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Transcript Exhibit(s)

AZ CORP COMMISSION
DOCKET CONTROL

2014 FEB 24 PM 1 23

Docket #(s): W-03514A-13-0111

W-03514A-13-0142

Arizona Corporation Commission
DOCKETED

FEB 24 2014

DOCKETED BY

Exhibit #: Part 2 of 3 A-16 - A-17,

KMR-1 through KMR-6, S-4 through S-18

For Part 1 please see barcode 0000151338

For Part 3 Please see barcode 0000151340

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Jay L. Shapiro (No. 014650)
2394 E. Camelback Road, Suite 600
Phoenix, Arizona 85016
Telephone (602) 916-5000

Attorneys for Payson Water Co., Inc.

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO: W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR AUTHORITY TO: (1) ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM; AND (2) ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	DOCKET NO: W-03514A-13-0142

SUPPLEMENTAL REJOINDER TESTIMONY OF JASON WILLIAMSON

January 15, 2014

EXHIBIT
A-16
ADMITTED

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I. INTRODUCTION, PURPOSE AND SUMMARY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Jason Williamson. My business address is 7581 E. Academy Boulevard, Suite 229, Denver, Colorado 80230.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. On behalf of the Applicant, Payson Water Co., Inc. ("PWC" or the "Company").

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS PROCEEDING?

A. Yes. In Phase 1, I submitted direct testimony in support of the Company's request to consolidate and expedite the financing and rate applications, and in response to the Staff Report. I also testified at the Phase 1 hearings in late September 2013. In this Phase 2, I submitted rebuttal and rejoinder testimonies. As stated in my rejoinder, I am also adopting the direct testimony of the prior President, Robert Hardcastle, because he no longer has any interest in or association with PWC.

Q. WHAT IS THE PURPOSE OF THIS SUPPLEMENTAL REJOINDER TESTIMONY?

A. At the request of the Administrative Law Judge, I will address the issue of the condemnation of the Star/Quail Valley system, which was raised in Staff's direct testimony and in Intervenor Kathleen Reidhead's ("KMR") surrebuttal testimony. I will also respond to Intervenor Thomas Bremer's ("Bremer") recent filing regarding East Verde Park ("EVP"). Finally, I will address the Company's concerns and requests regarding the timing of the implementation of new rates.

II. CONDEMNATION OF STAR/QUAIL VALLEY SYSTEM

Q. IN HER SURREBUTTAL TESTIMONY, KMR CLAIMS THE STAR/QUAIL VALLEY SYSTEM IS AN ASSET THAT IS "MISSING." IS THIS SYSTEM MISSING?

A. No. The Town of Star Valley ("Town") condemned this system.

Q. DO YOU KNOW WHY THE SYSTEM WAS CONDEMNED, MR. WILLIAMSON?

A. The condemnation occurred before JW Water Holdings, LLC bought the stock of PWC from Brooke Utilities. I don't know the details. But, my general understanding is that the Town became interested in running its own water system and approached PWC on two different occasions in the past several years – the second time sometime in or around 2011. The court issued its condemnation order in April 2012. Star Valley took possession of the Star/Quail Valley system on May 1, 2012.[1] Again, this was just over a year before we bought the stock.

Q. DO YOU KNOW WHAT HAPPENED TO THE PROCEEDS FROM THE CONDEMNATION JUDGMENT?

A. It appears the proceeds were used primarily to pay bills as well as to provide a dividend to the previous shareholder before we bought the stock. The Company's consultant, Mr. Bourassa, more fully explains this in his supplemental rejoinder testimony.[2]

Q. IS THERE REASON TO BELIEVE THAT PWC WAS BEHAVING BADLY OR ILLEGALLY, OR THAT THERE WAS SOMETHING WRONG WITH THESE ASSETS TO HAVE THEM CONDEMNED?

A. Absolutely not. The word "condemnation" seems to have a negative connotation.

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[1] See **Exhibit JW-SRJ1**.

