

ORIGINAL



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MEMORANDUM

TO: Docket Control  
FROM: Steven M. Olea  
Director  
Utilities Division

EA for SMD

Arizona Corporation Commission

DOCKETED

FEB 27 2012

DOCKETED BY [Signature]

DATE: February 27, 2012

RE: STAFF REPORT FOR KATHERINE RESORT WATER COMPANY'S  
APPLICATION FOR A PERMANENT RATE INCREASE, DOCKET NO. W-  
01751A-11-0331

Attached is the Staff Report for Katherine Resort Water Company's application for a permanent rate increase. Staff recommends approval of its recommended rates and charges.

SMO:KN:red

Originator: Katalin Nagy

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AZ CORP COMMISSION  
DOCKET CONTROL

Service List for: Katherine Resort Water Company  
Docket No. W-01751A-11-0331

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**STAFF REPORT  
UTILITIES DIVISION  
ARIZONA CORPORATION COMMISSION**

**KATHERINE RESORT WATER COMPANY**

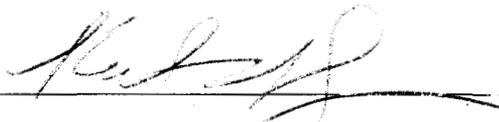
**DOCKET NO. W-01751A-11-0331**

**APPLICATION FOR A  
PERMANENT RATE INCREASE**

**FEBRUARY 27, 2012**

## STAFF ACKNOWLEDGMENT

The Staff Report for Katherine Resort Water Company ("Company"), Docket No. W-01751A-11-0331, was the responsibility of the Staff members listed below. Katalin Nagy was responsible for the review and analysis of the Company's application, recommended revenue requirements, rate base and rate design. Delbert Smith was responsible for the engineering and technical analysis. Trish Meeter was responsible for reviewing the Arizona Corporation Commission's ("Commission") records on the Company, determining compliance with Commission policies/rules and reviewing customer complaints filed with the Commission.



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Katalin Nagy  
Public Utilities Analyst I



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Delbert Smith  
Public Utilities Engineer Supervisor



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Trish Meeter  
Consumer Services Analyst I

**EXECUTIVE SUMMARY**  
**KATHERINE RESORT WATER COMPANY**  
**DOCKET NO. W-01751A-11-0331**

Katherine Resort Water Company ("Katherine Resort" or "Company") provides water service to 49 residential customers near Lake Mohave, north of Bullhead City, Arizona.

The Company proposes an increase of \$23,600, or 113.00 percent, over test year revenue of \$20,892. The proposed revenue results in an operating income of \$24,293, producing a 27.06 percent rate of return on an original cost rate base ("OCRB") of \$89,790. The typical bill for a 5/8-inch meter residential customer with a median usage of 1,894 gallons per month would increase from \$33.53 to \$70.63 for an increase of \$37.10, or 110.6 percent.

Staff recommends an increase of \$2,384, or 12.05 percent over a Staff adjusted test year revenue of \$19,791. The recommended revenue results in an operating income of \$4,437, producing a 21.64 percent rate of return on a Staff adjusted OCRB of \$20,506. The typical bill for a 5/8-inch meter residential customer with a median usage of 1,894 gallons per month would increase from \$33.53 to \$34.88 for an increase of \$1.35, or 4.0 percent.

The application asserts that additional revenues are needed to provide for profits, salaries, and capital replacements. Staff's review revealed that the Company had not recorded advances, advance refunds, depreciation expense or accumulated depreciation. The Company's accounting deficiencies precluded it from properly determining its financial position and results of operations.

Staff recommends approval of its recommended rates and charges as presented on Schedule KN-4 of this Report.

Staff recommends that any increase in rates approved by the Commission not become effective until ADEQ has determined that the Company's water system is delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. Staff further recommends the Company file with the Commission's Docket Control as a compliance item in this matter 1) documentation showing that the minor Operation and Maintenance corrections have been made, 2) ADEQ documentation showing that all ADEQ Monitoring and Reporting requirements have been met and 3) ADEQ documentation showing that the Company's water system is delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. This compliance documentation shall be filed within 90 days of the effective date of the Commission's order in this matter.

Staff recommends that the Company file with the Commission's Docket Control as a compliance item in this docket, ADWR documentation showing compliance with ADWR requirements. Staff further recommends that this documentation be filed within 90 days of the effective date of the Commission's Decision in this matter.

Staff recommends approval of the Company's proposed charges for meters and service lines smaller than 2-inches. For meters 2-inches and larger Staff recommends customer specific

charges apply based on the Company's costs. Staff recommends that the separate service line and meter installation charges listed under "Staff's Recommendation" in Table C be adopted.

Staff recommends that the Company file a Cross Connection or Backflow Prevention Tariff as soon as possible, but no later than forty-five (45) days after the effective date of the Commission Decision in this matter.

Staff recommends that Katherine Resort file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least three BMPs in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. Staff further recommends that a maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

Staff recommends that Katherine Resort post a sign at its well and tank site which meets the following. The sign should comply with ADEQ requirements and include the following information: system name, system PWS ID number and emergency contact phone number(s).

Staff further recommends that Katherine Resort be ordered to adopt Staff's recommended depreciation rates as shown in Table B of the attached Engineering Report.

Staff further recommends that Katherine Resort be ordered to file with the Commission a Tariff Schedule of the Company's new rates and charges within 30 days after the effective date of any decision or order in this matter.

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### SCHEDULES

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**EXHIBIT**

Engineering Report.....Exhibit A

**FACT SHEET**

Company Statistics:

Original CC&N granted in Decision No. 33059, dated April 19, 1961.  
 Current rates granted in Decision No. 67066, dated June 25, 2004.

*Rates:*

Company application docketed: August 30, 2011.  
 Current test year ended: December 31, 2010.

*Monthly Charges:*

	<u>Current Rates</u>	<u>Company Proposed Rates</u>	<u>Staff Recommended Rates</u>
Monthly Minimum Charge			
5/8 x 3/4-inch Meter	\$27.85	\$55.00	\$28.25
Gallons included in Minimum	0	0	0
Excess of Minimum- Per 1,000 Gallons:			
5/8 x 3/4-inch Meter:			
0 to 4,000 Gallons	\$3.00	\$8.25	N/A
4,001 to 30,000 Gallons	\$4.25	\$13.90	N/A
Over 30,000 Gallons	\$4.75	\$20.50	N/A
0 to 3,000 Gallons	N/A	N/A	\$3.50
3,001 to 8,000 Gallons	N/A	N/A	\$5.40
Over 8,000 Gallons	N/A	N/A	\$7.55
	<u>Current Rates</u>	<u>Company Proposed Rates</u>	<u>Staff Recommended Rates</u>
Typical Bill:			
Average usage 3,331 gallons	\$37.84	\$82.48	\$40.54
Median usage 1,894 gallons	\$33.53	\$70.63	\$34.88

*Customers:*

5/8 x 3/4-inch meter residential customers in the test year: 49

*Notifications:*

Customer Notification was mailed on August 26, 2011.

*Complaints:*

There were no complaints filed against the Company from 2009 through the end of the test year; however, three opinions have been filed with the Consumer Services section in opposition to this application between September 14, 2011, and October 25, 2011.

## **SUMMARY OF FILING**

The test year results, as adjusted by Staff, for Katherine Resort Water Company (“Katherine Resort” or “Company”) reflect total operating revenue of \$19,791 and \$2,321 operating income for a rate of return of 11.32 percent on an original cost rate base (“OCRB”) of \$20,506. The Company did not propose a fair value rate base that differs from its OCRB.

The Company proposes an increase of \$23,600, or 113.00 percent over test year revenue of \$20,892. The proposed revenue results in an operating income of \$24,293, producing a 27.06 percent rate of return on an OCRB of \$89,790. The typical bill for a 5/8-inch meter residential customer having a median usage of 1,894 gallons per month would increase from \$33.53 to \$70.63 for an increase of \$37.10, or 110.6 percent.

Staff recommends an increase of \$2,384, or 12.05 percent over a Staff adjusted test year revenue of \$19,791. The recommended revenue results in an operating income of \$4,437, producing a 21.64 percent rate of return on a Staff-adjusted OCRB of \$20,506. The typical bill for a 5/8-inch meter residential customer having a median usage of 1,894 gallons per month would increase from \$33.53 to \$34.88 for an increase of \$1.35, or 4.0 percent.

The poor condition of the Company’s accounting records contributed to deficiencies in its rate filing. Staff sent the Company a letter of deficiency on September 29, 2011, identifying needed corrections to the filing. Staff recognized that the Company needed assistance with its application and determined that despite deficiencies in the filing, sufficient information was available to process the case and issued a sufficiency letter on December 27, 2011.

## **COMPANY BACKGROUND**

Katherine Resort supplies public utility water service to a residential subdivision within the Lake Mead National Recreation Area, in Mohave County, located approximately two miles north of Bullhead City and Davis Dam in Arizona. The Company currently serves 49 metered customers.

Katherine Resort’s Certificate of Convenience and Necessity (“CC&N”) was granted in Decision No. 33059, dated April 19, 1961. The Company is a “C” corporation and a wholly-owned subsidiary of C. Ed Schuetz Development Company, Inc. (“Developer”). The Developer is currently registered with the Corporations Division as a foreign corporation. The current rates were established in Decision No. 67066, dated June 25, 2004.

