

ORIGINAL



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MEMORANDUM

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TO: Docket Control
FROM: Ernest G. *EGJ* Johnson
Director
Utilities Division

Arizona Corporation Commission
DOCKETED

JUN - 7 2005

DOCKETED BY	<i>KW</i>
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DATE: June 7, 2005

RE: STAFF REPORT FOR TONTO VILLAGE WATER COMPANY, INC.'S RATE INCREASE APPLICATION (DOCKET NO. W-01580A-04-0672)

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

EGJ:CRM:red

Originator: Charles R. Myhlousen

Attachment: Original and sixteen copies

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Service List for: Tonto Village Water Company
Docket No. W-01580A-04-0672

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**STAFF REPORT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION**

TONTO VILLAGE WATER COMPANY, INC.

DOCKET NO. W-01580A-04-0672

**APPLICATION FOR A
PERMANENT RATE INCREASE**

JUNE 7, 2005

STAFF ACKNOWLEDGMENT

The Staff Report for Tonto Village Water Company, Inc. ("Company") Docket No. W-01580A-04-0672, was the responsibility of the Staff members listed below. Charles R. Myhlhousen was responsible for the review and analysis of the Company's application, recommended revenue requirements, rate base and rate design. Dorothy Hains was responsible for the engineering and technical analysis. Carman Madrid was responsible for reviewing the Commission's records on the Company, determining compliance with Commission policies/rules and reviewing customer complaints filed with the Commission.

Charles R. Myhlhousen
Charles R. Myhlhousen
Public Utilities Rate Analyst III

Dorothy Hains
Dorothy Hains
Utilities Engineer

Carman Madrid
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EXECUTIVE SUMMARY
TONTO VILLAGE WATER COMPANY, INC.
DOCKET NO. W-01580A-04-0672

Tonto Village Water Company ("Company") serves customers in an area approximately 15 miles east of Payson, Arizona, two miles west of Kohl's Ranch. The Company is in the business of providing utility water service to Arizona customers in Gila County. The Company provides service to approximately 190 customers. The Company's current rates were effective November 1, 1989.

The Company's rate application requested an increase in revenue of \$35,574 or a 163.27 percent increase over test year revenues. The Company's proposed rates will produce revenues of \$57,363 resulting in an operating income of \$27,926 for a 112.53 percent rate of return on an original cost rate base ("OCRB") of \$24,816. The Company's proposed rates would increase the typical residential bill with a median usage of 1,702 gallons from \$6.74 to \$20.70 for an increase of \$13.96 or 207.12 percent. Staff recommends an increase in revenue of \$19,261 or a 94.65 percent increase over the test year revenues. Staff's recommended rates will produce revenues of \$39,880 resulting in an operating income of \$6,491 for a 24.55 percent rate of return on an OCRB of \$26,439. Staff's recommended rates would increase the typical residential bill with a median usage of 1,702 gallons from \$6.74 to \$11.79 for an increase of \$5.05 or 74.93 percent.

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Attachment

Engineering Report

Fact sheet

Current Rates: Decision 56671, dated October 25, 1989, rates effective November, 1989.

Type of Ownership: Arizona C Corporation

Location: The Company serves customers in Gila County approximately 15 miles east of Payson, Arizona and two miles west of Kohl's Ranch.

Rates: Permanent rate increase application filed September 16, 2004, and amended January 6, 2005, and February 22, 2005.

Current Test Year Ended: December 31, 2003

Monthly Minimum Charges:

	<u>Current Rates</u>	<u>Company Proposed Rates</u>	<u>Staff Recommended Rates</u>
Monthly Minimum Charge Based on 5/8 X 3/4 inch meter	\$6.00	\$19.00	\$10.00
Gallons in Minimum	1000	0	0
Commodity Charge Excess of minimum, per 1,000 gallons	1.05		
Tier one – zero gallons to 5,000 gallons		1.00	
Tier two – 5,001 gallons to 10,000 gallons		1.50	
Tier three – all gallons over 10,000 gallons		3.00	
Tier one – zero gallons to 3,000 gallons			1.05
Tier two - 3,001 gallons to 7,000 gallons			2.15
Tier three – all gallons over 7,000 gallons			3.50

Customers:

Average number of customers in prior test year: 140
Average number of customers in current test year: 190

Notifications:

Customer Notification was mailed on September 15, 2004

Complaints:

Number of customers concerns since application filed:
Two complaints (one outage/interruption, one repair issues/delays). One inquiry-billing disputed. All resolved. Four opinions-three oppositions and one in favor of the proposed rate increase.

Percentage of complaints to customers base: Just over one percent.

Summary of Filing

Based on test year results as adjusted by Utilities Staff ("Staff") Tonto Village Water Company ("Company") realized an operating loss of \$11,098 on an original cost rate base ("OCRB") of \$26,439 for no rate of return as shown on Schedule 1.

The Company proposed rates produce operating revenues of \$57,363 and an operating income of \$27,926 for a 112.53 percent rate of return on an OCRB of \$24,816. The Company's proposed rates would increase the typical residential bill with a median usage of 1,702 gallons from \$6.74 to \$20.70 for an increase of \$13.96 or 207.12 percent.

Staff's recommended rates produce a revenue level of \$39,880 and an operating income of \$6,491 for a 24.55 percent rate of return on an OCRB of \$26,439. Staff's recommended rates would increase the typical residential bill with a median usage of 1,702 gallons from \$6.74 to \$11.79 for an increase of \$5.50 or 74.93 percent.

Company Background

On September 16, 2004, the Company filed an application for a permanent rate increase with the Arizona Corporation Commission ("Commission"). On October 18, 2004, the application was found deficient. On January 6, 2005, and February 22, 2005, the Company submitted the deficient items. On March 24, 2005, the application was deemed sufficient.

The Company indicated that a rate increase is needed because the day to day expenses have increased.

Consumer Services

A review of the Commission's records revealed that in the years of 2002 and 2003, there were no complaints, inquires or opinions. In 2004, there were two resolved complaints (outage/repair), one resolved billing inquiry, and four opinions (three against and one for the proposed rate increase). In 2005 there is one resolved quality of service complaint.

Compliance

The Utilities Division Compliance Section showed no outstanding compliance issues.

The Company is current in its property and sales taxes payments.

The Company is in good standing with the Corporations's Division of the Commission.

The Company is currently in compliance with the new arsenic maximum contaminant level which will be effective January 23, 2006.

The Company is not within an Active Management Area, and consequently is not subject to reporting and conservation rules.

