



0000012356

ORIGINAL

Arizona Corporation Commission
MEMORANDUM
DOCKETED

RECEIVED

DEC 11 2000

2000 DEC 11 P 3:10

TO: Docket Control

DOCKETED BY	lf
-------------	----

AZ CORP COMMISSION
DOCUMENT CONTROL

FROM: Deborah R. Scott
Director
Utilities Division

*Barbara
W. Tasker
for*

DATE: December 11, 2000

RE: STAFF REPORT FOR YARNELL WATER IMPROVEMENT ASSOCIATION, INC.,
APPLICATION FOR A PERMANENT RATE INCREASE (DOCKET NO. W-02255A-
00-0640)

Attached is the Staff Report for Yarnell Water Improvement Association, Inc.'s application for a permanent rate increase. Staff recommends approval of the rates and charges, as well as the transfer of the assets and certificate of convenience and necessity, subject to Commission approval. Staff further recommends that a hearing not be held in this matter.

DRS:SSA/jbc

Originator: Sonn S. Ahlbrecht

Attachment: Original and Eleven Copies

STAFF REPORT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

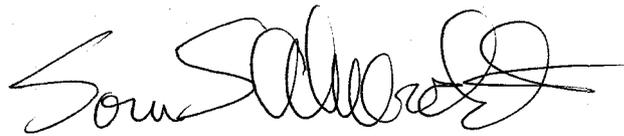
YARNELL WATER IMPROVEMENT ASSOCIATION, INC.
DOCKET NO. W-02255A-00-0640

APPLICATION
FOR A
PERMANENT RATE INCREASE

DECEMBER 2000

STAFF ACKNOWLEDGMENT

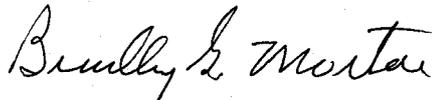
The Staff Report for Yarnell Water Improvement Association, Inc., Docket No. W-02255A-00-0640, was the responsibility of the Staff members listed as follows. Sonn S. Ahlbrecht was responsible for the review and analysis of the Company's application for a permanent rate increase and Staff's recommended revenue requirements, rate base and rate design. Marlin Scott Jr. was responsible for the engineering and technical analysis. Bradley G. Morton 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.



Sonn S. Ahlbrecht
Rate Analyst II



Marlin Scott Jr.
Utilities Engineer (Water/Wastewater)



Bradley G. Morton
Consumer Service Specialist I

TABLE OF CONTENTS

	<u>PAGE</u>
Factsheet	1
Summary of Filing	3
Background	4
Consumer Services.....	4
Engineering Analysis and Compliance	5
Rate Base	5
Plant in Service	6
Operating Revenues	8
Operating Expenses	8
Interest and Amortization Expense	9
Rate of Return	9
Cash Flow and Rate Design	10
Staff Recommendations	10

SCHEDULES

Summary of Filing	1
Rate Base	2
Statement of Operating Income	3
Rate Design	4
Typical Bill Analysis.....	5

ATTACHMENTS

Engineering Report	A
--------------------------	---

FACTSHEET

Company History:

CC&N Authorized: Decision No. 44085, dated April 22, 1974
 Current Permanent Rates: Decision No. 56656, dated October 6, 1989
 Type of Ownership: Tax Exempt Corporation
 Classification: Class D Water Utility

Location: In Yavapai County, approximately thirty miles southwest of Prescott along U.S. Route 89. The system is not located within an Active Management Area.

Rates:

Permanent Rate Application filed: August 30, 2000
 Current Test Year Ended: December 31, 1999
 Prior Test Year Ended: December 31, 1987

	Current Rates	Company Proposed Rates	Staff Proposed Rates
Monthly Charge (Based on a 3/4-inch Meter)	\$20.00	\$24.00	\$24.00
Gallons included in monthly charge	1,000	1,000	0
Commodity charge per 1,000 gallons from 1,001 to 5,000 gallons	\$2.00	\$4.00	\$3.00
Commodity charge per 1,000 gallons from 5,001 to 10,000 gallons	\$3.75	\$4.75	\$4.00
Commodity charge per 1,000 gallons from 10,001 to 50,000 gallons	\$5.50	\$6.25	\$5.50
Commodity charge per 1,000 gallons in excess of 50,000 gallons	\$5.50	\$7.00	\$6.50

Yarnell Water Improvement Association, Inc.

Docket No. W-02255A-00-0640

Page 2

Customers:

Number of customers in the prior Test Year (12/31/87): 436

Number of customers at the end of current Test Year (12/31/99): 510

Average number of customers for the current Test Year by meter size:

¾ - Inch	506
1 - Inch	6
1 ½ - Inch	1
2 - Inch	1

Seasonal Customers: N/A

Customer notification published in Prescott Courier: August 31st to September 5th, 2000

Number of customer complaints since rate application filed: 9

Percentage of complaints to customer base: 1.74%

Summary of Filing

Based on Test Year results, as adjusted by Staff, Yarnell Water Improvement Association, Inc. ("YWIA or Company"), realized an operating loss of \$10,281 on an Original Cost Rate Base ("OCRB") of \$71,602, resulting in a 14.36 percent negative rate of return on invested capital. Please refer to the Summary of Filing, Schedule 1.

YWIA has requested an increase of \$45,000, or total revenue of \$234,539, which would result in operating income of \$39,837, and a 71.08 percent rate of return on an OCRB of \$56,047. However, the rates proposed by the Company in the application produce total revenue of \$238,258.

Staff has recommended a revenue level of \$234,539 resulting in operating income of \$62,772, for an 87.67 percent rate of return on an OCRB of \$71,602. As a result of the Company-proposed rates generating more revenue than requested, it was necessary for Staff to adjust rates to arrive at the same amount of revenue. At Staff proposed rates, the average residential bill of 3,399 gallons for customers receiving service through a 3/4-inch meter would increase from \$24.80 to \$34.20, for an increase of 37.9 percent.

YWIA serves the residents and businesses of the community of Yarnell, located in Yavapai County approximately thirty miles southwest of Prescott along U.S. Route 89. During the Test Year ended December 31, 1999, YWIA provided water to an average of 514 metered customers. Of those 514 customers, 506 customers were served by 3/4-inch meters, six customers were served by 1-inch meters, one customer through a 1 1/2-inch meter, and one customer through a 2-inch meter.

YWIA is requesting rate relief from the Arizona Corporation Commission ("ACC or Commission") for various reasons as stated within the application narrative. The Company's last rate increase became effective on November 1, 1989. Due to increases in repairs and maintenance, water testing costs, and the need for additional personnel over the years, Company representatives believe the current revenue level is insufficient to meet expenses.

Additionally in the application narrative, the Company acknowledged that they are in violation of the loan agreement with GMAC Commercial Mortgage Corp. The loan covenant states that YWIA must maintain a Debt Coverage Ratio ("DCR") of 1.0 as a minimum. The Company reported a DCR of 0.66 in 1998, and as delineated on Schedule 1, DCR for the Test Year is 0.86. After Staff made adjustments to expenses, the DCR decreased to 0.23 at present rates. At Staff's recommended revenues and adjusted expenses, the ratio increases to 1.10, resulting in an Operating Margin of 26.76 percent.

Background

YWIA was organized in Arizona as a non-profit corporation on November 14, 1972, for the purpose of providing water service to residents of Yarnell. On April 22, 1974, YWIA was granted its Certificate of Convenience and Necessity ("CC&N") in Decision No. 44085. YWIA's current rates were established in Decision No. 56656, dated October 6, 1989.

