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ARIZONA CORP. COMM  
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IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR THE DETERMINATION OF THE CURRENT FAIL VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS ANTHEM WATER DISTRICT AND ITS SUN CITY WATER DISTRICT.

**Docket No. W-01303A-09-0343**

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR THE DETERMINATION OF THE CURRENT FAIL VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS ANTHEM/AGUA FRIA WASTEWATER DISTRICT AND ITS SUN CITY WEST WASTE WATER DISTRICT.

**Docket Nos. SW-01303A-09-0343**

**FILING OF THE OPENING BRIEF OF MARSHALL MAGRUDER IN  
THE RATE CONSOLIDATION AND RATE STRUCTURE (PHASE II)  
WITH AN  
ERRATA TO THE MARSHALL MAGRUDER  
CONSOLIDATED RATES AND RATE STRUCTURE OF 28 JUNE 2010  
16 July 2010**

Marshall Magruder, a Santa Cruz County Arizona American Water Tubac Water District customer, a Party in Dockets W/SW-010303A-08-0227, submits this Opening Brief in the Arizona-American Water Company case Phase II, concerning Rate Consolidation and Rate Structure. An Errata, to the previously filed Consolidated Structures, are included herein.

This Brief includes evidence and positions to support:

- a. Rate Consolidation for all water districts and for all non-exempt rate categories.
- b. Rate Structure design to provide a lowest rates for lowest consumption users (such as those on limited incomes) and increasingly higher rates for the highest consumption users to conserve water throughout Arizona by sending "price signals" to residential and commercial customers.
- c. Rate Structure design with five residential and four commercial tiers (inclined blocks), so all customers can "visualize" and move from a rate tier to a lower tier more easily, by using less water, to promote water conservation.

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- d. Rate Consolidation for all wastewater districts.
- e. Consolidation for all "Fees and Miscellaneous Charges".
- f. Consolidation for the Company's "Rules and Regulations" in one document.
- g. "Water Demand Side Management (DSM)" programs are to include specified performance measurement objective criteria and goals for all rate categories including customer "water" audits, and with both Incentives and Penalties for decreased or increased water losses, respectively.

The testimony, conclusions and recommendations, as summarized in this Brief, benefit the Customers, Company and Commission with consolidated rates with conservation-oriented inclined tier blocks and others herein to be adopted by the Commission.

An Errata to the Magruder "Consolidated Rate Schedules" of 25 June 2010 are included.

I certify this filing has been emailed or mailed to the Commission, Company and parties on the Service List. My contact information and addresses are provided below.

Respectfully submitted on this 16<sup>th</sup> day of July 2010

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By 

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**OPENING BRIEF  
OF  
MARSHALL MAGRUDER  
IN THE RATE CONSOLIDATION AND RATE STRUCTURE (PHASE II)**

**AND**

**ERRATA  
TO THE MARSHALL MAGRUDER CONSOLIDATED RATES AND RATE STRUCTURE  
FILED ON 28 JUNE 2010**

**16 JULY 2010**

**IN THE MATTER  
OF THE APPLICATIONS OF  
ARIZONA-AMERICAN WATER COMPANY,  
AN ARIZONA CORPORATION,**

**FOR THE DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND  
PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR  
UTILITY SERVICE BY ITS ANTHEM WATER DISTRICT AND ITS SUN CITY WATER DISTRICT  
(ACC Docket No. W-01303A-09-0343)**

**AND**

**FOR THE DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND  
PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR  
UTILITY SERVICE BY ITS ANTHEM/AGUA FRIA WASTEWATER DISTRICT AND ITS SUN CITY  
WEST WASTE WATER DISTRICT  
(ACC Docket No. SW-01303A-09-0343)**

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**Opening Brief of  
Marshall Magruder in  
Rate Consolidation and Rate Structure (Phase II)  
And  
An Errata to the Marshall Magruder Consolidated Rates and Rate Structure  
filed on 28 June 2010**

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**Brief Summary, Conclusions and Recommendations**

This party proposes Rate Consolidation for all water districts with a new Rate Structure. The consolidated revenue will be slightly less than Target Revenue based on the Company's model. Residential revenue is reduced about 0.5% and commercial increased by 1.5%. A water LIFELINE and water conservation-oriented Rate Structure is proposed for all customers.

The resultant monthly impacts in terms of Dollars and percent for a Median residential user's bill, in the 5/8 & 3/4-inch and 1-inch rate categories, are

**Table ES-1 – Impact of Consolidated Rates on Median Consumption Customers.**

Water District	5/8 and 3/4-inch Residential Service			1-inch Residential Service		
	Impact	Dollars	Percent	Impact	Dollars	Percent
Agua Fria	Decrease	\$1.66	6.25%	Decrease	\$20.94	38.72%
Anthem	Decrease	\$33.33	55.56%	Decrease	\$65.91	65.91%
Havasu	Decrease	\$13.44	37.46%	Decrease	\$15.93	31.64%
Mohave-Bullhead	Increase	\$8.56	61.64%	Increase	\$9.48	54.90%
Mohave-Rio	Increase	\$10.87	65.61%	Increase	\$1.04	3.26%
Paradise Valley-5/8"	Increase	\$0.04	0.11%	Increase	\$54.89	24.12%
Paradise Valley-3/4"	Decrease	\$2.72	7.22%			
Sun City	Increase	\$11.98	77.47%	Decrease	\$2.59	6.82%
Sun City West	Decrease	\$5.46	17.80%	Decrease	\$25.55	42.00%
Tubac	Decrease	\$14.96	35.38%	Decrease	\$69.16	67.74%

The residential Consolidated Service Charge is \$14.50 for 5/8- & 3/4-inch services and \$20.00 for 1-inch service. Water LIFELINE service for 3,000 gallons is \$17.96. Consolidated Rates are standard for all rate classes. The volumetric residential and commercial rates, by Tier, are

- Tier 1 \$0.98/1000 gallons** (this a water "LIFELINE" rate for first 3,000 gallons)
- Tier 2 \$2.50/1000 gallons** (First Tier for commercial 1.5-inch and larger rate categories)
- Tier 3 \$3.00/1000 gallons**
- Tier 4 \$3.50/1000 gallons**
- Tier 5 \$4.00/1000 gallons.**

For residential 5/8- and 3/4-inch and 1-inch rate categories, the Tier breakpoints are at 3,000; 10,000; 25,000; and 45,000/50,000 gallons. This is over 90% of the customers.

Higher Customer Charges and Tier breakpoints are used for larger service rate categories.

Other rate classes, such as private fire and non-potable water average 10% higher to reduce at least a \$1,089,829 shortfall from the recently approved non-potable water rate.

A five-year phase-in of all rate changes is proposed with the Company's "5 Step" process.

Consolidated Wastewater rates, unchanged from the Company's proposal, are accepted.

Consolidated Miscellaneous Charges and Fees and a new meter change fee are proposed.

Consolidated and reader-friendly Rules and Regulations are proposed.

The establishment of Water Demand Side Management (WDSM) programs is proposed including an incentive-driven Water Loss Management DSM program.

All of the above are based on **fair and reasonable** considerations for the Company and ratepayers, without discrimination based on their location, as required by the Arizona Constitution.

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Specific Recommendations:

1. That all Water District rates be consolidated in 5-Steps over a 5-year period.
2. That a low First Residential Tier, at less than \$1.00/1000 gallons, be created for first 3,000 gallons as water LIFELINE for all customers (or \$17.96 for first 3,000 gallons) and that all "low income" programs be cancelled.
3. That Five Residential and Four Commercial Tiers be used with at least a 4:1 ratio between the Last and First Tier rate.
4. That the Magruder Consolidated Rates be considered for implementation.
5. That all Wastewater District rates be consolidated in 5-Steps over a 5-year period.
6. That all Miscellaneous Charges and Fees be consolidated into one schedule for all districts and submitted to the Commission within 45 days of approval of this case.
7. That a new \$500 fee be established for changing a water meter to a smaller size and that a Safety Certification be provided and recorded on the deed for customers with fire sprinklers and that this process be included with the Consolidated Charges and Fees submission.
8. That the Company's Rules and Regulations (R&Rs) be consolidated and reviewed for readability by a Citizens Advisory Committee (CAC) and submitted to the Commission within 180-days after completion of this case. The approved R&Rs will be published on the Company's website.
9. That the Company be ordered to provide five or more Water SDM projects, in several Rate Classes, including both residential customers and large hotels/resorts (golf courses), with incentives funded by a Water DSM rate adjustment not to exceed 2% within 90 days.
10. That the Company provide a Water Loss Management program as a DSM program with financial disincentives if leakage exceeds 10% in any district and incentivized when less.
11. That the Company activate a Citizens Advisory Committee (CAC) with at least one representative per small district (less than 5,000 customers) and at least two for larger districts representing different Rate Classes to meet at least semi-annually, establish a regular "Town Hall" schedule, and publish a multi-page newsletter as a way to receive customer feedback, review Rules and Regulations, and to inform the public of DSM programs and ongoing project or company changes.

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## Section 1

### Background and the Issues

#### 1.1 Background from the Last Rate Case.

Marshall Magruder was an intervenor in the prior Arizona-American Water Company (the Company) rate case in Dockets W/SW-01303A-08-0227 (hereafter, First Rate Case) and is an intervenor in this rate case, Rate Consolidation (Phase II) in Dockets W/SW-01303A-09-0343.

During the First Rate Case, Marshall Magruder proposed that conservation be a significant driver for water volumetric rates using a steep inverse slope (Tier) Rate Structure, with up to ten Tiers to make price breakpoints "visible" and "obtainable". Customers must see potential savings in order to reduce water consumption. These breakpoints are designed so a prudent person could conserve and attain lower monthly bills by responding to clear "price signals" to conserve water.

He also stressed that a low initial volumetric or "First Tier" rate so that special adjustments for lower-income customers are not necessary. The Rate Structure should be designed so all residential customers have an adequate water "LIFELINE" at a low and reasonable cost. This avoids rate discrimination and unique administrative costs to establish, monitor and advertise a "low income" program, as this is build in the Rate Structure used by all, e.g., a "LIFELINE" first tier rate.

He proposed consolidating all Miscellaneous Charges and Fees and to consolidate the Company's Rules & Regulations.

The resultant Commission Decision and Order No. 71470 (8 December 2009) ordered the Commission Staff and Company to propose a rate consolidation testimony and schedules for all the AAWC water and wastewater districts in Arizona.

#### 1.2 The Issues.

Seven issues were identified for this case. These are as follows:

Issue 1 – Should Water District Rates be consolidated?

Issue 2 – Should Rate Structure be Conservation Oriented?

Issue 3 – Should Wastewater District Rates be consolidated?

Issue 4 – Should All Fees and Miscellaneous Charges be consolidated?

Issue 5 – Should the Rules and Regulations be consolidated?

Issue 6 – Should a Water Demand Side Management (DSM) Program be established?

Issue 7 – Should Water Loss be an incentive or disincentive?

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**Section 2**  
**Should Water District Rates Be Consolidated?**  
**(Issue 1)**

In the First Rate Case, the Magruder Testimony and the Company's witness and testimonies provided evidence that supports Rate Consolidation that was incorporated into the Marshall Magruder Direct Testimony,<sup>1</sup> hereafter, Magruder Testimony, as Exhibit MM-1 and also in the Marshall Magruder Rebuttal Testimony.<sup>2</sup> Understanding the factors involved in Rate Consolidation were considerations in the Magruder Testimony that were essential to resolving this issue.

**2.1 Arizona Constitutional Requirements Concerning Rates.**

**2.1.1 The Charges for Services Must be Just and Reasonable.**

The Rate Design directly impacts the "just and reasonable" decision considerations in all rate cases, as quoted in the Magruder Rebuttal, Section 12 of Article 15 of the Arizona Constitution:

**"Sec. 12. All charges made for services rendered, or to be rendered, by public service corporations within this state shall be just and reasonable, and no discrimination in charges, service, or facilities shall be made between persons or places for a like and contemporaneous service..."**  
[AZ Constitution, Article 15, Section 12] (Emphasis added)

**2.1.2 The Charges for Service Must NOT Discriminate between Persons or Places.**

This section continues and prohibits rate discrimination between customers in different places or locations, for the "same" and contemporaneous services rendered. The "services rendered" are the same for all water (and wastewater) district customers. Imposing different rates in different districts does not meet the intent of this section, and appears potentially unconstitutional.

This Constitutional section, in my opinion, strongly supports Rate Consolidation in all Water and in all Wastewater districts, in fact, an existing situation that also appears to not conform.

**2.2 Factors That Influence Support for Rate Consolidation.**

The below performance and financial factors were carefully considered in the Magruder Testimony in this case and also in The Last Rate Case [Magruder Testimony, Exhibit MM-1]:

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<sup>1</sup> "Direct Testimony of Marshall Magruder in Rebuttal to Rate Structure and Rate Consolidation Testimonies by the Commission Staff and Arizona-American Water Company" filed 3 May 2010, hereafter "Magruder Testimony."  
<sup>2</sup> "Rebuttal Testimony of Marshall Magruder to Rate Structure and Rate Consolidation Testimonies and Rebuttals and an Errata to His Direct Testimony," filed 14 May 2010, hereafter "Magruder Rebuttal."

1  
2 a. Product. The Company's product (water supply or waste water removal) is the *same* in all  
3 water and wastewater districts.<sup>3</sup> Focus on prudent "product" safe delivery or removal should  
4 dominate business decisions.

5 b. Services. The Company provides the *same* services in all districts.

6 c. Infrastructure Requirements. The infrastructure requirements, in terms of engineering  
7 standards, are the *same* in all districts, thus directing that certain engineering and operations must  
8 be built into the system.

9 d. Water Quality. The quality of customer water in terms of water purity, public health and  
10 safety regulations and standards are the *same* for all districts.

11 e. Meet Customer Demands. The requirements to meet customer water and wastewater  
12 demands are the *same* in all districts including adequate backup equipment, operational personnel,  
13 and storage and tank maintenance.

14 f. Administrative Requirements. These administrative requirements, in terms of meter  
15 reading, billing and call centers, are the *same* for all districts.

16 g. Operations and Maintenance (O&M). The O&M requirements are the *same* for all districts.  
17 Rate Consolidation smoothes out any unusual or high one-time cost for unscheduled O&M.

18 h. Technical Specialists. Larger operations permit more technical and diverse specialists  
19 within the Company that an individual district could support.

20 i. Equipment Replacements. The equipment replacement actions use the *same* standards in  
21 all districts used for replacing equipment that reached the end of its effective life that enhance cost  
22 sharing and savings due to "economies of scale."

23 j. Cost of Growth. The requirements for new customers, due to growth, implemented by the  
24 Commission, are the *same* in all districts for all new line extensions and equipment to be funded in  
25 advance by the new customers (or developer) and not by existing customers.

26 k. Major Capital Costs. The Company's capital cost for improvements are the *same* for all  
27 districts such a new infrastructure needs, replacement wells, larger storage tank, smart meters,  
28 expanded or updated call center, are in the Company's total revenue requirement.

29 l. Major Non-Periodic Expenses. All districts have non-periodic (and sometimes emergency)  
30 and *similar* major expenses. If these costs pass directly just to the individual customers that benefit  
31 may cause major increases in these customers' rates; however, when shared by many customers  
32 in all districts, these expenses are easily absorbed without undue hardship to a few. Many times  
33 these expenses are unexpected.

34  
35 <sup>3</sup> The term "all districts" used herein means all the AAWC water and wastewater districts in Arizona.

1  
2 m. Interconnections. Interconnections between districts is not a critical factor as water  
3 systems are not *similar* to the electrical grid with multiple paths, thus an interconnection between  
4 two areas was testified by the Company, RUCO and Staff to have insignificant impacts on rates.  
5 Interconnections of non-contiguous districts is a “nice to have, if possible,” however, parties in this  
6 case agreed that interconnectivity is neither required nor necessary for Rate Consolidation.

7 n. Rate Case Expenses. Rate Case expenses to be reduced for all customers, less rate  
8 cases to be filed, and the resultant Commission and RUCO rate case costs also decrease.

9 o. Standardization. Standardization throughout all districts makes the Company more  
10 efficient in terms of *similar* chemicals used, product tests, procurement, quality control, personnel  
11 management and training, system monitoring, and leak management techniques.

12 p. Rate Stability. Rate stability and rate swings from rate case to rate case will be greatly  
13 reduced and more gradual in all districts, after initial consolidation differences are absorbed.

14 q. Rate “Shock”. Rate “shock” in the future for all districts will be reduced after consolidation  
15 and probably will not be a future major factor, as gradualism will result. “Rate Shock” will disappear.

