

ORIGINAL



0000160611

MEMORANDUM

RECEIVED

TO: Docket Control

FROM: Steven M. Olea
Director
Utilities Division

EA for SMD

2015 APR 10 P 3:02

AZ CORP COMMISSION
DOCKET CONTROL

DATE: April 10, 2015

RE: STAFF REPORT FOR LAKE VERDE WATER COMPANY'S APPLICATIONS
FOR AN EMERGENCY RATE INCREASE AND FINANCING APPROVAL
(DOCKET NOS. W-01557A-15-0079 AND W-01557A-15-0080)

Attached is the Staff Report for Lake Verde Water Company's applications for an emergency rate increase and financing approval. Staff recommends approval of the emergency rate request and conditional approval of the financing request using Staff's recommended rates.

A Procedural Order has set a hearing date on this case of April 24, 2015. Any party who wishes may file comments to the Staff Report with the Commission's Docket Control by 4:00 p.m. on or before April 20, 2015.

SMO:TBH:nr\ML

Originator: Teresa B. Hunsaker

Arizona Corporation Commission
DOCKETED
APR 10 2015
DOCKETED BY TV

Service List for: Lake Verde Water Company
Docket Nos. W-01557A-15-0079 & W-01557A-15-0080

Mr. Dugan L. McDonald
President, Board of Directors
LAKE VERDE WATER COMPANY
Post Office Box 3270
738 South Parks Drive
Lake Verde, Arizona 86322

Ms. Brenda McDonald
Secretary, Board of Directors
LAKE VERDE WATER COMPANY
Post Office Box 3270
738 South Parks Drive
Lake Verde, Arizona 86322

Ms. Janice Alward, Chief Counsel
Legal Division
ARIZONA CORPORATION COMMISSION
1200 West Washington Street
Phoenix, AZ 85007

Ms. Lyn Farmer, Director
Hearings Division
ARIZONA CORPORATION COMMISSION
1200 West Washington Street
Phoenix, AZ 85007

Mr. Steven M. Olea, Director
Utilities Division
ARIZONA CORPORATION COMMISSION
1200 West Washington Street
Phoenix, AZ 85007

**STAFF REPORT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION**

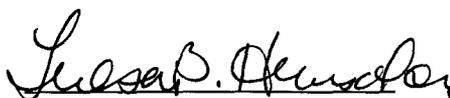
**LAKE VERDE WATER COMPANY
DOCKET NOS. W-01557A-15-0079
AND W-01557A-15-0080**

**APPLICATIONS FOR A
EMERGENCY RATE INCREASE
AND FINANCING APPROVAL**

APRIL 10, 2015

STAFF ACKNOWLEDGMENT

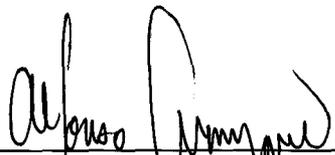
The Staff Report for Lake Verde Water Company ("Lake Verde" or "Company") applications for an emergency rate increase and financing approval, Docket Nos. W-01557A-15-0079 and W-01557A-15-0080, were the responsibility of the Staff members listed below. Teresa B. Hunsaker was responsible for the review and analysis of the Company's applications. Frank Smaila was responsible for the engineering and technical analysis. Alfonso Amezcua was responsible for reviewing the Arizona Corporation Commission's ("Commission") records on the Company and reviewing customer complaints filed with the Commission.



Teresa B. Hunsaker
Public Utilities Analyst II



Frank Smaila
Utilities Engineer



Alfonso Amezcua
Public Utilities Consumer Analyst II

**EXECUTIVE SUMMARY OF
LAKE VERDE WATER COMPANY
DOCKET NOS. W-01557A-15-0079 & W-01557A-15-0080**

On March 4, 2015, Lake Verde Water Company ("Lake Verde" or "Company") filed applications for an emergency rate increase and financing approval with the Arizona Corporation Commission ("Commission"). On March 23, 2015, the emergency rates and financing requests were consolidated by Procedural Order, and a hearing date was set for April 24, 2015. The Company is requesting an emergency rate increase due to water quality and adequate storage issues. The Company is also requesting approval of a Water Infrastructure Finance Authority of Arizona ("WIFA") loan in the amount of \$500,000 for needed plant upgrades for arsenic removal and adequate storage.

Lake Verde is an Arizona Class E utility engaged in the business of providing potable water service to 68 customers in portions of Yavapai County, Arizona. The Company was granted a Certificate of Convenience and Necessity ("CC&N") to provide water service per Decision No. 30705, dated January 6, 1958. The current rates, authorized in Decision No. 58638, have been in effect since June 1994.

Lake Verde did not request approval of specifically identified interim emergency rates. Instead, it requested that Staff review the information provided and make the appropriate recommendations. The Company may be approaching insolvency and is operating at a loss. Staff recommends an emergency rate increase in the amount of \$26,267, or a 157.2 percent increase over 2013 revenue of \$16,709. A typical bill for 5/8-inch by 3/4-inch meter with average usage of 6,505 gallons would increase by \$32.00, or 148.84 percent, from \$21.50 to \$53.50.

WIFA Loan - The proposed \$500,000¹ financing is a 20-year amortizing loan at 4.5 percent interest rate². The Company advocated the purpose of the WIFA loan is to finance plant needed to bring its system into compliance with current Environmental Protection Agency ("EPA") and Arizona Department of Environmental Quality ("ADEQ") arsenic standards and ADEQ required minimum storage capacity. Staff examined the engineering plans and estimated costs for Lake Verde's project and found them to not be reasonable. Staff estimated costs for necessary plant additions to be \$126,000. Staff recommends approval of the financing application with revisions as discussed here in.

Staff Recommends:

- Approval of Staff-recommended emergency rates to replace current rates which consists of a \$26.00 monthly minimum charge that includes the first 1,000 gallons of usage. The rate of \$5.00 per thousand for all gallons over 1,000 gallons.

¹ Company's application provided estimated improvement costs for plant additions of \$305,000. Salaries and other variables are estimated to total \$500,000 including plant additions.

² The interest rate of 4.5 percent or the prevailing rate prescribed by the Drinking Water Revolving Fund at the time of the commitment.

- The interim rates are subject to true-up and refund pending the Decision resulting from a permanent rate increase case required to be filed in this proceeding.
- That the Commission authorize the Company to incur a loan with an 18 to 22 year amortization period, not to exceed \$126,000 at an interest rate not to exceed that available from WIFA.
- Approval of a WIFA Loan Surcharge mechanism that may result in a surcharge of up to \$17.52 per month for customers with a 5/8-inch by 3/4-inch meter as shown on Schedules TBH-2 and TBH-6. The surcharge would be implemented only after the Company closes on the WIFA loan.
- Directing the Company to file as a compliance item in this Docket, within 30 days of the execution of any financing transactions authorized herein, a notice confirming that such execution has occurred and a certification by an authorized Company representative that the terms of the financing fully comply with the authorizations granted.
- The Company file in this Docket, upon filing of the loan closing notice and upon providing the loan documents to Staff, an application requesting implementation of the WIFA Loan Surcharge.
- Directing Staff to calculate the appropriate WIFA Loan Surcharge and prepare and file a recommended order for Commission consideration within 60 days of the filing of a surcharge implementation request by the Company and to calculate the surcharge based on the actual loan debt service (principal and interest), debt reserve and additional income tax obligation using the same methodology presented in Schedule TBH-2.
- Approval of the loan and surcharge shall be rescinded if the Company has not drawn funds from the loan within one year of the date of the Decision resulting from this proceeding. Therefore, establishing an expiration date for any unused authorization to incur debt granted in this proceeding at twenty-four months from the date of a Decision in this matter.
- The Company file a full rate case application no later than June 30, 2017, using a test year ending December 31, 2016.
- The Company be ordered to provide to the Commission with a cashier's check in the amount of \$100.00 prior to commencing its billing of the emergency rates authorized in this Decision.
- The Company file with Docket Control, within 30 days of a Decision approving new rates in this case, a revised tariff reflecting approved rates associated with the emergency rate increase, as a compliance item in this docket.

- Within 30 days of a Decision approving new rates in this case, the Company notify its customers of the revised rates, and its effective date, in a form acceptable to Staff, by means of an insertion in the Company's next regularly-scheduled billing.
- The Company segregate the WIFA Loan Surcharge less Annual Income Tax component, in a separate bank account and that any withdrawals from this account be restricted to payments to WIFA.
- The Company file with Docket Control, as a compliance item in this docket, a copy of the Point-of-Use ("POU") Treatment Device Tariff attached as Exhibit 2 to Staff's Engineering Memorandum.
- The Company notify its customers, in a form acceptable to Staff, of the POU Tariff approved by the Commission and its effective date by mean of either an insert in the next regularly scheduled billing or by separate mailing and shall provide copies of the POU Tariff to any customers upon request. Staff will file a letter in the Docket confirming that the Company's tariffs have been updated with the tariff approved by the Commission. The tariff shall go into effect 30 days after the date notice is sent to customers.
- The Company file with Docket Control, as a compliance item in this docket by December 31, 2015, a copy of the ADEQ Approval to Install certificate for the POU treatment devices.
- The Company file with Docket Control, as a compliance item in this docket by April 29, 2016, a copy of the ADEQ Approval of Installation certificate for the POU treatment devices.
- The Company file with Docket Control, as compliance item in this docket by June 30, 2016, a copy of the ADEQ Approval of Construction for the storage tank and booster pumps.
- The Company file with Docket Control, as a compliance item in this docket by June 30, 2016, documentation showing that old plant equipment no longer used or useful at both the upper and lower well site have been removed from the premises and that both sites cleaned of all debris and tripping hazards.
- The Company file with Docket Control, as a compliance item in this docket by June 30, 2016, documentation showing that chlorination metering pump and storage tank are secured onto foundations and power provided to chlorination metering pump installed in a professional manner.
- The Company be ordered to file with Docket Control, as a compliance item in this docket by June 30, 2016, documentation from ADEQ stating that the Company is in compliance with ADEQ requirements.

- The Company be ordered to file with Docket Control, as a compliance item in this docket by June 30, 2016, documentation from ADWR stating that the Company is in compliance with ADWR requirements.
- The Company file with Docket Control, as a compliance item in this docket by June 30, 2017, a copy of an updated water system engineering assessment report for future improvements.
- The Company use the depreciation rates by individual National Association of Regulatory Commissioners Uniform System of Accounts presented in Exhibit 3 of the Engineering Memorandum on a going forward basis.

TABLE OF CONTENTS

	<u>PAGE</u>
INTRODUCTION	1
BACKGROUND	1
CONSUMER SERVICES	1
PUBLIC NOTICE	2
COMPLIANCE.....	2
ENGINEERING ANALYSIS	2
CONDITIONS NECESSARY FOR EMERGENCY RATE RELIEF.....	2
SUMMARY OF COMPANY'S JUSTIFICATION FOR EMERGENCY RATE RELIEF.....	2
<i>Inadequate System</i>	3
<i>Inadequate Water Quality</i>	3
<i>Inadequate Operating Revenue</i>	3
<i>Staff's Conclusion Regarding Emergency Rate Relief</i>	3
STAFF'S ANALYSIS AND CONCLUSIONS.....	3
RATE DESIGN	4
FINANCING APPLICATION AND WIFA LOAN SURCHARGE MECHANISM.....	5
<i>Purpose and Terms of the Proposed Financing</i>	5
<i>Debt Service Coverage and Cash Flow Analysis</i>	6
<i>WIFA Loan Surcharge Mechanism</i>	6
<i>Capital Structure</i>	7
<i>Encumbrance</i>	7
<i>Cashier's Check</i>	7
STAFF RECOMMENDATIONS.....	7

SCHEDULES

FINANCIAL ANALYSIS.....SCHEDULE TBH-1.1
OPERATING INCOME - PROPERTY TAX EXPENSESCHEDULE TBH-1.2
GROSS REVENUE CONVERSION FACTOR.....SCHEDULE TBH-1.3
WIFA LOAN SURCHARGE MECHANISM CALCULATIONSCHEDULE TBH-2
TABLE A - CONVERSION FACTOR TABLE.....SCHEDULE TBH-3
WIFA LOAN FINANCIAL ANALYSISSCHEDULE TBH-4.1
TERMS OF THE PROPOSED WIFA LOANSCHEDULE TBH-4.2
LOAN AMORTIZATION SCHEDULE AT 5.75 PERCENT.....SCHEDULE TBH-4.3
CASH FLOW ANALYSIS.....SCHEDULE TBH-5
RATE DESIGN.....SCHEDULE TBH-6
TYPICAL BILL ANALYSISSCHEDULE TBH-7

ATTACHMENT

ENGINEERING MEMORANDUM..... ATTACHMENT A

INTRODUCTION

On March 4, 2015, Lake Verde Water Company ("Lake Verde" or "Company") filed applications for an emergency rate increase and financing approval with the Arizona Corporation Commission ("Commission"). On March 23, 2015, the emergency rates and financing requests were consolidated by Procedural Order, and a hearing date was set for April 24, 2015. The Company is requesting an emergency rate increase due to water quality and adequate storage issues. The Company is also requesting approval of a Water Infrastructure Finance Authority of Arizona ("WIFA") loan in the amount of \$500,000 for needed plant upgrades for arsenic removal and adequate storage.