The Commission has also approved two loans obtained by the utility. Decision No. 44157, approved a \$769,000 loan from Farmers Home Administration on May 20, 1974, and a \$100,000 loan from the same lending institution was authorized by Decision No. 44990, dated February 25, 1975. Both loans are for a period of forty years at five percent interest per annum, and the respective outstanding balances at the end of the Test Year are \$456,094.80 and \$59,528.81. Per the amortization schedules provided by the Company, both loans should mature in 2014. Additionally, the loans are now administered by GMAC Commercial Mortgage Corporation instead of Farmers Home Administration.

The tariff approved in Decision No. 56656, also contains a charge of \$7.50 per hydrant per month. This fee is billed by the Company to the Yarnell Fire District ("District"), for the approximately 77 fire hydrants located within the Yarnell area. On January 24, 2000, Tom Branski of the Yarnell Fire District filed a formal complaint against YWIA. Among other items, the District requested the utility revise their current rate schedule to eliminate the existing hydrant fee, and relieve the District from any future financial obligations regarding that fee. On March 7, 2000, Mr. Branski withdrew his complaint against YWIA, based upon the agreement that the Company would file a rate case to revise the tariff and have the hydrant charge removed.

Consumer Services

A search of Consumer Services records revealed a total of eight complaints and nine opinions regarding YWIA since 1998. Two complaints were filed in 1998, both of which involved possible meter problems. In both cases, no problem was found with the meter. In 1999, one complaint was filed disputing the meter location. That individual was referred to the contractor who selected the location.

Five complaints are on file with Consumer Services for 2000. The Yarnell Fire District filed two of the complaints, and one escalated to a formal complaint that was later withdrawn as mentioned above. Two of the complaints related to high billing disputes and have been resolved by Consumer Services. The fifth complaint regarding water service to a new connection is pending. To date, nine YWIA customers have contacted Consumer Services to object to the proposed rate increase, but no requests for intervention have been received.

Consumer Services has received a sample copy of YWIA's billing format. The billing format is in full compliance with all minimum information required by R14-2-409.B.2. The Company is a Class "D" corporation in good standing with the Commission's Corporations Division.

Engineering Analysis and Compliance

Staff Engineering conducted a field inspection of the Company's system on October 26, 2000. Participants in the inspection included Marlin Scott, Jr., Utilities Engineer, and Brad Morton, Utilities Consumer Service, accompanied by Mr. Stacey Zudell, Operator for the Company.

Please refer to Attachment A, Staff Engineering's Report, for a detailed description of the water system, water use data, and growth projections.

As stated in Staff's Engineering Report, the Company's system has no deficiencies. The Arizona Department of Environmental Quality ("ADEQ") has determined that YWIA is currently delivering water that does not exceed any maximum contaminant levels, and meets the Safe Drinking Water Act quality standards. Additionally, the Company's water system is not located within an Active Management Area as designated by Arizona Department of Water Resources ("ADWR").

Staff Engineering evaluated YWIA's current water testing costs and determined that the total estimated cost annually is \$2,684. Please refer to Table A in Section G of Attachment A for a breakdown of those costs.

Also included in Attachment A, in Section I, are Staff Engineering's proposed service line and meter installation charges, as well as recommended depreciation rates, by individual plant account.

YWIA is current in its remittance of both property taxes and sales tax.

The Company's books and records are not kept in accordance with the National Association of Regulatory Utility Commissioners ("NARUC") Uniform System of Accounts. Staff's recommendation was based on the fact that the supporting plant detail did not agree with the application's Plant in Service schedule. This will be addressed in more detail in the section of this report entitled Plant in Service.

Rate Base

Staff made six adjustments to YWIA's proposed rate base resulting in an increase of \$15,555, from \$56,047 to \$71,602, as delineated on Schedule 2, Page 1 of 3. Adjustment A decreased the Company's Plant in Service by \$84,965, as detailed on Schedule 2, Page 2 of 3. Most of the plant adjustments resulted from the plant balances approved in Decision No. 56656, which the Company failed to record at that time. Please refer to the section of this report entitled Plant in Service for additional detail regarding this adjustment.

Schedule 2, Page 3 of 3, itemizes Adjustment B, an increase to Accumulated Depreciation of \$475,468. The large adjustment to accumulated depreciation was the difference between the Commission approved five percent composite depreciation rate versus the Company's use of a lower

composite depreciation rate utilized for bookkeeping purposes. These two adjustments have the effect of decreasing Net Plant proposed by the Company of \$704,938 to \$144,505.

Adjustment C increased Plant Advances by \$13,995 to reclassify a line extension agreement from Contributions in Aid of Construction ("CIAC"). The corresponding Adjustment D decreased CIAC by \$13,995, as well as an increase to CIAC of \$689 to bring the account to the \$640,689 balance approved in Decision No. 56656. Adjustment E increased Amortization of CIAC by \$576,614 to record amortization expense from 1982 to the present. Staff estimates that the CIAC should be fully amortized near the end of 2001.

The remaining change to Rate Base, Adjustment F, represents a minor increase due to adjustments recommended on the Income Statement for Operations and Maintenance.

Plant in Service

Several adjustments to Plant in Service were required as depicted on Schedule 2, Page 2 of 3. The unusually large amount of recommended adjustments can be attributed to two main issues. The first issue being that YWIA did not reflect the plant beginning balances approved in Decision No. 56656. As a result, additions and retirements were made to accounts that had an incorrect beginning balance, resulting in further differences.

The second main reason for the large number of adjustments, as mentioned previously in the Engineering Analysis and Compliance section of this report, is due to the fact that the Company's plant detail did not support the Plant in Service schedule in the application. As a result, Staff's recommended Plant in Service was derived by adding plant additions for intervening years 1988 through Test Year 1999 to, and subtracting plant retirements from, the approved Plant in Service in Decision No. 56656.

Adjustments A, B, D, I, J, L, N, P, and Q to Plant in Service were made solely to conform with the plant account balances approved in Decision No. 56656.

Adjustment C increased Structures & Improvements by \$43,302 to adjust to the approved beginning balance of \$89,726 in Decision No. 56656. This account was also increased by \$8,082 for plant additions including a heating/air unit, blacktop for the parking lot, and some fencing.

Adjustment E increased Pumping Equipment by \$15,807 to adjust to the approved beginning balance of \$31,057 in Decision No. 56656. This account was also increased by \$5,069 for plant additions including a pump and a generator.

Adjustment F decreased Water Treatment Equipment by \$47,277 to adjust to the approved beginning balance of \$1,585 in Decision No. 56656. This account was also increased by \$3,453 for additional water treatment equipment.

Adjustment G increased Distribution Reservoirs and Standpipes by \$76,921 to adjust to the approved beginning balance of \$233,141 in Decision No. 56656. This account was also increased by \$17,500 to repaint the storage tanks.

Adjustment H increased Transmission and Distribution Mains by \$33,991 to adjust to the approved beginning balance of \$595,130 in Decision No. 56656. This account was also increased by \$23,788 for plant additions, including \$13,995 for a 1995 line extension agreement, and \$9,793 for a CLA valve.

Adjustment K decreased Hydrants by \$12,370 to adjust to the approved beginning balance of \$40,911 in Decision No. 56656. This account was also increased by \$4,012 for additional hydrants and replacement parts.

Adjustment M decreased Office Furniture & Equipment by \$8,142 to adjust to the approved beginning balance of \$2,571 in Decision No. 56656. This account was also increased by \$3,089 for office equipment additions.

Adjustment O decreased Tools, Shop & Garage Equipment by \$35,001 to adjust to the approved beginning balance of \$4,359 in Decision No. 56656. This account was also increased by \$4,461 for additions of this type of equipment.

