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MORANDUM

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2014 APR 9 PM 3 31

TO: Docket Control Center

FROM: Steven M. Olea  
Director  
Utilities Division

*EA for SMD*

**ORIGINAL**

DATE: April 9, 2014

RE: AMENDED STAFF REPORT FOR WHITE HILLS WATER CO., INC.'S  
APPLICATION FOR A RATE INCREASE (DOCKET NO. W-01982A-13-0311).

Attached is the Amended Staff Report for White Hills Water Co., Inc.'s permanent rate increase request. The Amended Staff Report is required because two typographical errors were inadvertently included in the Staff Report docketed April 8, 2014. First, the last section of the Staff Report, "Staff Recommends", was omitted. Second, extraneous pages were included in the docketed Staff Report. Staff recommends approval of the rate application using Staff's recommended rates and charges request.

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 April 18, 2014.

SMO:MJR:red/BH

Originator: Mary J. Rimback

Arizona Corporation Commission  
**DOCKETED**

APR 09 2014

DOCKETED BY 

Service List for: White Hills Water Co., Inc.  
Docket No. W-01982A-13-0311

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**AMENDED  
STAFF REPORT  
UTILITIES DIVISION  
ARIZONA CORPORATION COMMISSION**

**WHITE HILLS WATER COMPANY, INC.**

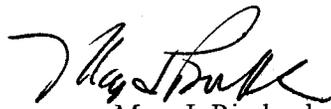
**DOCKET NO. W-01982A-13-0311**

**APPLICATION FOR A  
PERMANENT RATE INCREASE**

**APRIL 9, 2014**

## STAFF ACKNOWLEDGMENT

The Amended Staff Report for White Hills Water Company, Inc., Docket No. W-1982A-13-0311, was the responsibility of the Staff members listed below. Mary J. Rimback was responsible for the review and analyses of the Company's application, recommended revenue requirements, rate base and rate design. Del Smith was responsible for the engineering and technical analysis. Carmen Madrid was responsible for reviewing the Commission's records on the Company, determining compliance with Commission policies/rules and reviewing customer complaints filed with the Commission.



Mary J. Rimback  
Public Utilities Analyst



Del Smith  
Utilities Engineer Supervisor



Carmen Madrid  
Public Utilities Consumer Analyst I

**EXECUTIVE SUMMARY  
WHITE HILLS WATER COMPANY, INC.  
DOCKET NO. W-01982A-13-0311**

White Hills Water Company, Inc. (“White Hills” or “Company”) is a for-profit “C” Corporation and a Class D<sup>1</sup> public service corporation serving potable water to approximately 92 customers in an unincorporated rural desert community 40 miles northwest of the City of Kingman in Mohave County, Arizona. The Development is known as the Golden Horseshoe Ranchos Subdivision and consists of units 1, 3, 4, 5 and 6. All customers are residential customers. The Company also owns standpipes, which are coin-operated.

On September 12, 2013, the Company filed an application for a permanent rate increase. On December 16, 2013, the Company filed an amended application.

The Company’s amended application proposed operating revenue of \$69,406, an increase of \$28,171<sup>2</sup> or 68.32 percent over test year revenue of \$41,235 to provide an operating income of \$20,664 on its proposed fair value rate base (“FVRB”) of \$48,181 which is its original cost rate base (“OCRB”). The Company’s proposed rates result in a 42.89 percent rate of return on rate base, a 29.77 percent operating margin and cash flow of \$33,875. The Company’s proposed rates would increase the typical monthly bill of a 5/8 x 3/4-inch meter customer, with a median usage of 978 gallons, by \$26.00 or 136.8 percent from \$19.00 to \$45.00.<sup>3</sup>

Staff recommends permanent rates that produce total operating revenue of \$63,882, an increase of \$22,647 or 54.92 percent over test year revenue of \$41,235 to provide an operating income of \$10,446 and no rate of return on the Staff adjusted OCRB of negative \$47,286. Since Staff’s rate base is negative, a return on rate base calculation is not meaningful. Staff’s recommended rates result in a 16.35 percent operating margin and a \$13,540 cash flow. Staff proposed rates would increase the typical monthly bill of a 5/8 x 3/4-inch meter customer, with a median usage of 978 gallons, by \$19.27 or 101.4 percent from \$19.00 to \$38.27.

Staff recommends:

- Approval of Staff’s rates and charges as shown in Schedule MJR-4.
- That the permanent rates in this matter not become effective until the first day of the month after the Company files with Docket Control, as a compliance item in this docket, a Certificate of Compliance Letter of Good Standing issued by the Arizona Department of Revenue.
- In addition to collection of its regular rates and charges, the Company may collect from its customers a proportionate share of any privilege, sales or use tax, per Arizona Administrative Code (“A.A.C.”) Rule 14-2-409(D)(5).

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<sup>1</sup> Staff previously classified this Company as a Class E public service corporation. Staff continues to follow the Class E timeline requirements for this rate case.

<sup>2</sup> The Company miscalculated the increase in revenue on page 6 of the amended rate application at \$26,892.

<sup>3</sup> The Company miscalculated the rates needed to generate the revenue proposed by the Company.

- Directing the Company to docket with the Commission a schedule of its approved rates and charges within 30 days after the date the Decision in this matter is issued.
- Authorizing the depreciation rates shown in Table C of the Engineering Report.
- Directing the Company to file its next general rate case no later than June 30, 2018, using a test year ending December 31, 2017.
- Directing the Company to transfer ownership of land currently owned by the two stockholders of the Company and utilized by White Hills Water Co., Inc. to the Company.
- Directing White Hills, as a compliance item in this case, to notify its customers of the authorized rates and charges approved in this proceeding, and their effective date, in a form acceptable to Staff, by means of an insert in its next regular scheduled billing and to file copies with Docket Control within 10 days of the date notice is sent to customers.
- That White Hills monitor both of its water systems and report water losses on a monthly basis in its Annual Reports of its' water to the Commission. The Company shall coordinate readings from the well production meters and individual customer meters and report the results per system in its Annual Reports going forward. Staff further recommends that, if the reported water loss is greater than 10 percent for either system, White Hills shall prepare a water loss reduction report containing a detailed analysis and plan to reduce water loss to 10 percent or less for that particular system. If White Hills believes it is not cost effective to reduce the water loss to less than 10 percent, White Hills should submit a detailed cost benefit analysis to support its opinion. In no case shall the White Hills allow water loss to be greater than 15 percent for either system. The water loss reduction report or the detailed cost benefit analysis, whichever is submitted per this recommendation, shall be docketed as a compliance item no later than April 30<sup>th</sup> of the year following the excessive water loss.
- Approval of the three Best Management Practices ("BMP") tariffs shown in Exhibit A of the Engineering Report.
- That White Hills notify its customers, in a form acceptable to Staff, of the BMP Tariffs approved by the Commission and their effective date by means of either an insert in the next regularly scheduled billing or by a separate mailing and shall provide copies of the BMP Tariffs to any customer upon request. Staff will file a letter in the Docket confirming that White Hills' tariffs have been updated with the tariffs approved by the Commission. The tariffs shall go into effect 30 days after the date notice is sent to customers. White Hills may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

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**FACT SHEET**

**Company Statistics:**

**Current Rates:** Decision No. 54305 dated February 1, 1985.

**Type of Ownership:** C-Corporation.

**Location:** The Company's service area is located in a rural area of Mohave County approximately 40 miles northwest of Kingman, Az.

**Rates:**

Rate Application Docketed: September 12, 2013  
Amended Application Docketed: December 16, 2013  
Current Test Year Ended: December 31, 2012  
Application Found Sufficient: February 7, 2014

	<u>Current Rates</u>	<u>Company Proposed Rates</u>	<u>Staff Recommended Rates</u>
Monthly Minimum Charge (Based on a 5/8" X 3/4" meter)	\$19.00	\$45.00	\$28.00
Gallons in Minimum	1,000	2,000	-0-
Commodity Charge: Excess of minimum, charge per 1,000 gallons:			
0 to 5,000 Gallons	\$ 10.50	\$ 12.00	\$10.50
5,001 to 10,000 Gallons	\$ 10.50	\$ 15.00	\$12.50
Over 10,001 Gallons	\$ 10.50	\$ 18.00	\$14.50
Typical residential bill based On median usage of 978 gallons:	\$19.00	\$45.00	\$38.27
Unmetered Standpipe per gallon	\$0.0105	\$.0200	\$.0200

**Customers:**

Number of customers in the prior test year (8/31/1983): 21<sup>4</sup>  
Number of customers in the current test year (12/31//2012): 92

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<sup>4</sup> Obtained from information included as support in last rate case.

Current year customers by meter size: 5/8/ x 3/4-inches:	92
Seasonal Customers:	10-20 <sup>5</sup>
Customer notification mailed:	September 13, 2013

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<sup>5</sup> Per Email from Company 3/25/2014.

## SUMMARY OF RATE FILING

The test year results, as adjusted by Staff, for White Hills Water Co., Inc. ("White Hills" or "Company") show total operating revenue of \$41,235 and operating expenses of \$48,492 resulting in a \$7,257 operating loss, and a negative cash flow to provide no rate of return on the negative \$47,286 Staff-adjusted original cost rate base ("OCRB"). Since the Company did not file reconstruction cost new information, Staff recommends recognizing a fair value rate base ("FVRB") equal to the OCRB.

The Company's proposed rates approximate the requested operating revenues of \$69,406. The amount requested produces an increase of \$28,171 or 68.32 percent over test year revenue of \$41,235 to provide a \$20,664 operating income and a 42.89 percent rate of return on its proposed \$48,181 FVRB and OCRB. The Company's proposed rates result in a 29.77 percent operating margin and \$33,875 cash flow. The Company's proposed rates would increase the typical monthly residential bill for a 5/8 x 3/4-inch meter customer with a median usage of 978 gallons by \$26.00 or 136.8 percent, from \$19.00 to \$45.00. (Schedule MJR-5).

Staff recommends permanent rates that produce total operating revenue of \$63,882, an increase of \$22,647 or 54.92 percent, over the test year revenue of \$41,235, to provide a \$10,446 operating income and no rate of return on a negative \$47,286 Staff-adjusted FVRB. Staff's recommended rates result in a 16.35 percent operating margin and a \$13,540 cash flow. Under Staff's recommended rate design, the typical monthly bill for a 5/8 x 3/4-inch meter customer with a median usage of 978 gallons would increase \$19.27, or 101.4 percent, from \$19.00 to \$38.27.

## COMPANY BACKGROUND

White Hills is a small water provider which serves a development located 40 miles northwest of Kingman, in Mohave County Arizona. During the test year ended December 31, 2012, White Hills provided water to 92 customers. All are served by 5/8 x 3/4-inch meters. The Company also owns coin-operated standpipes.

According to White Hills, it is experiencing financial difficulty in servicing its customers for several reasons: 1) it is located a relatively long distance from services (40 miles from Kingman and reachable by dirt roads in some instances); 2) the age of the system (some of the system was originally placed in service over 50 years ago in 1962); and 3) the economic events of the last decade have caused the Company to lose rather than increase customers.

Added to this, there is a low median usage of water in the area. The low median usage stems from the fact that there are seasonal residents and that connections consist, for the most part, of metered units serving one or two individuals. The costs of running the Company are spread over relatively few people with low water usage.

The Company's two stockholders/owners, V. David Arthur and Janice E. Arthur ("Owners"), currently conduct White Hills's business functions. The Owners live in Mesa, Arizona

and perform Company administrative functions from their home. The owners travel to the water company site to address issues which require their presence.

White Hills has changed ownership five times since 1997. The current Owners are the sole stockholders. Mr. V. David Arthur originally purchased the Company in 1997 and is now the current owner through a repossession of the Company in 2009. Developers have advanced funds to the Company over the years. The Company's application reveals that \$411,945 in Advances In Aid of Construction ("AIAC") were provided by developers.

#### *Record Keeping*

Staff excluded certain expenditures from the test year because inadequate documentation was provided by the Company. Staff recommends that the Company maintain adequate records of expenditures for plant and operating costs.

#### *Land Ownership*

The Company has built plant on land that is not held in the name of the water company. The land is owned by the two stockholders of the corporation. Staff recommends that such land be transferred to the Company.

### **CONSUMER SERVICES**

A search of the Consumer Service records reveals the following customer complaints against White Hills:

- 2011 – 1 complaint-billing
- 2012 – -0- complaints
- 2013 – 1 complaint-deposit
  - 33 opinions-rate case (opposed) 27 of the 33 are included on a petition against the rate case (the petition includes 48 signatures, but only 27 are customers; others are water haulers or non-customers)
- 2014 – -0- complaints

All complaints have been resolved and closed.

A review of the Company's bill format indicates that it is in compliance with Arizona Administrative Code ("A.A.C.") R14-2-409.B.2.a thru R14-2-409.B.2.j.

### **COMPLIANCE**

A search of the Utilities Division Compliance Section database showed that there are currently no delinquent compliance items for White Hills.

The Company has not provided a Certificate of Compliance Letter of Good Standing from the Arizona Department of Revenue ("ADOR"). Staff recommends that rates approved by the Commission in this matter not become effective until the Company provides a Letter of Good Standing from the ADOR.

## **ENGINEERING ANALYSIS**

An on-site inspection of the system was performed by Staff Engineer Del Smith on October 17, 2013. The Engineer was accompanied by Mr. Dave Arthur and Mrs. Jan Arthur, owners of the Company. Details of the system are contained in the attached Engineering Report.

## **RATE BASE**

Staff's five rate base adjustments result in a net decrease to the Company's proposed rate base of \$95,467, from \$48,181 to negative \$47,286, as shown in Schedule MJR-2, page 1. Details of Staff's adjustments are explained below.