Staff received a compliance status report from Arizona Department of Environmental quality ("ADEQ") dated May 5, 2005, in which ADEQ stated that the system has no major deficiencies. ADEQ also states that ADEQ has determined that this system is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

Rate Base

Staff made adjustments to rate base of \$1,623. These adjustments were made to reflect the result of removing Advances-In-Aid-of-Construction of \$550 and Meter Deposits of \$620 from other water revenue and placing them in rate base. Staff made an allowance using the formula method for the cash working capital portion of the working capital allowance in the amount of \$2,793 resulting in a rate base of \$26,439. See Schedule CRM-2 page 1.

Plant in Service:

Staff made no adjustment to plant in service. See Schedule CRM-2 page 2 of 3, plant in service is \$111,982.

Accumulated Depreciation:

Staff made no adjustment to accumulated depreciation. See Schedule CRM-2 page 3 of 3, accumulated depreciation is \$81,251.

Advances in Aid of Construction:

Staff increased advances-in-aid of construction by \$550. This amount was reclassified from other water revenues. The total amount of advances in aid of construction is \$5,019.

Meter Deposits:

Staff increased meter deposits by \$620. This amount was reclassified from other water revenues. The total amount of meter deposits is \$2,066.

Operating Revenue

Staff made no adjustment to metered revenue. The Company's bill count revenue matched the revenue shown in the application and that reflects the test year revenue. Staff adjusted other water revenues by \$1,170. Staff reclassified \$550 to advances in aid of construction and \$620 to meter deposits.

Operating Expenses

Staff adjustments to operating expenses results in an increase of \$2,280 from \$29,437 to \$31,717 as shown on Schedule CRM-3 page 1. Adjustments are discussed below.

Adjustment B. increased Outside Services by \$1,800 to reflect the amount Staff determined was paid to a certified operator.

Adjustment C. increased Water Testing by \$1,105 to reflect Staff's recommended expense level.

Adjustment D. decreased Depreciation Expense by \$625. Staff recommended amount is consistent with the depreciation rates on a going forward basis.

Rate of Return

Staff's recommended rates and charges would provide an operating income of \$2,529 for a rate of return of 9.57 percent based on the Staff adjusted operating income and its adjusted rate base of \$26,439. This will give the Company a positive cash flow of \$7,303.

Revenue Requirement

The Company's narrative portion of the application stated that it needs this rate increase because of the increase in expenses and rate base.

Staff concurs with the Company in its need to increase rates. However, Staff is recommending a smaller increase than the Company requested increase of \$35,574. Staff is recommending an increase of \$14,251.

Rate Design

Both the Company and Staff are utilizing an inverted three-tier rate structure. These recommended tiers provide an economic incentive for large consumption customers to conserve. No gallons are included in the minimum charge under the Company's proposed or Staff's recommended rates. The Company's proposed rates would increase the typical residential bill with a median usage of 1,702 gallons by \$13.96 or 207.12 percent. Staff is recommending different break-over points in its rate design to encourage efficient water use. Staff's recommended rates would increase the typical residential bill with a median usage of 1,702 gallons by \$4.17 or 61.87 percent.

The Company has requested a change to its meter and service line charges. The Company's charges are within Staff's experience of reasonable and customary charges and Staff concurs.

The Company proposes to increase each of its service charges as indicated on Schedule CRM-4. Staff concurs with the proposed changes except for the items noted below.

The Company proposes to increase Meter Test (if correct) from zero to \$50.00. The Company has not provided adequate information to support its charge amount. Staff recommends \$25.00 as being reasonable and normal.

The Company proposes to increase Customer Deposit from the Commission's rules to \$30.00 plus the Commission's rules. The Company has not provided adequate information to support its amount. Staff recommends the Commission's rule Arizona Administrative Code ("AAC") R14-2-403.B as being reasonable and normal.

The Company proposes to decrease Deposit Interest from the Commission's rules to one percent. The Company has not provided adequate information to support its amount. Staff recommends the Commission's rule of (R14-2-403.B) as being reasonable and normal.

The Company proposes to increase Re-establishment (within 12 months) from Commission's rules to \$25.00 plus the Commission's rules. The Company has not provided adequate information to support its amount. Staff recommends the Commission's rule (R14-2-403.D) months off the system times the minimum as being reasonable and normal.

The Company proposed to increase Deferred Payment from zero to 1.50 percent plus \$3.00. The Company has not provided adequate information to support its charge amount. Staff recommends the Commission's rule ACC (R14-2-409.G(6)) as being reasonable and normal.

The Company proposed to increase Meter Re-read (If Correct) from zero to \$25.00. The Company has not provided adequate information to support its charge amount. Staff recommends \$15.00 as being reasonable and normal.

The Company proposed to increase Late Fee from zero to \$3.00 plus Commission's rules. The Company has not provided adequate information to support its charge amount. Staff recommends one and one half percent on the unpaid balance per month as being reasonable and normal.

Recommendations

- Approval of Staff's rates and charges as shown on Schedule CRM-4. In addition to collection of its regular rates and charges, the Company may collect from its customers a proportionate share of any privilege, sales or use tax.
- That the Company file with Docket Control a schedule of its approved rates and charges within 30 days after the Decision in this matter is issued.
- The Company does not have adequate production and storage capacity. Staff recommends that the Company install its planned water source by June 30, 2006. Staff further recommends the Company file a copy of ADEQ's Approval of Construction for the new source with Docket Control by June 30, 2006, pursuant to this application. See paragraphs C & L of Staff's Engineering Report for discussion and details.
- Staff recommends that the Company use depreciation rates by individual National Association of Regulatory Utility Commissioners category, as delineated in Exhibit 6 of the Staff Engineering Report.
- Staff recommends that the Company immediately fix the leakage found on the pressure tank and the 34,000 gallon storage tank at Well Site No. 2. Staff further recommends the Company file a document to show the leakage is fixed with Docket Control within thirty days of the effective date of the final Decision and Order issued pursuant to this application. See paragraph L of Staff's Engineering Report for discussion and details.