## **CONSUMER SERVICES**

There were no complaints filed against the Company from 2009 through the end of the test year; however, three opinions have been filed with the Consumer Services section in opposition to this application between September 14, 2011, and October 25, 2011.

## **COMPLIANCE**

The Company did not maintain proper accounting records. In particular, refund of advances, collection of contributions and annual accruals of depreciation and amortization were not recorded. These accounting errors resulted in misstatements of the Company's balance sheet, income statement and rate filing.

The Company does not have any approved Curtailment Tariff on file with the Arizona Corporation Commission ("Commission").

## **ENGINEERING ANALYSIS**

Mr. Del Smith, Staff Engineering Supervisor, and Ms. Katalin Nagy, Public Utilities Analyst I, accompanied by Mr. Mike Avitabile, who handles the day-to-day operations of the Company, conducted an inspection of plant facilities on January 12, 2012.

The water system is supplied by two pumps suspended from the top of a 900 foot mine shaft and connected to a 20,000-gallon storage tank. The water is chlorinated and then pressurized by two 3-horsepower booster pumps through a 5,500-gallon pressure tank. A more detailed description of the system is contained in the attached Engineering Report.

The Katherine Resort service area is not located within any Arizona Department of Water Resources ("ADWR") Active Management Area, and, consequently, is not subject to ADWR's reporting and conservation rules.

## **RATE BASE**

Staff recommends an OCRB of \$20,506 as shown on Schedule KN-2, page 1 of 4. This represents a \$69,284 decrease from the Company's proposed OCRB of \$89,790<sup>1</sup>. Staff's OCRB results from adjustments to plant, accumulated depreciation, advances and contributions to reflect compliance with Generally Accepted Accounting Principles. Staff's rate base adjustment also reflects determination of an allowance for cash working capital using the formula method.

## **PLANT IN SERVICE**

Rate Base adjustment A increased the value of plant in service by \$6,452, from \$105,521 to \$111,973, as shown on Schedule KN-2, pages 1 and 2 of 4. During the test year, Katherine Resort replaced electrical pumping equipment for \$6,091 and purchased a new meter for \$361. Katherine Resort did not capitalize these items, but booked them as expenses.

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<sup>1</sup> The Company did not propose a fair value rate base that differs from its OCRB.

## **ACCUMULATED DEPRECIATION**

Accumulated Depreciation increased by \$82,559, from \$0 to \$82,559, as shown in Adjustment B, Schedule KN-2, pages 1 and 3 of 4. Since the Company did not provide accumulated depreciation since the last rate case, Staff calculated accumulated depreciation beginning with accumulated depreciation authorized in Decision No. 67066 and bringing it forward through the end of the test year.

## **ADVANCES**

Advances were decreased by \$3,308, from \$3,308 to \$0, as shown in Adjustment C, Schedule KN-2, pages 1 and 3 of 4. Staff reclassified plant advances as contributions since they have not been refunded in a 10-year period.

## **CONTRIBUTIONS**

Contributions increased by \$6,745, from \$12,423 to \$19,168, as shown in Adjustment D, Schedule KN-2, pages 1 and 3 of 4. Adjustment was made to reclassify plant advances of \$3,308 as noted above and to recognize a balance of \$3,437 from the prior Decision No. 67066.

## **AMORTIZATION OF CONTRIBUTIONS-IN-AID-OF-CONSTRUCTION ("CIAC")**

Amortization of CIAC increased by \$8,541, from \$0 to \$8,541, as shown in Adjustment E, Schedule KN-2, pages 1 and 3 of 4. Balance of \$3,437 was recognized from prior Decision No. 67066 and \$5,104 was calculated to reflect a 4.02 percent amortization rate since 2003 through the end of test year.

## **WORKING CAPITAL**

Working Capital increased by \$1,719, from \$0 to \$1,719, as shown in Adjustments F and G, Schedule KN-2, pages 1 and 4 of 4. 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**

Staff's adjusted test year operating income results are presented on Schedule KN-3. The net effect of Staff's recommended revenue and expense adjustments increased operating income by \$1,628, from \$693 to \$2,321. The adjustments are explained in further detail below.

## **OPERATING REVENUE**

The Company filed metered water revenue of \$20,892 for the test year. Staff decreased operating revenue by \$1,101, from \$20,892 to \$19,791, as shown in Adjustment A, Schedule KN-3, pages 1 and 2 of 5. It was determined that the Company erroneously included sales tax of \$1,101 in its revenue calculation.

## **OPERATING EXPENSES**

Staff decreased total operating expenses by \$2,729, from \$20,199 to \$17,470, as shown on Schedule KN-3, page 1 of 5. A detailed explanation of the adjustments are shown below.

Salaries and Wages – Increased salaries and wages by \$720, from \$2,400 to \$3,120, as shown in Adjustment B, Schedule KN-3, pages 1 and 2 of 5. The adjustment was made to reflect 4 hours worked by the owner per week at a rate of \$15 per hour.

Chemicals – Increased chemicals by \$60, from \$0 to \$60, as shown in Adjustment C, Schedule KN-3, pages 1 and 2 of 5. Staff's adjustment reflects Staff's calculation of materials and supplies based on the documentation submitted by the Company.

Repairs and Maintenance – Decreased repairs and maintenance expense by \$6,873, from \$7,512 to \$639, as shown in Adjustment D, Schedule KN-3, pages 1 and 2 of 5. Staff's adjustment reflects Staff's removal and capitalization of the cost of meters and a pump that the Company inappropriately expensed and the removal of unsupported claimed expenses.

Office Supplies and Expense – Decreased office supplies and expense account by \$196, from \$766 to \$570, as shown in Adjustment E, Schedule KN-3, pages 1 and 2 of 5. The adjustment reflects Staff's calculations for reasonable office expenses for the test year.

Outside Services – Increased outside services by \$2,305, from \$2,768 to \$5,073, as shown in Adjustment F, Schedule KN-3, pages 1 and 3 of 5. The adjustment reflects Staff's discovery and reclassification of expenses that were not properly recorded in the Company's records.

Water Testing – Decreased water testing expense by \$1,555, from \$2,563 to \$1,008, as shown in Adjustment G, Schedule KN-3, pages 1 and 3 of 5. Water testing expense was determined by Staff Engineer in accordance with the Monitoring Assistance Program ("MAP"), which requires mandatory participation for water systems that serve less than 10,000 persons.

Transportation Expense – Increased transportation expense by \$1,189, from \$491 to \$1,680, as shown in Adjustment H, Schedule KN-3, pages 1 and 3 of 5. The adjustment was made by Staff to reflect transportation expense to Company for licensed operator based on information provided by licensed operator.

Depreciation Expense – Increased depreciation expense by \$1816, from \$0 to \$1816, as shown in Adjustment I, Schedule KN-3, pages 1 and 4 of 5. The adjustment reflects Staff's calculation of depreciation expense by applying Staff's recommended depreciation rates to Staff's recommended plant balances, offset by amortization of contributions as shown on Schedule KN-2, page 3 of 4.

Taxes Other Than Income – Decreased taxes other than income account by \$1,101, from \$1,101 to \$0, as shown in adjustment J, Schedule KN-3, pages 1 and 5 of 5. The adjustment reflects Staff's removal of sales tax paid that was collected via a pass-through provision.

Income Taxes – Increased income tax expense by \$906, from \$0 to \$906, as shown in Adjustment K, Schedule KN-3, pages 1 and 5 of 5. The adjustment reflects the calculation of federal and state income taxes based on the Company's operating revenue in the test year.

## **REVENUE REQUIREMENT AND RATE DESIGN**

Staff recommends revenue of \$22,175, an increase of \$2,384, or 12.05 percent over test year revenue of \$19,791. Staff's recommended revenue provides a 21.64 percent rate of return on an OCRB of \$20,506 and an operating margin of 20.01 percent (Schedule KN-1).

The Company proposes continuing its current three-tier rate structure with no change in break-over points. Staff recommends an inverted three-tier structure with break-over points at 3,000 and 8,000 gallons. Staff's recommended tiers would provide a price signal to users that higher consumption is increasingly expensive. No gallons are included in the minimum charge under the Company's proposed or Staff's recommended rates.

Staff finds that 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, Staff concludes that it is appropriate to apply an after-hours service charge in addition to the regular charge for any utility service, if it is provided after hours at the customer's request, or for the customer's convenience.

Therefore, Staff recommends the creation of a separate \$22.50 After-Hours Service Charge. For example, under Staff's proposal, a customer would be subject to a \$15 Establishment charge if done during normal business hours, but would pay an additional \$22.50 after-hours charge when such service is at the customer's request or for the customer's convenience. Staff recommends the After Hours Service Charge verbiage should include "at the customer's request or for the customer's convenience". This will assure the customer has been made aware of the added cost for this service.

## **STAFF RECOMMENDATIONS**

Staff recommends approval of its recommended rates and charges as presented on Schedule KN-4 of this Report.

Staff further recommends that any permanent rates and charges in this matter shall become effective on the first day of the month after the Company files in this docket, a notice from ADEQ that Katherine Resort is delivering water which meets the water quality standards required by the Arizona Administrative Code.