BACKGROUND

Lake Verde is an Arizona Class E utility engaged in the business of providing potable water service to 68 customers in portions of Yavapai County, Arizona. The Company was granted a Certificate of Convenience and Necessity ("CC&N") to provide water service per Decision No. 30705, dated January 6, 1958. The current rates, authorized in Decision No. 58638, have been in effect since June 1, 1994. Lake Verde was assigned water system Public Water System ("PWS") Permit No.13-038.

The Company stated in its application that it is requesting the emergency rate increase to comply with a court injunction (CV-2014-014091) requiring the Company to come into compliance with the Safe Drinking Water Standards. The Company also states that current rates have been in place for more than 20 years and that the Company has for many years operated with net-operating losses. Further, the Company states that there is simply no money generated by the company to bring the water system into compliance.

The Company stated that Mr. Dugan McDonald, President of Lake Verde signed a Consent Order, DW-42-10, on behalf of the Company to make the repairs necessary to bring the Company into compliance with the Safe Drinking Water Standards. The Company stated that since November 2008 the arsenic levels found in the water system exceed the maximum contamination levels ("MCL") and represent an immediate threat to health and welfare of its users. The Company claims that the Company is willing to bring the water system into compliance but that its cash flow is insufficient to maintain operations and general maintenance, to make needed plant upgrades for arsenic removal and adequate storage, and to meet water quality standards.

CONSUMER SERVICES

Staff reviewed the Commission's database for complaints on Lake Verde from January 1, 2012 through March 11, 2015, Staff found no complaints, inquiries or opinions.

The Company is currently in good standing with the Corporations Division.

PUBLIC NOTICE

The Procedural Order dated March 23, 2015 requires that the Company's public notice be filed by April 7, 2015.

COMPLIANCE

Lake Verde has no outstanding compliance issues pending.

ENGINEERING ANALYSIS

Staff Engineering has determined that the Environmental Protection Agency ("EPA") and Arizona Department of Environmental Quality ("ADEQ") have found that the Company is currently delivering water that does not meet water quality standards and fails to provide adequate storage capacity to serve its existing customers. The Company is not located in an Active Management Area ("AMA") and is not subject to any Arizona Department of Water Resources ("ADWR") AMA reporting and conservation requirements. However, ADWR advises that the Company has not timely filed its Annual Report and System Water Plan and therefore, is not in compliance with ADWR. A complete discussion of Staff's technical findings and recommendations and a description of the water system are provided in the attached Staff's Engineering Memorandum (Attachment A).

CONDITIONS NECESSARY FOR EMERGENCY RATE RELIEF

General conditions necessary for interim emergency rates³ include:

1. A sudden change that causes hardship to a company.
2. A company is insolvent.
3. A company's ability to maintain service (pending a formal rate determination) is in serious doubt.

SUMMARY OF COMPANY'S JUSTIFICATION FOR EMERGENCY RATE RELIEF

The Company's current rates have been in effect for over 20 years. The monthly customer charge for a 5/8-inch by 3/4-inch metered customer is \$10.50 and includes the first 1,000 gallons. For all gallons over 1,000, the cost is \$2.00 per thousand gallons. The average bill with usage of 6,505 gallons under current rates is \$21.50. According to the Company's application, its current rates do not provide sufficient revenue to enable it to become financially viable. The Company claims the following inadequacies:

³ According to Attorney General Opinion No. 71-17, interim or emergency rates are proper when either all or any of the following conditions occur: when sudden change brings hardship to a Company; when the Company is insolvent; or when the condition of the Company is such that its ability to maintain service pending a formal rate determination is in serious doubt. Those criteria have been affirmed in *Scates v. Arizona Corporation Commission*, 118 Ariz. 531 (CT. App. 1978) and in *Residential Utility Consume Office v. Arizona Corporation Commission*, 199 Ariz. 588 (2001).

Inadequate System

The Company's water system is inadequate to meet the needs of its current customers. The Company states that the water system has two wells but one is non-operational and one large storage tank that has rusted out and is non-operational.

Inadequate Water Quality

The Company's water quality is currently not meeting water quality standards. The Company's application states that "Since November 2008, it has been determined that the Arsenic levels found within our water system are in fact too high and do represent an immediate threat to the health and welfare of its users." Additionally, the Company's application states that "On May 20, 2010, I, Dugan McDonald, the President of Lake Verde Water Company signed a Consent Order DW-42-10 on behalf of the water company to make the repairs necessary to bring the water company and the water being distributed into compliance with the stated safe drinking water standards." The Company states that it is under court order (CV-2014-014091) to remove the arsenic from the water or the Company would be shut down.

Inadequate Operating Revenue

Lake Verde's current rates do not provide sufficient revenue to pay its operating expenses and to correct its inadequate infrastructure and water quality problems. The Company's application states that "There is simply no money generated from the distribution of the water." The Company is requesting \$90,000 for salaries and wages for three employees. The Company cannot make needed repairs and perform required maintenance on the system.

Staff's Conclusion Regarding Emergency Rate Relief

Staff concludes that the Company's condition satisfies criterion numbers two and three discussed in the "Conditions Necessary for Emergency Rate Relief" section of this Report. The Company has been ordered to remove the arsenic from the water. Staff believes condition number two, has been met because it appears that the Company is insolvent. Staff has reviewed a copy of the Company's 2013 Annual Report; it indicates that the Company had losses of \$6,332 in 2012 and \$10,347 in 2013. Additionally, the Company is not currently providing adequate service, and there is no reasonable expectation that it may begin to provide adequate service at the existing rates. Implementation of interim emergency rates may prevent further deterioration of this system. Staff concludes that two of the three conditions have been met; as such Staff believes a qualified emergency condition exists.

STAFF'S ANALYSIS AND CONCLUSIONS

Lake Verde did not request approval of specifically identified interim emergency rates. Instead, it requested that Staff review the information provided and make the appropriate recommendations. Staff reviewed the emergency rate application. The application lacked sufficient financial information to establish emergency rates. The Company filed the 2013 Annual Report with

the Commission on December 15, 2014. Staff reviewed the emergency rate and financing applications, the unaudited 2013 Annual Report and discussed the matter with Mr. and Mrs. McDonald to develop the Financial Analysis as shown on Schedule TBH-1.1. Staff reviewed the plant balances provided and Staff's recommendations reflect the limited rate base. These numbers are unaudited, but for the purposes of an interim rate increase, they can be used to establish the Company's needs in an emergency rate case filing.

Staff recommends emergency rates to produce total operating revenue of \$42,976 less operating expenses of \$38,336 producing an operating income of \$4,640 for the Company, or an operating margin of 10.80 percent as shown on Schedule TBH-1.1 Col C. Staff recommends an emergency rate increase in the amount of \$26,267, or a 157.2 percent increase over 2013 revenue of \$16,709. Staff recommends approval of \$10,000 for salaries and wages, as shown in Schedules TBH-1.1. A typical bill for 5/8-inch by 3/4-inch meter with average usage of 6,505 gallons would increase by \$32.00, or 148.84 percent, from \$21.50 to \$53.50. Staff's recommended emergency rates and typical bill analysis are shown on Schedules TBH-6 and TBH-7, respectively.

The Company's 2013 revenue of \$16,709 less operating expenses of \$27,056 produces an operating loss of \$10,347 for the Company as shown on TBH-1.1 Col. A. The Company may be approaching insolvency and is operating at a loss.

Staff believes that the Company should be ordered to file a full rate case application no later than June 30, 2017 using a test year ending December 31, 2016.

RATE DESIGN

Under the Company's current rates, customer class is distinguished by meter size. The monthly minimum charges vary by meter size and include 1,000 gallons. One commodity rate applies to all usage. However, the Company's customers only have 5/8-inch by 3/4-inch meters.

Staff recommends the approval of the emergency rates which consist of a \$26.00 monthly minimum charge that includes the first 1,000 gallons of usage and the rate of \$5.00 per thousand for all gallons over 1,000 gallons. The calculation of the surcharge is discussed in the "Financing Application and WIFA Loan Surcharge Mechanism" section of this Report. Staff's rate design and WIFA Loan Surcharges are shown on Schedule TBH-6.

Staff is presently unable to design inverted, tiered commodity rates and is unable to determine the median usage of customers, as bill counts have not been provided to Staff. Staff estimated the average usage based on the 2013 Annual Report's Water Use Data Sheet on Page 12. The average usage of 6,505 gallons is based on average monthly gallons (442,352 gallons sold) divided by the average number of customer (68 customers).

FINANCING APPLICATION AND WIFA LOAN SURCHARGE MECHANISM

Purpose and Terms of the Proposed Financing

The Company advocated the purpose of the WIFA loan is to finance plant needed to bring its system into compliance with current EPA and ADEQ Safe Drinking Water Standards and ADEQ required minimum storage capacity. As discussed above, Lake Verde is out of compliance with the current minimum arsenic standard established by both the EPA and ADEQ. Additionally, the Company is out of compliance in not maintaining adequate water storage.

The proposed \$500,000⁴ financing is a 20-year amortizing loan at 4.5 percent interest rate⁵. Staff examined the engineering plans and estimated costs for Lake Verde's project and found them to not be reasonable. Staff estimated costs for necessary plant additions to be \$126,000. Staff recommends approval of the financing application with revisions as discussed in the Engineering Memorandum.

Staff recommends that the Commission approve a 20-year amortizing loan of \$126,000 to fund the arsenic removal plant and adequate storage capacity at an interest rate not to exceed that available from WIFA. Although the Company's financing application assumes that the WIFA loan will bear an interest rate of 4.5 percent, WIFA informed Staff that the Company would likely receive a loan based on 5.6 percent⁶ ((prime rate 5.0 percent + 2.0 percent) x subsidy rate, 0.80)). Staff used a higher interest rate of 5.75 percent to be conservative. The typical WIFA loan is for 20 years with a 19.5 year amortization (interest only for the first six months).

As shown in Schedule TBH-2, the annual debt service (principal and interest) on a \$126,000, 20-year amortizing loan at 5.75 percent per annum is \$10,622⁷. WIFA also requires funding of Reserve Fund or Replacement Fund equal to 20 percent of the debt service, in this instance \$2,124. The WIFA Loan Surcharge has an annual income tax component by the Company of \$1,553. The annual income tax component is held by the Company to meet its income tax obligations. Staff determined that additional surcharge revenues of \$14,299, as shown on TBH-1.1 Col E Line 6, would be needed to provide the Company funds until permanent rates have been determined. The terms of the proposed WIFA loan and monthly payments are shown on Schedule TBH-4.2.

Staff's recommended equipment and system improvements include Undersink Point-of-Use ("POU") Reverse Osmosis Arsenic Treatment devices installed in each customer's home and the construction and installation of a storage tank, booster pumps, pump-house building, and electrical switching equipment. The estimated equipment and construction costs and recommended system requirements are discussed further in the attached Engineering Memorandum.

⁴ Company's application provided estimated improvement costs for plant additions of \$305,000. Salaries and other variables are estimated to total \$500,000 including plant additions.

⁵ The interest rate of 4.5 percent or the prevailing rate prescribed by the Drinking Water Revolving Fund at the time of the commitment.

⁶ Staff contacted a WIFA representative for an expected interest rate for this case.

⁷ Slight Rounding difference explained on TBH-4.2 Terms of the Proposed WIFA Loan.

Staff Recommended Equipment & Estimated Construction Costs

NARUC Account No.	Description	Unit(s)	Unit Cost, \$	Total Cost, \$
304	Structures and Improvements	1 Lot	\$5,500	\$5,500
311	Pumping Equipment	2	\$5,000	\$10,000
320	Water Treatment Equipment (POU's)	68	\$450	\$30,600
330	Storage Tank, 30,000 gallons	1 Lot	\$59,000	\$59,000
Staff Estimate Subtotal				\$105,100
Contingency 10%				\$10,500
Engineering and Permitting				\$10,400
Staff Estimated Equipment & Construction Total				\$126,000

Debt Service Coverage and Cash Flow Analysis

Staff determined that recommended emergency interim rates are insufficient to cover debt service on the proposed loan; thus, in addition to Staff's recommended emergency interim rates, the Company would need an additional source of funds to meet its obligations. Staff is recommending a WIFA Loan Surcharge. Staff calculated a pro-forma 2.26 debt service coverage rate ("DSC") using Staff's recommended emergency interim rates plus the WIFA Loan Surcharge of \$14,299 as shown on Schedule TBH-2 Step 9. The combined increase (\$26,267 + \$14,299 = \$40,566) provides sufficient cash flow to meet all obligations including WIFA's requirement to fund a "Debt Service Reserve Fund" equal to 20 percent of debt service and uncommitted cash flow. This pro-forma DSC shows that the cash flow with the surcharge will be adequate to cover debt service on the proposed loan as shown on Schedule TBH-5.