SUMMARY OF FILING

	-- Present Rates --		-- Proposed Rates --	
	Company as Filed	Staff as Adjusted	Company as Proposed	Staff as Recommended
Revenues:				
Metered Water Revenue	\$20,349	\$20,349	\$55,923	\$39,610
Unmetered Water Revenue	0	0	0	0
Other Water Revenues	1,440	270	1,440	270
Total Operating Revenue	\$21,789	\$20,619	\$57,363	\$39,880
Operating Expenses:				
Operation and Maintenance	\$22,080	\$24,985	\$22,080	\$24,985
Depreciation	5,399	4,774	5,399	4,774
Property & Other Taxes	1,913	1,913	1,913	1,913
Income Tax	45	45	45	1,717
Total Operating Expense	\$29,437	\$31,717	\$29,437	\$33,389
Operating Income/(Loss)	(\$7,648)	(\$11,098)	\$27,926	\$6,491
Rate Base O.C.L.D.	\$24,816	\$26,439	\$24,816	\$26,439
Rate of Return - O.C.L.D.	-30.82%	-41.98%	112.53%	24.55%
Times Interest Earned Ratio (Pre-Tax)	NMN	NMN	NMN	NMN
Debt Service Coverage Ratio (Pre-Tax)	NMN	NMN	NMN	NMN
Operating Margin	-35.10%	-53.82%	48.68%	16.28%

NMN: Not a meaningful number

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

RATE BASE

	----- Original Cost -----			Staff
	Company	Adjustment		
Plant in Service	\$111,982	\$0		\$111,982
Less:				
Accum. Depreciation	81,251	0		81,251
Net Plant	\$30,731	\$0		\$30,731
Less:				
Plant Advances	\$4,469	\$550	A	\$5,019
Meter Deposits	1,446	620	B	2,066
Total Advances	\$5,915	\$1,170		\$7,085
Contributions Gross	\$0	\$0		\$0
Less:				
Amortization of CIAC	0	0		0
Net CIAC	\$0	\$0		\$0
Total Deductions	\$5,915	\$1,170		\$7,085
Plus:				
1/24 Power	\$0	\$165	C	\$165
1/8 Operation & Maint.	0	2,628	C	2,627
Inventory	0	0		0
Prepayments	0	0		0
Total Additions	\$0	\$2,793		\$2,793
Rate Base	\$24,816	\$1,623		\$26,439

- A Removed \$550 from other water revenues on Schedule CRM-3 and added same amount to advances in aid of construction.
- B Removed \$620 from other water revenues on Schedule CRM-3 and added amount to meter deposits.
- C Staff's inclusion of formula-method working capital, based on recommended operating expenses.

PLANT ADJUSTMENT

	Company Exhibit	Adjustment	Staff Adjusted
301 Organization	\$0	\$0	\$0
302 Franchises	0	0	0
303 Land & Land Rights	3,466	0	3,466
304 Structures & Improvements	3,064	0	3,064
307 Wells & Springs	9,340	0	9,340
311 Pumping Equipment	11,121	0	11,121
320 Water Treatment Equipment	2,780	0	2,780
330 Distribution Reservoirs & Standpipes	26,431	0	26,431
331 Transmission & Distribution Mains	46,101	0	46,101
333 Services	0	0	0
334 Meters & Meter Installations	7,600	0	7,600
335 Hydrants	0	0	0
336 Backflow Prevention Devices	0	0	0
339 Other Plant and Misc. Equipment	0	0	0
340 Office Furniture & Equipment	2,079	0	2,079
341 Transportation Equipment	0	0	0
343 Tools Shop & Garage Equipment	0	0	0
344 Laboratory Equipment	0	0	0
345 Power Operated Equipment	0	0	0
346 Communication Equipment	0	0	0
347 Miscellaneous Equipment	0	0	0
348 Other Tangible Plant	0	0	0
TOTALS	\$111,982	\$0	\$111,982

ACCUMULATED DEPRECIATION ADJUSTMENT

	<u>Amount</u>
Accumulated Depreciation - Per Company	\$81,251
Accumulated Depreciation - Per Staff	81,251
Total Adjustment	\$0

STATEMENT OF OPERATING INCOME

	Company Exhibit	Staff Adjustments	Staff Adjusted
Revenues:			
461 Metered Water Revenue	\$20,349	\$0	\$20,349
460 Unmetered Water Revenue	0	0	0
474 Other Water Revenues	1,440	(1,170) A	270
Total Operating Revenue	\$21,789	(\$1,170)	\$20,619
Operating Expenses:			
601 Salaries and Wages	\$7,800	\$0	\$7,800
610 Purchased Water	0	0	0
615 Purchased Power	3,967	0	3,967
618 Chemicals	0	0	0
620 Repairs and Maintenance	1,322	0	1,322
621 Office Supplies & Expense	2,889	0	2,889
630 Outside Services	3,795	1,800 B	5,595
635 Water Testing	917	1,105 C	2,022
641 Rents	0	0	0
650 Transportation Expenses	589	0	589
657 Insurance - General Liability	0	0	0
659 Insurance - Health and Life	0	0	0
666 Regulatory Commission Expense - Rate Case	0	0	0
675 Miscellaneous Expense	801	0	801
403 Depreciation Expense	5,399	(625) D	4,774
408 Taxes Other Than Income	643	0	643
408.11 Property Taxes	1,270	0	1,270
409 Income Tax	45	0	45
Total Operating Expenses	\$29,437	\$2,280	\$31,717
OPERATING INCOME/(LOSS)	(\$7,648)	(\$3,450)	(\$11,098)
Other Income/(Expense):			
419 Interest and Dividend Income	\$0	\$0	\$0
421 Non-Utility Income	0	0	0
427 Interest Expense	0	0	0
428 Reserve/Replacement Fund Deposit	0	0	0
426 Miscellaneous Non-Utility Expense	0	0	0
Total Other Income/(Expense)	\$0	\$0	\$0
NET INCOME/(LOSS)	(\$7,648)	(\$3,450)	(\$11,098)

STAFF ADJUSTMENTS

A - OTHER WATER REVENUES - Per Company	\$1,440	
Per Staff	<u>270</u>	<u>(\$1,170)</u>

Staff reclassified \$550 to advances-in-aid-of-construction and \$620 to meter deposits.

B - OUTSIDE SERVICES - Per Company	\$3,795	
Per Staff	<u>5,595</u>	<u>\$1,800</u>

The Company now has a certified operator on a part time basis. The Company previously did not have a certified operator.

C - WATER TESTING - Per Company	\$917	
Per Staff	<u>2,022</u>	<u>\$1,105</u>

To adjust to Staff Engineer's recommended expense level.

D - DEPRECIATION - Per Company	\$5,399	
Per Staff	<u>4,774</u>	<u>(\$625)</u>

To adjust to Staff's recommended depreciation expense.

