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MEMORANDUM

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AZ CORP COMMISSION
DOCKET CONTROL

TO: Docket Control

FROM: Thomas M. Broderick
Director
Utilities Division

A handwritten signature in black ink, appearing to read "T. M. Broderick".

DATE: October 13, 2015

RE: STAFF REPORT FOR CORDES LAKES WATER COMPANY'S
APPLICATION FOR A PERMANENT RATE INCREASE (DOCKET NO. W-
02060A-15-0245)

Attached is the Staff Report for Cordes Lakes Water Company's application for a permanent rate increase. Staff recommends approval of the rate application using Staff's recommended rates and charges.

Any party who wishes may file comments to the Staff Report with the Commission's Docket Control by 4:00 p.m. on or before October 23, 2015.

TMB:MJR:red/RWG

Originator: Mary J. Rimback

Arizona Corporation Commission

DOCKETED

OCT 13 2015

DOCKETED BY	A handwritten signature in black ink, appearing to be "KJ".
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Service List for: Cordes Lakes Water Company
Docket No. W-02060A-15-0245

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Cordes Lakes Water Company
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**STAFF REPORT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION**

**CORDES LAKES WATER COMPANY
DOCKET NO. W-02060A-15-0245**

**APPLICATION FOR A
PERMANENT RATE INCREASE**

OCTOBER 13, 2015

STAFF ACKNOWLEDGMENT

The Staff Report for Cordes Lakes Water Company ("Cordes" or "Company") Docket No. W-02060A-15-0245 is the responsibility of Staff members listed below. Mary J. Rimback was responsible for the review and analysis of the Company's application, recommended revenue requirement, rate base, and rate design. Michael Thompson was responsible for the engineering and technical analysis. Thomas Davis 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 Utility Analyst



Michael Thompson
Utilities Engineer



Thomas Davis
Public Utilities Consumer Analyst I

**EXECUTIVE SUMMARY
CORDES LAKES WATER COMPANY
DOCKET NO. W-02060A-15-0245**

Cordes Lakes Water Company ("Cordes" or "Company") is a for-profit Arizona "C" Corporation and a Class D public service corporation serving potable water to approximately 1,333 customers in the vicinity of Cordes Junction, in Yavapai County, Arizona.

On July 2, 2015, the Company filed an application for a permanent rate increase. On July 30, 2015, Staff filed a letter declaring the application sufficient.

The Company proposed operating revenue of \$534,535, an increase of \$102,338, or 23.68 percent, over test year revenue of \$432,197. This provides a \$24,073 operating income on its proposed \$240,737 fair value rate base ("FVRB") which is its original cost rate base ("OCRB"). The Company's proposed revenues result in a cash flow of \$51,462 and a rate of return of 10.00 percent. The Company proposed rates would increase the typical monthly bill for a 3/4-inch meter residential customer, with median usage of 2,814 gallons by \$5.20 or 26.31 percent from \$19.77 to \$24.97.

Staff recommends permanent rates that produce total operating revenue of \$516,440; an increase of \$84,242, or 19.49 percent, over test year revenue of \$432,197. This provides a \$24,201 operating income on the Staff adjusted \$242,011 FVRB. Staff's recommended rates result in a cash flow of \$51,590 and a rate of return of 10.00 percent. Staff's recommended rates would increase the typical monthly bill for a 3/4-inch meter residential customer, with median usage of 2,814 gallons, by \$4.28 or 21.66 percent from \$19.77 to \$24.05.

Staff recommends:

- Approval of Staff's rates and charges as shown in Schedule MJR-4.
- In addition to collection of its regular rate 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 F of the Engineering Report.
- Directing Cordes, 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.

- Directing the Company to receive approval from the ACC, prior to incurring any long-term debt.
- Directing the Company to re-classify notes/payable to affiliates, which are owed for longer than 12 months to Paid in Capital on the Company's balance sheet.
- That Cordes continue to monitor and record monthly water losses and repair all leaks when discovered and located.
- That Cordes install identification signs at each of its sites to include, at a minimum, the plant site name, Arizona Department of Water Resources ("ADWR") well number, and emergency phone number.
- That the Well Site No. 4 hydro-pneumatic tank be repaired or replaced.

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FACT SHEET

Company Statistics:

Current Rates: Decision No. 74155 effective November 1, 2013.

Type of Ownership: C-Corporation.

Location: The Company's service area is located in the vicinity of Cordes Junction in Yavapai County, Arizona.

Rates:

Rate Application Docketed: July 2, 2015
Current Test Year Ended: December 31, 2014
Application Found Sufficient: July 30, 2015

	<u>Current Rates</u>	<u>Company Proposed Rates</u>	<u>Staff Recommended Rates</u>
Monthly Minimum Charge (Based on a 3/4-inch meter)	\$11.75	\$14.84	\$14.40
Gallons in Minimum	0	0	0
Commodity Charge (Based on a 3/4-inch meter): Excess of minimum, charge per 1,000 gallons:			
0 to 3,000 Gallons	\$2.85	\$3.60	\$3.43
3,001 to 8,000 Gallons	\$4.25	\$5.36	\$5.11
Over 8,000 Gallons	\$6.50	\$7.23	\$7.01
Bulk/Construction/Standpipe per 1,000 gallons	N/T	N/T	\$7.01
Typical residential bill based On median usage of 2,814 gallons	\$19.77	\$24.97	\$24.05

Customers:

Number of customers in the prior test year (12/31/2011):	1,300
Number of customers in the current test year (12/31/2014):	1,333

FACT SHEET (CONT'D)

Current year customers by meter size:	
3/4-inch:	1,326
1-inch:	5
1-1/2-inch	1
2-inch	1
Seasonal customers:	zero
Customer notification mailed	July 1, 2015
No. of customers in opposition to rate increase	-0-
No. of customer complaints January 1, 2012 through September 14, 2015:	6
Percentage of complaints to customer base:	.45%

SUMMARY OF RATE FILING

The test year results, as adjusted by Staff, for Cordes Lakes Water Company (“Cordes” or “Company”) show total operating revenue of \$432,197 and operating expenses of \$474,577 resulting in a \$42,380 operating loss, to provide no rate of return on the \$242,011 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 proposed revenue of \$534,535, as shown on page 6 of the application. The amount requested produces an increase of \$102,338 or 23.68 percent over test year revenue of \$432,197 to provide a \$24,073 operating income and a 10.00 percent rate of return on its proposed \$240,737 FVRB and OCRB. The Company’s proposed rates result in a cash flow of \$51,462. The Company’s proposed rates would increase the typical monthly bill for a 3/4-inch meter residential customer, with median usage of 2,814 gallons, by \$5.20 or 26.31 percent, from \$19.77 to \$24.97 (Schedule MJR-5).

Attachment A to the Application, states that amounts additional to the amounts requested in the preceding paragraph, are more appropriate. The additional amounts are approximately \$30,000 annually. The additional amounts include a cash flow of \$81,000 per year, and an operating margin of 10 percent. Staff calculates the rate of return at this level of revenues at an estimated 21.80 percent. The additional funds are attributed to possible emergencies and implementation of a water loss control system for Cordes. Staff is recommending cash flow to meet contingencies in this rate application. A water loss control system is not included in the rates as the cost of the system is not known and measurable at this time.

The Company has applied for a grant from the Water Infrastructure Finance Authority (“WIFA”) to pay the cost of a Loss Analysis and Leak Detection Survey. Grants up to \$35,000 are available from WIFA.

Staff recommends permanent rates that produce total operating revenue of \$516,440, an increase of \$84,242 or 19.49 percent, over the test year revenue of \$432,197. This provides a \$24,201 operating income and a 10.00 percent rate of return on the \$242,011 Staff adjusted FVRB. Staff’s recommended rates result in a cash flow of \$51,590. Staff’s recommended rate design for permanent rates would increase the typical monthly bill for a 3/4-inch meter residential customer with median usage of 2,814 gallons by \$4.28, or 21.66 percent, from \$19.77 to \$24.05.

Cordes serves an area located in the vicinity of Cordes Junction, Yavapai County, Arizona. During the test year ended December 31, 2014, Cordes provided water to 1,333 customers. Out of the total, 1,326 were served by 3/4-inch meters, 5 were served by 1-inch meters, one by a 1 1/2-inch meter and one by a 2-inch meter.

Cordes’ business activities are currently performed by two administrative employees, plus a general manager. Operational activities are performed by an On-site Manager, an Operator and two field technicians. In addition, the Company contracts with outside services for billing, payroll, accounting and regulatory requirements.

COMPANY BACKGROUND

Cordes is a for-profit Arizona C-Corporation and a Class D public service corporation serving potable water to approximately 1,333 customers in an located area in the vicinity of Cordes Junction, in Yavapai County, Arizona. The Certificate of Convenience and Necessity ("CC&N") for the water system was granted in Decision No. 39646, dated September 13, 1968. Current rates were established in Decision No. 74155 effective November 1, 2013.

Cordes filed an application for a permanent rate increase ("Application") on July 2, 2015. Staff deemed the Company's rate application sufficient and notified Cordes by letter on July 30, 2015. The Company mailed a rate application notice to customers on July 1, 2015.

Related Companies

The Company shares a common ownership with three other entities that are included in the support for this application. Page 5 of the application describes the common control of Cordes Lakes Water and Arizona Water Works Supply ("AWWS") incorporated September 23, 1969. Cordes purchases supplies and plant from AWWS. Cordes is directly billed for plant and supplies from AWWS.

Cordes is affiliated with Berneil Water Company ("Berneil") incorporated October 23, 1951. Berneil is a water company regulated by the Arizona Corporation Commission ("ACC") or ("Commission"). Berneil is located within the limits of the Town of Paradise Valley, in Maricopa County, Arizona. Berneil and Cordes share some expenses. Allocation of these expenses is discussed below under "Cost Allocation among Affiliated Companies".

Cordes is also affiliated with TBS Irrigation Products, located in El Cajon, California. TBS Irrigation provides billing services to Cordes.

Cost Allocation among Affiliated Companies

For the most part, the Company directly charges costs to the two water Companies (Cordes and Berniel). However, some costs appear to be allocated on an arbitrary basis.

Workers Compensation insurance was allocated based on labor hours, though the policy clearly states a rate per \$100 for each classification of payroll not labor hours. Staff recommends the workers compensation policy be allocated based on exposure as shown on the policy.

General Liability insurance was allocated based on number of connections rather than the actual exposure insured by the policy. General liability insurance is purchased to protect the Company's assets from third party claims. As such, connections are not an adequate cost indicator. Staff allocated insurance based on the revenues reported in this rate case by Cordes and in Annual reports provided to the Commission for Berneil.

Rent and an Officer's salary were allocated on a 50/50 basis to each water Company. No basis for this amount was shown in the application. Staff allowed this allocation, but recommends that in the future the Company track the actual office time spent on each water company or develop a more comprehensive method of allocating these costs. A comprehensive method will allocate based on several factors contributing to the cost such as revenues, expenses, plant, number of connections, or labor.

Long-Term Debt

The Company's application on page 24, "Supplemental Financial Data" shows long-term debt outstanding for two loans (\$6,009 matures 2/13/2016) and (\$8,123 matures 8/6/2016). Instructions on the application page 24 include the following instructions:

"ARS 40-301 requires ACC approval of long-term debt. If the Commission has not approved any of the above loans, then please submit an application requesting approval of the above loans."

The Company stated in response to a data request from Staff that the Company was not aware that Commission approval was required for a vehicle loan and that the Company had not requested authorization for the long-term debt.

Staff notes no exemption for long-term debt on vehicles. The Company included both items in rate base and requested a return on the vehicles purchased. Further, the debt is an encumbrance against the water company; as such, it does affect the rate-payers of Cordes.