Staff recommends that any increase in rates approved by the Commission not become effective until ADEQ has determined that the Company's water system is delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. Staff further recommends the Company file with the Commission's Docket Control as a compliance item in this matter 1) documentation showing that the minor Operation and Maintenance corrections have been made, 2) ADEQ documentation showing that all ADEQ Monitoring and Reporting requirements have been met and 3) ADEQ documentation showing that the Company's water system is delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. This compliance documentation shall be filed within 90 days of the effective date of the Commission's order in this matter.

Staff recommends that the Company file with the Commission's Docket Control as a compliance item in this docket, ADWR documentation showing compliance with ADWR requirements. Staff further recommends that this documentation be filed within 90 days of the effective date of the Commission's Decision in this matter.

Staff recommends approval of the Company's proposed charges for meters and service lines smaller than 2-inches. For meters 2-inches and larger Staff recommends customer specific charges apply based on the Company's costs. Staff recommends that the separate service line and meter installation charges listed under "Staff's Recommendation" in Table C be adopted.

Staff recommends that the Company file a Cross Connection or Backflow Prevention Tariff as soon as possible, but no later than forty-five (45) days after the effective date of the Commission Decision in this matter.

Staff recommends that Katherine Resort file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least three BMPs in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. Staff further recommends that a maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

Staff recommends that Katherine Resort post a sign at its well and tank site which meets the following. The sign should comply with ADEQ requirements and include the following information: system name, system PWS ID number and emergency contact phone number(s).

Staff further recommends that Katherine Resort be ordered to adopt Staff's recommended depreciation rates as shown in Table B of the attached Engineering Report.

Staff further recommends that Katherine Resort be ordered to file with the Commission a Tariff Schedule of the Company's new rates and charges within 30 days after the effective date of any decision or order in this matter.

**SUMMARY OF FILING**

	-- Present Rates --		-- Proposed Rates --	
	Company as Filed	Staff as Adjusted	Company as Filed	Staff as Adjusted
<b>Revenues:</b>				
Metered Water Revenue	\$20,892	\$19,791	\$44,492	\$22,175
Unmetered Water Revenue	0	0	0	0
Other Water Revenues	0	0	0	0
<b>Total Operating Revenue</b>	<b>\$20,892</b>	<b>\$19,791</b>	<b>\$44,492</b>	<b>\$22,175</b>
<b>Operating Expenses:</b>				
Operation and Maintenance	\$18,790	\$14,440	\$18,790	\$14,440
Depreciation	0	1,816	0	1,816
Property & Other Taxes	1,409	308	1,409	308
Income Tax	0	906	0	1,174
<b>Total Operating Expense</b>	<b>\$20,199</b>	<b>\$17,470</b>	<b>\$20,199</b>	<b>\$17,738</b>
<b>Operating Income/(Loss)</b>	<b>\$693</b>	<b>\$2,321</b>	<b>\$24,293</b>	<b>\$4,437</b>
<b>Rate Base O.C.L.D.</b>	<b>\$89,790</b>	<b>\$20,506</b>	<b>\$89,790</b>	<b>\$20,506</b>
<b>Rate of Return - O.C.L.D.</b>	<b>0.77%</b>	<b>11.32%</b>	<b>27.06%</b>	<b>21.64%</b>
<b>Operating Margin</b>	<b>3.32%</b>	<b>11.73%</b>	<b>54.60%</b>	<b>20.01%</b>

NOTE: 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		
Plant in Service	\$105,521	\$6,452	A	\$111,973
Less:				
Accum. Depreciation	0	82,559	B	82,559
<b>Net Plant</b>	<b>\$105,521</b>	<b>(\$76,107)</b>		<b>\$29,414</b>
Less:				
Plant Advances	\$3,308	(\$3,308)	C	\$0
Accumulated Deferred Income Taxes	0	0		0
<b>Total Advances</b>	<b>\$3,308</b>	<b>(\$3,308)</b>		<b>\$0</b>
Contributions Gross	\$12,423	\$6,745	D	\$19,168
Less:				
Accumulated Amortization of CIAC	\$0	\$8,541	E	\$8,541
<b>Net CIAC</b>	<b>\$12,423</b>	<b>(\$1,796)</b>		<b>\$10,627</b>
<b>Total Deductions</b>	<b>\$15,731</b>	<b>(\$5,104)</b>		<b>\$10,627</b>
Plus:				
1/24 Power	\$0	\$43	F	\$43
1/8 Operation & Maint.	\$0	\$1,676	G	\$1,676
Inventory	\$0	\$0		\$0
Prepayments	\$0	\$0		\$0
<b>Total Additions</b>	<b>\$0</b>	<b>\$1,719</b>		<b>\$1,719</b>
<b>Rate Base</b>	<b>\$89,790</b>	<b>(\$69,284)</b>		<b>\$20,506</b>

- A. See Schedule KN-2, page 2 of 4
- B. See Schedule KN-2, page 3 of 4
- C. See Schedule KN-2, page 3 of 4
- D. See Schedule KN-2, page 3 of 4
- E. See Schedule KN-2, page 3 of 4
- F. See Schedule KN-2, page 4 of 4
- G. See Schedule KN-2, page 4 of 4

**PLANT ADJUSTMENT**

	Company Exhibit	Adjustment	Staff Adjusted
301 Organization	\$0	\$0	\$0
302 Franchises	0	0	0
303 Land & Land Rights	4,000	0	4,000
304 Structures & Improvements	11,009	0	11,009
307 Wells & Springs	766	0	766
311 Pumping Equipment	40,772	6,091 a	46,863
320 Water Treatment Equipment	4,426	0	4,426
330 Distribution Reservoirs & Stan	25,668	0	25,668
331 Transmission & Distribution M	7,190	0	7,190
333 Services	1,665	0	1,665
334 Meters & Meter Installations	9,825	361 b	10,186
335 Hydrants	0	0	0
336 Backflow Prevention Devices	0	0	0
339 Other Plant and Misc. Equipm	0	0	0
340 Office Furniture & Equipment	200	0	200
341 Transportation Equipment	0	0	0
343 Tools Shop & Garage Equipm	0	0	0
344 Laboratory Equipment	0	0	0
345 Power Operated Equipment	0	0	0
346 Communication Equipment	0	0	0
347 Miscellaneous Equipment	0	0	0
348 Other Tangible Plant	0	0	0
105 C.W.I.P.	0	0	0
<b>TOTALS</b>	<b>\$105,521</b>	<b>\$6,452 A.</b>	<b>\$111,973</b>

A - Sum of Plant Additions moved from Repairs and Maintenance account

a. - To recognize addition of new pump

b. - To recognize addition of new meter

**STAFF ADJUSTMENTS**

B -	Accumulated Depreciation - Per Company	\$0	
	Per Staff		<u>\$ 82,559</u>
			<u>\$ 82,559</u>

Since the Company provided no accumulated depreciation Staff calculated accumulated depreciation beginning with accumulated depreciation authorized in Decision No. 67066 and bringing it forward through the end of the test year. (see Schedule KN-2 page 3.1-3.14).

C -	Advances in Aid of Construction(AIAC) - Per Company	\$3,308	
	Per Staff		<u>\$0</u>
	Staff reclassified plant advances as CIAC since they have not been refunded in a 10 year period.		(\$3,308)

D -	Contributions in Aid of Construction(CIAC) - Per Company	\$12,423	
	Per Staff		<u>\$19,168</u>
			<u>\$6,745</u>

Adjustment was made to reclassify plant advances as CIAC that have not been refunded in a 10 year period.	\$	3,308
Adjustment was made to recognize CIAC balance from Decision No. 67066.	\$	<u>3,437</u>
	\$	6,745

E -	Amortization of CIAC - Per Company	\$0	
	Per Staff		<u>\$ 8,541</u>
			<u>\$ 8,541</u>

To recognize amortization of CIAC balance per Decision No. 67066.	\$	3,437
To calculate amortization of CIAC since last rate case. (2003 through 2010).	\$	<u>5,104</u>
	\$	8,541

contribution per last rate case	\$	15,860
amortization rate	x	4.02%
	\$	<u>638</u>
number of years	x	8
	\$	<u>5,104</u>

**STAFF ADJUSTMENTS - (Cont.)**

F -	WORKING CAPITAL (1/24 PURCHASED PWR & WTR) - Per Company	\$0	
	Per Staff		<u>\$43</u>
	To reflect Staff's calculation of cash working capital based upon Staff's recommendations for purchased power and purchased water using the formula method.		<u>\$43</u>
G -	WORKING CAPITAL (1/8 OPERATION & MAINT EXP) - Per Company	\$0	
	Per Staff		<u>\$1,676</u>
	To reflect Staff's calculation of cash working capital based upon Staff's recommendations for operation and maintenance expense (excluding purchased power and purchased water expenses) using the formula method.		<u>\$1,676</u>