Adjustment R increased Miscellaneous Equipment by \$3,001 to account for plant additions including a beam scale and a metal detector.

Adjustment S decreased Other Tangible Plant by \$171,646 to adjust to the approved beginning balance of \$175,260 in Decision No. 56656. This account was also increased by \$14,906 for addition of a backhoe, as well as decreasing it by \$9,583 for retirement of the backhoe and associated bucket replaced by the addition.

Lastly, Adjustment T in the amount of \$19,735 was made to remove an item referred to as "Unbooked ACC Adjustment" that appeared on the Company application, but was not approved in Decision No. 56656.

All twenty of the adjustments to plant recommended by Staff have the net effect of decreasing Plant in Service by \$84,965, from \$1,586,473 proposed by YWIA, to \$1,501,508 recommended by Staff.

Staff increased Accumulated Depreciation by \$475,468 as depicted on Schedule 2, Page 3 of 3. This amount was derived by calculating annual depreciation expense at a five percent rate applied to Plant in Service for the intervening years since the 1987 Test Year. Depreciation expense of \$782,599 for years 1988 through 1999, was added to the Accumulated Depreciation balance of \$583,986 approved by Decision No. 56656. Additionally, \$9,583 for the retirement detailed in Adjustment S is subtracted, along with an addition of \$1 due to rounding. As mentioned previously

in the Rate Base section of this report, this large adjustment is the result of the difference between the application of a Commission approved five percent composite depreciation rate to Plant in Service since the last Test Year, and the lower depreciation rates utilized by the Company for bookkeeping purposes.

Operating Revenues

The Company's revenues matched the amount reported in the application, therefore no adjustment was necessary. However, the revenues derived from the bill counts submitted did not match the revenues reported in the Income Statement. Staff's remedy to this discrepancy is discussed further in the section entitled Rate Design.

Operating Expenses

A total of eight adjustments to Operating Expenses resulted in a net increase of \$5,118, resulting in Total Operating Expenses of \$199,820, as reflected on Schedule 3, Page 1 of 3. Explanations for Staff's operating expense adjustments also appear on Schedule 3, Pages 2 and 3.

Adjustment A increased Salaries and Wages by \$3,217. Staff normalized salaries by multiplying the Test Year fourth quarter gross wages by four to arrive at an annual amount. Staff believes this adjustment was necessary due to fluctuations in salary during the Test Year.

Adjustment B increased Outside Services by \$2,680 as the result of a reclassification of accounting services from Miscellaneous Expense.

Adjustment C decreased Water Testing by \$1,233 based upon Staff Engineering's calculation of water testing costs. For further detail, please refer to Section G of the Engineering Report, Attachment A.

Adjustment D decreased Insurance – General Liability by \$1,478. This reduction was based upon the most recent billing statement received by YWIA for liability insurance.

Adjustment E decreased Miscellaneous Expense by \$2,680 to reclassify accounting expenses to Outside Services as mentioned in Adjustment B above.

Depreciation Expense was increased \$4,658 by Adjustment F to reflect the five percent depreciation rate approved in Decision No. 56656. At Staff's proposed rates, depreciation expense has been revised for each plant account, resulting in a proposed composite depreciation rate of 3.13 percent, or \$18,847 annually.

Adjustment G increased Taxes Other Than Income by \$771. This adjustment is to account for increased employer payroll taxes as a result of Staff's recommended increase in Salaries and Wages.

Adjustment H decreased Property Taxes by \$817 to reflect the 2000 Property Tax Statements received by the Company from Yavapai County.

Interest and Amortization Expense

YWIA has three "below the line" items, and two of them required adjustment. As noted earlier, the Company has two loans outstanding from GMAC Commercial Mortgage Corporation. Both loans are for a period of forty years, and interest is calculated at five percent.

Per the amortization schedules provided by YWIA, projected interest expense for 2001 is \$24,493 for both loans. Adjustment I decreased Interest Expense from the Test Year level of \$26,860, to the amount projected on the amortization schedules.

Adjustment J increased Amortization Expense by \$32,034 to reflect Test Year amortization of CIAC calculated at the five percent rate. Since the CIAC was established in 1974, and amortization began in 1982, in order to not penalize the Company, Staff has classified this non-cash expense below operating income due to the fact that the assets associated with the CIAC are fully depreciated.

Rate Of Return

There are several methods to arrive at a fair and reasonable rate of return. Cost of capital studies, cash requirement analysis, operating margin, times interest earned ratio ("TIER") and debt coverage ratio ("DCR"), are the most common methodologies used. The Company is classified as a Class D water utility and as such is not required to file cost of capital studies to arrive at its proposed rate of return.

Staff's proposed rates result in approximately an 87.67 percent rate of return. However, this high rate of return is due to almost fully depreciated plant in service. Consequently, a small rate base.

Staff based its recommended rate of return on the GMAC Commercial Mortgage Corp. required DCR of at least 1.00. This ratio measures the cash requirements of the Company. GMAC Commercial Mortgage Corp.'s required 1.00 ratio means that for every dollar of debt, the Company has \$1.00 available to service the debt net of operating expenses.

Staff's proposed rates produce a DCR of 1.10, which would enable the Company to meet GMAC Commercial Mortgage Corp's required DCR, and provide a cushion for contingencies.

Cash Flow and Rate Design

Based upon the rates proposed by Staff, YWIA will realize a 23.74 percent increase in operating revenues that will provide the Company with Operating Income of \$62,772. This increase will also provide the Company with a positive cash flow of \$64,175, based upon Net Income of \$13,294.

As discussed in the Background section of this Report, the company removed the fire hydrant charge from proposed rates. Staff concurs with this change, and has designed rates accordingly to recover the revenue from metered rates.

Staff's rate design is comprised of a four-tier, inverted block commodity rate structure with no gallons included in the monthly minimum charge as depicted on Schedule 4. YWIA currently has a three-tier, inverted block commodity rate structure with 1,000 gallons included in the monthly charge. The Company has requested a fourth tier to further promote conservation above the 50,000 gallons per month consumption level. Although Staff agrees for the most part, the recommended rate design does not include 1,000 gallons in the monthly charge.

As mentioned in the Operating Revenues section of this Report, the Company's bill counts did not reflect the revenues shown on the Company's application. To remedy this situation, Staff increased the amount of gallons sold in the Test Year by 2.3 million to arrive at recommended revenue levels.

Although Staff has recommended the amount of revenue requested by YWIA, the rates that produce that revenue have been adjusted. This is due to the Company's requested rates producing more revenue than the \$234,539 stated as necessary to meet operating expenses and debt service.

Staff Recommendations

Staff recommends approval of the rates and charges presented in Schedule 4 of this Report.

Staff further recommends approval of the above rates and charges without a hearing.

Staff further recommends that in addition to the collection of its regular rates and charges, YWIA shall collect from its customers their proportionate share of any Privilege, Sales or Use Tax as provided for in A.A.C. R14-2-409.D.

Staff further recommends the depreciation rates delineated within the Engineering Report be approved.

Staff further recommends that the Company implement and maintain its records in accordance with the NARUC Uniform System of Accounts that has been adopted by the Commission.

