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ORIGINAL

MEMORANDUM

RECEIVED

TO: Docket Control

2015 DEC 28 A 10: 14

FROM: Thomas M. Broderick  
Director  
Utilities Division

AZ CORP COMMISSION  
DOCKET CONTROL

DATE: December 28, 2015

RE: STAFF REPORT FOR APPALOOSA WATER COMPANY'S APPLICATION  
FOR AN INCREASE IN ITS RATES (DOCKET NO. W-03443A-15-0271)

Attached is the Staff Report for Appaloosa Water Company's application for an increase in its rates. Staff recommends approval of the rate application using Staff's recommended rates and charges.

Any party who wishes may file comments to the Staff Report with the Commission's Docket Control by 4:00 p.m. on or before January 7, 2016.

TMB:BCA:nr/BES

Arizona Corporation Commission  
DOCKETED

Originator: Brendan Aladi

DEC 28 2015

DOCKETED BY

Service List for: Appaloosa Water Company, Inc.  
Docket No. W-03443A-15-0271

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**STAFF REPORT  
UTILITIES DIVISION  
ARIZONA CORPORATION COMMISSION**

**APPALOOSA WATER COMPANY  
DOCKET NO. W-03443A-15-0271**

**APPLICATION FOR A PERMANENT RATE INCREASE**

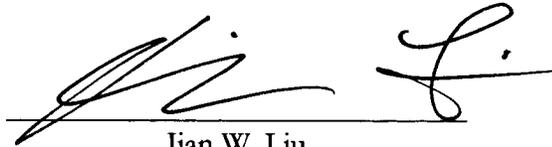
**DECEMBER 28, 2015**

## STAFF ACKNOWLEDGMENT

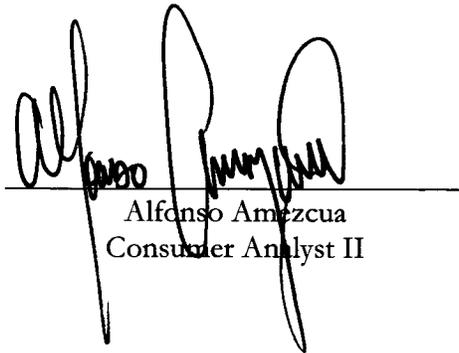
The Staff Report for Appaloosa Water Company ("Appaloosa" or "Company"), Docket No. W-03443A-15-0271, was the responsibility of the Staff members listed below. Brendan Aladi was responsible for the review and analysis of the Company's application, recommended revenue requirement, rate base, and rate design. Jian Liu was responsible for the engineering and technical analysis. Alfonso Amezcua was responsible for reviewing the Arizona Corporation Commission's records on the Company and reviewing customer complaints filed with the Commission.



Brendan Aladi  
Public Utilities Analyst



Jian W. Liu  
Utilities Engineer



Alfonso Amezcua  
Consumer Analyst II

**EXECUTIVE SUMMARY  
APPALOOSA WATER COMPANY  
DOCKET NO. W-03443A-15-0271**

On July 28, 2015, Appaloosa Water Company ("Appaloosa" or "Company") filed an application with the Arizona Corporation Commission ("Commission") for a permanent rate increase. On September 29, 2015, the application was made sufficient.

Appaloosa is a class D for-profit Arizona public service corporation that provides potable water service to approximately 228 customers. The Company's service area is in a community known as Appaloosa Meadows located in the town of Chino Valley in Yavapai County, Arizona.

Appaloosa proposed a \$141,689, or a 100.00 percent, revenue increase from test year revenue of \$141,689 to \$283,378. The proposed revenue increase would produce an operating income of \$98,958 for a 34.74 percent operating margin. The Company's proposed original cost rate base ("OCRB") is a negative \$472,486 which is also its proposed fair value rate base ("FVRB"). The Company's proposed rates would increase the typical residential bill with a median usage of 4,958 gallons from \$37.21 to \$74.42, for an increase of \$37.21, or 100.0 percent.

Staff recommends a \$10,639 or 7.51 percent increase over the test year revenue of \$141,689 to \$152,328. Staff's recommended revenue would produce an operating income of \$40,000 for a 26.26 percent operating margin. Staff recommends an original OCRB of negative \$73,103 and the same for FVRB. Due to the Company's negative rate base, Staff's recommended revenue requirement is based on a cash flow analysis. Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 4,958 gallons from \$37.21 to \$39.25, for an increase of \$2.04, or 5.5 percent, as shown on Schedule BCA-5.

**RECOMMENDATIONS**

Staff recommends:

1. The Commission approve the Staff-recommended rates and charges as shown on Schedule BCA-4.
2. That the Company be put on notice to appropriately record all plant transactions in accordance with National Association of Regulatory Utility Commissioners ("NARUC") guidelines. If the Company fails to do so, Staff could recommend fines in the next rate case. The Company shall maintain all invoices for both operating expenses and capital improvements.
3. The Company file with Docket Control, as a compliance item in this Docket, a schedule of its approved rates and charges within 30 days after the Decision in this matter is issued.
4. That the Company use the depreciation rates presented in Table B of the attached Engineering Report by individual NARUC category on a going-forward basis. Staff

has updated Appaloosa's Arsenic Treatment media depreciation rate based on information provided by the Company.

5. The elimination of the requirement to file quarterly water loss reports going forward. In Decision Nos. 73270 and 74787, Appaloosa was ordered to file water loss reports. The Company filed the reports every quarter beginning January 2013. The Company's water loss has been below 10 percent for more than a year.

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Engineering Report ..... Attachment A

**FACT SHEET**

**Current Rates:** Decision No. 73270 dated July 30, 2012.

**Type of Ownership:** C-Corporation

**Location:** The Company's service area is in a community known as Appaloosa Meadows located in the town of Chino Valley in Yavapai County, Arizona.

**Rate Application Docketed:** July 28, 2015

**Current Test year Ended:** December 31, 2014

Rates

	<u>Current Rates</u>	<u>Company Proposed Rates</u>	<u>Staff Recommended Rates</u>
<b>Monthly Minimum Charges:</b>			
5/8 x 3/4-inch meter	\$25.00	\$50.00	\$26.00
<b>Gallons In Minimum</b>	0	0	0
<b>5/8 x 3/4 -inch Residential Customer Commodity Rate:</b>			
Per 1,000 gallons:			
From 1 to 3,000 Gallons	\$1.95	\$3.90	\$2.16
From 3,001 to 7,000 Gallons	\$3.25	\$6.50	\$3.46
Over 7,000 Gallons	\$4.45	\$8.90	\$4.66

Typical Residential Bill Analysis

	<u>Present</u>	<u>Company Proposed</u>	<u>Staff Recommended</u>
Based on median usage of 4,958 gallons	\$37.21	\$74.42	\$39.25

**Customers:**

Number of customers in prior rate case (12/31/10): 234

Average number of customers in the current test year (12/31/14): 228

Current Test Year customers by meter size:

5/8 X 3/4-inch 185

1-inch 49

234

Seasonal customers: 0

Customer notification: For rate application was filed on July 28, 2015.

Customer Complaints: 4

Opinions – Rate Case Items – Opposed = 37

37/228 = 16 Percent

## SUMMARY OF RATE FILING

Appaloosa Water Company ("Appaloosa" or "Company") proposed a \$141,689, or 100.00 percent, revenue increase from test year revenue of \$141,689 to \$283,378. The proposed revenue increase would produce an operating income of \$98,445 for a 34.74 percent operating margin. The Company's proposed original cost rate base ("OCRB") is a negative \$472,486, which is also its proposed fair value rate base ("FVRB"). The Company's proposed rates would increase the typical residential bill with a median usage of 4,958 gallons from \$37.21 to \$74.42, for an increase of \$37.21, or 100.0 percent.

The test year results for Appaloosa, as adjusted by Utilities Division Staff ("Staff"), show total operating revenue of \$141,689 and operating income of \$31,589 for a 22.29 percent operating margin.

Staff recommends a \$10,639, or 7.51 percent, increase over test year revenue of \$141,689 to \$152,328. Staff's recommended revenue would produce an operating income of \$40,000 for a 26.26 percent operating margin. Staff recommends an original OCRB of negative \$73,103 and the same for FVRB. Due to the Company's negative rate base, Staff's recommended revenue requirement is based on a cash flow analysis. Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 4,958 gallons from \$37.21 to \$39.25, for an increase of \$2.04, or 5.50 percent, as shown on Schedule BCA-5.

According to the application, the Company requests a rate increase due to increases in the cost of operations, arsenic media cost and required investments in other plant. The Company states that its current rates do not have the flexibility needed to address unforeseen expenses.

## BACKGROUND

On July 28, 2015, Appaloosa filed an application with the Arizona Corporation Commission ("Commission") for a permanent rate increase. On September 22, 2015, Appaloosa filed an updated application. During the test year ended December 31, 2014, Appaloosa provided water service to 228 metered customers.

Appaloosa is a class D for-profit Arizona public service corporation that provides potable water service. The Company's service area is in a community known as Appaloosa Meadows located in the town of Chino Valley in Yavapai County, Arizona. On August 25, 2015, Staff filed a Letter of Deficiency for Appaloosa's rate application. On September 29, 2015, the rate application was deemed sufficient.

The Company was granted authority to provide water utility services in Arizona in Commission Decision No. 60733, dated March 23, 1998. The Company's current rates and charges were authorized in Decision No. 73270, dated July 30, 2012. Artesian Holding, LLC is the current owner of Appaloosa.

## CONSUMER SERVICES

Staff reviewed the Commission's records for the period beginning January 1, 2012, to December 14, 2015, and found four complaints, all resolved and closed; and 37 opinions opposing the rate increase. A notarized affidavit of mailing for the Customer Notice was filed on July 28, 2015.

## COMPLIANCE

A check of the Utilities Division Compliance Section Database indicates that there are currently no delinquencies for Appaloosa.

## ENGINEERING ANALYSIS AND RECOMMENDATIONS

An inspection of the Company's water system was conducted by Jian W. Liu, Staff Engineer, accompanied by Company Representative, Kimble McClymonds, the Company's certified operator on October 14, 2015. A complete discussion of Staff's technical findings and recommendations and a complete description of the water system are provided in the attached Engineering Report.

