.52		$89,660.95	2014
101	SD	JORDAN PARK	1,000,000	1994	1995	1995	18,746	12,072	$71,797.18	$19,073.76		$90,870.94	2010
102	SD	RED CLIFF	100,000	1971	2008	2008	3,498	2,655	$14,761.56	$4,460.40		$19,221.96	2008
103	SD	SEDONA TOWN TANK	300,000	1958	1995	1985	7,162	5,581	$27,430.46	$8,817.98		$36,248.44	2009
104	SD	SEDONA WEST	102,800	1961	1999	1985	3,452	2,730	$14,567.44	$4,586.40		$19,153.84	2014
105	SD	SHADOW ROCK TANK #2	700,000	1988	1999	1994	13,594	9,295	$52,065.02	$14,686.10		$66,751.12	2013
106	SD	SKY MOUNTAIN	100,000	1973	1998	1973	4,857	2,819	$20,496.54	$4,735.92		$25,232.46	2009
107	SD	WELL #7 SETTLING TANK	12,000	2009	2009	2009	951	735	$4,013.22	$1,234.80		$5,248.02	2022
108	SD	WELL #9 FILTERS TANK #1	2,200	N/A	1973	1973	268	203	$1,130.96	$341.04		$1,472.00	2015
109	SD	WELL #9 FILTERS TANK #2	6,000	N/A	2001	1973	547	440	$2,308.34	$739.20		$3,047.54	2015
110	SD	SEDONA GOLF RESORT	250,000	1998	1999	1999	8,036	4,912	$33,911.92	$8,252.16		$42,164.08	2015
111	SD	SUNUP	150,000	1984	1984	1984	4,672	3,414	$19,715.84	$5,735.52		$25,451.36	2013
112	SD	SUNUP #2	175,000	2007	2007	2007	5,438	3,601	$22,948.36	$6,049.68		$28,998.04	2021
		SEDONA	3,898,000						$355,699.27	$97,821.48		$453,520.75	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

						2008		
	SYSTEM	NAME	CAPACITY GALS	Ext Next Due	Ext 2nd Due	Int Coat	Ext Coat	TOTAL
100	SD	HARMONY HIGH PARK	1,000,000	2014	2021			0
101	SD	JORDAN PARK	1,000,000	2010	2017			0
102	SD	RED CLIFF	100,000	2008	2015	18,262	4,460	22,722
103	SD	SEDONA TOWN TANK	300,000	2009	2016			0
104	SD	SEDONA WEST	102,800	2014	2021			0
105	SD	SHADOW ROCK TANK #2	700,000	2013	2020			0
106	SD	SKY MOUNTAIN	100,000	2009	2016			0
107	SD	WELL #7 SETTLING TANK	12,000	2015	2022			0
108	SD	WELL #9 FILTERS TANK #1	2,200	2008	2015		341	341
109	SD	WELL #9 FILTERS TANK #2	6,000	2008	2015		739	739
110	SD	SEDONA GOLF RESORT	250,000	2008	2015		8,252	8,252
111	SD	SUNUP	150,000	2013	2020			0
112	SD	SUNUP #2	175,000	2014	2021			0
		SEDONA	3,898,000			18,262	13,793	32,054

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2009			2010			2011		
	SYSTEM	NAME	CAPACITY COST	Int. Coats	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL
100	SD	HARMONY HIGH PARK	1,000,000			0			0			0
101	SD	JORDAN PARK	1,000,000			0	78,797	19,074	97,871			0
102	SD	RED CLIFF	100,000			0			0			0
103	SD	SEDONA TOWN TANK	300,000	34,430	8,818	43,248			0			0
104	SD	SEDONA WEST	102,800			0			0			0
105	SD	SHADOW ROCK TANK #2	700,000			0			0			0
106	SD	SKY MOUNTAIN	100,000	23,997	4,736	28,732			0			0
107	SD	WELL #7 SETTLING TANK	12,000			0			0			0
108	SD	WELL #9 FILTERS TANK #1	2,200			0			0			0
109	SD	WELL #9 FILTERS TANK #2	6,000			0			0			0
110	SD	SEDONA GOLF RESORT	250,000			0			0			0
111	SD	SUNUP	150,000			0			0			0
112	SD	SUNUP #2	175,000			0			0			0
		SEDONA	3,898,000	58,427	13,554	71,981	78,797	19,074	97,871	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2012			2013			2014			
	SYSTEM	NAME	CAPACITY GALS	Int. Goal	Ext. Goal	TOTAL	Int. Goal	Ext. Goal	TOTAL	Int. Goal	Ext. Goal	TOTAL	Int. Goal
100	SD	HARMONY HIGH PARK	1,000,000			0			0	77,552	19,109	96,661	
101	SD	JORDAN PARK	1,000,000			0			0			0	
102	SD	RED CLIFF	100,000			0			0			0	
103	SD	SEDONA TOWN TANK	300,000			0			0			0	
104	SD	SEDONA WEST	102,800			0			0	18,067	4,586	22,654	
105	SD	SHADOW ROCK TANK #2	700,000			0	59,065	14,686	73,751			0	
106	SD	SKY MOUNTAIN	100,000			0			0			0	
107	SD	WELL #7 SETTLING TANK	12,000			0			0			0	
108	SD	WELL #9 FILTERS TANK #1	2,200			0			0			0	1,131
109	SD	WELL #9 FILTERS TANK #2	6,000			0			0			0	2,308
110	SD	SEDONA GOLF RESORT	250,000			0			0			0	37,412
111	SD	SUNUP	150,000			0	23,216	5,736	28,951			0	
112	SD	SUNUP #2	175,000			0			0		6,050	6,050	
		SEDONA	3,898,000	0	0	0	82,281	20,422	102,702	95,620	29,745	125,364	40,851

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2015			2016			2017			2018	
	SYSTEM	NAME	CAPACITY GALS	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat
100	SD	HARMONY HIGH PARK	1,000,000		0			0			0		
101	SD	JORDAN PARK	1,000,000		0			0		19,074	19,074		
102	SD	RED CLIFF	100,000	4,460	4,460			0			0		
103	SD	SEDONA TOWN TANK	300,000		0		8,818	8,818			0		
104	SD	SEDONA WEST	102,800		0			0			0		
105	SD	SHADOW ROCK TANK #2	700,000		0			0			0		
106	SD	SKY MOUNTAIN	100,000		0		4,736	4,736			0		
107	SD	WELL #7 SETTLING TANK	12,000	1,235	1,235			0			0		
108	SD	WELL #9 FILTERS TANK #1	2,200	341	1,472			0			0		
109	SD	WELL #9 FILTERS TANK #2	6,000	739	3,048			0			0		
110	SD	SEDONA GOLF RESORT	250,000	8,252	45,664			0			0		
111	SD	SUNUP	150,000		0			0			0		
112	SD	SUNUP #2	175,000		0			0			0		
		SEDONA	3,898,000	15,028	55,879	0	13,554	13,554	0	19,074	19,074	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2010			2020			2021	
	SYSTEM	NAME	CAPACITY	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost
100	SD	HARMONY HIGH PARK	1,000,000	0			0			0		19,109
101	SD	JORDAN PARK	1,000,000	0			0			0		
102	SD	RED CLIFF	100,000	0			0			0		
103	SD	SEDONA TOWN TANK	300,000	0			0			0		
104	SD	SEDONA WEST	102,800	0			0			0		4,586
105	SD	SHADOW ROCK TANK #2	700,000	0			0		14,686	14,686		
106	SD	SKY MOUNTAIN	100,000	0			0			0		
107	SD	WELL #7 SETTLING TANK	12,000	0			0			0		
108	SD	WELL #9 FILTERS TANK #1	2,200	0			0			0		
109	SD	WELL #9 FILTERS TANK #2	6,000	0			0			0		
110	SD	SEDONA GOLF RESORT	250,000	0			0			0		
111	SD	SUNUP	150,000	0			0		5,736	5,736		
112	SD	SUNUP #2	175,000	0			0			0	26,448	6,050
		SEDONA	3,898,000	0	0	0	0	0	20,422	20,422	26,448	29,745

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

						2012		
	SYSTEM	NAME	CAPACITY GALS	TOTAL	Int. Coat	Ext. Coat	TOTAL
100	SD	HARMONY HIGH PARK	1,000,000	19,109			0
101	SD	JORDAN PARK	1,000,000	0			0
102	SD	RED CLIFF	100,000	0			0
103	SD	SEDONA TOWN TANK	300,000	0			0
104	SD	SEDONA WEST	102,800	4,586			0
105	SD	SHADOW ROCK TANK #2	700,000	0			0
106	SD	SKY MOUNTAIN	100,000	0			0
107	SD	WELL #7 SETTLING TANK	12,000	0	7,513	1,235	8,748
108	SD	WELL #9 FILTERS TANK #1	2,200	0			0
109	SD	WELL #9 FILTERS TANK #2	6,000	0			0
110	SD	SEDONA GOLF RESORT	250,000	0			0
111	SD	SUNUP	150,000	0			0
112	SD	SUNUP #2	175,000	32,498			0
		SEDONA	3,898,000	56,193	7,513	1,235	8,748