WIFA Loan Surcharge Mechanism

A monthly WIFA Loan Surcharge of \$17.52 per 5/8-inch by 3/4-inch meter⁸ would provide \$14,299 of additional funds needed under Staff's assumed loan terms⁹. The WIFA Loan Surcharge combined with Staff's recommended emergency interim rates would increase a typical bill for 5/8-inch by 3/4-inch meter customer with average use of 6,505 gallons by \$49.52, or 230.34 percent, from \$21.50 to \$71.02 (Schedule TBH-7). Since the first payment on the WIFA loan becomes due six months after execution, a time window is available for the Company to obtain the loan, submit the loan documents to the Commission and obtain authorization to implement a loan surcharge after the terms of the loan become known and measurable.

Staff recommends that the Company provide the copies of the executed WIFA loan documents and that the Company provides the loan documents to Staff in order for Staff to calculate the appropriate WIFA Loan Surcharge. The WIFA Loan Surcharge will be calculated based upon the actual amount of the WIFA loan and actual number of customers at the time of the loan closing. The WIFA Loan Surcharge will be calculated on the actual loan debt service (principal

⁸ See Schedule TBH-6 for the WIFA Loan Surcharges of the other meter sizes.

⁹ See Schedule TBH-4.2 for the Terms of the Proposed WIFA Loan.

and interest), debt reserve and additional income tax obligation using the same methodology presented in Schedule TBH-2.

Capital Structure

As of December 31, 2013, Lake Verde's capital structure consisted of 100.0 percent equity as shown on Schedule TBH-4.1 Col A. Staff calculated a pro-forma capital structure reflecting issuance of \$126,000, 20 year amortizing loan at 5.75 percent and it is composed of 86.44 percent long-term debt and 13.56 percent equity as shown on Schedule TBH-4.1.

Encumbrance

Staff further concludes that issuance of the proposed debt financing for the purposes stated within the financing application is compatible with the public interest, should not impair its ability to provide services and is generally consistent with sound financial practices. Pursuant to Arizona Revised Statutes ("A.R.S.") § 40-285 and Arizona Administrative Code ("A.A.C.") R18-15-104, Staff recommends for the Company to pledge its assets and revenues in connection with the loan. However, no "used and useful" determination of the proposed plant was made, and no particular future treatment should be inferred for rate making or rate base purposes.

Cashier's Check

Staff further recommends that the Company be required to post a cashier's check in the amount of \$100.

STAFF RECOMMENDATIONS

Staff recommends approval of Staff-recommended emergency rates to replace current rates which consists of a \$26.00 monthly minimum charge that includes the first 1,000 gallons of usage. The rate of \$5.00 per thousand for all gallons over 1,000 gallons.

Staff further recommends the interim rates are subject to true-up and refund pending the Decision resulting from a permanent rate increase case required to be filed in this proceeding.

Staff further recommends that the Commission authorize the Company to incur a loan with an 18 to 22 year amortization period, not to exceed \$126,000 at an interest rate not to exceed that available from WIFA.

Staff further recommends approval of a WIFA Loan Surcharge mechanism that may result in a surcharge of up to \$17.52 per month for customers with a 5/8-inch by 3/4-inch meter as shown on Schedules TBH-2 and TBH-6. The surcharge would be implemented only after the Company closes on the WIFA loan.

Staff further recommends directing the Company to file as a compliance item in this Docket, within 30 days of the execution of any financing transactions authorized herein, a notice confirming

that such execution has occurred and a certification by an authorized Company representative that the terms of the financing fully comply with the authorizations granted.

Staff further recommends the Company file in this Docket, upon filing of the loan closing notice and upon providing the loan documents to Staff, an application requesting implementation of the WIFA Loan Surcharge.

Staff further recommends directing Staff to calculate the appropriate WIFA Loan Surcharge and prepare and file a recommended order for Commission consideration within 60 days of the filing of a surcharge implementation request by the Company and to calculate the surcharge based on the actual loan debt service (principal and interest), debt reserve and additional income tax obligation using the same methodology presented in Schedule TBH-2.

Staff further recommends approval of the loan and surcharge shall be rescinded if the Company has not drawn funds from the loan within one year of the date of the Decision resulting from this proceeding. Therefore, establishing an expiration date for any unused authorization to incur debt granted in this proceeding at twenty-four months from the date of a Decision in this matter.

Staff further recommends the Company file a full rate case application no later than June 30, 2017, using a test year ending December 31, 2016.

Staff further recommends the Company be ordered to provide to the Commission with a cashier's check in the amount of \$100.00 prior to commencing its billing of the emergency rates authorized in this Decision.

Staff further recommends the Company file with Docket Control, within 30 days of a Decision approving new rates in this case, a revised tariff reflecting approved rates associated with the emergency rate increase, as a compliance item in this docket.

Staff further recommends within 30 days of a Decision approving new rates in this case, the Company notify its customers of the revised rates, and its effective date, in a form acceptable to Staff, by means of an insertion in the Company's next regularly-scheduled billing.

Staff further recommends the Company segregate the WIFA Loan Surcharge less Annual Income Tax component, in a separate bank account and that any withdrawals from this account will be restricted to payments to WIFA.

Staff further recommends the Company file with Docket Control, as a compliance item in this docket, a copy of the Point-of-Use ("POU") Treatment Device Tariff attached as Exhibit 2 to Staff's Engineering Memorandum.

Staff further recommends that the Company notify its customers, in a form acceptable to Staff, of the POU Tariff approved by the Commission and its effective date by mean of either an insert in the next regularly scheduled billing or by separate mailing and shall provide copies of the

POU Tariff to any customers upon request. Staff will file a letter in the Docket confirming that the Company's tariffs have been updated with the tariff approved by the Commission. The tariff shall go into effect 30 days after the date notice is sent to customers.

Staff further recommends the Company file with Docket Control, as a compliance item in this docket by December 31, 2015, a copy of the ADEQ Approval to Install certificate for the POU treatment devices.

Staff further recommends the Company file with Docket Control, as a compliance item in this docket by April 29, 2016, a copy of the ADEQ Approval of Installation certificate for the POU treatment devices.

Staff further recommends the Company file with Docket Control, as compliance item in this docket by June 30, 2016, a copy of the ADEQ Approval of Construction for the storage tank and booster pumps.

Staff further recommends the Company file with Docket Control, as a compliance item in this docket by June 30, 2016, documentation showing that old plant equipment no longer used or useful at both the upper and lower well site have been removed from the premises and that both sites cleaned of all debris and tripping hazards.

Staff further recommends the Company file with Docket Control, as a compliance item in this docket by June 30, 2016, documentation showing that chlorination metering pump and storage tank are secured onto foundations and power provided to chlorination metering pump installed in a professional manner.

Staff further recommends the Company be ordered to file with Docket Control, as a compliance item in this docket by June 30, 2016, documentation from ADEQ stating that the Company is in compliance with ADEQ requirements.

Staff further recommends the Company be ordered to file with Docket Control, as a compliance item in this docket by June 30, 2016, documentation from ADWR stating that the Company is in compliance with ADWR requirements.

Staff further recommends the Company file with Docket Control, as a compliance item in this docket by June 30, 2017, a copy of an updated water system engineering assessment report for future improvements.

Staff further recommends the Company use the depreciation rates by individual National Association of Regulatory Commissioners Uniform System of Accounts presented in Exhibit 3 of the Engineering Memorandum on a going forward basis.

Financial Analysis

Line No.		[A] 2013 Annual Report Income Statement	[B] Adjustments	REF	[C] Staff Recommended Emergency Rates Income Statement	[D] Adjustments	REF	[E] Staff Recommended Emergency/WIFA Loan Income Statement
1	Income Statement							
2	Operating Revenues							
3	Metered Water Revenues	\$ 16,709	\$ 26,267	A	42,976			42,976
4	Miscellaneous Service Revenue	-						
5	Other Water Revenue	-						
6	WIFA Loan Surcharge	-				14,299	E	14,299
7	Total Operating Revenues	\$ 16,709	\$ 26,267		\$ 42,976	\$ 14,299		\$ 57,275
8								
9	Operating Expenses							
10	Salaries and Wages	-	10,000	B	10,000			10,000
11	Purchased Power	1,949			1,949			1,949
12	Chemicals	-			-			-
13	Repairs and Maintenance	-			-			-
14	Office Supplies Expense	1,464			1,464			1,464
15	Outside Services	4,259			4,259			4,259
16	Contractual Services - Testing	1,669			1,669			1,669
17	Rent - Building	2,100			2,100			2,100
18	Rent - Equipment	-			-			-
19	Transportation Expense	1,583			1,583			1,583
20	Insurance - General Liability	671			671			671
21	Insurance - Other	-			-			-
22	Regulatory Expense - Other	-			-			-
23	Miscellaneous Expense	8,211			8,211			8,211
24	Depreciation Expense	4,303			4,303			4,303
25	Property Taxes	847	328	C	1,174	220	F	1,394
26	Income Taxes	-	952	D	952	1,553	G	2,506
27	Total Operating Expenses	\$ 27,056	\$ 11,280		\$ 38,336	\$ 1,773		\$ 40,109
28								
29	Operating Income/(Loss)	\$ (10,347)	\$ 14,987		\$ 4,640	\$ 12,526		\$ 17,166
30								
31	Other Income (Expense)							
32	Interest and Dividend Income	\$ -			-			-
33	Non-Utility Income	-			-			-
34	Miscellaneous Non-Utility Expenses	-			-			-
35	Interest Expense	-			-			-
36	Interest Expense on Long-term Debt	-			-	7,157	H	7,157
37	Total Other Income (Expense)	\$ -	\$ -		\$ -	\$ (7,157)		\$ (7,157)
38								
39	Net Income (Loss)	\$ (10,347)	\$ 14,987		\$ 4,640	\$ 5,370		\$ 10,009
40	Operating Margin (Line 29 / Line 7)	-61.92%			10.80%			29.97%
41	Principal Payment				\$ -	\$ 3,465	I	\$ 3,465
42	WIFA Debt Reserve				\$ -	\$ 2,124	J	\$ 2,124
43	Cash Flow (L39 + L18 - L43 -L42)	\$ (6,044)			\$ 8,943	\$ (220)		\$ 8,723

Adjustments

- A - Emergency Rates - Staff Recommended
- B - Emergency Rates - Staff Recommended (Company Proposed \$90,000)
- C - See Schedule TBH-1.2 Line 22
- D - See Schedule TBH-1.3 Line 52. Company made no adjustment.
- E - See Schedule TBH-2, Step 9
- F - See Schedule TBH-1.2 Line 22
- G - See Schedule TBH-2, Step 7
- H - See Schedule TBH-2, Step 2
- I - See Schedule TBH-2, Step 3
- J - See Schedule TBH-2, Step 6

Lake Verde Water Company
 Docket No. W-01557A-15-0079 & W-01557A-15-0080
 Application For Emergency Rate Case and Financing
 Period Ending December 31, 2013

Operating Income - Property Tax Expense

LINE NO.	[A] STAFF AS ADJUSTED	[B] STAFF EMERGENCY RECOMMENDED RATES	[C] STAFF EMERGENCY & WIFA LOAN SURCHARGE RECOMMENDED RATES
1	PROPERTY TAX CALCULATION		
2	Staff Adjusted Test Year Revenues	\$16,709	\$16,709
3	Weight Factor	2	2
4	Subtotal (Line 1 * Line 2)	\$33,418	\$33,418
5	Staff Recommended Revenue, Per Schedule TBH-1.1	16,709	42,976
6	Subtotal (Line 3 + Line 4)	\$50,127	\$76,394
7	Number of Years	3	3
8	Three Year Average (Line 5 / Line 6)	\$16,709	\$25,465
9	Department of Revenue Multiplier	2	2
10	Revenue Base Value (Line 7 * Line 8)	\$33,418	\$50,929
11	Plus: 10% of CWIP	\$0	\$0
12	Less: Net Book Value of Licensed Vehicles	\$0	\$0
13	Full Cash Value (Line 9 + Line 10 - Line 11)	\$33,418	\$50,929
14	Assessment Ratio	18.50%	18.50%
15	Assessment Value (Line 12 * Line 13)	\$6,182	\$9,422
16	Composite Property Tax Rate	12.46%	12.46%
17	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$771	
18	Company Proposed Property Tax	\$847	
19	Staff Test Year Adjustment (Line 16-Line 17)	(\$76)	
20	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$1,174
21	Staff Test Year Adjusted Property Tax Expense (Line 16)		771
22	Increase in Property Tax Expense Due to Increase in Revenue Requirement		404
23	Total Difference in Staff TY Adjustment plus Increase due to Revenue Req. (Line 18 + Line 21)		\$328
24	Increase to Property Tax Expense (Line 21)		\$404
25	Increase in Revenue Requirement		\$26,267
26	Increase to Property Tax per Dollar Increase in Revenue (Line 23/Line 24)		1.537%
	¹ Total Adjustment \$548 (\$328 Emergency and \$220 Emergency/WIFA)		\$40,566 1.537%