16 r. Public and Political Consternation. Consternation will be reduced after rate consolidation in  
17 the public and political arenas. Because of a lack of rate stability, the frequently high rate changes  
18 are being requested in the Company’s rate cases. The Company presently has a poor reputation  
19 with its customers and local politicians. Consternation concerns are real but will be mute, as Rate  
20 Consolidation smoothes out to equalize the cost peaks and valleys so what ratepayers now  
21 perceive will be gone. There could be no better time than the present to consolidate from this view.

22 s. Company’s Revenue Impact. The Company’s total revenue from all districts remains the  
23 *same*, that is, revenue received is designed to *neutral before and after Rate Consolidation*.

24 t. Rate Relief Timing. Rate relief timing is critical. In this rate case, the Company has a real  
25 and validated revenue need. All the elements are in place for this to be accomplished during these  
26 proceedings and accomplished without additional delay so the Company receives its fair and  
27 reasonable rate of return on its investment.

28 u. Public Outreach and Education. Prior to implementation, public outreach and education  
29 are essential as additional “Town Halls” are now being held in all districts. Most customers do not  
30 understand the relationships and issues involving Rate Consolidation and in the Rate Structure  
31 design for fair and reasonable rates and the Arizona Constitution prohibition against rate  
32 discrimination based on “persons or places”.

33 v. Phase-In Plan. Rate Consolidation use a Rate Structure design with multiple “steps” to  
34 reduce short-term cost impact for lowest using consumers as higher consuming users develop  
35 conservation methods to reduce cost. This factor permits Rate Consolidation and Rate Structure

design to reduce the rate transitional differences in various districts with price signals to smooth the differences.

**2.3 The Benefits of Rate Consolidation.**

Considering the above Rate Consolidation Factors has lead to many benefits for the Company, Customers and Commission, including providing the same benefits today and the same benefits for "all" customers in all water districts. Table 1 summarizes these benefits.

**Table 1 – Customer, Company and Commission Benefits Associated with the Rate Consolidation Factors**

<b>Benefits</b>	<b>For the Customer</b>	<b>For the Company</b>	<b>For the Commission</b>
Product	Same for all districts	Same for all districts	Same for all districts
Services	Same for all districts	Same for all districts	Same for all districts
Infrastructure requirements	Same for all districts	Same for all districts	Same for all districts
Water quality	Same for all districts	Same for all districts with central labs	Same for all districts
Meet customer demands	Same for all districts	Same for all districts	Same for all districts
Administrative requirements	Lower admin cost	Lower admin cost, better efficiency	Lower admin cost
Operations & Maintenance	Unique costs smoothed out	Easier to manage	Overall O&M costs lower
Technical specialists	Better technical services	Better technical expertise	Better technical support
Equipment replacements	Cost savings	Economies of scale	Better overall systems
Cost of growth	No rate impact on today's customers	New customers pay for growth	Same for all districts
Major capital costs	Same for all districts	Consolidated capital costs for all districts	Consolidated capital costs for all districts
Major non-periodic expenses	Same for all districts	Consolidated capital costs for all districts	Consolidated capital costs for all districts
Interconnections	Not required	Not required	Not necessary
Rate case expenses	Customers save	Company saves	Significantly less work
Standardization	Same for all	Fewer procedures	Easier to regulate
Rate stability and swings	Gradual rate changes	Greater earning stability; financial management	Smaller rate changes
Rate "shock"	Reduced or eliminated, smaller future rate changes	Gradualism not "shock"	Gradualism not "shock"
Public and political consternation	Already happened; reduced after consolidation	After consolidation, future changes are smaller	Less rate complaints, after consolidation
Company's revenue impact	No impact	No impact	No impact
Rate Relief Timing	Now is best time for all districts	Company's revenue needs should be met	Future efforts reduced to meet this need
Public Outreach and Public Outreach and Education	Many customers need correct information to correct misleading rumors	Company hosts more Town Halls and bill stuffers	Fewer complaints to the Commission and RUCO
Phased-in Plans	Multi-year Steps, less impact	No impact, revenue neutral	Implements Gradualism

**2.4 Costs for Rate Consolidation.**

Each Rate Consolidation Factor may have a "cost" for the Customer, the Company or the Commission. Most Rate Consolidation Factors have a saving impact or do not have any additional cost. Table 2 summarizes these "costs"

**Table 2 – Customer, Company and Commission Costs Associated with the Rate Consolidation Factors**

Cost	For the Customer	For the Company	For the Commission
Product	No additional cost	No additional cost	No additional cost
Services	No additional cost	No additional cost	No additional cost
Infrastructure requirements	No additional cost	No additional cost	No additional cost
Water quality	No additional cost	No additional cost	No additional cost
Meet customer demands	No additional cost	No additional cost	No additional cost
Administrative requirements	No additional cost	No additional cost	No additional cost
Operations and Maintenance	No additional cost	No additional cost	No additional cost
Equipment replacements	No additional cost	No additional cost	No additional cost
New customer costs	No rate impacts	No rate impacts	No rate impacts
Major non-periodic expenses	No additional cost	No additional cost	No additional cost
Interconnections	Not a factor	Not a factor	Not a factor
Rate case expenses	Cost savings	Significantly less effort, cost savings	Significantly less effort, cost savings
Standardization	No additional cost	No additional cost	Easier to regulate
Rate Stability and Swings	No additional cost	No additional cost	No additional cost
Rate "shock"	No additional cost	No additional cost	No additional cost
Public and Political Consternation	Implementing consolidation with public concerns not answered	Excessive complaints until longer-term benefits shown to all customers	Present complaints are short-term due smaller future rate increases
Impact on Company revenue	Revenue neutral	Revenue neutral	Revenue neutral
Rate Relief Timing	Should be accomplished during a rate case, with multi-year steps to reduce transitional rate impacts	Needs a recently approved Total Revenue by Commission	No additional cost
Public Outreach and Public Outreach and Education	Customers need to learn the basis of Rate Structure	Mailer costs; additional educational meetings	Understanding reduces complains; no direct costs
Phase-in Plans	Flash-cut increases immediate impact on ratepayers	No impact if revenue neutral	No additional cost

These issues were previously in Magruder Testimony including Exhibits MM-1 and MM-2. These Exhibits are excerpts from his Reply Brief in the First Rate Case. The Magruder Rebuttal expanded the impacts of the Rate Consolidation Factors based on comments by other parties.

**2.5 Composition of a Customer's Water Bill.**

Simply, for a specific customer class and customer category, the Customer Charge is then added to the Cost of Water to determine a customer's Water Bill. The Cost of Water may use corrected volume-consumed times the structure of rates for the total volume consumed.

$$\text{Bill} = \text{Customer Charge} + \text{Cost of Water (COW)}$$

$$\text{Where, COW} = \sum (\text{Tier's volumetric charge} \times 1,000\text{'s of gallons consumed in the Tier})$$

**2.5.1 Rate Consolidation Considerations – Service Charge**

1  
2 The sum of a monthly fixed customer service charge and a variable charge based on the  
3 quantity of water used determine the customer monthly water bill, before adding any Miscellaneous  
4 Charges and Fees. Taxes levied on the bill and non-company fees are not a part of this proceeding.

5 The Company acquired several districts from the Citizens Utilities Company and other  
6 companies. Rate Consolidation provides a mechanism to ensure the Company, when compared to  
7 prior separate accounting and planning at the district levels, accomplishes infrastructure work in the  
8 most efficient manner. Rate Consolidation suppresses the age differences between districts; such  
9 as Sun City Water District is expected to have major (approximately \$25,000,000) replacement  
10 costs to water mains, pumps, and wells in the next five years. Further, long-term infrastructure  
11 modernization, upgrades, and improvement company-wide plans can be implemented to benefit all  
12 customers.

13 The Cost of Service (COS) is an important element determined in a rate case and is, in  
14 general, reflected as a part of the fixed monthly customer Service or Customer Charge. The  
15 company's target for 5/8 & 3/4-inch service charge was \$14.86 in its Version 2.0 and \$14.51 in its  
16 Version 4.0 software model; however, \$16.97 was proposed in the Company's Rebuttal. The  
17 Magruder Consolidated Rates<sup>4</sup> proposed \$14.50. The Company's Model considered that the  
18 Service or Customer Charge covers 40% of these costs.

19 The primary purpose of the Service Charge is to fund infrastructure, general and  
20 administration expenses to deliver safe water to its customers. In general, these are fixed costs and  
21 usually described as the "meter" fee necessary to be connected to receive water.

22 In general, the present Service Charge is not the same for all customers in a rate category.  
23 After Rate Consolidation, will be the same for all customers, with differences based on the rate  
24 category only and the size of the water connection, ranging from 5/8-ths an inch to 10-inches.

### 25 **2.5.2 Rate Case Considerations - Water Volumetric Rate Charge**

26 The second rate component is a volumetric water charge based on the quantity of water  
27 delivered. This is the ratepayer's "cost of water" or COW and varies based on the quantity of water  
28 a customer consumes between the usual monthly readings. The customer's meter reads the  
29 volume of water that passes by the meter since the prior reading, and this "volume" of water (with  
30 standard and approved corrective factors, normalizes the reading) is then multiplied by the  
31

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33  
34 <sup>4</sup> "Consolidated Rate Schedules by Marshall Magruder" filed on 25 June 2010, as modified by the attached "Errata to  
35 the Consolidated Rate Schedules by Marshall Magruder" in Attachment A, herein, and hereafter as "Magruder  
Consolidated Rates".

1 designated volumetric rate (in dollars per 1,000 cubic feet of water) for the monthly COW charged  
2 to the customer. The design of a Rate Structure is how the COW varies by  
3

- 4 a. *Customer class* (such as residential, business/commercial, private fire, and others),
- 5 b. *Customer category* in the class based on size of water pipe connected to the meter, and
- 6 c. Total volume of water consumed in the monthly reading, in thousands of cubic feet.

7 The Volumetric Rate Charge uses a "Tier" design, an essential element determined in the  
8 Design of the Rate Structure, presented in the following section.

## 9 **2.6 Resolution of the Rate Consolidation Issue.**

10 Based on the First Rate Case and the Company's Water Model, version 4, it as possible to  
11 use the factors and considerations for Rate Consolidation for the water districts. It was decided to  
12 consolidate the total revenue requirements for all water districts based on the Company's  
13 evidence and experiences above. Some rate categories were not "consolidated" due to legal or  
14 "not" practicable reasons. These are clearly indicated in the Model and Appendix B

15 Second, due to the significant differences in Rate Structures for the present water districts,  
16 consolidation is impossible without redesigning the Rate Structure.

17 Based on this decision, then the resultant Rate Structure design is essential that it was  
18 both fair and reasonable and did not discriminate between persons or places. See Section 3  
19 below for the resultant steps used to design the Rate Structure for the consolidated water districts.

### 20 **2.6.1 Total Target Revenue Requirements.**

21 The process to consolidate rates consists of combining the Target Revenue for all water  
22 districts into one value, defined as the "Target Revenue." Six of the eight water districts were in  
23 the Last Rate case that used a Test Year ending on 31 December 2007 and the other two water  
24 districts (Sun City and Anthem) used a Test Year ending on 31 December 2008. For each water  
25 district, "fair and reasonable" Target Revenues were determined. Thus using consecutive years  
26 for Test Years is reasonable and appears to not have any legal basis for not be used in this case.

27 The "rate structure", as proposed in the following Section, was used to determine the  
28 "Revenue from Consolidated Rates", as discussed later. The Target Revenue in Table 3 below, in  
29 the third column, is for each rate class, based on the Last Rate Case and the preliminary Target  
30 Revenues for the two water districts in this case.  
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**Table 3 – Present and Consolidated Target Revenue by Rate Classes**

<b>ARIZONA AMERICAN WATER COMPANY</b>				
<b><u>Summary of Consolidated Water Rates</u></b>				
<b>Rate Classes</b>	<b>Revenue from Consolidated Rates</b>	<b>Target Revenue</b>	<b>Difference</b>	
Residential (a)	55,829,027	56,101,076	(272,049)	
Commercial	13,410,557	12,510,487	900,070	
OPA (b)	391,915	205,193	186,722	
Sale For Resale (c)	283,647	279,308	4,339	
Misc- Non-Potable	1,088,904	2,178,733	(1,089,829)	
Private Fire	700,328	436,640	263,688	
<b>Total</b>	<b>\$ 71,704,378</b>	<b>\$ 71,711,438</b>	<b>\$ (7,060)</b>	

(a) Includes Multi-family - rates are not consolidated.  
 (b) OPA in Aqua Fria (State Prison) and in Mohave consolidated to Commercial rates.  
 (c) Includes Peoria Public Interruptible in Sun City, PI Surprise and Water Contract in Agua Fria and City of Phoenix in Anthem whose rates were not consolidated.

[Computed using AZCONSOL Model version 4 with the Assumptions in Appendix A.]

**2.6.2 Issues Involving Target Revenue.**

The total Target Revenue in Table 3 shows the preliminary annual Target Revenue of \$71,711,483, as used in the Company's Rate Consolidation Model v4.

a. Preliminary Target Revenue. It is noted that two water districts (Anthem and Sun City) have not had their final revenue requirements approved by the Commission, thus there probably will be a different revenue requirement for these districts since the Company, Staff and RUCO have differences. This must be considered when conforming to the Commissioner's decision in the Final Tariffs.

b. Revenue Shortfall and Adjustments by Rate Class. A significant decrease in Target Revenue resulted from the recent A.R.S. §40-252 proceedings that amended ACC Order No. 71740 (8 December 2009) to reduce the volumetric cost for Non-Potable water rate to \$1.24/1,000 gallons in the Agua Fria Water District.<sup>5</sup> This resultant revenue loss by the Company; however, consolidated rates will "smooth out" this loss, thus the Target Revenue remains unchanged for the case, even though the Company has a loss under the Last Rate Case. With increases proposed by this party, in the Assumptions in Attachment A, for Non-Potable water rate increased from \$1.24/1000 gallons to \$1.32/1000 gallons, the Company remains with a \$1,089,829 revenue shortfall below its Target Revenue for the Non-Potable Water rate class as shown in Table 3. Other rate changes, mostly in the Commercial, Private Fire and OPA rate classes were increased

<sup>5</sup> Commission Procedural Order of 17 June 2010 by Tenna Wolfe, Administrative Law Judge.

1 to reduce the Company's loss. The Magruder Consolidated Rate Total Revenue of \$71,704,378 or  
2 to \$7,060 below the anticipated Company's Target Revenue. This appears to be acceptable.

3  
4 c. LIFELINE Rates. The residential rates were decreased by \$272,049, or about 0.5% to  
5 create a "LIFELINE" rate for all customers that would include all lower-income customers. This  
6 eliminates all the administrative costs for having a low-income rate program. The low-income  
7 program in Sun City, with over 20,000 customers, has a goal for 1,000 to be in this program (5%),  
8 but that goal has never been met. Many with lower-incomes do not apply for such a program,  
9 primarily due to pride or not wanting "a handout." In Santa Cruz County, I testified that 27% of the  
10 customers could meet the UniSource Energy Services "CARES" program but only 6.1% were  
11 receiving benefits under that program. Most of those in need, weren't getting the benefit.

12 d. Company Preference. Mr. Townsley, the Company's President, in his prefilled direct  
13 and oral testimony in the Last Rate Case and this case has strongly supported Rate Consolidation  
14 for ALL water and ALL wastewater districts. He sees the resultant benefits to customers and the  
15 Commission.

## 16 **2.7 Rate Consolidation Conclusion.**

17 When considering the benefits for Rate Consolidation, and the cost for such a program,  
18 and as stated in the Magruder Rebuttal that addressed each Rate Consolidation concern, it is  
19 concluded that Rate Consolidation benefits the customers, the Company and the Commission,  
20 and that Rate Consolidation is the best course of action. Further, due to all water districts having  
21 recent rate cases, there is no better time than the present case for taking this action.

## 22 **2.8 Rate Consolidation Recommendations.**

23 As stated in the Magruder Rebuttal, in particular, the responses in Section 2 of the  
24 Rebuttal, all the concerns expressed by the Commission Staff, RUCO, and other parties were  
25 overcome by logical arguments that showed that the benefits of Rate Consolidation significantly  
26 outweighed the counter-arguments. Further, separation of any water district from the total  
27 company is counter-productive and has no long-term basis but would only have short-term  
28 benefits that would be negated with time.

## 29 **2.9 Rate Consolidation Implementation.**

30 The details for implementation are covered in the design of the resultant Rate Structure.  
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**Section 3**  
**Should the Rate Design be Water Conservation Oriented?**  
**(Issue 2)**

In the First Rate Case Marshall Magruder considered the Company's witness Mr. Eugene Hebert and his prior testimonies as strong evidence to support are new Rate Structure [see Magruder Testimony Exhibit MM-2] for excerpts from Mr. Hebert's prior testimony.