## RECORD KEEPING - PLANT AND EXPENSES

Staff reviewed Appaloosa records and found that they were in substantial compliance with the 1996 publication of the National Association of Regulatory Utility Commissioners ("NARUC") Uniform System of Accounts ("USOA"). However, Staff is concerned that the Company may not always record its plant additions and expenses as required by the NARUC USOA. Accounting Instruction No. 5, Paragraph D, states in part:

**When an item of plant is retired**, account 108 – Accumulated Depreciation and Amortization of Utility Plant in Service, shall be charged and **the appropriate plant accounts shall be credited with the entire recorded original cost of plant** retired regardless of the amounts of depreciation which has been accumulated for this particular item of plant . . . (Emphasis added)

Staff notes that the Company recorded costs for media for arsenic treatment as an expense instead of appropriately capitalizing them as plant. Although Staff has recommended the expensing of arsenic media, such treatment has been limited to utilities experiencing less than two years of life from its media. Appaloosa has historically experienced 3 years of life from its media. Staff believes Appaloosa should continue capitalizing its media replacements.

The Company also incorrectly included sales tax, Water Infrastructure Finance Authority of Arizona ("WIFA") loan principal repayment and interest on a WIFA loan as operating expenses.

Staff recommends that the Company be put on notice that it should appropriately record all plant transactions and expenses according to NARUC guidelines. The Company shall maintain all invoices for both operating expenses and capital improvements.

## **RATE BASE**

The Company did not propose a FVRB that differs from its OCRB. Staff's adjustments increased the Company's proposed rate base by \$399,383, from negative \$472,486 to negative \$73,103, as shown on Schedule BCA-2, page 1. Details of Staff adjustments are presented below.

### *Plant-in-Service*

Adjustment A increases plant-in-service by \$274,323, from \$1,230,707 to \$1,505,030, as shown on Schedule BCA-1, pages 1 and 2 of 8. This reflects the correction of the ending plant balances adopted in the last rate case (Decision No. 73270) and the reclassification of media for arsenic treatment from repairs and maintenance expense to the arsenic plant account.

Water Treatment Equipment – Adjustment “a” increases this account by \$148,250, from \$0 to \$148,250, as shown on Schedule BCA-2 pages 2 and 3. Staff increased this account by \$148,250 to reflect the correct ending balance approved in the last rate case.

Media for Arsenic Treatment – Adjustment “b” increases this account by \$25,635, from \$0 to \$25,635, as shown on Schedule BCA-2 pages 2 and 3. Staff increased this account by \$25,635 to reflect the reclassification of \$25,635 from Acct. No. 620, repairs and maintenance expense, to Acct. No. 320.3, media for arsenic treatment.

Storage Tank – Adjustment “c” increases this account by \$100,438, from \$0 to \$100,438, as shown on Schedule BCA-2 pages 2 and 3. Staff increased this account by \$100,438 to reflect the correct ending balance approved in the last rate case.

Computer Software – Adjustment “d” increases this account by \$1,500, from \$0 to \$1,500, as shown on Schedule BCA-2 pages 2 and 3. Staff increased this account by \$1,500 to reflect the correct ending balance approved in the last rate case.

Miscellaneous Equipment – Adjustment “e” decreases this account by \$1,500, from \$1,500 to \$0, as shown on Schedule BCA-2 pages 2 and 3. Staff decreased this account by \$1,500 to reflect the correct ending balance approved in the last rate case.

### *Accumulated Depreciation*

Adjustment B decreases accumulated Depreciation by \$199,514, from \$609,994 to \$410,480, as shown on Schedule BCA-2, pages 5 of 8. This reflects the impact of Staff's recalculation of accumulated depreciation based on Staff adjusted Plant-in-Service and Commission approved rates.

*Advance In Aid of Construction (AIAC)*

Adjustment C increases AIAC by \$33,712, from \$0 to \$33,712, as shown on Schedule BCA-2, page 1. Staff's adjusted amount reflects the \$535,553 ending balance approved in the last rate case, removes \$481,616 of AIAC transferred to contribution in aid of construction ("CIAC") in 2014, and removes \$20,225 in AIAC refunds since the last rate case.

12/31/10 Ending Balance (Decision No. 73270)	\$535,553
Less: AIAC transferred to CIAC in 2014	\$481,616
AIAC refunds since the last rate case	<u>\$ 20,225</u>
Net AIAC Balance	\$ 33,712

*Amortization of Contribution in Aid of Construction*

Adjustment D decreases accumulated amortization of CIAC by \$51,306, from \$152,044 to \$100,738, as shown on Schedule BCA-2, pages 1 and 8. Staff calculated the ending balance of the accumulated amortization of CIAC by computing the amortization on the CIAC from the year the CIAC was made or transferred from AIAC to the end of the test year.

Description	Adds	Annual Amortization Calc.	Annual Amortization
Balance Per Decision No. 73270	\$759,327		
2011	\$759,327	(759,327 x 3.07%) =	\$23,225
2012	\$759,327	(759,327 x 3.07%) =	\$23,225
2013	\$759,327	(759,327 x 3.07%) =	\$23,225
2014	\$759,327	(759,327 x 3.07%) =	\$23,225
2014 AIAC Transfer	\$481,616	(759,327 x 3.07%)/2 =	<u>\$7,400</u>
	Total Amortization Increase		\$100,738

*Working Capital*

Appaloosa did not claim any working capital allowance. Staff's adjustments E and F resulted in a net increase to working capital of \$10,564, from \$0 to \$10,564, as shown on Schedule BCA-2, pages 1 and 8.

Cash working capital was calculated by using the formula method which equals one-eighth of the operating expenses less depreciation, taxes, purchased power and purchased water expenses plus one twenty-fourth of purchased power and purchased water expenses.

## OPERATING INCOME STATEMENT

### *Operating Revenue*

Staff made no operating revenue adjustments

### *Operating Expenses*

Staff's adjustments to operating expenses resulted in a net decrease of \$74,834, from \$184,933 to \$110,100, as shown on Schedule BCA-3, page 1 and 2. Details of Staff's adjustments are presented below.

Repairs and Maintenance Expense – Adjustment A decreases repairs and maintenance expense by \$25,508, from \$25,508 to \$0, as shown on Schedule BCA-3, pages 1 and 2 to reflect the reclassification of \$25,508 from Acct. No. 620, repairs and maintenance expense to Acct. No. 320.3, media for arsenic treatment.

Outside Services Expense – Adjustment B increases outside services expense by \$4,200, from \$6,929 to \$11,129, as shown on Schedule BCA-3, pages 1 and 2. This reflects the reclassification of water operator fee of \$4,200 from water testing expense, Acct. No. 635, to outside services expense, Acct. No. 630.

Water Testing – Adjustment C decreases water testing expense by \$4,541, from \$6,810 to \$2,269, as shown on Schedule BCA-3, pages 1 and 2 to reflect Staff Engineer's calculation of water testing expense, and also removes \$341 in unsupported expense.

Depreciation Expense – Adjustment D decreases depreciation expense by \$37,818, from \$42,819 to \$5,001, as shown on Schedule BCA-3, pages 1 and 2. Staff's depreciation expense reflects application of Staff's recommended depreciation rates to Staff's recommended plant balances.

Taxes Other Than Income – Adjustment E decreases taxes other than income by \$18,532, from \$18,815 to \$283, as shown on Schedule BCA-3, pages 1 and 2. This reflects the removal of \$13,509 in sales taxes paid by customers. As a pass-through tax, it is not included in revenue and should not be included in expenses. Staff also removed \$4,611 in WIFA principal repayment and interest payment and recognized \$283 in taxes other than income.

Property Taxes – Adjustment F decreases property tax by \$693, from \$7,391 to \$6,698, to reflect Staff's recalculation of property tax expense based on the Arizona Department of Revenue ("ADOR") methodology as shown on Schedule BCA-3, page 5.

Income Tax Expense – Adjustment G increases test year income tax expense by \$7,801, from \$0 to \$7,801, to reflect Staff's calculation of the income tax obligation on Staff's adjusted test year taxable income, as shown on Schedule BCA-3, page 1.

Interest on Customer Deposit – Adjustment H increases interest on customer deposit by \$258, from \$0 to \$258, as shown on Schedule BCA-3, pages 1 and 3. This reflects Staff's calculation of interest on customer deposits.

## REVENUE REQUIREMENT

Staff recommends total annual operating revenue of \$152,328 as shown on Schedule BCA-1, page 2, Column B, line 10. Staff's recommendation is an increase of \$10,639, or 7.51 percent, over test year revenue of \$141,689. Staff's recommended revenue would produce an operating income of \$40,000 for a 26.26 percent operating margin and a cash flow of \$27,681 after payment of the debt service on the \$200,000 loan, as shown on Schedule BCA-1, page 1. Staff recommends an OCRB of negative \$73,103.

Staff's total revenue requirement of \$152,328 provides the Company with sufficient cash flow to pay operating expenses and contingencies. Cash flow needs determined the revenue requirement.

## RATE DESIGN

Schedule BCA-4 presents a complete list of the Company's present, proposed, and Staff's recommended rates and charges.

The Company's current rate structure is comprised of three tiers, with a first-tier break-over of 3,000 gallons, 7,000 gallons for the second-tier, and over 7,000 gallons for the third-tier. Its monthly minimum charges do not include any gallons. In this proceeding, the Company proposes to retain a three tiered rate structure, with a first-tier break-over of 3,000 gallons, 7,000 gallons for the second tier, and over 7,000 gallons for the third-tier.

The Company's proposed rates would increase the typical residential bill for customers with a 5/8 x 3/4 - inch meter and a median usage of 4,958 gallons from \$37.21 to \$74.42 for an increase of \$37.21, or 100.0 percent, as shown on Schedule BCA-5.

Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill for customers with a median usage of 4,958 gallons from \$37.21 to \$39.25, for an increase of \$2.04, or 5.5 percent, as shown on Schedule BCA-5.

## MISCELLANEOUS SERVICE CHARGES

Establishment Charge – The Company proposes to increase the establishment service charge from \$25 to \$50. Staff recommends a charge of \$30.

Reconnection (Delinquent) Charge – The Company proposes to increase the reconnection (delinquent) service charge from \$30 to \$60. Staff recommends the Reconnection (Delinquent) Charge remain at \$30.

Meter Test Charge – The Company proposes to increase the meter test charge from \$15 to \$30. Staff recommends a charge of \$20.

NSF Check Charge – The Company proposes to increase the NSF check charge from \$20 to \$40. Staff recommends the NSF Check charge remain at \$20. Per the Company, its bank charges \$12.

Meter Re-read – The Company proposes to increase the meter re-read charge from \$15 to \$30. Staff recommends a charge of \$20.

Late Payment Penalty Charge – The Company proposes to change the late fee penalty from 1-1/2 percent to \$3. Staff continues to recommend 1-1/2 percent.

After Hours Service Charge – The Company proposes to increase the after hour charge from \$50 to \$100. Staff recommends the after hour service charge remain at \$50.

An additional fee for service provided after normal business hours is appropriate when such service is at the customer's request or for the customer's convenience. Such a tariff compensates the utility for additional expenses incurred from providing after-hours service.