SUMMARY OF FILING

	-- Present Rates --		-- Proposed Rates --	
	Company as Filed	Staff as Adjusted	Company as Filed	Staff as Adjusted
Revenues:				
Metered Water Revenue	\$181,107	\$181,107	\$232,587	\$232,612
Unmetered Water Revenue	0	0	0	0
Other Water Revenues	8,432	8,432	1,952	1,927
Total Operating Revenue	\$189,539	\$189,539	\$234,539	\$234,539
Operating Expenses:				
Operation and Maintenance	\$134,716	\$135,222	\$134,716	\$135,222
Depreciation	42,242	46,900	42,242	18,847
Property & Other Taxes	17,744	17,698	17,744	17,698
Income Tax	0	0	0	0
Total Operating Expense	\$194,702	\$199,820	\$194,702	\$171,767
Operating Income/(Loss)	(\$5,163)	(\$10,281)	\$39,837	\$62,772
Rate Base O.C.L.D.	\$56,047	\$71,602	\$56,047	\$71,602
Rate of Return - O.C.L.D.	-9.21%	-14.36%	71.08%	87.67%
Debt Coverage Ratio (DCR)	0.86	0.23	1.73	1.10
Operating Margin	-2.72%	-5.42%	16.99%	26.76%

- NOTES:
1. The Debt Service Coverage Ratio (DSC) represents the ability of the Company to service outstanding debt based on income.
 2. 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	\$1,586,473	(\$84,965)	A	\$1,501,508
Less:				
Accum. Depreciation	881,535	475,468	B	1,357,003
Net Plant	\$704,938	(\$560,433)		\$144,505
Less:				
Plant Advances	\$0	\$13,995	C	\$13,995
Customer Deposits	13,502	0		13,502
Total Advances	\$13,502	\$13,995		\$27,497
Contributions Gross	\$653,995	(\$13,306)	D	\$640,689
Less:				
Amortization of CIAC	0	576,614	E	576,614
Net CIAC	\$653,995	(\$589,920)		\$64,075
Total Deductions	\$667,497	(\$575,925)		\$91,572
Plus:				
1/24 Power	\$329	\$0		\$329
1/8 Operation & Maint.	15,853	63	F	15,916
Inventory	0	0		0
Prepayments	2,424	0		2,424
Total Additions	\$18,606	\$63		\$18,669
Rate Base	\$56,047	\$15,555		\$71,602

Explanation of Adjustment:

- A See Schedule 2, Page 2.
- B See Schedule 2, Page 3.
- C To reclassify a \$13,995 line extension agreement from Contributions in Aid of Construction (CIAC) to Plant Advances.
- D To reclassify a \$13,995 line extension agreement from CIAC to Plant Advances, as well as an addition in the amount of \$689 to adjust to CIAC balance of \$640,689 as per Decision No. 56656.
- E To record amortization of CIAC from 1982 through the 1999 Test Year.
- F To adjust working capital allowance based on Staff's adjustments to operating expenses.

PLANT ADJUSTMENT

	Company Exhibit	Adjustment	Staff Adjusted
301 Organization	\$24,471	\$53,869 A	\$78,340
302 Franchises	37,863	(37,863) B	0
303 Land & Land Rights	13,952	0	13,952
304 Structures & Improvements	46,424	51,384 C	97,808
307 Wells & Springs	43,568	2,989 D	46,557
311 Pumping Equipment	15,250	20,876 E	36,126
320 Water Treatment Equipment	48,862	(43,824) F	5,038
330 Distribution Reservoirs & Star	156,220	94,421 G	250,641
331 Transmission & Distribution M	561,139	57,779 H	618,918
333 Services	8,608	47,528 I	56,136
334 Meters & Meter Installations	81,588	(49,363) J	32,225
335 Hydrants	53,281	(8,358) K	44,923
336 Backflow Prevention Devices	435	0	435
339 Other Plant and Misc. Equipm	99,402	(99,402) L	0
340 Office Furniture & Equipment	10,713	(5,053) M	5,660
341 Transportation Equipment	17,424	(7,524) N	9,900
343 Tools Shop & Garage Equipm	39,360	(30,540) O	8,820
344 Laboratory Equipment	0	0	0
345 Power Operated Equipment	0	9,814 P	9,814
346 Communication Equipment	0	1,889 Q	1,889
347 Miscellaneous Equipment	742	3,001 R	3,743
348 Other Tangible Plant	346,906	(166,323) S	180,583
0 Unbooked ACC Adjustment	(19,735)	19,735 T	0
TOTALS	\$1,586,473	(\$84,965)	\$1,501,508

Explanation of Adjustment:

- A To increase beginning balance to amount approved in Decision No. 56656.
- B To decrease beginning balance to amount approved in Decision No. 56656.
- C To increase beginning balance to \$89,726 as approved in Decision No. 56656, plus additions of \$8,082.
- D To increase beginning balance to amount approved in Decision No. 56656.
- E To increase beginning balance to \$31,057 as approved in Decision No. 56656, plus additions of \$5,069.
- F To decrease beginning balance to \$1,585 as approved in Decision No. 56656, plus additions of \$3,453.
- G To increase beginning balance to \$233,141 as approved in Decision No. 56656, plus additions of \$17,500.
- H To increase beginning balance to \$595,130 as approved in Decision No. 56656, plus additions of \$23,788, including \$13,995 for a line extension agreement in 1995.
- I To increase beginning balance to amount approved in Decision No. 56656.
- J To decrease beginning balance to amount approved in Decision No. 56656.
- K To decrease beginning balance to \$40,911 as approved in Decision No. 56656, plus additions of \$4,012.
- L To decrease beginning balance to amount approved in Decision No. 56656.
- M To decrease beginning balance to \$2,571 as approved in Decision No. 56656, plus additions of \$3,089.
- N To decrease beginning balance to amount approved in Decision No. 56656.
- O To decrease beginning balance to \$4,359 as approved in Decision No. 56656, plus additions of \$4,461.
- P To increase beginning balance to amount approved in Decision No. 56656.
- Q To increase beginning balance to amount approved in Decision No. 56656.
- R To increase account balance for additions in the amount of \$3,001.
- S To decrease beginning balance to \$175,260 as approved in Decision No. 56656, plus additions of \$14,906. Account was decreased by \$9,583 for retirement of a backhoe.
- T To remove a \$19,735 unbooked ACC adjustment on the Company application.

ACCUMULATED DEPRECIATION ADJUSTMENT

	<u>Amount</u>
Accumulated Depreciation - Per Company	\$881,535
Accumulated Depreciation - Per Staff	1,357,003 A
Total Adjustment	\$475,468

Explanation of Adjustment:

- A - Following is detail of the Accumulated Depreciation account beginning with the amount approved in Decision No. 56656, and adding depreciation expense for years 1988 through 1999 at a five percent depreciation rate. Retirements decreased Accumulated Depreciation, and additions were computed using the half-year convention method.