**3.1 Factors and Considerations that Influence Rate Structure Design.**

The Factors considered for the design of the Rate Structure are different to the Rate Consolidation Factor. The Rate Structure needs careful consideration, as this is how rates directly impact the customers.

It is important that the Total Revenue is not changed when proposing any Rate Structure. The Total Revenue raised from the customers must equal the Commission-determined Total Revenue allowed from a rate case. An unlimited number of Rate Structures can be designed to equal the desired Total Revenue requirements, as this structure determines how customer classes, customer categories and volumetric costs are used to achieve the total revenue allowed.

The cost Factor for each customer needs to be the primary consideration in the design of the Rate Structure. In order to achieve the allowed Total Revenue, the following Factors should be considered for Rate Structures that differ from the Factors used in Rate Consolidation.

a. Balance Between Revenue Classes. The balance of revenue from residential and commercial Rate Classes with and other unique or specialized customer classes such as for private fire companies, irrigation, and other purposes may need to be adjusted to achieve certain needs.

b. Balance of Revenue within a Customer Class. The balance between revenue raised from each customer category (e.g., interconnection size) in a customer class depends on the number of customers in that category that significantly impacts on the total revenue for a customer class.

c. Revenue from Miscellaneous Charges and Fees. The revenue versus cost of service for consolidated Miscellaneous Charges and Fees must be revenue neutral (Issue 4 below). They should not influence the design of Rate Structure; however a new "Mater Change Fee" is added to discourage customers from downsizing their rate category if fire safety is compromised.

d. Total Company Revenue. The total revenue in the Rate Structure design for must remain revenue neutral and not to exceed the allowed revenue authorized by the Commission.

e. Capital Costs for New Development. The revenue versus capital costs for developments or new customers, including line extensions, should also be revenue neutral. These costs should not influence Rate Structure design but may impact the Total Revenue requirements.

1  
2 f. Gradualism. Rate Structure design should “gradually” (e.g., using gradualism) introduce  
3 rate changes to customers and significant rate changes, called “rate shock” should be avoided if at  
4 all possible. The long-term impacts from Rate Consolidation will reduce future rate shock; however,  
5 in order to initially achieve Rate Consolidation, due to the differences in the existing rates, carefully  
6 designing the Rate Structure can be used to reduce the one-time impact of Rate Consolidation.

7 g. Public Opinion. Public opinion needs to be considered when changing the Rate Structure.

8 h. Rates for those on Lower Incomes. Lower-income customers need to be considered in  
9 the design of the Rate Structure. A “LIFELINE” with low rates are used for the first several thousand  
10 gallons consumed, can provide all customers these First Tier low rates in Rate Structure. A special,  
11 low or “fixed” income rate category or lower-income rate adjustments are not necessary.

12 i. Number of Breakpoints and Tiers. Additional breakpoints and Tiers are essential in all rate  
13 categories to facilitate water conservation and is a key Rate Structure design consideration.

14 Number of breakpoints and tiers are designed to assist in water conservation for both residential  
15 and commercial rate classes. Five residential and four commercial Tiers should be a minimum.

16 j. Small Residential and Commercial User Rates the Same. Same water rates for small  
17 Residential and Commercial users are the *same*. Small commercial users have similar water  
18 consumption as similar residential consumers. Many small businesses are “Mom and Pop”-type  
19 stores where the same conservation processes can be applied.

20 k. Phase-in Rate Changes. Rate Consolidation implementation use a Rate Structure  
21 designed to reduce long-term cost impacts and implemented in a transition series of annual “steps”.

22 l. Local Administrative Impact. For those in communities under local administration, such as  
23 by a homeowner’s association (HOA), “price signals” from the Rate Structure change can impact all  
24 in the community who are customers. Rate changes influence community decisions, such as  
25 irrigation and “green lawn” requirements that may need re-consideration, if the rates are beyond the  
26 affordability capabilities of the HOA membership.

27 m. Water Source Pricing. The Rate Structure needs to account for different sources of water  
28 and, due to the impact of continual depletion of our groundwater, costs for potable groundwater  
29 should be higher than non-potable water, effluent or CAP-delivered water.

30 n. Water for Commercial Purposes. For businesses with high water consumption volumes,  
31 such as a restaurant, commercial swimming pool, private fire district, or golf course, thus these  
32 needs should be integrated into the overall Rate Structure when determining the Total Revenue.

33 **3.1.1 The Influence of Water Conservation on Design of the Rate Structure.**

1  
2 Arizona, like the rest of the Western United States, is water poor. The overdraft of the state's  
3 aquifers and our last-place position in the Colorado River Compact means our water resources  
4 cannot sustain the present consumption rate. Water conservation must drive the Rate Structure  
5 design with the lowest "rates" for those who consume the least volume of water and much higher  
6 rates for those who consume the greatest volume of water. This sends a clear "price signal" to the  
7 highest water consumers and lowers their monthly water bill and requires consumption changes.

8 The study in the Company's Rebuttal of 7 April 2010, "Arizona-American Water Company's  
9 Anthem Water District: The Effect of Tiered Water Rates on Water Consumption"<sup>6</sup> shows price  
10 signals in the Tier Design lower consumption by 5%. The public understands a price signal.

### 11 **3.1.2 Influence of Lower-Income Customers on the Design of the Rate Structure.**

12 In the Last Rate Case, the Company's witness stated a person needs only a minimum of  
13 about 300 gallons a month to live a healthy lifestyle, based on drinking and to satisfy sanitation  
14 needs. For all residential rate categories, increasing this essential requirement by a factor of ten so  
15 that the First 3,000 gallons consumed in a month<sup>7</sup> has a very low cost to all customers.

16 Due to this low cost, all other customers in each rate category will be both benefiting and  
17 subsidizing these first 3,000 gallons. As proposed, a "LIFELINE rate" and is available and  
18 embedded in residential rate for less than 2-inch service and commercial rates in the 5/8-3/4-inch  
19 rate category.

### 21 **3.1.3 Combining 5/8&3/4-inch with 1-inch Residential Rates in the Rate Structure.**

22 Due to a high Customer Charge in the 1-inch rate category, some customers have tried to  
23 change their 1-inch meters to 5/8 or 3/4-inch rate category. Some have requested these two rate  
24 categories be combined. Unfortunately, most customers with 1-inch connections have fire sprinkler  
25 systems that require that volume of water. Changing meters brings up an unnecessary liability. The  
26 Magruder Consolidated Rates has a lower Customer Charge for the 1-inch customers in  
27 Attachment A and adds a high "fee" to change meters in Section 4. The Company combined the  
28 5/8 & 3/4-inch with 1-inch rates. This party does not agree and has proposed separate rates.

### 29 **3.2 The Benefits from a Responsive Design of the Rate Structure.**

30 The above Rate Structure Factors and considerations have lead to benefits for the  
31 Company, Customers and Commission. Table 4 summarizes these benefits.

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33 <sup>6</sup> By Miles H. Kinger, Rate Analyst, AAWC, dated 8 March 2010.

34 <sup>7</sup> This party prefers to use 4,000 gallons; however, there are many customers with usage in the first half-dozen rate  
35 bands, using 3,000 gallons was more financially feasible. A 4,000 gallons limit at such a low rate, required higher  
rates for the other four residential Tiers, that this party finally realized that 4,000 gallons was not easily feasible.

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**Table 4 – Customer, Company and Commission Benefits Associated with the Factors and Considerations for the Rate Structure Design**

<b>Benefit</b>	<b>For the Customer</b>	<b>For the Company</b>	<b>For the Commission</b>
Balance between Revenue Classes	Used to shift costs between classes	No impact if Total Revenue is revenue neutral	Fair, reasonable, and discrimination considerations
Balance of revenue within a Rate Category	To shift cost in a Rate Category, such as for "LIFELINE rates"	No impact if Total Revenue is revenue neutral	Fair, reasonable, and discrimination considerations
Revenue from Miscellaneous Charges and Fees	Revenue neutral, fair and reasonable without discrimination	No impact if Total Revenue is revenue neutral	Fair, reasonable, and discrimination considerations
Total Company Revenue	Total customer costs to equal total revenue, without rate discrimination	Requires meeting Target Revenue from customers	Fair, reasonable, and discrimination considerations
Capital costs for New Development	Should be born by developers not existing customers	Negotiation costs; revenue neutral	Prudency Reviews must monitor this closely
Gradualism	Significantly reduces rate shock	Fewer complaints; no rate shock	Preferred approach; avoids rate shock
Public Opinion	Feedback for the Company and Commission	Used to allocate revenue to class and category	Fair, reasonable, and discrimination considerations
Rates for those with Lower Incomes	Low "LIFELINE" rates for First Residential rate category.	Fair and Reasonable design	Fair, reasonable, and discrimination considerations
Number of Breakpoints and Tiers	Provide Price Signals to reduce bills for conservation	Allows customers to "see" impacts of conservation	Aides in conserving water
Breakpoints and Tiers	Designed to allow customers to achieve lower rates through conservation; needs many Tiers; AND noticeable changes in rates for each Tier	Used to allocate revenue within a rate category fairly and reasonably with out discrimination; revenue neutral	Fair, reasonable, and discrimination considerations
Small Residential and Commercial user rates are the same	Due to similarity in size and function, small businesses can conserve with less usage	Fewer tariffs to implement	Less computations during audits
Phase-in Rate Changes	Spreads out cost over several years, reduced rate shock	No direct impact as long as Total Revenue is not changed	Fair, reasonable, and discrimination considerations
Local Administrative Impact	May cause excessive water use and not conserve water	No direct impact	Fair, reasonable, and discrimination considerations
Water Source Pricing	Customers should pay more for using ground water	Need to establish increasing costs based on water source	Fair, reasonable, and discrimination considerations
Water for Commercial Purposes	To benefit a unique customer requirement	Permits flexibility in decision making	Fair, reasonable, and discrimination considerations

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**3.3 Cost Impacts to Consider for the Design of the Rate Structure.**

Each of the Design of Rate Structure Factors could have a "cost" to the customers, the Company and the Commission that could be considered as negative impacts. As shown in Table 5 the "costs" are summarized.

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**Table 5 – Customer, Company and Commission Costs Associated with the Factors and Considerations for the Rate Structure Design**

<b>Cost Factor</b>	<b>For the Customer</b>	<b>For the Company</b>	<b>For the Commission</b>
Balance of revenue from Customer Classes	Some will have a one-time increase or decrease in rates	No direct impact, no additional cost	Fair, Reasonable, and Discrimination considerations
Balance of revenue within a Rate Category	Can provide "LIFELINE" rate, some with higher/lower rates	No direct impact, no additional cost	Fair, Reasonable, and Discrimination considerations
Miscellaneous charges and fees Revenue	Standard charges applied to all customers	No additional cost	Fair, Reasonable, and Discrimination considerations
New Development Capital costs	Present customers to not pay costs for future developments	Negotiate construction contracts	Fair, Reasonable, and Discrimination considerations
Gradualism	Long-term smoothing of rates for all customers	No direct impact	Fair, Reasonable, and Discrimination considerations
Public Opinion	Higher rates upset customers	Complaints managed with factual information	Fair, Reasonable, and Discrimination considerations
Low Income Rates	Same for all residential customers	No direct impact, revenue neutral	Fair, Reasonable, and Discrimination considerations
Total Company Revenue	Total customer costs equal total revenue	Requires Total Revenue from customers	Fair, Reasonable, and Discrimination considerations
Number of Breakpoints and tiers	Decreases cost for lowest consumers and increase cost for highest consumers	Reduce costs with standard tiers	Fair, Reasonable, and Discrimination considerations
Small Residential and Commercial User Rates the Same	Little differences between small Residential and Commercial customers	No direct impact as long as Total Revenue is unchanged	Fair, Reasonable, and Discrimination considerations
Phase-in Rate Changes	Some whose rates are being reduced have to wait	No direct impact as long as Total Revenue is unchanged	Fair, Reasonable, and Discrimination considerations
Local Administrative Impact	Can penalize homeowners; shift to xeriscape landscaping	No direct impact	Fair, Reasonable, and Discrimination considerations
Water Source	Water prices vary by source	Must vary prices based on water source	Fair, Reasonable, and Discrimination considerations
Water for Commercial Purposes	Price signals need to be understood	Deign Tiers so most customers can benefit from conservation	Fair, Reasonable, and Discrimination considerations
Breakpoints and tiers	Decreases costs for lowest consumption and increased costs for highest consumption	Reduced costs with standard tiers	Fair, Reasonable, and Discrimination considerations
Balance of revenue from Customer Classes	Some customer classes with higher and others with lower rates	No direct impact as long as Total Revenue is not changed	Fair, Reasonable, and Discrimination considerations

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**3.4 Resolution of the Rate Structure Design Issues.**

The design of the Rate Structure has the most critical customer impact, because the Total Revenue was first determined to be "fair and reasonable" by the Commission. How this impacts each customer class and rate category considers the Factors presented in Tables 1 to Table 5.

First, due to the potential high degree of rate shock, especially for a large number of customers, that is those in the residential rate class, it was determined that a small reduction in

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2 revenue from the residential class, could provide enough elasticity to attempt to design fair and  
3 reasonable residential rates.

4 Second, after many model iterations, by decreasing the overall revenue for the residential  
5 rate class about \$272,049 or about 0.5% and increasing the overall revenue for the commercial  
6 rate class by about the same \$900,070 or about 1.3% (shown in Table 3 above), then it is  
7 possible to minimize the most of the large swings in rate changes for each water district. Table 3,  
8 from the Schedule H-1 is summary of consolidated water rates the proposed revenue changes.  
9 The result of the proposed Rate Structure was \$7,060 less than the Target Total Revenue.

10 Third, the customers with the highest rate increases from consolidation had either very low  
11 rates or high consumption with the Median in the Third or higher Tier. These customers had high  
12 "percentage" increases but reasonably low "dollar" increases. Customers with the highest rate  
13 decreases had much higher present rates, with "percentage" and "dollar" changes much larger  
14 than those with a rate decrease.

#### 15 **3.4.1 Tier Design Issues**

16 Tier design is a critical element when designing the Rate Structures for residential and  
17 commercial rate categories. The end result for a rate category needs to include the

- 18 a. Number of Tiers,
- 19 b. Tier width in terms of thousands of gallons (kgal), and
- 20 c. Fair and Reasonable rates for the Tier for all similar customers in the same rate category.

21 Tier design needs to consider the total number of customers at each kgal of consumption in  
22 the rate category.

#### 23 **3.4.2 Median (or Mean) Consumption and Average Consumption Bill Issues.**

24 Due to the Poisson probability distribution<sup>8</sup> found with water customer consumption patterns,  
25 the customer Median (or Mean) Consumption is lower than that for Average Consumption. This  
26 leads to considering at least one or more small Tier widths before the Median customer, and then  
27 increasing Tier width when beyond the Average Consumption. During hearings, several witnesses  
28 agreed, none objected, that "Median Consumption" is a better description to determine customer  
29 costs than using an Average Consumption customer. Median Consumption is where 50% consume  
30 more, and 50% consume less water, in a Rate Category. The Average Consumption is determined  
31 by the total water consumed divided by the number of customers in that Rate Category.  
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34 <sup>8</sup> The Magruder Testimony in the Last Rate Case erroneously referred to a X<sup>2</sup> (chi) squared distribution. After  
35 discussions with a water utility manager, a Poison Probability Distribution function is a better fit.

1 The Company's Rate Consolidation Model v4 results in Appendix B provides the Mean  
2 (Median) and Average Residential Customer costs based the Magruder Consolidated Rates for  
3 each Rate Category.  
4

5 Residential rates for 5/8 & 3/4-inch and 1-inch services are in Table 6. The "Present Bill"  
6 column represents the results of the Last Rate Case for all water districts except for Anthem and  
7 Sun City, which are the subject of the present case. The "Proposed Bill" column represents the  
8 Company's proposed rates Anthem and Sun City that might change during these proceedings. Sun  
9 City entry also shows the dollar and percent increase from the Present to the Proposed Rates.

10 The Consolidated Bill is for Magruder Consolidated Rates from Attachment A. The  
11 Company's Rate Consolidation Model v4 results in Appendix B provides the Mean (Median) and  
12 Average Residential Customer costs based the Magruder Consolidated Rates for each Rate  
13 Category.