Moreover, it is appropriate to apply an after-hours service charge in addition to the charge for any utility service provided after hours at the customer's request or for the customer's convenience. For example, under Staff's proposal, a customer would be subject to a \$30 Establishment fee if it is done during normal business hours, but would pay an additional \$50 after-hours fee if the customer requested that the establishment be done after normal business hours.

## **SERVICE LINE AND METER INSTALLATION CHARGES**

The Company has requested changes to its service line and meter installation charges as shown on Schedule BCA-4.

Staff has recommended service line and meter installation charges based upon an analysis of costs as discussed in the attached Engineering Report. Further, since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, Staff recommends separate service line and meter installation charges. Staff recommends approval of Staff's service line and meter installation charges are shown on Schedule BCA-4.

## **RECOMMENDATIONS**

Staff recommends:

1. The Commission approve the Staff-recommended rates and charges as shown on Schedule BCA-4.

2. That the Company be put on notice to appropriately record all plant transactions in accordance with NARUC guidelines. If the Company fails to do so, Staff could recommend fines in the next rate case. The Company shall maintain all invoices for both operating expenses and capital improvements.
3. The Company file with Docket Control, as a compliance item in this Docket, a schedule of its approved rates and charges within 30 days after the Decision in this matter is issued.
4. That the Company use the depreciation rates presented in Table B of the attached Engineering Report by individual NARUC category on a going-forward basis. Staff has updated Appaloosa's Arsenic Treatment media depreciation rate based on information provided by the Company.
5. The elimination of the requirement to file quarterly water loss reports going forward. In Decision Nos. 73270 and 74787, Appaloosa was ordered to file water loss reports. The Company filed the reports every quarter beginning January 2013. The Company's water loss has been below 10 percent for more than a year.

SUMMARY OF FILING

	-- Present Rates --		Proposed		Staff
	Company as Filed	Staff as Adjusted	Company as Filed	Company as Filed	Recommended as Adjusted
1 Revenues:					
2 Metered Water Revenue	\$ 141,176	\$ 141,176	\$ 282,352	\$	151,815
3 Unmetered Water Revenue	-	-	-		-
4 Other Water Revenues	513	513	1,026		513
5					
6 Total Operating Revenue	<u>\$ 141,689</u>	<u>\$ 141,689</u>	<u>\$ 283,378</u>	<u>\$</u>	<u>152,328</u>
7					
8 Operating Expenses:					
9 Operation and Maintenance	\$ 115,908	\$ 90,059	\$ 115,908	\$	90,059
10 Depreciation	42,819	5,001	42,819		5,001
11 Property & Other Taxes	26,206	6,981	26,206		7,149
12 Income Tax	-	7,801	-		9,861
13 Interest on Customer Deposits	\$ -	\$ 258	\$ -	\$	258
14 Total Operating Expense	<u>\$ 184,933</u>	<u>\$ 110,100</u>	<u>\$ 184,933</u>	<u>\$</u>	<u>112,328</u>
15					
16 Operating Income/(Loss)	<u>\$ (43,244)</u>	<u>\$ 31,589</u>	<u>\$ 98,445</u>	<u>\$</u>	<u>40,000</u>
17					
18					
19 Rate Base O.C.L.D.	\$ (472,486)	\$ (73,103)	\$ (472,486)	\$	(73,103)
20					
23 Operating Margin	N/M	22.29%	34.74%		26.26%
24					
25 Cash Flow - Before Debt Service(L10+L16)	\$ (425)	\$ 36,590	\$ 141,264	\$	45,001
26 Less: Debt Service	0	17,320	17,320		17,320
27 Cash Flow - After Debt Service(L10+L16)	<u>(425)</u>	<u>19,270</u>	<u>123,944</u>		<u>27,681</u>
28					
29					

NOTE: Operating Margin represents the proportion of funds available to pay interest and other below the line or non-ratemaking expenses.

REVENUE REQUIREMENT CALCULATION

LINE NO.	DESCRIPTION	[A]	[B]
		COMPANY ORIGINAL COST	STAFF ORIGINAL COST
1	Adjusted Rate Base	\$ (472,486)	\$ (73,103)
2	Adjusted Operating Income (Loss)	\$ (43,244)	\$ 31,589
3	Current Rate of Return (L2 / L1)	Not Meaningful	Not Meaningful
4	Required Rate of Return	Not Meaningful	Not Meaningful
5	Required Operating Income (L4 * L1)	\$ 98,445	\$ 40,000
6	Operating Income Deficiency (L5 - L2)	\$ 141,689	\$ 8,411
7	Gross Revenue Conversion Factor	0.0000	1.2649
8	Required Revenue Increase (L7 * L6)	\$ 141,689	\$ 10,639
9	Adjusted Test Year Revenue	\$ 141,689	\$ 141,689
10	Proposed Annual Revenue (L8 + L9)	\$ 283,378	\$ 152,328
11	Required Increase in Revenue (%)	100.00%	7.51%
12	Proposed Operating Margin	34.74%	26.26%
13	Depreciation Expense	\$ 42,819	\$ 5,001
14	Cash Flow (L5 + L13)	\$ 141,264	\$ 45,001

References:

Column (A): Company Application  
Column (B): Staff Schedules

APPALOOSA WATER COMPANY  
Docket No. W-03443A-15-0271  
Test Year Ended :12/31/14

GROSS REVENUE CONVERSION FACTOR AND INCOME TAX CALCULATION FOR RECOMMENDED REVENUE

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
<u>Calculation of Gross Revenue Conversion Factor:</u>					
1	Revenue	100.0000%			
2	Uncollectible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Tax Rate (Line 17) + Property Tax Factor (Line 22)	20.9407%			
5	Subtotal (L3 - L4)	79.0593%			
6	Revenue Conversion Factor (L1 / L5)	1.264874			
<u>Calculation of Uncollectible Factor:</u>					
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	19.6750%			
9	One Minus Combined Income Tax Rate (L7 - L8)	80.3250%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0			
<u>Calculation of Effective Tax Rate:</u>					
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	5.5000%			
14	Federal Taxable Income (L12 - L13)	94.5000%			
15	Applicable Federal Income Tax Rate (Line 44)	15.0000%			
16	Effective Federal Income Tax Rate (L14 x L15)	14.1750%			
17	Combined Federal and State Income Tax Rate (L13 +L16)	19.6750%			
<u>Calculation of Effective Property Tax Factor</u>					
18	Unity	100.0000%			
19	Combined Federal and State Tax Rate (Line 17)	19.6750%			
20	One Minus Combined Income Tax Rate (L18 - L19)	80.3250%			
21	Property Tax Factor (XXX-18, L24)	1.5757%			
22	Effective Property Tax Factor (L21 * L22)	1.2657%			
23	Combined Federal and State Tax and Property Tax Rate (L17+L22)		20.9407%		
24	Required Operating Income	\$ 40,000			
25	Adjusted Test Year Operating Income (Loss)	\$ 31,589	\$ 8,411		
26	Required Increase in Operating Income (L24 - L25)				
27	Income Taxes on Recommended Revenue (Col. (D), L52)	\$ 9,861			
28	Income Taxes on Test Year Revenue (Col. (B), L52)	\$ 7,801	\$ 2,060		
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)				
30	Recommended Revenue Requirement (Schedule BCA-1, Line 10)	\$ 152,328			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	\$ -			
33	Adjusted Test Year Uncollectible Expense	\$ -	\$ -		
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32 - L33)				
35	Property Tax with Recommended Revenue (BCA-3, L19)	\$ 6,866			
36	Property Tax on Test Year Revenue (BCA-3, L 20)	\$ 6,698	\$ 168		
37	Increase in Property Tax Due to Increase in Revenue (BCA-3, L21)				
38	Total Required Increase in Revenue (L26 + L30 + L34+L37)		\$ 10,639		
<u>Calculation of Income Tax:</u>					
39	Revenue	Test Year \$141,689	\$ 10,639	STAFF Recommended \$ 152,328	
40	Operating Expenses Excluding Income Taxes	\$102,041	\$ 168	\$102,208	
41	Synchronized Interest (L47)	\$ -		\$ -	
42	Arizona Taxable Income (L36 - L37- L38)	\$ 39,648		\$ 50,120	
43	Arizona State Income Tax Rate	5.5000%		5.5000%	
44	Arizona Income Tax (L39 x L40)	\$ 2,181	\$ 2,181	\$ 2,757	
45	Federal Taxable Income (L33 - L35)	\$ 37,468		\$ 47,364	
46	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15%	\$ 5,620		\$ 7,105	
47	Federal Tax on Second Income Bracket (\$50,001 - \$75,000) @ 25%	\$ -		\$ -	
48	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34%	\$ -		\$ -	
49	Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39%	\$ -		\$ -	
50	Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34%	\$ -		\$ -	
51	Total Federal Income Tax	\$ 5,620	\$ 5,620	\$ 7,105	
52	Combined Federal and State Income Tax (L35 + L42)	\$ 7,801	\$ 7,801	\$ 9,861	
53	Applicable Federal Income Tax Rate [Col. (D), L42 - Col. (B), L42] / [Col. (C), L36 - Col. (A), L36]				15.00%
<u>Calculation of Interest Synchronization:</u>					
54	Rate Base (Schedule BCA-2)	\$ (73,103)			
55	Weighted Average Cost of Debt	0.00%			
56	Synchronized Interest (L45 X L46)	\$ -			

### ORIGINAL COST RATE BASE/FAIR VALUE

	----- Original Cost -----			-----	
	Company	Adjustment		Staff	Staff
Plant in Service	\$ 1,230,707	\$ 274,323	A	\$	1,505,030
Less:					
Accum. Depreciation	609,994	(199,514)	B		410,480
<b>Net Plant</b>	<b>\$ 620,713</b>	<b>\$ 473,837</b>		<b>\$</b>	<b>1,094,550</b>
Less:					
Plant Advances (ALAC)	-	53,937			53,937
ALAC Refunds	-	20,225			20,225
Total Advances	-	33,712	C		33,712
Contributions Gross	1,240,943	-			1,240,943
Less:					
Amortization of CIAC	152,044	(51,306)	D		100,738
Net CIAC	1,088,899	51,306			1,140,205
Customer Deposits	4,300				4,300
ADIT	-	N/A			N/A
<b>Total Deductions</b>	<b>\$ 1,093,199</b>	<b>\$ 85,018</b>		<b>\$</b>	<b>1,178,217</b>
Plus:					
1/24 Power	-	347	E		347
1/8 Operation & Maint.	-	10,217	F		10,217
Inventory	-	-			-
Prepayments	-	-			-
<b>Total Additions</b>	<b>\$ -</b>	<b>\$ 10,564</b>		<b>\$</b>	<b>10,564</b>
<b>Rate Base</b>	<b>\$ (472,486)</b>	<b>\$ 399,383</b>		<b>\$</b>	<b>(73,103)</b>