Plant Adjustment – In adjustment A, Staff increased plant in the amount of \$802. Adjustment A includes eleven adjustments to the Company's amended application of December 16, 2013. The adjustments reflect a lack of substantiation since the current owners repossessed the Company in 2009, mathematical errors, and reclassification of plant. The results in particular plant accounts are shown in schedule MJR-2 page 2:

- decrease Wells and Springs \$370
- increase Pumping Equipment \$3,999
- decrease Distribution Reservoirs and Standpipe \$90,768 and reclassify to Storage Tanks and Pressure Tanks
- increase Storage Tanks \$89,130
- increase Pressure Tanks \$1,286
- decrease Transmission and Distribution Mains \$1,263
- decrease Services \$381
- decrease Meters \$739
- decrease Shop Tools and Garage Equipment \$319
- decrease Miscellaneous Equipment \$500
- increase Other Tangible plant \$727

Accumulated Depreciation – In adjustment B, Staff increased Accumulated Depreciation by \$108,460, from \$137,080 to \$245,540, as shown in Schedule MJR-2, page 3. Staff calculated an accumulated depreciation balance by adding depreciation expense for the years 1999-2012 using a ½-year convention for Additions and Retirements, and subtracting accumulated depreciation for recorded plant retirements. Annual Reports were used for the years 1999 through 2008 as the application did not provide information on these years.

Advances in Aid of Construction ("AIAC") – In adjustment C, Staff decreases reported AIAC by \$411,945 to reflect AIAC that Staff recommends treating as Contributions in Aid of Construction ("CIAC").

Amortization of CIAC – This adjustment increases the amortization of CIAC by \$7,169 to reflect the amortization on the Staff-recommended CIAC additions.

Working Capital – In adjustment E, Staff included a cash working capital allowance of \$5,022 based on the formula method, as shown in Schedule MJR-2, page 1. The formula method recognizes one-eighth of the operating expenses excluding depreciation, taxes, and purchased power and expenses plus one twenty-fourth of purchased power and water expenses.

## **OPERATING INCOME**

Staff's fourteen operating income adjustments decrease the total operating expenses by \$32 from \$48,742 to \$48,710, as shown in Schedule MJR-3, page 1. Details of Staff's adjustments are discussed below.

Salaries and Wages – Adjustment A increases this account by \$6,900 from -0- to \$6,900 to allow for an on-site part time field employee.

Repairs and Maintenance – Adjustment B decreases this account to by \$835 from \$8,703 to \$7,868 and reflects normalization of repairs and maintenance from 2009-2012 to \$7,067 and a amortization over 10 years of the cost of installation of an electric transformer in the amount of \$8,014. Unisource Electric required the Company to pay for installation while Unisource continues to own the transformer.

Office Supplies & Expense – Adjustment C increases this account by \$683, from \$1,490 to \$2,173, normalizing office supplies & expenses from 2009-2012.

Outside Services – Adjustment D increases outside services by \$1,082 from \$9,899 to \$10,981. The adjustment removes a test year independent contractor who is now salaried (\$6,218), removes Engineering Services (\$1,700) which amount is now capitalized, annualizes the cost of a Certified Operator (\$600), and includes a management contract in the amount of \$8,400.

Water Testing – Adjustment E decreases water testing by \$964, from \$2,522 to \$1,558, to reflect Staff's recommended amount of \$1,558. See Engineering Report.

Rent and Utilities – Adjustment F increases rent and utilities by \$1,200, from -0- to \$1,200, to recognize management's use of home office for owners/managers.

Transportation Expense – Adjustment G increases transportation expense by \$146, from \$754 to \$900, to normalize transportation expense at six trips costing \$150 each.

Insurance Expense – Adjustment H increases insurance expense by \$1,578, from -0- to \$1,578, to reflect purchase of insurance from the National Association of Water Companies (“NAWC”) insurance program for water companies.

Rate Case Expense – Adjustment I increases rate case expense by \$1,500, from -0- to \$1,500, to allow for \$4,500 rate case expense normalized over three years.

Miscellaneous Expense – Adjustment J decreases miscellaneous expenses by \$1,245 from \$4,835, to \$3,590, to normalize miscellaneous expense 2009-2012.

Depreciation Expense – Adjustment K decreases depreciation expense by \$10,117, from \$13,211 to \$3,094, to reflect application of Staff’s recommended depreciation rates to Staff’s recommended depreciable plant amounts as shown in Schedule MJR-3, page 4.

Taxes other than Income – Adjustment L increases this account by \$1,207, from -0- to \$1,207, to reflect 17.5 percent employer taxes for salaries and wages of \$6,900.

Property Tax – Adjustment M increases this account by \$707 to reflect Staff’s application of the modified version of the ADOR property tax methodology.

Income Taxes – Adjustment N decreases this account by \$1,874 to allow Staff calculated income taxes on the test year operating loss.

## **REVENUE REQUIREMENT**

Staff recommends total operating revenue from permanent rates of \$63,882, a \$22,647 or 54.92 percent increase over the test year revenue of \$41,235, which results in an operating income of \$10,446 as shown in Schedule MJR-1. Staff’s recommended rates allow for a cash flow of \$13,540 and an operating margin of 16.35 percent. Staff endeavored to provide the Company sufficient funds to meet the Company’s operating needs and manage contingencies. Staff did not derive the revenue requirement by applying a rate of return on rate base because the Company’s negative rate base makes such a calculation not meaningful.

## **RATE DESIGN**

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

The present rate structure includes a monthly minimum charge for only the 5/8 x 3/4-inch meter size and a \$10.50 per 1,000 gallons commodity rate for all gallons not included in the monthly minimum charge. 1,000 gallons are included in the monthly minimum charge.

The Company proposes a rate structure that includes only a monthly minimum charge for the 5/8 x 3/4-inch meters, an inverted three-tier commodity rate, and 2,000 gallons included in the minimum charge. The commodity charge would have break-over points at 5,000 gallons and 10,000

gallons. The proposed rates represent increases over present rates to both the monthly minimum charges and the commodity rates. As proposed by the Company, the monthly minimum charge for 5/8 x 3/4-inch meter would increase from \$19.00 to \$45.00. The Company's proposed rates would increase the typical residential bill, with a median usage of 978 gallons, by \$26.00 or 136.80 percent, from \$19.00 to \$45.00.

Staff recommends a rate structure that includes a monthly minimum charge that increases by meter size and an inverted three-tier commodity rate for all 5/8 x 3/4-inch and 3/4-inch meters, and a two-tier commodity rate for larger meters. Staff's rate design includes zero gallons in the minimum charge. Staff recommends break-over points that increase by meter size. Under Staff's recommended rate design, the typical monthly residential bill for a 5/8 x 3/4-inch meter customer with a median usage of 978 gallons would increase by \$19.27 or 101.4 percent from \$19.00 to \$38.27. (Schedule MJR-5).

The Company has unmetered coin-operated standpipes. Currently the charge is \$.25 to purchase 26 gallons or \$.0105 per gallon. The Company proposes and Staff concurs to increase the charge to \$.25 for 12.5 gallons or \$.02 per gallon.

The Company proposes increases to all its service line and meter installation charges. Staff recommends approval of increases to the service line and meter installation charges as shown in Schedule MJR-4, Page 2.

The Company proposes increases to Establishment (from \$5 to \$40); Reconnection (Delinquent) (from \$5 to \$40); non-sufficient funds ("NSF") Check (from \$10 to \$25); Meter Re-Read (from \$2.50 to \$20); and After Hours Service Charge (N/T to \$60). The Company proposes removal of the tariff for Establishment (After Hours).

Staff recommends an increase to Establishment (from \$5 to \$30) and removal of the Establishment after-hours charge as this charge is not necessary since Staff is recommending one charge for Establishment and a separate charge for all After Hours Services. Staff recommends the addition of an after-hour service charge of \$35. An after hours service charge is appropriate when it is at the customer's request. Such a charge compensates the utility for additional expenses incurred when providing after-hours service. This charge is in addition to the charge for any utility service provided after-hours at the customer's request. For Meter Test, Staff recommends inserting the words "if correct" after Meter Test and a change from actual cost to \$30. Staff also recommends inserting the words "if correct") after Meter re-read and a change from \$2.50 to \$20. Staff recommends increasing the NSF check from \$10 to \$25. Staff's recommended water system service charges are shown in Schedule MJR-4, page 2.

## **STAFF RECOMMENDATIONS**

- Approval of Staff's rates and charges as shown in Schedule MJR-4.
- That the permanent rates in this matter not become effective until the first day of the month after the Company files with Docket Control, as a compliance item in this

docket, a Certificate of Compliance Letter of Good Standing issued by the Arizona Department of Revenue.

- In addition to collection of its regular rates and charges, the Company may collect from its customers a proportionate share of any privilege, sales or use tax, per Arizona Administrative Code (“A.A.C.”) Rule 14-2-409(D)(5).
- Directing the Company to docket with the Commission a schedule of its approved rates and charges within 30 days after the date the Decision in this matter is issued.
- Authorizing the depreciation rates shown in Table C of the Engineering Report.
- Directing the Company to file its next general rate case no later than June 30, 2018, using a test year ending December 31, 2017.
- Directing the Company to transfer ownership of land currently owned by the two stockholders of the Company and utilized by White Hills Water Co., Inc. to the Company.
- Directing White Hills, as a compliance item in this case, to notify its customers of the authorized rates and charges approved in this proceeding, and their effective date, in a form acceptable to Staff, by means of an insert in its next regular scheduled billing and to file copies with Docket Control within 10 days of the date notice is sent to customers.
- That White Hills monitor both of its water systems and report water losses on a monthly basis in its Annual Reports of its’ water to the Commission. The Company shall coordinate readings from the well production meters and individual customer meters and report the results per system in its Annual Reports going forward. Staff further recommends that, if the reported water loss is greater than 10 percent for either system, White Hills shall prepare a water loss reduction report containing a detailed analysis and plan to reduce water loss to 10 percent or less for that particular system. If White Hills believes it is not cost effective to reduce the water loss to less than 10 percent, White Hills should submit a detailed cost benefit analysis to support its opinion. In no case shall the White Hills allow water loss to be greater than 15 percent for either system. The water loss reduction report or the detailed cost benefit analysis, whichever is submitted per this recommendation, shall be docketed as a compliance item no later than April 30<sup>th</sup> of the year following the excessive water loss.
- Approval of the three Best Management Practices (“BMP”) tariffs shown in Exhibit A of the Engineering Report.

- That White Hills notify its customers, in a form acceptable to Staff, of the BMP Tariffs approved by the Commission and their effective date by means of either an insert in the next regularly scheduled billing or by a separate mailing and shall provide copies of the BMP Tariffs to any customer upon request. Staff will file a letter in the Docket confirming that White Hills' tariffs have been updated with the tariffs approved by the Commission. The tariffs shall go into effect 30 days after the date notice is sent to customers. White Hills may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

**White Hills Water Co., Inc.**

Docket Nos. W-01982A-13-0311

Test Year Ended December 31, 2012

Schedule MJR-1

**SUMMARY OF FILING**

	-- Present Rates --		-- Proposed Rates --	
	Company as Filed	Staff as Adjusted	Company as Filed	Staff as Adjusted
Revenues:				
Metered Water Revenue	\$35,840	\$35,840	\$59,377	\$53,853
Unmetered Water Revenue	4,292	4,292	8,926	8,926
Other Water Revenues	1,103	1,103	1,103	1,103
<b>Total Operating Revenue</b>	<b>\$41,235</b>	<b>\$41,235</b>	<b>\$69,406</b>	<b>\$63,882</b>
Operating Expenses:				
Operation and Maintenance	\$33,989	\$44,034	\$33,989	\$44,034
Depreciation	13,211	3,094	13,211	3,094
Taxes Other than Property and Income	0	1,207	0	1,207
Property Taxes	1,542	2,031	1,542	2,403
Income Tax	0	(1,874)	0	2,698
<b>Total Operating Expense</b>	<b>\$48,742</b>	<b>\$48,492</b>	<b>\$48,742</b>	<b>\$53,436</b>
<b>Operating Income/(Loss)</b>	<b>(\$7,507)</b>	<b>(\$7,257)</b>	<b>\$20,664</b>	<b>\$10,446</b>
Rate Base	\$48,181	(\$47,286)	\$48,181	(\$47,286)
Rate of Return - On Rate Base	N/M	N/M	42.89%	N/M
<sup>1</sup> Operating Margin	N/M	N/M	29.77%	16.35%
Cash Flow	\$ 5,704	N/M	\$ 33,875	\$ 13,540

NOTES:

<sup>1</sup> Operating Margin represents the proportion of funds available to pay interest and other below the line or non-ratemaking expenses.

**RATE BASE**

	----- Original Cost -----			Staff
	Company	Adjustment		
1 Plant in Service	\$600,096	\$802	A	\$600,898
2				
3 Less:				
4 Accum. Depreciation	137,080	108,460	B	245,540
5				
6 <b>Net Plant</b>	<b>\$463,016</b>	<b>(\$107,658)</b>		<b>\$355,358</b>
7				
8 Less:				
9 Advances In Aid of Construction ("AIAC")	\$411,945	(\$411,945)	C	\$0
10 Customer Security Deposits	2,890	0		2,890
11				
12 Total Advances	\$414,835	(\$411,945)		\$2,890
13				
14 Gross Contributions Aid of Construction ("CIAC")	\$0	\$411,945	C	\$411,945
15 Less:				
16 Amortization of CIAC	0	7,169	D	7,169
17				
18 Net CIAC	\$0	\$404,776		\$404,776
19				
20 Total Deductions	\$414,835	(\$7,169)		\$407,666
21				
22 Plus:				
23 1/24 Power	\$0	\$241	E	\$241
24				
25 1/8 Operation & Maint.	0	4,781	E	4,781
26				
27 Inventory	0	0		0
28				
29 Prepayments	0	0		0
30				
31 Total Additions	\$0	\$5,022		\$5,022
32				
33 <b>Rate Base</b>	<b>\$48,181</b>	<b>(\$95,467)</b>		<b>(\$47,286)</b>

*Explanation of Adjustment:*

- A See Schedule MJR-2, Page 2.
- B See Schedule MJR-2, Page 3.
- C Re-classify AIAC to CIAC
- D Amortization of CIAC using Composite depreciation rate, 1/2 year convention
- E White Hills did not request a cash working capital allowance. Staff calculated a cash working capital allowance using Staff adjusted operating expenses.