Amount approved in Decision No. 56656:	\$	583,986
Add depreciation expense for the following years:		
1988	\$	66,307
1989		66,307
1990		66,430
1991		66,665
1992		66,847
1993		66,734
1994		66,942
1995		67,189
1996		68,097
1997		68,611
1998		65,570
1999		46,900
	\$	782,599
Subtract retirements:	1993	\$ (9,583)
Adjusment necessary due to rounding:		1
Accumulated Depreciation at Test Year End:	\$	1,357,003

STATEMENT OF OPERATING INCOME

	Company Exhibit	Staff Adjustments	Staff Adjusted
Revenues:			
461 Metered Water Revenue	\$181,107	\$0	\$181,107
460 Unmetered Water Revenue	0	0	0
474 Other Water Revenues	8,432	0	8,432
Total Operating Revenue	\$189,539	\$0	\$189,539
Operating Expenses:			
601 Salaries and Wages	\$79,231	\$3,217 A	\$82,448
610 Purchased Water	0	0	0
615 Purchased Power	7,893	0	7,893
618 Chemicals	2,379	0	2,379
620 Repairs and Maintenance	12,930	0	12,930
621 Office Supplies & Expense	10,156	0	10,156
630 Outside Services	1,090	2,680 B	3,770
635 Water Testing	3,917	(1,233) C	2,684
641 Rents	128	0	128
650 Transportation Expenses	3,253	0	3,253
657 Insurance - General Liability	5,869	(1,478) D	4,391
659 Insurance - Health and Life	1,560	0	1,560
666 Regulatory Commission Expense - Rate Case	0	0	0
675 Miscellaneous Expense	6,310	(2,680) E	3,630
403 Depreciation Expense	42,242	4,658 F	46,900
408 Taxes Other Than Income	6,674	771 G	7,445
408.11 Property Taxes	11,070	(817) H	10,253
409 Income Tax	0	0	0
Total Operating Expenses	\$194,702	\$5,118	\$199,820
OPERATING INCOME/(LOSS)	(\$5,163)	(\$5,118)	(\$10,281)
Other Income/(Expense):			
419 Interest and Dividend Income	\$7,049	\$0	\$7,049
421 Non-Utility Income	0	0	0
427 Interest Expense	26,850	(2,357) I	24,493
4XX Amortization Expense (Pre-1985 CIAC)	0	32,034 J	32,034
4XX Reserve/Replacement Fund Deposit	0	0	0
426 Miscellaneous Non-Utility Expense	0	0	0
Total Other Income/(Expense)	(\$19,801)	(\$29,677)	(\$49,478)
NET INCOME/(LOSS)	(\$24,964)	(\$34,795)	(\$59,759)

STAFF ADJUSTMENTS

A -	SALARIES AND WAGES - Per Company	\$79,231	
	Per Staff	82,448	\$3,217
	To increase expense to normalized 2001 amount.		
B -	OUTSIDE SERVICES - Per Company	\$1,090	
	Per Staff	3,770	\$2,680
	To reclassify expense amount for accounting services from Miscellaneous Expense to Outside Services.		
C -	WATER TESTING - Per Company	\$3,917	
	Per Staff	2,684	(\$1,233)
	To decrease expense to amount recommended by Staff Engineering.		
D -	INSURANCE - GENERAL LIABILITY - Per Company	\$5,869	
	Per Staff	4,391	(\$1,478)
	To decrease account to most recently received statement.		
E -	MISCELLANEOUS EXPENSE - Per Company	\$6,310	
	Per Staff	3,630	(\$2,680)
	To reclassify expense amount for accounting services from Miscellaneous Expense to Outside Services, as per D above.		
F -	DEPRECIATION - Per Company	\$42,242	
	Per Staff	46,900	\$4,658

Explanation of Adjustment:

Annual Depreciation Expense:

Plant in Service	\$1,501,508
Less: Non Depreciable Plant	92,292
Fully Depreciated Plant	471,216
Depreciable Plant	\$938,000
Times: Authorized Depreciation Rate	5.00%
Credit to Accumulated Depreciation	\$46,900

STAFF ADJUSTMENTS (Cont.)

H -	PROPERTY TAXES - Per Company	\$11,070	
	Per Staff	10,253	(\$817)

To decrease expense based upon 2000 property tax statements received by the utility from the County of Yavapai.

I -	INTEREST EXPENSE - Per Company	\$26,850	
	Per Staff	24,493	(\$2,357)

To adjust expense to 2001 amounts per GMAC Commercial Mortgage billing statement.

J -	AMORTIZATION EXPENSE (PRE-1985 CIAC) - Per Company	\$0	
	Per Staff	32,034	\$32,034

To increase expense below the line for amortization expense of a Pre-1985 Contribution in Aid of Construction.

*** Amortization of CIAC:**

Contribution(s) in Aid of Construction (Gross)	\$640,689	
Less: Non Amortizable Contribution(s)	0	
Fully Amortized Contribution(s)	0	
Amortizable Contribution(s)	\$640,689	
Times: Staff Proposed Amortization Rate	5.00%	
Amortization of CIAC	\$32,034	

RATE DESIGN

Monthly Usage Charge	Present	-Proposed Rates-	
	Rates	Company	Staff
5/8" x 3/4" Meter	\$20.00	\$24.00	\$24.00
3/4" Meter	20.00	24.00	24.00
1" Meter	35.00	40.00	40.00
1½" Meter	46.00	52.00	80.00
2" Meter	60.00	65.00	128.00
3" Meter	75.00	80.00	240.00
4" Meter	N/A	0.00	400.00
6" Meter	N/A	0.00	800.00
Per 1,000 Gallons up to 5,000	\$2.00	\$4.00	\$3.00
Per 1,000 Gallons from 5,001 to 10,000	3.75	4.75	4.00
Per 1,000 Gallons from 10,001 to 50,000	5.50	6.25	5.50
Per 1,000 Gallons in excess of 50,000 gallons	5.50	7.00	6.50
Gallons Included in Monthly Charge	1,000	1,000	0
Service Line and Meter Installation Charges			
5/8" x 3/4" Meter	\$300.00	\$700.00	\$455.00
3/4" Meter	300.00	700.00	515.00
1" Meter	370.00	770.00	590.00
1½" Meter	525.00	825.00	820.00
2" Meter	525.00	825.00	1,380.00
3" Meter	850.00	950.00	1,935.00
4" Meter	N/A	1,050.00	3,030.00
6" Meter	N/A	1,150.00	5,535.00
Service Charges			
Establishment	\$30.00	\$50.00	\$40.00
Establishment (After Hours)	30.00	80.00	60.00
Reconnection (Delinquent)	30.00	50.00	40.00
Meter Test (If Correct)	30.00	30.00	30.00
Deposit	40.00	80.00	*
Deposit Interest	*	*	*
Re-Establishment (Within 12 Months)	**	**	**
NSF Check	12.00	25.00	25.00
Deferred Payment	0.00%	0.00%	0.00%
Meter Re-Read (If Correct)	10.00	10.00	10.00
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)

*** 1.00% of Monthly Minimum for a Comparable Sized Meter Connection, but no less than \$5.00 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

Average Number of Customers: 506

<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	3,399	\$24.80	\$33.59	\$8.80	35.5%
Median Usage	1,982	\$21.96	\$27.93	\$5.96	27.2%
Staff Proposed					
Average Usage	3,399	\$24.80	\$34.20	\$9.40	37.9%
Median Usage	1,982	\$21.96	\$29.95	\$7.98	36.3%

Present & Proposed Rates (Without Taxes)
General Service 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	\$20.00	\$24.00	20.0%	\$24.00	20.0%
1,000	20.00	24.00	20.0%	27.00	35.0%
2,000	22.00	28.00	27.3%	30.00	36.4%
3,000	24.00	32.00	33.3%	33.00	37.5%
4,000	26.00	36.00	38.5%	36.00	38.5%
5,000	28.00	40.00	42.9%	39.00	39.3%
6,000	31.75	44.75	40.9%	43.00	35.4%
7,000	35.50	49.50	39.4%	47.00	32.4%
8,000	39.25	54.25	38.2%	51.00	29.9%
9,000	43.00	59.00	37.2%	55.00	27.9%
10,000	46.75	63.75	36.4%	59.00	26.2%
15,000	74.25	95.00	27.9%	83.50	12.5%
20,000	101.75	126.25	24.1%	111.00	9.1%
25,000	129.25	157.50	21.9%	138.50	7.2%
50,000	266.75	313.75	17.6%	276.00	3.5%
75,000	404.25	488.75	20.9%	438.50	8.5%
100,000	541.75	663.75	22.5%	601.00	10.9%
125,000	679.25	838.75	23.5%	763.50	12.4%
150,000	816.75	1,013.75	24.1%	926.00	13.4%
175,000	954.25	1,188.75	24.6%	1,088.50	14.1%
200,000	1,091.75	1,363.75	24.9%	1,251.00	14.6%