*Explanation of Adjustment:*

- A - Refer to Schedule BCA-2, Pages 2 and 3
- B - Refer to Schedule BCA-2, Page 4
- C - Refer to Schedule BCA-2, Page 8
- D - Refer to Schedule BCA-2, Page 8
- E - Refer to Schedule BCA-2, Page 8
- F - Refer to Schedule BCA-2, Page 8

**PLANT ADJUSTMENT**

	Company Exhibit	Adjustment	Staff Adjusted
301 Organization Costs	\$ 264	\$ -	\$ 264
302 Franchise Costs	2,309	-	2,309
303 Land & Land Rights	3,161	-	3,161
304 Structures & Improvements	67,051	-	67,051
307 Wells & Springs	238,519	-	238,519
311 Electric Pumping Equipment	94,131	-	94,131
320 Water Treatment Equipment	-	-	-
320.1 Water Treatment Plants	-	148,250 a	148,250
320.2 Solutions & Feeders	-	-	-
320.3 Media for Arsenic Treatment	-	25,635 b	25,635
330 Distribution Reservoirs & Standpipes	-	-	-
330.1 Storage Tank	-	100,438 c	100,438
330.2 Pressure Tanks	-	-	-
331 Transmission & Distribution Mains	745,102	-	745,102
333 Services	-	-	-
334 Meters & Meter Installations	15,055	-	15,055
335 Hydrants	48,876	-	48,876
336 Backflow Prevention Devices	-	-	-
339 Other Plant & Misc. Equip.	-	-	-
340 Office Furniture & Fixtures	1,850	-	1,850
340.1 Computer & Software	-	1,500 d	1,500
341 Transportation Equipment	-	-	-
342 Store Equipment	-	-	-
343 Tools & Work Equipment	-	-	-
344 Laboratory Equipment	-	-	-
345 Power Operated Equipment	-	-	-
345 Communications Equipment	-	-	-
347 Miscellaneous Equipment	1,500	(1,500) e	-
348 Other Tangibles	12,889	-	12,889
105 C.W.I.P.	-	-	-
<b>TOTALS</b>	<b>\$ 1,230,707</b>	<b>\$ 274,323 A</b>	<b>\$ 1,505,030</b>

### STAFF RATE BASE ADJUSTMENTS

a -	WATER TREATMENT PLANT - Per Company Per Staff	\$ - \$ 148,250	\$ 148,250
	To properly reflect December 31, 2010, ending water treatment plant balance adopted in Decision No. 73270.		
b -	MEDIA FOR ARSENIC TREATMENT - Per Company Per Staff	- 25,635	\$ 25,635
	To properly reflect December 31, 2010, ending media for arsenic treatment balance adopted in Decision No. 73270.		
c -	STORAGE TANK - Per Company Per Staff	- 100,438	\$ 100,438
	To properly reflect December 31, 2010, ending storage tank balance adopted in Decision No. 73270.		
d -	COMPUTER AND SOFTWARE - Per Company Per Staff	\$ - 1,500	\$ 1,500
	To properly reflect December 31, 2010, ending computer software balance adopted in Decision No. 73270.		
e -	MISCELLANEOUS EQUIPMENT - Per Company Per Staff	\$ 1,500 -	\$ (1,500)
	To properly reflect December 31, 2010, ending miscellaneous equipment balance adopted in Decision No. 73270.		

## ACCUMULATED DEPRECIATION ADJUSTMENT

	<u>Amount</u>
Accumulated Depreciation - Per Company	\$ 609,994
Accumulated Depreciation - Per Staff	410,480 B
<b>Total Adjustment</b>	<b>\$ (199,514)</b>

Explanation of Adjustment:

- B - To reflect Staff's calculation of accumulated depreciation reserve based on Staff's adjustments to plant.

ACCT	ACCUMULATED DEPRECIATION		
	Company <u>Application</u>	Staff <u>Adjustment</u>	Staff <u>Calculated</u>
No. Description	\$ 264	\$ -	\$ -
301 Intangibles	2,309	-	-
303 Land and Land Rights	42,427	(22,331)	20,096
304 Structures and Improvements	150,917	(79,431)	71,486
307 Wells and Springs	-	-	-
310 Power Generation Equipment	94,131	-	94,131
311 Electrical Pumping Equipment	-	23,211	23,211
320.1 Water Treatment Plant	-	-	-
320.2 Solution Chemical Feeders	-	4,268	4,268
320.3 Media for Arsenic Treatment	-	-	-
330 Distribution Reservoirs & Standpipes	-	34,029	34,029
330.1 Storage Tank	-	-	-
330.2 Pressure Tank	283,138	(149,020)	134,118
331 Transmission and Distribution Mains	-	-	-
333 Services	15,055	(3,769)	11,286
334 Meters and Meter Installation	18,582	(9,782)	8,800
335 Hydrants	-	-	-
339 Other Plant and Miscellaneous Equipment	615	494	1,109
340 Office Furniture and Fixtures	-	1,500	1,500
340.1 Computers and Software	-	-	-
341 Transportation Equipment	-	-	-
343 Tools and Work Equipment	-	-	-
345 Power Operated Equipment	-	-	-
346 Communications Equipment	-	-	-
347 Miscellaneous Equipment	750	(750)	-
348 Other Tangible Plant	1,806	4,640	6,446
Total	\$ 609,994	(199,514)	\$ 410,480

Appaloosa Water Company  
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Test Year Ended: December 31, 2014

Acct. No.	Description	Decision 73270		2011		Accum Depr	Plant	Accum Depr
		12/31/2010	Plant	Depr Exp	Plant			
301	Organization	264.00	264.00	-	-	-	-	-
302	Franchises	2,309.00	2,309.00	-	-	-	2,309.00	-
303	Land & Land Rights	3,161.00	3,161.00	-	-	-	3,161.00	-
304	Structures & Improvements	67,051.00	11,165.00	2,232.80	13,397.80	13,397.80	67,051.00	13,397.80
307	Wells & Springs	238,519.00	39,715.00	7,942.68	47,657.68	47,657.68	238,519.00	47,657.68
311	Pumping Equipment	94,131.00	58,830.00	11,766.38	70,596.38	70,596.38	94,131.00	70,596.38
320	Water Treatment Equipment	148,250.00	3,464.00	4,936.73	8,400.73	8,400.73	148,250.00	8,400.73
320.1	Water Treatment Plants	-	-	-	-	-	-	-
320.2	Solution Chemical Feeders	27,125.00	21,700.00	5,425.00	27,125.00	27,125.00	27,125.00	27,125.00
320.2	Media For Arsenic Treatment	-	-	-	-	-	-	-
330	Distribution Reservoirs & Standpipes	100,438.00	25,110.00	2,229.72	27,339.72	27,339.72	100,438.00	27,339.72
330.1	Storage Tanks	-	-	-	-	-	-	-
330.2	Pressure Tanks	745,102.00	74,510.00	14,902.04	89,412.04	89,412.04	745,102.00	89,412.04
331	Transmission & Distrib. Mains	-	-	-	-	-	-	-
333	Services	15,055.00	6,270.00	1,254.08	7,524.08	7,524.08	15,055.00	7,524.08
334	Meters & Meter Installations	48,876.00	4,890.00	977.52	5,867.52	5,867.52	48,876.00	5,867.52
335	Hydrants	-	-	-	-	-	-	-
336	Backflow Prevention Devices	-	-	-	-	-	-	-
339	Other Plant & Misc Equipment	1,850.00	615.00	123.40	738.40	738.40	1,850.00	738.40
340	Office Furniture & Equipment	1,500.00	300.00	300.00	600.00	600.00	1,500.00	600.00
340.1	Computers & Software	-	-	-	-	-	-	-
341	Transportation Equipment	-	-	-	-	-	-	-
343	Tools, Shop & Garage Equip.	-	-	-	-	-	-	-
344	Laboratory Equipment	-	-	-	-	-	-	-
345	Power Operated Equipment	-	-	-	-	-	-	-
346	Communications Equipment	-	-	-	-	-	-	-
347	Miscellaneous Equipment	12,889.00	1,290.00	1,288.90	2,578.90	2,578.90	12,889.00	2,578.90
348	Other Tangible Plant	1,506,520.00	247,859.00	53,379.24	301,238.24	301,238.24	1,506,520.00	301,238.24
	<b>TOTAL WATER PLANT</b>							

Appaloosa Water Company  
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Test Year Ended: December 31, 2014

Acct. No.	Description	2012		2013		Accum Depr
		Adds	Depr Exp	Plant	Accum Depr	
301	Organization	-	-	264.00	-	-
302	Franchises	-	-	2,309.00	-	-
303	Land & Land Rights	-	-	3,161.00	-	-
304	Structures & Improvements	15,630.60	2,232.80	67,051.00	2,232.80	17,863.39
307	Wells & Springs	55,600.37	7,942.68	238,519.00	7,942.68	63,543.05
311	Pumping Equipment	82,362.75	11,766.38	94,131.00	11,766.38	94,129.13
320	Water Treatment Equipment	148,250.00	4,936.73	148,250.00	4,936.73	18,274.18
320.1	Water Treatment Plants	-	-	-	-	-
320.2	Solution Chemical Feeders	27,125.00	-	27,125.00	-	27,125.00
320.2	Media For Arsenic Treatment	-	-	-	-	-
330	Distribution Reservoirs & Standpipes	29,569.45	2,229.72	100,438.00	2,229.72	31,799.17
330.1	Storage Tanks	-	-	-	-	-
330.2	Pressure Tanks	104,314.08	14,902.04	745,102.00	14,902.04	119,216.12
331	Transmission & Distrib. Mains	-	-	-	-	-
333	Services	8,778.16	1,254.08	15,055.00	1,254.08	10,032.24
334	Meters & Meter Installations	6,845.04	977.52	48,876.00	977.52	7,822.56
335	Hydriants	-	-	-	-	-
336	Backflow Prevention Devices	-	-	-	-	-
339	Other Plant & Misc Equipment	861.79	123.40	1,850.00	123.40	985.19
340	Office Furniture & Equipment	900.00	300.00	1,500.00	300.00	1,200.00
340.1	Computers & Software	-	-	-	-	-
341	Transportation Equipment	-	-	-	-	-
343	Tools, Shop & Garage Equip.	-	-	-	-	-
344	Laboratory Equipment	-	-	-	-	-
345	Power Operated Equipment	-	-	-	-	-
346	Communications Equipment	-	-	-	-	-
347	Miscellaneous Equipment	-	-	-	-	-
348	Other Tangible Plant	3,867.80	1,288.90	12,889.00	1,288.90	5,156.70
	<b>TOTAL WATER PLANT</b>	<b>349,192.48</b>	<b>47,954.24</b>	<b>1,506,520.00</b>	<b>47,954.24</b>	<b>397,146.72</b>