**PLANT ADJUSTMENT**

	Company Exhibit	Adjustment	Staff Adjusted
301 Organization	\$10,114	\$0	\$10,114
302 Franchises	0	0	0
303 Land & Land Rights	969	0	969
304 Structures & Improvements	13,330	0	13,330
307 Wells & Springs	62,490	(370) a	62,120
310 Power Generated Equipment	0	0	0
311 Pumping Equipment	69,112	3,999 b	73,111
320.1 Water Treatment Equipment	0	0	0
320.2 Solution Chemical Feeders	0	0	0
330 Distribution Reservoirs and Standpipe	90,768	(90,768) c	0
330.1 Storage Tanks	0	89,130 c	89,130
330.2 Pressure Tanks	0	1,286 c	1,286
331 Transmission & Distribution Mains	295,471	(1,263) d	294,208
333 Services	8,184	(381) e	7,803
334 Meters & Meter Installations	21,223	(739) f	20,484
335 Hydrants	185	0	185
336 Backflow Prevention Devices	197	0	197
339 Other Plant and Misc. Equipment	0	0	0
340 Office Furniture & Equipment	2,613	0	2,613
340.1 Computers & Software	0	0	0
341 Transportation Equipment	0	0	0
343 Tools Shop & Garage Equipment	819	(319) g	500
344 Laboratory Equipment	0	0	0
345 Power Operated Equipment	0	0	0
346 Communication Equipment	0	0	0
347 Miscellaneous Equipment	4,612	(500) h	4,112
348 Other Tangible Plant	20,009	727 i	20,736
<b>TOTALS</b>	<b>\$600,096</b>	<b>\$802</b>	<b>\$600,898</b>

*Explanation of Adjustment:*

a	307	Company Amended No invoice Stmt only	\$ 62,490 (370) \$ 62,120
b	311	Company Posted to Repairs Payment included twice miscalculation	\$ 69,112 4,259 (425) 165 \$ 73,111
c	330	Company Payment over \$150, no invoice Payment over \$150, no invoice Duplicate, in naruc 331 Company miscalculation	\$ 90,768 (1,253) (152) (384) 150
	330.1	re-class to	\$ 89,129
c	330.2	Company Amended Invoices	\$ - 1,286 \$ 1,286
d	331	Company original cost of drill reduced cost of drill	\$ 295,471 (763) (500) \$ 294,208
		Drill coded to 343 for \$500	
e	333	Company Refund to Bish Payment over \$150, no invoice	\$ 8,184 (221) (160) \$ 7,803
f	334	Company No invoices Company error in calculation	21,223 \$ (264) (475) \$ 20,484
g	343	Company Amended 2010 no invoices Drill machine	\$ 819 (819) 500 \$ 500
h	347	Company Amended no invoices	\$ 4,612 (500) \$ 4,112
i	348	Company Amended Re-class from Expenses	\$ 20,009 727 \$ 20,736

## ACCUMULATED DEPRECIATION ADJUSTMENT

	Amount
Accumulated Depreciation - Per Company	\$137,080
Accumulated Depreciation - Per Staff	245,540
<b>Total Adjustment</b>	<b>\$108,460</b>

*Explanation of Adjustment:*

- B - To reflect plant adjustments, application of the authorized depreciation rates and removal of depreciation accrued on fully depreciated plant and to recognize retirements.

	<u>Accumulated</u> <u>Depreciation Balances</u>	Depreciation Rates Decision No. 54357	Per Company	Per Staff		
301	Organization	n/a	\$ 10,114	\$ -	\$ (10,114)	non-depreciable
302	Franchises	n/a	-	-	-	
303	Land & Land Rights	n/a	-	-	-	
304	Structures & Improvements	5.00%	3,375	3,382	7	
307	Wells & Springs	5.00%	25,312	44,515	19,203	
310	Power Generation Equipment		-	-	-	
311	Pumping Equipment	5.00%	18,307	32,764	14,457	
320	Water Treatment Equipment	5.00%	-	-	-	
320.1	Water Treatment Plant		-	-	-	
320.2	Solution Chemical Feeders		-	-	-	
330	Dist. Reservoirs & Standpipes	5.00%	18,903	-	(18,903)	re-class to 330.1 and 330.2
330.1	Storage Tanks		-	33,643	33,643	
330.2	Pressure Tanks		-	32	32	
331	Transmission & Distribution Mains	5.00%	39,965	111,228	71,263	
333	Services	5.00%	518	585	67	
334	Meters & Meter Installation	5.00%	4,679	12,024	7,345	
335	Hydrants	5.00%	73	132	59	
336	Backflow Prevention Devices	0.00%	13	5	(8)	
339	Other Plant & Misc Equipment	0.00%	-	-	-	
340	Office Furniture & Equipment	5.00%	2,613	2,613	-	
340.1	Computers & Software	0.00%	-	-	-	
341	Transportation Equipment	5.00%	-	-	-	
342	Stores Equipment	0.00%	-	-	-	
343	Tools, Shop, & Garage Equipt	5.00%	592	38	(555)	
344	Laboratory Equipment	0.00%	-	-	-	
345	Power Operated Equipment	5.00%	-	-	-	
346	Communication Equipment	5.00%	-	-	-	
347	Miscellaneous Equipment		4,612	3,024	(1,588)	
309	Flowhead Meters		-	-	-	
348	Other Tangible Plant	5.00%	8,004	1,555	(6,449)	
			\$ 137,080	\$ 245,540	\$ 108,460	

**STATEMENT OF OPERATING INCOME**

	Company Exhibit	Staff Adjustments		Staff Adjusted
Revenues:				
461 Metered Water Revenue	\$35,840	\$0		\$35,840
460 Unmetered Water Revenue	4,292	\$0		4,292
474 Other Water Revenues	1,103	\$0		1,103
<b>Total Operating Revenue</b>	<b>\$41,235</b>	<b>\$0</b>		<b>\$41,235</b>
Operating Expenses:				
601 Salaries and Wages	\$0	\$6,900	A	6,900
610 Purchased Water	0	\$0		0
615 Purchased Power	5,786	\$0		5,786
618 Chemicals	0	\$0		0
620 Repairs and Maintenance	8,703	(\$835)	B	7,868
621 Office Supplies & Expense	1,490	\$683	C	2,173
630 Outside Services	9,899	\$1,082	D	10,981
635 Water Testing	2,522	(\$964)	E	1,558
641 Rents	0	\$1,200	F	1,200
650 Transportation Expenses	754	\$146	G	900
657 Insurance - General Liability	0	\$1,578	H	1,578
659 Insurance - Health and Life	0	\$0		0
666 Regulatory Commission Expense - Rate Case	0	\$1,500	I	1,500
675 Miscellaneous Expense	4,835	(\$1,245)	J	3,590
403 Depreciation Expense	13,211	(\$10,117)	K	3,094
408 Taxes Other Than Income	0	\$1,207	L	1,207
408.11 Property Taxes	1,542	\$707	M	2,249
409 Income Tax	0	(\$1,874)	N	(1,874)
<b>Total Operating Expenses</b>	<b>\$48,742</b>	<b>(\$32)</b>		<b>\$48,710</b>
<b>OPERATING INCOME/(LOSS)</b>	<b>(\$7,507)</b>	<b>\$32</b>		<b>(\$7,475)</b>

**STAFF ADJUSTMENTS**

A -	SALARIES AND WAGES - Per Company	\$0	
	Per Staff	6,900	<u>\$6,900</u>

To allow for on-site part-time field employee  
From independent contractor to employee

B -	REPAIRS AND MAINTENANCE - Per Company	\$8,703	
	Normalize Repairs and Maintenance 2009-2012 \$7,067	(\$1,636)	
	Amortize installation of electric transformer \$8,014 for 10 years	801	
	Per Staff	7,868	<u>(\$835)</u>

Normalize Repair and Maintenance, amortize installation of transformer

C -	OFFICE SUPPLIES & EXPENSE	\$1,490	
	Per Staff	2,173	<u>\$683</u>

To normalize office expense 2009-2012

D -	OUTSIDE SERVICES - Per Company	\$9,899	
	Remove test year independent Contractor, now salaried	(\$6,218)	
	Remove Engineering Services--amount is capitalized	(\$1,700)	
	Certified Operator annualized @ \$200/mo.(2400-1800)	\$600	
	Include Management Contract with Owners \$750/ mo	\$8,400	
	Per Staff	10,981	<u>\$1,082</u>

E -	WATER TESTING - Per Company	\$2,522	
	Per Staff	1,558	<u>(\$964)</u>

To recognize the average on-going water testing expenses

F -	RENT AND UTILITIES - per Company	0	
	Per Staff	1,200	<u>\$1,200</u>

To Recognize Management use of home office for owners/managers

**STAFF ADJUSTMENTS (Cont.)**

G -	TRANSPORTATION EXPENSE - per Company Per Staff	\$754 \$900	146
	To normalize transportation expense 6 trips @ \$150		
H	INSURANCE EXPENSE Per Staff	\$0 \$1,578	1,578
	To reflect purchase of insurance from a NAWC insurance program for water companies		
I	RATE CASE EXPENSE Per Staff	\$0 \$1,500	1,500
	To reflect \$4,500 normalized over 3 years		
J -	MISCELLANEOUS EXPENSE Per Staff	\$4,835 3,590	(\$1,245)
	To normalize miscellaneous expense 2009-2012		
K -	DEPRECIATION - Per Company Per Staff	\$13,211 3,094	(\$10,117)
	To reflect application of Staff's depreciation rates to Staff's depreciable plant balances by account		
L -	TAXES OTHER THAN INCOME - Per Company Per Staff employer taxes	\$0 1,207	\$1,207
	Company estimated 17.5 % employee payroll taxes for \$6,900 in salaries and wages		
M -	PROPERTY TAX - Per Company Per Staff	\$1,542 2,249	\$707
	To reflect the a change in property taxes based on the change in revenue		
N -	INCOME TAXES - per Company Per Staff	\$0 (1,874)	(\$1,874)
	To reflect allowance for C-Corporation Taxes		

OPERATING INCOME ADJUSTMENT D - DEPRECIATION EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED	[D]	[E]	[F]
1	Depreciation Expense	\$ 13,211	\$ 4,221	\$ 17,432			
Line No.	ACCT NO. DESCRIPTION	Company Proposed PLANT IN SERVICE BALANCE	STAFF PLANT BALANCE	Fully Depreciated Plant	STAFF DEPR. PLANT BALANCE	STAFF RECOMMENDED RATE	STAFF RECOMMENDED EXPENSE
1	Plant In Service						
2	301 Organization	\$ 10,114	10,114		\$ 10,114	0.00%	\$ -
3	302 Franchises	-	-		-	0.00%	-
4	303 Land & Land Rights	969	969		969	0.00%	-
5	304 Structures & Improvements	13,330	13,330	2,575	10,755	3.33%	358
6	307 Wells & Springs	62,490	62,120	37,976	24,144	3.33%	804
7	310 Power Generating Equipment	-	-	-	-	5.00%	-
8	311 Pumping Equipment	69,112	73,111	19,994	53,117	12.50%	6,640
9	320.1 Water Treatment Plants	-	-	-	-	3.33%	-
10	320.2 Solution Chemical Feeders	-	-	-	-	20.00%	-
11	330 Dist. Reservoirs & Standpipes	90,768	-	-	-	-	-
12	330.1 Storage Tanks	-	89,130	-	89,130	2.22%	1,979
13	330.2 Pressure Tanks	-	1,286	-	1,286	5.00%	64
14	331 Transmission & Distribution Mains	295,471	294,208	23,318	270,890	2.00%	5,418
15	333 Services	8,184	7,803	-	7,803	3.33%	260
16	334 Meters & Meter Installations	21,223	20,484	-	20,484	8.33%	1,706
17	335 Hydrants	185	185	-	185	2.00%	4
18	336 Backflow Prevention Devices	197	197	-	197	6.67%	13
19	339 Other Plant and Misc. Equipment	-	-	-	-	6.67%	-
20	340 Office Furniture & Equipment	2,613	2,613	2,613	-	6.67%	-
21	341 Transportation Equipment	-	-	-	-	20.00%	-
22	343 Tools Shop & Garage Equipment	819	500	-	500	5.00%	25
23	344 Laboratory Equipment	-	-	-	-	10.00%	-
24	345 Power Operated Equipment	-	-	-	-	5.00%	-
25	346 Communication Equipment	-	-	-	-	10.00%	-
26	347 Miscellaneous Equipment	4,612	4,112	2,500	1,612	10.00%	161
27	348 Other Tangible Plant	20,009	20,736	-	20,736	0.00%	-
28		-	-	-	-	-	-
29		-	-	-	-	-	-
30	Subtotal General	\$ 600,096	\$ 600,898	\$ 88,976	\$ 511,922		\$ 17,432
31	Less: Non-depreciable Account(s)	11,083	11,083		11,083		
32	Depreciable Plant (L29-L30)	\$ 589,013	\$ 589,815		\$ 500,839		
33							
34	Contributions-in-Aid-of-Construction (CIAC)		411,945			\$ -	
35	Weighted Average Depreciation/Amortization Rate					3.4805%	
36	Less: Amortization of CIAC (L32 x L33)		14,338				\$ -
37	<b>Depreciation Expense - STAFF</b>						<b>\$ 17,432</b>
38							
39	<b>Pro Forma Depreciation Expense Calculation</b>						
40							
41	Plant in Service	\$ 600,898					
42	Less: Non-depreciable plant	11,083					
43	Fully depreciated plant	88,976					
44	Depreciable Plant	\$ 500,839					
45	Times: Staff weighted average depreciation rate	3.4805%					
46	Depreciation expense before amortization of CIAC	17,432					
47	Less: Amortization of CIAC	14,338					
48	<b>Test Year Depreciation - Staff</b>	<b>3,094</b>					
49	Depreciation expense - Company	13,211					
50	<b>Staff recommended adjustment</b>	<b>\$ (10,117)</b>					