14 **3.4.3 First Tier is LIFELINE<sup>9</sup> Water for Residential and Small Commercial Customers.**

15 An important concern is providing in the First Residential Tier a low rate and Tier width so  
16 adequate water is available at a low cost for lower-income customers. The same First Residential  
17 Tier is used for all residential customer categories, thus the higher Tiers will have to have a higher  
18 rate to compensate if the First Tier low rate so the Company's Total Revenue is achieved in design  
19 of the Rate Structure.  
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33 <sup>9</sup> The term LIFELINE, as used by this party, described the First Tier rate structure where the rate per 1,000 gallons is  
34 low, so that 3,000 gallons are provided at a low cost for customers in the Residential and Commercial 5/8 & 3/4-inch  
35 and Residential 1-inch Rate Categories, shown in Table 7. The Commission Staff stated several times during the  
hearing that the Staff did not use this term; however, no other term was suggested.

Table 6 – Impacts of Consolidated Rates on Median and Average Residential Service

District	Description	Consumption	Present Bill	Proposed Bill	Consolidated Bill	Increase (\$)	Increase (%)	
Agua Fria	5/8" & 3/4"	Average	7,679	\$31.18		\$29.14	-\$2.04	-6.56%
		Mean	6,000	\$26.60		\$24.94	-\$1.66	-6.25%
	1-inch	Average	12,062	\$67.57		\$46.63	-\$20.94	-30.99%
		Mean	7,000	\$53.76		\$32.94	-\$20.82	-38.72%
Anthem	5/8" & 3/4"	Average	9,616	\$37.22	\$70.15	\$33.98	-\$36.17	-51.56%
		Mean	8,000	\$33.33	\$62.30	\$29.94	-\$32.36	-51.94%
	1-inch	Average	11,203	\$71.40	\$120.96	\$44.05	-\$76.91	-63.58%
		Mean	9,000	\$66.09	\$111.29	\$37.35	-\$65.91	-65.91%
Havasu	5/8" & 3/4"	Average	9,796	\$50.36		\$34.43	-\$15.93	-31.64%
		Mean	5,000	\$35.88		\$22.44	-\$13.44	-37.46%
	1-inch	Average	3,400	\$61.02		\$23.94	-\$37.08	-60.77%
		Mean	3,000	\$59.81		\$22.94	-\$36.87	-61.65%
Mohave	5/8" & 3/4" Bullhead	Average	8,070	\$18.01		\$30.12	+\$12.11	+67.25%
		Mean	5,000	\$13.88		\$22.44	+\$8.56	+61.64%
	5/8" & 3/4" RIO	Average	10,239	\$20.98		\$35.66	+\$14.67	+69.94%
		Mean	7,000	\$16.57		\$27.44	+\$10.87	+65.61%
	1-inch RIO	Average	10,854	\$37.08		\$43.00	+\$5.93	+15.98%
		Mean	7,000	\$31.90		\$32.94	+\$1.04	+3.26%
	1-inch Bullhead	Average	24,153	\$54.94		\$82.90	+\$27.96	50.90%
		Mean	13,000	\$39.96		\$49.44	+\$9.48	+23.73%
Tubac	5/8" & 3/4"	Average	11,740	\$58.36		\$40.16	-\$18.20	-31.19%
		Mean	7,000	\$42.40		\$27.44	-\$14.96	-35.28%
	1-inch	Average	18,758	\$149.14		\$66.71	-\$82.42	-55.27%
		Mean	7,000	\$102.10		\$32.94	-\$69.16	-67.74%
Paradise Valley	3/4-inch	Average	24,954	\$65.81		\$79.80	+\$13.99	+21.26%
		Mean	10,000	\$37.66		\$34.94	-\$2.72	-7.22%
	5/8-inch MMWC	Average	8,545	\$34.83		\$34.15	-\$3.53	-10.13%
		Mean	8,000	\$34.15		\$29.94	-\$4.21	-12.33%
	5/8-inch	Average	20,406	\$54.79		\$66.16	+\$11.36	+20.74%
		Mean	11,000	\$37.90		\$37.94	+\$0.04	+0.11%
	1-inch MMWC	Average	93,912	\$277.93		\$346.09	+\$68.16	+24.52%
		Mean	78,000	\$227.55		\$282.44	+\$54.89	+24.12%
Sun City	5/8" & 3/4"	Average	7,954	\$16.73	\$20.44 +\$9.38 +45.90%	\$29.83	\$13.09	+78.26%
		Mean	7,000	\$15.46	\$18.89 +\$8.55 +44.25%	\$27.44	+\$11.98	+77.47%
	1-inch	Average	17,824		\$53.99	\$63.91	+\$9.92	+18.38%
		Mean	8,000		\$38.03	\$35.44	-\$2.59	-6.82%
Sun City West	5/8" & 3/4"	Average	6,702	\$32.41		\$26.70	-\$5.72	-17.64%
		Mean	6,000	\$30.34		\$24.94	-\$5.40	-17.80%
	1-inch	Average	13,529	\$77.41		\$51.03	-\$26.38	-34.08%
		Mean	8,000	\$61.10		\$35.44	-\$25.66	-42.00%

1 The Company has proposed low First Tier residential rates and presently, proposes  
 2 \$1.00/1,000 gallons in its Final Consolidated Rate Schedule for all meter sizes up to 2-inches.<sup>10</sup>  
 3 The Magruder Rate Schedule (Attachment A) proposes \$0.98/1,000 gallons. Both are for the first  
 4 3,000 gallons, thus the total bills for the First Tier is shown in Table 7 below.  
 5

6 There is reasonable agreement between the Company and Magruder for the First Tier  
 7 Residential 5/8 & 3/4-inch bills with a 44-cent difference. For the First Tier Residential 1-inch rates,  
 8 the Company retained the same Customer Charge as for the smaller connection, thus is \$4.29 less  
 9 than the Magruder proposal. In the residential proposals, the Commission Staff is higher by about  
 10 10% for the 5/8&2/4-inch rate category and more than 100% higher than the Company and about  
 11 80% higher than the Magruder proposal for the 1-inch residential rate category.  
 12

13 **Table 7 – First Tier Costs for All Ratepayers (LIFELINE Rates)**

First Tier Proposals	Customer Charge	Volumetric Charge			Total Cost for first 3,000 gallons
		1-1000 gallons	1 to 2000 gallons	1 to 3000 gallons	
<b>For Residential 5/8 &amp; 3/4-inch service</b>					
Company Proposed First Tier <sup>11</sup>	\$15.65	\$1.00	\$2.00	\$3.00	<b>\$18.65</b>
Staff Proposed First Tier <sup>12</sup>	\$14.00	\$1.00	\$2.00	\$3.00	<b>\$17.00</b>
Magruder First Tier <sup>13</sup>	\$14.50	\$0.98	\$1.96	\$2.94	<b>\$17.44</b>
<b>For Residential 1-inch service</b>					
Company Proposed First Tier	\$15.65	\$1.00	\$2.00	\$3.00	<b>\$18.65</b>
Staff Proposed First Tier	\$35.00	\$1.40	\$2.80	\$3.20	<b>\$38.20</b>
Magruder First Tier	\$20.00	\$0.98	\$1.96	\$2.94	<b>\$22.94</b>
<b>For Commercial 5/8 &amp; 3/4-inch service</b>					
Company Proposed First Tier	\$15.65	\$1.00	\$2.00	\$3.00	<b>\$18.65</b>
Staff Proposed First Tier	\$35.00	\$1.40	\$2.80	\$3.20	<b>\$38.20</b>
Magruder First Tier	\$17.50	\$0.98	\$1.96	\$2.94	<b>\$20.44</b>
<b>For Commercial 1-inch service</b>					
Company Proposed First Tier	\$39.13	\$2.535	\$5.07	\$7.606	\$46.736
Staff Proposed First Tier	\$35.00	\$1.40	\$2.80	\$3.20	\$38.20
Magruder First Tier	\$30.00	\$2.50	\$5.00	\$7.50	\$37.50

26 **3.4.4 Principles and Rules used for the Rate Structure in Magruder's Consolidated Rates.**

27 Several principles and rules used to design the Rate Structure for Consolidated Rates.

28 a. LIFELINE Rates. As previously discussed in 3.4.3 above. The \$0.98/1000 gallons volumetric  
 29 rate is used for all 5/8 & 3/4-inch service and residential service for 1-inch and 1.5-inch service. For  
 30

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 32  
 33 <sup>10</sup> AAWC Consolidated Scenario, 27 May 2010, page 2 at 15-16.

<sup>11</sup> AAWC Final Scenarios, 3 June 2010, Company Scenario One (All Water Districts).

<sup>12</sup> Direct Testimony by Jeffery M. Michlik on Rate Design and Rate Consolidation, of 29 March 2010, Consolidated Water Districts Scenario One, Schedule JMM-3, page 1.

<sup>13</sup> Magruder Consolidated Rates, see Attachment A.

1 larger residential service, the First Tier rate slowly increases to \$2.00/1000 gallons as the 3,000  
2 gallon LIFELINE allowance is absorbed in the resultant First Tier.

3  
4 b. Implementation in 5-Steps. Magruder used the Model to create a 1-step rate change but  
5 recommends that five steps be used. Thus, the Total Revenue change, if each Step is one-year,  
6 annually will be about 20% of the total change. This was considerably easier to calculate than going  
7 through the 5-Step process in 27-linked Excel spreadsheets. The final tariffs should employ the  
8 Model's 5-Step approach for implementation of one step per year.

9 c. Ratio from First to Last Tier. In general, this party proposed a 6-to-1 ratio from the highest  
10 rate to the lowest rate in his Direct Testimony. A 4-to-1 ratio now appears more achievable. This  
11 results in rate breakpoints to send clear price signals to the highest consumption customers.

12 d. Five Residential and Four Commercial Tiers. This permits all ratepayers to respond to price  
13 signals and is a key principle for the design of the Rate Structure.

14 The Company's Final Schedules supported Five Residential Tiers but used only Two Tiers for  
15 Commercial rates, as proposed by The Resorts (J.S. Thornton), in his "Resorts Class of Service,  
16 Option 3 [Exhibit JST-14, p. 3]. The Company either misunderstood this Exhibit which was listed as  
17 "applicable to all hotel properties with 50 or greater rooms." This was a request that a special rate  
18 category be established for such facilities. That is NOT the same as for the entire Commercial  
19 Class of customers. The limited applicability of Exhibit JST-14 Option 3 goes against the  
20 consolidation concept by making special exceptions for limited users. The rates in Option 3  
21 significantly reduce the Company's revenue to the degree that residential and other Rate Classes  
22 have higher rates to satisfy a few resort hotels by using their rates for all Commercial Class  
23 customers.

24 The Magruder Consolidated Rates has Four Commercial Tiers, at the same rates as for the  
25 upper Four Tiers used by Residential customers with different breakpoints.<sup>14</sup> The establishment of a  
26 Water DSM Program (Issue 6) to incentivize larger hotels and resorts based on demonstrated lower  
27 water usage due to active conservation measures can be a way to effectively lower the cost of  
28 water for these establishments. Designing a faulty Rate Structure is not a solution.

### 29 **3.4.5 Assumptions in the Magruder Consolidated Rates.**

30 Several assumptions used in the design of the Magruder Consolidated Rates and include:

31 a. Retaining the 1-inch Residential Rate Category. As previously discussed, a modest  
32 increase in Customer Charge was made from 5/8 & 3/4-inch rate category.

33  
34 <sup>14</sup> When using the Company's model, v4, the Commercial 4-inch rate category would not accept any volumetric values  
35 but the 4,000,000 gallons breakpoint between the 4<sup>th</sup> and 5<sup>th</sup> Tiers.

b. Customer Charges. In general, after the initial two residential customer charges, the other Customer Charges were increased up to 10% and also rounded to an even number instead of to the nearest penny.

c. Non-Consolidated Rate Categories. The Company's list of these was accepted as reasonable and no attempt was made to consolidate these during this rate case. The Table 3 has Notes (a) to (c) that was accepted.

d. Non-Potable Water. The recent Commission decision to lower this rate category to a single volumetric rate of \$1.24 was increased to \$1.32 to makeup some of the Target Revenue shortfall in this Rate Class.

e. Private Fire Rate. These were increased in each Rate Category by approximately 10%, again to makeup some of the Target Revenue shortfall.

f. Hydrants. This Customer Charge was increased from \$12.00 to \$14.00, again to makeup some of the Target Revenue shortfall.

g. Commercial 4-inch Rate. The Model had problems with any entries for this Rate Category (error message), thus only two steps are in the Assumptions for this Rate Category. Since there is a high expectation for changes in the Total or Target Revenue, having this Rate Category completed with four tiers is being proposed, using 6,000,000 gallons and above (as with the 3-inch rates), with 1, 2 and 3 million gallon breakpoints at the same \$2.50, \$3.00, \$3.50 and \$4.00 rates. This one Rate Category then can be used as a planned "conforming" rate area.

### 3.5 Impact of Rate Changes in the Magruder Consolidated Rates

Table 8 below shows, for 5/8-inch to 1-inch residential Median Consumption customers, the rate impacts from unconsolidated to the Magruder Consolidated Rates in dollars and percentages.

**Table 8 – Impact of Consolidated Rates on Median Consumption Customers.**

District	5/8 and 3/4-inch Residential Service			1-inch Residential Service		
	Impact	Dollars	Percent	Impact	Dollars	Percent
Agua Fria	Decrease	\$1.66	6.25%	Decrease	\$20.94	38.72%
Anthem	Decrease	\$33.33	55.56%	Decrease	\$65.91	65.91%
Havasu	Decrease	\$13.44	37.46%	Decrease	\$15.93	31.64%
Mohave-Bullhead	Increase	\$8.56	61.64%	Increase	\$9.48	54.90%
Mohave-Rio	Increase	\$10.87	65.61%	Increase	\$1.04	3.26%
Paradise Valley-5/8	Increase	\$0.04	0.11%	Increase	\$54.89	24.12%
Paradise Valley-3/4	Decrease	\$2.72	7.22%			
Sun City	Increase	\$11.98	77.47%	Decrease	\$2.59	6.82%
Sun City West	Decrease	\$5.46	17.80%	Decrease	\$25.55	42.00%
Tubac	Decrease	\$14.96	35.38%	Decrease	\$69.16	67.74%

1  
2 Table 6 [page 30] shows the change due to Consolidated Rates for residential connections  
3 from 5/8-inch to 1-inch service for all districts. Most have rate decreases due to consolidation;  
4 however, Mohave and Sun City have rates with over a 50% rate increase, with in black borders.

5 Attachment B also provides Average Consumption and associated costs for each water  
6 district and for every rate class in all eight water districts.

7 **3.5.1 Mohave Water District Rate Increases Greater than 50%.**

8 For the 5/8&3/4-inch rates in Bullhead and Rio, these rate increases vary between \$8.56 and  
9 \$14.67 per month (between 62% and almost 70%). The percent rate increase is large due to the  
10 very low rates now in this water district; much lower then all other water districts, other than Sun  
11 City. The new Consolidated monthly water rates will be between \$22.44 and \$27.44 for the median  
12 Mohave customer, the lowest of all Arizona American water customers for the 5/8&3/4-inch service,  
13 thus is percent rate increase is diminished because the dollar monthly rate increase still keeps  
14 these customers with the lowest rate increases in the state-wide customer base.

15 For the 1-inch customers in Bullhead, the consolidated rate monthly increase is \$27.96 (or  
16 50.9%), for the average customer's usage of 24,153 gallons per month. Other than Paradise Valley,  
17 this is the highest 1-inch consumption rate in the other water districts. This is an example of where  
18 water conservation may result in lower water consumption in this one rate category.

19 **3.5.2 Sun City Rate Increases Greater than 50%.**

20 Increasing the number of tiers provides a customer the ability to see how much consumption  
21 reduction is necessary to lower the volumetric charge. In this party's opinion, up to ten tiers greatly  
22 assists in improving this visibility. For this case, I have agreed to a minimum of five residential tiers  
23 and four commercial tiers to increase this visibility.

24 For the 5/8&3/4-inch rates, these rate increases vary between \$11.98 for the Median user  
25 and \$13.09 for the Average user per month (about 78%). The percent rate increase is large due to  
26 lowest present rates in this water district; lower then all other water districts. The Consolidated  
27 monthly rates are between \$27.44 (for the median users) and \$29.83 for the Average Sun City  
28 customer. The Company proposed an \$8.55 rate increase (44.25%) for the Median user and a  
29 \$9.38 rate increase (45.9%) for the Average usage customer. Subtracting these Sun City proposed  
30 increases, the Rate Consolidation increases the Median user \$3.44 or 33.22%, or about 11 cents a  
31 day or \$3.71 for Average consumption users.

32 In addition, the Sun City residential customers presently have two "fees" added to their bills:

- 33 (1) Central Arizona Project (CAP) raw water usage of \$0.848 per customer and  
34 (2) Ground Water Savings Fee (residential) of \$1.565.