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	CAPACITY GALS	BUILT	LAST INT PAINT	LAST EXT PAINT	INTERIOR SQ FT	EXTERIOR SQ FT	INT COST	EXT COST		TOTAL	NEXT DUE
113	OR	BOOSTER #2 - TANK #1	20,000	1960	2000	2001	1,725	1,002	$7,279.50	$1,683.36		$8,962.86	2015
114	OR	BOOSTER #2 - TANK #2	100,000	1976	2005	2005	3,498	2,655	$14,761.56	$4,460.40		$19,221.96	2012
115	OR	BOOSTER #3 - TANK #1	21,000	1969	2001	2001	1,399	937	$5,903.78	$1,574.16		$7,477.94	2015
116	OR	BOOSTER #3 - TANK #2	100,000	1987	2005	2005	3,498	2,655	$14,761.56	$4,460.40		$19,221.96	2012
117	OR	BOOSTER #4 - TANK #1	21,000	1960	2001	2002	1,399	937	$5,903.78	$1,574.16		$7,477.94	2016
118	OR	BOOSTER #4 - TANK #2	100,000	1980	2002	2002	3,498	2,655	$14,761.56	$4,460.40		$19,221.96	2016
119	OR	CHERRY VALLEY	130,000	1981	1993	1981	4,150	3,591	$17,513.00	$6,032.88		$23,545.88	2010
120	OR	CORONADO TANK	100,000	1989	1990	1990	3,498	2,655	$14,761.56	$4,460.40		$19,221.96	2010
121	OR	ORACLE TOWN TANK	1,000,000	1962	1988	1988	16,141	12,518	$61,820.03	$19,778.44		$81,598.47	2011
		ORACLE	1,592,000						$157,466.33	$48,484.60		$205,950.93	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GALS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
113	OR	BOOSTER #2 - TANK #1	20,000	2008	2015	7,280	1,683	8,963
114	OR	BOOSTER #2 - TANK #2	100,000	2012	2019			0
115	OR	BOOSTER #3 - TANK #1	21,000	2008	2015	5,904	1,574	7,478
116	OR	BOOSTER #3 - TANK #2	100,000	2012	2019			0
117	OR	BOOSTER #4 - TANK #1	21,000	2009	2016			0
118	OR	BOOSTER #4 - TANK #2	100,000	2009	2016			0
119	OR	CHERRY VALLEY	130,000	2010	2017			0
120	OR	CORONADO TANK	100,000	2010	2017			0
121	OR	ORACLE TOWN TANK	1,000,000	2011	2018			0
		ORACLE	1,592,000			13,183	3,258	16,441

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2009			2010			2011		
	SYSTEM	NAME	CAPACITY COST	INT. COST	EXT. COST	TOTAL	INT. COST	EXT. COST	TOTAL	INT. COST	EXT. COST	TOTAL
113	OR	BOOSTER #2 - TANK #1	20,000			0			0			0
114	OR	BOOSTER #2 - TANK #2	100,000			0			0			0
115	OR	BOOSTER #3 - TANK #1	21,000			0			0			0
116	OR	BOOSTER #3 - TANK #2	100,000			0			0			0
117	OR	BOOSTER #4 - TANK #1	21,000		1,574	1,574			0			0
118	OR	BOOSTER #4 - TANK #2	100,000		4,460	4,460			0			0
119	OR	CHERRY VALLEY	130,000			0	21,013	6,033	27,046			0
120	OR	CORONADO TANK	100,000			0	18,262	4,460	22,722			0
121	OR	ORACLE TOWN TANK	1,000,000			0			0	65,320	19,778	85,098
		ORACLE	1,592,000	0	6,035	6,035	39,275	10,493	49,768	65,320	19,778	85,098

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2012			2013			2014			
	SYSTEM	NAME	CAPACITY GALS	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost
113	OR	BOOSTER #2 - TANK #1	20,000			0			0			0	
114	OR	BOOSTER #2 - TANK #2	100,000	18,262	4,460	22,722			0			0	
115	OR	BOOSTER #3 - TANK #1	21,000			0			0			0	
116	OR	BOOSTER #3 - TANK #2	100,000	18,262	4,460	22,722			0			0	
117	OR	BOOSTER #4 - TANK #1	21,000			0			0			0	
118	OR	BOOSTER #4 - TANK #2	100,000			0			0			0	
119	OR	CHERRY VALLEY	130,000			0			0			0	
120	OR	CORONADO TANK	100,000			0			0			0	
121	OR	ORACLE TOWN TANK	1,000,000			0			0			0	
		ORACLE	1,592,000	36,523	8,921	45,444	0	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY	2015 Ext. Cost	2015 TOTAL	2016 Int. Cost	2016 Ext. Cost	2016 TOTAL	2017 Int. Cost	2017 Ext. Cost	2017 TOTAL	2018 Int. Cost	2018 Ext. Cost
113	OR	BOOSTER #2 - TANK #1	20,000	1,683	1,683			0			0		
114	OR	BOOSTER #2 - TANK #2	100,000		0			0			0		
115	OR	BOOSTER #3 - TANK #1	21,000	1,574	1,574			0			0		
116	OR	BOOSTER #3 - TANK #2	100,000		0			0			0		
117	OR	BOOSTER #4 - TANK #1	21,000		0	5,904	1,574	7,478			0		
118	OR	BOOSTER #4 - TANK #2	100,000		0	14,762	4,460	19,222			0		
119	OR	BOOSTER VALLEY	130,000		0			0			0		
120	OR	CHERRY VALLEY	100,000		0			0		6,033	6,033		
121	OR	CORONADO TANK	1,000,000		0			0		4,460	4,460		
	OR	ORACLE TOWN TANK									0		19,778
		ORACLE	1,592,000	3,258	3,258	20,665	6,035	26,700	0	10,493	10,493	0	19,778

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GALS	TOTAL	2011 Int. Cost	2011 Ext. Cost	2011 TOTAL	2020 Int. Cost	2020 Ext. Cost	2020 TOTAL	2021 Int. Cost	2021 Ext. Cost
113	OR	BOOSTER #2 - TANK #1	20,000	0			0			0		
114	OR	BOOSTER #2 - TANK #2	100,000	0		4,460	4,460			0		
115	OR	BOOSTER #3 - TANK #1	21,000	0			0			0		
116	OR	BOOSTER #3 - TANK #2	100,000	0		4,460	4,460			0		
117	OR	BOOSTER #4 - TANK #1	21,000	0			0			0		
118	OR	BOOSTER #4 - TANK #2	100,000	0			0			0		
119	OR	CHERRY VALLEY	130,000	0			0			0		
120	OR	CORONADO TANK	100,000	0			0			0		
121	OR	ORACLE TOWN TANK	1,000,000	19,778			0			0		
		ORACLE	1,592,000	19,778	0	8,921	8,921	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

						2025		
	SYSTEM	NAME	CAPACITY GALS	TOTAL	Int. Coat	Ext. Coat	TOTAL
113	OR	BOOSTER #2 - TANK #1	20,000	0			0
114	OR	BOOSTER #2 - TANK #2	100,000	0			0
115	OR	BOOSTER #3 - TANK #1	21,000	0			0
116	OR	BOOSTER #3 - TANK #2	100,000	0			0
117	OR	BOOSTER #4 - TANK #1	21,000	0			0
118	OR	BOOSTER #4 - TANK #2	100,000	0			0
119	OR	CHERRY VALLEY	130,000	0			0
120	OR	CORONADO TANK	100,000	0			0
121	OR	ORACLE TOWN TANK	1,000,000	0			0
		ORACLE	1,592,000	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
122	SM	SAN MANUEL SETTLING	48,000	2007	2007	2007	2,385	1,659	$10,064.70	$2,787.12		$12,851.82	2021
123	SM	SAN MANUEL TOWN-LOWER	250,000	1953	2005	2005	7,429	4,920	$31,350.38	$8,265.60		$39,615.98	2019
124	SM	SAN MANUEL TOWN-UPPER	750,000	1953	2001	2001	14,445	8,783	$55,324.35	$13,877.14		$69,201.49	2015
		SAN MANUEL	1,048,000						$96,739.43	$24,929.86		$121,669.29	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GAL	[illegible]	[illegible]	[illegible]	[illegible]	TOTAL
122	SM	SAN MANUEL SETTLING	48,000	2014	2021			0
123	SM	SAN MANUEL TOWN-LOWER	250,000	2009	2019			0
124	SM	SAN MANUEL TOWN-UPPER	750,000	2008	2015		13,877	13,877
		SAN MANUEL	1,048,000			0	13,877	13,877

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				12/2009			2010			2011		
	SYSTEM	NAME	CAPACITY GALS	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL
122	SM	SAN MANUEL SETTLING	48,000			0			0			0
123	SM	SAN MANUEL TOWN-LOWER	250,000		8,266	8,266			0			0
124	SM	SAN MANUEL TOWN-UPPER	750,000			0			0			0
		SAN MANUEL	1,048,000	0	8,266	8,266	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GAL	2009			2010			2014			
				Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Int. Cost	Ext. Cost	TOTAL	Inf. Cost
122	SM	SAN MANUEL SETTLING	48,000			0			0		2,787	2,787	
123	SM	SAN MANUEL TOWN-LOWER	250,000			0			0			0	
124	SM	SAN MANUEL TOWN-UPPER	750,000			0			0			0	62,324
		SAN MANUEL	1,048,000	0	0	0	0	0	0	0	2,787	2,787	62,324

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2015			2016			2017			2018	
	SYSTEM	NAME	CAPACITY GAL	EXT COST	TOTAL	INT COST	EXT COST	TOTAL	INT COST	EXT COST	TOTAL	INT COST	EXT COST
122	SM	SAN MANUEL SETTLING	48,000		0			0			0		
123	SM	SAN MANUEL TOWN-LOWER	250,000		0			0			0		
124	SM	SAN MANUEL TOWN-UPPER	750,000	13,877	76,201			0			0		
		SAN MANUEL	1,048,000	13,877	76,201	0	0	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2019			2020			2021	
	SYSTEM	NAME	CAPACITY GALS	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat
122	SM	SAN MANUEL SETTLING	48,000	0			0			0	10,065	2,787
123	SM	SAN MANUEL TOWN-LOWER	250,000	0	34,850	8,266	43,116			0		
124	SM	SAN MANUEL TOWN-UPPER	750,000	0			0			0		
		SAN MANUEL	1,048,000	0	34,850	8,266	43,116	0	0	0	10,065	2,787