As a practical matter, Staff recommends no action on the part of the Company for these particular loans. The current rate application is scheduled for a Commission order on or about January 26, 2016. The loans are scheduled to be paid in full within six months of the anticipated Decision on the rates. As such, Staff recommends no application be filed for approval of the loans, but that the Company be placed on notice as to any further long-term debt obligations. Commission rules require the prior approval of all long-term debt.

Notes/Accounts Payable to Associated Companies

The Company's application, on page 23, shows an amount of \$267,988 as "Notes/Accounts Payable to Associated Companies". Staff Reviewed the Company's General Ledger for itemization of these payables. Payables are shown in accounts:

- 234.1 Payable AZWW,
- 234.2 Payable Berneil Water
- 234.3 Payable FUCSP

The Company general ledger reflects that a portion of these accounts are owing to associated companies for a term longer than twelve months. Details in the general ledger are:

Payable 234.1 AZWW

Payable to affiliates Beginning of Test Year:	\$109,000
Additional credits to account	6,000
Balance at end of year	\$115,000

Payable older than twelve months: \$109,000

Payable 234.2 Berneil Water

Payable to affiliates Beginning of Test Year:	\$ 74,400
Additional credits to account	182,440
Debits to account	114,852
Balance at end of year	\$141,988

Payable older than twelve months: \$74,400

Payable 234.3 FUCSP

Payable to affiliates Beginning of Test Year:	\$11,000
---	----------

No transactions to this account are recorded in the test year, and the ending balance remains \$11,000 at the end of the year

Payable older than twelve months \$11,000

Subtotal older than twelve months:

Arizona Water Works	\$109,000
Berneil Water	\$ 74,400
FUCSP	<u>\$ 11,000</u>
Subtotal	\$194,400

Staff notes that the beginning balances from the prior year were not paid back within the twelve months of the test year. This would indicate that the payables are by definition long-term debt. As noted above ARS 40-301 requires ACC prior approval of long-term debt. No approval was sought or proposed by the Company for the payable to affiliates.

Staff recommends that debt owed to affiliates that is beyond one year and not approved by the ACC be reclassified as Paid in Capital rather than notes payable, reducing the payable to affiliates to \$73,587 and increasing the Paid in Capital by \$194,400.

CONSUMER SERVICES

A review of the Consumer Service records showed that for the period January 1, 2012, through September 14, 2015, the following customer complaints were filed against the Company.

2012 – Zero Complaints

2013 – Four complaints – two billing, one disconnect/termination, one construction

2014 – One complaint – one disconnect/termination
2015 – One complaint – once disconnect/termination

All complaints have been resolved and closed.

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

COMPLIANCE ISSUES

The Company has no delinquent compliance items with the Commission's Utilities Division. The Company is current on its property tax obligations.

ENGINEERING ANALYSIS

An inspection of the system was performed by Staff member Michael Thompson on August 19, 2015. Staff was accompanied by Mr. Ray Jones, P.E. (Principle, ARICOR Water Solutions), and Mr. Richard Ross (Manager and Operator, Cordes Lakes). Staff's Engineering Report was prepared by Michael Thompson and is attached as Exhibit A.

Cordes Water has an approved Backflow Prevention tariff on file with the ACC.

Cordes has an approved Curtailment tariff on file with the ACC.

Cordes has five (5) Best Management Practice ("BMP") Tariffs on file with the Commission.

RATE BASE

Staff's two rate base adjustments result in a net increase to the Company's proposed rate base by \$1,274 from \$240,737 to \$242,011, 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 \$3,500 as shown in Schedule MJR-2, page 2. The adjustment re-classifies outside services related to an extension of the Company's CC&N from an expense item to capitalized plant account 301 Organization.

Working Capital – In Adjustment B, Staff decreased rate base in the amount of \$2,226 to conform to Staff's operating income adjustments for Working Capital that was calculated using the formula method. 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 five operating income adjustments decrease the Company's proposed total operating

loss by \$14,003, from \$56,382 to \$42,380, as shown in Schedule MJR-3, page 1. Details of Staff's adjustments are discussed below.

Outside Services – Adjustment A decreases this account by \$3,500 to re-classify from expenses to plant the outside services associated with the extension of the CC&N ordered by Decision No. 74155.

Water Testing – Adjustment B increases water testing expenses by \$197 to reflect Staff's recommended amount of \$5,122. See Engineering Report Table E.

Rents – Adjustment C decreases rents by \$5,109 to more closely reflect office rent in zip code 85281, which is the zip code for the allocated rent expense. The Company allocated rent 50/50 between Berneil and Cordes water companies. The amount of \$15,000 was allocated for 192 square feet or \$78.13 per foot. Staff spot checked rents for the zip code and calculated an average of \$24.91 per foot for the office rent in Tempe, Az.

Insurance- General Liability – Adjustment D decreases insurance expense by \$9,393. The Company included workers compensation (\$12,019) allocated on labor hours and a package commercial policy (\$13,589) allocated on customer count. Staff decreased the workers compensation premium by \$3,182 to reflect actual exposure per \$100 of payroll classification as shown on the policy declarations page and Staff decreased the amount allocated for the commercial package policy by \$6,211 to a more appropriate exposure based on Revenues.

Income Taxes – Adjustment E increases this expense by \$3,802 to allow for Staff calculated income taxes on the test year operating loss as shown in MJR-3, page 5.

REVENUE REQUIREMENT

Staff recommends total operating revenue from permanent rates of \$516,440, an increase of \$84,242, or 19.49 percent, over the test year revenue of \$432,197. Staff's recommended revenue provides an operating income of \$24,201 and a cash flow of \$51,590 as shown in Schedule MJR-1. Staff derived the revenue requirement by applying a rate of return on rate base. Staff's recommended revenue is sufficient to cover operating and maintenance expense and to manage contingencies.

RATE DESIGN

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

There are four meter sizes presently in use in the system: 3/4-inch, 1-inch, 1-1/2 inch, and 2-inch. Approximately 1,326 meters are 3/4-inch meters. The 3/4-inch meter has a three-tiered commodity rate structure with break-over points at 3,000 and 8,000 gallons. The current tier rates are \$2.85, \$4.25, and \$6.50 with a monthly minimum of \$11.75. All other meters have a two-tiered rate structure. The 1-inch meter has a break-over point of 10,000 and current commodity rates of

\$4.25 and \$6.50 with a monthly minimum of \$19.50. The 1-1/2 inch meter break-over point is 17,000 gallons and current commodity rates of \$4.25 and \$6.50 with a monthly minimum of \$39.25. There is currently one customer with a 1-1/2 inch meter. The break-over point for the 2-inch meter is 26,000 gallons and current commodity rates of \$4.25 and \$6.50 with a monthly minimum of \$62.50. There is only one customer with a 2-inch meter.

The Company proposes to maintain the existing break-over points for all meter sizes and increases the commodity tier rates from \$2.85 to \$3.60 (a 26.3 percent increase) for the first tier, from \$4.25 to \$5.36 (a 26.1 percent increase) for the second tier and from \$6.50 to \$7.23 (a 11.2 percent increase) for the third tier. Minimum Monthly charges are proposed to increase from \$11.75 to \$14.84 (26.3 percent increase) for the 3/4-inch meter; from \$19.50 to \$24.73 (a 26.8 percent increase) for the 1-inch meter; from \$39.25 to \$49.45 (a 26.0 percent increase) for the 1-1/2 inch meter; and from \$62.50 to \$79.12 (a 26.6 percent increase) for the 2-inch meter. The Company proposes similar percentage increases in the minimum monthly charges for other meter sizes. The Company's proposed rates would increase the typical residential bill, with a median usage of 2,814 gallons, by \$5.20 (26.31 percent), from \$19.77 to \$24.97. (Schedule MJR-5).

Staff recommends a rate structure that maintains the existing break-over points for all meter sizes and increases the commodity tier rates from \$2.85 to \$3.43 (a 20.35 percent increase) for the first tier, from \$4.25 to \$5.11 (a 20.24 percent increase) for the second tier and from \$6.50 to \$7.01 (a 7.85 percent increase) for the third tier. Minimum Monthly charges are proposed to increase from \$11.75 to \$14.40 (22.55 percent increase) for the 3/4-inch meter; from \$19.50 to \$25.50 (a 23.08 percent increase) for the 1-inch meter; from \$39.25 to \$48.00 (a 22.29 percent increase) for the 1-1/2 inch meter; and from \$62.50 to \$76.80 (a 22.88 percent increase) for the 2-inch meter. Staff recommends similar percentage increases in the minimum monthly charges for other meter sizes. Staff's recommended rates would increase the typical residential bill, with a median usage of 2,814 gallons, by \$4.28 (21.66 percent), from \$19.77 to \$24.05. (Schedule MJR-5).

The Company proposes and Staff recommends no change to the current service line and meter installation charges as shown in MJR-4.

Bulk Water/Construction/Standpipe Rates

The Company does not currently have bulk water, construction or standpipe rates included in the tariff, nor did the Company propose such a rate. Staff recommends that a bulk water, construction and standpipe rate be added to the tariff. The tariff presumes that the purchaser is paying for a commodity as needed and that no meter is installed on a permanent basis for the customer. As such, Staff's recommendation is to charge for usage at the highest tier rate only, no separate monthly minimum is to be charged to the customer.

Other Service Charges

The Company's application does not propose a change to the tariffed Other Service Charges. Staff recommends no change to Other Service Charges included in the current tariff.

Road Cutting or Boring

The Company is proposing to add Road Cutting or Boring At Cost to the tariff. Staff recommends acceptance of the Company's proposal.

Staff's recommended water system service charges are shown in Schedule MJR-4, page 2.

STAFF RECOMMENDATIONS

Staff recommends:

- Approval of Staff's rates and charges as shown in Schedule MJR-4.
- In addition to collection of its regular rate 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 F of the Engineering Report.
- Directing Cordes, 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.
- Directing the Company receive approval from the ACC, prior to incurring any long-term debt.
- Directing the Company to re-classify notes/payable to affiliates, which are owed for longer than 12 months to Paid in Capital on the Company's balance sheet.
- That Cordes continue to monitor and record monthly water losses and repair all leaks when discovered and located.
- That Cordes install identification signs at each of its sites to include, at a minimum, the plant site name, Arizona Department of Water Resources ("ADWR") well number, and emergency phone number.
- That the Well Site No. 4 hydro-pneumatic tank be repaired or replaced.

Cordes Lakes Water Company

Docket No. W-02060A-15-0245

Test Year Ended December 31, 2014

Schedule MJR-1

SUMMARY OF BILLING

	-- Present Rates --		-- Proposed Rates --	
	Company as Filed	Staff as Adjusted	Company as Filed	Staff as Adjusted
Revenues:				
Metered Water Revenue	\$420,530	\$420,530	\$522,868	\$504,773
Unmetered Water Revenue	-	-	-	-
Surcharge				
Other Water Revenues	11,667	11,667	11,667	11,667
Total Operating Revenue	\$432,197	\$432,197	\$534,535	\$516,440
Operating Expenses:				
Operation and Maintenance	\$438,508	\$420,703	\$438,508	\$420,703
Depreciation	27,389	27,389	27,389	27,389
Taxes Other than Property and Income	16,742	16,742	16,742	16,742
Property Taxes	20,123	20,123	21,767	21,476
Income Tax	(14,183)	(10,381)	6,056	5,928
Total Operating Expense	\$488,579	\$474,577	\$510,462	\$492,238
Operating Income/(Loss)	(\$56,382)	(\$42,380)	\$24,073	\$24,201
Rate Base	\$240,737	\$242,011	\$240,737	\$242,011
Rate of Return - On Rate Base	N/M	N/M	10.00%	10.00%
Cash Flow	(28,993)	(14,991)	51,462	51,590

NOTES:

¹ Cash Flow is the amount of cash available for contingencies.