The sum of these fees, \$2.413 per month, in each month's actual bill for a Median consumer is:

- Present bill \$17,873 (=\$15.46 + \$2.413)
- Company's proposed bill \$23,783 (=\$21.37 + \$2.413), a \$8.55 increase
- Staff's proposed bill<sup>15</sup> \$19,273 (=\$16.86 + \$2.413), a \$1.40 increase
- Magruder Consolidated proposed bill \$32,243 (=\$29.83 + \$2.413), a \$11.98 increase  
(Includes the Company's \$8.55 proposed increase)

Sun City has the second lowest rates of Arizona American customers for the 5/8 & 3/4-inch service. The dollar monthly rate increase for Rate Consolidation is \$3.44 for the Median consumer. These customers have the lowest rate increase in the statewide customer base. Sun City 1-inch residential Median customers, has a 6.82% overall reduction with Magruder Consolidated Rates.

**3.5.3 Pre-Consolidation, Total, and Proposed Revenue Requirements by Water District.**

Table 9 below provides the present Revenue and Proposed Revenue requirements to meet the Target Revenue for the Company from the Consolidated Rate Model, v4, Schedule H-1.

**Table 9 – Present and Proposed Stand-Alone Revenue Requirements**

ARIZONA AMERICAN WATER COMPANY									Schedule H-1
CONSOLIDATED RATES - PRESENT AND PROPOSED REVENUE									
REVENUE - PRESENT RATES - STAND ALONE									
	Sun City	SCW	Agua Fria	Anthem	Tubac	Mohave	Havasu	PV	Total
Residential*	7,456,182	8,007,995	16,698,300	5,279,103	429,394	3,928,553	1,192,910	7,108,793	50,101,229
Commercial	1,439,034	1,182,277	4,532,525	967,874	177,484	945,939	191,448	1,954,299	11,390,880
OPA			6,832			176,554		21,806	205,193
Sale For Resale	83		117,062	71,929				31,113	220,188
Misc- Non Potable	188,482		427,339	834,977					1,450,798
Private Fire	46,450	67,996	120,726	86,395		26,119		7,648	355,335
<b>Total</b>	<b>9,130,231</b>	<b>9,258,268</b>	<b>21,902,785</b>	<b>7,240,279</b>	<b>606,878</b>	<b>5,077,165</b>	<b>1,384,358</b>	<b>9,123,659</b>	<b>63,723,622</b>

REVENUE - COMPANY PROPOSED RATES - STAND ALONE									
	Sun City	SCW	Agua Fria	Anthem	Tubac	Mohave	Havasu	PV	Total
Residential*	9,110,507	8,007,995	16,698,300	9,624,625	429,394	3,928,553	1,192,910	7,108,793	56,101,076
Commercial	1,758,259	1,182,277	4,532,525	1,768,257	177,484	945,939	191,448	1,954,299	12,510,487
OPA			6,832		-	176,554	-	21,806	205,193
Sale For Resale	101		117,062	131,031	-	-	-	31,113	279,308
Misc- Non-Potable	230,335		427,339	1,521,060	-	-	-	-	2,178,733
Private Fire	56,764	67,996	120,726	157,386	-	26,119	-	7,648	436,640
<b>Total</b>	<b>11,155,966</b>	<b>9,258,268</b>	<b>21,902,785</b>	<b>13,202,359</b>	<b>606,878</b>	<b>5,077,165</b>	<b>1,384,358</b>	<b>9,123,659</b>	<b>71,711,438</b>

Table 9 shows that the Company has a Total Revenue need of \$71,711,438 but presently receives \$63,723,622 at today's rates. The totals for each Water District by Rate Class are shown.

<sup>15</sup> Staff Rate Design Errata of 12 July 2010, Errata Schedule JMM-2, page 1.

3.5.4 Impact of Rate Consolidation by Water District and Rate Class.

Table 10 below shows the Magruder Consolidated Rate revenues for each Rate Class and each Water District. "Step 1", as used in Attachment A, is the total change as only one Step was used, thus this Table shows the total change in revenue for each Rate Class and District.

Table 10 – Revenue by Rate Class and Districts for the Magruder Consolidated Rates.

REVENUE - CONSOLIDATED - STEP 1											
	Sun City	SCW	Agua Fria	Anthem	Tubac	Mohave	Havasu	PV	Total	Target	Differenc
Residential (a)	13,706,988	6,950,587	15,378,023	4,163,273	269,836	6,474,570	925,762	7,959,988	55,829,027	56,101,076	(272,049)
Commercial	2,608,606	1,084,298	4,291,974	892,950	102,260	1,757,198	147,852	2,525,419	13,410,557	12,510,487	900,070
OPA (b)			10,886			348,757		32,272	391,915	205,193	186,722
Sale For Resale (c)	106		117,062	131,031				35,448	283,647	279,308	4,339
Misc- Non-Potable	254,103		206,777	628,024					1,088,904	2,178,733	(1,089,829)
Private Fire	127,016	80,629	247,132	79,880		102,424		63,247	700,328	436,640	263,688
<b>Total</b>	<b>16,696,818</b>	<b>8,115,513</b>	<b>20,251,855</b>	<b>5,895,158</b>	<b>372,097</b>	<b>8,682,949</b>	<b>1,073,614</b>	<b>10,616,373</b>	<b>71,704,378</b>	<b>71,711,438</b>	<b>(7,060)</b>

Table 11 expands, by comparing the Magruder Consolidated Rates from Table 10 to the Present Rates (assuming the Company's proposed rates for Anthem and Sun City) in Table 9.

Table 11 – Resultant Increase (Decrease) in Revenue by District and by Rate Class.

INCREASE (DECREASE) FROM NON-CONSOLIDATED RATES										
	Sun City	SCW	Agua Fria	Anthem	Tubac	Mohave	Havasu	PV	Total	
<b>Total</b>	5,540,852	(1,142,755)	(1,650,930)	(7,307,200)	(234,781)	3,605,784	(310,744)	1,492,714		
<b>Residential Increase/(Decrease)</b>										
\$ Amount	4,596,481	(1,057,408)	(1,320,277)	(5,461,353)	(159,558)	2,546,017	(267,148)	851,196		(272,049)
Percentage	50%	-13%	-8%	-57%	-37%	65%	-22%	12%		0%
<b>Commercial Increase/(Decrease)</b>										
\$ Amount	850,346	(97,979)	(240,550)	(875,306)	(75,224)	811,259	(43,596)	571,120		900,070
Percentage	48%	-8%	-5%	-50%	-42%	86%	-23%	29%		7%
<b>OPA Increase/(Decrease)</b>										
\$ Amount	-	-	4,053	-	-	172,203	-	10,465		186,722
Percentage	0%	0%	59%	0%	0%	98%	0%	48%		91%
<b>SFR Increase/(Decrease)</b>										
\$ Amount	5	-	-	-	-	-	-	4,334		4,339
Percentage	5%	0%	0%	0%	0%	0%	0%	14%		2%
<b>Misc - Non-Potable Increase/(Decrease)</b>										
\$ Amount	23,768	-	(220,562)	(893,035)	-	-	-	-		(1,089,829)
Percentage	10%	0%	-52%	-59%	0%	0%	0%	0%		-50%
<b>Private Fire Increase/(Decrease)</b>										
\$ Amount	70,252	12,633	126,406	(77,506)	-	76,305	-	55,599		263,688
Percentage	124%	19%	105%	-49%	0%	292%	0%	727%		60%

3.5.5 Impact of Rate Consolidation by Water District.

These revenues are changed from the present to the proposed revenues from the Magruder Consolidated Rates (Appendix A), for the consolidated revenue and commercial

1 customer classes are summarized in Table 12 below for Residential and Commercial Rate  
2 Classes.

3 **Table 12 – Overall Change in Revenue by Water District**

	<b>Residential Rate Class</b>	<b>Commercial Rate Class</b>
4 Agua Fria	<b>Decrease 8%</b>	<b>Decrease 5%</b>
5 Anthem	<b>Decrease 57%</b>	<b>Decrease 50%</b>
6 Havasu	<b>Decrease 22%</b>	<b>Decrease 23%</b>
7 Mohave (note 1)	<b>Increase 65%</b>	<b>Increase 86%</b>
8 Paradise Valley	<b>Increase 12%</b>	<b>Increase 29%</b>
9 Sun City (note 2)	<b>Increase 50%</b>	<b>Increase 48%</b>
Sun City West	<b>Decrease 13%</b>	<b>Decrease 8%</b>
Tubac	<b>Decrease 37%</b>	<b>Decrease 42%</b>

10 Note 1. See paragraph 3.5.1 above for actual customer impacts.

11 Note 2. See paragraph 3.5.2 above for resultant customer impacts after the proposed rate increase.

### 12 **3.6 Resolution of the Rate Structure Design Issue.**

13 Based on the principles and rules used in this rate design, the resultant rate structure  
14 considers factors necessary to ensure fairness and reasonableness for both customers and the  
15 Company, which needs to meet the Commission-approved target revenue. Two water districts, as  
16 discussed in 3.5.1 and 3.5.2 have some rate increases that exceed 50%; however, both of these  
17 districts have benefited from the lowest rates state-wide, and the resultant increase for most is  
18 less than 11 cents a day. The provision of a LIFELINE rate, for the lower Tier residential and  
19 commercial rate classes, ensure that all lower income customers can meet their needs without the  
20 administrative and psychological costs associated with implementing a special and unique low-  
21 income rate category. A "5-Step" phase-in plan smoothes the transition from stand-alone to  
22 statewide consolidated rates for all customers.

### 23 **3.7 Rate Structure Conclusion.**

24 All customers in each rate category are treated the same in the Magruder Consolidated  
25 Rates, thus discrimination based on customers and place will not occur and prior discrimination  
26 due to customer locations will be eliminated. Thus, Rate Consolidation with a conservation-  
27 oriented Rate Structure are "fair and reasonable" and in the public interest.

### 28 **3.8 Rate Structure Recommendations.**

29 It is recommended that the Commission approve the Magruder Consolidated Rate  
30 Structure, using the Assumptions in Attachment A.

### 31 **3.9 Rate Structure Implementation.**

32 Upon Commission approval, with total revenue for all water districts known, the Company  
33 should update the Target Revenue in the Model, and calculate new rates for all customers. If  
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there are variations more than \$10,000 from the Target Revenue, then the Commercial 4-inch service rates are modified to reduce such variation to less than \$10,000. Further, the Five-Step process should be included in these rates, using an annual rate change on 1 January from 2011 through 2015, for all water districts. During these five years, the Company should be restricted to not submitting new rate cases unless there is an extreme change in the situation, which will have to be justified in such a rate case submission.

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**Section 4**  
**Should Wastewater Districts Be Consolidated?**  
**(Issue 3)**

**4.1 Consolidated Wastewater Districts.**

Based on the water district Rate Consolidation and Rate Structure Factors in Tables 1, 2, 4, and 5, for the benefits and costs, wastewater rate consolidation appears to be the best alternative.

**4.2 Conclusion and Recommendation.**

This Party has limited experience with the additional factors that influence Wastewater issues; therefore, after review and consideration, Marshall Magruder will adopt the Wastewater Rates in the Company's Rebuttal as being fair and reasonable without discriminating between persons and places.

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**Section 5**  
**Should All Miscellaneous Charges and Fees Be Consolidated?**  
**(Issue 4)**

**5.1 Background on the issue of Consolidation of Miscellaneous Charges and Fees.**

A separate schedule for these miscellaneous charges and fees exists for each water and wastewater district. These variations in charges or fees for the same service appear to have remained for many years, sometimes a legacy fee or charge from a prior owner.

The Arizona Constitution, Article 15, Section 12, states there should be no discrimination in charges for the same contemporaneous service, thus consolidation of these miscellaneous charges and fees is very appropriate for this case. This issue was presented in the Last Rate Case and deferred to this consolidation phase and was discussed in greater detail in Magruder Testimony Exhibit MM-1, "Consolidation of Miscellaneous Charges and Fees" as updated in Table 13 below.

**Table 13. Present, Proposed, and a Standard for Miscellaneous Charges and Fees.**

Miscellaneous Customer Cost	Company's		Magruder Proposed Charge/Fee	Variations in other districts' (present and proposed) including Staff and RUCO
	Present Charge	Proposed Charge		
Establish, Re-establish, Re-connect Fee (Regular hours)	\$ 30.00	\$ 30.00	<b>\$ 30.00</b>	\$ 20 to \$40
(Off hours)	\$ 40.00	\$ 40.00	<b>\$ 60.00</b>	\$ 20 to \$ 60
Water Meter Test (if correct)	\$ 10.00	\$ 10.00	<b>\$ 80.00</b>	\$10 to \$81
Meter Re-read (if correct)	\$ 5.00	\$ 5.00	<b>\$ 20.00</b>	\$ 5 to \$25
Move Customer Meter	NA	NA	<b>Actual Cost</b>	NA or Actual Cost
Non-Sufficient Funds Check Charge	\$ 10.00	\$ 10.00	<b>\$ 30.00</b>	\$10 to \$25
Late Fee Charge	1.5%/ month	1.5%/ month	<b>3.0% /month</b>	NA to 1.5% per month
Deferred Payment Finance Fee	NA	NA	<b>1.5% /month</b>	NA to 1.5% per month
Residential Deposit	2 x average bill			2 x average bill
Non-Residential Deposit	2.5 x average bill			2.5 x average bill
Deposit Required (residential or commercial), Interest on Deposit	In accordance with ACC Rule 14-2-403(B)			
Service Line Charge (Difference based on size of line)	\$130 to \$6,120	\$156 to \$830, Actual	<b>Actual Cost</b>	\$370 to \$1,620 to actual cost
Meter Installation Charge (Difference based on size of line)	\$370 to \$1,630	\$370 to \$1,890, Actual	<b>Actual Cost</b>	\$130 to \$6,130 to actual costs (plus \$120 for AMR)
Meter Installation Change (decrease from 1-inch to 5/8 or 3/4-inch meter)	NA	None	<b>\$500.00</b>	Requires safety certification by Fire Dept for sprinkler system

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**5.2 No justification supports separate Miscellaneous Charges and Fees.**

The Company supports consolidation of miscellaneous charges and fees and has offered no arguments to support the any variations. Therefore these charges and fees should be consolidated into one schedule applicable for all water and wastewater districts.

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**5.3 Imposing a Fee and Safety Certification for Changes that Impact Sprinkler Systems.**

A new fee of \$500 per meter change is added when a customer requests that a meter be changed to a smaller size and the customer has a fire sprinkler system. Before changing any meter with a sprinkler system, the customer will have to provide a safety certification that the Fire Department or an Arizona-certified Registered Professional Engineer (RPE) has approved this change and that fire safety design will not be impacted for such a meter change. The Company will prepare a form for customers to use for this purpose. The purpose of this certification is to ensure that the customer does not negatively impact the design fires safety capabilities of the facility involved and that the Company has a customer signature that absolves the Company of any possible or future liabilities for such meter changes. Prior to the Company changing the meter, the customer will be required furnish to the Company that this certification has been to recorded with the administrator of property record office for that community or county so that any future owners are aware of this meter change. The certification will remain with the Company's records for the property.

**5.4 Conclusion and Recommendations.**

It is recommended that the Company provide a Tariff filing within 45 days of the approval of this rate case that consolidates the Miscellaneous Fees and Charges, including the new charge for changing meters when facilities have a fire sprinkler system and the draft "certification" procedure for inclusion in the Rules and Regulations.

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2 **Section 6**

3 **Should the Rules and Regulations Be Consolidated?**  
4 **(Issue 5)**

5 **6.1 Background on the Issue of Consolidated Rules and Regulations.**

6 Each water and wastewater district has its own Rules and Regulations (R&Rs), most do not  
7 appearing similar to others. A Consolidated R&Rs should facilitate both customer understanding  
8 and Company operations by reducing the volume of redundant and conflicting rules and  
9 regulations. A generic set of R&Rs should be applicable throughout all districts and a district  
10 specific supplement to cove the unique differences, if necessary.

11 The consolidation of R&Rs was discussed in the Last Rate Case and deferred to the present  
12 case.

13 **6.2 Consolidated Rules and Regulations Conclusions and Recommendations.**

14 a. Conclusions. Consolidation of the R&Rs should enhance administrative efficiency and  
15 improve the Company's quality performance. This consolidation should make the Company's  
16 business processes easier understand by its customers and also by its workers.