Gross Revenue Conversion Factor

LINE NO.	DESCRIPTION	[A]	[B]	[C]
	<i>Calculation of Gross Revenue Conversion Factor:</i>			
1	Revenue	100.000%		
2	Uncollectible Factor (Line 11)	0.000%		
3	Revenues (L1 - L2)	100.00%		
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	21.747%		
5	Subtotal (L3 - L4)	78.253%		
6	Revenue Conversion Factor (L1 / L5)	1.2779		
	<i>Calculation of Uncollectible Factor:</i>			
7	Unity	100.000%		
8	Combined Federal and State Tax Rate (Line 17)	20.525%		
9	One Minus Combined Income Tax Rate (L7 - L8)	79.475%		
10	Uncollectible Rate	0.000%		
11	Uncollectible Factor (L9 * L10)	0.000%		
	<i>Calculation of Effective Tax Rate:</i>			
12	Operating Income Before Taxes (Arizona Taxable Income)	100.000%		
13	Arizona State Income Tax Rate	6.500%		
14	Federal Taxable Income (L12 - L13)	93.500%		
15	Applicable Federal Income Tax Rate (Line 53)	15.000%		
16	Effective Federal Income Tax Rate (L14 * L15)	14.025%		
17	Combined Federal and State Income Tax Rate (L13 + L16)		20.525%	
	<i>Calculation of Effective Property Tax Factor:</i>			
18	Unity	100.000%		
19	Combined Federal and State Income Tax Rate (L17)	20.525%		
20	One Minus Combined Income Tax Rate (L18 - L19)	79.475%		
21	Property Tax Factor (TBH-5, Line 24)	1.537%		
22	Effective Property Tax Factor (L20 * L21)		1.222%	
23	Combined Federal and State Income Tax and Property Tax Rate (L17 + L22)			21.747%
24	Required Operating Income TBH-1.1	\$4,640		
25	Adjusted Test Year Operating Income (Loss) TBH-1.1	(10,347)		
26	Required Increase in Operating Income (L24 - L25)		\$ 14,987	
27	Income Taxes on Recommended Revenue (Col. [C], L52)	\$952		
28	Income Taxes on Test Year Revenue (Col. [A], L52)	(2,124)		
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		3,076	
30	Recommended Revenue Requirement	\$42,976		
31	Uncollectible Rate (Line 10)	0.00%		
32	Uncollectible Expense on Recommended Revenue (L30 * L31)	\$0		
33	Adjusted Test Year Uncollectible Expense	\$0		
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32 - L33)		\$0	
35	Property Tax with Recommended Revenue	\$1,174		
36	Property Tax on Test Year Revenue	\$771		
37	Increase in Property Tax Due to Increase in Revenue (L35 - L36)		404	
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)		\$18,467	
	<i>Calculation of Income Tax:</i>			
39	Revenue	Test Year		Staff Recommended
40	Operating Expenses Excluding Income Taxes	\$16,709	\$ 11,280.11	\$42,976
41	Synchronized Interest (L56)	0		38,336
42	Arizona Taxable Income (L39 - L40 - L41)	(\$10,347)		0
43	Arizona State Income Tax Rate	6.50%		\$4,640
44	Arizona Income Tax (L42 * L43)	(\$673)		6.50%
45	Federal Taxable Income (L42 - L44)	(\$9,674)		\$302
46	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15%	(\$1,451)		\$4,338
47	Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25%	0		\$651
48	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34%	0		0
49	Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39%	0		0
50	Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34%	0		0
51	Total Federal Income Tax	(1,451)		651
52	Combined Federal and State Income Tax (L44 + L51)	(\$2,124)		\$952
53	Applicable Federal Income Tax Rate (Col. [C], L51 - Col. [A], L51) / [Col. [C], L45 - Col. [A], L45]			15.0000%

WIFA Loan Surcharge Mechanism Calculation

Loan Amount: \$126,000.00
Term: 20
Interest Rate Before Subsidy: 7.00%
Subsidy Rate: 80%
Interest Rate: If interest rate is not found on TABLE A on
5.75% TBH-3, use the next highest percentage

Step 1 - Find the Annual Payment on the Loan

\$126,000.00 Total Amount of Loan
0.0843 TABLE A, Annual Conversion Factor Table, Column B
\$10,621.80 Annual Principal and Interest Payment

Step 2 - Find the Annual Interest Payment on the Loan

\$126,000.00 Total Amount of Loan
0.0568 TABLE A, Annual Conversion Factor Table, Column C
\$7,156.80 Annual Interest Payment on Debt

Step 3 - Find the Annual Principal Payment on the Loan

\$126,000.00 Total Amount of Loan
0.0275 TABLE A, Annual Conversion Factor Table, Column D
\$3,465.00 Annual Principal Payment on Debt

Step 4 - Find the Gross Revenue Conversion Factor

1.27790 TBH-1.3 - Line 6

Step 5 - Find the Incremental Income Tax Factor

1.2779 minus 1 = 0.2779

Step 6 - Find the Debt Reserve Component of the Annual Surcharge Revenue

\$10,621.80 Annual Interest and Principal Payments on the Loan (from Step 1)
20% Multiplied by: 20% for 5 Years
\$2,124.36 Debt Reserve Component of the Annual Surcharge Revenue for first five years

Step 7 - Find the Annual Income Tax Component of the Surcharge Revenue

0.2779 Incremental Income Tax Factor
\$5,589.36 Multiplied by: Annual Principal Payment on Loan (from Step 3) plus Debt Reserve Component (from Step 6)
\$1,553.29 Annual Income Tax Component of the Annual Surcharge Revenue

Step 8 - Find the Debt Service Component of the Annual Surcharge Revenue

\$7,156.80 Annual Interest Payment on the Loan (from Step 2)
\$3,465.00 Plus: Annual Principal Payment (from Step 3)
\$2,124.36 Plus: Debt Reserve Component of the Annual Surcharge Revenue (from Step 6)
\$12,746.16 Debt Service Component of the Annual Surcharge Revenue

Step 9 - Find the Annual Surcharge Revenue Requirement Needed for the Loan

\$1,553.29 Annual Income Tax Component of the Annual Surcharge Revenue (from Step 7)
\$12,746.16 Plus: Debt Service Component of the Annual Surcharge Revenue (from Step 8)

\$14,299.45 Total Annual Surcharge Revenue Requirement for the Loan

Step 10 - Find the Equivalent Bills

Col A	Col B	Col C	Col D	Col E
Meter Size	NARUC Multiplier	Number of Customers	Number of Months in Year	Equivalent Bills Col B x C x D
5/8" x 3/4" Meter	1.0	68	12	816
3/4" Meter	1.5	0	12	0
1" Meter	2.5	0	12	0
1 1/2" Meter	5.0	0	12	0
2" Meter	8.0	0	12	0
3" Meter	15.0	0	12	0
4" Meter	25.0	0	12	0
6" Meter	50.0	0	12	0
		<u>68</u>		<u>816</u>

Step 11 - Find the Monthly Surcharge on 5/8" x 3/4" Meter Size Customers

\$14,299.45 Total Annual Surcharge Revenue Requirement for the Loan (from Step 9)
816 Divided by: Total Number of Equivalent Bills (from Step 10)

\$17.52 Monthly Surcharge for 5/8" by 3/4" Customers

Step 12 - Find the Monthly Surcharge for the Remaining Meter Size Customers

Col A	Col B	Col C	Col D
Meter Size	NARUC Multiplier	5/8" x 3/4" Meter Customers' Surcharge	Surcharge by Meter Size Col B x C
5/8" x 3/4" Meter	1.0	\$17.52	\$17.52
3/4" Meter	1.5	17.52	26.29
1" Meter	2.5	17.52	43.81
1 1/2" Meter	5.0	17.52	87.62
2" Meter	8.0	17.52	140.19
3" Meter	15.0	17.52	262.86
4" Meter	25.0	17.52	438.10
6" Meter	50.0	17.52	876.19

Table A
Conversion Factor Table (Based on a 20-year Loan)

Line No.	Column A Annual Interest	Column B Annual Payment Conversion Factor	Column C Annual Interest Payment Conversion Factor	Column D Annual Principal Payment Conversion Factor
1	3.50%	0.0696	0.0344	0.0352
2	3.75%	0.0711	0.0369	0.0342
3	4.00%	0.0727	0.0394	0.0333
4	4.25%	0.0743	0.0419	0.0324
5	4.50%	0.0759	0.0444	0.0316
6	4.75%	0.0775	0.0468	0.0307
7	5.00%	0.0792	0.0493	0.0299
8	5.25%	0.0809	0.0518	0.0291
9	5.50%	0.0825	0.0543	0.0283
10	5.75%	0.0843	0.0568	0.0275
11	6.00%	0.0860	0.0593	0.0267
12	6.25%	0.0877	0.0618	0.0259
13	6.50%	0.0895	0.0643	0.0252
14	6.75%	0.0912	0.0668	0.0245
15	7.00%	0.0930	0.0692	0.0238
16	7.25%	0.0948	0.0717	0.0231
17	7.50%	0.0967	0.0742	0.0224
18	7.75%	0.0985	0.0767	0.0218
19	8.00%	0.1004	0.0792	0.0211

Please Note: If interest rate is not found use the next highest percentage.

WIFA Loan Financial Analysis

Selected Financial Information

Line No.		[A] ¹ <i>Income Statement</i> <i>12/31/2013</i>	[B] ² <i>Pro-forma Emergency Rates</i>	[C] ³ <i>Pro-forma Emergency Rates</i> <i>with WIFA Loan Surcharge</i>
1	Operating Income	\$ (10,347)	\$ 4,640	\$ 17,166
2	Depreciation & Amort.	4,303	4,303	4,303
3	Income Tax Expense	0	952	2,506
4				
5	Interest Expense	0	0	7,157
6	Repayment of Principal	0	0	3,465
7	Debt Reserve Requirement (Deposit)	0	0	2,124
8				
9	TIER			
10	[1+3] ÷ [5]	N/A	N/A	2.75
11				
12	DSC			
13	[1+2+3] ÷ [5+6+7]	N/A	N/A	2.26
14				
15				
16	Capital Structure			
17				
18	Short-term Debt	0 0.00%	0 0.00%	0 0.00%
19				
20	Long-term Debt	0 0.00%	0 0.00%	126,000 86.44%
21				
22	Common Equity	19,771 100.00%	19,771 100.00%	19,771 13.56%
23				
24	Total Capital	\$ 19,771 100.00%	\$ 19,771 100.00%	\$ 145,771 100.00%
25				
26				
27				
28	¹ Column [A] is based on the 2013 Annual Report filed with the Commission on December 15, 2014.			
29	² Column [B] Operating Income has been modified to reflect pro-forma adjustments for the Emergency Rate Case revenues and \$10,000 for Salaries and wages expense, Property Taxes and Income Taxes from Schedule TBH-1.1.			
30				
31	³ Column [C] is Column [B] modified to reflect pro-forma adjustments for the WIFA Loan Surcharge for the issuance of the proposed \$126,000 debt financing amortized for 20 year term at 5.75 percent per annum. Schedule TBH-1.1 Col E.			
32				

Lake Verde Water Company

Schedule TBH-4.2

Docket No. W-01557A-15-0079 & W-01557A-15-0080

Application For Emergency Rate Case and Financing

Period Ending December 31, 2013

Terms of the Proposed WIFA Loan

Terms and Conditions

Loan Amount	\$126,000.00
Term (No. of Years)	20
Combined Interest & Fee Rate	
Interest Rate Index	7.00%
Subsidy Rate Index	80.00%
Combined Interest & Fee Rate	5.60%
TBH-3 Table A- Staff Used Next Higher Interest Rate to be Conservative	5.75%
Number of Payments per Year	12
Coverage Requirement	20.00%
Number of Years Debt Service Reserve Funded	5
Debt Service Reserve Requirement	\$10,615.50
Rounding Difference to WIFA Loan Surcharge Calculation (\$10,621.80 - \$10,615.50)	\$6.30
WIFA Loan Surcharge per TBH-2 at 5.75%	\$10,621.80

Monthly Fixed Payment to WIFA

Years 1 through 5

Prior to Debt Service Reserve Requirement

Monthly Debt Service Payment	884.63
Monthly Debt Service Reserve Deposit	176.93
Total Monthly Fixed Payment	\$1,061.55

Years 6 through 20

After Debt Service Reserve Requirement

Monthly Debt Service Payment	884.63
Monthly Debt Service Reserve Deposit	0.00
Monthly Replacement Fund Deposit	176.93
Total Monthly Fixed Payment	\$884.63

Monthly Replacement Fund Deposit -- Held Locally

Prior to Debt Service Reserve Requirement

\$0.00

After Debt Service Reserve Requirement

\$176.93

Annual Fiscal Impact

Year	Annual Debt Service	Reserve Fund Deposit	Replacement Fund Deposit	Total Annual Fiscal Impact
1	10,615.50	2,123.10	0.00	12,738.60
2	10,615.50	2,123.10	0.00	12,738.60
3	10,615.50	2,123.10	0.00	12,738.60
4	10,615.50	2,123.10	0.00	12,738.60
5	10,615.50	2,123.10	0.00	12,738.60
6	10,615.50	0.00	2,123.10	12,738.60
7	10,615.50	0.00	2,123.10	12,738.60
8	10,615.50	0.00	2,123.10	12,738.60
9	10,615.50	0.00	2,123.10	12,738.60
10	10,615.50	0.00	2,123.10	12,738.60
11	10,615.50	0.00	2,123.10	12,738.60
12	10,615.50	0.00	2,123.10	12,738.60
13	10,615.50	0.00	2,123.10	12,738.60
14	10,615.50	0.00	2,123.10	12,738.60
15	10,615.50	0.00	2,123.10	12,738.60
16	10,615.50	0.00	2,123.10	12,738.60
17	10,615.50	0.00	2,123.10	12,738.60
18	10,615.50	0.00	2,123.10	12,738.60
19	10,615.50	0.00	2,123.10	12,738.60
20	10,615.50	0.00	2,123.10	12,738.60
	\$212,310.05	\$10,615.50	\$31,846.51	\$254,772.06