RATE DESIGN

Monthly Usage Charge	Present	-Proposed Rates-	
	Rates	Company	Staff
5/8" x 3/4" Meter Residential	\$ 6.00	\$ 19.00	10.00
5/8" x 3/4" Meter Non-residential	6.00	35.00	n/a
3/4" Meter	6.00	19.00	12.00
1" Meter	15.00	38.00	20.00
1½" Meter	30.00	76.00	40.00
2" Meter	48.00	100.00	65.00
3" Meter	90.00	250.00	120.00
4" Meter	150.00	350.00	200.00
6" Meter	n/a	n/a	400.00
Excess of Minimum - per 1,000 Gallons	\$1.05	n/a	n/a
Gallons Included in Minimum	1,000	0	0
For 5/8 inch meter and larger			
Tier one - zero gallons to 5,000 gallons		1.00	n/a
Tier two - 5,001 gallons to 10,000 gallons		1.50	n/a
Tier three - all gallons over 10,000 gallons		3.00	n/a
Tier one - zero gallons to 3,000 gallons			1.05
Tier two - 3,001 to 7,000 gallons			2.15
Tier three - all gallons over 7,000 gallons			3.50
Service Line and Meter Installation Charges			
5/8" x 3/4" Meter	\$275.00	\$375.00	\$375.00
3/4" Meter	300.00	425.00	425.00
1" Meter	325.00	500.00	500.00
1½" Meter	475.00	675.00	675.00
2" Meter	650.00	900.00	900.00
3" Meter	850.00	1,300.00	1,300.00
4" Meter	1,050.00	1,800.00	1,800.00
6" Meter	0.00	0.00	0.00
Service Charges			
Establishment	\$10.00	\$25.00	\$25.00
Establishment (After Hours)	10.00	40.00	40.00
Reconnection (Delinquent)	10.00	25.00	25.00
Reconnection (Delinquent) after hours	10.00	40.00	40.00
Meter Test (If Correct)	n/a	50.00	25.00
Meter Deposit	*	*	*
Deposit Interest	*	1.00%	*
Re-Establishment (Within 12 Months)	**	**	**
NSF Check	15.00	25.00	25.00
Deferred Payment		1.50%	***
		Min \$3.00	
Meter Re-Read (If Correct)	n/a	25.00	15.00
Late Fee unpaid balance per month	n/a	1.50%	1.50%
		Min \$3.00	

* Per Commission Rules (R14-2-403.B)

** Months off system times the minimum (R14-2-403.D)

*** Per Commission Rules (R14-2-409.G(6))

TYPICAL BILL ANALYSIS

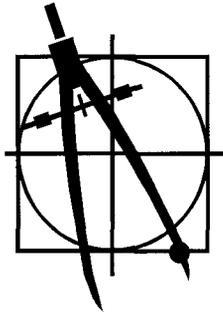
General Service 5/8 X 3/4 - Inch Meter

Average Number of Customers: 186

<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	3,649	\$8.78	\$22.65	\$13.87	158.0%
Median Usage	1,702	\$6.74	\$20.70	\$13.96	207.1%
<u>Staff Proposed</u>					
Average Usage	3,649	\$8.78	\$14.55	\$5.77	65.7%
Median Usage	1,702	\$6.74	\$11.79	\$5.05	74.9%

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

<u>Gallons Consumption</u>	<u>Present Rates</u>	<u>Company Proposed Rates</u>	<u>% Increase</u>	<u>Staff Proposed Rates</u>	<u>% Increase</u>
0	\$6.00	\$19.00	216.7%	\$10.00	66.7%
1,000	6.00	20.00	233.3%	11.05	84.2%
2,000	7.05	21.00	197.9%	12.10	71.6%
3,000	8.10	22.00	171.6%	13.15	62.3%
4,000	9.15	23.00	151.4%	15.30	67.2%
5,000	10.20	24.00	135.3%	17.45	71.1%
6,000	11.25	25.50	126.7%	19.60	74.2%
7,000	12.30	27.00	119.5%	21.75	76.8%
8,000	13.35	28.50	113.5%	25.25	89.1%
9,000	14.40	30.00	108.3%	28.75	99.7%
10,000	15.45	31.50	103.9%	32.25	108.7%
15,000	20.70	46.50	124.6%	49.75	140.3%
20,000	25.95	61.50	137.0%	67.25	159.2%
25,000	31.20	76.50	145.2%	84.75	171.6%
50,000	57.45	151.50	163.7%	172.25	199.8%
75,000	83.70	226.50	170.6%	259.75	210.3%
100,000	109.95	301.50	174.2%	347.25	215.8%
125,000	136.20	376.50	176.4%	434.75	219.2%
150,000	162.45	451.50	177.9%	522.25	221.5%
175,000	188.70	526.50	179.0%	609.75	223.1%
200,000	214.95	601.50	179.8%	697.25	224.4%



Engineering Report
For Tonto Village Water Company
By Dorothy Hains
Docket No. W-01580A-04-0672 (Rates)
April 27, 2005

EXECUTIVE SUMMARY

Recommendations:

1. Tonto Village Water Company ("Company") does not have adequate production and storage capacity. Staff recommends that the Company install its planned water source by June 30, 2006. Staff further recommends the Company file a copy of Arizona Department of Environmental Quality's ("ADEQ") Approval of Construction of the new source with Docket Control by June 30, 2006 pursuant to this application. (See §C & L of the report for discussion and details.)
2. Staff recommends that the Company use depreciation rates by individual National Association of Regulatory Utility Commissioners ("NARUC") category, as delineated in Exhibit 6 in the future. These rates should be used to calculate the annual depreciation expense for the Company in this application. (See §K and Exhibit 6 for a discussion and a tabulation of the recommended rates.)
3. Staff recommends approval of meter and service line installation charges as shown in Table 8. (See §L of report for discussion and details.)
4. Water testing expenses are based upon participation in the ADEQ Monitoring Assistance Program ("MAP"). Annual testing expenses should be adjusted to \$2,022. (See §J and Table 7 for discussion and details.)
5. Staff recommends that the Company repair the leakage found on pressure tank and 34,000 gallon storage tank at Well Site #2. Staff further recommends the Company file the documentation verifying this repair with Docket Control within thirty days of the effective date of the final decision and order issued pursuant to this application. (See §L of report for discussion and details.)

Conclusions:

1. The most recent lab analysis provided by the Company indicates that the arsenic levels in the wells used by the Company are between 4µg/l and 4.5 µg/l, which are below the new arsenic MCL.

2. Non-account water for the Company was calculated to be 7.27 percent for the period beginning in January 2003 and ending in December 2003, which is acceptable. (See §E of report for discussion and details.)
3. The Company is not in any Arizona Department of Water Resources (“ADWR”) Active Management Area and is not in subject to ADWR monitoring and reporting requirements.
4. According to the Utilities Division Compliance Section, the Company has no outstanding ACC compliance issues.
5. The Company is in compliance with ADEQ water quality standards and delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. (See §G of report for discussion and details.)

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**ENGINEERING REPORT
FOR
TONGO VILLAGE WATER COMPANY, INC.
DOCKET NO. W-01580A-04-0672 (RATES)**

A. PURPOSE OF REPORT

This report was prepared in response to the application of Tonto Village Water Company. ("Tonto Village" or "Company") for a rate increase. An inspection and evaluation of the Company's water system was conducted by Dorothy Hains, Utilities Engineer, in the accompaniment of Ron Standage, the Company's Owner on April 1, 2005.