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2082		
	SYSTEM	NAME	CAPACITY GALS	TOTAL	Int. Cost	Ext. Cost	TOTAL
122	SM	SAN MANUEL SETTLING	48,000	12,852			0
123	SM	SAN MANUEL TOWN-LOWER	250,000	0			0
124	SM	SAN MANUEL TOWN-UPPER	750,000	0			0
		SAN MANUEL	1,048,000	12,852	0	0	0

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	ITEM	[illegible]	[illegible]	LAST INT PAINT	LAST EXT PAINT	INTERIOR SQ FT	EXTERIOR SQ FT	[illegible]	[illegible]		[illegible]	Next Due
125	WK	WK TOWN TANK #1	200,000	1962	1994	1994	5,501	4,243	$23,214.22	$7,128.24		$30,342.46	2008
126	WK	WK TOWN TANK #2	10,000	1973	1994	1994	796	656	$3,359.12	$1,102.08		$4,461.20	2010
		WINKELMAN	210,000						$26,573.34	$8,230.32		$34,803.66	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GALS	EST. NEXT Int.	EST. NEXT Ext.	2009 Int. Coat	2009 Ext. Coat	TOTAL
125	WK	WK TOWN TANK #1	200,000	2008	2015	26,714	7,128	33,842
126	WK	WK TOWN TANK #2	10,000	2010	2017			0
		WINKELMAN	210,000			26,714	7,128	33,842

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2009			2010			2011			
	SYSTEM	NAME	[illegible]	[illegible] Cost	Ext. Cost	TOTAL	[illegible] Cost	[illegible]	[illegible]	[illegible]	Ext. Cost	TOTAL
125	WK	WK TOWN TANK #1	200,000			0			0			0
126	WK	WK TOWN TANK #2	10,000			0	3,359	1,102	4,461			0
		WINKELMAN	210,000	0	0	0	3,359	0	3,359	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2012			2013			2014			
	SYSTEM	NAME	CAPACITY GALS	Int. Coat	Ext. Coat	TO AL	Int. Coat	Ext. Coat	TO AL	Int. Coat	Ext. Coat	TO AL	Int. Coat
125	WK	WK TOWN TANK #1	200,000			0			0			0	
126	WK	WK TOWN TANK #2	10,000			0			0			0	
		WINKELMAN	210,000	0	0	0	0	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

										2017			2018
	SYSTEM	NAME											
125	WK	WK TOWN TANK #1	200,000	7,128	7,128			0			0		
126	WK	WK TOWN TANK #2	10,000		0			0		1,102	1,102		
		WINKELMAN	210,000	7,128	7,128	0	0	0	0	1,102	1,102	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2019			2020			2021	
	SYSTEM	NAME	CAPACITY GALS	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	Ext. Coat
125	WK	WK TOWN TANK #1	200,000	0			0			0		
126	WK	WK TOWN TANK #2	10,000	0			0			0		
		WINKELMAN	210,000	0	0	0	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2022		
	SYSTEM	NAME	CAPACITY GALS	TOTAL	Int. cost	Ext. cost	TOTAL
125	WK	WK TOWN TANK #1	200,000	0			0
126	WK	WK TOWN TANK #2	10,000	0			0
		WINKELMAN	210,000	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22	**FOR RECOAT YEAR GO TO CELL CT90**
Exterior sq. ft. cost <= 250,000	1.68	
Int. sq. ft. cost >250,000	3.83	**FOR SUMMARY, GO TO CELL BG6**
Ext. sq. ft. cost >250,000	1.58	**FOR NORTHERN GROUP SUMMARY GO TO CELL CA5**

	SYSTEM	NAME	CAPACITY GALS	BUILT	LAST INT MAINT	LAST EXT MAINT	INTERIOR SQ FT	EXTERIOR SQ FT	[illegible]	[illegible]		[illegible]	[illegible]
127	SU	DESERT WELLS SETTLING	48,000	2008	2008	2008	2,350	1,624	$9,917.00	$2,728.32		$12,645.32	2022
128	SU	DESERT WELLS TANK	376,000	1973	2002	2002	8,235	6,387	$31,540.05	$10,091.46		$41,631.51	21016
129	SU	QUEEN CREEK TANK	2,200,000	N/A	2008	2008	35,374	20,358	$135,482.42	$32,165.64		$167,648.06	2008
130	SU	SUPERIOR TOWN TANK	500,000	1959	2008	2008	10,024	7,579	$42,301.28	$12,732.72		$55,034.00	2022
		SUPERIOR	3,124,000						$219,240.75	$57,718.14		$276,958.89	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

							2008		
	SYSTEM	NAME	CAPACITY GALS	Ex. Next Due	Ext. Next Due	Int. Coat	Ex. Coat	TOTAL
127	SU	DESERT WELLS SETTLING	48,000	2015	2022			0
128	SU	DESERT WELLS TANK	376,000	2009	2016			0
129	SU	QUEEN CREEK TANK	2,200,000	2008	2015	142,482	32,166	174,648
130	SU	SUPERIOR TOWN TANK	500,000	2015	2022			0
		SUPERIOR	3,124,000			142,482	32,166	174,648

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME				TOTAL						
127	SU	DESERT WELLS SETTLING	48,000			0			0			0
128	SU	DESERT WELLS TANK	376,000		10,091	10,091			0			0
129	SU	QUEEN CREEK TANK	2,200,000			0			0			0
130	SU	SUPERIOR TOWN TANK	500,000			0			0			0
		SUPERIOR	3,124,000	0	10,091	10,091	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

	SYSTEM	NAME	CAPACITY GAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
127	SU	DESERT WELLS SETTLING	48,000			0			0			0	
128	SU	DESERT WELLS TANK	376,000			0			0			0	
129	SU	QUEEN CREEK TANK	2,200,000			0			0			0	
130	SU	SUPERIOR TOWN TANK	500,000			0			0			0	
		SUPERIOR	3,124,000	0	0	0	0	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

				2015			2016						2018	
	SYSTEM													
127	SU	DESERT WELLS SETTLING	48,000	2,728	2,728			0			0			
128	SU	DESERT WELLS TANK	376,000		0	38,540	10,091	48,632			0			
129	SU	QUEEN CREEK TANK	2,200,000	32,166	32,166			0			0			
130	SU	SUPERIOR TOWN TANK	500,000	12,733	12,733			0			0			
		SUPERIOR	3,124,000	47,627	47,627	38,540	10,091	48,632	0	0	0	0	0	

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2019							2021
	SYSTEM	NAME	[illegible]	TOTAL	Int. Coat	Ext. Coat	TOTAL	Int. Coat	[illegible]	[illegible]	[illegible]	Ext. Coat
127	SU	DESERT WELLS SETTLING	48,000	0			0			0		
128	SU	DESERT WELLS TANK	376,000	0			0			0		
129	SU	QUEEN CREEK TANK	2,200,000	0			0			0		
130	SU	SUPERIOR TOWN TANK	500,000	0			0			0		
		SUPERIOR	3,124,000	0	0	0	0	0	0	0	0	0

Interior sq. ft.cost <= 250,000	4.22
Exterior sq. ft. cost <= 250,000	1.68
Int. sq. ft. cost >250,000	3.83
Ext. sq. ft. cost >250,000	1.58

					2009		
	SYSTEM	NAME	CAPACITY GALS	TOTAL	Int. Cost	Ext. Cost	TOTAL
127	SU	DESERT WELLS SETTLING	48,000	0	9,917	2,728	12,645
128	SU	DESERT WELLS TANK	376,000	0			0
129	SU	QUEEN CREEK TANK	2,200,000	0			0
130	SU	SUPERIOR TOWN TANK	500,000	0	49,301	12,733	62,034
		SUPERIOR	3,124,000	0	59,218	15,461	74,679

EXHIBIT
IBEW-1
admitted

LUBIN & ENOCH, P.C.
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Jarrett J. Haskovec
State Bar No. 023926
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Attorneys for Intervenor IBEW Local 387

RECEIVED
2009 JUN 25 P 2: 36
AZ CORP COMMISSION
DOCKET CONTROL

BEFORE THE ARIZONA

CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY, AND FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR UTILITY SERVICE AND FOR CERTAIN RELATED APPROVALS BASED THEREON.	Docket No. W-01445A-08-0440 **NOTICE OF FILING THE DIRECT TESTIMONY OF EDWIN L. JUNAS, JR.**

Pursuant to the Assistant Chief Administrative Law Judge's Procedural Order (p. 2) dated June 11, 2009, Intervenor Local Union 387, International Brotherhood of Electrical Workers, AFL-CIO, CLC, by and through undersigned counsel, hereby provides notice of its filing of the attached Direct Testimony of Edwin L. Junas, Jr. in this docket.

RESPECTFULLY SUBMITTED this 25th day of June 2009.

LUBIN & ENOCH, P.C.

Nicholas J. Enoch, Esq.
Attorney for Intervenor

Original and thirteen (13) copies of IBEW Local 387's Notice filed this 25th day of June 2009, with:

Arizona Corporation Commission
Docket Control Center
1200 West Washington Street
Phoenix, Arizona 85007-2996

Copies of the foregoing transmitted electronically this same date to:

Robert W. Geake, Esq.
Arizona Water Company
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Phoenix, Arizona 85038-9006
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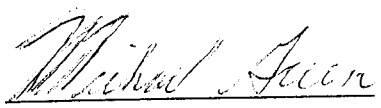
Attorney for Intervenor Abbott

Daniel W. Pozefsky, Esq.
Residential Utility Consumer Office
1100 West Washington, Suite 220
Phoenix, Arizona 85007
Attorney for Intervenor RUCO



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Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A1. Edwin L. Junas, Jr. My business address is 5818 North 7th Street, Suite 201, Phoenix, Arizona 85014.