17 The Company's Consolidated R&Rs should be user-friendly. Further, the Company should  
18 use this project as a way to improve relations with its customers by establishing a Citizens  
19 Advisory Committee (CAC) to meet at least semi-annually, with at least one person per water  
20 district and wastewater district and for each district with over 5,000 customers, then two or more  
21 representatives. The CAC will be used as a way to receive feedback from customers and to  
22 provide information to customers, such as the status of all water projects including schedules and  
23 outage periods, and various regulatory actions including Water DSM, "town hall" schedules, and  
24 at least a semi-annual multi-page newsletter.

25 b. Recommendations. It is recommended that

- 26 • The R&Rs be consolidated into one document and during this process, reviewed  
27 by the CAC to ensure the result in user-friendly, with 180-days after the completion  
28 of this case.  
29 • That the R&Rs be published on the Company's website.  
30 • That the R&Rs be an agenda item for CAC meetings.  
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32 **6.3 Consolidated Rules and Regulations Implementation.**

33 The Consolidated Rules and Regulations should be reviewed by the CAC prior to  
34 submission to the Commission.  
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**Section 7**  
**Should a Water Demand Side Management Program Be Established?**  
**(Issue 6)**

**7.1 Water Demand Side Management (WDSM) Program Issues.**

Using the analogies from both the electricity and natural gas utilities, WDSM programs are conservation programs whereby customer demands for water are permanently reduced by a change in equipment or procedures. Such a WDSM program would compensate the Company for its part using the same process used by the Commission for these other two utilities.

I created this kind of program; however, it is a realistic way to reduce water consumption. The Arizona Department of Water Resources (ADWR) program with "Best Practices" should and could be integrated by the Company into the WSDM process. Here are a few example of WDSM projects:

- a. Providing a pool cover mechanisms to reduce evaporation and water loss from a pool.
- b. Providing incentives for purchasing a dish or clothes washer that used significantly less than the model now being used by a customer.
- c. Providing incentives for a car wash facility to recycle water.
- d. Replacing the showerheads in a school's shower room with low-flow versions.
- e. Providing low-water trees for customers that replace trees that consume lots of water.
- f. Working with gardeners to set drip irrigation timers to optimize water usage.

Each of the WDSM programs would be submitted to the Commission for approval prior to implementation. Further, upon approval, a WDSM rate "adjustor" would be added to customer's bills to fund these programs. The WDSM adjustment should not exceed 2% on a customer's bill.

Obviously, any WDSM program will lose expected revenue for the Company. This avoided cost will need to be factored into the Company's compensation based on measured performance results for implementing each WDSM program.

**7.2 Water DSM Conclusions and Recommendations.**

a. Conclusion. Water conservation is a Company and Commission concern. Programs that conserve water by taking or changing what one does are those best suited, therefore it is concluded that a WDSM program be created and managed by the Company with 100% reimbursement.

b. Recommendations. It is recommended that the Company propose a Water Demand Side Management (WSDM) program in several Rate Classes, as a way to provide incentives for customers to reduce water demands. The Company should be ordered to apply for establishing a Water DSM Program within 180-days after issuing the resultant order for this case.

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## Section 8

### Should Water Loss Be An Incentive or Disincentive? (Issue 7)

#### 8.1 Background on the Issue of Water Loss.

In general, the Commission seems to be of the opinion that when the total water loss by a water utility is considered excessive when exceeding 10%. This results in a goal not to exceed a 10% wastage factor. It is this party's opinion that NO water losses are beneficial to the Company or the customers. Just like transmission (energy) losses in the electricity industry, water losses are always charged to the customers and not to the utility.

#### 8.2 Creation of Incentivizes and Disincentives to Reduce Water Loss.

To the best of the knowledge of this party, no Water Loss Management incentive programs are known to exist at this Commission and probably very few are elsewhere.

At present, the implementation of "smart meters" is providing the Company the capacity to understand the actual real-time customer demands and the ability to monitor water flow in ways not dreamed of a decade ago. Using this technology and other innovative processes, the Company should be able to monitor its system much closer, in particular, to determine if and where there are water losses in its mains or other parts of its system. This could be the basis for creating a Water Loss program.

If the Commission sets a target water loss Goal is set with the Commission with agreement by the Company, and this goal is not obtained, then the agreement's disincentives should be exercised.

#### 8.3 Water Loss Program Conclusions and Recommendations.

a. Conclusion. The Company needs to have an active Water Loss Management Program.

b. Recommendation. That the Company is to propose a program with financial incentives and disincentives to reduce water losses for each water district. This Water Loss Management Program should be one of the Water DSM Programs.

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**Attachment A**

**Errata to Magruder Consolidated Rate Schedules**

This errata replaces Attachment A to the Magruder Consolidated Rate Schedules filed on 25 July 2010, by replacing pages 4 through 6 with those herein. The original Scope, References and Discussion paragraphs of the 25 July 2010 remain without change.

The following corrections and changes are included in this Errata:

- a. Under Commercial, 5/8-“ – 3/4” – correct Fifth Tier to read “Over 50,000”.
- b. Under Commercial, 1” – change Second, Third and Fourth Tiers to “20,000”, “50,000” and “80,000”, respectively.
- c. Under Residential and Commercial, 3” – change Customer Charge to “\$250.00”.
- d. Under Residential and Commercial, 4” – change Customer Charge to “\$400.00”.
- e. Under Commercial, 4”, change tiers from 4 to 2, with First Tier, 4,000,000 at \$3.50 rate and Second Tier, over 4,000,000 at \$4.00. [See Brief for additional discussion]
- f. Under Residential and Commercial, 6” – Change Customer Charge to “725.00”.
- g. Under Non-Potable Rate – Change to “1.3200”
- h. Under Private Fire Rate – Change 2” to \$11.00, 3” to \$23.00, 4” to “\$44.00”, 6” to “\$100.00”, 8” to “\$175.00”, 10” to \$275.00, and 12” to “\$400.00”.

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**Marshall Magruder Consolidated Rate Schedule**

**ARIZONA WATER COMPANY CONSOLIDATED RATES MODEL - WATER**

**Percentage of Consolidated Rates Step 1**

Sun City	100.000%
SCW	100.000%
Agua Fria	100.000%
Anthem	100.000%
Tubac	100.000%
Mohave	100.000%
Havasu	100.000%
PV	100.000%

**Residential Rates and Blocks**

**Commercial, OPA, Turf Rates and Blocks**

<b>5/8" - 3/4"</b>			<b>5/8" - 3/4"</b>		
<b>Customer Charge</b>		<b>\$14.50</b>	<b>Customer Charge</b>		<b>\$17.50</b>
First	3,000	\$0.9800	First	3,000	\$0.9800
Next	7,000	\$2.5000	Next or First	7,000	2.5000
Next	15,000	\$3.0000	Next	15,000	3.0000
Next	20,000	\$3.5000	Next	25,000	3.5000
Over	45,000	\$4.0000	Over	50,000	4.0000
<b>1"</b>			<b>1"</b>		
<b>Customer Charge</b>		<b>\$20.00</b>	<b>Customer Charge</b>		<b>\$30.00</b>
First	3,000	\$0.9800	First	10,000	\$2.5000
Next	7,000	\$2.5000	Next or First		
Next	15,000	\$3.0000	Next	20,000	3.0000
Next	30,000	\$3.5000	Next	50,000	3.5000
Over	55,000	\$4.0000	Over	80,000	4.0000
<b>1 1/2"</b>			<b>1 1/2"</b>		
<b>Customer Charge</b>		<b>\$70.00</b>	<b>Customer Charge</b>		<b>\$70.00</b>
First	3,000	\$0.9800	First	25,000	\$2.5000
Next	22,000	\$2.5000	Next or First		
Next	25,000	\$3.0000	Next	25,000	3.0000
Next	50,000	\$3.5000	Next	150,000	3.5000
Over	100,000	\$4.0000	Over	200,000	4.0000
<b>2"</b>			<b>2"</b>		
<b>Customer Charge</b>		<b>\$110.00</b>	<b>Customer Charge</b>		<b>\$110.00</b>
First	30,000	\$1.7500	First	100,000	\$2.5000
Next	70,000	\$2.5000	Next or First		
Next	100,000	\$3.0000	Next	100,000	3.0000
Next	100,000	\$3.5000	Next	300,000	3.5000
Over	300,000	\$4.0000	Over	500,000	4.0000
<b>3"</b>			<b>3"</b>		
<b>Customer Charge</b>		<b>\$250.00</b>	<b>Customer Charge</b>		<b>\$250.00</b>
First	25,000	\$2.0000	First	1,000,000	\$2.5000
Next	75,000	\$2.5000	Next or First	-	
Next	100,000	\$3.0000	Next	2,000,000	3.0000
Next	100,000	\$3.5000	Next	3,000,000	3.5000
Over	300,000	\$4.0000	Over	6,000,000	4.0000

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Marshall Magruder Consolidated Rate Schedule					
ARIZONA WATER COMPANY CONSOLIDATED RATES MODEL - WATER					
<b>4"</b>			<b>4"</b>		
<b>Customer Charge</b>		<b>\$400.00</b>	<b>Customer Charge</b>		<b>\$400.00</b>
First	100,000	\$2.0000	First		\$2.5000
Next	100,000	\$2.5000	Next or First		
Next	100,000	\$3.0000	Next		3.0000
Next	200,000	\$3.5000	Next	4,000,000	3.5000
Over	500,000	\$4.0000	Over	4,000,000	4.0000
<b>6"</b>			<b>6"</b>		
<b>Customer Charge</b>		<b>\$725.00</b>	<b>Customer Charge</b>		<b>\$725.00</b>
First	100,000	\$2.0000	First	1,000,000	\$2.2500
Next	100,000	\$2.5000	Next or First		
Next	250,000	\$3.0000	Next	3,000,000	3.0000
Next	500,000	\$3.5000	Next	4,000,000	3.5000
Over	950,000	\$4.0000	Over	8,000,000	4.0000
<b>Apartments Not Consolidated - Present rates in effect.</b>					
<b><u>Non-Potable Rate</u></b>					
Customer Charge		\$-			
All Consumption		\$1.3200			
<b><u>Private Fire Rate</u></b>					
<b>2"</b>					
Customer Charge		\$11.00			
<b>3"</b>					
Customer Charge		\$23.00			
<b>4"</b>					
Customer Charge		\$44.00			
<b>6"</b>					
Customer Charge		\$100.00			
<b>8"</b>					
Customer Charge		\$175.00			
<b>10"</b>					
Customer Charge		\$275.00			
<b>12"</b>					
Customer Charge		\$400.00			
<b><u>Hydrants</u></b>					
Customer Charge		\$14.00			
<b><u>Water Districts Included in Rate Consolidation</u></b>					
Included? Yes=1, No=0					
Sun City		1			
SCW		1			
Agua Fria		1			
Anthem		1			
Tubac		1			
Mohave		1			
Havasu		1			
PV		1			

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**Attachment B**

**Magruder Consolidated Rate Structure Analysis of Revenue by Classes**

This attachment contains the detailed analysis by rate classes for each of the eight water districts in this case. These eight tables are from the AAWC Model v4 used for the Magruder Rate Schedules, in particular, for the Assumptions found in Appendix A.

Each rate schedule is described in terms of

- a. Line number
- b. Rate Schedule designation
- c. Description, including rate class and size of line
- d. Average number of customers in the rate class
- e. Average consumption for customers in the rate class
- f. Present revenue received in the rate class
- g. Consolidated revenue to be received in the rate class
- h. Proposed increase (decrease) in revenue in the rate class in dollars due to Consolidation
- i. Proposed increase (decrease) in revenue in the rate class in percent due to Consolidation

Rate classes that are not consolidated are indicated with a green filled-in. Company Exhibit A-50 shows that this is 1.5% of the total Revenues.

In addition, the total revenue is further totals by Residential, Commercial, OWU, Miscellaneous, Non-potable and Firewater classes.

The following such tables are in this Attachment:

- Agua Fria Water District based on TY ending 31 Dec 2007
- Anthem Water District based on TY ending 31 Dec 2008
- Havasu Water District based on TY ending 31 Dec 2007
- Mohave Water District based on TY ending 31 Dec 2007 (two pages)
- Paradise Valley Water District based on TY ending 31 Dec 2007
- Sun City West Water District based on TY ending 31 Dec 2007
- Sun City Water District based on TY ending 31 Dec 2008
- Tubac Water District based on TY ending 31 Dec 2007

Every table if from the AAWC Consolidated Rates Model, v4, using the Assumptions in Attachment A.

**Arizona American Water Company - Aqua Fria Water**

Test Year Ended December 31, 2007 - Analysis of Revenue by Detailed Class

Line No.	Rate Schedule	Description	Average			Revenues			Proposed	
			Number of Customers	Average Consumption	Present Rates	Proposed Step 1 Consolidated Rates	Increase Amount	Increase %		
1	C1M1A	Aqua Fria Residential 5/8 & 3/4"	27,417	7,679	10,697,423.20	10,123,609.34	\$(573,813.86)	-5.36%		
2	C1M1B	Aqua Fria Residential 1"	4,477	12,062	3,675,288.54	2,738,075.60	\$(937,212.94)	-25.50%		
3	C1M1C	Aqua Fria Residential 1-1/2"	143	134,181	821,134.84	945,731.78	\$124,596.94	15.17%		
4	C1M1D	Aqua Fria Residential 2"	170	215,118	1,562,468.64	1,623,277.00	\$60,808.36	3.89%		
5	C1M1E	Aqua Fria Residential 3"	2	28,526	5,690.12	6,067.00	\$376.88	6.62%		
6	C1M1G	Aqua Fria Residential 6"	-	-	692.52	725.00	\$32.48	4.69%		
7	C2M1A	Aqua Fria Commercial 5/8 & 3/4"	67	6,906	27,574.82	29,072.32	\$1,497.50	5.43%		
8	C2M1B	Aqua Fria Commercial 1"	109	36,241	185,759.25	196,027.00	\$10,267.75	5.53%		
9	C2M1C	Aqua Fria Commercial 1-1/2"	166	105,876	776,243.19	867,460.00	\$91,216.81	11.75%		
10	C2M1D	Aqua Fria Commercial 2"	266	181,217	2,122,432.77	2,223,055.00	\$100,622.23	4.74%		
11	C2M1E	Aqua Fria Commercial 3"	57	132,090	424,088.44	420,400.00	\$(3,688.44)	-0.87%		
12	C2M1F	Aqua Fria Commercial 4"	-	521,200	10,163.81	11,121.00	\$957.19	9.42%		
13	C2M1G	Aqua Fria Commercial 6"	3	1,375,971	169,556.02	145,518.50	\$(24,037.52)	-14.18%		
14	C2M3	Arizona Water Contract [not consolidated]	1	284,571	5,428.51	5,428.51	\$-	0.00%		
15	C4M2	Aqua Fria OPA - State Prison	-	663,250	6,832.44	10,885.50	\$4,053.06	59.32%		
16	C5M1	Aqua Fria - OWU PI Surprise [not consolidated]	4	2,217,091	117,062.40	117,062.40	\$-	0.00%		
17	B6M04	Private Fire 4"	1	-	492.00	528.00	\$36.00	7.32%		
18	C6M04	Private Fire 4"	78	-	30,196.80	41,008.00	\$10,811.20	35.80%		
19	C6M06	Private Fire 6"	106	-	59,831.00	127,300.00	\$67,469.00	112.77%		
20	C6M08	Private Fire 8"	35	-	27,008.00	73,850.00	\$46,842.00	173.44%		
21	C6M12	Private Fire 12"	1	-	2,280.00	4,800.00	\$2,520.00	110.53%		
22	E6M06	Private Fire 6"	1	-	1,029.00	700.00	\$(329.00)	-31.97%		
24	C7M2	Aqua Fria Irrigation - Raw	4	98,217	12,325.10	5,963.76	\$(6,361.34)	-51.61%		
25	C8M2	Aqua Fria Non-Potable	1	12,735,083	416,895.69	201,723.72	\$(215,171.97)	-51.61%		
27	Total Aqua Fria Water - Billed Revenues		33,109	18,755,279	\$21,157,897.08	\$19,919,389.43	\$(1,238,507.65)	-5.85%		
29	Total Residential		32,209	397,566	\$16,762,697.85	\$15,437,485.72	\$(1,325,212.13)	-7.91%		
30	Total Commercial		669	2,644,072	\$3,721,246.80	\$3,898,082.33	\$176,835.53	4.75%		
31	Total OPA		-	663,250	\$6,832.44	\$10,885.50	\$4,053.06	59.32%		
32	Total Sale For Resale		4	2,217,091	\$117,062.40	\$117,062.40	\$-	0.00%		
33	Total Private Fire		222	-	\$120,836.80	\$248,186.00	\$127,349.20	105.39%		
34	Misc Irrigation Sales		5	12,833,300	\$429,220.79	\$207,687.48	\$(221,533.31)	-51.61%		
36	Total Aqua Fria Water - Billed Revenues		33,109	18,755,279	\$21,157,897.08	\$19,919,389.43	\$(1,238,507.65)	-5.85%		