OPERATING INCOME ADJUSTMENT H - PROPERTY TAXES

LINE NO.	Property Tax Calculation	[A]	[B]
		STAFF AS ADJUSTED	STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2012	\$ 41,235	\$ 41,235
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	\$ 82,470	\$ 82,470
4a	Staff Adjusted Test Year Revenues - 2012	41,235	
4b	Staff Recommended Revenue, Per Schedule MJR-1		63,882
5	Subtotal (Line 4 + Line 5)	\$ 123,705	\$ 146,352
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	\$ 41,235	\$ 48,784
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	\$ 82,470	\$ 97,568
10	Plus: 10% of CWIP -		-
11	Less: Net Book Value of Licensed Vehicles		-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	\$ 82,470	\$ 97,568
13	Assessment Ratio	19.0%	19.0%
14	Assessment Value (Line 12 * Line 13)	15,669	\$ 18,538
15	Composite Property Tax Rate (Company Property Tax + Assessment Value)	12.9617%	12.9617%
16	Staff Proposed Property Tax Expense (Line 14 * Line 15)	\$ 2,031	
17	Company Proposed Property Tax	1,542	
18	Staff Test Year Adjustment (Line 16-Line 17)	\$ 489	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$ 2,403
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		\$ 2,031
21	Increase/(Decrease) to Property Tax Expense		\$ 372
22	Increase/(Decrease) to Property Tax Expense		\$ 372
23	Increase in Revenue Requirement		22,647
24	Increase/(Decrease) to Property Tax per Dollar Increase in Revenue (Line 19/Line 20)		1.64%

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
<u>Calculation of Gross Revenue Conversion Factor:</u>					
1	Revenue	100.0000%			
2	Uncollectible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Tax Rate (Line 17)	20.5250%			
5	Subtotal (L3 - L4)	79.4750%			
6	Revenue Conversion Factor (L1 / L5)	1.258257			
<u>Calculation of Uncollectible Factor:</u>					
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	20.5250%			
9	One Minus Combined Income Tax Rate (L7 - L8)	79.4750%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0.0000%			
<u>Calculation of Effective Tax Rate:</u>					
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	6.5000%			
14	Federal Taxable Income (L12 - L13)	93.5000%			
15	Applicable Federal Income Tax Rate (Line 44)	15.0000%			
16	Effective Federal Income Tax Rate (L14 x L15)	14.0250%			
17	Combined Federal and State Income Tax Rate (L13 +L16)	20.5250%			
18	Required Operating Income (Schedule Summary Schedule 1)	\$ 10,446			
19	Adjusted Test Year Operating Income (Loss) (Schedule 1)	\$ (7,257)			
20	Required Increase in Operating Income (L18 - L19)		\$ 17,703		
21	Income Taxes on Recommended Revenue (Col. (D), L43)	\$ 2,698			
22	Income Taxes on Test Year Revenue (Col. (B), L43)	\$ (1,874)			
23	Required Increase in Revenue to Provide for Income Taxes (L21 - L22)		\$ 4,572		
24	Recommended Revenue Requirement (Schedule MJR-1)	\$ 63,882			
25	Uncollectible Rate (Line 10)	0.0000%			
26	Uncollectible Expense on Recommended Revenue (L24 * L25)	\$ -			
27	Adjusted Test Year Uncollectible Expense	\$ -			
28	Required Increase in Revenue to Provide for Uncollectible Exp. (L26 - L27)		\$ -		
30	Property Tax with Recommended Revenue (Schedule MJR-3 p 5 OF 6)	\$ 2,403			
31	Property Tax on Test Year Revenue (Schedule MJR-3 p 5 of 6)	\$ 2,031			
32	Increase in Property Tax Due to Increase in Revenue (L30-31)		\$ 372		
Total Required Increase in Revenue (L21 + L24 + L29 + L32)			\$ 22,647		
<u>Calculation of Income Tax:</u>					
33	Revenue (Schedule MJR-1 and MJR-7)	\$ 41,235	\$ 22,647	\$ 63,882	
34	Operating Expenses Excluding Income Taxes	\$ 50,366	\$ -	\$ 50,738	
35	Synchronized Interest MJR 6.1	\$ -	\$ -	\$ -	
36	Arizona Taxable Income (L33 - L34 - L35)	\$ (9,131)		\$ 13,144	
37	Arizona State Income Tax Rate	6.50%		6.50%	
38	Arizona Income Tax (L36 x L37)		\$ (594)		\$ 854
39	Federal Taxable Income (L36 - L38)	\$ (8,538)		\$ 12,290	
40	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15%	\$ (1,281)		\$ 1,843	
41	Federal Tax on Second Income Bracket (\$50,001 - \$75,000) @ 25%	\$ -		\$ -	
42	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34%	\$ -		\$ -	
43	Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39%	\$ -		\$ -	
44	Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34%	\$ -		\$ -	
45	Total Federal Income Tax	\$ (1,281)	\$ (1,281)	\$ 1,843	\$ 1,843
46	Combined Federal and State Income Tax (L38 + L45)		\$ (1,874)	\$	\$ 2,698
47	Applicable Federal Income Tax Rate [Col. (D), L45 - Col. (B), L45] / [Col. (C), L39 - Col. (A), L39]				15.0%

**White Hills Water Co., Inc.**

Docket No. W-01982A-13-0311

Test Year Ended December 31, 2012

Schedule MJR-4

Page 1 of 3

**RATE DESIGN**

Monthly Usage Charge	Present	Company	Staff
	Rates	Proposed	Recommended
5/8" x 3/4" Meter	\$19.00	\$45.00	\$ 28.00
3/4" Meter	\$0.00	\$0.00	\$ 42.00
1" Meter	\$0.00	\$0.00	\$ 70.00
1½" Meter	\$0.00	\$0.00	\$ 140.00
2" Meter	\$0.00	\$0.00	\$ 224.00
3" Meter	\$0.00	\$0.00	\$ 448.00
4" Meter	\$0.00	\$0.00	\$ 700.00
6" Meter	\$0.00	\$0.00	\$ 1,400.00
Gallons Included in Minimum	1,000	2,000	0
<u>Commodity Rate Charge</u>			
<i>5/8" x 3/4" Meter and 3/4" Meter</i>			
Tier 1 From 0 to 3,000 gallons	10.50	12.00	10.50
Tier 2 From 3,001 to 10,000 gallons	10.50	15.00	12.50
Tier 3 Over 10,000 gallons	10.50	18.00	14.50
<i>1" Meter</i>			
Tier 1 From 0 to 40,000 gallons	10.50	N/A	12.50
Tier 2 Over 40,000 gallons	10.50	N/A	14.50
<i>1½" Meter</i>			
Tier 1 From 0 to 120,000 gallons	10.50	N/A	12.50
Tier 2 Over 120,000 gallons	10.50	N/A	14.50
<i>2" Meter</i>			
Tier 1 From 0 to 225,000 gallons	10.50	N/A	12.50
Tier 2 Over 225,000 gallons	10.50	N/A	14.50
<i>3" Meter</i>			
Tier 1 From 0 to 500,000 gallons	10.50	N/A	12.50
Tier 2 Over 500,000 gallons	10.50	N/A	14.50
<i>4" Meter</i>			
Tier 1 From 0 to 800,000 gallons	10.50	N/A	12.50
Tier 2 Over 800,000 gallons	10.50	N/A	14.50
<i>6" Meter</i>			
Tier 1 From 0 to 1,500,000 gallons	10.50	N/A	12.50
Tier 2 Over 1,500,000 gallons	10.50	N/A	14.50

**RATE DESIGN**

Service Line and Meter Installation Charges

Meter Size	Company Current Tariff	Company Proposed			Staff's Recommendation		Total Charge (Note 1)
		Service Line Charge	Meter Charge	Total Charge	Service Line Charge	Meter Charge	
5/8 x 3/4-inch	\$ 100	\$ 1,200	\$ 350	\$ 1,550	\$ 565	\$ 158	\$ 723
3/4-inch	\$ 120	\$ -	\$ -	\$ -	\$ 565	\$ 260	\$ 825
1-inch	\$ 160	\$ -	\$ -	\$ -	\$ 629	\$ 321	\$ 950
1½-inch	\$ 300	\$ -	\$ -	\$ -	\$ 699	\$ 536	\$ 1,235
2-inch Turbine	\$ 400	\$ 1,200	\$ 1,500	\$ 2,700	\$ 1,054	\$ 1,066	\$ 2,120
3-inch Turbine		\$ -	\$ -	\$ -	\$ -	\$ -	At Cost
4-inch Turbine		\$ -	\$ -	\$ -	\$ -	\$ -	At Cost
6-inch Turbine		\$ -	\$ -	\$ -	\$ -	\$ -	At Cost

- Notes: 1) At cost pricing would apply if installation requires the use of heavy equipment such as a backhoe or involves crossing an improved road.  
2) At cost pricing would apply for meter sizes larger than two inches.

	Present Rates	Company Proposed	Staff Recommended
<u>Service Charges</u>			
Establishment	\$5.00	\$40.00	\$30.00
Establishment (After Hours)	25.00	N/T	N/T
Reconnection (Delinquent)	5.00	40.00	30.00
Meter Test	actual cost	actual cost	N/T
Meter Test (If Correct)	N/T	25.00	30.00
Deposit	*	*	*
Deposit Interest	N/T	*	*
Re-Establishment (Within 12 Months)	see below	**	**
NSF Check	10.00	25.00	25.00
Deferred Payment (per month)	N/T	per rules	1.50%
Meter Re-Read (If Correct)	2.50	20.00	20.00
Late Fee (per month)	N/T	per rules	1.50%
After Hours Service Charge	N/T	60.00	35.00

Re-Establishment Number of months x minimum less value of water  
NT = No Tariff

Unmetered Customers:

All usage per gallon.....	\$ 0.0105	\$ 0.0200	\$ 0.0200
Standpipe coin operated one quarter equals	26 gals	12.5 gals	12.5 gals
Delivery Charge per Truck Load (500 gals.)	\$2.50	N/T	N/T

**RATE DESIGN**

Monthly Service Charge for Fire Sprinkler

4" or Smaller	***	***	***
6"	***	***	***
8"	***	***	***
10"	***	***	***
Larger than 10"	***	***	***

- 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.

**TYPICAL BILL ANALYSIS**  
General Service 5/8 X 3/4 - Inch Meter

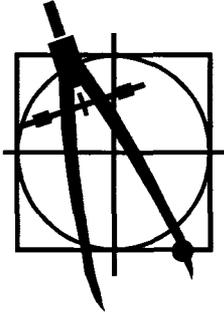
Average Number of Customers: 88

<u>Company Proposed</u>	<u>Gallons</u>	<u>Present Rates</u>	<u>Proposed Rates</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average Usage	2,049	\$30.01	\$45.58	\$15.57	51.9%
Median Usage	978	\$19.00	\$45.00	\$26.00	136.8%

<u>Staff Recommend</u>	<u>Gallons</u>	<u>Present Rates</u>	<u>Proposed Rates</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average Usage	2,049	\$30.01	\$49.51	\$19.50	65.0%
Median Usage	978	\$19.00	\$38.27	\$19.27	101.4%

Present & Proposed Rates (Without Taxes)  
General Service 5/8 X 3/4 - Inch Meter

<u>Gallons Consumption</u>	<u>Present Rates</u>	<u>Company Proposed Rates</u>	<u>% Increase</u>	<u>Staff Proposed Rates</u>	<u>% Increase</u>
0	\$19.00	\$45.00	136.8%	\$28.00	47.4%
1,000	19.00	45.00	136.8%	38.50	102.6%
2,000	29.50	45.00	52.5%	49.00	66.1%
3,000	40.00	57.00	42.5%	59.50	48.8%
4,000	50.50	69.00	36.6%	72.00	42.6%
5,000	61.00	81.00	32.8%	84.50	38.5%
6,000	71.50	96.00	34.3%	97.00	35.7%
7,000	82.00	111.00	35.4%	109.50	33.5%
8,000	92.50	126.00	36.2%	122.00	31.9%
9,000	103.00	141.00	36.9%	134.50	30.6%
10,000	113.50	156.00	37.4%	147.00	29.5%
15,000	166.00	246.00	48.2%	219.50	32.2%
20,000	218.50	336.00	53.8%	292.00	33.6%
25,000	271.00	426.00	57.2%	364.50	34.5%
50,000	533.50	876.00	64.2%	727.00	36.3%
75,000	796.00	1,326.00	66.6%	1,089.50	36.9%
100,000	1,058.50	1,776.00	67.8%	1,452.00	37.2%
125,000	1,321.00	2,226.00	68.5%	1,814.50	37.4%
150,000	1,583.50	2,676.00	69.0%	2,177.00	37.5%
175,000	1,846.00	3,126.00	69.3%	2,539.50	37.6%
200,000	2,108.50	3,576.00	69.6%	2,902.00	37.6%



**ENGINEERING REPORT FOR  
White Hills Water Co., Inc.**

**Docket No.  
W-01982A-13-0311 (Rates)  
W-01982A-14-0009 (CC&N)**

**By Del Smith**

**March 6, 2014**

**CONCLUSIONS**

1. The Arizona Corporation Commission (“ACC” or “Commission”) Utilities Division Staff (“Utilities Staff” or “Staff”) concludes that White Hills Water Co., Inc. (“White Hills” or “Company”) has adequate production and storage capacity to serve the present customer base and reasonable growth.
2. The Arizona Department of Environmental Quality (“ADEQ”) has reported that White Hills is currently delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.
3. The Arizona Department of Water Resources (“ADWR”) has reported that White Hills is currently in compliance with departmental requirements governing water providers and/or community water systems. The White Hills service area is not located within an ADWR Active Management Area (“AMA”).
4. A check of the Utilities Division Compliance Section database showed that there are currently no delinquent Commission compliance items for White Hills.
5. White Hills has approved Curtailment and Backflow Tariffs on file with the Commission.
6. The Company anticipates that growth will occur in the area when economic conditions improve but no change in the customer base is expected until then.
7. Engineering Staff finds the certified operator fee of \$200 per month reasonable given the remote location of White Hills.
8. The bills for services provided by Mohave Engineering Associates (“MEA”) totaling \$16,087 are for engineering ‘as-built’ drawings and documentation which were needed to bring the water system(s) into compliance with ADEQ. Engineering Staff finds the charges for MEA services reasonable and appropriate.