### STATEMENT OF OPERATING INCOME

	Company Exhibit	Staff Adjustments	Staff Adjusted
<b>Revenues:</b>			
461 Metered Water Revenue	\$20,892	(\$1,101) A	19,791
460 Unmetered Water Revenue	0	0	0
474 Other Water Revenues	0	0	0
<b>Total Operating Revenue</b>	<b>\$20,892</b>	<b>(\$1,101)</b>	<b>\$19,791</b>
<b>Operating Expenses:</b>			
601 Salaries and Wages	\$2,400	\$720 B	\$3,120
610 Purchased Water	0	0	0
615 Purchased Power	1,030	0	1,030
618 Chemicals	0	60 C	60
620 Repairs and Maintenance	7,512	(6,873) D	639
621 Office Supplies & Expense	766	(196) E	570
630 Outside Services	2,768	2,305 F	5,073
635 Water Testing	2,563	(1,555) G	1,008
641 Rents	1,200	0	1,200
650 Transportation Expenses	491	1,189 H	1,680
657 Insurance - General Liability	0	0	0
659 Insurance - Health and Life	0	0	0
666 Regulatory Commission Expense - Rate Case	0	0	0
675 Miscellaneous Expense	60	0	60
403 Depreciation Expense	0	1,816 I	1,816
408 Taxes Other Than Income	1,101	(1,101) J	0
408.11 Property Taxes	308	0	308
409 Income Tax	0	906 K	906
<b>Total Operating Expenses</b>	<b>\$20,199</b>	<b>(\$2,729)</b>	<b>\$17,470</b>
<b>OPERATING INCOME/(LOSS)</b>	<b>\$693</b>	<b>\$1,628</b>	<b>\$2,321</b>
<b>Other Income/(Expense):</b>			
419 Interest and Dividend Income	\$0	\$0	\$0
421 Non-Utility Income	0	0	0
427 Interest Expense	6,000	(6,000) L	0
4XX Reserve/Replacement Fund Deposit	0	0	0
426 Miscellaneous Non-Utility Expense	0	0	0
<b>Total Other Income/(Expense)</b>	<b>(\$6,000)</b>	<b>\$6,000</b>	<b>\$0</b>
<b>NET INCOME/(LOSS)</b>	<b>(\$5,307)</b>	<b>\$7,628</b>	<b>\$2,321</b>

### STAFF ADJUSTMENTS

A -	METERED WATER REVENUE - Per Company	20,892	
	Per Staff	<u>19,791</u>	<u>(\$1,101)</u>

The adjustment reflects Staff's removal of sales tax from metered revenue reported by the Company.

B -	SALARIES AND WAGES - Per Company	\$2,400	
	Per Staff	<u>3,120</u>	<u>\$720</u>

Staff estimated the owner worked 4 hrs per week at \$15 per hour.

Number of hours worked per week		4
Number of weeks in a year	x	52
		<u>208</u>
Wages per hour	x	\$15
	\$	<u>3,120</u>

C -	CHEMICALS - Per Company	0	
	Per Staff	<u>60</u>	<u>\$60</u>

The adjustment reflects Staff's calculation of materials and supplies based on the documentation submitted by the Company.

D -	REPAIRS AND MAINTENANCE - Per Company	\$7,512	
	Per Staff	<u>639</u>	<u>(\$6,873)</u>

Staff removed and capitalized \$6,452 for the cost of meters and a pump that the Company inappropriately expensed and removed \$421 that was for unsupported claimed expenses.

\$	6,452
\$	<u>421</u>
\$	6,873

E -	OFFICE SUPPLIES & EXPENSE - Per Company	\$766	
	Per Staff	<u>570</u>	<u>(\$196)</u>

To reflect calculations of reasonable office expenses.

6 books of stamps @ \$45 per book	\$	270
Ink cartridges for printer	\$	130
Misc. items (envelopes,ledgers,pens)	\$	<u>170</u>
	\$	570

**STAFF ADJUSTMENTS (Cont.)**

F -	OUTSIDE SERVICES - Per Company	\$2,768	
	Per Staff	<u>5,073</u>	<u>\$2,305</u>

Adjustments were made to reflect Staff's calculation of services rendered based on documentation submitted by Company.

Administrative Services	\$	1,800
Certified Operator Invoices	\$	1,175
Service calls for water leakage and meter removal, and meter locks	\$	988
Meter Reading @ \$80 per month	\$	960
Evaluation of water system	\$	<u>150</u>
	\$	5,073

G -	WATER TESTING - Per Company	\$2,563	
	Per Staff	<u>1,008</u>	<u>(\$1,555)</u>

Water testing expense determined by Staff Engineer  
See pg.16 of Engineering Report for further details.

H -	TRANSPORTATION EXPENSE - Per Company	\$491	
	Per Staff	<u>1,680</u>	<u>\$1,189</u>

Adjustments to reflect transportation expenses to Company for licensed operator.

Number of miles to and from Company		70
Reasonable rate \$ 0.50 per mile	x	<u>.50</u>
		\$35
Number of visits per month	x	<u>4</u>
		140
Number of months in a year	x	<u>12</u>
		1680

**STAFF ADJUSTMENTS (Cont.)**

I - DEPRECIATION EXPENSE - Per Company \$0  
Per Staff \$1,816 \$1,816

DESCRIPTION	PLANT In SERVICE Per Staff	NonDepreciable or Fully Depreciated PLANT	DEPRECIABLE PLANT (Col A - Col B)	DEPRECIATION RATE	DEPRECIATION EXPENSE (Col C x Col D)
Organization	\$ -	\$ -	\$ -	0.00%	\$ -
Franchises	\$ -	\$ -	\$ -	0.00%	\$ -
Land & Land Rights	4,000		\$ 4,000	0.00%	\$ -
Structures & Imprvmnts	11,009	\$ -	\$ 11,009	3.33%	\$ 367
Wells & Springs	\$ 766	\$ 766	\$ -	3.33%	\$ -
Pumping Equipment	\$ 46,863	\$ 40,772	\$ 6,091	12.50%	\$ 761
Water Treatment Equip	\$ 4,426	\$ -	\$ 4,426	3.33%	\$ 147
Distr. Res.- Storage	\$ 25,668	\$ -	\$ 25,668	2.22%	\$ 570
Trans & Distr Mains	\$ 7,190	\$ 7,190	\$ -	2.00%	\$ -
Services	\$ 1,665	\$ 1,665	\$ -	3.33%	\$ -
Meters & Meter Instal	\$ 10,186	\$ -	\$ 9,825	8.33%	\$ 608
Hydrants	\$ -	\$ -	\$ -	0.00%	\$ -
Backflow Prevention	\$ -	\$ -	\$ -	0.00%	\$ -
Other Plant and Misc. Eq.	\$ -	\$ -	\$ -	0.00%	\$ -
Office Furniture & Eq.	\$ 200	\$ 200	\$ -	6.67%	\$ -
Transportation Equipment	\$ -	\$ -	\$ -	0.00%	\$ -
Tools Shop & Garage Eq.	\$ -	\$ -	\$ -	0.00%	\$ -
<b>Total Plant</b>	<b>\$ 111,973</b>	<b>\$ 50,593</b>	<b>\$ 61,019</b>		<b>\$ 2,454</b>

Depreciation Expense Before Amortization of CIAC: \$ 2,454  
Less Amortization of CIAC\*: \$ 638  
**Test Year Depreciation Expense - Staff: \$ 1,816**  
Depreciation Expense - Company: 0  
**Staff's Total Adjustment: \$ 1,816**

**\* Amortization of CIAC Calculation:**  
Contribution(s) in Aid of Construction (Gross) 19,168  
Less: Non Amortizable Contribution(s) 0  
Less: NewContributions moved from AIAC in 2011 3,308  
Amortizable Contribution(s) 15,860  
Times: Staff Proposed Amortization Rate 4.02%  
**Amortization of CIAC \$ 638**

**STAFF ADJUSTMENTS (Cont.)**

J - TAXES OTHER THAN INCOME - Per Company	\$1,101	
Per Staff	<u>0</u>	<u>(\$1,101)</u>

To reflect the removal of sales tax paid that was collected via a pass-through provision.

K - INCOME TAX - Per Company	\$0	
Per Staff	<u>\$906</u>	<u>\$906</u>

To reflect the calculation of federal and state income tax.

**RATE DESIGN**

Monthly Usage Charge	Present	-Proposed Rates-	
	Rates	Company	Staff
5/8" x 3/4" Meter	\$27.85	\$55.00	\$28.25
3/4" Meter	\$41.78	\$55.00	\$41.78
1" Meter	\$69.63	\$82.50	\$69.63
1 1/2" Meter	\$139.25	\$139.25	\$139.25
2" Meter	\$222.80	\$275.00	\$222.80
3" Meter	\$0.00	\$440.00	\$0.00
4" Meter	\$696.25	\$880.00	\$696.25
6" Meter	\$1,392.00	\$1,500.00	\$1,392.00

Excess of Minimum - per 1,000 Gallons	\$0.00	\$0.00	\$0.00
Gallons Included in Minimum	0	0	0

Commodity Rates

5/8" x 3/4" Meter			
First Block	0-4,000	\$3.00	\$8.25 N/A
Second Block	4,001-30,000	\$4.25	\$13.90 N/A
Third Block	Over 30,000	\$4.75	\$20.50 N/A
First Block	0 - 3,000	N/A	N/A \$3.50
Second Block	3,001 - 8,000	N/A	N/A \$5.40
Third Block	Over 8,000	N/A	N/A \$7.55

Service Line and Meter Installation Charges	Present	-Company Proposed-		-Staff Recommended-		Total
	Rates	Service Line Charge	Meter Installation	Service Line Charge	Meter Installation	
5/8" x 3/4" Meter	\$420.00	N/A	N/A	\$334.00	\$116.00	\$450.00
3/4" Meter	\$495.00	N/A	N/A	318.00	182.00	500.00
1" Meter	\$580.00	N/A	N/A	\$595.00	231.00	595.00
1 1/2" Meter	\$820.00	N/A	N/A	473.00	452.00	925.00
2" Meter Turbine	\$2,140.00	N/A	N/A	\$2,250.00	-	ICB
3" Meter	\$0.00	N/A	N/A	\$0.00	-	ICB
4" Meter Turbine	\$4,105.00	N/A	N/A	\$4,250.00	-	ICB
6" Meter Turbine	\$7,590.00	N/A	N/A	\$7,750.00	-	ICB

Note - Individual Case Basis ("ICB") is used to refer to Staff's proposal to apply charges based on customer's specific cost for meters 2-inches and larger.