**Arizona American Water Company - Anthem Water**

Test Year Ended December 31, 2008 - Analysis of Revenue by Detailed Class

Rate Schedule	Description	Average				Revenues				Proposed		
		Full + Partial Consumption	Number of Customers	Average Consumption	Annualized Present Rates	Propose Rates Not Consolidated	Proposed Step 1 Consolidated Rates	Increase Amount	Increase %			
1M1A	Anthem Distco Res 5/8 & 3/4	561,899	4,869	9,616	\$2,285,267.23	\$4,163,062.94	\$2,043,675.40	\$2,119,387.54	-50.9%			
1M1B	Anthem Distco Res 1"	468,322	3,384	11,203	\$2,748,035.91	\$5,006,094.75	\$1,883,660.64	\$3,122,534.11	-62.4%			
1M1C	Anthem Distco Res 1 1/2"	10,911	67	13,563	\$96,817.15	\$176,371.78	\$84,359.32	\$92,012.46	-52.2%			
1M1D	Anthem Distco Res 2"	30,515	14	179,465	\$106,741.61	\$194,450.72	\$115,062.75	\$79,387.97	-40.8%			
2M1A	Agua Fria Res 5/8 & 3/4	22	0.25	7,333	\$-	\$-	\$-	\$-	0.0%			
2M1B	Agua Fria Res 1"	33	0.58	9,429	\$-	\$-	\$-	\$-	0.0%			
1M2A	Anthem Distco Com 5/8" & 3/4"	19	0.42	3,800	\$136,79	\$249.19	\$373.38	\$124.19	49.8%			
1M2B	Anthem Distco Com 1"	550	1	52,885	\$2,013.99	\$3,668.88	\$2,227.00	\$(1,441.88)	-39.3%			
1M2C	Anthem Distco Com 1 1/2"	646	2	27,725	\$3,748.43	\$6,828.51	\$3,496.00	\$(3,332.51)	-48.8%			
1M2D	Anthem Distco Com 2"	9,483	3	241,503	\$32,857.70	\$59,856.63	\$34,728.50	\$(25,128.13)	-42.0%			
1M2E	Anthem Distco Com 3"	312	1	31,304	\$3,510.49	\$6,395.07	\$2,355.00	\$(4,040.07)	-63.2%			
2M1A	Anthem Distco Com 5/8" & 3/4"	1,516	24	5,213	\$9,484.26	\$17,277.45	\$9,595.98	\$(7,681.47)	-44.5%			
2M1B	Anthem Distco Com 1"	16,971	45	31,439	\$70,040.24	\$127,592.01	\$72,047.00	\$(55,545.01)	-43.5%			
2M1C	Anthem Distco Com 1 1/2"	40,589	48	70,750	\$159,505.97	\$290,571.44	\$174,746.00	\$(115,825.44)	-39.9%			
2M1D	Anthem Distco Com 2"	138,699	120	96,327	\$567,558.80	\$1,033,920.30	\$497,980.50	\$(535,939.80)	-51.8%			
2M1E	Anthem Distco Com 3"	17,862	13	116,771	\$91,111.35	\$165,977.27	\$67,162.00	\$(98,815.27)	-59.5%			
7M2	Anthem Wholesale (Phoenix) OWU [not consolidated]	239,764	2	8,542,660	\$71,929.20	\$131,031.03	\$131,031.03	\$-	0.0%			
7M1	Anthem Non-Potable Irrig	480,873	48	840,540	\$687,648.39	\$1,252,674.17	\$492,028.68	\$(760,645.49)	-60.7%			
7M2	Anthem Non-Potable Irrig - Const	103,027	5	1,717,117	\$147,328.61	\$268,385.34	\$135,995.64	\$(132,389.70)	-49.3%			
6M04	Anthem Distco Private Fire 4"	-	10	-	\$10,147.41	\$18,485.54	\$5,280.00	\$(13,205.54)	-71.4%			
6M06	Anthem Distco Private Fire 6"	-	43	-	\$65,519.30	\$119,356.51	\$59,900.00	\$(59,456.51)	-49.8%			
6M08	Anthem Distco Private Fire 8"	-	7	-	\$10,728.48	\$19,544.07	\$14,700.00	\$(4,844.07)	-24.8%			
6M06	Agua Fria Private Fire 6"	-	1	-	\$-	\$-	\$-	\$-	0.0%			
<b>Total Anthem Water - Billed Revenues</b>		2,122,013	8,708	12,008,643	\$7,170,131.33	\$13,061,793.58	\$5,830,304.82	\$(7,231,488.76)	-55.4%			
	Total Residential	1,071,702	8,335	230,609	\$5,236,861.91	\$9,539,980.19	\$4,126,658.11	\$(5,413,322.08)	-56.7%			
	Total Commercial	226,647	257	677,717	\$939,988.04	\$1,712,336.74	\$864,711.36	\$(847,625.38)	-49.5%			
	Total OWU	239,764	2	8,542,660	\$71,929.20	\$131,031.03	\$131,031.03	\$-	0.0%			
	Total Miscellaneous	583,900	53	2,557,657	\$834,977.00	\$1,521,059.50	\$628,024.32	\$(893,035.18)	-58.7%			
	Total Private Fire	-	61	-	86,395.19	157,386.12	79,880.00	\$(77,506)	-49.2%			
<b>Total Anthem Water - Billed Revenues</b>		2,122,013	8,708	12,008,643	\$7,170,131.33	\$13,061,793.58	\$5,830,304.82	\$(7,231,488.76)	-55.4%			

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**Arizona American Water Company - Havasu Water**

Test Year Ended December 31, 2007 - Analysis of Revenue by Detailed Class

Rate Schedule	Description	Average			Revenues			Proposed	
		Full + Partial without Cust Annualization	Number of Customers	Average Consumption	Present Rates	Proposed Step 1 Consolidated Rates	Increase Amount	Increase %	
H1M1A	Bullhead Residential 5/8 & 3/4-inch	185,953	1,582	9,796	\$1,004,184.05	\$739,813.28	\$(264,370.77)	-26.33%	
H1M1B	Havasu Residential 1" Meter	17	-	3,400	\$345.09	\$122.74	\$(222.35)	-64.43%	
H1M1D	Havasu Residential 2" Meter	355	1	29,583	\$3,328.10	\$1,836.25	\$(1,491.85)	-44.83%	
H1M1F	Havasu Residential 4" Meter	5,966	2	229,462	\$35,489.17	\$27,023.00	\$(8,466.17)	-23.86%	
H1M3D	Havasu Residential Apt 2" Meter [Not consolidated]	53	-	53,000	\$173.06	\$173.06	\$-	0.00%	
H1M3F	Havasu Residential Apt 4" Meter [Not consolidated]	330	40	682	\$7,328.88	\$7,328.88	\$-	0.00%	
H1M3H	Havasu Residential Apt 4" Meter - Valley Manor [Not consolidated]	4,178	73	4,797	\$25,397.00	\$25,397.00	\$-	0.00%	
H1M3J	Havasu Residential Apt 4" Meter - Kenjen RV [Not consolidated]	1,672	111	1,261	\$22,431.07	\$22,431.07	\$-	0.00%	
H1M3K	Havasu Residential Apt 4" Meter - HV Falls RV [Not consolidated]	2,049	280	611	\$50,211.86	\$50,211.86	\$-	0.00%	
H1M3L	Havasu Residential Apt 1" Meter - LH RV [Not consolidated]	2,077	36	4,605	\$13,061.45	\$13,061.45	\$-	0.00%	
H1M3M	Havasu Residential Apt 1" Meter - D Hills RV [Not consolidated]	1,302	99	1,100	\$19,747.51	\$19,747.51	\$-	0.00%	
H1M3P	Havasu Residential Apt 6" Meter - Hav Resort [Not consolidated]	5,908	155	3,178	\$42,281.58	\$42,281.58	\$-	0.00%	
H2M1A	Havasu Commercial 5/8, 3/4" Meter	7,086	35	16,912	\$33,257.05	\$27,885.36	\$(5,371.69)	-16.15%	
H2M1B	Havasu Commercial 1" Meter	6,613	9	60,118	\$28,223.00	\$26,123.50	\$(2,099.50)	-7.44%	
H2M1D	Havasu Commercial 2" Meter	19,412	20	79,233	\$110,576.25	\$81,596.50	\$(28,979.75)	-26.21%	
H2M1E	Havasu Commercial 3" Meter	1,112	4	20,981	\$23,513.61	\$16,040.00	\$(7,473.61)	-31.78%	
	Total Havasu - Billed Revenues	244,083	2,449	518,719	\$1,419,548.73	\$1,101,073.04	\$(318,475.69)	-22.43%	
	Total Residential	209,860	2,381	341,475	\$1,223,978.82	\$949,427.68	\$(274,551.14)	-22.43%	
	Total Commercial	34,223	68	177,244	\$195,569.91	\$151,645.36	\$(43,924.55)	-22.46%	
	Total Havasu - Billed Revenues	244,083	2,449	518,719	\$1,419,548.73	\$1,101,073.04	\$(318,475.69)	-22.43%	

**Arizona American Water Company - Mohave Water Water**

Test Year Ended December 31, 2007 - Analysis of Revenue by Detailed Class

Rate Schedule	Description	Average			Revenues			Proposed	
		Number of Customers	Average Consumption		Present Rates	Proposed Step 1 Consolidated Rates	Increase Amount	Increase %	
G1M1A	Bullhead Residential 5/8 & 3/4-inch	14,428	8,070	\$3,319,751.58	\$5,687,316.82	\$2,367,565.24	71.32%		
G1M1B	Bullhead Residential 1" Meter	55	24,153	\$37,698.09	\$60,252.24	\$22,554.15	59.83%		
G1M1D	Bullhead Residential 2" Meter	30	119,791	\$90,889.28	\$173,715.50	\$82,826.23	91.13%		
G1M2A	Bullhead Residential Apt 5/8" Meter [Not consolidated]	71	17,870	\$30,189.28	\$30,189.28	\$-	0.00%		
G1M2B	Bullhead Residential Apt 1" Meter [Not consolidated]	53	25,514	\$37,696.84	\$37,696.84	\$-	0.00%		
G1M2C	Bullhead Residential Apt 1.5" Meter [Not consolidated]	4	55,022	\$5,524.77	\$5,524.77	\$-	0.00%		
G1M2D	Bullhead Residential Apt 2" Meter [Not consolidated]	143	58,929	\$271,678.83	\$271,678.83	\$-	0.00%		
G1M2F	Bullhead Residential Apt 4" Meter [Not consolidated]	3	261,290	\$18,810.56	\$18,810.56	\$-	0.00%		
G1M2G	Bullhead Residential Apt 6" Meter [Not consolidated]	1	916,571	\$25,174.66	\$25,174.66	\$-	0.00%		
G1M3A	Rio Utility Residential 5/8 & 3/4-inch	347	10,239	\$89,340.93	\$162,145.50	\$72,804.57	81.49%		
G1M3B	Rio Utility Residential 1" Meter	4	10,854	\$1,797.92	\$2,064.90	\$266.98	14.85%		
G2M1A	Bullhead Commercial 5/8 & 3/4-inch	392	11,836	\$126,095.88	\$240,947.60	\$114,851.72	91.08%		
G2M1B	Bullhead Commercial 1" Meter	169	26,404	\$124,428.60	\$231,099.00	\$106,670.40	85.73%		
G2M1C	Bullhead Commercial 1.5" Meter	9	116,951	\$23,228.38	\$49,383.00	\$26,154.62	112.60%		
G2M1D	Bullhead Commercial 2" Meter	204	103,779	\$558,212.11	\$1,032,871.00	\$474,658.89	85.03%		
G2M1E	Bullhead Commercial 3" Meter	27	100,726	\$96,783.63	\$167,608.50	\$70,824.87	73.18%		
G2M1F	Bullhead Commercial 4" Meter	1	46,222	\$2,583.69	\$5,056.00	\$2,472.31	95.69%		
G2M1G	Bullhead Commercial 6" Meter	-	445,000	\$3,229.76	\$5,178.75	\$1,948.99	60.34%		
G2M1V	BHC Veteran Memorial - 5/8" Meter	2	62,652	\$4,151.50	\$7,970.40	\$3,818.91	91.99%		
H2M1D	Havasu Commercial 2"	1	456,667	\$4,712.16	\$10,071.50	\$5,359.34	113.73%		
H2M1F	Havasu Commercial 4"	0.42	286,400	\$2,513.27	\$7,012.00	\$4,498.73	179.00%		
G4M1	Bullhead OPA - 5/8" Meter	25	7,474	\$5,749.15	\$11,247.74	\$5,498.59	95.64%		
G4M1	Bullhead OPA - 1" Meter	8	38,511	\$6,828.25	\$14,280.00	\$7,451.75	109.13%		
G4M1	Bullhead OPA - 1.5" Meter	4	43,833	\$4,985.67	\$9,643.50	\$4,657.83	93.42%		
G4M1	Bullhead OPA - 2" Meter	42	72,588	\$85,251.62	\$166,833.00	\$81,581.38	95.69%		
G4M1	Bullhead OPA - 3" Meter	2	731,042	\$27,018.94	\$50,847.00	\$23,828.07	88.19%		
G4M1	Bullhead OPA - 4" Meter	1	799,750	\$15,588.77	\$38,389.50	\$22,800.73	146.26%		
G4M1	Bullhead OPA - 6" Meter	1	1,596,667	\$31,131.88	\$57,516.75	\$26,384.87	84.75%		
G6M02	Private Fire 2"	21	-	\$846.72	\$2,772.00	\$1,925.28	227.38%		
G6M04	Private Fire 4"	66	-	\$5,307.61	\$34,804.00	\$29,496.39	555.74%		
G6M06	Private Fire 6"	20	-	\$2,419.20	\$24,000.00	\$21,580.80	892.06%		



Arizona American Water Company - Paradise Valley Water										
Test Year Ended December 31, 2007 - Analysis of Revenue by Detailed Class										
Schedule	Description	Full + Partial without Cust Annualization	Average			Revenues			Proposed	
			Number of Customers	Average Consumption	Present Rates	Proposed Step 1 Consolidated Rates	Increase Amount	Increase %		
5	P1M1A	Paradise Valley Residential 5/8"	546,624	2,232	20,406	\$1,703,706.49	\$1,979,716.92	\$276,010.43	16.20%	
6	P1M1A	Paradise Valley Residential 3/4"	9,208	31	24,954	\$29,047.28	\$33,946.58	\$4,899.30	16.87%	
7	P1M1A	Paradise Valley Residential 1"	1,286,247	1,896	56,531	\$4,166,014.42	\$4,754,766.22	\$588,751.80	14.13%	
8	P1M1A	Paradise Valley Residential 1-1/2"	44,719	59	63,521	\$183,581.66	\$194,656.82	\$11,075.16	6.03%	
9	P1M1A	Paradise Valley Residential 2"	204,719	130	130,811	\$802,412.95	\$749,356.75	\$(53,056.20)	-6.61%	
10	P1M1B	Paradise Valley (MMWC)Res 5/8"	188	2	8,545	\$855.30	\$799.28	\$(56.02)	-6.55%	
11	P1M1B	Paradise Valley (MMWC)Res 1"	47,895	43	93,912	\$150,783.26	\$180,966.34	\$30,183.08	20.02%	
12	P1M1B	Paradise Valley (MMWC)Res 1-1/2"	19,477	20	82,181	\$70,571.55	\$78,596.98	\$8,025.43	11.37%	
13	P1M1B	Paradise Valley (MMWC)Res 2"	17,452	9	163,103	\$67,883.89	\$61,948.75	\$(5,935.14)	-8.74%	
14	P2M1A	Paradise Valley Commercial 5/8"	2,969	46	5,438	\$25,958.34	\$17,480.20	\$(8,478.14)	-32.66%	
15	P2M1A	Paradise Valley Commercial 3/4"	1	1	83	\$481.62	\$210.98	\$(270.64)	-56.19%	
16	P2M1A	Paradise Valley Commercial 1"	34,934	50	58,030	\$98,662.97	\$139,447.00	\$40,784.03	41.34%	
17	P2M1A	Paradise Valley Commercial 1-1/2"	46,288	24	161,282	\$120,796.86	\$184,211.00	\$63,414.14	52.50%	
18	P2M1A	Paradise Valley Commercial 2"	385,948	120	268,392	\$996,139.90	\$1,394,901.00	\$398,761.10	40.03%	
19	P2M1A	Paradise Valley Commercial 3"	49,424	22	185,805	\$192,477.69	\$204,221.50	\$11,743.81	6.10%	
20	P2M1A	Paradise Valley Commercial 4"	2,359	1	196,583	\$9,150.87	\$13,056.50	\$3,905.63	42.68%	
21	P2M1A	Paradise Valley Commercial 6"	41,666	4	868,042	\$144,770.95	\$146,706.75	\$1,935.80	1.34%	
22	P2M1T	Paradise Valley Turf Customer 3"	9,745	-	2,436,250	\$39,115.53	\$30,339.50	\$(8,776.03)	-22.44%	
23	P2M1T	Paradise Valley Turf Customer 4"	16,054	0.25	5,351,333	\$35,816.04	\$59,708.00	\$23,891.96	66.71%	
24	P2PVC	Paradise Valley Country Club 6"	185,447	1	15,453,917	\$276,705.87	\$276,705.87	\$-	0.00%	
25	P4MIT	Paradise Valley Turf Customer 3"	11,050	1	920,833	\$21,883.80	\$32,386.50	\$10,502.70	47.99%	
26	P5M1A	Paradise Valley OWU/OPA 5/8"	20	5	333	\$1,548.00	\$1,069.60	\$(478.40)	-30.90%	
27	P5M1A	Paradise Valley OWU/OPA 1"	5,108	10	44,034	\$16,155.52	\$21,070.50	\$4,914.98	30.42%	
28	P5M1A	Paradise Valley OWU/OPA 2"	2,686	5	44,767	\$13,688.10	\$13,670.00	\$(18.10)	-0.13%	
29	P6M1A	Paradise Valley Private Fire	-	68	-	\$8,293.00	\$68,580.00	\$60,287.00	726.96%	
30	Total Paradise Valley Water - Billed Revenues		2,970,228	4,780	26,639,086	\$9,176,501.85	\$10,638,519.54	\$1,462,017.68	15.93%	
31	Total Residential		2,176,529	4,422	643,964	\$7,174,856.80	\$8,034,754.64	\$859,897.84	11.98%	
32	Total Commercial		774,835	269	24,985,155	\$1,940,076.64	\$2,466,988.30	\$526,911.66	27.16%	
33	Total OPA		11,050	1	920,833	\$21,883.80	\$32,386.50	\$10,502.70	47.99%	
34	Total Sale For Resale		7,814	20	89,134	\$31,391.62	\$35,810.10	\$4,418.48	14.08%	
35	Total Private Fire		-	68	-	\$8,293.00	\$68,580.00	\$60,287.00	726.96%	
36	Total Paradise Valley Water - Billed Revenues		2,970,228	4,780	26,639,086	\$9,176,501.85	\$10,638,519.54	\$1,462,017.68	15.93%	