## RECOMMENDATIONS

1. Staff recommends that White Hills monitor water use for both its water systems and report water losses on a monthly basis in its Annual Reports to the Commission. The Company shall coordinate readings from the well production meters and individual customer meters and report the results per system in its Annual Reports going forward. Staff further recommends that if the reported water loss is greater than 10 percent for either system White Hills shall prepare a water loss reduction report containing a detailed analysis and plan to reduce water loss to 10 percent or less for that particular system. If White Hills believes it is not cost effective to reduce the water loss to less than 10 percent, White Hills should submit a detailed cost benefit analysis to support its opinion. In no case shall White Hills allow water loss to be greater than 15 percent for either system. The water loss reduction report or the detailed cost benefit analysis, whichever is submitted per this recommendation, shall be docketed as a compliance item no later than April 30<sup>th</sup> of the year following the excessive water loss.
2. Staff recommends an annual water testing expense of \$1,558 be used for purposes of this application.
3. Staff recommends that White Hills use the depreciation rates presented in Table C.
4. Staff recommends that the service line and meter installation charges listed under “Staff’s Recommendation” in Table D be adopted.
5. Staff recommends approval of the three Best Management Practices (“BMP”) tariffs attached hereto as Exhibit A.
6. Staff further recommends that White Hills notify its customers, in a form acceptable to Staff, of the BMP Tariffs approved by the Commission and their effective date by means of either an insert in the next regularly scheduled billing or by a separated mailing and shall provide copies of the BMP Tariffs to any customer upon request. Staff will file a letter in the Docket confirming that White Hills’ tariffs have been updated with the tariffs approved by the Commission. The tariffs shall go into effect 30 days after the date notice is sent to customers. White Hills may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.
7. The Utilities Division mapping section issued its memorandum for the White Hills CC&N application in Docket No. W-01982A-14-0009 on February 4, 2014. Attachment C to the memorandum is a map of Staff’s recommended CC&N service area and Attachment C-2 is the associated legal description.

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## A. INTRODUCTION AND LOCATION OF COMPANY

On September 12, 2013, White Hills Water Co., Inc. ("White Hills" or "Company") filed an application with the Arizona Corporation Commission ("ACC" or "Commission") to increase its rates in Docket No. W-01982A-13-0311. See Section J for details regarding the Company's Certificate of Convenience and Necessity ("CC&N") Application in Docket No. W-01982A-14-0009. The ACC Utilities Division Staff ("Utilities Staff" or "Staff") filed its letter of sufficiency regarding the Company's rate application on February 7, 2014. The Company's current rates were approved in Commission Decision No. 54305, dated January 3, 1985. Staff's engineering reviews and analyses of the pending rate application and CC&N application are presented in this report. For purposes of processing the rate application White Hills is considered a Class D water utility company that provides public utility water service to 92 metered connections.<sup>1</sup> Figure 1 shows the location of the Company within Mohave County and Figure 2 shows the certificated area granted in Commission Decision No. 38386 covering three square miles (labeled Units 3, 4 and 6).

White Hills serves an outlying rural area approximately 40 miles northwest of Kingman known as the Golden Horseshoe Ranchos Subdivision Units 1, 3, 4 and 6. The Company was granted a Certificate of Convenience and Necessity ("CC&N") in Commission Decision No. 38386 issued February 21, 1966. This CC&N was revoked on February 18, 2003. (See Section J for further discussion). White Hills operates Arizona Department of Environmental Quality ("ADEQ") Public Water System ("PWS") No. 08-039 which serves Sections 9, 17 and 21 Township 27 North, Range 19 West in Mohave County, Arizona (referred to as Golden Horseshoe Ranchos Subdivision Units 3, 4 and 6, respectively).<sup>2</sup> White Hills also operates PWS No. 08-149 which serves Section 9 Township 27 North, Range 20 West in Mohave County, Arizona (referred to as Golden Horseshoe Ranchos Subdivision Unit1). Even though PWS No. 08-149 has been in operation since 1998, the Company only recently filed to extend its CC&N to include the area served by PWS No. 08-149 (see Section J for further discussion).

## B. DESCRIPTION OF THE WATER SYSTEMS

The White Hills water systems were visited on October 17, 2013, by Staff members Mary Rimback and Del Smith. Staff was accompanied by Mr. Dave Arthur and Mrs. Jan Arthur, owners of the Company. The in-service plant (i.e. wells, tanks, pumps, and visible pipe) appeared to be in proper working order. The plant sites were in reasonably good condition. Staff did not observe any leaks at the well sites or in the distribution system. Kelly Grunder is the Company's certified operator.<sup>3</sup> David Cowen is the Company's meter reader and handles minor system repairs. Mrs. Arthur handles the accounting and billing for the Company.

### *PWS No. 08-039*

This water system consists of two well sites identified for purposes of this report as Jan's Well Site and the Sweet Well Site. Jan's Well Site consists of Jan's Well, two 30,000-gallon storage

<sup>1</sup> Per plant data submitted with the application.

<sup>2</sup> This service area covers the CC&N area revoked in Decision No. 65649.

<sup>3</sup> Kelly Grunder is a Certified Grade 2 Water Distribution System Operator, ADEQ Operator Identification No. OP020700.

tanks (total capacity 60,000 gallons), two 2-horsepower (“hp”) booster pumps, three 120-gallon bladder/pressure tanks, a standpipe system and a distribution system serving 48 metered customers. The Sweet Well Site consists of the Sweet Well and one 15,000 gallon storage tank. At the time of Staff’s inspection this well site was not in service. Both well sites are located in Golden Horseshoe Ranchos Unit 4. Distribution facilities have been installed to provide service to customers located in Units 3, 4, 5 and 6.

*PWS No. 08-149*

This water system consists of one well site identified for purposes of this report as the Unit 1 Well Site. The Unit 1 Well Site consists of the Unit 1 Well, one 20,000-gallon storage tank, two 1.5-hp booster pumps, one 80-gallon bladder/pressure tank, a standpipe system and a distribution system serving 36 metered customers. The Unit 1 Well Site is located in Golden Horseshoe Ranchos Unit 1. Distribution facilities have been installed to provide service to customers located in Unit 1. This system has been in operation since 1962.

Schematics of the water systems are illustrated in Figures 3A, 3B and 3C, and a detailed listing of the plant facilities is included in Table A below.

**Table A. Plant Facilities Summary<sup>4</sup>**

**Well Data (PWS No. 08-039)**

	Jan’s Well	Sweet Well (Inactive)
ADWR Registration No.	55-912606	55-642196
Location	Lot 537*	Lots 533 & 534*
Casing Diameter (inches)	4	8
Casing Depth (feet)	812	704
Pump Horsepower (hp)	7.5	na
Pump Yield (gallons per minute)	33 - 35	na
Meter Size (inches)	2	na
Year Drilled	2011	1962

\*Located in Golden Horseshoe Ranchos Unit 4.

<sup>4</sup> The information listed was based on one, or a combination of, the following sources: 1) Company’s Application, 2) Commission Annual Reports, 3) Arizona Department of Water Resources Records, 4) Information contained in the Company’s Response to a Staff Data Requests and, 5) Information collected during Staff’s site visit.

**Water Storage, Booster Systems, & Structures (PWS No. 08-039)**

Structure or Equipment	Location	Quantity – Capacity, Size
Storage Tanks	Jan's Well Site	2 – 30,000 Gallons
Bladder Tanks	Jan's Well Site	3 – 119 Gallons
Booster Pumps	Jan's Well Site	2 – 2 hp Single Speed
Security Fence	Jan's Well Site	6 Foot Chain Link*
Building (Wood Frame)	Jan's Well Site	2 - 8' X 12'
Standpipe System	Jan's Well site	1
Building (Wood Frame)	Sweet Well Site	1 – 20' X 20'
Storage Tank	Lot 521 (GHR Unit 4)	1 – 15,000 gallons (Inactive)
Building (Wood Frame)	Lot 521 (GHR Unit 4)	1 – 8' X 12'
Pressure Relief Valve	Lot 521 (GHR Unit 4)	1 – 2 inch
Security Fence	Lot 521 (GHR Unit 4)	6 Foot Chain Link*

Note: Security fences are not equipped with security wire.

**Distribution Mains (PWS No. 08-039)**

Diameter (inches)	Material	Length (feet)
2	PVC	6,528
3	Plastic	17,253
4	PVC	2,618
6	PVC C-900	5,280

Note: 1) PVC is poly vinyl chloride pipe used in water distribution systems and in general construction.

**Meters (PWS No. 08-039)**

Size	Quantity
5/8 x 3/4 inch	53

**Well Data (PWS No. 08-149)**

	Unit 1 Well
ADWR Registration No.	55-551185
Location	Lot 543*
Casing Diameter (inches)	9
Casing Depth (feet)	835
Pump Horsepower (hp)	5
Pump Yield (gallons per minute)	23 - 25
Meter Size (inches)	2
Year Drilled	1996

\*Located in Golden Horseshoe Ranchos Unit 1.

**Water Storage, Booster Systems, & Structures (PWS No. 08-149)**

Structure or Equipment	Location	Quantity – Capacity, Size
Storage Tank	Unit 1 Well Site	1 – 20,000 Gallons
Bladder Tank	Unit 1 Well Site	1 – 80 Gallons
Booster Pumps	Unit 1 Well Site	2 – 1.5 hp (1-VSD & 1 - Single Speed back-up)
Security Fence	Unit 1 Well Site	6 Foot Chain Link*
Building (Wood Frame)	Unit 1 Well Site	1 - 12' X 20'
Standpipe System	Unit 1 Well site	1

Note: Security fences are not equipped with security wire.

**Distribution Mains (PWS No. 08-149)**

Diameter (inches)	Material	Length (feet)
4	PVC (SDR Series)	22,558
6	PVC (SDR Series)	3,269