Service Charges

Establishment	\$15.00	\$25.00	\$15.00
Establishment (After Hours)	\$22.50	\$0.00	\$0.00
Reconnection (Delinquent)	\$25.00	\$50.00	\$25.00
Meter Test (If Correct)	\$15.00	\$25.00	\$15.00
Deposit	Per Rule	50.00	*
Deposit Interest	Per Rule	6.00%	**
Re-Establishment (Within 12 Months)	Per Rule	**	**
NSF Check	\$15.00	\$15.00	\$15.00
Deferred Payment	1.50%	1.50%	1.50%
Meter Re-Read (If Correct)	\$5.00	\$15.00	\$5.00
Late Fee (per Month)	1.50%	1.50%	1.50%
After Hours Service Charge	N/A	0	\$22.50

Monthly Service Charge for Fire Sprinkler

4" or Smaller	\$0.00	\$0.00	***
6"	0.00	0.00	***
8"	0.00	0.00	***
10"	0.00	0.00	***
Larger than 10"	0.00	0.00	***

\* 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.

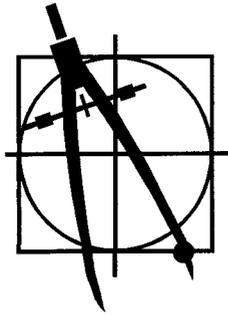
**TYPICAL BILL ANALYSIS**  
General Service 5/8 X 3/4 - Inch Meter

Average Number of Customers: 42

<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	3,331	\$37.84	\$82.48	\$44.64	118.0%
Median Usage	1,894	\$33.53	\$70.63	\$37.10	110.6%
<u>Staff Proposed</u>					
Average Usage	3,331	\$37.84	\$40.54	\$2.70	7.1%
Median Usage	1,894	\$33.53	\$34.88	\$1.35	4.0%

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	\$27.85	\$55.00	97.5%	\$28.25	1.4%
1,000	30.85	63.25	105.0%	31.75	2.9%
2,000	33.85	71.50	111.2%	35.25	4.1%
3,000	36.85	79.75	116.4%	38.75	5.2%
4,000	39.85	88.00	120.8%	44.15	10.8%
5,000	44.10	101.90	131.1%	49.55	12.4%
6,000	48.35	115.80	139.5%	54.95	13.7%
7,000	52.60	129.70	146.6%	60.35	14.7%
8,000	56.85	143.60	152.6%	65.75	15.7%
9,000	61.10	157.50	157.8%	73.30	20.0%
10,000	65.35	171.40	162.3%	80.85	23.7%
15,000	86.60	240.90	178.2%	118.60	37.0%
20,000	107.85	310.40	187.8%	156.35	45.0%
25,000	129.10	379.90	194.3%	194.10	50.3%
50,000	245.35	859.40	250.3%	382.85	56.0%
75,000	364.10	1,371.90	276.8%	571.60	57.0%
100,000	482.85	1,884.40	290.3%	760.35	57.5%
125,000	601.60	2,396.90	298.4%	949.10	57.8%
150,000	720.35	2,909.40	303.9%	1,137.85	58.0%
175,000	839.10	3,421.90	307.8%	1,326.60	58.1%
200,000	957.85	3,934.40	310.8%	1,515.35	58.2%



**ENGINEERING REPORT FOR  
Katherine Resort Water Company**

**Docket No.  
W-01751A-11-0331 (Rates)**

**By Del Smith**

**January xx, 2012**

**CONCLUSIONS**

1. Arizona Corporation Commission (“ACC” or “Commission”) Utilities Division Staff (“Utilities Staff” or “Staff”) concludes that the Katherine Resort Water Company (“Katherine Resort” or “Company”) water system has adequate storage and well production capacity to serve the present customer base and reasonable growth.
2. Lost water for Katherine Resort was calculated to be 7.2 percent during the test year which is within acceptable limits.
3. Customer growth in the Katherine Resort service area is expected to be minimal at least through 2013.
4. A check of the Utilities Division Compliance Section database showed that there are no delinquent Commission compliance items for Katherine Resort.
5. Katherine Resort has an approved Curtailment Tariff on file with the Commission.

**RECOMMENDATIONS**

1. Staff recommends that any increase in rates approved by the Commission not become effective until ADEQ has determined that the Company’s water system is delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. Staff further recommends the Company file with the Commission’s Docket Control as a compliance item in this matter 1) documentation showing that the minor Operation and Maintenance corrections have been made, 2) ADEQ documentation showing that all ADEQ Monitoring and Reporting requirements have been met and 3) ADEQ documentation showing that the Company’s water system is delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. This compliance documentation shall be filed within 90 days of the effective date of the Commission’s order in this matter.

2. Staff recommends an annual water testing expense of \$1,008 be used for purposes of this application.
3. Arizona Department of Water Resources (“ADWR”) has determined that Katherine Resort is currently not in compliance with departmental requirements for failure to file 2009 Annual Water Use Report. Staff recommends that the Company file with the Commission’s Docket Control as a compliance item in this docket, ADWR documentation showing compliance with ADWR requirements. Staff further recommends that this documentation be filed within 90 days of the effective date of the Commission’s Decision in this matter.
4. Staff recommends that the Company use the depreciation rates presented in Table B on a going forward basis.
5. Staff recommends approval of the Company’s proposed charges for meters and service lines smaller than 2-inches. For meters 2-inches and larger Staff recommends customer specific charges apply based on the Company’s costs. Staff recommends that the separate service line and meter installation charges listed under “Staff’s Recommendation” in Table C be adopted.
6. The Company does not have an approved Cross Connection or Backflow Prevention tariff. Staff recommends that the Company file a Cross Connection or Backflow Prevention Tariff as soon as possible, but no later than forty-five (45) days after the effective date of the Commission Decision in this matter. The tariff shall be filed with Docket Control as a compliance item under this same docket number for Staff’s review and certification. Staff further recommends that the Company file such a tariff in the form found on the Commission’s website at [www.azcc.gov/Divisions/Utilities/forms/CrossConnectBackflow.pdf](http://www.azcc.gov/Divisions/Utilities/forms/CrossConnectBackflow.pdf).
7. Staff recommends that Katherine Resort file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least three BMPs in the form of tariffs that substantially conform to the templates created by Staff for Commission’s review and consideration. The templates created by Staff are available on the Commission’s website at <http://www.azcc.gov/Divisions/Utilities/forms.asp> . Staff further recommends that a maximum of two BMPs may come from the “Public Awareness/Public Relations” or “Education and Training” categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.
8. Staff recommends that Katherine Resort post a sign at its well and tank site which meets the following. The sign should comply with ADEQ requirements and include the following information: system name, system PWS ID number and emergency contact phone number(s). Staff further recommends that the Company file documentation with Docket Control demonstrating compliance within forty-five (45) days of the effective date of the Commission Decision in this matter.

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## **A. INTRODUCTION AND LOCATION OF COMPANY**

On August 30, 2011, Katherine Resort Water Company (“Katherine Resort” or “Company”) filed an application with the Arizona Corporation Commission (“ACC” or “Commission”) to increase its rates (Docket No.W-01751A-11-0331). The Company’s current rates were approved in Commission Decision No. 67066, dated June 25, 2004. The ACC Utilities Division Staff (“Utilities Staff” or “Staff”) engineering review and analysis of the rate application filed on August 30, 2011, is presented in this report.

Katherine Resort is a Class E water utility company that provides public utility water service to 49 metered connections in the Katherine Resort Lands Subdivision, which is an isolated 50 lot development, surrounded by the Lake Mead National Recreation Area located in Mohave County approximately two miles north of Bullhead City and Davis Dam. Figure 1 shows the location of the Company and Figure 2 shows the Certificate of Convenience and Necessity (“CC&N”) which covers just over twelve acres. The CC&N was granted in Commission Decision No. 33059 dated April 19, 1961.

## **B. DESCRIPTION OF THE WATER SYSTEM**

The Katherine Resort water system was visited on January 12, 2012, by Staff members Del Smith and Katalin Nagy. Mr. Smith and Ms. Nagy were accompanied by Mr. Mike Avitabile. Mr. Avitabile handles the day-to-day operations of the Company. According to Arizona Department of Environmental Quality (“ADEQ”) records Jeffery Wileman is the Company’s Certified Operator<sup>1</sup>. Mr. Wileman wasn’t present during Staff’s site visit.