RATE BASE

	----- Original Cost -----			Staff
	Company	Adjustment		
1 Plant in Service	\$1,242,596	\$3,500	A	\$1,246,096
2				
3 Less:				
4 Accum. Depreciation	981,068	-		981,068
5				
6 Net Plant	\$261,528	\$3,500		\$265,028
7				
8 Less:				
9 Plant Advances	\$8,956	-		\$8,956
10 Customer Security Deposits	18,250	-		18,250
11				
12 Total Advances	\$27,206	-		\$27,206
13				
14 Contributions Gross	\$76,247	-		76,247
15 Less:				
16 Amortization of CIAC	31,958	-		31,958
17				
18 Net CIAC	\$44,289	-		\$44,289
19				
20 Total Deductions	\$71,495	\$0		\$71,495
21				
22 Plus:				
23 1/24 Power	\$1,430	(0)		\$1,430
24				
25 1/8 Operation & Maint.	49,274	(2,226)	B	47,048
26				
27 Inventory	-	-		-
28				
29 Prepayments	-	-		-
30				
31 Total Additions	\$50,704	(\$2,226)		\$48,478
32				
33 Rate Base	\$240,737	\$1,274		\$242,011

Explanation of Adjustment:

- A See Schedule MJR-2, Page 2 PLANT ADJUSTMENTS
- B Staff adjusted working capital based on Staff Operating income adjustments.

DETAILED ADJUSTMENTS

	Company Exhibit	Adjustment	Staff Adjusted
1			
2	301 Organization	\$ -	\$ 3,500
3	302 Franchises	-	-
4	303 Land & Land Rights	-	-
5	304 Structures & Improvements	6,657	6,657
6	307 Wells & Springs	167,349	167,349
7	310 Power Generated Equipment	-	-
8	311 Pumping Equipment	78,482	78,482
9	320.1 Water Treatment Equipment	-	-
10	320.2 Solution Chemical Feeders	1,303	1,303
11	330 Distribution Reservoirs and Standpipe	-	-
12	330.1 Storage Tanks	141,632	141,632
13	330.2 Pressure Tanks	-	-
14	331 Transmission & Distribution Mains	581,937	581,937
15	333 Services	29,060	29,060
16	334 Meters & Meter Installations	68,859	68,859
17	335 Hydrants	-	-
18	336 Backflow Prevention Devices	-	-
19	339 Other Plant and Misc. Equipment	60,550	60,550
20	340 Office Furniture & Equipment	6,101	6,101
21	340.1 Computers & Software	-	-
22	341 Transportation Equipment	98,180	98,180
23	343 Tools Shop & Garage Equipment	-	-
24	344 Laboratory Equipment	-	-
25	345 Power Operated Equipment	1,904	1,904
26	346 Communication Equipment	-	-
27	347 Miscellaneous Equipment	582	582
28	348 Other Tangible Plant	-	-
29		-	-
30		-	-
31	TOTALS	<u>\$1,242,596</u>	<u>\$ 1,246,095</u>

32

33

34 Explanation of Adjustment A:

35

36 Capitalize Organization costs of CC&N Extension

ACCUMULATED DEPRECIATION ADJUSTMENT

<u>Accumulated Depreciation</u>		Depreciation Rates	Per	Per		
<u>Balances</u>		Decision No. 60408	Per Company	Staff		
301	Organization	n/a	-	-	-	
302	Franchises	n/a	-	-	-	
303	Land & Land Rights	n/a	-	-	-	
304	Structures & Improvements	3.33%	3,423	3,423	(0)	
307	Wells & Springs	3.33%	98,160	98,160	(0)	
310	Power Generation Equipment	5.00%	-	-	-	
311	Pumping Equipment	12.50%	36,582	36,589	7	
320	Water Treatment Equipment	0.00%	-	-	-	
320.1	Water Treatment Plant	3.33%	-	-	-	
320.2	Solution Chemical Feeders	20.00%	130	130	0	
330	Dist. Reservoirs & Standpipes	0.00%	-	-	-	
330.1	Storage Tanks	2.22%	80,908	80,908	(0)	
330.2	Pressure Tanks	5.00%	-	-	-	
331	Transmission & Distribution Main	2.00%	565,917	565,917	(0)	
333	Services	3.33%	19,512	19,512	(0)	
334	Meters & Meter Installation	8.33%	42,009	42,009	(0)	
335	Hydrants	2.00%	-	-	-	
336	Backflow Prevention Devices	6.67%	-	-	-	
339	Other Plant & Misc Equipment	0.00%	1	46,560	46,560	0
340	Office Furniture & Equipment	6.67%	3,047	3,047	(0)	
340.1	Computers & Software	20.00%	-	-	-	
341	Transportation Equipment	20.00%	84,097	84,097	(0)	
342	Stores Equipment	4.00%	-	-	-	
343	Tools, Shop, & Garage Equipt	5.00%	-	-	-	
344	Laboratory Equipment	10.00%	-	-	-	
345	Power Operated Equipment	5.00%	143	143	(0)	
346	Communication Equipment	10.00%	-	-	-	
347	Miscellaneous Equipment	10.00%	582	582	-	
348	Other Tangible Plant	2.50%	0	-	-	
			<u>\$ 981,070</u>	<u>981,074</u>	<u>\$ 4</u>	

	<u>Amount</u>
Accumulated Depreciation - Per Company, Page 15	\$981,068
Accumulated Depreciation - Per Staff	<u>981,068</u>
No Adjustment	<u><u>\$0</u></u>

STATEMENT OF OPERATING INCOME

	Company Exhibit	Staff Adjustments	Staff Adjusted
Revenues:			
461 Metered Water Revenue	\$420,530	\$ -	\$420,530
460 Unmetered Water Revenue	-	-	-
474 Other Water Revenues	11,667	-	11,667
Total Operating Revenue	\$432,197	\$0	\$432,197
Operating Expenses:			
601 Salaries and Wages	214,850	-	214,850
604 Employee Pension & Benefits	29,711	-	29,711
610 Purchased Water	-	-	-
615 Purchased Power	34,317	-	34,317
618 Chemicals	2,929	-	2,929
620 Repairs and Maintenance	4,337	-	4,337
621 Office Supplies & Expense	11,683	-	11,683
630 Outside Services	55,755	(3,500) A	52,255
635 Water Testing	4,925	197 B	5,122
427.2 Customer Security Deposit Interest	-	-	-
641 Rents	19,000	(5,109) C	13,891
650 Transportation Expenses	16,849	-	16,849
657 Insurance - General Liability	25,609	(9,393) D	16,216
659 Insurance - Health and Life	-	-	-
666 Rate Case Expense	10,000	-	10,000
675 Miscellaneous Expense	8,543	-	8,543
403 Depreciation Expense	27,389	-	27,389
408 Taxes Other Than Income	16,742	-	16,742
408.11 Property Taxes	20,123	-	20,123
409 Income Tax	(14,183)	3,802 E	(10,381)
Total Operating Expenses	488,579	(14,003)	474,577
OPERATING INCOME/(LOSS)	(\$56,382)	\$14,003	(\$42,380)

STATE ADJUSTMENTS

A -	OUTSIDE SERVICES-Per Company	\$55,755	
	Desert Mountain Analytical Services (non-operating)	(\$1,750)	
	Desert Mountain Analytical Services (non-operating)	(\$1,750)	
	Per Staff	52,255	<u>(\$3,500)</u>
	Decrease for items re-classified to Plant		
B -	WATER TESTING - Per Company	\$4,925	
	Per Staff	5,122	<u>\$197</u>
	To recognize the average on-going water testing expenses.		
C -	RENTS Per Company	\$19,000	
	Per Staff	13,891	<u>(\$5,109)</u>
	To decrease to typical rents in zip code 85281		
D -	INSURANCE--General Liability	\$25,609	
	Workers Compensation--per Staff	(3,182)	
	General Liability Per Staff	(6,211)	
	Per Staff	16,216	<u>(\$9,393)</u>
	To decrease allocation		

OPERATING INCOME ADJUSTMENT D - DEPRECIATION EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED	[D]	[E]	[F]	
1	Depreciation Expense	\$ 27,389	\$ 0	\$ 27,389				
					78,482			
Line No.	ACCT NO.	DESCRIPTION	Company Proposed PLANT IN SERVICE BALANCE	STAFF PLANT BALANCE	Non-Depreciable Fully Depreciated Plant	STAFF DEPR. PLANT BALANCE	STAFF RECOMMENDED RATE	STAFF RECOMMENDED EXPENSE
1		Plant In Service		3,500	\$ 3,500	\$ -	0.00%	\$ -
2	301	Organization	-	-	-	-	0.00%	-
3	302	Franchises	-	-	-	-	0.00%	-
4	303	Land & Land Rights	-	-	-	-	3.33%	147
5	304	Structures & Improvements	6,657	6,657	2,257	4,400	3.33%	5,061
6	307	Wells & Springs	167,349	167,349	15,370	151,979	-	-
7	310	Power Generating Equipment	-	-	-	-	5.00%	-
8	311	Pumping Equipment	78,482	78,482	10,558	67,924	12.50%	8,491
9	320.1	Water Treatment Plants	-	-	-	-	3.33%	-
10	320.2	Solution Chemical Feeders	1,303	1,303	-	1,303	20.00%	261
11	330	Dist. Reservoirs & Standpipes	-	-	-	-	2.22%	-
12	330.1	Storage Tanks	141,632	141,632	47,174	94,458	2.22%	2,097
13	330.2	Pressure Tanks	-	-	-	-	5.00%	-
14	331	Transmission & Distribution Mains	581,937	581,937	562,495	19,442	2.00%	389
15	333	Services	29,060	29,060	19,350	9,710	3.33%	323
16	334	Meters & Meter Installations	68,859	68,859	7,739	61,120	8.33%	5,091
17	335	Hydrants	-	-	-	-	2.00%	-
18	336	Backflow Prevention Devices	-	-	-	-	6.67%	-
19	339	Other Plant and Misc. Equipment	60,550	60,550	-	60,550	6.67%	4,039
20	340	Office Furniture & Equipment	6,101	6,101	-	6,101	6.67%	407
21	340.1	Computers & Software	-	-	-	-	10.00%	-
22	341	Transportation Equipment	98,180	98,180	69,049	29,131	20.00%	5,826
23	343	Tools Shop & Garage Equipment	-	-	-	-	5.00%	-
24	344	Laboratory Equipment	-	-	-	-	10.00%	-
25	345	Power Operated Equipment	1,904	1,904	-	1,904	5.00%	95
26	346	Communication Equipment	-	-	-	-	10.00%	-
27	347	Miscellaneous Equipment	582	582	582	-	10.00%	-
28	348	Other Tangible Plant	-	-	-	-	2.50%	-
29		Subtotal General	\$ 1,242,596	\$ 1,246,096	\$ 738,074	\$ 508,022		\$ 32,226
30		Less: Non-depreciable Account(s)	-	3,500	-	-		
31		Depreciable Plant (L29-L30)	\$ 1,242,596	\$ 1,242,596		\$ 508,022		
32							\$ 76,247	
33							6.3434%	
34		Contributions in-Aid-of-Construction (CIAC)						\$ 4,837
35		Weighted Average Depreciation/Amortization Rate						\$ 27,389
36		Less: Amortization of CIAC (L32 x L33)						
37		Depreciation Expense - STAFF						
38								
39		Pro Forma Depreciation Expense Calculation						
40								
41		Plant in Service	\$ 1,246,096					
42		Less: Non-depreciable plant	-					
43		Fully depreciated plant	738,074					
44		Depreciable Plant	\$ 508,022					
45		Times: Staff weighted average depreciation	6.3434%					
46		Depreciation expense before amortization	32,226					
47		Less: Amortization of CIAC	4,837					
48		Test Year Depreciation - Staff	27,389					
49		Depreciation expense - Company	27,389					
50		Staff recommended adjustment	\$ 0					