Q2. PLEASE DESCRIBE YOUR RECENT EMPLOYMENT.

A2. I am a Business Agent for Intervenor Local Union 387, International Brotherhood of Electrical Workers, AFL-CIO, CLC ("IBEW Local 387"). The position of Business Agent is a hired position on the Union's staff and I was hired to my present position on October 1, 2007 by Robert E. DeSpain, the Business Manager/Financial Secretary of IBEW Local 387. Mr. DeSpain is the principal elected officer of IBEW Local 387.

Prior to my becoming a Business Agent for the IBEW Local 387, I was employed by the Arizona Public Service Company ("APS") for twenty-nine (29) years and three (3) months in a variety of bargaining unit positions, the last of which was as an Instrument Repairman Journeyman at Four Corners Power Plant. I retired from APS on September 30, 2007. Throughout my nearly thirty (30) years at APS, I was a very active member of IBEW Local 387 and I served on the Local's Executive Board for two (2) terms.

Q3. WHAT IS IBEW LOCAL 387?

A3. IBEW Local 387 is the labor organization which serves as the exclusive representative for, *inter alia*, approximately one-hundred (100) employees of the Arizona Water Company ("AWC"). In particular, IBEW

Local 387 represents all of the AWC employees holding the following positions:

- Laborer;
- Meter Repairman/Repairwoman and Tester (and Senior Repairman/Repairwoman and Tester)
- Meter Reader (and Lead Meter Reader);
- Production and Treatment Operator (and Lead Production and Treatment Operator); and
- Serviceman/Servicewoman (and Senior Serviceman/Senior Servicewoman).

IBEW Local 387 and AWC have entered into a series of collective bargaining agreements ("CBA") dating back to 1955 concerning rates of pay, wages, hours of employment, and other terms and conditions of employment. Our current CBA with AWC is set to expire on December 31, 2009.

In addition to representing the aforementioned employees at AWC, IBEW Local 387 also represents thousands of employees at APS, Graham County Electric Cooperative, Inc., Navopache Electric Cooperative, Inc., the Santa Cruz District of UniSource Energy Corporation and Asplundh Tree Expert Company. While I am not certain about the exact number, it is fair to assume that a fair number of our members are themselves customers of AWC. To learn more about IBEW Local 387, I invite you to visit our website at www.ibew387.com.

Q4. DO YOU BELIEVE THAT ARIZONA WATER POLICY NEEDS TO BE CONNECTED TO ARIZONA ENERGY POLICY?

A4. Water and energy use are intertwined. Water is often used to produce energy, and energy is, in turn, needed to pump, transport, and purify water. And we Arizonans are increasingly recognizing physical, economic, and environmental limitations in our use of both. Nevertheless, to date, policymakers at both the state and federal levels have not paid very much attention to these connections. As the certified representative of public service corporations in both the water and electric industries, I believe that IBEW Local 387 is uniquely positioned to help explain these connections.

Q5. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A5. My purpose is twofold. First, I am testifying in support of AWC's Application for a rate hike. Second, I would like this Commission to know that, in our opinion, AWC needs to undertake a sustained effort to improve its relationship with the certified bargaining representative of a large portion of its non managerial workforce.

As you know, Article XV, §3 of the Arizona Constitution expressly states that the interests of public service employees are on par with those of patrons. It reads as follows:

> The corporation commission shall have

> full power to, and shall ... make reasonable rules, regulations, and orders, by which such [public service] corporations shall be governed in the transaction of business within the State, and ... make and enforce reasonable rules, regulations, and orders for the convenience, comfort, and safety, and the preservation of the health, of the ***employees*** and patrons of such corporations[.]

On behalf of its own members, as well as tens of thousands of patrons of AWC, IBEW Local 387 believes this proceeding provides it with a unique and timely opportunity to express to this Commission our qualified support of AWC's Application and our reasons for doing so.

It goes without saying that it costs a substantial amount of money for a public service corporation to hire, train, and maintain a highly skilled work force. Similarly, it costs a great deal of money for any public service corporation to preserve the safety and health of its employees and patrons. Unlike AWC's rates, the wages and benefits paid by AWC to its unionized workforce have, for the most part, continued to rise since its last rate case. Further exasperating

the situation is the tremendous growth in AWC's customer base coupled with the recent economic downturn. In this regard, I fully agree with the underlying premise behind AWC's Application that exhortations to "work harder" and "work smarter" cannot change the fundamental nature of increasing marginal costs of serving an ever growing base of customers. Our International President, Edwin D. Hill, made similar points in his 2008 State of Our Union address regarding the utility sector, the webcast of which is available at www.ibew.org/sou-cbs/index.asp.

In these tremendously difficult economic times, I am certain that many in the public may not understand, or want to understand, the need to raise their water rates. However, unless AWC has the ability to provide a highly competitive employment package, you can be assured that AWC and, in turn, the public will suffer. I hope that this Commission and each of the parties in this case bear this is mind. For in my opinion, it is in the interests of all consumers to have a highly skilled workforce providing safe and reliable service even if that means that they are paying, what they believe to be at least, something more than rock-bottom prices for water service. To this end, IBEW Local 387 believes that the rate relief proposed in this case will help ensure that AWC will be able to meet its

commitments to its employees and customers in the years to come.

Q6. DO YOU BELIEVE AWC IS A RESPONSIBLE CORPORATE CITIZEN?

A6. Sort of "yes" and sort of "no". While by no means perfect, the relationship between IBEW Local 387 and AWC is, in some sense, mature and stable. That being said, I can say without reservation that IBEW Local 387's relationship with AWC is, by far, the worst of any of the public service corporations that I have to deal with on a regular basis. Unlike the management personnel that I interact with at the other utilities, I do not believe that AWC perceives IBEW Local 387 to be a partner with whom it needs to work with but, instead, it treats its employees' certified bargaining representative as an adversary against whom even the most trivial of matters needs to be fought.

For example, during the last contract negotiation with AWC, and realizing the economic circumstances AWC is facing, my Local made several relatively trivial non economic proposals to AWC which, for some unknown reason, were flatly rejected by the Company. Specifically, we requested that AWC allow us to have Union meetings with employees after work hours on company property and/or to allow IBEW stickers on employee hard hats and on company vehicles. As you can see for yourself when you drive around our State, such

is common place at our other utilities but not at AWC. In order to give you some context and tone to our discussions in this regard, please see attached Exhibit A.

In addition, IBEW Local 387 has repeatedly offered to assist AWC identify inefficiencies and problems with its operations, including safety and training-related issues, and, in almost all incidences, AWC has inexplicably rebuffed our attempts to provide constructive assistance. While my Local fully recognizes the fact that our members' long-term success is inextricably linked to the success of AWC, the Company, on the other hand, appears to think that its long-term success has little to do with how it treats its employees and their duly chosen representative, IBEW Local 387. Unlike chemicals, fuel, and water, the management at AWC needs to be mindful that "labor" is not simply a commodity.

Q7. HOW HAS AWC'S UNDER EARNINGS IMPACTED AWC'S UNIONIZED WORKFORCE?

A7. As set forth on page seven (7) of Joseph D. Harris' Direct Testimony dated August 22, 2008, payroll is AWC's single largest expense. In January, the economic downturn at AWC became so critical that the Company was forced to layoff a number of its employees, including eight (8) members of the IBEW bargaining unit. A copy

of AWC's Notice to the Union regarding this layoff is attached hereto as Exhibit B. What is worth mentioning at this point is that AWC simply announced the layoffs to its workforce without ever having made any effort whatsoever to discuss the topic with IBEW Local 387. In fact, AWC specifically told me beforehand that they did not want IBEW Local 387 to be involved in the process of informing the effected employees of what their options were regarding the impending layoff. By way of comparison, when APS was recently faced with a situation involving a reduction in force, it came to our Union and we worked together in a collaborative manner to address the unfortunate, but very real, situation.[1] Once again, that is not how AWC treats its employees.

I would also like to point out that in our most recent contract negotiation with AWC, IBEW Local 387 agreed to a wage freeze in 2009 and on June 8, 2009 AWC announced that its employees were facing a hefty increase in the employee-portion of their medical plan. A true and accurate copy of AWC's announcement is attached hereto as Exhibit C. For a utility that is projected by all of us to grow at a sustained, if not accelerating, pace

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[1] *See*, View Image No. 0000093009 (pp. 248-49, 257-58 & 260-61) in ACC Docket No. E-01345A-08-0172.

in the years to come, it goes without saying that its financial situation is not sustainable in the intermediate to long term without this Commission providing it with prompt and substantial rate relief. An increase in rates should be such that it would eliminate whatever pressure is on AWC to increasingly shift personnel and, in turn, healthcare costs to and at the expense of its represented employees.

Q8. DO YOU BELIEVE THAT AWC IS ENTITLED TO AN INCREASE IN ITS RATES AS CLAIMED, AND IN THE AMOUNTS SET FORTH, IN PARAGRAPH 10 OF ITS APPLICATION?