**Arizona American Water Company - Sun City West Water**

Test Year Ended December 31, 2007 - Analysis of Revenue by Detailed Class

e	Rate Schedule	Description	Full + Partial Bills without Customer Annualization	Average			Revenues			Proposed	
				Average Number of Customers	Average Consumption	Present Rates	Proposed Step 1 Consolidated Rates	Increase Amount	Increase %		
1	B1M1A	Residential 5/8 & 3/4-inch	1,130,102	14,052	6,702	\$5,551,248.75	\$4,656,550.44	\$894,698.31	-16.12%		
2	B1M1B	Residential 1" Meter	26,179	161	13,529	151,707.17	\$105,588.06	\$46,119.11	-30.40%		
3	B1M1C	Residential 1.5" Meter	316,770	464	56,881	1,396,183.64	\$1,329,809.58	\$66,374.06	-4.75%		
4	B1M1D	Residential 2" Meter	105,208	139	62,886	525,773.31	\$431,416.50	\$94,356.81	-17.95%		
5	B1M1E	Residential 3" Meter	-	-	-	-	\$-	\$-	-		
6	B1M1F	Residential 4" Meter	107,218	1	9,747,091	383,082.08	\$427,222.00	\$44,139.92	11.52%		
7	B2M1A	Commercial 5/8 & 3/4-inch	5,426	68	6,633	29,476.45	\$28,645.04	\$(831.41)	-2.82%		
8	B2M1B	Commercial 1"	25,253	76	27,659	114,653.90	\$108,364.50	\$(6,289.40)	-5.49%		
9	B2M1C	Commercial 1.5"	47,004	87	45,023	228,695.09	\$218,769.00	\$(9,926.09)	-4.34%		
10	B2M1D	Commercial 2"	135,771	126	89,677	611,922.85	\$552,325.50	\$(59,597.35)	-9.74%		
11	B2M1E	Commercial 3"	32,623	9	299,294	136,223.01	\$114,460.00	\$(21,763.01)	-15.98%		
12	B2M1F	Commercial 4"	12,185	1	1,015,417	44,890.60	\$47,447.50	\$2,556.90	5.70%		
13	B2M1G	Commercial 6"	2,805	1	255,000	16,414.75	\$14,286.25	\$(2,128.50)	-12.97%		
14	B6M04	Private Fire 4"	-	18	-	12,152.16	\$9,504.00	\$(2,648.16)	-21.79%		
15	B6M06	Private Fire 6"	-	42	-	42,453.20	\$50,300.00	\$7,846.80	18.48%		
16	B6M08	Private Fire 8"	-	10	-	13,391.07	\$20,825.00	\$7,433.93	55.51%		
20	<b>Total Sun City West - Billed Revenues</b>			1,946,544	15,203	11,625,792	\$9,258,268.03	\$8,115,513.37	\$(1,142,754.66)	-12.34%	
22	Total Residential			1,685,477	14,817	9,887,089	\$8,007,994.95	\$6,950,586.58	\$(1,057,408.37)	-13.20%	
23	Total Commercial			261,067	368	1,738,703	\$1,182,276.65	\$1,084,297.79	\$(97,978.86)	-8.29%	
24	Total Private Fire			-	70	-	67,996.43	\$80,629.00	\$12,632.57	18.58%	
26	<b>Total Sun City West - Billed Revenues</b>			1,946,544	15,255	11,625,792	\$9,258,268.03	\$8,115,513.37	\$(1,142,754.66)	-12.34%	

**Arizona American Water Company - Sun City Water**

Test Year Ended December 31, 2008 Analysis of Revenue by Detailed Class

Line No.	Rate Schedule	Description	Average			Revenues			Proposed	
			Average Number of Customers	Average Consumption	Annualized Present Rates	Propose Rates Not Consolidated	Proposed Step 1 Consolidated Rates	Increase Amount	Increase %	
1	A1M1A	Sun City Res 5/8 & 3/4	19,950	7.954	\$4,169,250.04	\$5,094,178.93	\$7,396,450.22	\$2,302,271.29	45.19%	
2	A1M1B	Sun City Residential 1"	338	17.824	\$185,811.66	\$227,078.75	\$284,779.82	\$57,701.07	25.41%	
3	A1M1C	Sun City Residential 1 1/2"	1,316	66.907	\$2,098,900.51	\$2,565,103.02	\$4,274,274.68	\$1,709,171.66	66.63%	
4	A1M1D	Sun City Residential 2"	442	87.683	\$999,104.19	\$1,221,012.09	\$1,748,565.00	\$627,552.91	43.21%	
5	A1M1E	Sun City Residential 3"	3	223.931	\$15,739.76	\$19,235.72	\$28,591.00	\$9,355.28	48.63%	
6	A1M1F	Sun City Residential 4"	No cust -					\$-	0.00%	
7	A1M1G	Sun City Residential 6"	2	134.087	\$12,562.15	\$15,352.26	\$21,558.00	\$6,205.74	40.42%	
8	A2M1A	Sun City Commercial 5/8" & 3/4"	226	6.592	\$48,776.79	\$59,598.03	\$90,392.00	\$30,793.97	51.67%	
9	A2M1B	Sun City Commercial 1"	149	22.656	\$94,851.72	\$115,917.72	\$173,280.00	\$57,362.28	49.49%	
10	A2M1C	Sun City Commercial 1 1/2"	191	43.125	\$234,691.22	\$286,819.75	\$462,791.50	\$175,971.75	61.35%	
11	A2M1D	Sun City Commercial 2"	183	109.838	\$492,439.52	\$601,813.78	\$871,382.00	\$269,568.22	44.79%	
12	A2M1E	Sun City Commercial 3"	26	169.420	\$117,553.98	\$143,663.37	\$199,878.00	\$56,214.63	39.13%	
13	A2M1F	Sun City Commercial 4"	5	1,097.860	\$117,596.99	\$143,716.22	\$254,498.50	\$110,782.28	77.08%	
14	A2M1G	Sun City Commercial 6"	7	2,236.674	\$344,894.52	\$421,498.03	\$579,394.25	\$157,896.22	37.46%	
15	A5M1	Sun City Public Interruptible - Peoria [Not consolidated]	1		\$82.80	\$101.16	\$105.72	\$4.56	4.51%	
16	A7M1D	Sun City Irrigation - 2"	2	83.542	\$3,699.54	\$4,521.16	\$8,546.50	\$4,025.34	89.03%	
17	A7M2	Sun City Irrigation - Raw	1	3,336.532	\$35,084.30	\$42,874.84	\$32,635.68	\$(10,239.16)	-23.88%	
18	B7M2	Sun City West Irrigation - Raw [a]	115	128.444	\$149,755.28	\$183,020.94	\$213,016.32	\$29,995.38	16.39%	
19	A6M03	Private Fire 3"	1	-	\$133.68	\$163.32	\$276.00	\$112.68	68.99%	
20	A6M04	Private Fire 4"	56	-	\$11,670.91	\$14,265.20	\$29,656.00	\$15,390.80	107.89%	
21	A6M06	Private Fire 6"	55	-	\$23,717.55	\$28,983.75	\$65,500.00	\$36,516.25	125.99%	
22	A6M08	Private Fire 8"	10	-	\$5,673.60	\$6,933.60	\$21,000.00	\$14,066.40	202.87%	
23	A8M1	Private Hydrant - Peoria	63	-	\$5,254.20	\$6,418.44	\$10,584.00	\$4,165.56	64.90%	
24	<b>Total Sun City Water - Billed Revenues</b>		23,142	7,773,069	\$9,167,254.91	\$11,202,270.08	\$16,767,155.19	\$5,564,885.11	49.68%	
27		Total Residential	22,051	538,386	7,481,368	9,141,961	13,754,219	4,612,258	50.45%	
28		Total Commercial	787	3,686,165	1,450,805	1,773,027	2,631,616	858,589	48.43%	
29		Total OWU	1	-	83	101	106	5	4.51%	
30		Total Miscellaneous	118	3,548,518	188,549	230,417	254,199	23,782	10.32%	
31		Total Fire	185	-	46,450	56,764	127,016	66,086	116.42%	

Arizona American Water Company - Sun City West Water											
Test Year Ended December 31, 2007 - Analysis of Revenue by Detailed Class											
Line No.	Rate Schedule	Description	Full + Partial Bills without Customer Annualization	Average Number of Customers	Average Consumption	Present Rates	Revenues		Proposed Step 1 Consolidated Rates	Increase Amount	Increase %
							Proposed	Revenues			
1	B1M1A	Residential 5/8 & 3/4-inch	1,130,102	14,052	6,702	\$5,551,248.75	\$4,656,550.44	\$4,656,550.44	\$(894,698.31)	-16.12%	
2	B1M1B	Residential 1" Meter	26,179	161	13,529	151,707.17	\$105,588.06	\$105,588.06	\$(46,119.11)	-30.40%	
3	B1M1C	Residential 1.5" Meter	316,770	464	56,881	1,396,183.64	\$1,329,809.58	\$1,329,809.58	\$(66,374.06)	-4.75%	
4	B1M1D	Residential 2" Meter	105,208	139	62,886	525,773.31	\$431,416.50	\$431,416.50	\$(94,356.81)	-17.95%	
5	B1M1E	Residential 3" Meter	-	-	-	-	\$-	\$-	\$-	-	
6	B1M1F	Residential 4" Meter	107,218	1	9,747,091	383,082.08	\$427,222.00	\$427,222.00	\$44,139.92	11.52%	
7	B2M1A	Commercial 5/8 & 3/4-inch	5,426	68	6,633	29,476.45	\$28,645.04	\$28,645.04	\$(831.41)	-2.82%	
8	B2M1B	Commercial 1"	25,253	76	27,659	114,653.90	\$108,364.50	\$108,364.50	\$(6,289.40)	-5.49%	
9	B2M1C	Commercial 1.5"	47,004	87	45,023	228,695.09	\$218,769.00	\$218,769.00	\$(9,926.09)	-4.34%	
10	B2M1D	Commercial 2"	135,771	126	89,677	611,922.85	\$552,325.50	\$552,325.50	\$(59,597.35)	-9.74%	
11	B2M1E	Commercial 3"	32,623	9	299,294	136,223.01	\$114,460.00	\$114,460.00	\$(21,763.01)	-15.98%	
12	B2M1F	Commercial 4"	12,185	1	1,015,417	44,890.60	\$47,447.50	\$47,447.50	\$2,556.90	5.70%	
13	B2M1G	Commercial 6"	2,805	1	255,000	16,414.75	\$14,286.25	\$14,286.25	\$(2,128.50)	-12.97%	
14	B6M04	Private Fire 4"	-	18	-	12,152.16	\$9,504.00	\$9,504.00	\$(2,648.16)	-21.79%	
15	B6M06	Private Fire 6"	-	42	-	42,453.20	\$50,300.00	\$50,300.00	\$7,846.80	18.48%	
16	B6M08	Private Fire 8"	-	10	-	13,391.07	\$20,825.00	\$20,825.00	\$7,433.93	55.51%	
20	<b>Total Sun City West - Billed Revenues</b>		1,946,544	15,203	11,625,792	\$9,258,268.03	\$8,115,513.37	\$8,115,513.37	\$(1,142,754.66)	-12.34%	
22	Total Residential		1,685,477	14,817	9,887,089	\$8,007,994.95	\$6,950,586.58	\$6,950,586.58	\$(1,057,408.37)	-13.20%	
23	Total Commercial		261,067	368	1,738,703	\$1,182,276.65	\$1,084,297.79	\$1,084,297.79	\$(97,978.86)	-8.29%	
24	Total Private Fire		-	70	-	67,996.43	\$80,629.00	\$80,629.00	\$12,632.57	18.58%	
26	Total Sun City West - Billed Revenues		1,946,544	15,255	11,625,792	\$9,258,268.03	\$8,115,513.37	\$8,115,513.37	\$(1,142,754.66)	-12.34%	

**Arizona American Water Company - Tubac**

**Test Year Ended December 31, 2007 - Analysis of Revenue by Detailed Class**

Rate Schedule	Description	Average		Present Rates	Proposed Step 1 Consolidated Rates		Proposed	
		Number of Customers	Average Consumption		Amount	Increase	Amount	%
F1M1A	Residential 5/8 & 3/4-inch	451	11,740	\$366,006.10	\$237,519.98	\$(128,486.12)	-35.10%	
F1M1B	Residential 1" Meter	23	18,758	\$44,715.70	\$22,905.46	\$(21,810.24)	-48.78%	
F1M1D	Residential 2" Meter	3	45,529	\$14,030.02	\$6,894.75	\$(7,135.27)	-50.86%	
F1M1E	Residential 3" Meter	1	800	\$4,642.00	\$2,516.00	\$(2,126.00)	-45.80%	
F2M1A	Commercial 5/8 & 3/4-inch	46	9,111	\$36,904.30	\$22,686.48	\$(14,217.82)	-38.53%	
F2M1B	Commercial 1" Meter	15	32,768	\$44,900.50	\$26,185.00	\$(18,715.50)	-41.68%	
F2M1C	Commercial 1.5" Meter	2	20,458	\$5,429.12	\$2,922.00	\$(2,507.12)	-46.18%	
F2M1D	Commercial 2" Meter	9	85,727	\$68,972.30	\$38,682.00	\$(30,290.30)	-43.92%	
F2M1E	Commercial 3" Meter	3	17,600	\$21,278.00	\$11,785.00	\$(9,493.00)	-44.61%	
<b>Total Tubac - Billed Revenues</b>		<b>553</b>	<b>242,491</b>	<b>\$606,878.04</b>	<b>\$372,096.67</b>	<b>\$(234,781.37)</b>	<b>-38.69%</b>	
Total Residential		478	76,827	\$429,393.82	\$269,836.19	\$(159,557.63)	-37.16%	
Total Commercial		75	165,664	\$177,484.22	\$102,260.48	\$(75,223.74)	-42.38%	
<b>Total Tubac - Billed Revenues</b>		<b>553</b>	<b>242,491</b>	<b>\$606,878.04</b>	<b>\$372,096.67</b>	<b>\$(234,781.37)</b>	<b>-38.69%</b>	