OPERATING INCOME ADJUSTMENT H - PROPERTY TAXES--C-CORP

LINE NO.	Property Tax Calculation	[A]	[B]	
		STAFF AS ADJUSTED	STAFF RECOMMENDED	
1	Staff Adjusted Test Year Revenues - 2014	\$ 432,197	\$ 432,197	
2	Weight Factor	2	2	
3	Subtotal (Line 2 * Line 3)	\$ 864,394	\$ 864,394	
4	Staff Adjusted Test Year Revenues - 2014	432,197		
5	Staff Recommended Revenue, Per Schedule MJR-1		516,440	
6	Subtotal (Line 3 + Line 4)	\$ 1,296,591	\$ 1,380,834	
7	Number of Years	3	3	
8	Three Year Average (Line 6 / Line 7)	\$ 432,197	\$ 460,278	
9	Department of Revenue Multiplier	2	2	
10	Revenue Base Value (Line 8 * Line 9)	\$ 864,394	\$ 920,556	
11	Plus: 10% of CWIP -		-	
12	Less: Net Book Value of Licensed Vehicles	29,131	29,131	
13	Full Cash Value (Line 10 + Line 11 - Line 12)	\$ 835,263	\$ 891,425	
14	Assessment Ratio	18.0%	18.0%	
15	Assessment Value (Line 13 * Line 14)	150,347	\$ 160,456	\$ 150,347
16	Composite Property Tax Rate (Company Property Tax ÷ Assessment Value)	13.3845%	13.3845%	
17				
18	Staff Proposed Property Tax Expense (Line 15 * Line 16)	\$ 20,123		
19	Company Proposed Property Tax	20,123		
20				
21	Staff Test Year Adjustment (Line 18-Line 19)	\$ 0		
22	Property Tax - Staff Recommended Revenue (Line 15 * Line 16)		\$ 21,476	
23	Staff Test Year Adjusted Property Tax Expense (Line 18)		\$ 20,123	
24	Increase/(Decrease) to Property Tax Expense		\$ 1,353	
25				
26	Increase/(Decrease) to Property Tax Expense		\$ 1,353	
27	Increase in Revenue Requirement		84,243	
28	Increase/(Decrease) to Property Tax per Dollar Increase in Revenue (Line 26/Line 27)		1.606140%	
29				
30				
31				
32				
33				
34	<u>References:</u>			
35	Col [A]: Company			
36	Col [B]: Staff Report			
37				

C-Corp Tax Calculation

LINE NO.	DESCRIPTION	(A)	(B)	(C)
1	<i>Calculation of Gross Revenue Conversion Factor</i>			
2	Revenue	100.0000%		
3	Uncollectible Factor (Line 14)	0.0000%		
4	Revenues (L1 - L2)	100.0000%		
5	Combined Federal and State Income Tax and Property Tax Rate (Line 30)	20.9651%		
6	Subtotal (L3 - L4)	79.0349%		
7	Revenue Conversion Factor (L1 / L5)	1.265264		
8				
9	<i>Calculation of Uncollectible Factor</i>			
10	Unity	100.0000%		
11	Combined Federal and State Tax Rate (Line 22)	19.68%		
12	One Minus Combined Income Tax Rate (L11 - L12)	80.33%		
13	Uncollectible Rate	0.0000%		
14	Uncollectible Factor (L9 * L10)	0.0000%		
15				
16	<i>Calculation of Effective Tax Rate</i>			
17	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%		
18	Arizona State Income Tax Rate	5.5000%		
19	Federal Taxable Income (L17 - L18)	94.5000%		
20	Applicable Federal Income Tax Rate (Line 72)	15.0000%		
21	Effective Federal Income Tax Rate (L19 x L20)	14.1750%		
22	Combined Federal and State Income Tax Rate (L18 +L21)		19.68%	
23				
24	Calculation of Effective Property Tax Factor			
25	Unity	100.00%		
26	Combined Federal and State Income Tax Rate (L22)	19.68%		
27	One Minus Combined Income Tax Rate (L25-L26)	80.33%		
28	Property Tax Factor (MJR-W17, L27)	1.61%		
29	Effective Property Tax Factor (L27*L28)	1.29%		
30	Combined Federal and State Income Tax and Property Tax Rate (L22+L29)		20.97%	
31				
32				
33	Required Operating Income (Schedule Summary Schedule MJR-1)	\$ 24,201		
34	Adjusted Test Year Operating Income (Loss) (Schedule MJR-1)	\$ (42,380)		
35	Required Increase in Operating Income (L33 - L34)		\$ 66,581	
36				
37	Income Taxes on Recommended Revenue (Col. C, L65)	\$ 5,928		
38	Income Taxes on Test Year Revenue (Col. A, L65)	\$ (10,381)		
39	Required Increase in Revenue to Provide for Income Taxes (L37 - L38)		\$ 16,308	
40				
41	Recommended Revenue Requirement (Schedule MJR-1)	\$ 516,440		
42	Uncollectible Rate (Line 13)	0.0000%		
43	Uncollectible Expense on Recommended Revenue (L41 * L42)	\$ -		
44	Adjusted Test Year Uncollectible Expense	\$ -		
45	Required Increase in Revenue to Provide for Uncollectible Exp. (L43 - L45)		\$ -	
46	Property Tax with Recommended Revenue (Schedule C-Prop Taxes L19)	\$ 21,476		
47	Property Tax on Test Year Revenue (Schedule C-Prop Taxes L20)	\$ 20,123		
48	Increase in Property Tax Due to Increase in Revenue (L46-47)		\$ 1,353	
49				
50	Total Required Increase in Revenue (L35 + L39 + L45 + L48)		\$ 84,243	Staff
51	<i>Calculation of Income Tax:</i>			
		Test Year		Recommended
52	Revenue (Schedule MJR-1)	\$ 432,197	\$ 84,242	\$ 516,439
53	Operating Expenses Excluding Income Taxes	\$ 484,958	\$ -	\$ 486,311
54	Synchronized Interest	\$ -	\$ -	\$ -
55	Arizona Taxable Income (L52 - L53 - L54)	\$ (52,761)	\$ -	\$ 30,129
56	Arizona State Income Tax Rate	5.50%		5.50%
57	Arizona Income Tax (L36 x L37)	\$ (2,902)	\$ -	\$ 1,657
58	Federal Taxable Income (L55 - L57)	\$ (49,859)	\$ -	\$ 28,472
59	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15%	\$ (7,479)	\$ -	\$ 4,271
60	Federal Tax on Second Income Bracket (\$50,001 - \$75,000) @ 25%	\$ -	\$ -	\$ -
61	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34%	\$ -	\$ -	\$ -
62	Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39%	\$ -	\$ -	\$ -
63	Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34%	\$ -	\$ -	\$ -
64	Total Federal Income Tax	\$ (7,479)	\$ -	\$ 4,271
65	Combined Federal and State Income Tax (L57 + L64)	\$ (10,381)	\$ -	\$ 5,928
66				



Monthly Usage Charge	Present	-Proposed Rates-	
	Rates	Company	Staff
5/8" x 3/4" Meter	N/A	N/A	\$ 14.40
3/4" Meter	11.75	14.84	14.40
1" Meter	19.50	24.73	24.00
1 1/2" Meter	39.25	49.45	48.00
2" Meter	62.50	79.12	76.80
3" Meter	125.00	158.24	153.60
4" Meter	195.00	247.25	240.00
6" Meter	390.00	494.50	480.00
Construction per 1,000 gallons	N/T	N/T	7.01
Bulk Water pipe per 1,000 gallons	N/T	N/T	7.01
Gallons Included in Minimum	0	0	0

Commodity Rate Charge

5/8" x 3/4" Meter

Tier 1	From 0 to 3,000 gallons	2.85	3.60	3.43
Tier 2	From 3,001 to 8,000 gallons	4.25	5.36	5.11
Tier 3	Over 8,000 gallons	6.50	7.23	7.01

3/4" Meter

Tier 1	From 0 to 3,000 gallons	2.85	3.60	3.43
Tier 2	From 3,001 to 8,000 gallons	4.25	5.36	5.11
Tier 3	Over 8,000 gallons	6.50	7.23	7.01

1" Meter

Tier 1	First 10,000 gallons	4.25	5.36	5.11
Tier 2	Over 10,000 gallons	6.50	7.23	7.01

1 1/2" Meter

Tier 1	First 17,000 gallons	4.25	5.36	5.11
Tier 2	Over 17,000 gallons	6.50	7.23	7.01

2" Meter

Tier 1	First 26,000 gallons	4.25	5.36	5.11
Tier 2	Over 26,000 gallons	6.50	7.23	7.01

3" Meter

Tier 1	First 50,000 gallons	4.25	5.36	5.11
Tier 2	Over 50,000 gallons	6.50	7.23	7.01

4" Meter

Tier 1	First 75,000 gallons	4.25	5.36	5.11
Tier 2	Over 75,000 gallons	6.50	7.23	7.01

6" Meter

Tier 1	First 150,000 gallons	4.25	5.36	5.11
Tier 2	Over 150,000 gallons	6.50	7.23	7.01

Bulk Water All Gallons 7.01
Construction All Gallons 7.01
Standpipe All Gallons 7.01

Service Line and Meter Installation Charges

	Present Service Line Charges	Present Meter Installation Charges	Present Total	Company Proposed Service Line Charges ¹	Company Proposed Installation Charges	Company Proposed Total ¹	Staff Recommended Service Line Charges ¹	Staff Recommended Meter Installation Charges	Staff Recommended Total ¹
5/8" x 3/4" Meter	N/A	N/A	\$ -	N/A	N/A	\$ -	N/A	N/A	\$ -
3/4 inch Meter	\$ 426	\$ 198	\$ 624	\$ 426	\$ 198	\$ 624	\$ 426	\$ 198	\$ 624
1" Meter	\$ 486	\$ 246	\$ 732	\$ 486	\$ 246	\$ 732	\$ 486	\$ 246	\$ 732
1 1/2" Meter	\$ 528	\$ 498	\$ 1,026	\$ 528	\$ 498	\$ 1,026	\$ 528	\$ 498	\$ 1,026
2" Meter	\$ 720	\$ 1,098	\$ 1,818	\$ 720	\$ 1,098	\$ 1,818	\$ 720	\$ 1,098	\$ 1,818
3" Meter	\$ 930	\$ 1,764	\$ 2,694	\$ 930	\$ 1,764	\$ 2,694	\$ 930	\$ 1,764	\$ 2,694
4" Meter	\$ 1,332	\$ 2,700	\$ 4,032	\$ 1,332	\$ 2,700	\$ 4,032	\$ 1,332	\$ 2,700	\$ 4,032
6" Meter	\$ 2,000	\$ 5,350	\$ 7,350	\$ 2,000	\$ 5,350	\$ 7,350	\$ 2,000	\$ 5,350	\$ 7,350

¹Actual Cost of Service Line if road cutting and boring under paved roadways is required.