A8. While I believe that AWC is entitled to an increase in its rates as claimed in the application, IBEW Local 387 certainly does not agree with William W. Garfield's assessment on page ten (10) of his pre-filed testimony dated August 22, 2008 that "[r]atemaking in Arizona falls short of providing utilities, like the Company, a reasonable opportunity to earn their authorized rate of return." Indeed, while IBEW Local 387 fully supports AWC's application in this case, I want to make it clear to the Commission that we do not support what I believe to be somewhat whiney "blame the Commission" tone underpinning much of AWC's application. Unlike Mr. Garfield, my Local would much prefer operating in Arizona's regulatory environment as opposed to that of other states, most notably California.

///

Q9. DO YOU BELIEVE THAT AWC IS ENTITLED TO A RATE OF RETURN IN THE AMOUNT SET FORTH IN PARAGRAPH 10 OF ITS APPLICATION?

A9. Yes.

Q10. DOES IBEW LOCAL 387 SUPPORT THE PROPOSED RATE DESIGN SET FORTH ON PAGE THIRTY-SIX (36) OF JOEL M. REIKER'S PRE-FILED TESTIMONY?

A10. Yes.

Q11. IN THEIR PRE-FILED TESTIMONY, MESSRS. GARFIELD (pp. 4 & 33-34) AND HARRIS (pp. 12-16) PROPOSE THE CONSOLIDATION OF FIVE (5) WATER SYSTEMS. DO YOU HAVE ANY COMMENTS OR OBSERVATIONS THAT YOU WOULD LIKE TO SHARE WITH THE COMMISSION REGARDING THIS TOPIC?

A11. For the reasons set forth by Messrs. Garfield and Harris, IBEW Local 387 strongly supports this concept. In particular, IBEW Local 387 fully agrees with and supports AWC's assertion that these systems are so functionally interrelated that it makes little sense for this Commission to not consolidate them for purposes of rate making. I know for a fact that a number of our members routinely travel around, and work in, all portions of AWC's facilities and infrastructure. That being said, I do not agree with Mr. Garfield's conclusory observation on page thirty (30) of his pre-filed testimony that "[m]ulti-disciplined

employees that can perform many different tasks generally cannot operate as efficiently at any one task as employees of a larger system could since they perform the same or similar task over and over." While it may be true in some circumstances, I am unaware of any evidence supporting this generalized statement.

Q12. DOES THIS CONCLUDE YOUR TESTIMONY?

A12. Yes.

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Exhibit A

ARIZONA WATER COMPANY

3805 N. BLACK CANYON HIGHWAY, PHOENIX, ARIZONA 85015-5351 • P.O. BOX 29006, PHOENIX, ARIZONA 85038-9006
PHONE: (602) 240-6860 • FAX: (602) 240-6878 • WWW.AZWATER.COM

January 9, 2009

Mr. Ed Junas
Business Representative
I.B.E.W., Local Union No. 387
5818 North Seventh Street, Suite 201
Phoenix, Arizona 85014

Re: Collective Bargaining Agreement Negotiations

Dear Mr. Junas:

This letter responds to your December 29, 2008 letter requesting to extend contract negotiations to March 1, 2009. As you know, the last collective bargaining Agreement between the I.B.E.W. Local No. 387 and Arizona Water Company (the "Company") expired on December 31, 2008. Even so, at our last negotiating meeting the Company offered to renew that Agreement through December 31, 2009 with no increase in wages or pay scales. Please let me know, as soon as possible, if the I.B.E.W. agrees, and I will have the necessary paperwork prepared. Otherwise, we should schedule a meeting.

Very truly yours,

William M. Garfield
President

jrc
VIA CERTIFIED MAIL

E-MAIL: mail@azwater.com

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WMG:RWG:JRC 1/9/2009 1:27 PM

International Brotherhood of Electrical Workers

SAM HOOVER
President

BOB DeSPAIN
Business Manager

IBEW Local 387
Proposals for Consideration – Arizona Water Company
February 10, 2009

1. **Wage Increase –**

   a. **2009 Wage Freeze**
   b. **2010 3.5% Wage Increase**

2. **Article X, Section 4 – Amended**

   Employees may carry over an additional forty (40) hours of unused vacation into the next year.

3. **Article XI, Section 5 - Amended**

   Time off for personal business is allowed if sick time is available and is limited to no more than four (4) hours per day and twenty-four (24) hours annually and cannot be used for such things as adding to vacation time or as additional sick leave.

4. **Article XI, Section 10 – New**

   When employee uses sixteen (16) hours or less of sick leave annually. The employee shall earn an additional eight (8) hours vacation for the next calendar year.

5. **New**

   IBEW Local 387 is allowed to have Union Meetings with employees on the Company property per division.

6. **New**

   Employees are allowed to wear union stickers on their hard hats.

7. **New**

   Severance Plan

LOCAL UNION 387
5818 NORTH 7TH STREET • SUITE 201 • PHOENIX, ARIZONA 85014 • PHONE (602) 264-1846 • FAX (602) 264-1901

ARIZONA WATER COMPANY

3805 N. BLACK CANYON HIGHWAY, PHOENIX, ARIZONA 85015-5351 • P.O. BOX 29006, PHOENIX, ARIZONA 85038-9006
PHONE: (602) 240-6860 • FAX: (602) 240-6878 • WWW.AZWATER.COM

March 4, 2009

Mr. Ed Junas
Business Representative
I.B.E.W., Local Union No. 387
5818 North Seventh Street, Suite 201
Phoenix, Arizona 85014

Re: Response to Proposals for Consideration Dated February 10, 2009 Made by the International Brotherhood of Electrical Workers Local No. 387 to Arizona Water Company — Collective Bargaining Agreement

Dear Mr. Junas:

This letter summarizes Arizona Water Company's (the "Company") responses to Proposals for Consideration dated February 10, 2009 from the I.B.E.W., Local Union No. 387 involving the Collective Bargaining Agreement ("CBA") as we discussed with you on February 19, 2009.

Company officials met five times with IBEW representatives and several employees who are union stewards (collectively, the "IBEW Negotiating Team"). During those five meetings, which occurred on October 21, 2008, November 5, 2008, December 11, 2008, February 10, 2009, and February 19, 2009, the Company and the IBEW Negotiating Team conducted detailed discussions about a broad variety of subjects of bargaining, including subjects contained in the Proposals for Consideration dated February 10, 2009. The Company will not restate here its comments, objections or any basis of disagreement with any of the proposals made by the IBEW Negotiating Team, as those were already discussed extensively during our negotiations.

The following summarizes the Company's responses to the February 10 Proposals:

1. Proposed Wage increase – The Company is agreeable to a wage freeze for 2009, but rejects the proposal to increase wages by 3.5% for 2010 and extend the CBA for two years, for reasons discussed during negotiations.

2. Carry over 40 hours of vacation leave into the next year – The Company is not agreeable to this proposal for reasons discussed during negotiations.

3. Increasing time off for personal business from 8 hours per year to 24 hours per year to be charged against available sick leave – The Company is not agreeable to this proposal for reasons discussed during negotiations.

4. Additional 8 hours of vacation leave for the next year to all employees who use 16 hours or less of sick leave in any year – The Company is not agreeable to this proposal for reasons discussed during negotiations.

5. The CBA to allow IBEW Local No. 387 to have Union meetings with employees on Company property – The Company is not agreeable to this proposal for reasons discussed during negotiations.

6. The CBA to allow employees to wear union stickers on their hard hats – The Company is not agreeable to this proposal for reasons discussed during negotiations.

7. Severance Plan - The Company is not agreeable to this proposal for reasons discussed during negotiations.

8. The CBA to allow employees to take vacation leave in two hour increments. This matter was discussed briefly during negotiations and was an item added by the IBEW Negotiating Team during the February 19 meeting. The Company is not agreeable to this proposal because: (i) Section 5 of Article VIII of the CBA already provides a limited ability to shift certain work hours with supervisor's prior approval; (ii) Vacation leave already can be taken in as small as 4 hour increments; (iii) The Company's administrative costs would increase; (iv) Coordinating time off between employees would become more complicated and time consuming; and (v) It could increase overtime charges.

At the December 11, 2008 meeting, the Company presented its proposal to extend the current CBA to December 31, 2009 under the same terms and conditions. By this letter the Company reaffirms and presents that proposal as the Company's "last, best and final offer." Unless the IBEW Negotiating Team accepts this proposal and the voting members of the bargaining unit approve, the parties will be at impasse.

The Company encourages the IBEW Negotiating Team to accept the Company's proposal to extend the current CBA under the same terms and conditions through December 31, 2009. Please let me know your decision on this matter by Tuesday, March 10, 2009 at 4:30 P.M. The Company hopes to hear your favorable response by that date.

Very truly yours,

William M. Garfield

William M. Garfield
President

jrc
Enclosures
VIA HAND DELIVERY

Exhibit B

ARIZONA WATER COMPANY

3805 N. BLACK CANYON HIGHWAY, PHOENIX, ARIZONA 85015-5351 • P.O. BOX 29006, PHOENIX, ARIZONA 85038-9006
PHONE: (602) 240-6860 • FAX: (602) 240-6878 • WWW.AZWATER.COM

February 6, 2009

Mr. Ed Junas
Business Representative
I.B.E.W., Local Union No. 387
5818 North Seventh Street, Suite 201
Phoenix, Arizona 85014

Re: Notice of layoffs for employees covered by Collective Bargaining Agreement

Dear Mr. Junas:

This letter provides notice of Arizona Water Company's (the "Company") intent to reduce the workforce in accordance with Article VI of the Collective Bargaining Agreement ("CBA") with the I.B.E.W., Local Union No. 387. Specifically, the Company intends to reduce its workforce covered by the CBA by seven Serviceman/Servicewoman positions and one Meter Reader position as shown on the enclosed list. Also enclosed are two lists which show all Company employees currently occupying the Serviceman/Servicewoman and Meter Reader positions.