The water is pumped by two wells pumps that are suspended from the top of the 900 feet deep, Katherine Mine shaft. These pumps discharge water to a 20,000 gallon storage tank. Either well pump can be repaired or replaced while the other remains in service.<sup>2</sup> Each well pump has a yield of 95 gallons per minute (“gpm”). The water is chlorinated for disinfection before it enters the storage tank from there it is pressurized by two 3 horsepower booster pumps through a 5,500 gallon pressure tank then it is delivered to customers via the distribution system. The top of the mine shaft is sealed with a concrete slab and the wells are fitted with sanitary seals. The distribution system presently serves 49 metered connections<sup>3</sup>. Water level in the storage tank is automatically controlled. A water system schematic is shown as Figure 3 and Table A includes a detailed plant facility listing.<sup>4</sup>

---

<sup>1</sup> Mr. Wileman is a Certified Grade 3 Water Distribution System Operator and a Grade 2 Water Treatment Plan Operator, ADEQ Operator Identification No. OP009137.

<sup>2</sup> The Company manually alternates the operation of each well pump monthly.

<sup>3</sup> Customer meter count based on discussions with Company representatives at the time of Staff’s inspection. The Company estimated that 70 to 80 percent of these connections serve permanent residents.

<sup>4</sup> Plant equipment at the well site was constructed in 1992.

**Table A. Plant Facilities Summary<sup>5</sup>**

**Well Data**

	Well Pump 1	Well Pump 2
ADWR Well Registration No.		
ADWR System ID	91-000315.0000	
Casing Size	16 inch	10 inch
Casing Depth	450 feet	450 feet
Pump Size Horsepower (Hp)	15 hp	15 hp
Pump Yield	95 gpm	95 gpm
Meter Size	1 1/2 inch	1 1/2 inch

Notes:

- 1) Water level in the mine shaft is 400 feet below ground.

**Water Tanks, Booster Systems, Structures & Generators**

Structure or Equipment	Location	Quantity – Capacity, Size
Storage tank	Well Site	1 - 20,000 gallon
Pressure tank	Well Site	1 – 5,500 gallon
Booster Pumps	Well Site	2 – 3 hp Vertical
Chlorination system	Well Site	1 – 35 gallon drum
Security Fencing	Around Well & Tanks	-

Notes:

- 1) A small fiberglass enclosure is used to house the chlorination system and the unit used for well pump control.

**Distribution Mains**

Diameter	Material	Length
2 inch	Transite	300 ft
3 inch	Transite	310 ft
4 inch	Transite	1,680 feet

Notes:

- 1) Transite is a brand name for asbestos-cement pipe used in water distribution systems and in general construction.

<sup>5</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 Request and, 5) Information collected during Staff's site visit.