	Present	Company	Staff
Service Charges			
Establishment	\$30.00	\$30.00	\$30.00
Establishment (After Hours)	N/T	N/T	N/A
Reconnection (Delinquent)	20.00	20.00	20.00
Meter Test (If Correct)	30.00	30.00	30.00
Deposit	*	*	*
Deposit Interest	*	*	*
Re-Establishment (Within 12 Months)	**	**	**
NSF Check	15.00	15.00	15.00
Deferred Payment	1.50%	1.50%	1.50%
Meter Re-Read (If Correct)	12.00	12.00	12.00
Late Fee	1.50% \$	1.50 \$	1.50
After Hours Service Charge	35.00	35.00	35.00
Road Cutting or Boring	N/T	At Cost	At Cost
			NT = No Tariff
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.

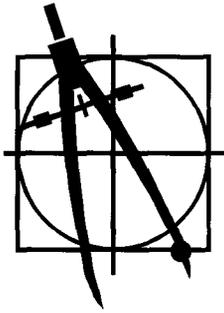
Typical Bill Analysis

General Service 3/4-Inch Meter

	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	3,753	\$ 23.50	\$ 29.68	\$ 6.18	26.28%
Median Usage	2,814	19.77	24.97	\$ 5.20	26.31%
Staff Recommended					
Average Usage	3,753	\$ 23.50	\$ 28.54	\$ 5.04	21.44%
Median Usage	2,814	19.77	24.05	\$ 4.28	21.66%

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

Gallons	Present	Company Proposed		Staff Recommended	
		Rates	%	Rates	%
		3/4 -Inch Meter	3/4 -Inch Meter	3/4 -Inch Meter	
Consumption	Rates	Rates	Increase	Rates	Increase
-	\$ 11.75	\$ 14.84	26.30%	\$ 14.40	22.55%
1,000	14.60	18.44	26.30%	17.83	22.12%
2,000	17.45	22.04	26.30%	21.26	21.83%
3,000	20.30	25.64	26.31%	24.69	21.63%
3,500	22.43	28.32	26.29%	27.25	21.49%
4,000	24.55	31.00	26.27%	29.80	21.38%
5,000	28.80	36.36	26.25%	34.91	21.22%
5,100	29.23	36.90	26.25%	35.42	21.20%
6,800	36.45	46.01	26.22%	44.11	21.01%
7,800	40.70	51.37	26.21%	49.22	20.93%
8,800	46.75	58.22	24.54%	55.85	19.46%
9,800	53.25	65.45	22.92%	62.86	18.04%
10,800	59.75	72.68	21.65%	69.87	16.93%
11,800	66.25	79.91	20.62%	76.88	16.04%
12,800	72.75	87.14	19.79%	83.89	15.31%
13,800	79.25	94.37	19.08%	90.90	14.70%
14,800	85.75	101.60	18.49%	97.91	14.18%
15,800	92.25	108.83	17.98%	104.92	13.73%
16,800	98.75	116.06	17.53%	111.93	13.34%
17,800	105.25	123.29	17.14%	118.94	13.01%
18,800	111.75	130.52	16.80%	125.95	12.71%
19,800	118.25	137.75	16.49%	132.96	12.44%
20,800	124.75	144.98	16.22%	139.97	12.20%
25,800	157.25	181.13	15.19%	175.02	11.30%
30,800	189.75	217.28	14.51%	210.07	10.71%
35,800	222.25	253.43	14.03%	245.12	10.29%
40,800	254.75	289.58	13.67%	280.17	9.98%
45,800	287.25	325.73	13.40%	315.22	9.74%
50,800	319.75	361.88	13.18%	350.27	9.54%
75,800	482.25	542.63	12.52%	525.52	8.97%
100,800	644.75	723.38	12.20%	700.77	8.69%



**ENGINEERING REPORT FOR
Cordes Lakes Water Company**

Docket No. W-02060A-15-0245 (Rates)

By Michael Thompson, P. E.

September 18, 2015

EXECUTIVE SUMMARY

CONCLUSIONS

1. Cordes Lakes original Certificate of Convenience & Necessity ("CC&N") was granted in Commission Decision No. 39646, dated September 13, 1968. Two (2) extensions of the CC&N were granted in Commission Decision Nos. 40231 and 40509, dated October 1, 1969 and February 16, 1970, respectively. The CC&N currently covers an area totaling approximately 1,300.46 acres (2.03 square miles).
2. The Arizona Department of Environmental Quality ("ADEQ") Drinking Water Compliance Status Report ("CSR"), dated July 22, 2015, indicates that the Cordes Lakes water system 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. ADEQ regulates the Cordes Lakes water system under ADEQ Public Water System Identification ("PWS ID") No. 04-13-023, and is classified as a Community water system.
4. The Cordes Lakes water system service area is not located within an ADWR Active Management Area ("AMA"), and is not subject to the AMA monitoring and reporting requirements.
5. ADWR's Water Provider Compliance Report dated September 14, 2015, indicates that the Cordes Lakes water system is currently compliant with departmental requirements governing water providers and/or community water systems.
6. Cordes Lakes does not anticipate any change in its current customer base.
7. According to the Commission's Utilities Division Compliance Section database, Cordes Lakes currently has no delinquent Commission compliance items.
8. Cordes Lakes has approved Cross-Connection/Backflow Prevention and Curtailment Tariffs on file with the Commission.

9. Cordes Lakes has five (5) Best Management Practice (“BMP”) Tariffs on file with the Commission.
10. Decision No. 74155 ordered Cordes Lakes to file for an extension of its CC&N to include an area where it is presently providing service to customers outside of its existing Certificate. Accordingly, Cordes Lakes filed an application for the extension of its CC&N on July 25, 2014 under Docket No. W-02060A-14-0281. On August 25 and November 7, 2014, Staff issued an insufficiency letter in Docket No. W-00260A-14-02081.
11. The Arizona Corporation Commission (“ACC” or “Commission”) Utilities Division Staff (“Utilities Staff” or “Staff”) concludes that the Cordes Lakes Water Company (“Cordes Lakes” or “Company”) water system has adequate production and storage capacity to serve the present customer base, as well as the area currently being served outside its CC&N, and any reasonable growth.

RECOMMENDATIONS

1. Staff recommends an annual water testing expense of \$5,122 be used for purposes of this application.
2. Staff further recommends that Cordes Lakes continue to monitor and record monthly water losses and repair all leaks when discovered and located.
3. Staff further recommends that Cordes Lakes continue to use the depreciation rates listed in Table F.
4. Staff further recommends approval of the Cordes Lakes proposed addition of Road Cutting and Boring at cost.
5. Staff further recommends approval of the service line and meter installation charges included in Table G.
6. Staff recommends that Cordes Lakes install identification signs at each of its sites to include, at a minimum, the plant site name, Arizona Department of Water Resources (“ADWR”) well number, and emergency phone number.
7. Staff recommends that the Well Site No. 4 hydro-pneumatic tank be repaired or replaced.

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A. INTRODUCTION AND LOCATION OF COMPANY

On July 2, 2015, Cordes Lakes Water Company (“Cordes Lakes” or “Company”) filed an application with the Arizona Corporation Commission (“ACC” or “Commission”) for approval of a rate increase in Docket No. W-02060A-15-0245. Cordes Lakes current rates were approved in Commission Decision No. 74155 dated October 25, 2013.

Cordes Lakes is a Class D public utility water company that provides service to approximately 1,340 metered connections.¹ The water system, shown in Figure 1 located in the figure section of this report, is a groundwater-based system serving the Cordes Lakes subdivision. The subdivision, located east of Interstate Highway 17 in Cordes Junction, is approximately 65 miles north of Phoenix, Arizona. The Company’s Certificate of Convenience and Necessity (“CC&N”), which covers an area totaling approximately 1,300.46 acres (2.03 square miles), is shown in Figure 2. The original CC&N was granted to Cordes Lakes in Commission Decision No. 39646, dated September 13, 1968. Two (2) extensions of the CC&N were granted in Commission Decision Nos. 40231 and 40509, dated October 1, 1969 and February 16, 1970, respectively.

B. DESCRIPTION OF THE WATER SYSTEM

The Cordes Lakes water system was visited on August 19, 2015, by Staff member Michael Thompson. Mr. Thompson was accompanied by Mr. Ray Jones, P.E. (Principle, ARICOR Water Solutions), and Mr. Richard Ross (Manager and Operator, Cordes Lakes). Mr. Donald Ross, Cordes Lakes’ certified operator of record, did not attend the site visit.²

The water system contains one (1) inactive and four (4) active pumping sites identified as points of entry (“POEs”) to the distribution system, two (2) active booster pump stations, and a distribution system. The active pumping sites, POE No. 1, No. 2, No. 4, and No. 5, consist of four (4) drinking water wells, four (4) chlorination systems, five (5) storage tanks, four (4) hydro-pneumatic pressure tanks, and eight (8) booster pumps. The booster pump stations, which receive water from POE No. 1 and No. 5, include four (4) booster pumps, and two (2) hydro-pneumatic pressure tanks. The four (4) pumping sites and two (2) booster pump stations pump directly to the distribution system which serves approximately 1,340 connections within its current CC&N, as well as an area (proposed CC&N extension area) outside its CC&N.³

The inactive site, POE No. 3, consists of a well, a 16,000 gallon storage tank, and a 5,000 gallon hydro-pneumatic pressure tank. The well, taken out of service in 2007, has been abandoned and is physically disconnected from the system. Cordes Lakes has plans to relocate the 16,000 gallon storage tank to the King Drive Booster Pump Station (Booster Pump Station No. 2) to provide

¹ Per water use data submitted with the application.

² Mr. Donald Ross is certified with the Arizona Department of Environmental Quality (“ADEQ”) as a Grade 4 Water Distribution System Operator, and a Grade 3 Water Treatment Plant Operator. Mr. Ross’s ADEQ Operator Identification No. is OP005277, with an expiration date of July 31, 2017. Mr. Richard Ross is certified with ADEQ as a Grade 1 Water Distribution System Operator with Operator Identification No. OP011001.

³ On July 25, 2014, Cordes Lakes requested an extension of its CC&N for the proposed extension area in Docket No. W-02060A-14-0281.

additional storage at the site. However, a specific date as to when the storage tank will be relocated has not been determined.

With the exception of the hydro-pneumatic pressure tank located at Well Site No. 4, the in-service plant facilities (i.e., wells, chlorinators, tanks, booster pumps and visible pipe) appeared to be in proper working order, properly maintained, and in good condition. Approximately twelve (12) inches of the external surface weld, where the semi-elliptical head and main body of the hydro-pneumatic pressure tank are connected, have excessive corrosion. With the exception of the corroded area, the tank appeared to be structurally sound. However, due to the severity of the corrosion, Staff recommends that the hydro-pneumatic tank be repaired or replaced.

Staff did not observe any leaks at the plant facilities, or in the distribution system. However, company signs at each of the plant sites were either illegible or missing altogether. Although not required in the Arizona Department of Environmental Quality ("ADEQ") Rules, it would be prudent of Cordes Lakes to install signs with proper identification at each of its plant sites. Staff recommends that Cordes Lakes install identification signs at each of its sites to include, at a minimum, the plant site name, the Arizona Department of Environmental Quality ("ADEQ") Public Water System ("PWS") number, the Arizona Department of Water Resources ("ADWR") well number, and emergency phone/contact number.

Detailed listings of the plant facilities are included in Table A. A site map and schematic of the service area are illustrated in Figures 3 and 4, respectively. Figures 3 and 4 are located in the figure section of this report.