Lake Verde Water Company

Docket No. W-01557A-15-0079 & W-01557A-15-0080

Application For Emergency Rate Case and Financing

Period Ending December 31, 2013

Schedule TBH-4.3

Loan Data:	
Loan Amount Requested	\$126,000.00
Down Payment:	\$0
Amount Financed:	\$126,000.00
Number of years:	20
Interest rate (r):	5.75%

Compounding Periods: 12
APR: 5.90%

Loan Amortization Schedule

Period	Loan payment (1)	Beginning-of-month principal (2)	Payments		End-of-month principal [(2) - (4)] (5)	Annual Interest (6)	Annual Principal (7)	Annual Debt Payment (8)	20% Reserve Fund Deposit (9)
			Interest [r * (2)] (3)	Principal [(1) - (3)] (4)					
1	\$884.63	\$126,000.00	\$603.75	\$280.88	\$125,719.12				
2	884.63	125,719.12	602.40	282.22	125,436.90				
3	884.63	125,436.90	601.05	283.57	125,153.33				
4	884.63	125,153.33	599.69	284.93	124,868.40				
5	884.63	124,868.40	598.33	286.30	124,582.10				
6	884.63	124,582.10	596.96	287.67	124,294.43				
7	884.63	124,294.43	595.58	289.05	124,005.38				
8	884.63	124,005.38	594.19	290.43	123,714.95				
9	884.63	123,714.95	592.80	291.82	123,423.13				
10	884.63	123,423.13	591.40	293.22	123,129.90				
11	884.63	123,129.90	590.00	294.63	122,835.28				
12	884.63	122,835.28	588.59	296.04	122,539.24	7,154.74	3,460.76	10,615.50	2,123.10

Cash Flow Analysis

Line		Staff Recommended W/O Proposed WIFA Loan	Pro-forma With Proposed WIFA Loan and Surcharge
1	Cash Inflows		
3	Metered Water Revenues	\$ 42,976	\$ 42,976
4	Miscellaneous Service Revenue		
5	Other Water Revenue		
6	WIFA Loan Surcharge		14,299
7	Total Revenues	\$ 42,976	\$ 57,275
8			
9	Cash Outflows		
10	Salaries and Wages	\$ 10,000	\$ 10,000
11	Purchased Power	1,949	1,949
12	Chemicals	-	-
13	Repairs and Maintenance	-	-
14	Office Supplies Expense	1,464	1,464
15	Outside Services	4,259	4,259
16	Contractual Services - Testing	1,669	1,669
17	Rent - Building	2,100	2,100
18	Rent - Equipment	-	-
19	Transportation Expense	1,583	1,583
20	Insurance - General Liability	671	671
21	Insurance - Other	-	-
22	Regulatory Expense - Other	-	-
23	Miscellaneous Expense	8,211	8,211
24	Depreciation Expense	4,303	4,303
25	Property Taxes	1,174	1,174
26	Income Taxes	952	2,506
27	Total Expenses	\$ 38,336	\$ 39,889
28			
29	Operating Income	\$ 4,640	\$ 17,386
30			
31	Plus: Depreciation Expense	\$ 4,303	\$ 4,303
32	Less: Loan Payment Interest	-	7,157
33	Less: Loan Payment Principal	-	3,465
34	Cash Flow from Operations before WIFA Reserve	\$ 8,943	\$ 11,067
35			
36	WIFA Reserve (20% of Principal and Interest)	\$ -	\$ 2,124
37	Cash Flow from Operations after WIFA Reserve	\$ 8,943	\$ 8,943

Rate Design				
	Present Rates	Staff Recommended Emergency Rates		
Monthly Usage Charge				
Monthly Minimum Charge:				
Meter Size (All Classes):				
5/8" x 3/4" Meter	\$ 10.50	\$		26.00
3/4" Meter	15.75			31.50
1" Meter	25.00			52.50
1 1/2" Meter	35.00			105.00
2" Meter	50.00			168.00
Gallons included in the Monthly Minimum Charge:	1,000			1,000
Per 1,000 for all gallons over the first 1,000	\$ 2.00	\$		5.00
WIFA Loan Surcharge				
5/8" x 3/4" Meter	N/A	\$		17.52
3/4" Meter	N/A			26.29
1" Meter	N/A			43.81
1 1/2" Meter	N/A			87.62
2" Meter	N/A			140.19
Other Service Charges				
Establishment	\$ 10.00	\$		10.00
Establishment (After Hours)	15.00			15.00
Reconnection (Delinquent)	5.00			5.00
Meter Test (If Correct)	10.00			10.00
Deposit	(a)			(a)
Deposit Interest	(a)			(a)
Reestablishment (within 12 months)	(b)			(b)
NSF Check	10.00			10.00
Deferred Payment (per month)	1.5% (c)			1.5% (c)
Meter Re-read	5.00			5.00
Monthly Service Charge for Fire Sprinkler - 4" or smaller	(c)			(c)
<p>(a) Per Rule R14-2-403(B).</p> <p>(b) Number of months off the system times the monthly minimum per A.A.C. R14-2-403(D).</p> <p>(c) 1% of the monthly minimum for a comparable sized meter, but no less than \$5.00 per month. The Monthly Service Charge for Fire Sprinklers is only applicable for service lines separate and distinct from the primary water service line.</p> <p>N/A Not Applicable</p> <p>In addition to the collection of regular rates, the utility will collect from its customers a proportionate share of any privilege, sales, use, and franchise tax. Per commission rule 14-2-409D(5).</p>				
Service and Meter Installation Charges	Total Present Charge	Recommended Service Line Charge	Recommended Meter Installation Charge	Total Recommended Charge
Service Size				
5/8" x 3/4" Meter	\$ 290.00	-	-	\$ 290.00
3/4" Meter	325.00	-	-	325.00
1" Meter	375.00	-	-	375.00
1 1/2" Meter	570.00	-	-	570.00
2" Meter	970.00	-	-	970.00

Typical Bill Analysis
General Service 5/8 x 3/4-Inch Meter

Please Note: The Company did not propose approval of specific emergency rates, it requested that Staff review the information provided and make the appropriate recommendations. Staff was unable to design inverted, tiered commodity rates and was unable to determine the median usage of customers, as bill counts are not required in filing an emergency rate increase request. Staff estimated the average usage based on the 2013 Annual Report's Water Use Data Sheet on Page 12. The Average Usage of 6,505 gallons is based on average monthly gallons (442,352 gallons sold) divided by the average number of customers (68 customers).

Staff Recommended With Emergency Rates	Gallons	Present Rates	Staff Recommended Emergency Rates	Dollar Increase	Percent Increase
Average Usage	6,505	\$ 21.50	\$ 53.50	\$ 32.00	148.84%

Staff Recommended With Emergency Rates With WIFA Loan Surcharge	Gallons	Present Rates	Staff Recommended Emergency Rates	Dollar Increase	Percent Increase
Average Usage	6,505	\$ 21.50	\$ 71.02	\$ 49.52	230.34%

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

Gallons Consumption	Authorized Present Rates	Staff Recommended With Emergency Rates	% Increase to Present Rates	Staff Recommended WIFA Loan Surcharge	Staff Recommended With Emergency Rates and WIFA Loan Surcharge	% Increase to Present Rates
-	\$ 10.50	\$ 26.00	147.62%	\$ 17.52	\$ 43.52	314.51%
1,000	10.50	26.00	147.62%	17.52	43.52	314.51%
2,000	12.50	31.00	148.00%	17.52	48.52	288.19%
3,000	14.50	36.00	148.28%	17.52	53.52	269.13%
4,000	16.50	41.00	148.48%	17.52	58.52	254.69%
5,000	18.50	46.00	148.65%	17.52	63.52	243.37%
6,000	20.50	51.00	148.78%	17.52	68.52	234.26%
7,000	22.50	56.00	148.89%	17.52	73.52	226.77%
8,000	24.50	61.00	148.98%	17.52	78.52	220.51%
9,000	26.50	66.00	149.06%	17.52	83.52	215.18%
10,000	28.50	71.00	149.12%	17.52	88.52	210.61%
11,000	30.50	76.00	149.18%	17.52	93.52	206.64%
12,000	32.50	81.00	149.23%	17.52	98.52	203.15%
13,000	34.50	86.00	149.28%	17.52	103.52	200.07%
14,000	36.50	91.00	149.32%	17.52	108.52	197.33%
15,000	38.50	96.00	149.35%	17.52	113.52	194.87%
16,000	40.50	101.00	149.38%	17.52	118.52	192.65%
17,000	42.50	106.00	149.41%	17.52	123.52	190.64%
18,000	44.50	111.00	149.44%	17.52	128.52	188.82%
19,000	46.50	116.00	149.46%	17.52	133.52	187.15%
20,000	48.50	121.00	149.48%	17.52	138.52	185.62%
25,000	58.50	146.00	149.57%	17.52	163.52	179.53%
30,000	68.50	171.00	149.64%	17.52	188.52	175.22%
35,000	78.50	196.00	149.68%	17.52	213.52	172.00%
40,000	88.50	221.00	149.72%	17.52	238.52	169.52%
45,000	98.50	246.00	149.75%	17.52	263.52	167.54%
50,000	108.50	271.00	149.77%	17.52	288.52	165.92%
75,000	158.50	396.00	149.84%	17.52	413.52	160.90%
100,000	208.50	521.00	149.88%	17.52	538.52	158.28%

MEMORANDUM

DATE March 31, 2015

TO: Teresa Hunsaker
Public Utilities Analyst II

FROM: Frank M. Smaila 
Utilities Engineer

RE: Lake Verde Water Company, Inc.
Emergency Rate Increase Application for (Docket No. W-01557A-15-0079) and
Financing Application (Docket No. W-01557A-15-0080)

Introduction

Lake Verde Water Company, Inc. ("Lake Verde" or "Company") is a Class E public service company providing water utility service in Yavapai County. The Company's Certificate of Convenience and Necessity ("CC&N") is approximately 2,100 Acres (3.2 square miles), located south of Camp Verde along South Salt Mine Road (T13N, R5E, Sections 17 & 20 and portions of Sections 8, 9 & 16)¹. According to the Arizona Corporation Commission ("ACC" or "Commission") Utilities Division Annual Water Report for year ending 2013 ("Annual Report") the Company was serving 68 customers. On February 5, 2015, Commission Utilities Division Staff ("Staff") members Teresa Hunsaker and Frank Smaila inspected the Company's water system.

On March 4, 2015, the Company filed with the ACC a request for an Emergency Rate Increase.² The Company indicated that its request for an emergency rate increase was necessary to bring the Company into compliance with the Safe Drinking Water Standards. The Company states that there is no money generated from the distribution of water and has not been profitable for many years. The average customer bill amounts to \$21.50 per month. The Company further states that it has not had a rate increase for over 20 years and therefore the current level of revenue collected does not cover the general maintenance of the facilities.

On March 4, 2015, the Company filed a Financing Application with the ACC seeking authorization to borrow \$500,000 from Water Infrastructure Finance Authority of Arizona ("WIFA") to fund engineering, procurement, installation and operation of a Treatment Plant to reduce Nitrates and Arsenic to below Maximum Contaminants Levels ("MCL").³ The application for funding approval also includes procurement and installation of a Water Storage Tank, Booster Station, Transmission Waterline, Engineering, Permitting, Electrical, Yard Piping and appurtenances.

¹ Exhibit 1, Maps of Lake Verde Water Company

² Emergency Rate Increase Application, (Docket No. W-01557A-15-0079)

³ Financing Application, (Docket No. W-01557A-15-0080)

On March 19, 2015, Staff requested a consolidated docket for both cases. On March 23, 2015 a procedural order was issued by the Hearing Division consolidating both docket cases.⁴

System Analysis

The Company's water system consists of one well (Well 55-643838, 2 hp, pump yield is 22 gallons per minute ("gpm"), one storage tank (5,000 gallons), one Pressure Tank (2,000 gallons) and a distribution system serving 68 metered service connections. Staff found that Well 55-643838 (Well No. 2), located at the upper well site, presently is fitted with a 3 hp motor producing approximately 40 gpm with a functional chlorination pump introduced at the well discharge piping. The 5,000 gallon storage tank is located at the upper well site but is not connected to the water system nor owned by the Company and the 2,000 gallon pressure tank, located at the lower well site, is in place but not functional. The pressure tank is corroded and is not used or useful as a pressure tank. A second Well 55-643828 (Well No. 1), located at the lower well site, is no longer active as the well has collapsed according to the system's operator, Alan Williams. Since there is not a storage tank or functional pressure tank, Well No. 2 discharges directly to the distribution system via a 112 gallon bladder tank to assist in maintaining pressure in the distribution system. There is a 2-inch totalizing flow meter on the discharge piping that is functioning properly according to the system's operator.