Appaloosa Water Company Accum Depre Sch

Appaloosa Water Company  
Docket No. W-03443A-15-0271  
Test Year Ended: December 31, 2014

Acct. No.	Description	2014				Net Plant @
		Adds	Depr Exp	Plant	Accum Depr	
301	Organization			264.00		264.00
302	Franchises			2,309.00		2,309.00
303	Land & Land Rights			3,161.00		3,161.00
304	Structures & Improvements		2,232.80	67,051.00	20,096.19	46,954.81
307	Wells & Springs		7,942.68	238,519.00	71,485.73	167,033.27
311	Pumping Equipment		1.88	94,131.00	94,131.00	-
320	Water Treatment Equipment					
320.1	Water Treatment Plants		4,936.73	148,250.00	23,210.90	125,039.10
320.2	Solutions Chemical Feeders					
320.2	Media For Arsenic Treatment		4,268.23	25,635.00	4,268.23	21,366.77
330	Distribution Reservoirs & Standpipes					
330.1	Storage Tanks		2,229.72	100,438.00	34,028.89	66,409.11
330.2	Pressure Tanks					
331	Transmission & Distrib. Mains		14,902.04	745,102.00	134,118.16	610,983.84
333	Services					
334	Meters & Meter Installations		1,254.08	15,055.00	11,286.33	3,768.67
335	Hydrants		977.52	48,876.00	8,800.08	40,075.92
336	Backflow Prevention Devices					
339	Other Plant & Misc Equipment					
340	Office Furniture & Equipment		123.40	1,850.00	1,108.58	741.42
340.1	Computers & Software		300.00	1,500.00	1,500.00	-
341	Transportation Equipment					
343	Tools, Shop & Garage Equip.					
344	Laboratory Equipment					
345	Power Operated Equipment					
346	Communications Equipment					
347	Miscellaneous Equipment					
348	Other Tangible Plant		1,288.90	12,889.00	6,445.60	6,443.40
	<b>TOTAL WATER PLANT</b>		<b>40,457.97</b>	<b>1,505,030.00</b>	<b>410,479.69</b>	<b>1,094,550.31</b>
		25,635				

### STAFF RATE BASE ADJUSTMENTS

C - ADVANCE IN AID OF CONSTRUCTION (AIAC) - Per Company 33,712 \$ 33,712  
Per Staff

To reflect Staff's calculation of net AIAC balance based on the Company's response to data request CLP 1.4.

12/31/10 Ending Balance (Decision No. 73270)	\$ 535,553
Less: AIAC transferred to CIAC in 2014	\$ 481,616
AIAC Refunds since the last Rate case	<u>\$ 20,225</u>
Net AIAC Balance	\$ 33,712

D - AMORTIZATION OF CIAC - Per Company 152,044  
Per Staff 100,738 \$ (51,306)

CIAC		Amortization Rate: 3.07%	
Description	Adds	Annual Amortization Calc.	Annual Amortization
Balance per Decision			
73270	\$ 759,327		
2011	\$ 759,327	\$759,327 x 3.07%	= \$ 23,335
2012	\$ 759,327	\$759,327 x 3.07%	= \$ 23,335
2013	\$ 759,327	\$759,327 x 3.07%	= \$ 23,335
2014	\$ 759,327	\$759,327 x 3.07%	= \$ 23,335
Transfer from AIAC 201	\$ 481,616	(\$481,616 x 3.07%)/2	\$ 7,400
Total Amortization Increase			<u>\$ 100,738</u>

To reflect Staff's calculation of Amortization of CIAC based on the Company's response to data request CLP 1.5.

E - WORKING CAPITAL (1/24 Purchased Pwr & Wtr) Per Company \$ -  
Per Staff 347 \$ 347

To reflect Staff's calculation of cash working capital based on Staff's recommendations for purchased power and purchased water.

F - WORKING CAPITAL (1/8 operation & Maint exp.) Per Company \$ -  
Per Staff 10,217 \$ 10,217

To reflect Staff's calculation of cash working capital based on Staff's recommendations for operation and maintenance expenses. (excluding purchased power and purchased water expenses).

STATEMENT OF OPERATING INCOME

	Company Exhibit	Staff Adjustments	Staff Adjusted	Staff Proposed Change	Staff Recommended
Revenues:					
461 Metered Water Revenue	\$ 141,176	\$ -	\$ 141,176	\$ 10,639	\$ 151,815
460 Unmetered Water Revenue	-	-	-	-	\$ -
474 Other Water Revenues	513	-	513	-	\$ 513
<b>Total Operating Revenue</b>	<b>\$ 141,689</b>	<b>\$ -</b>	<b>\$ 141,689</b>	<b>\$ 10,639</b>	<b>\$ 152,328</b>
Operating Expenses:					
601 Salaries and Wages	52,084	-	52,084	-	\$ 52,084
610 Purchased Water	-	-	-	-	\$ -
615 Purchased Power	8,326	-	8,326	-	\$ 8,326
618 Chemicals	-	-	-	-	\$ -
620 Repairs and Maintenance	25,508	(25,508) A	-	-	\$ -
621 Office Supplies & Expense	4,362	-	4,362	-	\$ 4,362
630 Outside Services	6,929	4,200 B	11,129	-	\$ 11,129
635 Water Testing	6,810	(4,541) C	2,269	-	\$ 2,269
641 Rents	6,000	-	6,000	-	\$ 6,000
650 Transportation Expenses	-	-	-	-	\$ -
657 Insurance - General Liability	3,653	-	3,653	-	\$ 3,653
659 Insurance - Health and Life	-	-	-	-	\$ -
666 Regulatory Commission Expense - Rate Case	-	-	-	-	\$ -
675 Miscellaneous Expense	2,236	-	2,236	-	\$ 2,236
403 Depreciation Expense	42,819	(37,818) D	5,001	-	\$ 5,001
408 Taxes Other Than Income	18,815	(18,532) E	283	-	\$ 283
408.11 Property Taxes	7,391	(693) F	6,698	168	\$ 6,866
409 Income Tax	-	7,801 G	7,801	2,060	\$ 9,861
427.4 Interest on Customer Deposits	-	258 H	258	-	\$ 258
<b>Total Operating Expenses</b>	<b>\$ 184,933</b>	<b>\$ (74,834)</b>	<b>\$ 110,100</b>	<b>\$ 2,228</b>	<b>\$ 112,328</b>
<b>OPERATING INCOME/(LOSS)</b>	<b>\$ (43,244)</b>	<b>\$ 74,834</b>	<b>\$ 31,589</b>	<b>\$ 8,411</b>	<b>\$ 40,000</b>

**OPERATING EXPENSE ADJUSTMENTS (Cont.)**

A -	REPAIRS AND MAINTENANCE - Per Company	\$ 25,508	
	Per Staff	-	<u>\$ (25,508)</u>
	To reflect the reclassification of repairs and maintenance expense, Acct. No. 620 to media for arsenic treatment, Acct. No. 320.3.		
B -	OUTSIDE SERVICES - Per Company	\$ 6,929	
	Per Staff	11,129	<u>\$ 4,200</u>
	To reflect the reclassification of \$4,200 in water Operator fee from water testing expense, Acct. No. 635 to outside services expense, Acct. Acct. No. 630.		
C -	WATER TESTING - Per Company	\$ 6,810	
	Per Staff	2,269	<u>\$ (4,541)</u>
	To reflect the reclassification of \$4,200 in water Operator's fee from water testing expense, Acct. No. 635 to outside services expense, Acct. No. 630 and remove \$341 in unsupported expense.		
D -	DEPRECIATION - Per Company	\$ 42,819	
	Per Staff	5,001	<u>\$ (37,818)</u>

*Explanation of Adjustment:*

**Pro Forma Annual Depreciation Expense:**

Plant in Service	\$ 1,505,030
Less: Non Depreciable Plant	101,365
Fully Depreciated Plant	-
Depreciable Plant	<u>\$ 1,403,665</u>
Times: Staff Proposed Depreciation Rate	3.07%
Credit to Accumulated Depreciation	43,135
Less: Amort. of CIAC* @ 3.07%	<u>38,135</u>
<b>Pro Forma Annual Depreciation Expense</b>	<b>\$ 5,001</b>

**\* Amortization of CIAC:**

Contribution(s) in Aid of Construction (Gross)	\$ 1,240,943
Less: Non Amortizable Contribution(s)	-
Fully Amortized Contribution(s)	-
Amortizable Contribution(s)	<u>\$ 1,240,943</u>
Times: Staff Proposed Amortization Rate	3.07%
<b>Amortization of CIAC</b>	<b>\$ 38,135</b>

**OPERATING EXPENSE ADJUSTMENTS (Cont.)**

E -	TAXES OTHER THAN INCOME - Per Company	\$ 18,815	
	Per Staff	<u>283</u>	<u>\$ (18,532)</u>

To remove \$13,509.76 in sales taxes paid by customers. As a pass-through tax, it is not included in revenue, so should not be included in expenses. And also to remove \$4,611.08 in WIFA principal repayment and interest payment and recognize \$283 in taxes other than income.

F -	PROPERTY TAXES - Per Company	\$ 7,391	
	Per Staff	<u>6,698</u>	<u>\$ (693)</u>

To reflect property tax expense using the Arizona Department of Revenue property tax method.

G -	INCOME TAX - Per Company	\$ -	
	Per Staff	<u>7,801</u>	<u>\$ 7,801</u>

To reflect Staff's calculation of the income tax obligation on Staff's adjusted Staff's adjusted test year taxable income.

H -	INTEREST ON CUSTOMER DEPOSIT - Per Company	\$ -	
	Per Staff	<u>258</u>	<u>\$ 258</u>

To reflect Staff's calculation of interest expense on customer deposits.