**Meters**

Size	Quantity
5/8 x 3/4 inch	49

**Fire Hydrants**

Size/Description	Quantity
Standard	2

MOHAVE COUNTY

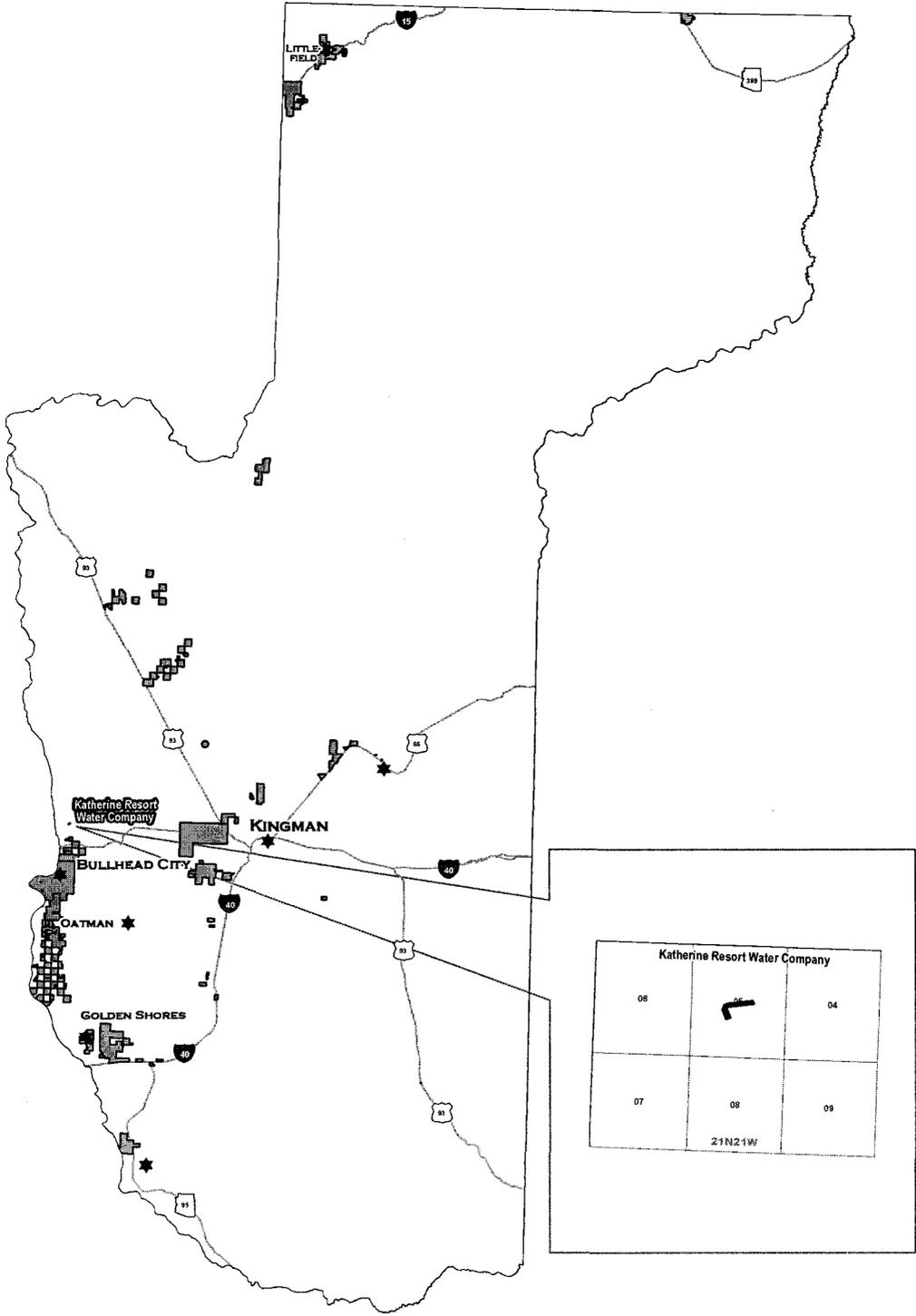


Figure 1. County Map

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

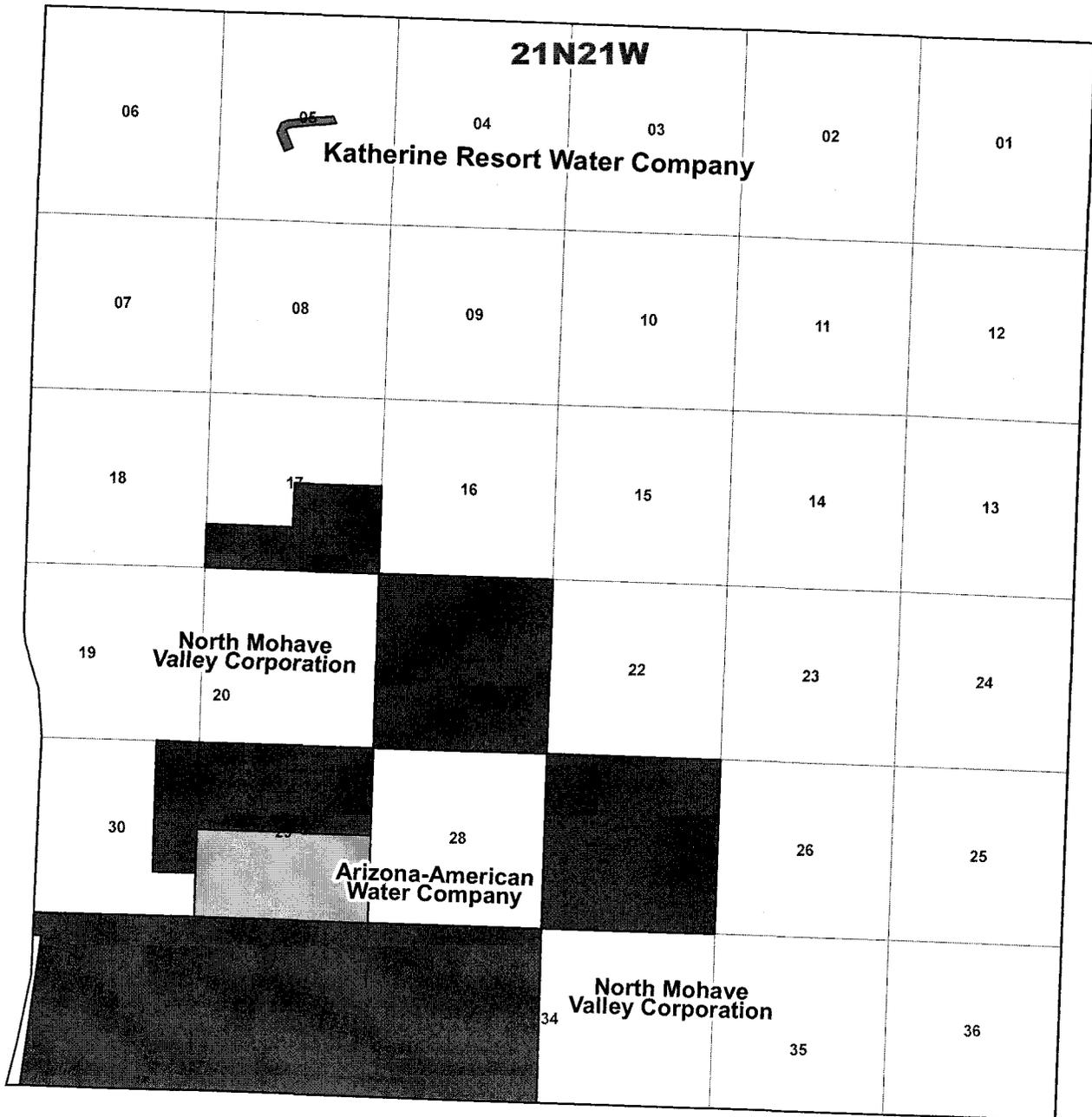


Figure 2. Certificated Area

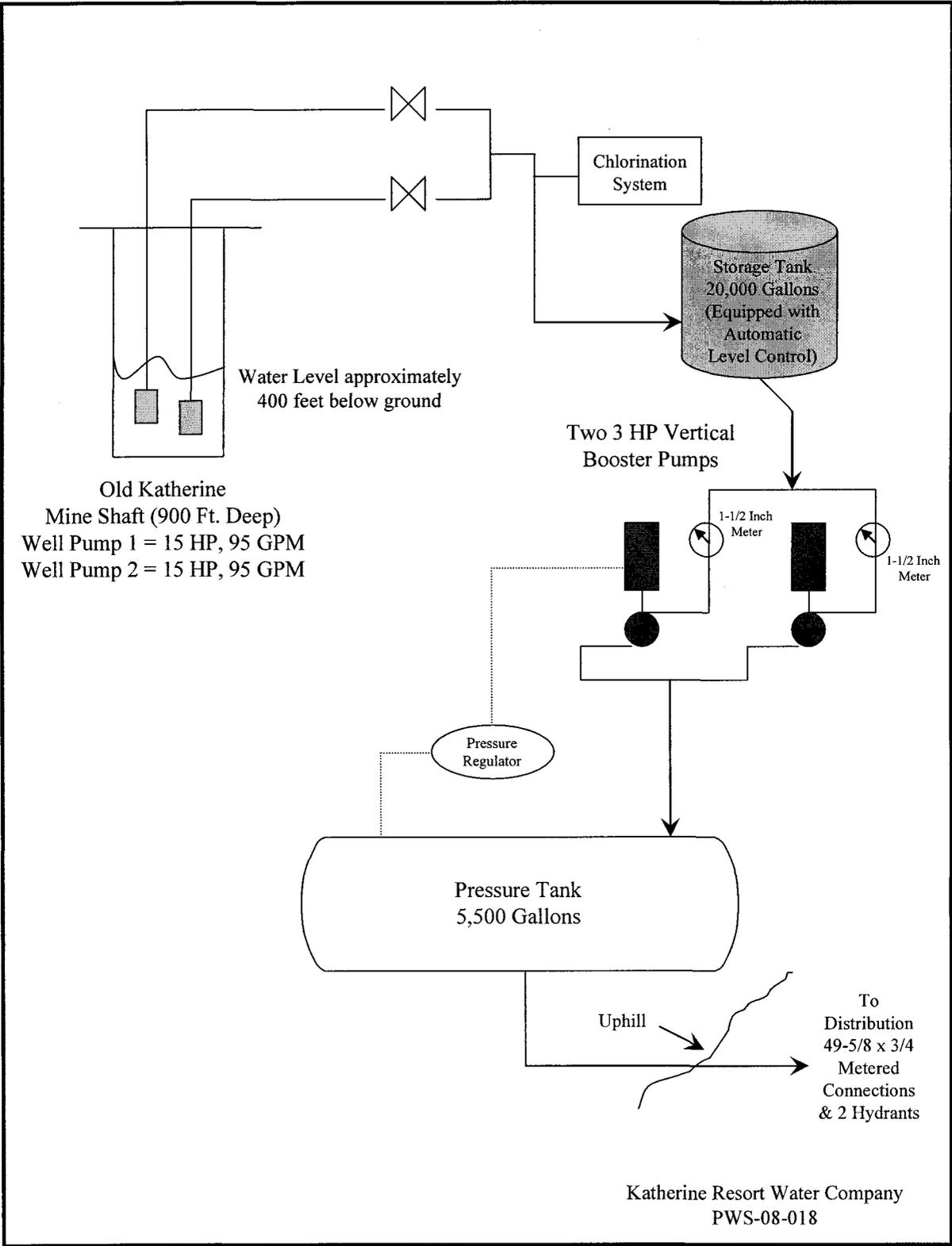
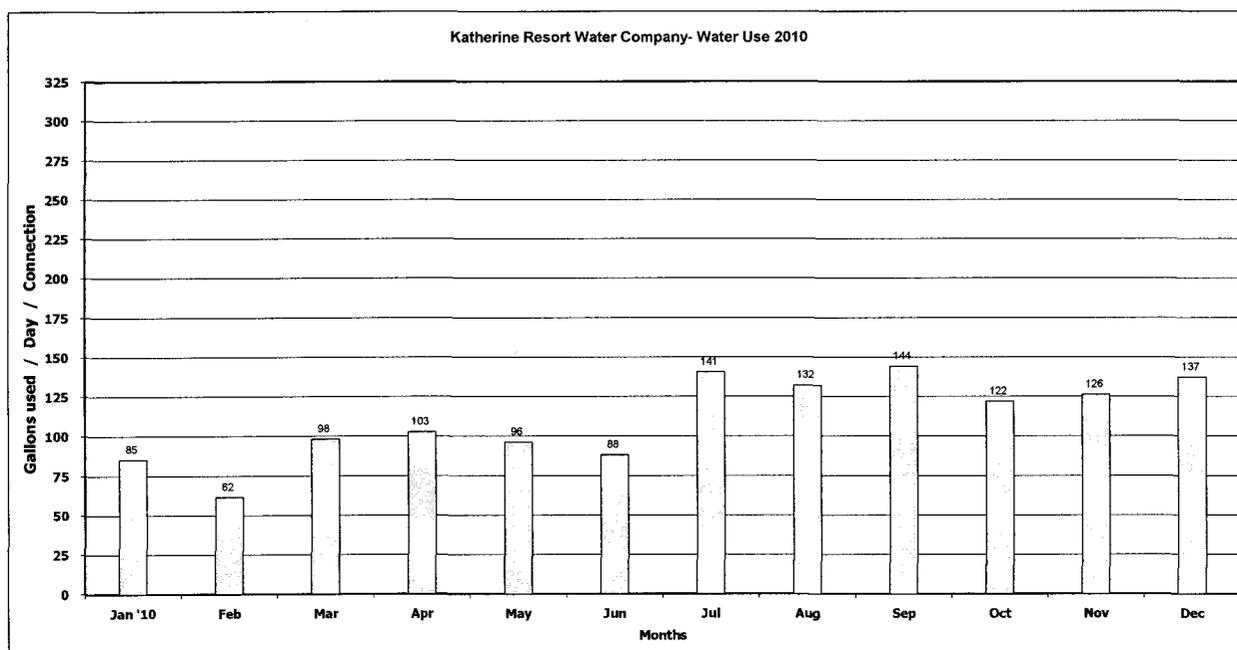


Figure 3. Water System Schematic

**C. WATER USE**

*Water Sold*

Figure 4 presents the water consumption data provided by the Company for the test year ending December 31, 2010. Customer consumption included a high monthly water use of 144 gallons per day (“GPD”) per connection in September, and the low water use was 62 GPD per connection in February. The average use for the twelve-month period was 111 GPD per connection. The Company reported 1,748,857<sup>6</sup> gallons of water sold during the test year.



**Figure 4. 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 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. Lost water for Katherine Resort was calculated to be 7.2 percent in 2010 which is within acceptable limits.

*System Analysis*

The Katherine Resort water system well production capacity is 200 gpm (there are two wells with each well rated at 100 gpm each well can operate independently either well pump can be repaired or replaced while the other remains in service) and the system currently has 20,000

<sup>6</sup> Total water sold during the test year based on the monthly data.

gallons of storage capacity. There are two fire hydrants in the distribution system however the system is not subject to a formal fire flow requirement. The system had 45 customers during the peak month of September 2010 when the Company reported 194,620 gallons sold. Staff concludes that the Katherine Resort water system has adequate production and storage capacity to serve the present customer base and reasonable growth.