According to the Company, the distribution system is comprised of approximately 680 feet of two-inch, 240 feet of three-inch and 4,300 feet of four-inch galvanized steel water lines. The operator indicated that over the past 3 years approximately twelve waterline breaks have been repaired.

Staff concludes that the Company has adequate production to serve its existing customers and reasonable growth but lacks storage capacity of approximately 30,000 gallons. The data indicates that there was 6 percent water loss in the system which is below Staff's recommended allowable water loss limit of 10 percent.

Both the upper and lower well sites are not maintained in a clean and professional manner. Old storage and pressure tanks and a booster pump that are no longer used or useful, still reside at both well sites. This equipment should be removed from premises and sites cleaned of all debris and tripping hazards. The upper well site contains the chlorinator metering pump and chlorination storage tank. Both chlorination units are unsecured to a foundation. The chlorination storage tank is located on the ground while the chlorinator metering pump is located on concrete block powered by an extension cord.

Arizona Department of Environmental Quality ("ADEQ") Compliance

Staff received an ADEQ Drinking Water Compliance Status Report dated January 20, 2015, in which ADEQ reported that the Lake Verde Water System, Public Water System ("PWS") No. 13-038, is not in compliance with ADEQ requirements and is currently delivering water that does not

⁴ Consolidated Docket No. W-01557A-15-0079 ET AL

meet water quality standards required by Arizona Administrative Code (“A.A.C”), Title 18, Chapter 4 (National Safe Water Drinking Requirements).

*Consent Order*⁵

According to ADEQ, the Company exceeded the MCL for arsenic since November 2008. ADEQ and the Company entered into a Consent Order (“Order”) on May 10, 2010. The Order stipulates that within one hundred and twenty (120) calendar days of the effective date of the Order, Lake Verde Water Company shall submit to ADEQ an administratively complete Approval to Construct (“ATC”) permit application to construct arsenic removal plant. The Order further stipulates that within two hundred and forty five (245) calendar days after ADEQ issues the ATC, the Company shall complete construction of the approved treatment system and submit an administratively complete Approval of Construction (“AOC”) permit application. To date, the Company has not satisfied either requirement and continues to be in violation.

*Notice of Violation*⁶

On July 2010, ADEQ issued the Company a Notice of Violation (“NOV”) concerning two issues. 1) Failure to provide the required minimum storage capacity, AAC R18-5-503(A) and 2) Failure to maintain and provide effective chlorine contact time for disinfection in the distribution system, AAC R18-4-203. Lake Verde Water Company has not installed the necessary storage capacity to be in compliance with ADEQ.

Arizona Department of Water Resources (“ADWR”) Compliance

The Company is not located within an ADWR Active Management Area. Staff received a Water Provider Compliance Status Report dated March 2, 2015, in which ADWR reported that Lake Verde Water Company was not currently in compliance with departmental requirements governing water providers and/or community water systems, due to the Company not filing their Annual Report or updated System Water Plan on time.

ACC Compliance

A check of the Commission’s Compliance Section database dated March 9, 2015, indicated that the Company had no ACC delinquent compliance items.

⁵ ADEQ Consent Order; Docket No. DW-42-10, dated May 10, 2010

⁶ ADEQ Case ID #: 119124, Notice of Violation

Estimated Costs to Achieve Compliance

Company Estimate

The Company submitted a Drinking Water Application to WIFA on February 23, 2015 requesting \$500,000 to finance the engineering, procurement, installation and operation of a treatment plant to reduce Nitrates and Arsenic below the MCL. According to ADEQ, the Company monitoring results do not indicate that the Nitrate level has ever exceeded the MCL.

In the emergency rate increase application Docket No. W-01557A-15-0079, the Company's estimated costs include two arsenic removal systems, two storage tanks and two pressure tanks to be located at both the upper and lower well sites. The Company did not provide capacity information for these major components. The Company also included estimated cost for rehabilitating Well No. 1, the lower well. The Company estimated total cost for the above plant to be \$305,000. Total estimated cost does not include contingency or taxes. Staff concludes that providing duplicate systems at the upper and lower well sites is not necessary at this time. Staff concludes that rehabilitation of Well No. 1 is also not necessary at this time as Well No. 2 has capacity of 40 gpm and the required production to meet water system needs is 20 gpm during peak month usage.

In the financing application Docket No. W-01557A-15-0080, the Company requests approval of the WIFA loan for the installation of one arsenic treatment facility to treat water from Wells No. 1 and No. 2. In April 2010, a System Assessment Report for Lake Verde Water Company ("Report"), PWS No.13-038 was completed. The Report proposed that a new Arsenic Treatment System ("ATF") utilizing adsorption technology be constructed at the lower well site to ultimately treat 35 gpm of water coming from both wells. The Report also proposed installation of one 20,000 gallon storage tank, booster station, instrumentation and controls and utilize an existing pressure tank. A new 2-inch transmission waterline is proposed to carry raw water from the Well No. 2 to the ATF site. Total estimated cost was \$447,000 in 2010. Staff concludes that the existing pressure tank is corroded and cannot be utilized as proposed and the proposed transmission line is not necessary at this time. Staff concludes that a single 20,000 gallon storage tank will not meet ADEQ minimum storage capacity requirements for a community water system according to Arizona Administrative Code ("A.A.C") R18-5-503.A.

Lake Verde Estimated Construction Costs, WIFA Application

Description	Unit(s)	Unit Cost, \$	Total Cost, \$
Adsorption Treatment System, 35 gpm			
System Piping, valves, meters & backflow preventer	1 Lot	\$20,000	\$20,000
System Installation	1 Lot	\$15,000	\$15,000
Foundation	1 Lot	\$5,000	\$5,000
Residuals Handling System	1 Lot	\$5,000	\$5,000
Acid System	1 Lot	\$5,000	\$5,000
Backwash Decant Valves & Piping	1 Lot	\$5,000	\$5,000
Building, 15 ft. x 15 ft.	1 Lot	\$9,000	\$9,000
Contractor Cost & Media	1 Lot	\$35,000	\$35,000
Water Storage Tank, 20,000 gallons	1 Lot	\$20,000	\$20,000
Booster Station	2	\$2,500	\$5,000
Yard Piping & Valves	1 Lot	\$5,000	\$5,000
Transmission Waterline, 2-inch HDPE	5,280 ft.	\$30/ft.	\$158,400
Electrical & Instrumentation Controls	1 Lot	\$20,000	\$20,000
Site Civil	1 Lot	\$4,000	\$4,000
TOTAL ESTIMATES CONSTRUCTION COST			\$311,400
CONTINGENCIES (10%)			\$31,140
TOTAL ESTIMATED COSTS W/O TAXES			\$342,540
Taxes, Insurance & Bonds (8.5%)			\$29,116
TOTAL ESTIMATED CONSTRUCTION W/TAXES			\$371,656
Engineering Design, Construction Admin Support, Startup & Permitting			\$75,000
TOTAL ESTIMATED ENGINEERING & CONSTRUCTION			\$446,656

Lake Verde Estimated Annual O & M Costs

Operation & Maintenance Cost Summary, 35 GPM Treatment System	
Labor Cost – 8 hour/week @ \$30/hour	\$12,480
Media Replacement Cost	\$4,000
Acid Cost	\$1,250
Media Disposal Cost	\$1,500
Power Cost	\$600
Equipment Maintenance Cost	\$4,000
Annual Operation & Maintenance Cost	\$23,830

Staff Estimate

Due to the low number of connections, Staff believes the cost of centralized treatment is unreasonable. Staff recommends that the Company install Point-of-Use (“POU”) treatment devices in every home served by the Company to treat MCL arsenic exceedance in lieu of centralized

treatment. Staff also recommends installation of one 30,000 gallon water storage tank and two variable frequency drive (“VFD”) controlled booster pumps each capable of delivering approximately 20 gpm installed within a new pumphouse and perimeter fencing. Staff further recommends that the Company abandon the lower well site containing non-active Well No. 1 and the non-functional pressure tank, both of which are not used or useful.

Staff recommends that the Company submit to ADEQ a POU Program application to treat arsenic and receive an Approval to Install (“ATP”) certificate prior to installation of POU devices and an Approval of Installation (“AOP”) certificate after installation of POU devices and ADEQ required verification testing. In an email dated March 19, 2015, the Company owner, Dugan McDonald, expressed his concern about entering the residences to maintain and monitor the water system. The Company does not have an approved Point-of- Use Treatment Device Tariff. Staff recommends the Commission approve the POU Tariff attached as Exhibit 2. The estimated cost table below utilizes National Association of Regulatory Utility Commissioners (“NARUC”) account numbers.

Staff’s Recommended Equipment & Estimated Construction Costs

NARUC Account No.	Description	Unit(s)	Unit Cost, \$	Total Cost, \$
304	Structures and Improvements ^{Note 1}	1 Lot	\$5,500	\$5,500
311	Pumping Equipment ^{Note 2}	2	\$5,000	\$10,000
320	Water Treatment Equipment ^{Note 3}	68	\$450	\$30,600
330	Storage Tank ⁷ , 30,000 gallons ^{Note 4}	1 Lot	\$59,000	\$59,000
Staff Estimate Subtotal				\$105,100
Contingency 10%				\$10,500
Engineering and Permitting				\$10,400
Staff Estimated Equipment & Construction Total				\$126,000

Note 1: Pumphouse Building (10 feet x 10 feet) (Metal) with Lighting and Heat and Upper Yard Fencing Purchase, Foundation & Installation, Grading and Clearing.

Note 2: VFD Controlled Booster Pumps, Purchase and Installation. Includes Foundation, Power and Switching Equipment and all required Valves & Gauges.

Note 3: Undersink Point-of-Use Reverse Osmosis Arsenic Treatment Units Purchase and Installation and Verification Testing Labor and Equipment.

Note 4: Storage Tank Purchase, Shipping and Installation. Includes Foundation, Instrumentation and Control and Yard Piping.

Staff's Estimated Annual Operation and Maintenance Costs

Operation & Maintenance Cost Summary, POU Treatment	
POU Filter Replacement Cost - \$70/POU Unit for 68 POU Units ^{Note 5}	\$4,760
Verification Testing Equipment ^{Note 6}	\$300
Labor Cost for POU Filter Replacement & Water Quality Testing – 0.5 hour/Unit @ \$30/hour for 68 Units	\$1,020
Laboratory Testing -\$25/Test for 23 POU Units ^{Note 7}	\$1,700
Annual Operation & Maintenance Cost	\$7,780

Note 5: Filters to be replace annually or as specified by manufacturer.

Note 6: ADEQ approved Industrial Test Systems Inc., Arsenic Quick II Field Testing Kit, Part No. 481303.

Note 7: Yearly laboratory testing of 1/3 of installed POU devices or follow ADEQ protocol to determine if POU devices are working properly.

Depreciation Rates

Staff recommends that the Company be authorized to use Staff's typical and customary depreciation rates from NARUC. These depreciation rates are presented in Exhibit 3.

Conclusions

1. Staff concludes that water system is comprised of Well No. 2, bladder tank, chlorination metering pump, chlorination storage tank and distribution waterlines.
2. Staff concludes that the Company does not have adequate storage capacity to serve its existing customers.
3. Staff concludes that the Company's old plant equipment, 2 pressure tanks, 1-storage tank and 1-booster pump, are corroded and no longer used or useful equipment.
4. Staff concludes that the well water meter is functioning properly per discussion with system's operator.
5. Staff concludes that Well No. 1 casing has collapsed and is not used and useful.
6. Staff concludes that the Company has adequate production from Well No. 2 to serve its existing customers and reasonable growth. The data also indicated that there was 6 percent water loss in the system which is below Staff's recommended allowable water loss limit of 10 percent.
7. Staff concludes that the Company is not in compliance with ADEQ requirements and is currently delivering water that does not meet water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

8. Staff concludes that the Company is not in compliance with ADWR requirements governing water providers and/or community water systems.
9. Staff concludes that the Company has no ACC delinquent compliance items.
10. Staff concludes that the costs associated with the lower well site Well No. 1 pump renovation are not necessary at this time.
11. Staff concludes that the Company does not have an approved Point-of-Use Treatment Device Tariff on file with the ACC.
12. Staff concludes the Company financing application of \$500,000 for the engineering and installation of centralized treatment, storage tanks, pressure tanks, booster pumps, well no. 1 renovation and transmission line is not necessary at this time.
13. Staff concludes that its proposed plant improvements to install POU devices, storage tank and VFD controlled booster pumps is appropriate and Staff's estimated cost of \$126,000 is reasonable.

Recommendations

1. Staff recommends the Commission approve the Point-of-Use ("POU") Treatment Device Tariff attached as Exhibit 2.
2. Staff further recommends that the Company notify its customers, in a form acceptable to Staff, of the POU Tariff approved by the Commission and its effective date by mean of either an insert in the next regularly scheduled billing or by separate mailing and shall provide copies of the POU Tariff to any customers upon request. Staff will file a letter in the Docket confirming that the Company's tariffs have been updated with the tariff approved by the Commission. The tariff shall go into effect 30 days after the date notice is sent to customers.
3. Staff recommends that the Company file with Docket Control, as a compliance item in this docket by December 31, 2015, a copy of the ADEQ Approval to Install certificate for the POU treatment devices.
4. Staff recommends that the Company file with Docket Control, as a compliance item in this docket by April 29, 2016, a copy of the ADEQ Approval of Installation certificate for the POU treatment devices.
5. Staff recommends that the Company file with Docket Control, as a compliance item in this docket by June 30, 2016, a copy of the ADEQ Approval of Construction for the storage tank and booster pumps.