**Meters (PWS No. 08-149)**

Size	Quantity
5/8 x 3/4 inch	39

**Fire Hydrants (PWS Nos. 08-039 & 08-149)**

Size/Description	Quantity
Standard	0

# M O H A V E C O U N T Y

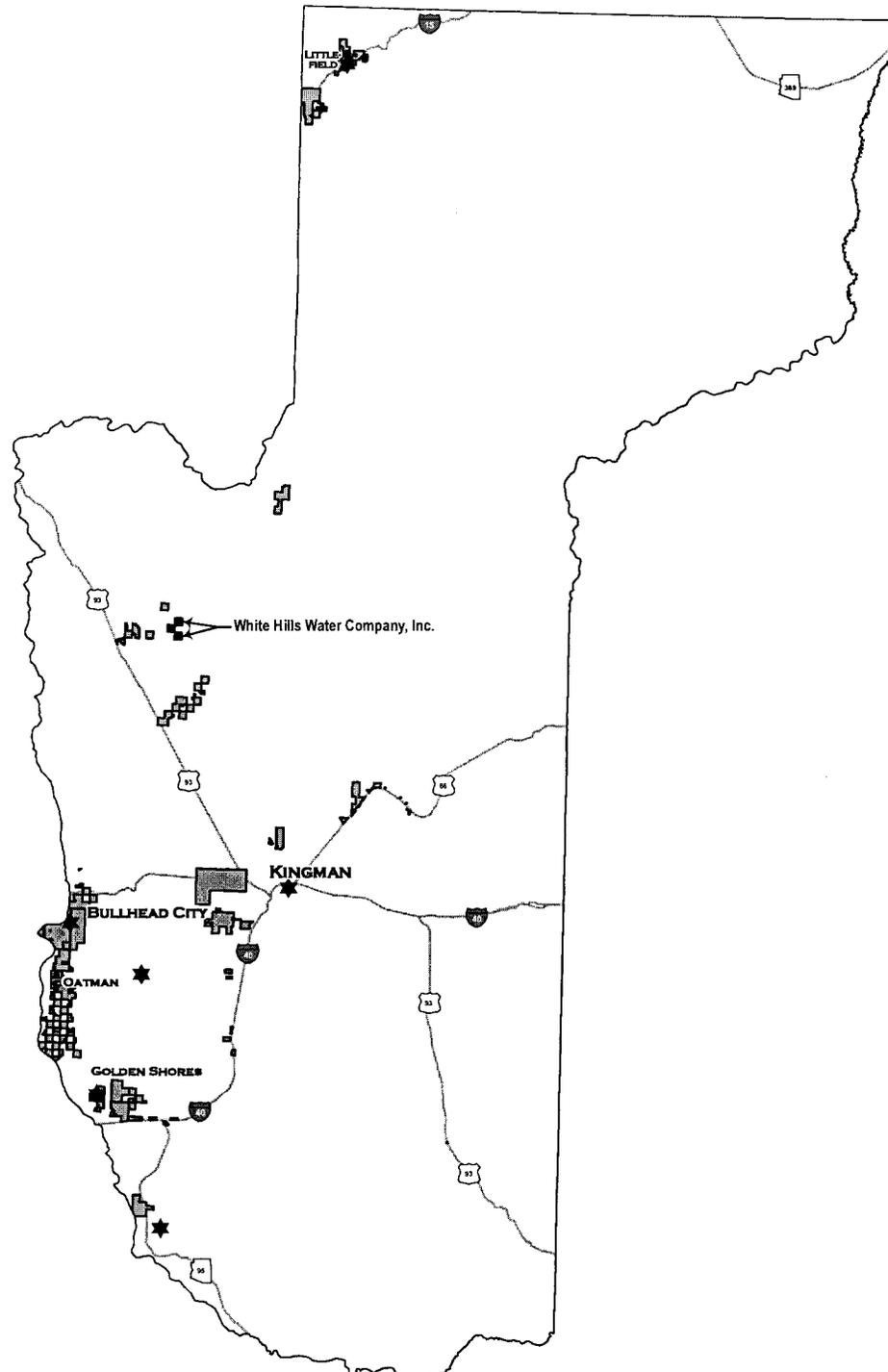


Figure 1. County Map

MOHAVE COUNTY

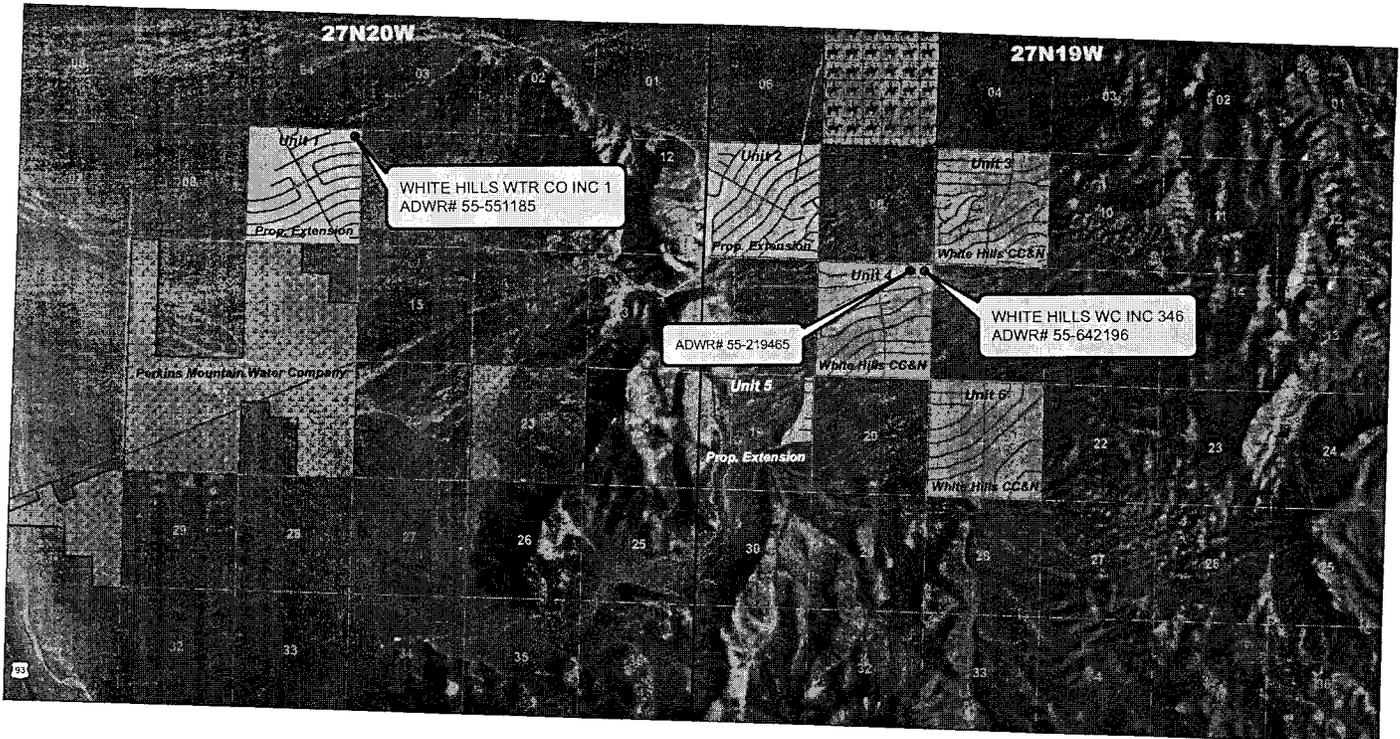
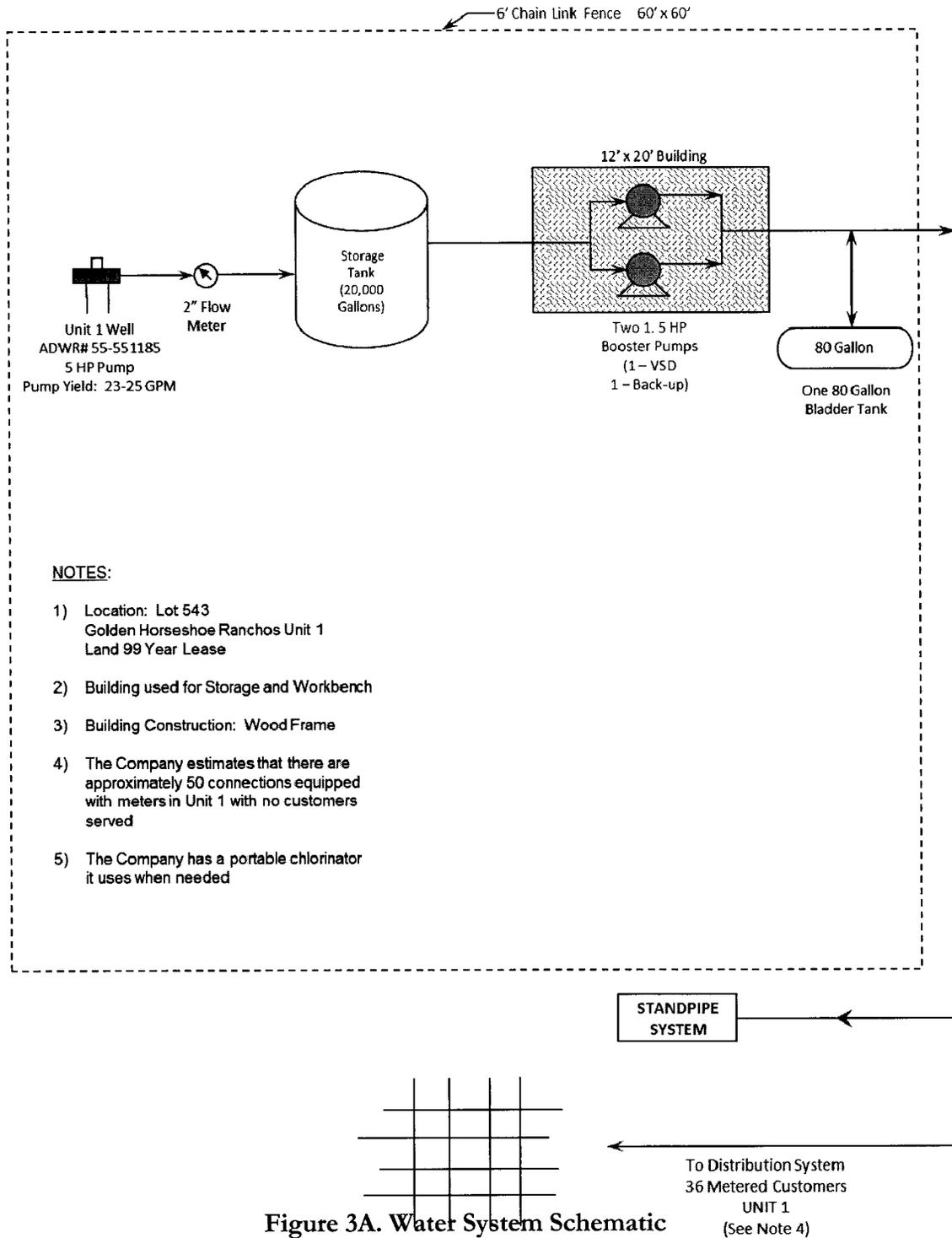
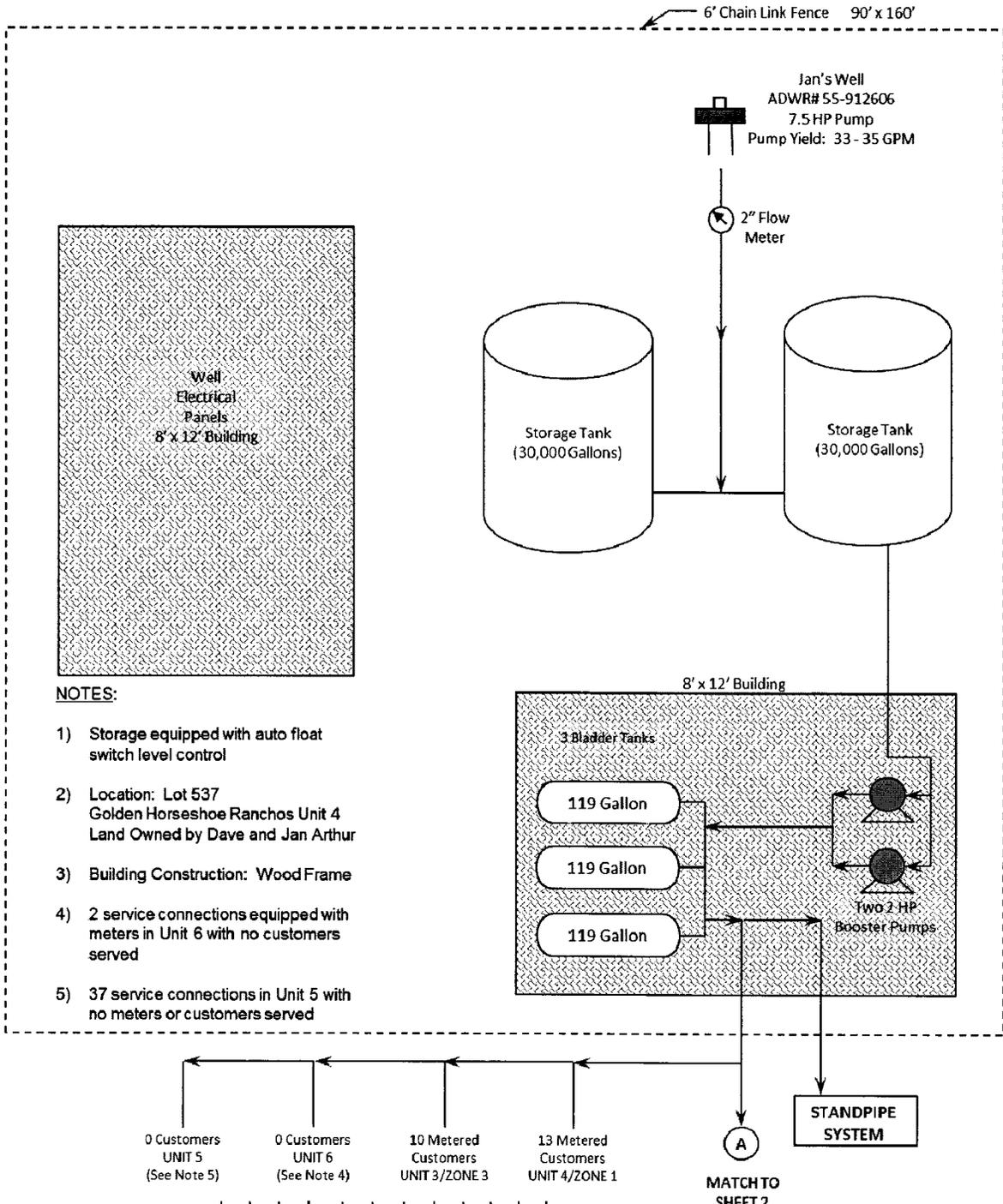