#### **D. GROWTH**

The number of customers served by Katherine Resort has declined by two since 2007. The Company reported 48 customers served in 2007 and 46<sup>7</sup> customers served year end 2010. The Company expects growth to be minimal at least through 2013.<sup>8</sup> Historical growth for 2007 through 2009 is based on the data reported by the Company in its annual reports submitted to the Commission.

#### **E. ADEQ COMPLIANCE**

##### *Compliance*

ADEQ regulates the Katherine Resort water system under ADEQ Public Water System Identification ("PWS ID") No. 08-018. According to an ADEQ Compliance Status Report dated September 28, 2011, the Company's water system has major monitoring and reporting deficiencies and ADEQ cannot determine if this system is currently delivering water that meets water quality standards required by 40 CFR 141/Arizona Administrative Code, Title 18, Chapter 4.

ADEQ inspected the water system on October 28, 2011. At that time all Monitoring and Reporting requirements had not been met. Also minor deficiencies were found in the Operation & Maintenance of the water system. ADEQ recommended the following corrections be made:

1. The casing on the west well needs to be resealed.
2. Install check valve between the tank and the well.
3. Install a threadless sampling tap at the well head.
4. Seal opening where the target cable enters the tank.
5. Install resilient seal on the tank hatch.

Staff recommends that any increase in rates approved by the Commission not become effective until ADEQ has determined that the Company's water system is delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. Staff further recommends the Company file with the Commission's Docket Control as a compliance item in this matter 1) documentation showing that the minor Operation and

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<sup>7</sup> See number of customers listed under water use data on page 18 of the Application.

<sup>8</sup> See discussion regarding "Anticipated growth/decline in customers" on page 3 of the Application.

Maintenance corrections have been made, 2) ADEQ documentation showing that all ADEQ Monitoring and Reporting requirements have been met and 3) ADEQ documentation showing that the Company's water system is delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. This compliance documentation shall be filed within 90 days of the effective date of the Commission's order in this matter.

*Water Testing Expense*

The Company is subject to mandatory participation in the Monitoring Assistance Program ("MAP").<sup>9</sup> The Company reported water testing expenses of \$2,195.00 (including the MAP fee) during the test year. Staff has reviewed and recalculated these expenses. Table A presents Staff's adjusted annual water testing expense.

**Table A. Water Testing Cost**

Monitoring	Cost per test	Quantity of tests per 3 years	Annual Testing Cost
Total Coliform	\$20	36 (Note 1)	\$240
MAP – IOCs, Radiochemical, Nitrate, Nitrite; Asbestos, SOCs, & VOCs	MAP	MAP	\$368 (Note 2)
Lead & Copper	\$30	5 (Note 3)	\$50
Disinfection Byproducts (TTHM & HAA5)	\$350	3	\$350
Total Testing Cost	-	-	<b>\$1,008</b>

- Notes: 1) Assumes one test monthly (based on one Point of Entry).  
 2) The ADEQ MAP invoice for Calendar Year 2011 was \$368.22.  
 3) Assumes lead and copper testing will remain at 5 tests triennially.

<sup>9</sup> The MAP program is mandatory for water systems, which serve less than 10,000 persons (approximately 3,300 service connections).

Staff recommends an annual water testing expense of \$1,008 be used for purposes of this application.

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

The Katherine Resort service area is not located within any ADWR Active Management Area. ADWR has determined that Katherine Resort is currently not in compliance with departmental requirements for failure to file 2009 Annual Water Use Report.<sup>10</sup>

Staff recommends that the Company file with the Commission’s Docket Control as a compliance item in this docket, ADWR documentation showing compliance with ADWR requirements. Staff further recommends that this documentation be filed within 90 days of the effective date of the Commission’s Decision in this matter.

#### **G. ACC COMPLIANCE**

A check of the Utilities Division Compliance Section database showed that there are no delinquent Commission compliance items for Katherine Resort.<sup>11</sup>

#### **H. DEPRECIATION RATES**

Per Decision No. 67066 the Company has been using depreciations rates by National Association of Regulatory Utility Commissioners (“NARUC”) plant category. The following table lists the annual depreciation rates by NARUC plant category currently recommended by Staff. These rates represent typical and customary values within a range of anticipated equipment life. Staff recommends that the Company use the depreciation rates presented in Table B on a going forward basis.

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<sup>10</sup> Per ADWR Non-Compliance Notification Report received September 9, 2011.

<sup>11</sup> Per Compliance Section email dated November 30, 2011.

**Table B. 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

**I. OTHER ISSUES**

*1. Service Line and Meter Installation Charges*

Katherine Resort proposes to increase its existing service line and meter installation charges.<sup>12</sup> These charges are refundable advances and the Company’s proposed charges for meters smaller than 2-inches are below the typical range for these charges. Therefore, Staff recommends approval of the Company’s proposed charges for meters smaller than 2-inches. 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, using the Company’s proposed total charge for meters smaller than 2-inches separate service line and meter charges have been developed by Staff. For meters 2-inches and larger Staff recommends customer specific charges apply based on the Company’s costs. Staff recommends that the charges listed under “Staff’s Recommendation” in Table C be adopted.

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

		Company Proposed			Staff’s Recommendation		
Meter Size	Company Current Tariff	Service Line Charge	Meter Charge	Total Charge	Service Line Charge	Meter Charge	Total Charge
5/8 x 3/4-inch	\$420	-	-	\$450	\$334	\$116	\$450
3/4-inch	\$495	-	-	\$500	\$318	\$182	\$500
1-inch	\$580	-	-	\$595	\$364	\$231	\$595
1-1/2-inch	\$820	-	-	\$925	\$473	\$452	\$925
2-inch Turbine	\$2,140	-	-	\$2,250	-	-	ICB
2-inch Comp	-	-	-	-	-	-	-
3-inch Turbine	-	-	-	-	-	-	-
3-inch Comp	-	-	-	-	-	-	-
4-inch Turbine	\$4,105	-	-	\$4,250	-	-	ICB
4-inch Comp	-	-	-	-	-	-	-
6-inch Turbine	\$7,590	-	-	\$7,750	-	-	ICB
6-inch Comp	-	-	-	-	-	-	-

Notes:

1) Individual Case Basis (“ICB”) is used in the Table C to refer to Staff’s proposal to apply charges based on customer specific costs for meters 2-inches and larger.

*2. Curtailment Tariff*

Katherine Resort has an approved Curtailment Tariff on file with the Commission.

<sup>12</sup> The Company’s current charges were approved in Decision No. 67066.

### *3. Backflow Prevention Tariff*

The Company does not have an approved Cross Connection or Backflow Prevention tariff. The purpose of the backflow prevention tariff is to protect the Company's water from the possibility of contamination caused by the backflow of contaminants that may be present on the customer's premises by requiring the installation and periodic testing of backflow prevention assemblies pursuant to the provisions of the Arizona Administrative Code ("A.A.C.") R14-2-405.B.6 and A.A.C. R18-4-215.

Staff recommends that the Company file a Cross Connection or Backflow Prevention Tariff as soon as possible, but no later than forty-five (45) days after the effective date of the Commission Decision in this matter. The tariff shall be filed with Docket Control as a compliance item under this same docket number for Staff's review and certification. Staff further recommends that the Company file such a tariff in the form found on the Commission's website at [www.azcc.gov/Divisions/Utilities/forms/CrossConnectBackflow.pdf](http://www.azcc.gov/Divisions/Utilities/forms/CrossConnectBackflow.pdf).

### *4. Best Management Practices ("BMP") Tariff*

In 2008, ADWR added a new regulatory program for the ADWR Third Management Plan for AMAs. The new program, called Modified Non-Per Capita Conservation Program ("Modified NPCCP"), addresses large municipal water providers (cities, towns and private water companies serving more than 250 acre-feet per year) and was developed in conjunction with stakeholders from all AMAs. Participation in the program is required for all large municipal water providers that do not have a Designation of Assured Water Supply and that are not regulated as a large untreated water provider or an institutional provider.

The Modified NPCCP is a performance-based program that requires participating providers to implement water conservation measures that result in water use efficiency in their service areas. A water provider regulated under the program must implement a required Public Education Program and choose one or more additional BMPs based on its size, as defined by its total number of water service connections. The provider must select the additional BMPs from the list included in the Modified NPCCP Program. The BMPs are a mix of technical, policy, and information conservation efforts.

Although the implementation of the Modified NPCCP is required of large municipal water providers within an AMA, the Commission has previously adopted the BMPs for implementation by Commission regulated small and large water companies.

Staff recommends that Katherine Resort file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least three BMPs in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. The templates created by Staff are available on the Commission's website at <http://www.azcc.gov/Divisions/Utilities/forms.asp>.

Staff further recommends that a maximum of two BMPs may come from the “Public Awareness/Public Relations” or “Education and Training” categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

*5. Posting of Sign at Facility Site*

During its site inspection Staff noted that a sign listing the Company’s identification information was not posted at the well and tank site. Staff recommends that Katherine Resort post a sign at its well and tank site which meets the following. The sign should comply with ADEQ requirements and include the following information: system name, system PWS ID number and emergency contact phone number(s). Staff further recommends that the Company file documentation with Docket Control demonstrating compliance within forty-five (45) days of the effective date of the Commission Decision in this matter.