6. Staff recommends that the Company file with Docket Control, as a compliance item in this docket by June 30, 2016, documentation showing that old plant equipment no longer used or useful at both the upper and lower well site has been removed from the premises and that both sites cleaned of all debris and tripping hazards.
7. Staff recommends that the Company file with Docket Control, as a compliance item in this docket by June 30, 2016, documentation showing that chlorination metering pump and storage tank are secured onto foundations and power provided to chlorination metering pump installed in a professional manner.
8. Staff recommends that the Company be ordered to file with Docket Control, as a compliance item in this docket by June 30, 2016, documentation from ADEQ stating that the Company is in compliance with ADEQ requirements.
9. Staff recommends that the Company be ordered to file with Docket Control, as a compliance item in this docket by June 30, 2016, documentation from ADWR stating that the Company is in compliance with ADWR requirements.
10. Staff recommends that the Company file with Docket Control, as a compliance item in this docket by June 30, 2017, a copy of an updated water system engineering assessment report for future improvements.
11. Staff recommends that the Company use the depreciation rates by individual National Association of Regulatory Utility Commissioners account presented in Exhibit 3.

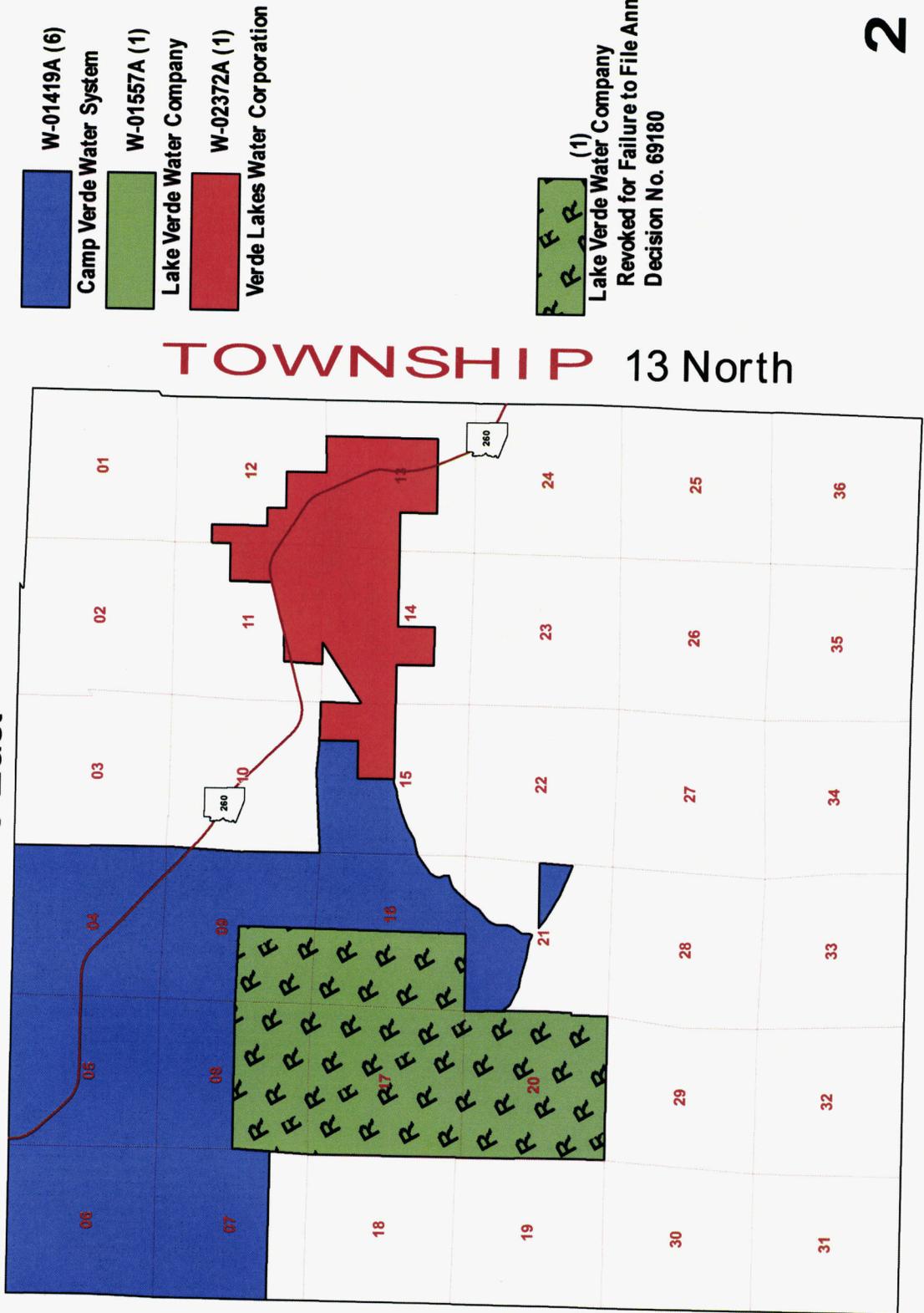
Exhibit 1

Map No. 18

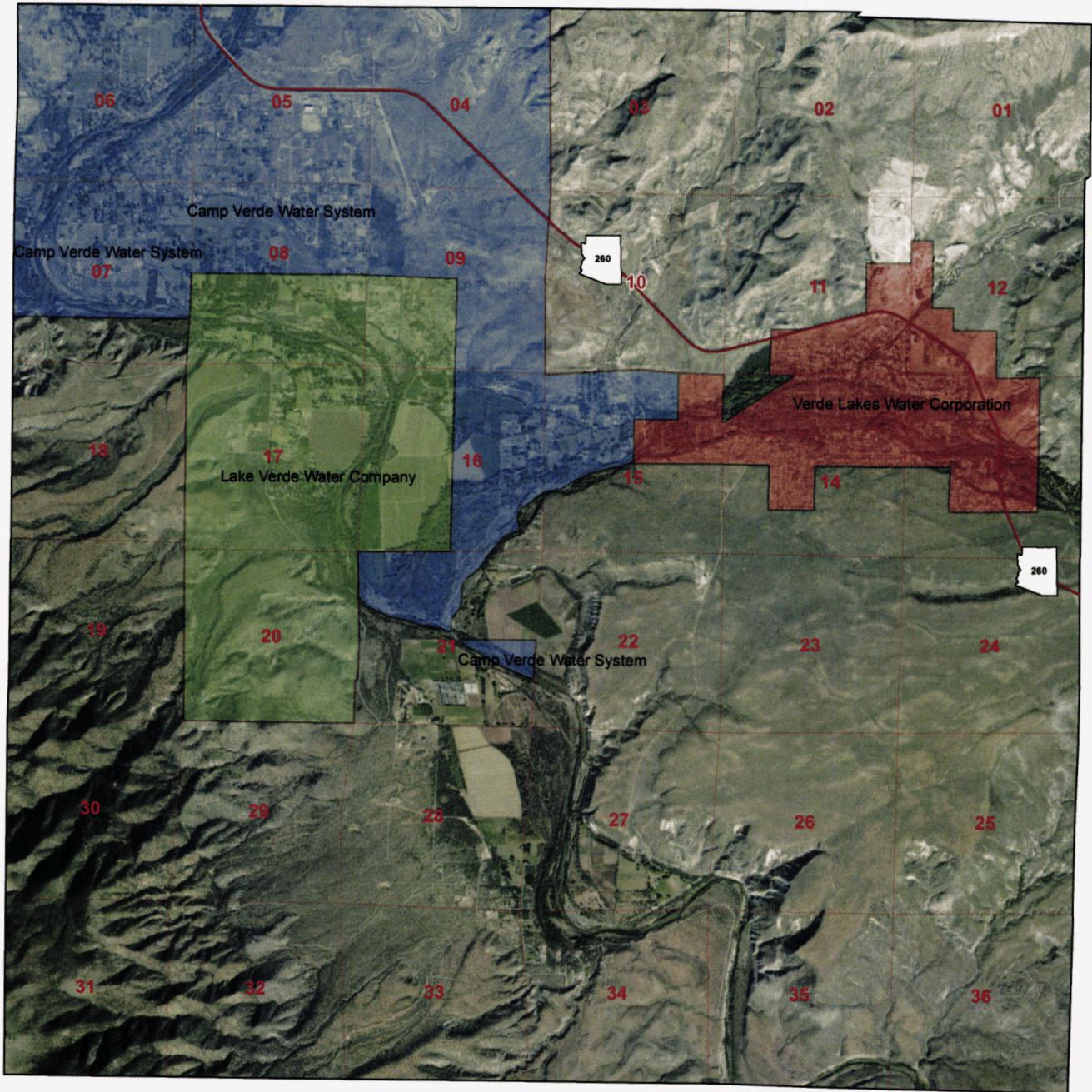
YAVAPAI COUNTY

RANGE 5 East

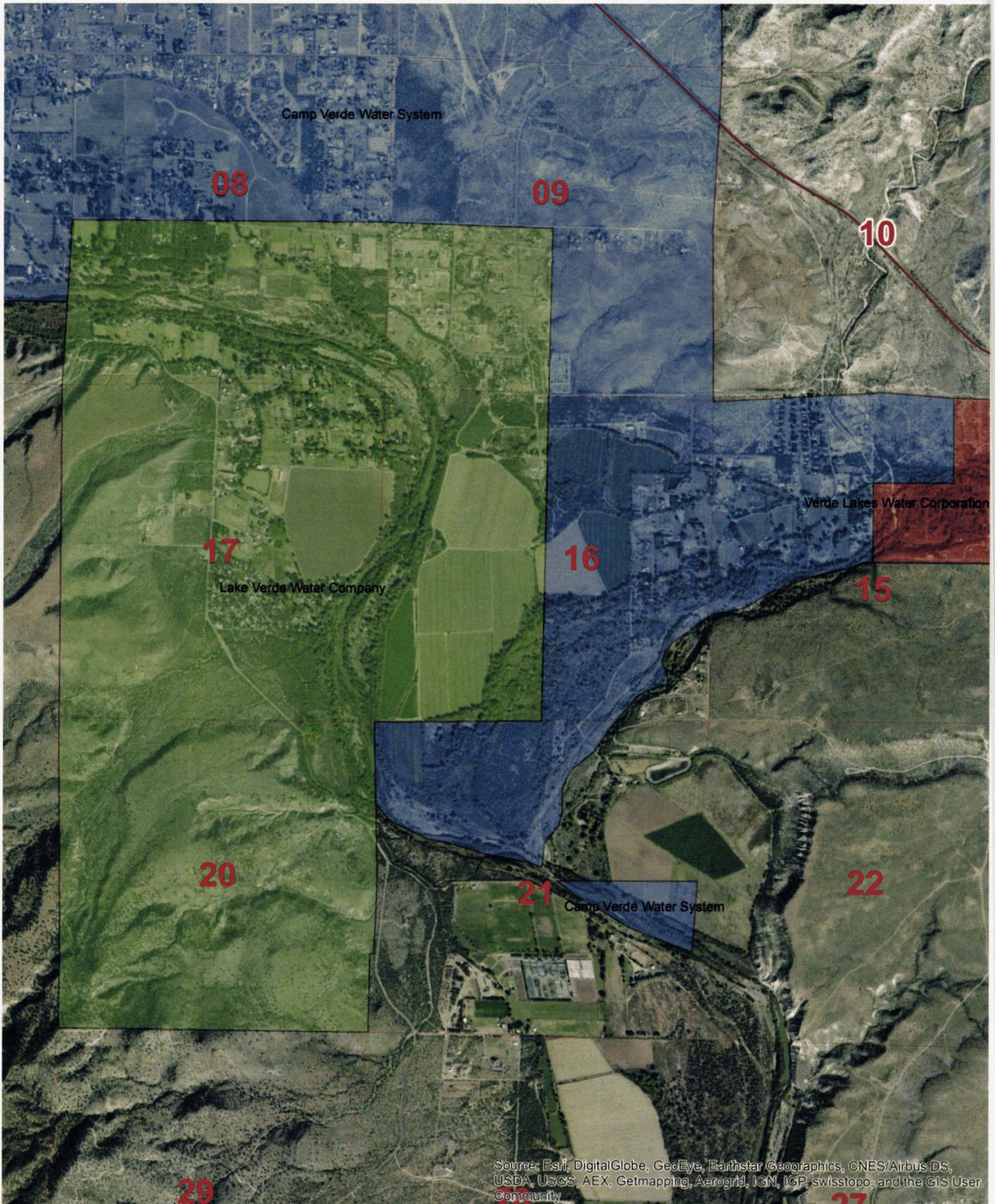
TOWNSHIP 13 North



YAVAPAI COUNTY



YAVAPAI COUNTY



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Exhibit 2

Company: _____

Decision No.: _____

Phone: _____

Effective Date: _____

POINT-OF-USE TREATMENT DEVICE TARIFF

PURPOSE:

The purpose of this tariff is to enable _____ (“Company”) to ensure its compliance with the requirements of the Arizona Department of Environmental Quality (“ADEQ”) for Point-of-Use (“POU”) treatment. POU treatment is to be installed on the customer’s premises, maintained, and tested pursuant to the provision of the Arizona Administrative Code (“A.A.C.”) R18-4-218 and ADEQ’s Arizona Point-of-Use Compliance Program Guidance (“Guidance”). A POU treatment device will treat only the water intended for direct consumption, typically installed at a single tap such as the kitchen sink.