The layoffs are scheduled to be completed by February 20, 2009, and will be conducted under procedures specified under Article VI of the CBA.

Very truly yours,

William M. Garfield
President

jrc
Enclosures
VIA HAND DELIVERY

E-MAIL: mail@azwater.com

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WMG:JRC

Arizona Water Company
Bargaining Unit Workforce Reductions

Geographic Area	Div	Last Name	First Name	Employee Number	Title	Hire Date
Miami	Miami	NORIEGA	AARON M	4014	SERVICEMAN	02/22/05
Coolidge	Coolidge	THOMPSON	TOMMY W	5318	SERVICEMAN	04/10/06
Casa Grande	Casa Grande	GUERRA JR	ARMANDO G	2360	SERVICEMAN	08/14/06
Casa Grande	Casa Grande	MONTIEL	DAVID	3681	SERVICEMAN	08/14/06
Sedona	Sedona	JOELS	GREGORY A	2995	SERVICEMAN	10/10/06
Casa Grande	Casa Grande	BALDENEGRO	ARMANDO M	1218	SERVICEMAN	03/12/07
Sedona	Sedona	DENNY	CHRISTOPHER J	1700	SERVICEMAN	03/21/07
Superior	Superior	DUARTE	JON N	1727	METER READER	11/26/07

06-24-09;03:23PM;

Arizona Water Company
All Serviceman Positions, by Seniority

Geographic Area	Div	Last Name	First Name	Employee Number	Title	Hire Date
Casa Grande	Casa Grande	BAKER II	HAROLD M	1214	SERVICEMAN	02/16/71
Casa Grande	Casa Grande	ZIMMERMAN	DENNIS G	6601	SERVICEMAN	08/13/73
Casa Grande	Casa Grande	ODOM	BILLY E	4226	SERVICEMAN	09/26/79
Sedona	Sedona	HENRY	ROBERT W	2634	SERVICEMAN	01/11/81
Bisbee	Bisbee	ENRIQUEZ	RAYMOND D	1958	SERVICEMAN	06/15/81
Miami	Miami	PHILLIPS	TERRY R	4522	SERVICEMAN	01/04/88
Miami	Miami	O'CONNOR	PATRICK A	4210	SERVICEMAN	11/28/88
Bisbee	Bisbee	TORRES	JOSEPH F	5450	SERVICEMAN	01/30/89
Sierra Vista	Bisbee	REYNOLDS	TOMMY J	4780	SERVICEMAN	05/16/94
Miami	Miami	HERNANDEZ	DANIEL P	2540	SERVICEMAN	09/26/94
Apache Junction	Apache Junction	ACUNA	DANIEL J	1005	SERVICEMAN	05/30/95
Overgaard	Lakeside	PACHECO	TIMOTHY E	4500	SERVICEMAN	06/30/95
Sedona	Sedona	ALLDREDGE JR	WILLIAM D	1002	SERVICEMAN	05/20/96
Lakeside	Lakeside	BURGAN	ERIC J	1450	SERVICEMAN	02/02/98
San Manuel	San Manuel	BONNER	MICHAEL R	1360	SERVICEMAN	09/21/98
Lakeside	Lakeside	LILLY	B ALAN	3195	SERVICEMAN	09/28/98
Pinewood	Sedona	FREDERICKSEN	ALAN D	2245	SERVICEMAN	01/18/99
Coolidge	Coolidge	FELIX	RALPH B	2157	SERVICEMAN	08/23/99
Casa Grande	Casa Grande	BRINER	WAYNE D	1407	SERVICEMAN	02/22/00
Rimrock	Sedona	GRAVES	BENJAMIN E	2333	SERVICEMAN	03/18/00
Apache Junction	Apache Junction	PADILLA	JAMES A	4524	SERVICEMAN	06/05/00
Apache Junction	Apache Junction	PREUHS	DARREL D	4595	SERVICEMAN	08/07/00
Apache Junction	Apache Junction	ECK	NATHAN P	1941	SERVICEMAN	10/30/00
Lakeside	Lakeside	DAVIS	D PAUL	1720	SERVICEMAN	11/01/00
Casa Grande	Casa Grande	JOHNSON	SCOTT H	3052	SERVICEMAN	11/20/00
Coolidge	Coolidge	MCCULLOUGH	TY M	3654	SERVICEMAN	05/29/01

Arizona Water Company
All Serviceman Positions, by Seniority

Geographic Area	Div	Last Name	First Name	Employee Number	Title	Hire Date
Casa Grande	Casa Grande	RASCON JR	RAMIRO M	4735	SERVICEMAN	07/23/01
Apache Junction	Apache Junction	LAMAGDELAIN	JOHN T	3312	SERVICEMAN	12/10/01
Apache Junction	Apache Junction	THOMPSON	MICHAEL K	5315	SERVICEMAN	12/31/01
Casa Grande	Casa Grande	GARCIA	JOSE J	2288	SERVICEMAN	09/30/02
Casa Grande	Casa Grande	LOPEZ III	JOSE F	3339	SERVICEMAN	09/13/03
Bisbee	Bisbee	FLORES	DAVID E	2211	SERVICEMAN	09/20/04
Bisbee	Bisbee	VALENZUELA	VICTOR G	5551	SERVICEMAN	09/20/04
Casa Grande	Casa Grande	ORTIZ JR	AARON	4399	SERVICEMAN	11/08/04
Casa Grande	Casa Grande	COLLINS	DONALD E	1537	SERVICEMAN	01/31/05
Miami	Miami	NORIEGA	AARON M	4014	SERVICEMAN	02/22/05
Apache Junction	Apache Junction	RUBAL	RICHARD M	4766	SERVICEMAN	06/06/05
Casa Grande	Casa Grande	AGUIRRE JR	JUAN F	1013	SERVICEMAN	06/28/05
Sedona	Sedona	GOFF	CASEY M	2318	SERVICEMAN	08/08/05
Coolidge	Coolidge	LOPEZ	LOUIE M	3342	SERVICEMAN	08/22/05
Casa Grande	Casa Grande	SALINAS	RYAN	5008	SERVICEMAN	11/21/05
Casa Grande	Casa Grande	RODRIGUEZ	EDDIE L	4757	SERVICEMAN	11/28/05
Coolidge	Coolidge	THOMPSON	TOMMY W	5318	SERVICEMAN	04/10/06
Casa Grande	Casa Grande	JUAREZ JR	ROGER	3066	SERVICEMAN	05/15/06
Overgaard	Lakeside	PRATER	WILLIAM K	4589	SERVICEMAN	05/15/06
Sedona	Sedona	HOWARD	PAUL G	2571	SERVICEMAN	07/03/06
Casa Grande	Casa Grande	GUERRA JR	ARMANDO G	2360	SERVICEMAN	08/14/06
Casa Grande	Casa Grande	MONTIEL	DAVID	3681	SERVICEMAN	08/14/06
Sedona	Sedona	GUTZWILLER	SEAN M	2370	SERVICEMAN	09/18/06
Sedona	Sedona	JOELS	GREGORY A	2995	SERVICEMAN	10/10/06
Apache Junction	Apache Junction	JONES	DAVID R	3061	SERVICEMAN	11/27/06
Casa Grande	Casa Grande	BALDENEGRO	ARMANDO M	1218	SERVICEMAN	03/12/07
Sedona	Sedona	DENNY	CHRISTOPHER	1700	SERVICEMAN	03/21/07
White Tank	Casa Grande	TAYLOR	ERIC J	5261	SERVICEMAN	02/25/08
San Manuel	San Manuel	CARBAJAL	DAVID O	1535	SERVICEMAN	10/27/08

Arizona Water Company
All Meter Reader Positions, by Seniority

Geographic Area	Div	Last Name	First Name	Employee Number	Title	Hire Date
San Manuel	San Manuel	BURKE	HARRY R	1222	METER READER	06/15/81
Apache Junction	Apache Junction	MCCORMICK	GLEN E	3649	METER READER	10/30/00
Pinewood	Sedona	BROCK	TODD J	1411	METER READER	07/23/02
Apache Junction	Apache Junction	COMERFORD	MARK L	1544	METER READER	05/15/06
Overgaard	Lakeside	SMALLEY	DAVID L	5048	METER READER	09/05/06
Apache Junction	Apache Junction	NORDLOW	ERIC R	4059	METER READER	12/14/06
Sierra Vista	Bisbee	FRANCO	RUBEN E	2240	METER READER	03/12/07
Casa Grande	Casa Grande	SANCHEZ	WILLIE R	5019	METER READER	07/23/07
Casa Grande	Casa Grande	BUIE	MARCUS S	1433	METER READER	07/23/07
Casa Grande	Casa Grande	WRIGHT	CLAYTON R	6087	METER READER	07/23/07
Casa Grande	Casa Grande	HIPPS	BRENDA M	2556	METER READER	08/06/07
Miami	Miami	HOPKINS	BRIAN B	2577	METER READER	09/26/07
Sedona	Sedona	SIMMONS	JONATHAN R	5039	METER READER	10/16/07
Superior	Superior	DUARTE	JON N	1727	METER READER	11/26/07
Apache Junction	Apache Junction	DAVIS	LAWRENCE C	1756	METER READER	12/03/07
Coolidge	Coolidge	GIBSON	DENNY N	2316	METER READER	12/26/07
Lakeside	Lakeside	PEDERSEN	LAWRENCE R	4526	METER READER	05/27/08
Casa Grande	Casa Grande	MANRIQUEZ	JESUS M	3451	METER READER	08/04/08

Exhibit C

ARIZONA WATER COMPANY

INTER-OFFICE CORRESPONDENCE

To: All Employees

Date: June 8, 2009

From: William M. Garfield, President WM

Subject: Group Medical and Dental Premiums

New premium rates for Arizona Water Company's insurance programs for active employees and their dependents have been received from the Company's insurance carriers.