Table A. Cordes Lakes Water System Plant Facilities Summary

Active Well Sites & Booster Pump Stations						
	Well Site #1 (POE #1)	Well Site #2 (POE #2)	Well Site #4 (POE #4)	Well Site #5 (POE #5)	Booster Pump Stations	
Well Identification (ADWR #)	55-609346	55-518196	55-609347	55-565855	BPS #1 (Antelope)	BPS #2 (King Drive)
Casing Size (inches)	12	8	12	10	N/A	N/A
Casing Depth (feet)	32	380	500	343	N/A	N/A
Meter Size (inch)	3	3	3	3	N/A	N/A
Pump Size (hp)	7.5	7.5	7.5	10	N/A	N/A
Pump Yield (gpm)	65	95	94	65	N/A	N/A
Well Yield (gpm)	85	86	100	45	N/A	N/A
Storage Tanks (Gallons)	(2) 45,000	30,000	30,000	100,000	N/A	16,000
Booster Pumps (hp)	(2) 7.5	(2) 7.5	(2) 10	(2) 7.5	(2) 5	(2) 5
Pressure Tanks (Gallons)	5,000	3,000	5,000	5,000	500	500
Chlorinators	Yes	Yes	Yes	Yes	N/A	N/A
Pump House (Dimensions)	8' x 8' Wood	8' x 8' Block	12' x 12' Block	8' x 8' Wood	N/A	N/A
Fencing	Chain Link	Chain Link	Chain Link	Chain Link	Chain Link	Chain Link

Note: hp indicates horsepower, and gpm indicates gallons per minute

Inactive Well	
	Well Site #3 (POE #3)
Well Identification (ADWR #)	55-609234
Casing Size (inches)	6
Casing Depth (feet)	343
Meter Size (inch)	3
Pump Size (hp)	2
Pump Yield (gpm)	12
Well Yield (gpm)	0
Storage Tanks (Gallons)	16,000
Booster Pumps (hp)	(2) 5
Pressure Tanks (Gallons)	5,000
Chlorinators	No
Pump House (Dimensions)	10' x 12' Wood
Fencing	Chain Link

Service Area Distribution Mains		
Diameter (inches)	Material	Length (feet)
4	Poly Vinyl Chloride ("PVC")	168,000
6	PVC	234,000
Total Length		402,000

Service Area Meters	
Size (inches)	Quantity
3/4	1,401
1	5
2	1
3 Turbo	6
Total Quantity	1,413

C. WATER USE

Table B summarizes water usage for the Cordes Lakes water system during the test year, January 2014 through December 2014.

Table B. Cordes Lakes Water Usage Summary (2014 Test Year)

Month/Year	Active Meters (Connections)	Gallons Produced	Gallons Sold	Gallons Unaccounted For	Gallons Consumed per Day	Gallons Consumed per Day per Connection	Water Loss
Jan-14	1,323	5,877,000	4,044,000	1,833,000	130,452	99	31.19%
Feb-14	1,321	5,593,000	3,893,000	1,700,000	139,036	105	30.40%
Mar-14	1,326	6,485,000	3,885,000	2,600,000	125,323	95	40.09%
Apr-14	1,330	6,960,000	5,367,000	1,593,000	178,900	135	22.89%
May-14	1,327	8,045,000	6,447,000	1,598,000	207,968	157	19.86%
Jun-14	1,329	8,856,000	6,056,000	2,800,000	201,867	152	31.62%
Jul-14	1,332	8,149,000	6,695,000	1,454,000	215,968	162	17.84%
Aug-14	1,333	7,110,000	5,081,000	2,029,000	163,903	123	28.54%
Sep-14	1,342	6,578,000	4,964,000	1,614,000	165,467	123	24.54%
Oct-14	1,344	6,284,000	5,081,000	1,203,000	163,903	122	19.14%
Nov-14	1,343	5,464,000	4,054,000	1,410,000	135,133	101	25.81%
Dec-14	1,340	5,237,000	5,169,000	68,000	166,742	124	1.30%
Total		80,638,000	60,736,000	19,902,000	166,222*	125*	24.68%

Note: * Asterisk indicates the value is an average

1. *Water Sold*

Figure 5, included in the figure section of this report, graphically illustrates the water consumption Cordes Lakes experienced during the test year. Customer consumption included an average daily high water usage of 162 gallons per day (“gpd”) per connection (1,332 connections) in July, and an average daily low water usage of 101 gpd per connection (1,343 connections) in November. The average daily water usage during the twelve-month period was 125 gpd per connection. Cordes Lakes reported 80,638,000 gallons of water produced, 60,736,000 gallons of water sold, and 19,902,000 gallons of water unaccounted for during the test year.⁴

2. *Non-Accounted For Water*

Non-accounted for water (the difference between the gallons of water produced and sold) should be 10 percent or less and never more than 15 percent. It is important to be able to reconcile the difference between water sold and water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage and any non-metered water use such as construction, theft, and line flushing. Cordes Lakes reported 80,638,000 gallons of water produced and 60,736,000 gallons of water sold during the test year ending December, 2014. As a result, Cordes Lakes water loss was 24.68 percent, exceeding the acceptable limit of 10 percent.

⁴ Water produced and sold during the test year is based on the monthly data taken from the meter reads.

In order to gain a perspective on how Cordes Lakes water loss has been trending over the past several years, production and sales figures from previous annual reports were used to determine both water loss volumes and percentages. Table C lists Cordes Lakes water loss volumes and percentages from the past ten (10) year period, beginning in 2005 and ending in 2014. Figure 6, located in the figure section of this report, graphically illustrates the percentage of water loss Cordes Lakes experienced during the same period. As indicated in Table C and graphically illustrated in Figure 6, Cordes Lakes water loss averaged 23.39 percent in 2005. Subsequently, in 2006 water loss decreased to an average of 10.13 percent. However, during the following eight (8) year period, 2007 through 2014, Cordes Lakes water loss continually increased from an average of 11.44 percent in 2007 to its current average of 24.68 percent, an increase of approximately 53.65 percent.

Table C. Cordes Lakes Historical Water Loss (Non-Accounted For Water)

Year	Water Loss – Non-Accounted for Water Volume (Gallons)	Water Loss – Non-Accounted for Water Percent	Source
2005	20,977,000	23.39	Annual Report
2006	8,357,000	10.13	Annual Report
2007	9,920,000	11.44	Annual Report
2008	15,180,000	17.51	Annual Report
2009	14,643,000	16.39	Annual Report
2010	16,570,000	20.56	Annual Report
2011	21,877,000	25.04	Annual Report
2012	17,526,000	21.32	Annual Report
2013	22,538,000	27.16	Annual Report
2014	19,902,000	24.68	Application

In Decision No. 74155, Cordes Lakes was ordered to file an application for financing approval for the cost of improvements to prevent water loss. In the same decision, Cordes Lakes was also authorized to seek financing from a lender of its choice. On November 13, 2014, Cordes Lakes filed a finance application (Docket No. W-02060A-14-0387) for approval to borrow an amount not to exceed \$200,000 from the Water Infrastructure and Finance Authority (“WIFA”) of Arizona to cover the cost of improvements that would address its water loss issues. As stated in the application, financing would be used for leak detection and repair as well as the replacement of meters.

On January 16, 2015, Staff submitted a Data Request to Cordes Lakes requesting additional information in the form of an engineering analysis detailing its proposed use of the borrowed funds to reduce water loss. On March 17, 2015, Cordes Lakes submitted its response to Staff’s January 16, 2015 Data Request. In its response, Cordes Lakes provided a proposal to prepare an engineering analysis from ARICOR Water Solutions (“ARICOR”), and a copy of the Planning and Design Technical Assistance Application (Grant) submitted to WIFA, on February 26, 2015, to cover the costs for the engineering analysis.

On April 7, 2015, Cordes Lakes filed a Motion to Withdraw its Financing Application due to its withdrawal of its loan application with WIFA. On May 13, 2015, the Motion to Withdraw its

Financing Application was granted, and administratively closed on May 28, 2015. However, Cordes Lakes did continue to pursue grant funds from WIFA in an attempt to cover its cost associated with the engineering analysis. On April 15, 2015 WIFA notified Cordes Lakes that it would not be awarded a grant, as other projects scored higher in the rating process. Cordes Lakes has since reapplied for grant funds in WIFA's current review cycle where awards will be announced in mid-October 2015.

In its motion to withdraw, Cordes Lakes indicated that it would file a new application once more information was available regarding the project it was seeking to finance. However, Staff is not currently able to assess whether, or not, a new financing application will be necessary to fund the successful completion of this undertaking. Staff recommends that Cordes Lakes continue to monitor and record monthly water losses and repair all leaks when discovered and located.

3. *Water System Analysis*

The Cordes Lakes water system has four (4) active drinking water wells with a total production capacity of approximately 316 gallons per minute ("gpm") (455,040 gpd). The water system has five (5) storage tanks with a total capacity of approximately 250,000 gallons. During the peak month, July 2014, the water system was serving 1,332 connections when Cordes Lakes reported 6,695,000 gallons of water sold. Average daily demand for the month of July 2014 was determined to be 215,968 gpd, while average daily demand per connection was determined to be 162 gpd. Staff concludes that the Cordes Lakes water system has adequate production and storage capacity to serve the present customer base within its CC&N, as well as the area currently being served outside its CC&N, and any reasonable growth.

D. GROWTH

Table D below and Figure 7, located in the figure section of this report, show Cordes Lakes customer growth based on service connection data from its past ten (10) Annual Reports. Accordingly, Cordes Lakes experienced a decline in growth from 2006 through 2012. However in 2013 and 2014 Cordes Lakes saw a marginal increase in customer growth. As mentioned in its application, Cordes Lakes does not anticipate any material change in its customer base.

Table D. Cordes Lakes Actual and Projected Growth

Year	Number of Customers	Source
2005	1,268	Annual Report
2006	1,342	Annual Report
2007	1,318	Annual Report
2008	1,330	Annual Report
2009	1,322	Annual Report
2010	1,315	Annual Report
2011	1,301	Annual Report
2012	1,292	Annual Report
2013	1,311	Annual Report
2014	1,340	Annual Report
2015	1,340	Projected
2016	1,340	Projected

E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (“ADEQ”) COMPLIANCE

1. Compliance Status

ADEQ regulates the Cordes Lakes water system under ADEQ Public Water System Identification (“PWS ID”) No. 04-13-023, and is classified as a Community water system.

ADEQ inspected the Cordes Lakes water system on November 21, 2011. During the inspection no major deficiencies were found in the operation, maintenance, or certified operator status of the water system. According to the ADEQ Drinking Water Compliance Status Report (“CSR”), dated July 22, 2015, the Cordes Lakes water system 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. Cordes Lakes is considered to be in full compliance by ADEQ.

2. Water Monitoring and Testing Expenses

In addition to Total Coliform, Disinfectant-By-Products, and Lead & Copper testing, the Cordes Lakes water system is also subject to mandatory participation in the Monitoring Assistance Program (“MAP”).⁵ In its Adjusted Test Year Income Statement, Account No. 635 (Contractual Services - Water Testing), Cordes Lakes reported \$4,925.00 in water testing expenses for the 2014 test year.

The monitoring/testing expenses that were reviewed, evaluated, and recalculated by Staff are represented in Table E. The total estimated annual water testing expenses for the water system are

⁵ The MAP is mandatory for water systems which serve less than 10,000 persons (approximately 3,300 service connections).

\$5,122.00. Staff recommends an annual water testing expense totaling \$5,122.00 be used for purposes of this proceeding.

Table E. Staff Recommended Water Monitoring/Testing – Cordes Lakes

Water Test	Expense Per Test	Quantity of Tests Per 3 Years	3 Year Expenses	Total Expenses per Year
Total Coliform	\$26.25	108	\$2,835.00	\$945.00
Lead & Copper	\$56.00	10	\$560.00	\$187.00
Disinfection-By-Products TTHM's	\$170.00	3	\$510.00	\$170.00
Disinfection-By-Products HAA5's	\$260.00	3	\$780.00	\$260.00
Monitoring Assistance Program (MAP)	\$3,560.00	MAP	\$10,680.00	\$3,560.00
Total			\$15,365.00	\$5,122.00

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

The Cordes Lakes water system service area is not located within an ADWR Active Management Area (“AMA”), and is not subject to the AMA monitoring and reporting requirements. ADWR’s Water Provider Compliance Report dated September 14, 2015, indicates that the Cordes Lakes water system is currently compliant with departmental requirements governing water providers and/or community water systems.