REQUIREMENTS:

The requirements to be in compliance with the Rules of the Arizona Corporation Commission (“Commission”) and the ADEQ, specifically A.A.C. R14-2-407, R14-2-410, R18-4-218 and the Guidance that governs this tariff are as follows:

1. The Company shall purchase and install the POU treatment device.
2. Subject to the provisions of A.A.C. R18-4-218 and the Guidance, the installation of the POU treatment device will be a condition of service.
3. The installation of the POU treatment device will be arranged to be installed at a time convenient to the customer and the Company.
4. The customer must permit the Company or its agents to enter the home to maintain the system in good working order, including, but not limited to, periodic replacement of filters, water sampling, and replacement of the system from time to time.
5. The POU treatment devices shall be the property of the Company.
6. Subject to the provisions of A.A.C. R14-2-407 and 410, and in accordance with Paragraphs 1 and 4 of this tariff, the Company may terminate service or may deny service to a customer who fails to install a POU treatment device or to permit the servicing and testing of the POU treatment device as required by this tariff.
7. The Company shall give any customer who is required to install a POU treatment device written notice of said requirement. The customer shall be given sixty (60) days from the time such written notice is received in which to comply with this notice. If A.A.C. R14-2-410.B.1. is **not** applicable and the customer can show good

Company: _____

Decision No.: _____

Phone: _____

Effective Date: _____

cause as to why the device cannot be installed within sixty (60) days, the Company may allow the customer an additional sixty (60) days to have the device installed.

8. Testing of the POU treatment device shall be in conformance with the requirements of A.A.C. R18-4-218 and the Guidance.
9. Consistent with the provisions of A.C.C. R14-2-407.B.2 and 3, each customer shall be responsible for safeguarding all Company property installed on the customer's premises for the purpose of supplying clean water to that customer. Each customer shall exercise all reasonable care to prevent loss or damage to Company property, excluding ordinary wear and tear. The customer shall be responsible for loss of or damage to Company property on the customer's premises arising from neglect, carelessness, or misuse and shall reimburse the Company for the cost of necessary repairs or replacements.
10. Pursuant to A.C.C. R14-2-407.B.5, each customer shall be responsible for notifying the Company of any failure identified in the Company's POU treatment device and system.

Attachment-AAC: Arizona Administrative Codes (4 pages)

Arizona Administrative Codes**R14-2-407. Provision of service**

- A. Utility responsibility.** Each utility shall be responsible for providing potable water to the customer's point of delivery.
- B. Customer responsibility**
1. Each customer shall be responsible for maintaining all facilities on the customer's side of the point of delivery in a safe and efficient manner and in accordance with the rules of the state Department of Health.
 2. Each customer shall be responsible for safeguarding all utility property installed in or on the customer's premises for the purpose of supplying water to that customer.
 3. Each customer shall exercise all reasonable care to prevent loss or damage to utility property, excluding ordinary wear and tear. The customer shall be responsible for loss of or damage to utility property on the customer's premises arising from neglect, carelessness, or misuse and shall reimburse the utility for the cost of necessary repairs or replacements.
 4. Each customer shall be responsible for payment for any equipment damage resulting from unauthorized breaking of seals, interfering, tampering or bypassing the utility meter.
 5. Each customer shall be responsible for notifying the utility of any failure identified in the utility's equipment.
 6. Water furnished by the utility shall be used only on the customer's premises and shall not be resold to any other person. During critical water conditions, as determined by the Commission, the customer shall use water only for those purposes specified by the Commission. Disregard for this rule shall be sufficient cause for refusal or discontinuance of service.
- C. Continuity of service.** Each utility shall make reasonable efforts to supply a satisfactory and continuous level of service. However, no utility shall be responsible for any damage or claim of damage attributable to any interruption or discontinuation of service resulting from:
1. Any cause against which the utility could not have reasonably foreseen or made provision for, i.e., force majeure
 2. Intentional service interruptions to make repairs or perform routine maintenance
 3. Curtailment.
- D. Service interruptions**
1. Each utility shall make reasonable efforts to reestablish service within the shortest possible time when service interruptions occur.
 2. Each utility shall make reasonable provisions to meet emergencies resulting from failure of service, and each utility shall issue instructions to its employees covering procedures to be followed in the event of emergency in order to prevent or mitigate interruption or impairment of service.

3. In the event of a national emergency or local disaster resulting in disruption of normal service, the utility may, in the public interest, interrupt service to other customers to provide necessary service to civil defense or other emergency service agencies on a temporary basis until normal service to these agencies can be restored.
 4. When a utility plans to interrupt service for more than 4 hours to perform necessary repairs or maintenance, the utility shall attempt to inform affected customers at least 24 hours in advance of the scheduled date and estimated duration of the service interruption. Such repairs shall be completed in the shortest possible time to minimize the inconvenience to the customers of the utility.
 5. The Commission shall be notified of interruptions in service affecting the entire system or any major division thereof. The interruption of service and cause shall be reported within 4 hours after the responsible representative of the utility becomes aware of said interruption by telephone to the Commission and followed by a written report to the Commission.
- E. Minimum delivery pressure. Each utility shall maintain a minimum standard delivery pressure of 20 pounds per square inch gauge (PSIG) at the customer's meter or point of delivery.
- F. Construction standards. Each utility shall construct all facilities in accordance with the guidelines established by the state Department of Health Services.

R14-2-410. Termination of service

- A. Nonpermissible reasons to disconnect service. A utility may not disconnect service for any of the reasons stated below:
1. Delinquency in payment for services rendered to a prior customer at the premises where service is being provided, except in the instance where the prior customer continues to reside on the premises.
 2. Failure of the customer to pay for services or equipment which is not regulated by the Commission.
 3. Nonpayment of a bill related to another class of service.
 4. Failure to pay for a bill to correct a previous underbilling due to an inaccurate meter or meter failure if the customer agrees to pay over a reasonable period of time.
- B. Termination of service without notice
1. Utility service may be disconnected without advance written notice under the following conditions:
 - a. The existence of an obvious hazard to the safety or health of the consumer or the general population.
 - b. The utility has evidence of meter tampering or fraud.
 - c. Unauthorized resale or use of utility services.

- d. Failure of a customer to comply with the curtailment procedures imposed by a utility during supply shortages.
2. The utility shall not be required to restore service until the conditions which resulted in the termination have been corrected to the satisfaction of the utility.
3. Each utility shall maintain a record of all terminations of service without notice. This record shall be maintained for a minimum of 1 year and shall be available for inspection by the Commission.

C. Termination of service with notice

1. A utility may disconnect service to any customer for any reason stated below provided the utility has met the notice requirements established by the Commission:
 - a. Customer violation of any of the utility's tariffs filed with the Commission and/or violation of the Commission's rules and regulations.
 - b. Failure of the customer to pay a delinquent bill for utility service.
 - c. Failure to meet or maintain the utility's credit and deposit requirements.
 - d. Failure of the customer to provide the utility reasonable access to its equipment and property.
 - e. Customer breach of a written contract for service between the utility and customer.
 - f. When necessary for the utility to comply with an order of any governmental agency having such jurisdiction.
2. Each utility shall maintain a record of all terminations of service with notice. This record shall be maintained for 1 year and be available for Commission inspection.

D. Termination notice requirements

1. No utility shall terminate service to any of its customers without providing advance written notice to the customer of the utility's intent to disconnect service, except under those conditions specified where advance written notice is not required.
2. Such advance written notice shall contain, at a minimum, the following information:
 - a. The name of the person whose service is to be terminated and the address where service is being rendered.
 - b. The Commission rule or regulation that was violated and explanation thereof or the amount of the bill which the customer has failed to pay in accordance with the payment policy of the utility, if applicable.
 - c. The date on or after which service may be terminated.
 - d. A statement advising the customer to contact the utility at a specific address or phone number for information regarding any deferred payment or other procedures which the utility may offer or to work out some other mutually agreeable solution to avoid termination of the customer's service.
 - e. A statement advising the customer that the utility's stated reason for the termination of services may be disputed by contacting the utility at a specific address or phone number, advising the utility of the dispute and making arrangements to discuss the cause for termination with a responsible employee

of the utility in advance of the scheduled date of termination. The responsible employee shall be empowered to resolve the dispute and the utility shall retain the option to terminate service.

E. Timing of terminations with notice

1. Each utility shall be required to give at least 10 days advance written notice prior to the termination date.
2. Such notice shall be considered to be given to the customer when a copy thereof is left with the customer or posted first class in the United States mail, addressed to the customer's last known address.
3. If after the period of time allowed by the notice has elapsed and the delinquent account has not been paid nor arrangements made with the utility for the payment thereof or in the case of a violation of the utility's rules the customer has not satisfied the utility that such violation has ceased, the utility may then terminate service on or after the day specified in the notice without giving further notice.
4. Service may only be disconnected in conjunction with a personal visit to the premises by an authorized representative of the utility.
5. The utility shall have the right (but not the obligation) to remove any or all of its property installed on the customer's premises upon the termination of service.

F. Landlord/tenant rule. In situations where service is rendered at an address different from the mailing address of the bill or where the utility knows that a landlord/tenant relationship exists and that the landlord is the customer of the utility, and where the landlord as a customer would otherwise be subject to disconnection of service, the utility may not disconnect service until the following actions have been taken:

1. Where it is feasible to so provide service, the utility, after providing notice as required in these rules, shall offer the occupant the opportunity to subscribe for service in his or her own name. If the occupant then declines to so subscribe, the utility may disconnect service pursuant to the rules.
2. A utility shall not attempt to recover from a tenant or condition service to a tenant with the payment of any outstanding bills or other charges due upon the outstanding account of the landlord.

R18-4-218. Criteria and Procedures for Public Water Systems Using Point-of-Entry or Point-of-Use Treatment Devices

- A. A water supplier may use a point-of-entry (POE) or point-of-use (POU) treatment technology to achieve compliance with a MCL or treatment technique if the water supplier meets the requirements of this Section.
- B. A public water system may use a POE or POU treatment device to achieve compliance with a MCL, if the treatment device:
 1. Is not used to achieve compliance with an MCL or treatment technique for a microbial contaminant or an indicator for a microbial contaminant, in accordance with 42 U.S.C. 300g-1(b)(4)(E)(ii) (2007);
 2. Is listed in 40 CFR 141 as an acceptable compliance technology for the applicable contaminant;

3. Is certified against the applicable NSF/ANSI Standards;
 4. Is owned, controlled and maintained by a public water system or by a person under contract with the public water system to ensure proper operation, maintenance, and compliance with MCLs or treatment techniques; and
 5. Is equipped with mechanical warnings to ensure that customers are automatically notified of recommended system maintenance and or operational problems. This performance indication device shall provide notice to the end user at a defined moment in time without shutting off the POE or POU device.
- C. Prior to installing a POE or POU treatment device, a public water system shall obtain the Department's written approval of a POE or POU operation and maintenance (O & M) plan. A public water system shall submit an O & M plan to the Department that ensures proper long-term operation, maintenance, and monitoring of the POE or POU treatment devices. An O & M plan shall ensure that:
1. The POE or POU treatment device provides health protection equivalent to the health protection provided by centralized water treatment. "Equivalent" means that water treated by the POE or POU treatment device meets all national primary drinking water regulations.
 2. A residential building, or a nonresidential building that uses water for human consumption, that is connected to the public water system has a POE or POU treatment device that is installed, operated, maintained, and monitored in a manner that assures continuous compliance with the MCLs, treatment techniques, and other requirements of this Chapter.
 3. Multi-unit residential and nonresidential buildings utilizing POU treatment devices to achieve compliance with this Chapter have a sufficient number of POU devices installed to provide adequate potable water for all residents, employees, and customers.
 4. The rights and responsibilities of persons served by the public water system are conveyed with the title upon the sale of property containing a POU treatment device, including but not limited to the following:
 - a. The public water system owns and is responsible for maintaining a POU treatment device that is installed to meet the requirements of this Section; and
- b. Persons served by public water systems must grant public water system employees reasonable access to POU treatment devices, so that the devices can be properly maintained. Public water systems may discontinue water service to a customer who refuses to allow public water system employees to enter the customer's home or business to inspect and maintain POU treatment devices.

Arizona Point-of-Use Compliance Program Guidance

<http://www.azdeq.gov/environ/water/download/pointofuse.pdf>

Exhibit 3

Table E. Depreciation Rate Table for Water Companies

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.00
320.3	Point-of-Use Treatment Devices	10	10.00
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	---	-----