PRO FORMA ANNUAL DEPRECIATION EXPENSE

LINE NO.	ACCT NO.	DESCRIPTION	UTILITY PLANT IN SERVICE BALANCES	FULLY/NON-DEPRECIABLE PLANT BALANCES	DEPRECIABLE PLANT IN SERVICE	DEPRECIATION RATE	DEPRECIATION EXPENSE
<b>Plant In Service</b>							
1	301	Organization Costs	\$ 264	\$ 264	\$ -	0.00%	\$ -
2	302	Franchise Costs	2,309	2,309	-	0.00%	-
3	303	Land & Land Rights	3,161	3,161	-	0.00%	-
4	304	Structures & Improvements	67,051	-	67,051	3.33%	2,233
5	307	Wells & Springs	238,519	-	238,519	3.33%	7,943
6	311	Electric Pumping Equipment	94,131	94,131	-	12.50%	-
7	320	Water Treatment Equipment	-	-	-	-	-
8	320.1	Water Treatment Plants	148,250	-	148,250	3.33%	4,937
9	320.2	Solutions & Feeders	-	-	-	20.00%	-
10	320.3	Media for Arsenic Treatment	25,635	-	25,635	33.30%	8,536
11	330	Distribution Reservoirs & Standpipes	-	-	-	-	-
12	330.1	Storage Tank	100,438	-	100,438	2.22%	2,230
13	330.2	Pressure Tanks	-	-	-	5.00%	-
14	331	Transmission & Distribution Mains	745,102	-	745,102	2.00%	14,902
15	333	Services	-	-	-	3.33%	-
16	334	Meters & Meter Installations	15,055	-	15,055	8.33%	1,254
17	335	Hydrants	48,876	-	48,876	2.00%	978
18	336	Backflow Prevention Devices	-	-	-	6.67%	-
19	339	Other Plant & Misc. Equip.	-	-	-	6.67%	-
20	340	Office Furniture & Fixtures	1,850	-	1,850	6.67%	123
21	340.1	Computer & Software	1,500	1,500	-	20.00%	-
22	341	Transportation Equipment	-	-	-	20.00%	-
23	342	Store Equipment	-	-	-	4.00%	-
24	343	Tools & Work Equipment	-	-	-	5.00%	-
25	344	Laboratory Equipment	-	-	-	10.00%	-
26	345	Power Operated Equipment	-	-	-	5.00%	-
27	345	Communications Equipment	-	-	-	10.00%	-
28	347	Miscellaneous Equipment	-	-	-	10.00%	-
29	348	Other Tangibles	12,889	-	12,889	10.00%	1,289
30		Subtotal General	<u>\$ 1,505,030</u>	<u>\$ 101,365</u>	<u>\$ 1,403,665</u>		<u>\$ 43,135</u>
31		Composite Depre. Rate (O40/K40)		3.07%			
		CIAC		1,240,943			
		Amortization of CIAC		38,135			
31		Depreciation Expense Before Amort. Of CIAC	\$ 43,135				
32		Less: Amortization of CIAC	38,135				
		Test Year Depreciation Expense - Staff	\$ 5,001				
		Depreciation Expense - Company	42,819				
		Staff's Total Adjustment:	<u>\$ (37,818)</u>				

OPERATING INCOME ADJUSTMENT F - PROPERTY TAXES

LINE NO.	DESCRIPTION	[A]	[B]
		STAFF AS ADJUSTED	STAFF RECOMMENDE
1	Staff Adjusted Test Year Revenues	\$ 141,689	\$ 141,689
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	\$ 283,378	\$ 283,378
4	Staff Recommended Revenue	\$ 141,689	\$ 152,328
5	Subtotal (Line 4 + Line 5)	\$ 425,067	\$ 435,706
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	\$ 141,689	\$ 145,235
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	\$ 283,378	\$ 290,471
10	Plus: 10% of CWIP	-	-
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	\$ 283,378	\$ 290,471
13	Assessment Ratio	18.00%	18.00%
14	Assessment Value (Line 12 * Line 13)	\$ 51,008	\$ 52,285
15	Composite Property Tax Rate - Obtained from ADOR	13.13120%	13.13120%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	\$ 6,698	
17	Company Proposed Property Tax	7,391	
18	Staff Test Year Adjustment (Line 16 - Line 17)	\$ (693)	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$ 6,866
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		6,698
21	Increase in Property Tax Due to Increase in Revenue Requirement		\$ 168
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		\$ 168
23	Increase in Revenue Requirement		\$ 10,639
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.575744%

REFERENCES:

- Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
- Line 17: Company Schedule C-1 Page 2
- Line 21: Line 19 - Line 20
- Line 23: Schedule xxx

**METERED REVENUES  
PRESENT RATES**

	<u>Monthly Minimum</u>	<u>Commodity Rates</u>	<u>Total Revenues</u>
1 General Service Meter 5/8 - Inch Meter	\$ 53,600	\$ 46,071	\$ 99,671
2 General Service Meter 1 - Inch Meter	25,377	15,887	41,264
3 General Service Meter	-	-	-
<b>TOTAL</b>	<b><u>\$ 78,977</u></b>	<b><u>\$ 61,958</u></b>	<b><u>\$ 140,935</u></b>
Percent	56%	44%	

**METERED REVENUES  
COMPANY PROPOSED RATES**

	<u>Monthly Minimum</u>	<u>Commodity Rates</u>	<u>Total Revenues</u>
1 General Service Meter 5/8 - Inch Meter	\$ 107,200	\$ 92,142	\$ 199,342
2 General Service Meter 1 - Inch Meter	50,754	31,774	82,528
3 General Service Meter	-	-	-
<b>TOTAL</b>	<b><u>\$ 157,954</u></b>	<b><u>\$ 123,916</u></b>	<b><u>\$ 281,870</u></b>
Percent	56%	44%	

**METERED REVENUES  
STAFF RECOMMENDED RATES**

	<u>Monthly Minimum</u>	<u>Commodity Rates</u>	<u>Total Revenues</u>
1 General Service Meter 5/8 - Inch Meter	\$ 55,744	\$ 49,135	\$ 104,879
2 General Service Meter 1 - Inch Meter	29,841	17,199	47,040
3 General Service Meter	-	-	-
<b>TOTAL</b>	<b><u>\$ 85,585</u></b>	<b><u>\$ 66,334</u></b>	<b><u>\$ 151,919</u></b>
Percent	56%	44%	

**RATE DESIGN**

Monthly Usage Charge	Present Rates	Company Proposed Rates	Staff Recommended Rates
5/8" x 3/4" Meter	\$ 25.00	\$ 50.00	\$ 26.00
3/4" Meter	\$ 25.00	\$ 50.00	\$ 26.00
1" Meter	\$ 41.67	\$ 83.34	\$ 49.00
1 1/2" Meter	\$ 83.33	\$ 166.66	\$ 91.00
2" Meter	\$ 133.33	\$ 266.66	\$ 142.00
3" Meter	\$ 266.67	\$ 533.34	\$ 280.00
4" Meter	\$ 416.67	\$ 833.34	\$ 432.00
6" Meter	\$ 833.33	\$ 1,666.66	\$ 848.00
<b>Commodity Rates</b>			
<u>5/8 x 3/4" &amp; 3/4" Meter - Residential, Commercial &amp; Industrial</u>			
Gallons Included in Minimum	-	-	-
Excess of Minimum - per 1,000 Gallons			
First 3,000 Gallons	\$ 1.95		
From 3,001 to 7,000 Gallons	\$ 3.25		
Over 7,000 Gallons	\$ 4.45		
		\$ 3.90	\$ 2.16
First 3,000 Gallons		\$ 6.50	\$ 3.46
From 3,001 to 7,000 Gallons		\$ 8.90	\$ 4.66
Over 7,000 Gallons			
<u>1" - Residential, Commercial &amp; Industrial</u>			
Gallons Included in Minimum	-	-	-
Excess of Minimum - per 1,000 Gallons			
From 1 to 7,000 Gallons	\$ 3.25	\$ 6.50	\$ 3.46
Over 7,000 Gallons	\$ 4.45	\$ 8.90	\$ 4.66
<u>1 1/2" - Residential, Commercial &amp; Industrial</u>			
Gallons Included in Minimum	-	-	-
Excess of Minimum - per 1,000 Gallons			
From 1 to 15,000 Gallons	\$ 3.25	\$ 6.50	\$ 3.46
Over 15,000 Gallons	\$ 4.45	\$ 8.90	\$ 4.66
<u>2" - Residential, Commercial &amp; Industrial</u>			
Gallons Included in Minimum	-	-	-
Excess of Minimum - per 1,000 Gallons			
From 1 to 24,000 Gallons	\$ 3.25	\$ 6.50	\$ 3.46
Over 24,000 Gallons	\$ 4.45	\$ 8.90	\$ 4.66
<u>3" - Residential, Commercial &amp; Industrial</u>			
Gallons Included in Minimum	-	-	-
Excess of Minimum - per 1,000 Gallons			
From 1 to 48,000 Gallons	\$ 3.25	\$ 6.50	\$ 3.46
Over 48,000 Gallons	\$ 4.45	\$ 8.90	\$ 4.66
<u>4" - Residential, Commercial &amp; Industrial</u>			
Gallons Included in Minimum	-	-	-
Excess of Minimum - per 1,000 Gallons			
From 1 to 75,000 Gallons	\$ 3.25	\$ 6.50	\$ 3.46
Over 75,000 Gallons	\$ 4.45	\$ 8.90	\$ 4.66
<u>6" - Residential, Commercial &amp; Industrial</u>			
Gallons Included in Minimum	-	-	-
Excess of Minimum - per 1,000 Gallons			
From 1 to 150,000 Gallons	\$ 3.25	\$ 6.50	\$ 3.46
Over 150,000 Gallons	\$ 4.45	\$ 8.90	\$ 4.66
From 1 to 150,000 Gallons			
Over 150,000 Gallons			
From 1 to 150,000 Gallons			
Over 150,000 Gallons			