G. ARIZONA CORPORATION COMMISSION COMPLIANCE

A check of the Utilities Division Compliance Section database showed that there are no delinquent Commission compliance items for Cordes Lakes.⁶

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 F. These rates represent typical and customary values within a range of anticipated equipment life. In Commission Decision No. 74155 dated October 25, 2013, Cordes Lakes was ordered to continue to use the depreciation rates as shown in Table F. Staff recommends that Cordes Lakes continue to use the depreciation rates listed in Table F.

⁶ Per Compliance Section email dated August 12, 2015.

Table F. Depreciation Rate Table

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

Cordes Lakes has proposed the addition of Road Cutting and Boring at Cost to its existing service line and meter installation charges.⁷ The installation charges, listed in Table G, are refundable advances and are similar to Staff's current range of charges for service line and meter installations. Staff recommends approval of Cordes Lakes proposed addition of Road Cutting and Boring at cost. Staff recommends that Cordes Lakes continue to use the installation charges included in Table G.

⁷ Cordes Lakes current charges were approved in Decision No. 74155, effective October 25, 2013. Correction needed.

Table G. Service Line and Meter Installation Charges – Cordes Lakes

Meter Size	Cordes Lakes Installation Charges		
	Service Line Charge ¹	Meter Charge	Total Charge ¹
3/4-inch	\$426	\$198	\$624
1-inch	\$486	\$246	\$732
1-1/2-inch	\$528	\$498	\$1,026
2-inch	\$720	\$1,098	\$1,818
3-inch	\$930	\$1,764	\$2,694
4-inch	\$1,332	\$2,700	\$4,032
6-inch	\$2,000	\$5,350	\$7,350

¹Actual Cost of Service Line if road cutting and boring under paved roadways is required

2. *Curtailment Tariff*

Cordes Lakes has an approved Curtailment Tariff on file with the Commission.

3. *Cross-Connection/ Backflow Prevention Tariff*

Cordes Lakes has an approved Cross-Connection/Backflow Prevention Tariff on file with the Commission.

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

Cordes Lakes has five (5) Best Management Practice (“BMP”) Tariffs on file with the Commission. The BMP’s were filed on February 14, 2014 and include:

- 1) Public Education Program
- 2) New Homeowner Landscape Information Tariff – BMP #2.3
- 3) Water Waste Investigation and Information Tariff – BMP #3.8
- 4) Meter Repair and/or Replacement – BMP #4.2
- 5) Water System Tampering Tariff – BMP 5.2

5. *CC&N Expansion Application*

In Decision No. 74155, Cordes Lakes was ordered to file for an extension of its CC&N to include an area where it is presently providing service to customers outside of its existing Certificate. Accordingly, Cordes Lakes filed an application for the extension of its CC&N on July 25, 2014 under Docket No. W-02060A-14-0281. On August 25 and November 7, 2014, Staff issued an insufficiency letter in Docket No. W-02060A-14-0281.