Figure 2. Certificated Area

**SCHEMATIC OF WHITE HILLS WATER COMPANY, INC. UNIT 1**  
**PWSID NO. 08-149**  
**SHEET 1 OF 1**

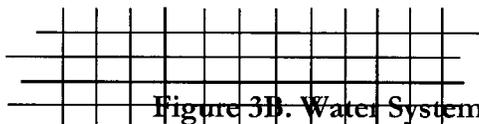


**SCHEMATIC OF WHITE HILLS WATER COMPANY, INC. UNITS 346**  
**PWSID NO. 08-039**  
**SHEET 1 OF 2**



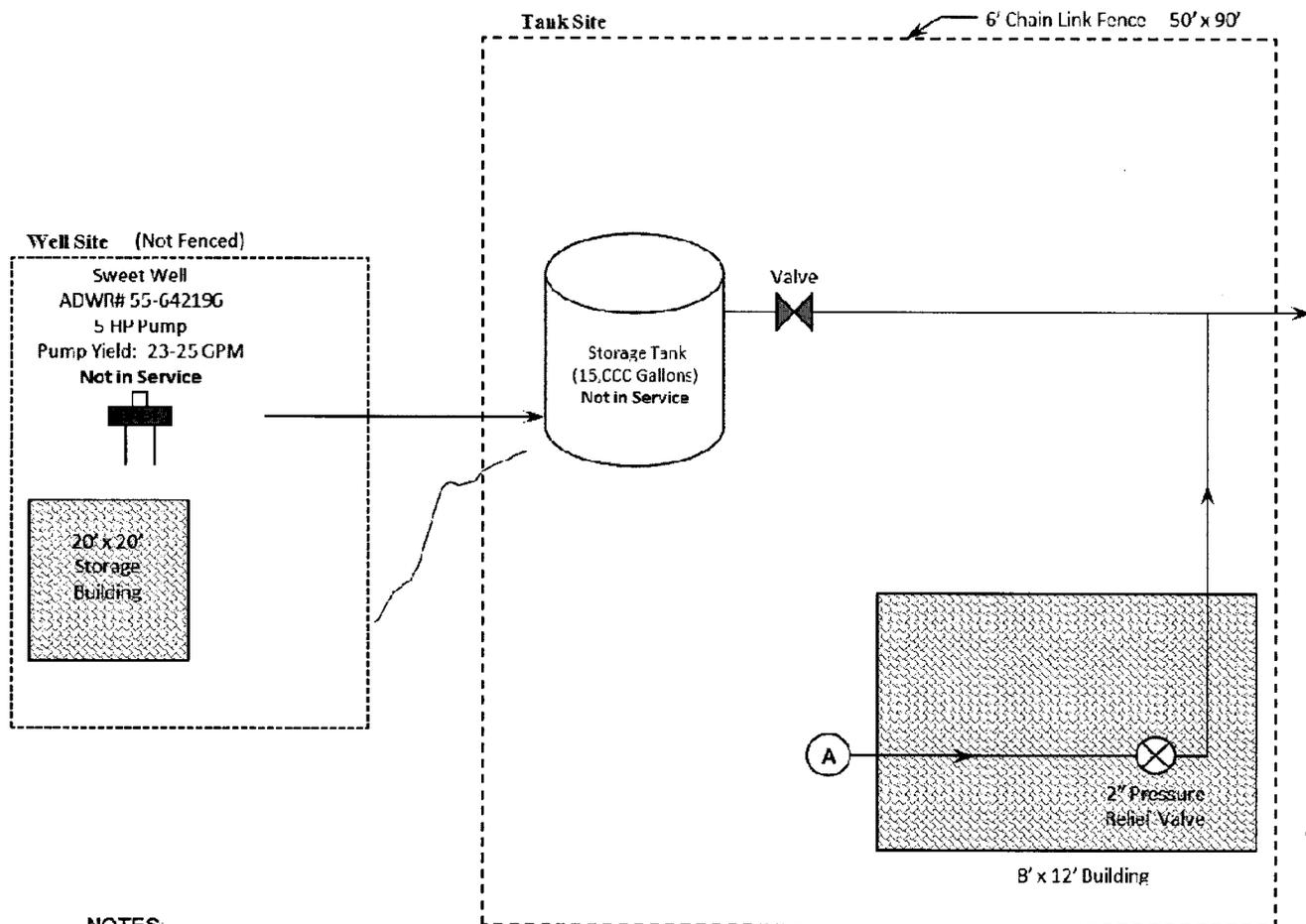
**NOTES:**

- 1) Storage equipped with auto float switch level control
- 2) Location: Lot 537  
Golden Horseshoe Ranchos Unit 4  
Land Owned by Dave and Jan Arthur
- 3) Building Construction: Wood Frame
- 4) 2 service connections equipped with meters in Unit 6 with no customers served
- 5) 37 service connections in Unit 5 with no meters or customers served



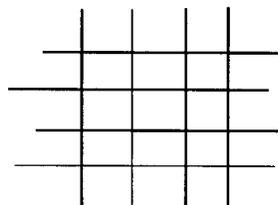
**Figure 3B. Water System Schematic**

**SCHEMATIC OF WHITE HILLS WATER COMPANY, INC. UNITS 346**  
**PWSID NO. 08-039**  
**SHEET 2 OF 2**



**NOTES:**

- 1) Location of Well: Lots 533 & 534  
 Golden Horseshoe Ranchos Unit 4  
 Land Deeded to Water Company
- 2) Location of Storage Tank: Lot 521  
 Golden Horseshoe Ranchos Unit 4  
 Land 99 Year Lease
- 3) Tank Equipped with Solar Powered Auto  
 Level Control
- 4) Building Construction: Wood Frame



← To Distribution System  
 25 Metered Customers  
 UNIT 4/ZONE 2

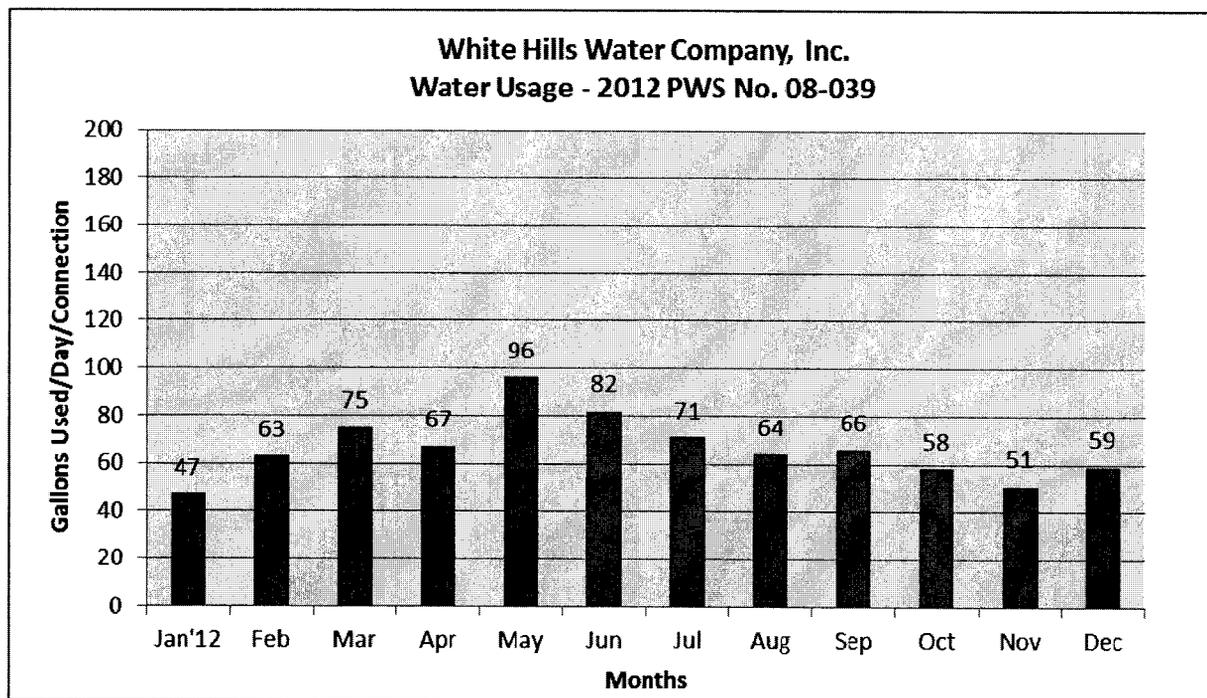
**Figure 3C. Water System Schematic**

**C. WATER USE**

*Water Sold*

*PWS #08-039*

Figure 4A represents the water consumption data provided by White Hills for the test year ending December 31, 2012. Customer consumption included a high monthly water use of 96 gallons per day (“gpd”) per connection in May, and the low water use of 47 gpd per connection in January. The average daily demand during the twelve-month period was approximately 67 gpd per connection.



**Figure 4A. Water Use**

*PWS #08-149*

Figure 4B represents the water consumption data provided by White Hills for the test year ending December 31, 2012. Customer consumption included a high monthly water use of 182 gallons per day gpd per connection in September, and the low water use of 65 gpd per connection in February. The average daily demand during the twelve-month period was approximately 116 gpd per connection.

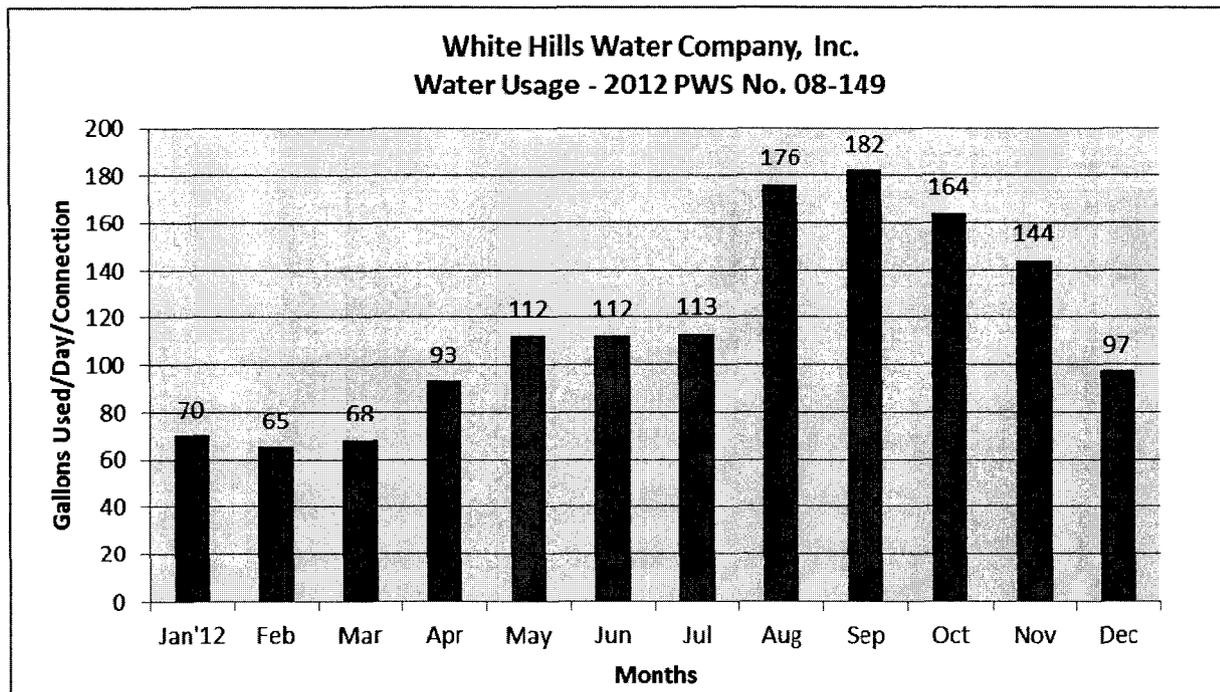


Figure 4B. Water Use

*Non-accounted For Water*

Non-accounted for water should be 10 percent or less. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a company to identify water and revenue losses due to leakage, theft, and flushing. Non-accounted for water could not be calculated for White Hills because of a lack of sufficient data.

Staff noted during its review of the water use data sheets in the Company's annual reports for the test year and prior years that the amount of water pumped by the Company's wells was missing. It does not appear this information was recorded and tracked even though the Company's wells are equipped with meters.

Staff recommends that White Hills monitor water use for both its water systems and report water losses on a monthly basis in its Annual Reports to the Commission.<sup>5</sup> The Company shall coordinate readings from the well production meters and individual customer meters and report the results per system in its Annual Reports going forward. Staff further recommends that if the reported water loss is greater than 10 percent for either system White Hills shall prepare a water loss reduction report containing a detailed analysis and plan to reduce water loss to 10 percent or less for that particular system. If White Hills believes it is not cost effective to reduce water loss to less than 10 percent, White Hills should submit a detailed cost benefit analysis to support its opinion. In no case shall White Hills allow water loss to be greater than 15 percent for either system. The water

<sup>5</sup> White Hills shall collect the data needed to accurately complete the water use data sheets contained in the Annual Report form.

loss reduction report or the detailed cost benefit analysis, whichever is submitted per this recommendation, shall be docketed as a compliance item no later than April 30<sup>th</sup> of the year following the excessive water loss.

*System Analysis*

*PWS #08-039*

This water system has one well that produces water at a rate of approximately 33 gallons per minute (“gpm”). The system has two 30,000-gallon storage tanks. There are no fire hydrants in the distribution system, and the system is not subject to a formal fire flow requirement.

During the peak month, May 2012, the water system was serving 52 connections and a standpipe when White Hills reported 155,450 gallons of water sold. Average daily demand for the month of May 2012 was determined to be 5,015 gpd. Staff concludes that the White Hills water system has adequate production and storage capacity to serve the present customer base and any reasonable growth.

*PWS #08-149*

This water system has one active well that produces water at a rate of approximately 23 gpm. The water system has one 20,000-gallon storage tank. There are no fire hydrants in the distribution system, and the system is not subject to a formal fire flow requirement.

During the peak month, September 2012, the water system was serving 37 connections and a standpipe when White Hills reported 201,854 gallons of water sold. Average daily demand for the month of May 2012 was determined to be 6,728 gpd. Staff concludes that the White Hills water system has adequate production and storage capacity to serve the present customer base and any reasonable growth.

**D. GROWTH**

The number of metered connections remained the same between 2009 and 2012. White Hills reported a total of 92 metered connections during this period.<sup>6</sup> White Hills currently serves only residential customers. The Company does not expect any commercial development in its service area. The Company anticipates that growth will occur in the area when economic conditions improve but no change in the customer base is expected until then.

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<sup>6</sup> Staff's historical growth figures are based on the data reported by White Hills in its annual reports submitted to the Commission.