Rates for the medical plan will increase 12.8%; there will be no change in the dental plan. The increase is effective July 1, and the new premium deductions will begin with your July 10th paycheck. Both carriers will remain the same: Anthem Blue Cross of California (medical) and Aetna (dental.)

The Company will continue to pay 100% of the medical and dental premiums for active employees. Premiums for dependent coverage will continue to be split: the Company will pay 60% and the employee will pay 40%.

Remember, your insurance premium deductions reduce your taxable wages for all payroll taxes, including FICA.

The new **MONTHLY** premium amounts are as follows:

MEDICAL	Total Monthly Premium	Amount Paid by Company	Amount Paid by Employee
Employee only	$526.32	$526.32	$-0-
PLUS one dependent	$601.65	$360.99	$240.66
TOTAL monthly medical premium for employee and one dependent	$1,127.97	$887.31	$240.66
PLUS two or more dependents	$1,002.85	$601.71	$401.14
TOTAL monthly medical premium for employee and two or more dependents	$1,529.17	$1,128.03	$401.14

DENTAL	Total Monthly Premium	Amount Paid by Company	Amount Paid by Employee
Employee only	$26.07	$26.07	$-0-
PLUS one dependent	$30.67	$18.40	$12.27
TOTAL monthly dental premium for employee and one dependent	$56.74	$44.47	$12.27
PLUS two or more dependents	$51.14	$30.68	$20.46
TOTAL monthly dental premium for employee and two or more dependents	$77.21	$56.75	$20.46

If you have any questions, please contact Linda Nogalo in the Phoenix office at (602) 240-6860 x104.

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Attorneys for Intervenor IBEW Local 387

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AZ CORP COMMISSION
DOCKET CONTROL

EXHIBIT
IBEW-2
admitted

BEFORE THE ARIZONA

CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY, AND FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR UTILITY SERVICE AND FOR CERTAIN RELATED APPROVALS BASED THEREON.	Docket No. W-01445A-08-0440 **NOTICE OF FILING THE SURREBUTTAL TESTIMONY OF EDWIN L. JUNAS, JR.**

Pursuant to the Assistant Chief Administrative Law Judge's Procedural Order (p. 2) dated June 11, 2009, Intervenor Local Union 387, International Brotherhood of Electrical Workers, AFL-CIO, CLC, by and through undersigned counsel, hereby provides notice of its filing of the attached Surrebuttal Testimony of Edwin L. Junas, Jr. in this docket.

RESPECTFULLY SUBMITTED this 17th day of August 2009.

LUBIN & ENOCH, P.C.

Nicholas J. Enoch, Esq.
Attorney for Intervenor

Original and thirteen (13) copies of IBEW Local 387's Notice filed this 17th day of August 2009, with:

Arizona Corporation Commission
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1200 West Washington Street
Phoenix, Arizona 85007-2996

Copies of the foregoing transmitted electronically this same date to:

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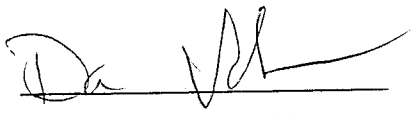

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Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A1. Edwin L. Junas, Jr. My business address is still 5818 North 7th Street, Suite 201, Phoenix, Arizona 85014.

Q2. ARE YOU THE SAME EDWIN L. JUNAS, JR. WHOSE DIRECT TESTIMONY WAS FILED IN THIS MATTER ON JUNE 25, 2009?

A2. Yes.

Q3. ON PAGES EIGHT (8) AND NINE (9) OF HIS REBUTTAL TESTIMONY DATED JULY 10, 2009, WILLIAM W. GARFIELD TAKES ISSUE WITH YOUR CHARACTERIZATION OF ARIZONA WATER COMPANY'S ("AWC") HAVING UNDERGONE "TREMENDOUS GROWTH." WHAT IS YOUR RESPONSE TO MR. GARFIELD'S ASSERTION?

A3. Unfortunately, I am hardly surprised that AWC would concoct a disagreement where none really exists. To this end, I would simply point out that paragraph seven (7) of AWC's Application in this very case states, *inter alia*, that "[t]he Company's rate base has increased substantially since the Company's most recent rate proceeding for each operating group, and the Company is annually adding additional utility plant to each water system within the Company in order to ensure safe and reliable water service to its customers." Mr. Garfield himself reiterated this point on page five (5) of his testimony wherein he cites the fact that AWC's operating and maintenance expenses "have increased significantly" since its last rate applications as one of the primary bases for AWC's instant application. While I anticipate that Mr. Garfield may, for some unknown reason, attempt to contrive a distinction

between customer growth and a growth in operating and maintenance expenses, I believe that it is self-evident that the two largely go hand in hand. If it is Mr. Garfield's contention that AWC's customer growth will remain flat or will decline slightly in the years to come, I would encourage him to visit the website for the Arizona Department of Commerce at www.azcommerce.com/EconInfo/Demographics/Population+Projections.htm. If he were to do so, he would quickly learn that, based on the best available information, I am correct in asserting that AWC is going "to grow at a sustained, if not accelerating, pace in the years to come."

Q4. ON PAGE NINE (9) OF HIS REBUTTAL TESTIMONY, MR. GARFIELD TAKES ISSUE WITH YOUR PREVIOUS ASSERTION "THAT AWC SIMPLY ANNOUNCED THE LAYOFFS TO ITS WORKFORCE WITHOUT EVER HAVING MADE ANY EFFORT WHATSOEVER TO DISCUSS THE TOPIC WITH IBEW LOCAL 387." DID AWC, IN FACT, EVER DISCUSS WITH IBEW LOCAL 387, IN A MEANINGFUL FASHION, THE TIMING AND POTENTIAL ALTERNATIVES TO THE FEBRUARY 2009 LAYOFFS?

A4. Absolutely not. The first time that my union learned about the impending layoffs was when we received Exhibit B to my Direct Testimony.

On December 11, 2008, I attended a negotiation meeting with AWC and IBEW Local 387 and nothing was told to us

about the possibility of layoffs. I attended a second negotiation meeting on February 11, 2009 in which we discussed, *inter alia*, the "Proposals for Consideration" dated February 10, 2009, a copy of which is included in Exhibit A to my Direct Testimony. During that meeting, Mr. Garfield said that, prior to any possible reduction in force to the bargaining unit, he would meet with the union beforehand as "they have never been through a reduction in workforce."

On February 6, 2009, I received a phone call from AWC's Vice President, Richard W. Henderson, in which I was notified that AWC will be laying off eight (8) bargaining unit employees and that a letter is on the way to the IBEW Local 387 union hall. This was the first notice of AWC's intent to reduce the bargaining unit workforce in accordance with Article VI of the collective bargaining agreement ("CBA") with IBEW Local 387, a copy of which is attached hereto as Exhibit A. At that point, I requested that I be present with Mr. Garfield when the process required by the CBA are being implemented by AWC. For reasons that escape me, my request was denied and I was told that if the CBA was not followed correctly, I should let them know.

Not having been present when the offers to the bargaining unit were made by AWC, I believe the first

set of offers starting were made on February 8, 2009. In AWC's letter to me dated February 6, 2009, it stated the layoffs are scheduled to be completed by February 20, 2009, and will be conducted under procedures specified under Article VI of the CBA.

After the fact, I was notified by AWC that they had met with the eight (8) bargaining unit employees concerning what had taken place. Then it was up to our stewards and me to review what had taken place without being present when the AWC verbally notified the eight (8) bargaining unit employees of the choice(s) they had to make. At our other public service corporations, such as Arizona Public Service Company, we have a joint partnership working together on issues that affect both the company and the unionized workforce. Regretably, this did not take place with AWC in this particular instance.

Q5. HAVE THE EMPLOYEES AT AWC SEEN A "HEFTY INCREASE" IN THEIR PORTION OF THE COMPANY'S GROUP MEDICAL INSURANCE PROGRAM?

A5. When one reviews the figures set forth in Exhibit C to my prior testimony, I believe the answer is "yes." The financial stress that our members are working under is further compounded by the fact that they received no pay raise at all in 2009 while paying a greater sum toward medical coverage, thus effectively resulting in

a pay cut to them even without considering the impact of inflation on real wages. Aside from being needlessly argumentative, I do not understand why Mr. Garfield could, or would even want to, take issue with this particular portion of my prior testimony.

Q6. DOES THIS CONCLUDE YOUR TESTIMONY?

A6. Yes.

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EXHIBIT A

ARTICLE IV - UNION REPRESENTATIVES

Section 1. The Company recognizes the Union's right to appoint Union Stewards in accordance with the Union's Constitution and By-Laws. However, the Company will only recognize such Union Stewards after proper notification, in writing, from the Union.

Section 2. Employees shall not engage in Union (or anti-Union) activities or business during times they are being paid by the Company. The Company will in no way discriminate against any Union Steward for proper performance of Union duties.

ARTICLE V - RIGHTS OF MANAGEMENT

Section 1. The management of the Company and its properties, and the direction of its working force, including, but not limited to, the right to: hire, promote, demote, transfer, assign and direct Employees; sell, lease, or transfer all or part of the business; move, transfer, or change the location of part or all of the operations; discipline, suspend, discharge, or retire Employees; make and enforce Company rules and regulations; increase or decrease the work force; determine the work to be performed, the Employees' performance and methods to be employed; establish quality and work standards; discontinue or relocate any or all portions of the operations now or hereinafter covered or carried out at the locations covered by this Agreement; schedule and reschedule hours, including overtime as provided herein; determine and redetermine job content, job classifications, and qualifications required for the job, with notice provided to the Union and the opportunity to confer with the Company on such; establish procedures to maintain safety, efficiency and order; suspend or discharge Employees for cause; relieve Employees from duty because of lack of work or other legitimate reason; contract out, providing Employees are not laid off as a direct result of such contracting out; are vested exclusively in the Company.