FIGURES

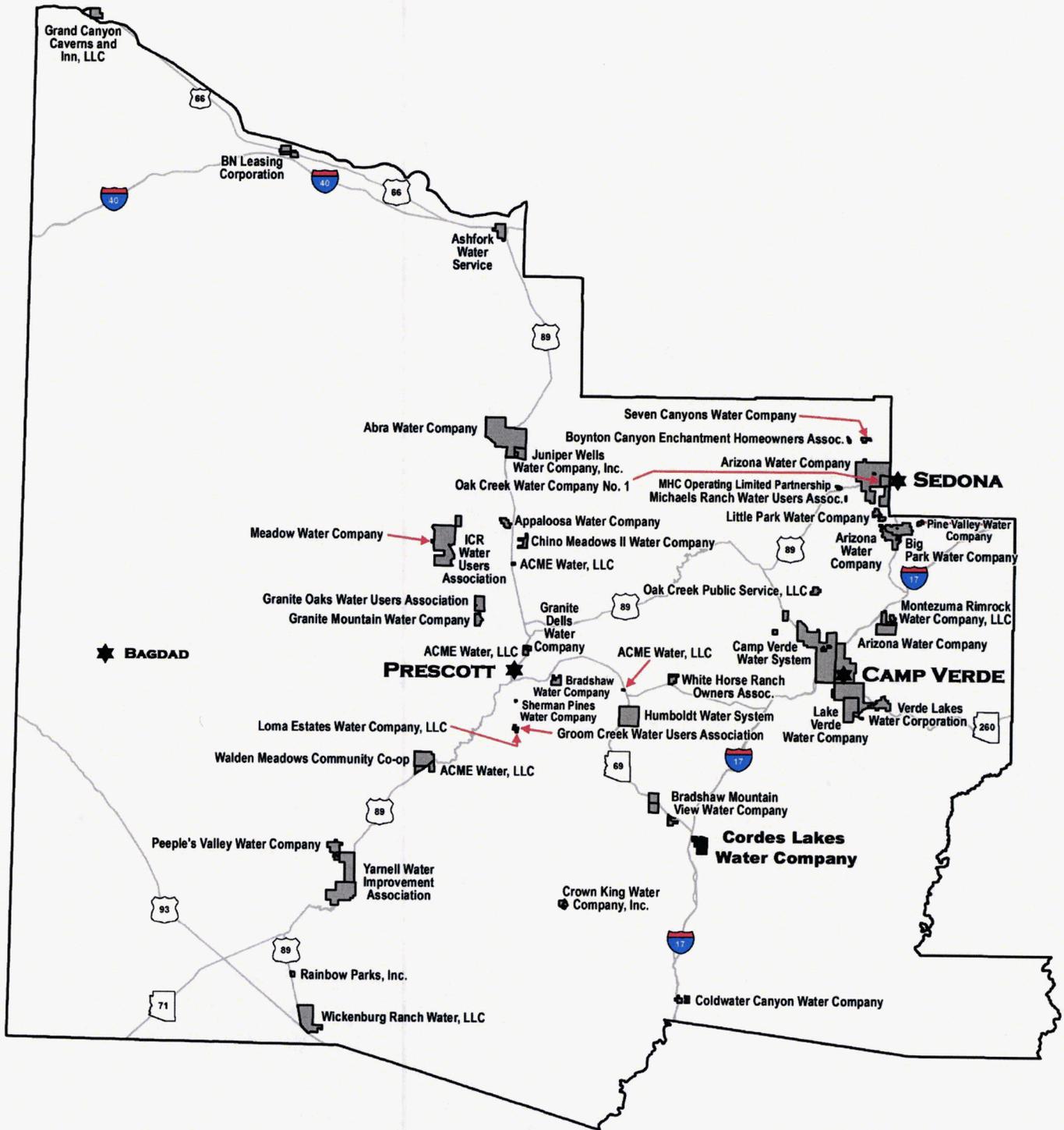


FIGURE 1 – YAVAPAI COUNTY MA

YAVAPAI COUNTY

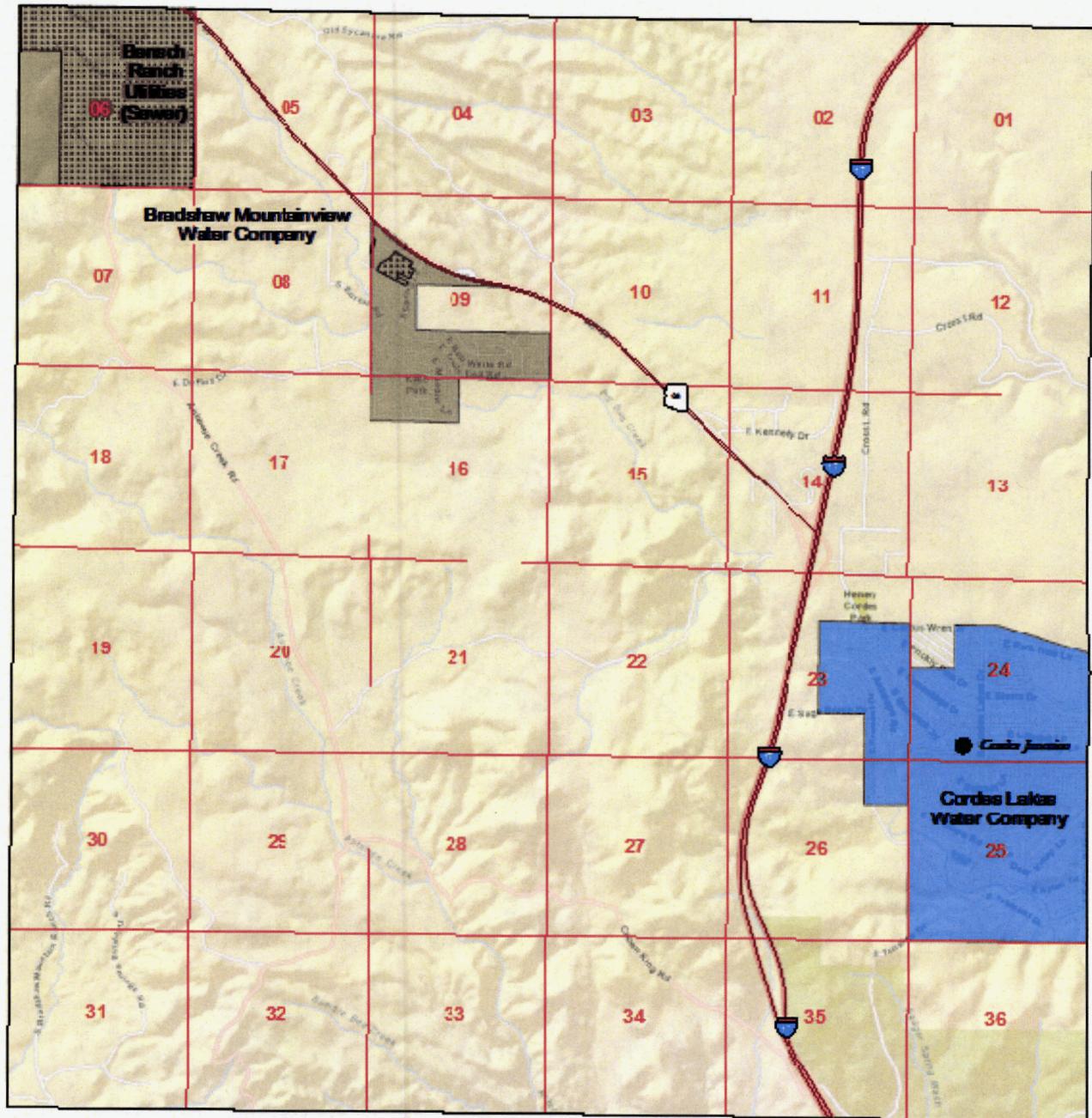


FIGURE 2 – CORDES LAKES CERTIFICATED AREA



FIGURE 3 – CORDES LAKES SITE MAP

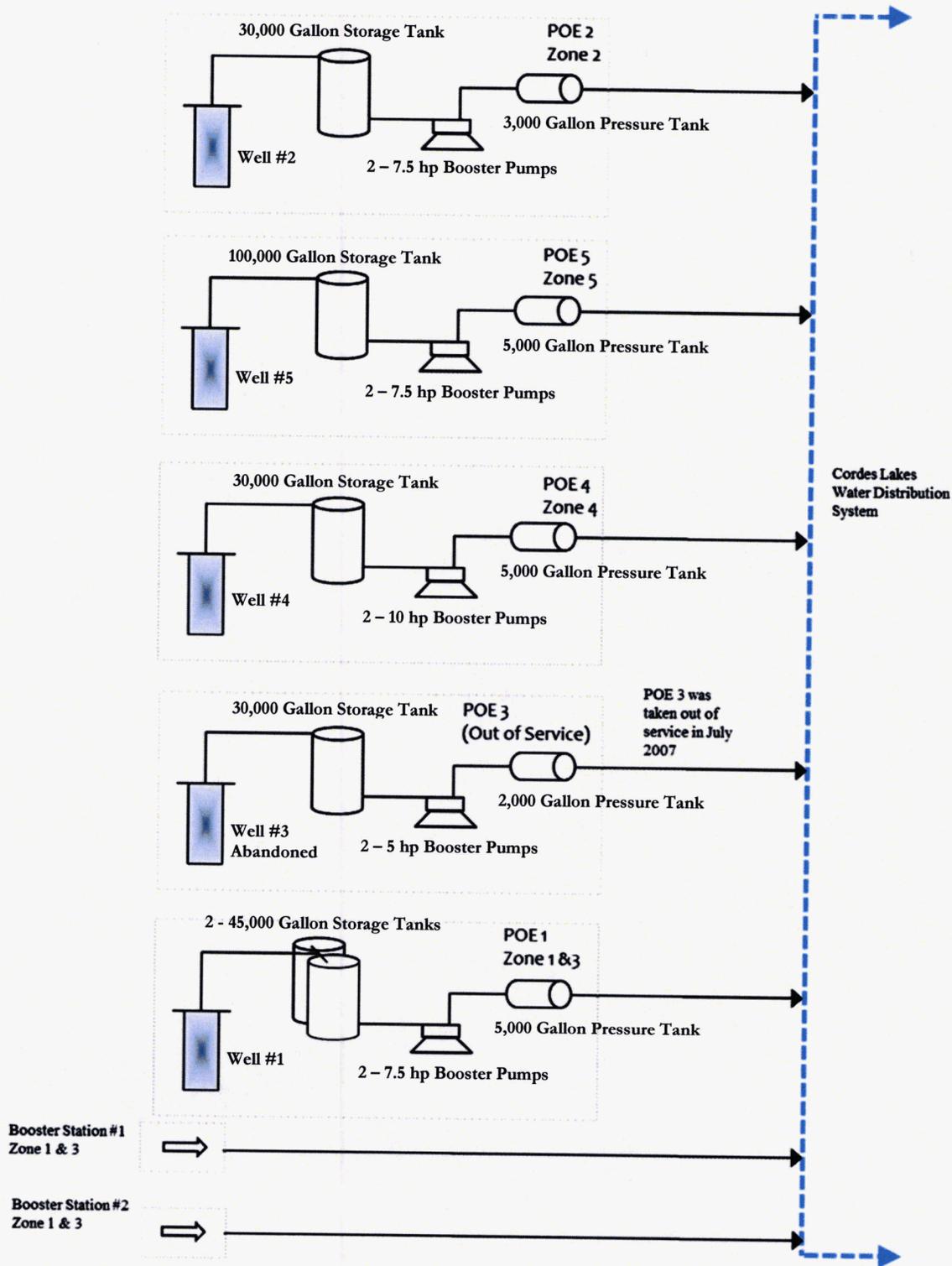


FIGURE 4 – CORDES LAKES WATER SYSTEM SCHEMATIC (PWS No. 04-13-023)

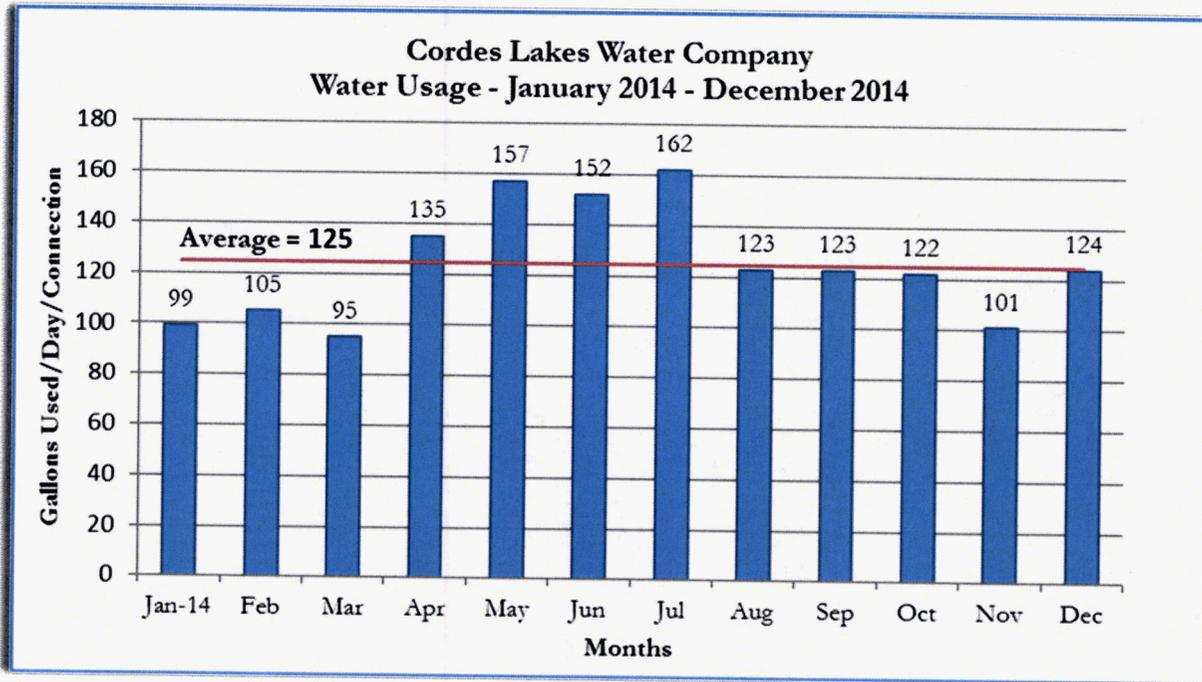


FIGURE 5 – CORDES LAKES WATER CONSUMPTION

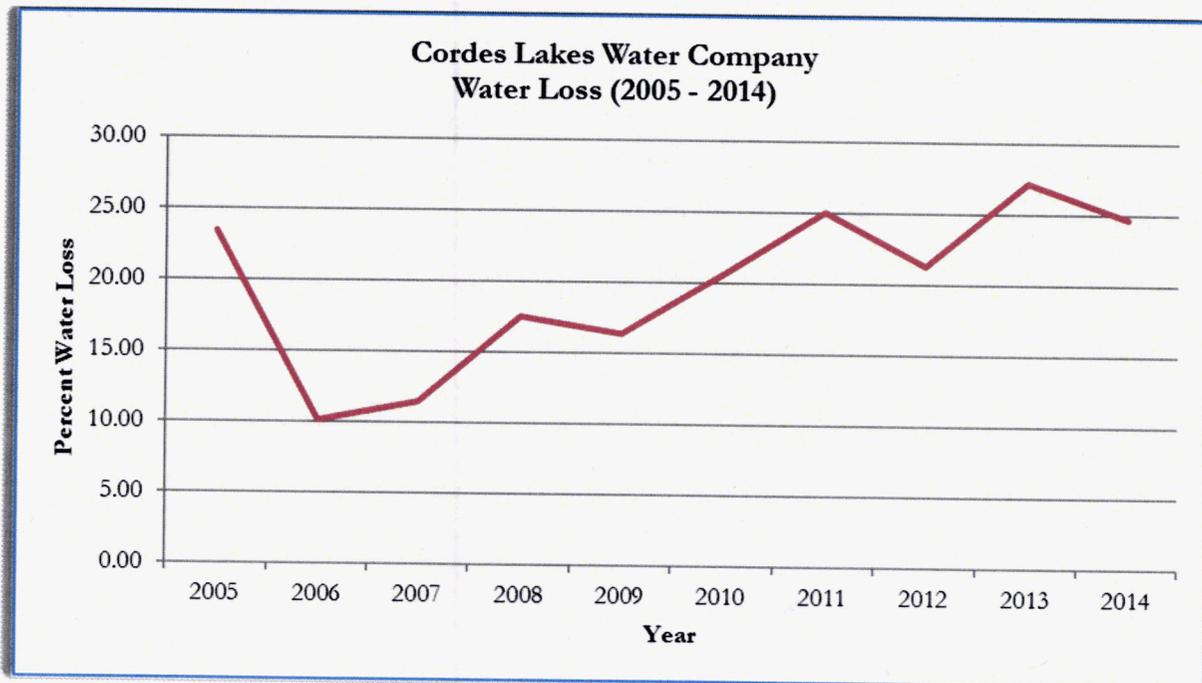


FIGURE 6 – CORDES LAKES HISTORICAL WATER LOSS

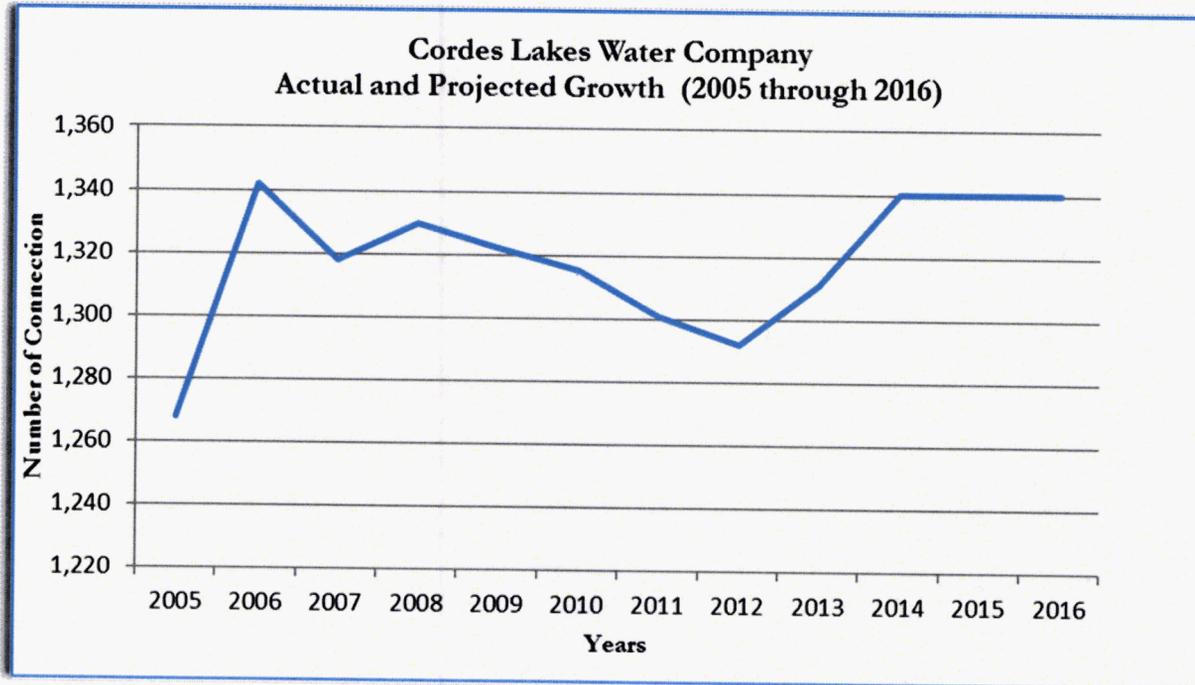


FIGURE 7 – CORDES LAKES GROWTH