TYPICAL BILL ANALYSIS
General Service 1 - Inch Meter

Average Number of Customers: 6

<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	8,222	\$55.08	\$71.31	\$16.22	29.5%
Median Usage	6,125	\$47.22	\$61.34	\$14.13	29.9%
Staff Proposed					
Average Usage	8,222	\$55.08	\$67.89	\$12.81	23.2%
Median Usage	6,125	\$47.22	\$59.50	\$12.28	26.0%

Present & Proposed Rates (Without Taxes)
General Service 1 - 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	\$35.00	\$40.00	14.3%	\$40.00	14.3%
1,000	35.00	40.00	14.3%	43.00	22.9%
2,000	37.00	44.00	18.9%	46.00	24.3%
3,000	39.00	48.00	23.1%	49.00	25.6%
4,000	41.00	52.00	26.8%	52.00	26.8%
5,000	43.00	56.00	30.2%	55.00	27.9%
6,000	46.75	60.75	29.9%	59.00	26.2%
7,000	50.50	65.50	29.7%	63.00	24.8%
8,000	54.25	70.25	29.5%	67.00	23.5%
9,000	58.00	75.00	29.3%	71.00	22.4%
10,000	61.75	79.75	29.1%	75.00	21.5%
15,000	89.25	111.00	24.4%	99.50	11.5%
20,000	116.75	142.25	21.8%	127.00	8.8%
25,000	144.25	173.50	20.3%	154.50	7.1%
50,000	281.75	329.75	17.0%	292.00	3.6%
75,000	419.25	504.75	20.4%	454.50	8.4%
100,000	556.75	679.75	22.1%	617.00	10.8%
125,000	694.25	854.75	23.1%	779.50	12.3%
150,000	831.75	1,029.75	23.8%	942.00	13.3%
175,000	969.25	1,204.75	24.3%	1,104.50	14.0%
200,000	1,106.75	1,379.75	24.7%	1,267.00	14.5%

TYPICAL BILL ANALYSIS
General Service 1 1/2 - Inch Meter

Average Number of Customers: 1

<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	7,875	\$64.78	\$81.66	\$16.88	26.0%
Median Usage	7,500	\$63.38	\$79.88	\$16.50	26.0%
Staff Proposed					
Average Usage	7,875	\$64.78	\$106.50	\$41.72	64.4%
Median Usage	7,500	\$63.38	\$105.00	\$41.63	65.7%

Present & Proposed Rates (Without Taxes)
General Service 1 1/2 - 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	\$46.00	\$52.00	13.0%	\$80.00	73.9%
1,000	46.00	52.00	13.0%	83.00	80.4%
2,000	48.00	56.00	16.7%	86.00	79.2%
3,000	50.00	60.00	20.0%	89.00	78.0%
4,000	52.00	64.00	23.1%	92.00	76.9%
5,000	54.00	68.00	25.9%	95.00	75.9%
6,000	57.75	72.75	26.0%	99.00	71.4%
7,000	61.50	77.50	26.0%	103.00	67.5%
8,000	65.25	82.25	26.1%	107.00	64.0%
9,000	69.00	87.00	26.1%	111.00	60.9%
10,000	72.75	91.75	26.1%	115.00	58.1%
15,000	100.25	123.00	22.7%	139.50	39.2%
20,000	127.75	154.25	20.7%	167.00	30.7%
25,000	155.25	185.50	19.5%	194.50	25.3%
50,000	292.75	341.75	16.7%	332.00	13.4%
75,000	430.25	516.75	20.1%	494.50	14.9%
100,000	567.75	691.75	21.8%	657.00	15.7%
125,000	705.25	866.75	22.9%	819.50	16.2%
150,000	842.75	1,041.75	23.6%	982.00	16.5%
175,000	980.25	1,216.75	24.1%	1,144.50	16.8%
200,000	1,117.75	1,391.75	24.5%	1,307.00	16.9%

TYPICAL BILL ANALYSIS
General Service 2 - Inch Meter

Average Number of Customers: 1

<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	875	\$60.00	\$68.50	\$8.50	14.2%
Median Usage	333	\$60.00	\$66.33	\$6.33	10.6%
Staff Proposed					
Average Usage	875	\$60.00	\$130.63	\$70.63	117.7%
Median Usage	333	\$60.00	\$129.00	\$69.00	115.0%

Present & Proposed Rates (Without Taxes)
General Service 2 - 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	\$60.00	\$65.00	8.3%	\$128.00	113.3%
1,000	60.00	69.00	15.0%	131.00	118.3%
2,000	62.00	73.00	17.7%	134.00	116.1%
3,000	64.00	77.00	20.3%	137.00	114.1%
4,000	66.00	81.00	22.7%	140.00	112.1%
5,000	68.00	85.00	25.0%	143.00	110.3%
6,000	71.75	89.75	25.1%	147.00	104.9%
7,000	75.50	94.50	25.2%	151.00	100.0%
8,000	79.25	99.25	25.2%	155.00	95.6%
9,000	83.00	104.00	25.3%	159.00	91.6%
10,000	86.75	108.75	25.4%	163.00	87.9%
15,000	114.25	140.00	22.5%	187.50	64.1%
20,000	141.75	171.25	20.8%	215.00	51.7%
25,000	169.25	202.50	19.6%	242.50	43.3%
50,000	306.75	358.75	17.0%	380.00	23.9%
75,000	444.25	533.75	20.1%	542.50	22.1%
100,000	581.75	708.75	21.8%	705.00	21.2%
125,000	719.25	883.75	22.9%	867.50	20.6%
150,000	856.75	1,058.75	23.6%	1,030.00	20.2%
175,000	994.25	1,233.75	24.1%	1,192.50	19.9%
200,000	1,131.75	1,408.75	24.5%	1,355.00	19.7%

**ENGINEERING REPORT
FOR
YARNELL WATER IMPROVEMENT ASSOCIATION
DOCKET NO. W-02255A-00-0640 (RATES)**

A. PURPOSE OF REPORT

This report was prepared in response to Yarnell Water Improvement Association's (Association) submission of an application for rates. This report will provide a description of the water system, evaluate its growth potential, and provide information on its status with other regulatory agencies. This system was field inspected on October 26, 2000, by Commission Staff members, Marlin Scott, Jr., Utilities Engineer, and Brad Morton, Utilities Consumer Service, accompanied by Mr. Stacey Zudell, Operator for the Association.

B. LOCATION OF ASSOCIATION

The Association is located approximately 30 miles southwest of Prescott. Figure 1 shows the location of the Association in relation to other Commission regulated companies in Yavapai County and Figure 2 shows the certificated areas.

C. DESCRIPTION OF WATER SYSTEM

This water system consists of two wells, three storage tanks, two booster pumps, four pressure reducing vaults and a distribution system. Brief descriptions of the plant operation are as follows:

Well Site: This well site is located in Peeples Valley and has Well #2 and Well #3. Well #2 has a 16-inch casing to a depth of 190 feet and is equipped with a 7-1/2-horsepower (Hp) submersible pump having a flowrate of 130 gallons per minute (GPM). Well #3 has a 16-inch casing to a depth of 160 feet and is equipped with a 5-Hp submersible pump having a flowrate of 130 GPM. These two wells pump into a 40,000 gallon storage tank, through a gas chlorination unit, two 25-Hp turbine booster pumps (125 GPM each) and a 4-inch master-meter, before boosting water 4.3 miles south to the Tank Site. This entire well site is surrounded by 100-feet by 100-feet of chain link fencing.