**RATE DESIGN**

Service Line and Meter Installation Charges	Present Rates	Company Proposed Rates	Staff Recommended	
			Service Line	Meter Chrg Total
5/8" x 3/4" Meter	\$ 600	\$ 1,200	\$ 445	\$ 155 \$ 600
3/4" Meter	\$ 700	\$ 1,400	\$ 445	\$ 255 \$ 700
1" Meter	\$ 810	\$ 1,620	\$ 495	\$ 315 \$ 810
1½" Meter	\$ 1,075	\$ 2,150	\$ 550	\$ 525 \$ 1,075
2" Turbine Meter	\$ 1,875	\$ 3,750	\$ 830	\$ 1,045 \$ 1,875
2" Compound Meter	\$ 2,720	\$ 5,440	\$ 830	\$ 1,890 \$ 2,720
3" Turbine Meter	\$ 2,715	\$ 5,430	\$ 1,045	\$ 1,670 \$ 2,715
3" Compound Meter	\$ 3,710	\$ 7,420	\$ 1,165	\$ 2,545 \$ 3,710
4" Turbine Meter	\$ 4,160	\$ 8,320	\$ 1,490	\$ 2,670 \$ 4,160
4" Compound Meter	\$ 5,315	\$ 10,630	\$ 1,670	\$ 3,645 \$ 5,315
6" Turbine Meter	\$ 7,235	\$ 14,470	\$ 2,210	\$ 5,025 \$ 7,235
6" Compound Meter	\$ 9,250	\$ 18,500	\$ 2,330	\$ 6,920 \$ 9,250
<b>Service Charges</b>				
Establishment	\$ 25.00	\$ 50.00		\$ 30.00
After Hour Service Charge	\$ 50.00	\$ 100.00		\$ 50.00
Reconnection (Delinquent)	\$ 30.00	\$ 60.00		\$ 30.00
Meter Test (If Correct)	\$ 15.00	\$ 30.00		\$ 20.00
Deposit	*	*		*
Deposit Interest	*	*		*
Re-Establishment (Within 12 Months)	**	**		**
NSF Check	\$ 20.00	\$ 40.00		\$ 20.00
Deferred Payment	1.50%	3.00%		1.50%
Meter Re-Read (If Correct)	\$ 15.00	\$ 30.00		\$ 20.00
Late Payment Penalty	1.50%	\$ 3.00		1.50%
Monthly Service Charge for Fire Sprinkler	***	***		***
4" or Smaller	-	-		-
6"	-	-		-
8"	-	-		-
10"	-	-		-
Larger than 10"	-	-		-
<p>* Per Commission Rules (R14-2-403.B)  ** Months off system times the minimum (R14-2-403.D)  *** 2.00% of Monthly Minimum for a Comparable Sized Meter Connection, but no less than \$10.00 per month. The Service Charge for Fire Sprinklers is only applicable for service lines separate and distinct from the primary water service line.</p>				

**TYPICAL BILL ANALYSIS**  
 General Service Meter 5/8 - Inch Meter

Average Number of Customers: 179

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	6,806	\$ 43.22	\$ 86.44	\$ 43.22	100.0%
Median Usage	4,958	\$ 37.21	\$ 74.42	\$ 37.21	100.0%

Staff Recommend	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	6,806	\$ 43.22	\$ 45.65	\$ 2.43	5.6%
Median Usage	4,958	\$ 37.21	\$ 39.25	\$ 2.04	5.5%

Present & Proposed Rates (Without Taxes)  
 General Service Meter 5/8 - Inch Meter

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff Proposed Rates	% Increase
0	\$ 25.00	\$ 50.00	100.0%	\$ 26.00	4.0%
1,000	26.95	53.90	100.0%	28.16	4.5%
2,000	28.90	57.80	100.0%	30.32	4.9%
3,000	30.85	61.70	100.0%	32.48	5.3%
4,000	34.10	68.20	100.0%	35.94	5.4%
5,000	37.35	74.70	100.0%	39.40	5.5%
6,000	40.60	81.20	100.0%	42.86	5.6%
7,000	43.85	87.70	100.0%	46.32	5.6%
8,000	48.30	96.60	100.0%	50.98	5.5%
9,000	52.75	105.50	100.0%	55.64	5.5%
10,000	57.20	114.40	100.0%	60.30	5.4%
15,000	79.45	158.90	100.0%	83.60	5.2%
20,000	101.70	203.40	100.0%	106.90	5.1%
25,000	123.95	247.90	100.0%	130.20	5.0%
50,000	235.20	470.40	100.0%	246.70	4.9%
75,000	346.45	692.90	100.0%	363.20	4.8%
100,000	457.70	915.40	100.0%	479.70	4.8%
125,000	568.95	1,137.90	100.0%	596.20	4.8%
150,000	680.20	1,360.40	100.0%	712.70	4.8%
175,000	791.45	1,582.90	100.0%	829.20	4.8%
200,000	902.70	1,805.40	100.0%	945.70	4.8%



**ENGINEERING REPORT FOR  
APPALOOSA WATER COMPANY  
Docket Nos. W-03443A-15-0271 (Rates)**

**By Jian W. Liu**

**November 2, 2015**

**CONCLUSIONS**

1. The Arizona Department of Environmental Quality ("ADEQ") reported that the Appaloosa Water Company ("Appaloosa" or "Company") Public Water System ("PWS") No. 13-208 is currently delivering water that meets water quality standards required by 40 C.F.R. 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code ("A.A.C."), Title 18, Chapter 4.
2. The Company is located in the Prescott Active Management Area ("AMA") and is subject to Arizona Department of Water Resources ("ADWR") AMA reporting and conservation requirements. ADWR reported that Appaloosa is currently in compliance with departmental requirements governing water providers and/or community water systems.
3. A check with the Arizona Corporation Commission ("ACC" or "Commission") Utilities Division Compliance Section showed no delinquent compliance items for the Company.
4. The Company has an approved curtailment tariff on file with the Commission.
5. The Company has an approved backflow prevention tariff on file with the Commission.
6. Appaloosa has approved BMP tariffs on file with the Commission.
7. Appaloosa has adequate production capacity and storage capacity to serve the existing customer base and anticipated growth.
8. The Company reported 19,383,600 gallons pumped and 19,292,200 gallons sold for the test year, resulting in a water loss of 0.47 percent, which is within acceptable limits.

**RECOMMENDATIONS**

1. In Decision Nos. 73270 and 74787, Appaloosa was ordered to file a water loss report. The Company filed the report every quarter beginning January 2013. The Company's water loss has been below 10 percent for more than a year. Staff recommends the elimination of the requirement to file quarterly water loss reports going forward.
2. ACC Utilities Division Staff ("Staff") recommends an annual water testing expense of \$2,269 be used for purposes of this application

3. Staff has updated Appaloosa's Arsenic Treatment media depreciation rate based on information provided by the Company. It is recommended that the Company use the depreciation rates presented in Table B by individual National Association of Regulatory Utility Commissioners ("NARUC") category going forward.
4. Staff recommends that the current authorized rates for a meter and service line continue to apply. These charges are listed in Table C.

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## A. INTRODUCTION AND LOCATION OF COMPANY

On July 28, 2015, Appaloosa Water Company (“Appaloosa” or “Company”) filed an application with the Commission to increase its rates (“Rate Application”). The ACC Utilities Division Staff (“Staff” or “Utilities Staff”) engineering review and analysis of the application is presented in this report.

Appaloosa serves the Appaloosa Meadows subdivision within the Town of Chino Valley. Figure 1 shows the location of the Company within Yavapai County and Figure 2 shows the Certificate of Convenience and Necessity (“CC&N”) covering approximately two-thirds of a square-mile. Appaloosa also serves two contiguous parcels covering roughly 60 acres north of its CC&N.

## B. DESCRIPTION OF THE WATER SYSTEM

The water system was field inspected on October 14, 2015, by Jian W. Liu, Staff Utilities Engineer, in the accompaniment of Kimble McClymonds, the Company’s certified operator.

The water system consists of two wells, one storage tank, a booster pump station equipped with two booster pumps, a pressure tank and fire pump, and a distribution system serving 228 customers at the end of 2014. Table A includes a detailed plant facility listing.

**Table A. Plant Facilities Summary**

Well Data		
	Well No 1	Well No. 2
ADWR ID No.	55-607274	55-607273
Casing Size	16 inches	12 inches
Casing Depth	660 feet	260 feet
Pump Size in Horsepower (Hp)	7.5 Hp	10 Hp
Pump Yield in Gallons Per Minute (GPM)	125 GPM	175 GPM
Meter Size	6 inch	6 inch
Year Drilled	1999	2004

**Storage, Pumping & Structures**

Structure or Equipment	Location	Quantity and Capacity
Pumps	Well Site #1 (Booster Pump Station)	1- 10 Hp (Spare for back-up) 2 -10 Hp (Booster Pumps) 1- 100 Hp (Fire Pump)
Pressure Tank	Booster Pump Station	1 – 5,500 gallon
Storage Tank (38' Diameter x 8' Height)	Booster Pump Station	1- 65,000 gallon
28'x 24' Pump House (Note 1)	Booster Pump Station	1
60' x 140 ' Slump Block Wall with iron entry gate (Note 2)	Booster Pump Station	1
Arsenic Treatment System AdEdge APU (Notes 3 )	Booster Pump Station	1 – 100 GPM

Notes:

- 1) Houses Booster Pumps, Pressure Tank and Fire Pump.
- 2) Fence surrounding the Booster Pump Station.
- 3) AdEdge Adsorption Package Unit (APU); Capacity: Up to 100 GPM

**Distribution Mains**

Diameter	Material	Length
2 inches	PVC	3,589 feet
4 inches	PVC	1,657 feet
6 inches	PVC	22,933 feet
8 inches	PVC	5,395 feet