B. LOCATION OF SYSTEM

The Company serves an area which is fifteen miles east of the City of Payson on State Highway 260 in Gila County. Exhibit 1 shows the approximate one-tenth square mile of certificated service area of the Company and Exhibit 2 shows the location of the Company within Gila County.

C. DESCRIPTION OF SYSTEM

I. System Description

The Company owns and operates a water system that consists of three well sites. Each well site consists of one well, one storage tank and booster pumping system. Well #1 has been dry and its associated plant items out of service since June 2004. The Company serves approximately 190 metered customers; the majority of which are residential. The Company also serves a charter school, a restaurant and a church. There is no fire flow included in the system. Exhibit 3 is a schematic drawing of the water system. A detailed listing of the Company's water system facilities is as follows:

Table 1. Well Data

Well Name	ADWR ID No.	Location	Pump HP	Yield (in GPM)	Casing Size (in inches) & Depth (in ft)	(Meter Size inches)	Year drilled
Well #1 ¹	55-627909	Tract 2 between Lot 19 & 20	1¼	17	8" x 223'	1¼	1957
Well #2	55-627911	Tract A next to Lot 167	1¼	16.1	5" x 260'	1¼	1968

Well #3	55-627912	Lot 224	1¼	14.3	5" x 340'	1¼	1987
			TOTAL:	47.4 ²			

Notes:

#1: This well has been out of service since June 2004.

#2: Currently total flow rate is only 30.4 gpm.

Table 2. Storage Tank

Capacity (Gallons)	Quantity	Location
10,000	1	Well Site #1
34,000	1	Well Site #2
10,000	1	Well Site #3
Total: 54,000 gallons		

Table 3. Distribution Mains

Diameter (inches)	Material	Length (feet)
2	polyvinyl chloride ("PVC") & asbestos ("ABS")	5,550
3	PVC & ABS	2,270
4	ABS	1,710
6	PVC	5,395

Table 4. Meters

Size (inches)	Quantity
5/8 x 3/4	194
¾	0
2	1
1½	2
2	7
3 (Comp)	N/A
Total	655

II. System Analysis

The system does not have adequate production and storage capacity to support the existing customer base. Staff recommends that the Company install a new source prior to June 30, 2006. (Also see § L of the report for discussion and details.)

D. ARSENIC

The U.S. Environmental Protection Agency (“EPA”) has reduced the arsenic maximum contaminant level (“MCL”) in drinking water from 50 micrograms per liter (“µg/l”) or parts per billion (“ppb”) to 10 µg/l. The date for compliance with the new MCL is January 23, 2006. The most recent lab analysis provided by the Company indicates that the arsenic levels in the wells used by the Company are between 4 µg/l and 4.5 µg/l, which are below the new arsenic MCL.

E. WATER USAGE

Table 5 summarizes water usage in the Company’s CC&N area. Attached as Exhibit 4, is a graph that shows water consumption data in gallons per day per connection for the period of January 2003 through December 2003.

Table 5 Water Usage

Month	Number of Customers	Water Sold (gallons)	Water pumped (gallons)	Water purchased (gallons)	Daily Average (gal/day/customer)
Jan 03	181	541,000	667,000	0	96
Feb 03	188	0 ¹	263,000	0	0
Mar 03	186	839,000	402,000	0	146
Apr 03	186	677,000	612,000	0	121
May 03	185	971,000	1,104,000	0	169
Jun 03	186	1,157,000	1,221,000	0	207
Jul 03	188	1,164,000	1,262,000	0	200
Aug 03	190	792,000	883,000	0	134
Sep 03	189	650,000	764,000	0	115
Oct 03	189	619,000	653,000	0	106
Nov 03	188	360,000	503,000	0	64
Dec 03	189	380,000	455,000	0	65
Total		8,150,000	8,789,000	0	
Average					119

Note #1: The Company did not read its meters in February due to snow cover.

I. Water Sold

Based on information provided by the Company, during this period the Company experienced a daily average use of 119 gallons per day (“gpd”) per customer, a high use of 207 gpd per customer and a low use of less than 50 gpd per customer^o. The highest total monthly use occurred in July, when 1,164,000 gallons were sold to 188 customers. The lowest total monthly use occurred in February. Because Tonto Village is normally under snow covering in February, the Company limits its monthly meter reading activity during that time, therefore there is no record to show gallons sold in February.

II. Non-account Water

Non-account water should be 10% or less and never more than 15%. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, theft, and flushing. It is important to be able to reconcile the difference between water sold and the water produced by the source. Non-account water for the Company was calculated to be 7.27 percent for the period beginning in January 2003 and ending in December 2003, which is within acceptable limits.

F. GROWTH PROJECTION

The Company’s service area is surrounded by Tonto National Forest land. Growth in this area is limited. There are 255 platted lots in the service area. Exhibit 5 details actual and projected growth for the system using linear regression analysis. The number of service connections was obtained from annual reports submitted to the Commission. Based on the service meter data contained in these reports, the number of customers increased from 171 at the end of 1996 to 189 by the end of 2003, with an average growth rate of 3 customers per year. Based on the linear regression analysis, the Company could have approximately 208 customers by the end of 2008. The following table summarizes actual and projected growth in the Company’s existing certificated service area.

Table 6. Actual and Projected Growth

Year	Nos. of Customers	
1996	171	Reported
1997	175	Reported
1998	180	Reported

^o Represents an estimated use based on the water pumped in February.

1999	184	Reported
2000	183	Reported
2001	198	Reported
2002	188	Reported
2003	189	Reported
2004	197	Estimated
2005	199	Estimated
2006	202	Estimated
2007	205	Estimated
2008	208	Estimated

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

Staff received a compliance status report from ADEQ dated May 5, 2005, in which ADEQ stated that the system has no major deficiencies. ADEQ also states that ADEQ has determined that this system is currently delivering water that meets water quality stands required by Arizona Administrative Code, Title 18, Chapter 4.

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

Tonto Village Water Company is not in any ADWR Active Management Area. Therefore, the Company is not required to comply with ADWR’s monitoring and reporting requirements.

I. ARIZONA CORPORATION COMMISSION (“ACC”) COMPLIANCE

According to the Utilities Division Compliance Section, the Company has no outstanding ACC compliance issues.

J. WATER TESTING EXPENSES

Tonto Village is subject to mandatory participation in the ADEQ Monitoring Assistance Program (“MAP”). Staff calculated the testing costs based on the following assumptions:

1. MAP will do baseline testing on everything except copper, lead, nitrates, and bacteria.
2. ADEQ testing is performed in 3-year compliance cycles. Therefore, monitoring costs are estimated for a 3-year compliance period and then presented as a pro forma expense on an annualized basis.