Tank Site: This elevated tank site has two 250,000 gallon storage tanks that serves the entire distribution system by gravity.

Distribution System: The distribution system consists of 85,369 feet of water main, 77 fire hydrants and four pressure reducing vaults that serves 510 metered customers. One stand pipe is installed and located across the street from the water office.

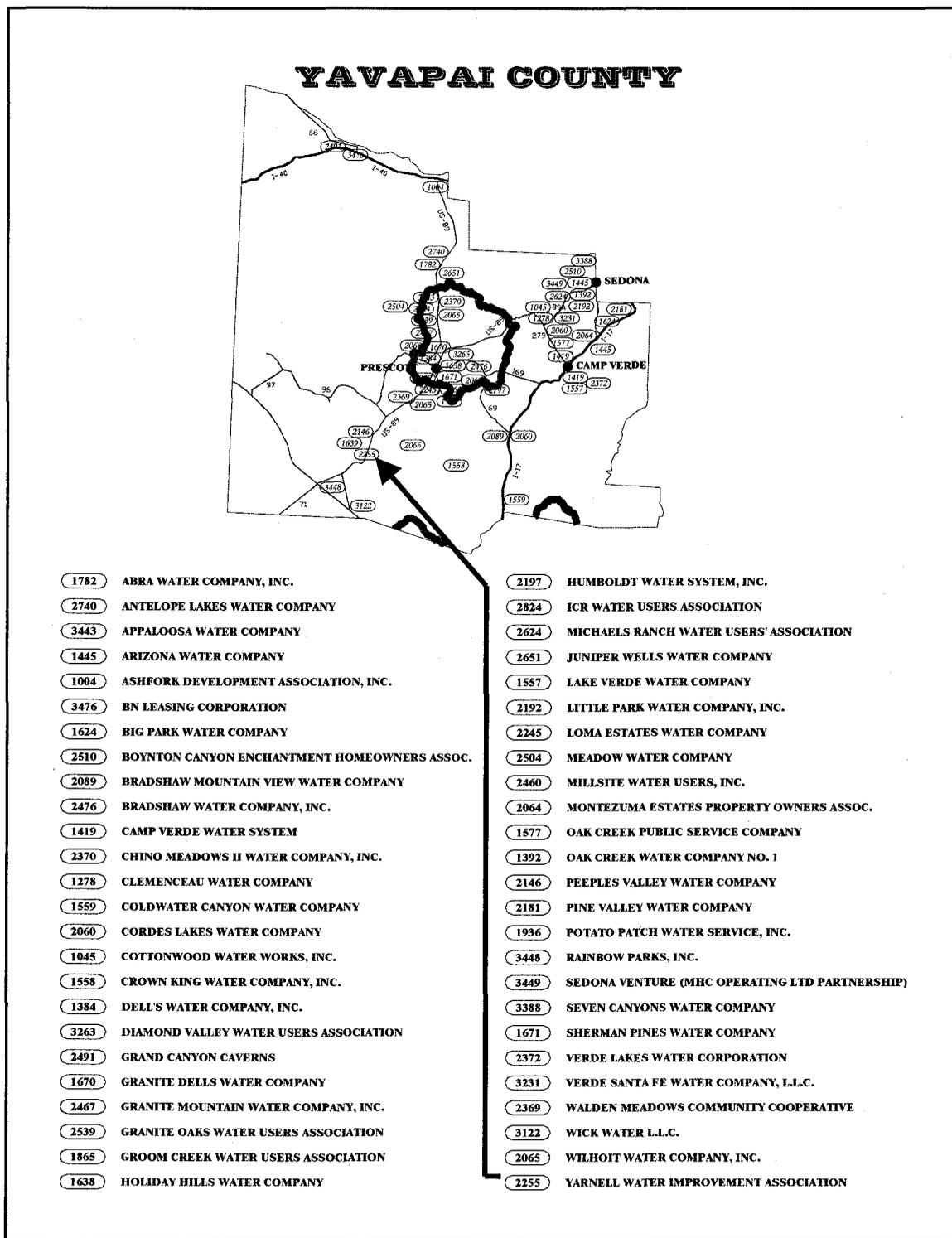


Figure 1. County Map

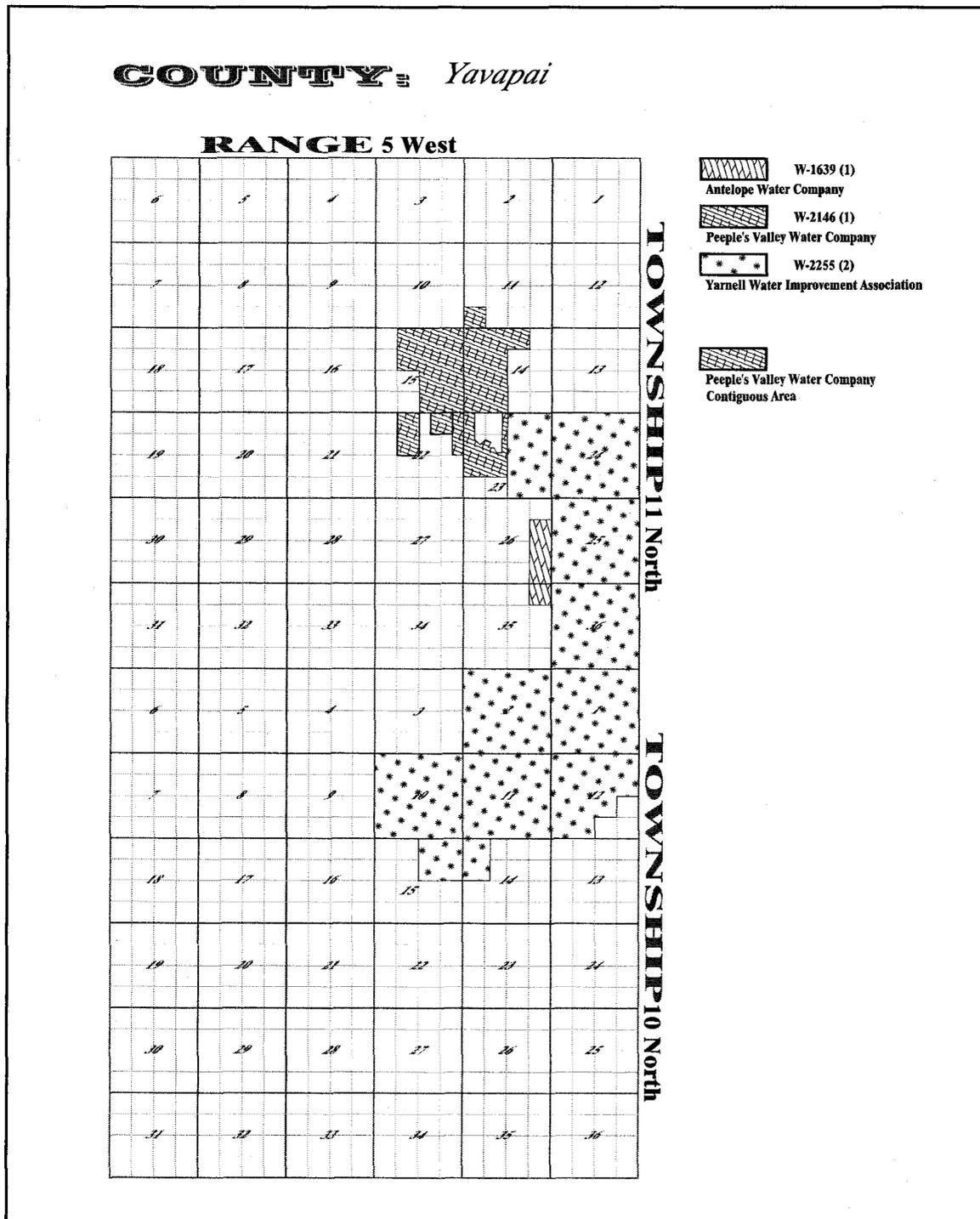


Figure 2. Certificated Areas

D. WATER USE

Figure 3 shows the Association's water consumption data for 13 months. The actual consumption was used to produce the peak water use figure. A high usage of 235 gallons per day (GPD) per connection and a low of 95 GPD per connection were experienced, for an annual average usage of 104 GPD per connection.