Section 2. All functions, rights, powers or authority of the Company are expressly retained by the Company, unless specifically delegated, modified or abridged by this Agreement.

ARTICLE VI - SENIORITY

Section 1. In all cases of transfer, promotion, decrease of personnel, or recall after layoff, the following factors shall be considered, and where factors (a) and (b) are substantially equal, factor (c) shall govern:

a. Knowledge, training, ability, skill, adaptability, efficiency and absenteeism;

b. Physical fitness;

c. Seniority (which is defined as length of continuous employment).

Section 2. The following procedure shall be followed in the event of a reduction in work force:

a. The position to be eliminated and all Employees occupying the position shall be identified;

b. An Employee affected may elect to take the layoff and remain eligible for recall for a twelve (12) month period, or;

c. Bump in accordance with the following limitations:

[1] Bump the least senior Employee in the same classification within the Division or on a Company-wide basis, or;

[2] Bump a less senior Employee in a lower classification in the same geographical area.

d. Recall from layoff will be in reverse order of the layoff and Employees shall not have their recall eligibility jeopardized until they are returned to their original classification and geographical location or the twelve (12) month period lapses, whichever is sooner.

e. Any relocation expense resulting from layoff or bumping procedure shall be borne by the Employees. However, should the Company require an Employee to relocate, the Company shall reimburse the Employee for reasonable relocation expenses.

f. Layoff and bumping procedures shall not apply when a system or Division, or a part thereof, is sold except to the extent that the purchaser does not offer similar employment to the Employee(s) affected.

Section 3. New Employees and those rehired after a break in continuous service shall be on probation for a period of six (6) months, during which time they may be terminated at the exclusive discretion of the Company with no recourse under the grievance procedures. If such Employees remain actively and continuously in the employ of the Company for six (6) months, they will then acquire seniority dated back to the first day of continuous employment.

Section 4. An Employee will lose all seniority for:

a. Layoff exceeding twelve (12) months due to lack of work or other causes beyond the control of the Company.

b. Failure to return when called back to work after a layoff within ten (10) working days from the date of mailing of notice by the Company to the Employee at the Employee's last known address as shown by the records of the Company (a copy of said notice shall be provided to the Union Steward).

c. Absence due to accident or sickness exceeding six (6) months after use of all available sick leave and vacation, or failure of such absent Employee to furnish a doctor's certificate within not more than five *(5)* days when requested by the Company. An Employee shall, if requested by the Company, submit to an examination from time to time by the Company's physician at the Company's expense, and the report of the Company's physician respecting the Employee's ability or inability to return to the Employee's duties within such six (6) month period shall be binding and conclusive.

d. Voluntary termination or discharge for proper cause by the Company.

e. Absence of three (3) consecutive days without reporting to the Employee's supervisor or the Division Manager except where extenuating circumstances prevent the Employee from reporting.

Section 5. Layoffs of less than twelve (12) months or leaves-of-absence granted by the Company shall not constitute a break in continuous service. Past continuous service credit shall be retained, but not accumulated, during the period of such absence. In the event of layoffs, the Company will notify non-probationary Employees to be released, by letter, at least two weeks in advance of such layoffs. Such Employees shall not be required to utilize accumulated vacation during the layoff.

Section 6. When new positions are created or vacancies occur, notices of such new positions or vacancies shall be posted on the bulletin boards of the Company for a period of one (1) week during which period of time applications will be received by the Company from non-probationary Employees for such positions or vacancies. The posting period will be two (2) weeks when any Employee considered qualified and capable of handling the job is absent on vacation and management is unable to notify the Employee of the posting. The Company will set forth in said notices the nature of the position, the duties and qualifications, the rate of pay, and shall indicate the promotional progression. The factors contained in Section 1 of this Article shall be considered by the Company in making the

selections to fill such positions or vacancies. The Company may temporarily fill such positions until the position or vacancy is filled as provided herein. If no qualified applications are received for the position or vacancy at the end of the posting period, the Company may fill such positions or vacancies. When temporary jobs of three (3) months duration or less are established, no posting will be necessary.

Employees who file applications for posted jobs will be interviewed in person where practical, or by telephone. All Employees who have filed applications for posted jobs shall be notified of the outcome.

When an Employee applies for transfer to a position in a system or Division and is accepted by the Company for transfer, the Employee must report to work in the new position on the date specified in the Job Vacancy Notice, or such later date as agreed to by the Company at its sole discretion.

Section 7. When an Employee, qualified and capable of performing the job, is temporarily assigned to a higher classification, the Employee shall receive the applicable rate of pay for the higher classification during the entire period of the assignment.

Section 8. The Company will employ a qualified Senior Serviceman or Senior Servicewoman in each Division where a Union classification is required.

In order to qualify as a Senior Serviceman or Senior Servicewoman, an Employee must have progressed through all steps as a Serviceman or Servicewoman, and must have obtained a Grade 3 Water Distribution System Operator's Certificate from the Arizona Department of Environmental Quality ("ADEQ").

After the Employee has progressed through all steps as Serviceman or Servicewoman and obtained said Certificate, the Employee shall not be promoted to the Senior Serviceman or Senior Servicewoman classification until an opening occurs. Promotion to Senior Serviceman or Senior Servicewoman shall be governed by Article VI, Section 1 and Section 8 of this Agreement.

Section 9. The Company is required to comply with the certification requirements of ADEQ. Any Employee occupying, or wishing to occupy, a position or performing duties such that ADEQ requires a specific grade of Water Distribution and/or Water Treatment Certificate of Registration as a Certified Operator must have obtained and currently possess the certificate required by ADEQ.

ARTICLE VII - NON-DISCIUMINATION

The Company, the Union, and Employees will not discriminate against any Employee or

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EXHIBIT
IBEW-3
admitted

BEFORE THE ARIZONA

CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY, AND FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR UTILITY SERVICE AND FOR CERTAIN RELATED APPROVALS BASED THEREON.	Docket No. W-01445A-08-0440 **NOTICE OF ERRATA**

Intervenor Local Union 387, International Brotherhood of Electrical Workers, AFL-CIO, CLC, by and through undersigned counsel, hereby notifies the Assistant Chief Administrative Law Judge and the parties of an error in A4 to the previously filed Surrebuttal Testimony of Edwin L. Junas, Jr. in this docket. A corrected answer to Q4 is attached hereto.

RESPECTFULLY SUBMITTED this 26th day of August 2009.

LUBIN & ENOCH, P.C.

Nicholas J. Enoch, Esq.
Attorney for Intervenor

///

Original and thirteen (13) copies of IBEW Local 387's Notice filed this 26th day of August 2009, with:

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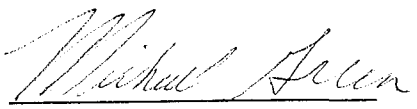

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Q4. ON PAGE NINE (9) OF HIS REBUTTAL TESTIMONY, MR. GARFIELD TAKES ISSUE WITH YOUR PREVIOUS ASSERTION "THAT AWC SIMPLY ANNOUNCED THE LAYOFFS TO ITS WORKFORCE WITHOUT EVER HAVING MADE ANY EFFORT WHATSOEVER TO DISCUSS THE TOPIC WITH IBEW LOCAL 387." DID AWC, IN FACT, EVER DISCUSS WITH IBEW LOCAL 387, IN A MEANINGFUL FASHION, THE TIMING AND POTENTIAL ALTERNATIVES TO THE FEBRUARY 2009 LAYOFFS?

A4. Absolutely not. The first time that my union learned about the impending layoffs was when we received Exhibit B to my Direct Testimony.

On December 11, 2008, I attended a negotiation meeting with AWC and IBEW Local 387 and nothing was told us about the possibility of layoffs. During that meeting Mr. Garfield said that prior to any possible reduction in force to the bargaining unit, he would meet with the union beforehand as "they have never been through a reduction in workforce." I attended another negotiation meeting on February 11, 2009 in which we discussed, *inter alia*, the "Proposals for Consideration" dated February 10, 2009, a copy of which is included in Exhibit A to my Direct Testimony.

On February 6, 2009, I received a phone call from AWC's Vice President, Richard W. Henderson, in which I was notified that AWC will be laying off eight (8) bargaining unit employees and that a letter is on the

way to the IBEW Local 387 union hall. This was the first notice providing a notice of AWC's intent to reduce the bargaining unit workforce in accordance with Article VI of the collective bargaining agreement ("CBA") with IBEW Local 387. At that point, I requested that I be present with Mr. Garfield when the process required by the CBA are being implemented by AWC. For reasons that escape me, my request was denied and I was told that if the CBA was not followed correctly to let them know.

Not being present when the offers to the bargaining unit were made by AWC, I believe the offers starting being made on February 8, 2009. In AWC's letter to myself dated February 6, 2009 it stated the layoffs are scheduled to be completed by February 20, 2009, and will be conducted under procedures specified under Article VI of the CBA.

After the fact, I was notified by AWC after they had met with the eight (8) bargaining unit employees of what had taken place. Then it was up to our stewards and me to review what had taken place without being present when the AWC verbally notified the eight (8) bargaining unit employees of the choice or choices they had to make. At our other public service corporations, such as Arizona Public Service Company, we have a joint

partnership working together on issues that affect both the company and the unionized workforce. Regretably, this did not take place with AWC in this particular instance.

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