3. MAP fees were calculated from the ADEQ MAP rules.
4. All monitoring expenses are based on Staff's best knowledge of lab costs and methodology and two points of entry.
5. The estimated water testing expenses represent a minimum cost based on no "hits" other than lead and copper, and assume compositing of well samples. If any constituents were found, then the testing costs would dramatically increase.

Table 7 shows the estimated annual monitoring expense, assuming participation in the MAP program. Water testing expenses should be adjusted to the annual expense amount shown in Table 7, which is \$ 2,022.

Table 7 Water Testing Cost

Monitoring – 3 wells (Tests per 3 years, unless noted.)	Cost per test	No. of tests per three year period	Total cost per three year period	Annual Cost
Bacteriological – monthly	\$15	108	\$1,620	\$540
Inorganics (& secondary)	\$240	9	\$2,160	\$720
Radiochemical – (1/ 4 yr)	\$55			MAP
IOC's, SOC's, VOC's				MAP
Nitrites	\$15			MAP
Nitrates – annual	\$25	9	\$225	\$75
Asbestos – per 9 years	\$180			MAP
Lead & Copper – annual	\$25	15	\$375	\$125
MAP fees (annual)				\$562.28
Total				\$2,022

K. DEPRECIATION RATES

Staff has developed typical and customary depreciation rates within the range of anticipated equipment life. These rates are presented in Exhibit 6, and should be used to calculate the annual depreciation expense for the Company in this application. It is recommended that the Company use depreciation rates by individual National Association of Regulatory Utility Commissioners ("NARUC") category, as delineated in Exhibit 6 in the future.

L. OTHER ISSUES

I. Service Line and Meter Installation Charges

The Company is proposing to revise its meter and service line installation charges. These charges are refundable advances and the Company's proposed charges are within Staff's experience of what are reasonable and customary charges. Therefore, Staff recommends approval of meter and service line installation charges as shown in Table 8.

Table 8. Service Line and Meter Installation Charges

Meter Size	Current Charges	Proposed Charges	Staff Recommendation
5/8 x3/4-inch	\$275	\$375	\$375
3/4-inch	\$300	\$425	\$425
1-inch	\$325	\$500	\$500
1-1/2-inch	\$475	\$675	\$675
2-inch	\$650	\$900	\$900
3-inch (turbine)	\$850	\$1,300	\$1,300
4-inch (turbine)	\$1,050	\$1,800	\$1,800
6" (turbine)	N/A	N/A	\$6,000

II. Curtailment Tariff

The Company has had an approved Curtailment Tariff in effect since July 17, 2004.

III. Items Found during Staff's Inspection

- A. Staff observed that the storage tank located at Well Site #2 had a severe leak. Staff recommends that the Company take action to fix the leak immediately. Staff further recommends that the Company file under this same docket number with Docket Control within thirty days of the effective date of the final decision and order issued pursuant to this application, documentation showing that the necessary repairs have been made.
- B. Staff also observed water leaking from the pressure tank located at Well Site #2. Staff recommends that the Company take action to fix the leak immediately. Staff further recommends that the Company file under this same docket number with Docket Control

within thirty days of the effective date of the final decision and order issued pursuant to this application, documentation showing that the necessary repairs have been made.

- C. Because Well #1 is dry and no longer producing water, the system does not have adequate production to serve the existing customer base. The Company has informed Staff that it originally had planned to either deepen Well #1 or install a new well. Increasing the depth of Well #1 was abandoned because ADEQ setback requirements could not be met. The Company now plans to drill a new well at Well Site #2. The Company's estimated cost to construct the new well is \$35,000 (this estimate assumes a well depth of 700 feet and installation of a well pump capable of 45 gpm). Staff recommends that the Company file under this same docket number with Docket Control by June 30, 2006, a copy of the ADEQ Approval of Construction for the new well.

EXHIBIT 2.