**E. ADEQ COMPLIANCE**

*Compliance*

ADEQ regulates the White Hills water systems under ADEQ PWS Nos. 08-039 and 08-149. ADEQ Compliance Status Reports, dated October 13, 2013, indicate that the White Hills water systems have no major monitoring or reporting deficiencies, and are currently delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.

*Water Testing Expense*

In addition to Total Coliform and Lead & Copper, both of White Hill's water systems are subject to mandatory participation in the Monitoring Assistance Program ("MAP").<sup>7</sup> PWS #08-149 is also required to test for Arsenic once per year. The Company reported water testing expenses of \$1,891.95 (including the MAP fee) during the test year. The monitoring and testing expenses that were reviewed, evaluated, and recalculated by Staff are represented in Table B for PWS #08-039 and PWS #08-149. Staff recommends an annual water testing expense of \$1,558 be used for purposes of this application.

**Table B. Water Testing Costs**

Monitoring PWS #08-039	Cost per Test	Quantity of Tests per 3 years	Annual Testing Cost
Total Coliform	\$20	36	\$240
MAP – IOCs, Radiochemical, Nitrate, Nitrite, Asbestos, SOCs, & VOCs	MAP	MAP	\$382 (Note 1)
Lead & Copper	\$45	15 (Note 2)	\$225
Total Annual Cost	-	-	<b>\$847</b>
Monitoring PWS #08-0149	Cost per Test	Quantity of Tests per 3 years	Annual Testing Cost
Total Coliform	\$20	36	\$240
MAP – IOCs, Radiochemical, Nitrate, Nitrite, Asbestos, SOCs, & VOCs	MAP	MAP	\$350 (Note 3)
Lead & Copper	\$45	5 (Note 4)	\$75
Arsenic/Metal Preparation	\$46	3 (Note 5)	\$46
Total Annual Cost	-	-	<b>\$711</b>
<b>Total Annual Costs (PWS #08-039 &amp; #08-149)</b>	-	-	<b>\$1,558</b>

1) The ADEQ MAP invoice for Calendar Year 2012 was \$381.52, 2) Assumes lead and copper testing will remain at five (5) tests annually, 3) The ADEQ MAP invoice for Calendar Year 2012 was \$350.43, 4) Assumes lead and copper testing will remain at five (5) tests triennially, 5) Assumes Arsenic will remain at one (1) test per year.

<sup>7</sup> The MAP program is mandatory for water systems, which serve less than 10,000 persons (approximately 3,300 service connections).

*Certified Operator Fees*

The certified operator charges the Company \$100 per system per month totaling \$200 per month. The operator drives from Bullhead City each month to take the monthly microbiological samples to the lab, attend to any other testing required plus perform the other duties of a certified operator. Engineering Staff finds the certified operator fee of \$200 per month reasonable especially given the remote location of this water company.

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

The White Hills service area is not located within an ADWR Active Management Area. ADWR has determined that White Hills is currently in compliance with departmental requirements governing water providers and/or community water systems.<sup>8</sup>

**G. ACC COMPLIANCE**

A check of the Utilities Division Compliance Section database showed that there are currently no delinquent Commission compliance items for White Hills.<sup>9</sup>

**H. DEPRECIATION RATES**

Staff’s typical and customary depreciation rates, which vary by National Association of Regulatory Utility Commissioners (“NARUC”) plant categories, are illustrated in Table C. These rates represent typical and customary values within a range of anticipated equipment life. Staff recommends that White Hills use the depreciation rates presented in Table C.

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<sup>8</sup> Per ADWR Water Provider Compliance Status Report dated September 17, 2013.

<sup>9</sup> Per Compliance Section email dated October 2, 2013.

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

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
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	20.00
320.3	Point-of-Use Treatment Devices	10	10.00
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
348	Other Tangible Plant	---	-----

**I. OTHER ISSUES**

*1. Service Line and Meter Installation Charges*

White Hills has proposed to increase its existing service line and meter installation charges.<sup>10</sup> The proposed charges are refundable advances (refunding is required over ten years independent of

<sup>10</sup> The Company's current charges were approved in Decision No. 54305 and became effective February 1, 1985.

the revenue generated). Since White Hills may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation.

Staff recommends that meter sizes 3-inches and larger be priced at cost. In addition, at cost pricing would apply if installation requires the use of heavy equipment such as a backhoe or involves crossing an improved road. Staff further recommends that the service line and meter installation charges listed under “Staff’s Recommendation” in Table D be adopted.

**Table D. Service Line and Meter Installation Charges**

Meter Size	Company Proposed			Staff's Recommendation			
	Company Current Tariff	Service Line Charge	Meter Charge	Total Charge	Service Line Charge	Meter Charge	Total Charge (Note 1)
5/8 x 3/4-inch	\$100	\$1,200	\$350	\$1,550	\$565	\$158	\$723
3/4-inch	\$120	-	-	-	\$565	\$260	\$825
1-inch	\$160	-	-	-	\$629	\$321	\$950
1-1/2-inch	\$300	-	-	-	\$699	\$536	\$1,235
2-inch Turbine	\$400	\$1,200	\$1,500	\$2,700	\$1,054	\$1,066	\$2,120
3-inch Turbine	-	-	-	-	-	-	At Cost
4-inch Turbine	-	-	-	-	-	-	At Cost
6-inch Turbine	-	-	-	-	-	-	At Cost

Notes: 1) At cost pricing would apply if installation requires the use of heavy equipment such as a backhoe or involves crossing an improved road.

2) At cost pricing would apply for meter sizes larger than two inches.

*2. Curtailment Tariff*

White Hills has an approved Curtailment Tariff on file with the Commission.

*3. Backflow Prevention Tariff*

White Hills has an approved Backflow Prevention Tariff on file with the Commission.

*4. Best Management Practices (“BMP”) Tariff*

Based on discussion with Staff, White Hills has selected three tariffs for implementation in its service area. The three proposed tariffs include the Public Education Program Tariff, 2.3 (New Homeowner Landscape Information Tariff) and 5.2 (Water System Tampering Tariff). Staff concludes that these BMP Tariffs are relevant to White Hills’ service area. Staff recommends approval of the three BMP tariffs selected, attached hereto as Exhibit A.

Staff further recommends that White Hills notify its customers, in a form acceptable to Staff, of the BMP Tariffs approved by the Commission and their effective date by means of either an

insert in the next regularly scheduled billing or by a separated mailing and be required to provide copies of the BMP Tariffs to any customer upon request. Staff will file a letter in the Docket confirming that White Hills' tariffs have been updated with the tariffs approved by the Commission. The tariffs shall go into effect 30 days after the date notice is sent to customers. White Hills may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

*5. Clarification of Certain Plant Additions*

The bills for services provided by Mohave Engineering Associates ("MEA") totaling \$16,087 (\$11,359 + \$4,728) are for engineering 'as-built' drawings and documentation which were needed to bring the water system(s) into compliance with ADEQ. Engineering Staff finds the charges for MEA services reasonable and appropriate.

**J. CC&N APPLICATION (DOCKET NO. W-01982A-14-0009)**

*Introduction*

The Commission in Decision No. 65649 dated February 18, 2003, rescinded White Hills' CC&N granted in Decision No. 38386 due to the Company's failure to file its 2001 Utility Annual Report. On August 29, 2013, the Company filed in Docket No. W-01982A-13-0285 a request for reinstatement of the CC&N revoked in Decision No. 65649 stating that all annual reports had been submitted. On January 10, 2014, the Company filed an application in Docket No. W-01982A-14-0009 to extend its CC&N to include Golden Horseshoe Ranchos Subdivision Unit 1 which the Company has been serving Unit 1 since 1998. The Company also requested to extend its CC&N to include a portion of Section 19 Township 27 North, Range 19 West in Mohave County, Arizona (referred to as Golden Horseshoe Ranchos Subdivision Unit 5). The proposed Unit 5 extension area includes specific lots where facilities have been installed at the developer's expense to serve the lots when economic conditions improve and the lots are sold. The Company again requested reinstatement of the CC&N revoked in Decision No. 65649. Staff filed its letter of sufficiency in Docket No. W-01982A-14-0009 on February 7, 2014. Since the Company is seeking all of the CC&N area in this Docket that is sought in Docket No. W-01982A-13-0285, Docket No. W-01982A-13-0285 was administratively closed on February 28, 2014.

*Staff's Review and Conclusions*

The Company provided Staff with maps of the Golden Horseshoe Ranchos Subdivision and the White Hills water system. These maps were prepared by MEA (engineering consultants to the Company). The maps show the location of existing customers and the Company's distribution system facilities. Facilities that have been installed to serve future customers are also shown on these maps. As previously discussed in this report, Staff concludes that White Hills has adequate production and storage capacity to serve the present customer base and reasonable growth. The owners of the Company live in Maricopa County and must commute several hours one-way by car when issues arise that need their immediate attention. Local resources are very limited and most contractors commute from the Kingman area which adds significantly to Company expenses. The

Company anticipates that growth will occur in the area when economic conditions improve but no change in the customer base is expected until then.

The Utilities Division mapping section issued its memorandum for the White Hills CC&N application in Docket No. W-01982A-14-0009 on February 4, 2014. Attachment C to the memorandum is a map of Staff's recommended CC&N service area and Attachment C-2 is the associated legal description. Staff's recommended CC&N includes areas where the Company has existing customers or where facilities have been installed at the developer's expense to serve specific lots. Staff recommends including the specific lots of Unit 5 extension area even though there are no existing customers served by the Company in that area.

EXHIBIT A

BEST MANAGEMENT PRACTICES (BMPs)

Company: White Hills Water Company, Inc.

Decision No.: \_\_\_\_\_

Phone: 480-981-0559

Effective Date: \_\_\_\_\_

### **Public Education Program Tariff**

#### **PURPOSE**

A program for the Company to provide free written information on water conservation measures to its customers and to remind them of the importance of conserving water (Required Public Education Program).

#### **REQUIREMENTS**

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall provide two newsletters to each customer; one to be provided in the spring, the other in the fall. The goal of the letters is to provide timely information to customers in preparation of the hot summer months, and the cold winter months, in regards to their water uses. The Company shall remind customers of the importance of water conservation measures and inform them of the information available from the Company.
2. Information in the newsletters shall include water saving tips, home preparation recommendations for water systems/pipes, landscape maintenance issues for summer and winter, water cistern maintenance reminders and additional pertinent topics. Where practical, the Company shall make this information available in digital format which can be e-mailed to customers upon request or posted on the Company's website.
3. Communication channels shall include one or more of the following: water bill inserts, messages on water bills, Company web page, post cards, e-mails and special mailings of print pieces, whichever is the most cost-effective and appropriate for the subject at hand.
4. Free written water conservation materials shall be available in the Company's business office and the Company shall send information to customers on request.
5. The Company may distribute water conservation information at other locations such as libraries, chambers of commerce, community events, etc., as well.
6. The Company shall keep a record of the following information and make it available to the Commission upon request.
  - a. A description of each communication channel (i.e., the way messages will be provided) and the number of times it has been used.
  - b. The number of customers reached (or an estimate).
  - c. A description of the written water conservation material provided free to customers.

Company: White Hills Water Company, Inc.

Decision No.: \_\_\_\_\_

Phone: 480-981-0559

Effective Date: \_\_\_\_\_

### **New Homeowner Landscape Information Tariff – BMP 2.3**

#### **PURPOSE**

A program for the Company to promote the conservation of water by providing a landscape information package for the purpose of educating its new customers about low water use landscaping (Modified Non-Per Capita Conservation Program BMP Category 2: Conservation Education and Training 2.3: New Homeowner Landscape Information).

#### **REQUIREMENTS:**

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. Upon establishment of water service the Company shall provide a free "Homeowner Landscape Packet" to each new customer in the Company's service area. The packet will include at a minimum: a cover letter describing the water conservation expectations for all customers in the Company's service area, all applicable tariffs, a basic interior-exterior water saving pamphlet, xeriscape landscape information, and information on where to find low water use plant lists, watering guidelines, and a rain water harvesting pamphlet.
2. Upon customer request, the Company shall provide:
  - a. On-site consultations on low water use landscaping and efficient watering practices.
  - b. A summary of water saving options.
3. The number of packets provided to new customers will be recorded and made available to the Commission upon request.

Company: White Hills Water Company, Inc.

Decision No.: \_\_\_\_\_

Phone: 480-981-0559

Effective Date: \_\_\_\_\_

## **WATER SYSTEM TAMPERING TARIFF – BMP 5.2**

### **PURPOSE**

The purpose of this tariff is to promote the conservation of groundwater by enabling the Company to bring an action for damages or to enjoin any activity against a person who tampers with the water system.

### **REQUIREMENTS:**

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission, specifically Arizona Administrative Code ("AAC") R14-2-410 and the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. In support of the Company's water conservation goals, the Company may bring an action for damages or to enjoin any activity against a person who: (1) makes a connection or reconnection with property owned or used by the Company to provide utility service without the Company's authorization or consent; (2) prevents a Company meter or other device used to determine the charge for utility services from accurately performing its measuring function; (3) tampers with property owned or used by the Company; or (4) uses or receives the Company's services without the authorization or consent of the Company and knows or has reason to know of the unlawful diversion, tampering or connection. If the Company's action is successful, the Company may recover as damages three times the amount of actual damages.
2. Compliance with the provisions of this tariff will be a condition of service.
3. The Company shall provide to all its customers, upon request, a complete copy of this tariff and AAC R14-2-410. The customers shall follow and abide by this tariff.
4. If a customer is connected to the Company water system and the Company discovers that the customer has taken any of the actions listed in No. 1 above, the Company may terminate service per AAC R14-2-410.

If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.