**Meters**

Size	Quantity
5/8 x 3/4 inch	185
1 inch	49

**Fire Hydrants**

Size/Description	Quantity
Standard	26

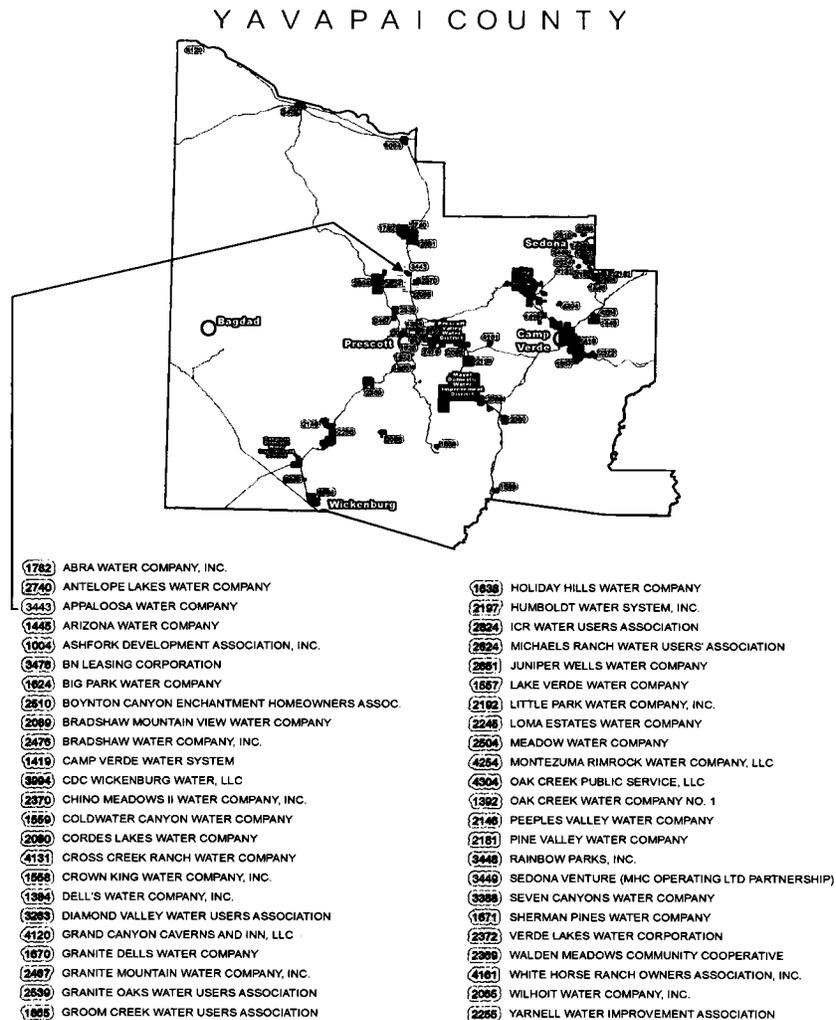
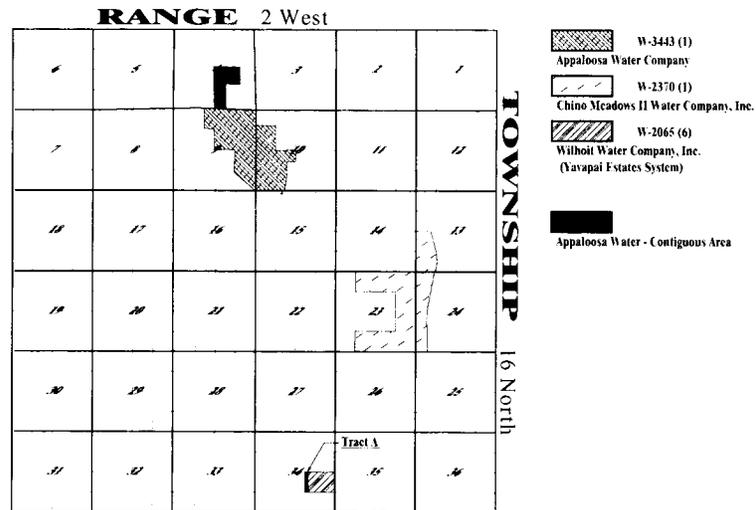


Figure 1. County Map

**COUNTY:** *Yavapai*



**Figure 2. Certificated Area**

### C. WATER USE

#### *Water Sold*

Figure 3 presents the water consumption data provided by the Company for the test year ending December 31, 2014. Customer consumption included a high monthly water use of 377 gallons per day (“GPD”) per connection in June, and a low water use of 121 GPD per connection in December. The average annual use was 230 GPD per connection.

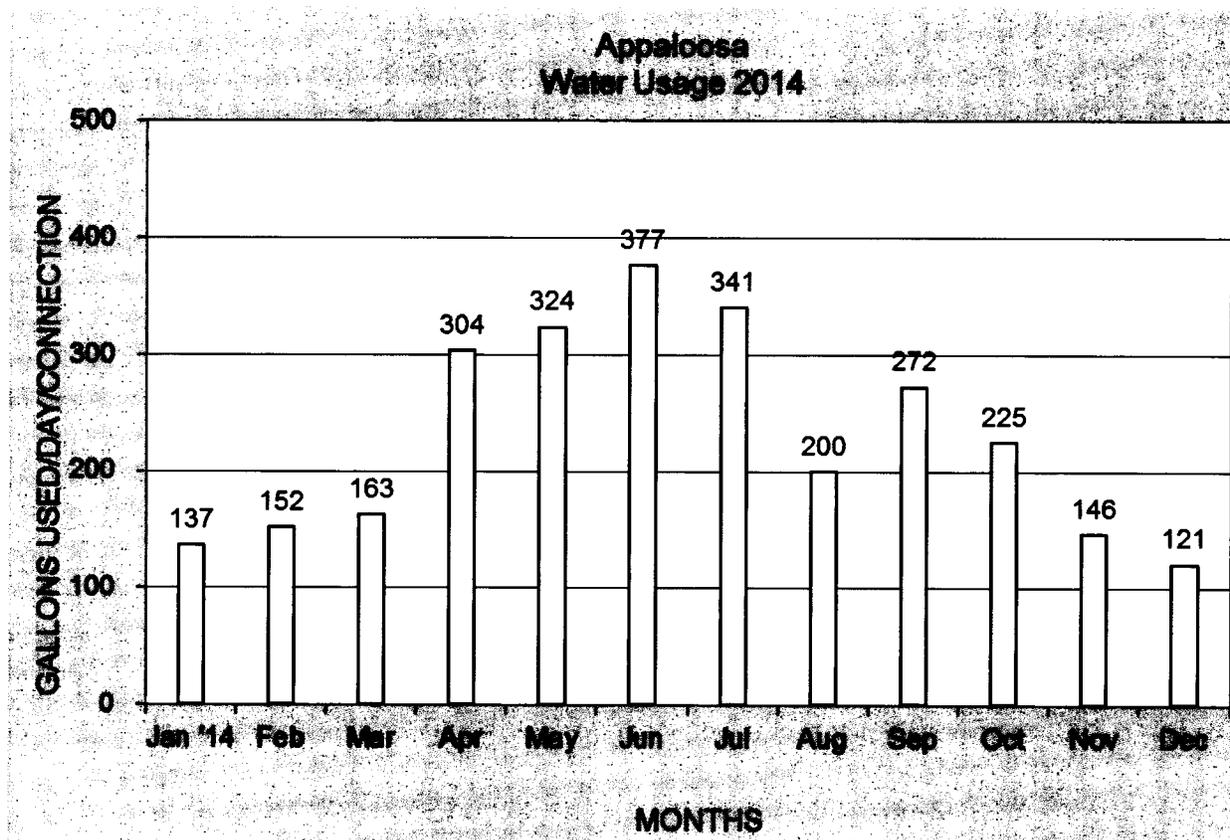


Figure 3. Water Use

#### *Non-Account Water*

Non-account water should be 10 percent or less. It is important to be able to reconcile the difference between water sold and water produced by the source. A water balance will allow a company to identify water and revenue losses due to leakage, theft and flushing. The Company reported 19,383,600 gallons pumped and 19,292,200 gallons sold for the test year, resulting in a water loss of 0.47 percent, which is within acceptable limits.

In Decision Nos. 73270 and 74787, Appaloosa was ordered to file a water loss report. The Company filed the report every quarter beginning January 2013. The Company's water loss has been below 10 percent for more than a year. Staff recommends the elimination of the requirement to file quarterly water loss reports going forward.

#### *System Analysis*

Based on the data provided by the Company, Staff concludes that Appaloosa has adequate production capacity and storage capacity to serve the existing customer base and anticipated growth.

#### **D. GROWTH**

The Company reported 229 customers in 2010. Appaloosa's water system had 228 customers in December 2014. Therefore, Staff expects that the Company will have little or no growth in the next 2 to 3 years assuming the current economic climate continues.

#### **E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE**

##### *Compliance*

ADEQ reported that the Appaloosa drinking water system, Public Water System ("PWS") No. 13-208, is currently delivering water that meets water quality standards required by 40 C.F.R. 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code ("A.A.C."), Title 18, Chapter 4. (ADEQ compliance status report dated June 3, 2015).

##### *Water Testing Expense*

The Company is subject to mandatory participation in the Monitoring Assistance Program ("MAP"). Participation in the MAP program is mandatory for water systems which serve less than 10,000 persons (approximately 3,300 service connections).

The Company reported its water testing expense at \$6,810 during the test year by combining water testing costs and water operator's fees. Staff has reviewed the Company's testing expense and recalculated the testing costs to remove non-water testing fees. Staff finds the certified operator fees reported by the Company for the test year of \$350 per month (that is \$4,200 for the test year) reasonable. Staff's recommended water testing expense is listed below in Table A.

**Table A. Water Testing Cost**

Monitoring	Cost per test	Quantity of tests per 3 years	Annual Cost
Total coliform (2 samples monthly)	\$20	72	\$480
Arsenic Lab Fee	\$30	36	\$360
MAP – IOCs, Radiochemical, Nitrate, Nitrite, Asbestos, SOCs, & VOCs	MAP	MAP	\$596
Lead & Copper	\$34	10	\$113
TTHM/HAA5 – per year	\$360	2	\$720
Total			<b>\$2,269</b>

Note: ADEQ's MAP invoice for the 2014 Calendar Year was \$596.24

Staff recommends an annual water testing expense of \$2,269 be used for purposes of this application.

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

Appaloosa’s service area is located in the ADWR Prescott Active Management Area (“AMA”) and is subject to ADWR AMA reporting and conservation requirements. ADWR reported that Appaloosa is currently in compliance with departmental requirements governing water providers and/or community water systems.<sup>1</sup>

**G. ARIZONA CORPORATION COMMISSION COMPLIANCE**

A check with the ACC Utilities Division Compliance Section showed no delinquent compliance items for the Company.<sup>2</sup>

**H. DEPRECIATION RATES**

Staff has updated Appaloosa’s Arsenic Treatment media depreciation rate based on information provided by the Company. It is recommended that the Company use the depreciation rates presented in Table B by individual National Association of Regulatory Utility Commissioners (“NARUC”) category going forward.

<sup>1</sup> Per ADWR email dated August 24, 2015.

<sup>2</sup> Per Compliance Section email dated October 30, 2015.

**Table B. Depreciation Rate Table for Water Companies**

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (percent)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
320.3	Media for Arsenic Treatment	3	33.3
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00

**I. OTHER ISSUES**

1. *Service Line and Meter Installation Charges*

The Company has requested to double its existing rates for every size and type of meter and service line without providing any supporting documentation. Staff recommends that the current authorized rates for a meter and service line continue to apply. These charges are listed below in Table C.

**Table C. Current Service Line and Meter Installation Charges**

Meter Size	Service Line	Meter	Total Charge
5/8 x 3/4-inch	\$445	\$155	\$600
3/4-inch	\$445	\$255	\$700
1-inch	\$495	\$315	\$810
1-1/2-inch	\$550	\$525	\$1,075
2-inch Turbine	\$830	\$1,045	\$1,875
2-inch Comp	\$830	\$1,890	\$2,720
3-inch Turbine	\$1,045	\$1,670	\$2,715
3-inch Comp	\$1,165	2,545	\$3,710
4-inch Turbine	\$1,490	\$2,670	\$4,160
4-inch Comp	\$1,670	\$3,645	\$5,315
6-inch Turbine	\$2,210	\$5,025	\$7,235
6-inch Comp	\$2,330	\$6,920	\$9,250

2. *Curtailment Tariff*

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

3. *Backflow Prevention Tariff*

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

4. *Best Management Practices*

Appaloosa has approved BMP tariffs on file with the Commission.