LOCATION OF TONTO VILLAGE WATER COMPANY SERVICE AREA

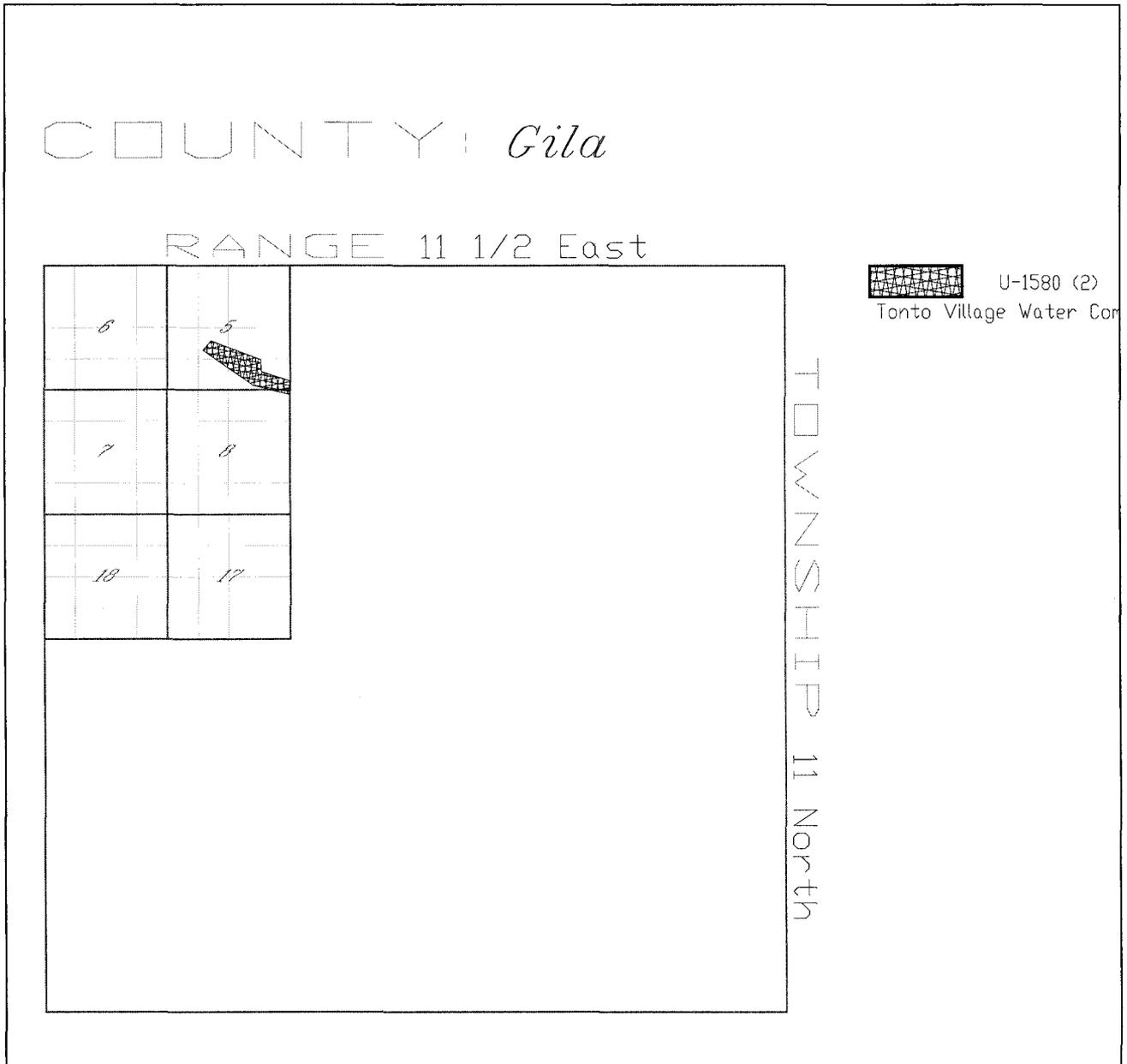


EXHIBIT 3
SYSTEMATIC DRAWING

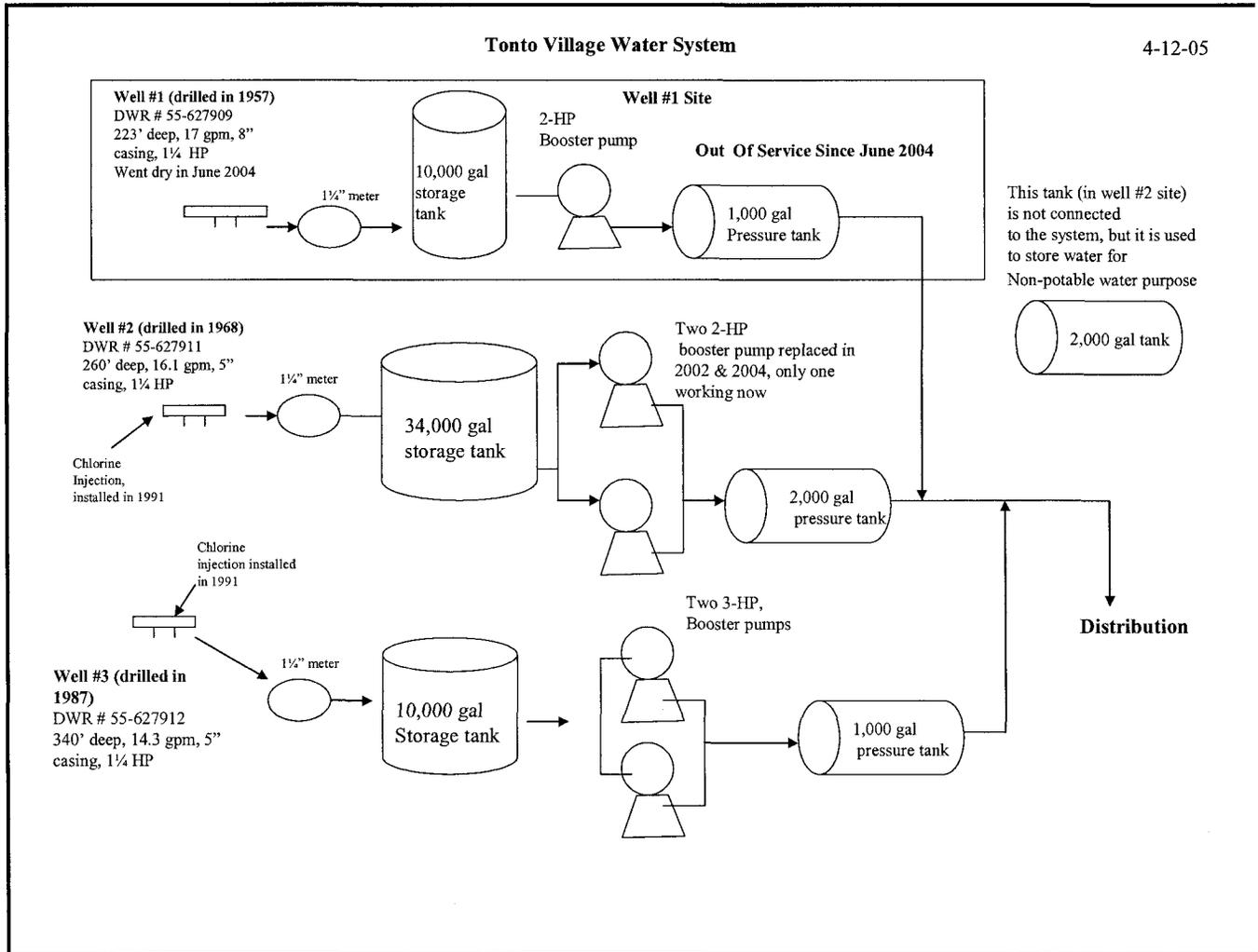


EXHIBIT 4

WATER USAGE ON THE TONTO VILLAGE WATER COMPANY SERVICE AREA

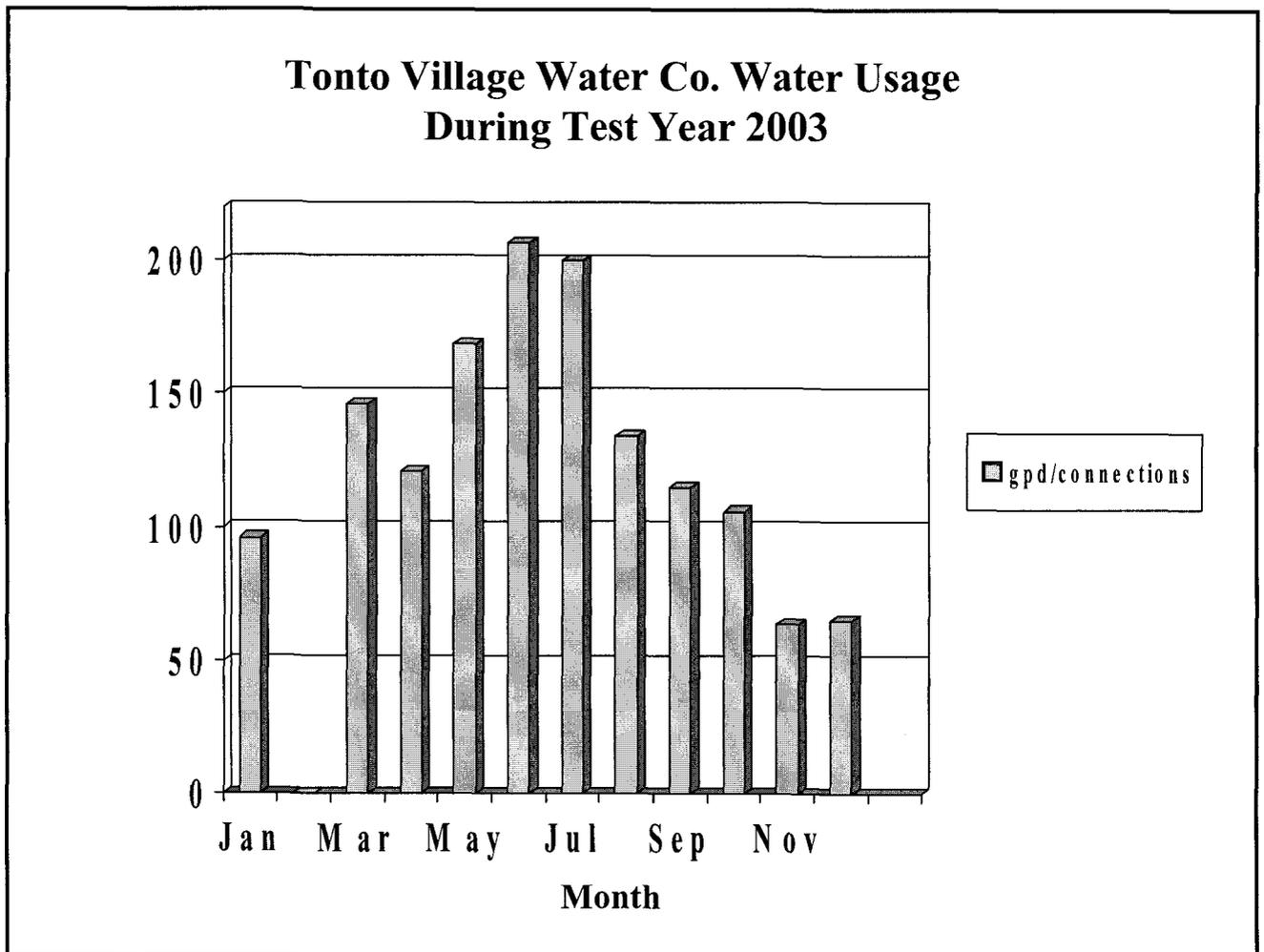