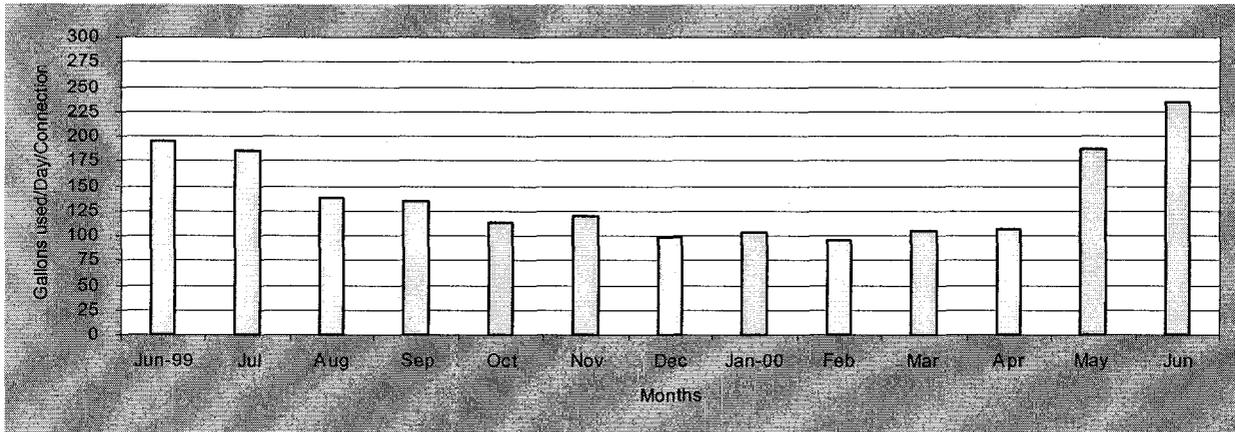


Figure 3. Water Use

E. GROWTH PROJECTION

Figure 4 details the customer growth using linear regression analysis. The number of service connections was obtained from annual reports submitted to the Commission. During the test year 1999, the Association had a total of 510 customers and it is projected that the Association could have approximately 558 customers by 2004.

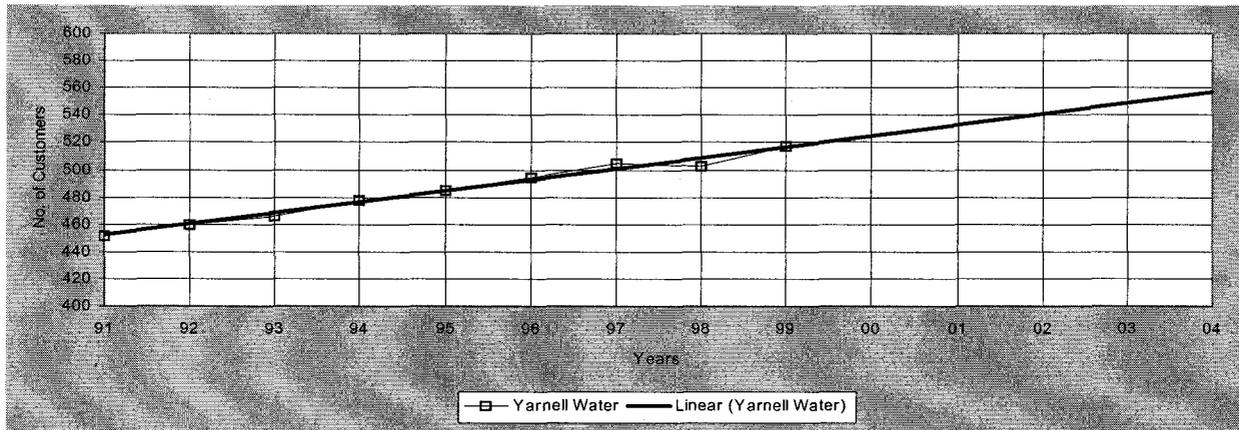


Figure 4. Growth Projection

G. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY COMPLIANCE

The Association's system has no deficiencies and the ADEQ has determined that the Association is currently delivering water that does not exceed any maximum contaminant levels and meets the Safe Drinking Water Act quality standards.

The Association stated its test year water testing cost at \$3,917. Staff Engineering has evaluated these testing costs with consideration of ADEQ's Monitoring Assistance Program (MAP) and when combined with other testing requirements, the total estimated cost is \$2,684. A breakdown of these costs for all testing requirements is shown in Table A.

Table A. Water testing cost

Monitoring – 2 wells (Tests per 3 years, unless noted)	Cost per Test	# of Tests (Per 3 years, unless noted)	With MAP	
			3-Year Cost	Annual Cost
Total Coliform – monthly	\$15	72	1,080	360
Inorganics – Priority Pollutants	\$239	2	478	159
Radiochemical – per 4 years				
Gross Alpha	\$55	2	110	28
Phase II and V:				
Nitrate – annual	\$20	6	120	40
Nitrite - per 9 years	\$15	2	30	3
Asbestos - per 9 years	\$180	2	360	40
MAP – IOCs, SOCs & VOCs	MAP	MAP	5,412	1,804
Lead & Copper – annual	\$25	30	750	250
TOTALS:			\$8,340	\$2,684

H. ARIZONA DEPARTMENT OF WATER RESOURCES COMPLIANCE

This water system is not located in any Active Management Area as designated by ADWR.

I. OTHERS

1. Service Line and Meter Installation Charges

The Association has proposed to increase its service line and meter installation charges. Staff, however, will recommend its own charges as follows:

Table B. Service line and meter installation charges.

Meter Size	Association's Existing	Association's Proposed	Staff's Recommendation
5/8" x 3/4"	\$300	\$700	\$455
3/4"	\$300	\$700	\$515
1"	\$370	\$770	\$590
1-1/2"	\$525	\$825	\$820
2"	\$525	\$825	\$1,380
3"	\$850	\$950	\$1,935
4"	N/A	\$1,050	\$3,030
6"	N/A	\$1,150	\$5,535

2. Depreciation Rates

Staff Engineering recommends using its own guidelines for depreciation rates. These guidelines are for annual accrual rates on an account-by-account basis to be used in the future for the calculation of annual depreciation expense. Table C shows these rates for the average service life and the annual accrual rate for each depreciable account.

Table C. Depreciation Rates

Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
307	Wells & Springs	30	3.33
311	Pumping Equipment	8	12.50

320	Water Treatment Equipment		
320.1	Treatment Plant Structures	30	3.33
320.2	Solution/Chemical Feeders	5	20.00
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 & Meter Installations	12	8.33
335	Hydrants	50	2.00
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
343	Tools, Shop & Garage Equipment	20	5.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	30	3.33