EXHIBIT 5

**ACTUAL AND PROJECTED GROWTH IN TONTO VILLAGE WATER COMPANY
SERVICE AREA**

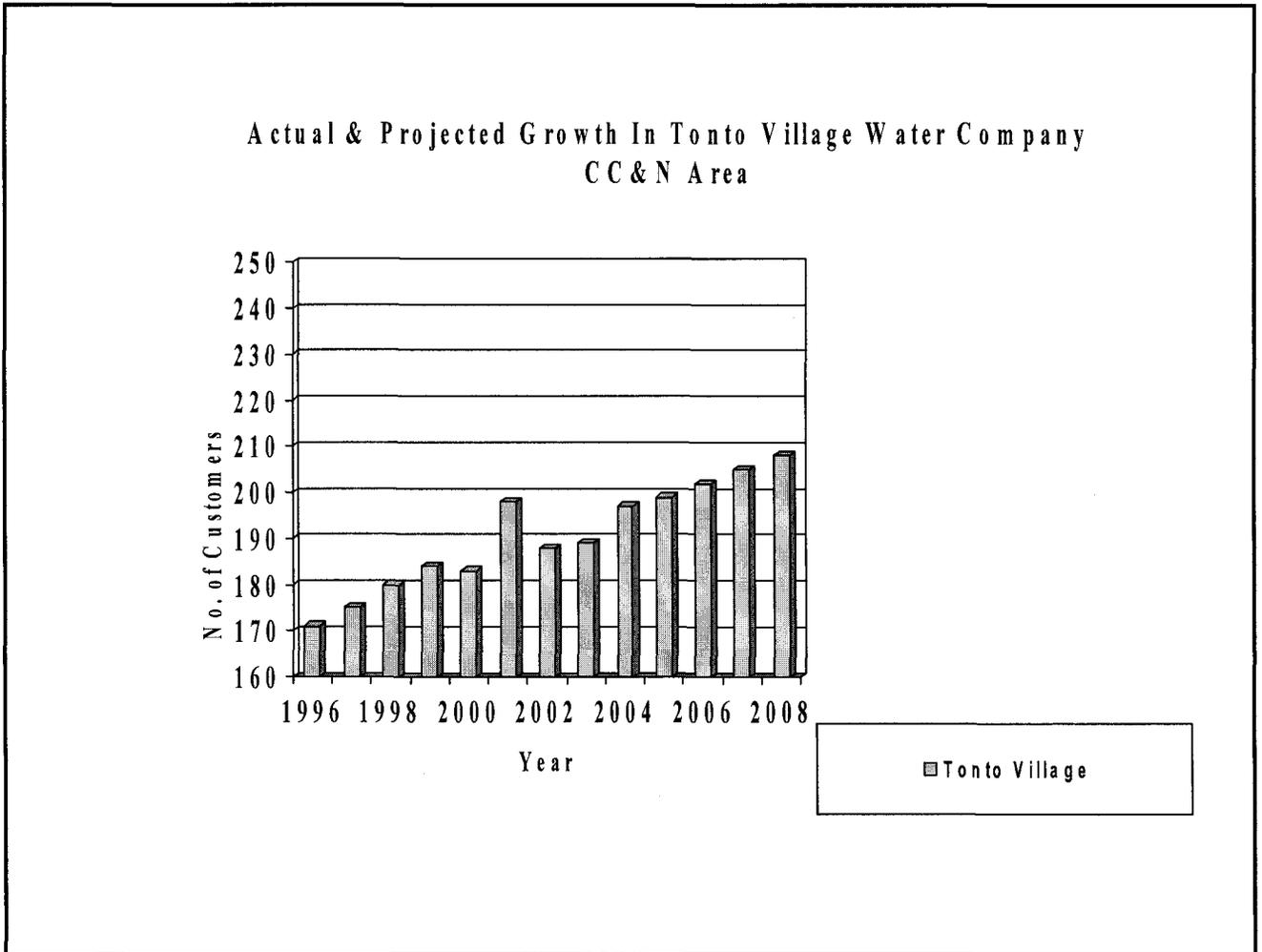


Exhibit 6

Water Depreciation Rates

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	20.0
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	----	----