[2] Supplemental Rejoinder Testimony of Thomas J. Bourassa at 3.

But, the condemning of assets does not necessarily mean that there is anything wrong or bad or illegal going on. In fact, condemnation proceedings are not all that unusual – the power of eminent domain goes back to the Bill of Rights. Here, the Town wanted the Star/Quail Valley system and exercised its governmental powers to acquire it by paying fair market value.

Q. IN HER SURREBUTTAL TESTIMONY, KMR ASSERTS THAT PWC IS "LIABLE" TO THE CUSTOMERS FOR THE "LOSS" OF THE STAR/QUAIL VALLEY SYSTEM. HOW DO YOU RESPOND?

A. First of all, the condemnation was not a "loss." The Town took the system and paid for it. All adjustments related to owning and operating Star/Quail Valley were made to the Company's books. Yes, the fair value of PWC's plant decreased as a result, however, this doesn't mean the Company became worse off financially. It just got smaller. It certainly didn't cause any expense to the customers that are still on one of PWC's systems.

Q. PLEASE CONTINUE.

A. KMR's assertion that PWC is liable to the customers is simply uninformed. I will leave the law to the lawyers, but customers pay for utility service. Just because customers pay rates does not mean they have an ownership interest in PWC or its plant. It is the shareholders not the customers that are entitled to proceeds of a condemnation because it is the shareholders who have lost assets – in this case revenue producing assets.

Q. WHICH SHAREHOLDER LOST ASSETS?

A. Brooke Utilities. That entity had its assets taken by the Town, that entity decided what to do with the proceeds, and then that entity sold JW Holdings the stock a little over a year later. Therefore, the current shareholder did not receive any benefit or compensation from the condemnation.

Q. BUT DIDN'T THE CURRENT SHAREHOLDER PAY LESS TO BUY THE STOCK THAN IT WOULD HAVE HAD THE STAR/QUAIL VALLEY SYSTEM STILL BEEN THERE?

A. Presumably. The fair market value of a water utility with roughly a third more customers is going to be higher. But we paid for what we bought – the stock of a water company that no longer owned or served the Star/Quail Valley system. Until KMR raised it, we did not see it as an issue for this rate case.

Q. DIDN'T MS. BROWN ADDRESS THE CONDEMNATION IN HER DIRECT TESTIMONY?

A. Yes, she said that the proceeds belonged to the Company, and then she made an adjustment to CIAC that we disagree with and which has been fully addressed in earlier testimony.[3] Staff has not recommended any other relief.

Q. DO YOU AGREE THAT THE MONEY BELONGED TO THE COMPANY?

A. Yes, frankly I am not sure whom else it could have belonged to. It was the Company's money, not the customers,' and the shareholder, then Brooke, decided what the Company should do with the money. But the taking of the Star/Quail Valley system reduced the fair market value of the stock, so it was really just the shareholder's payment for the loss of a revenue-producing asset – that system.

Q. COULDN'T THE MONEY HAVE BEEN USED TO IMPROVE THE SYSTEM?

A. I am not going to speculate about what could have been done with money that the prior owners decided should go somewhere else. I might have chosen to reinvest it, but I was not given that option. So, I am going to focus on this utility's current concerns, and there are plenty of them.

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[3] Direct Testimony of Crystal S. Brown at 7-8.

III. SUPPLEMENTAL REJOINDER TO BREMER

A. REQUEST FOR EVP HAULING SURCHARGE

Q. **BREMER STATES THAT EVP STRONGLY OPPOSES PWC'S REQUEST FOR A HAULING SURCHARGE. HOW DO YOU RESPOND?**

A. With the current production available in EVP, the Company is concerned that it will be unable to maintain water service during the entirety of the summer months. It is possible that hauling could be minimal or even unnecessary. But the previous years' shortages reveal the unpredictability of the supply.[4]

Q. **IS PWC'S CURRENT FINANCIAL POSITION A FACTOR?**

A. Certainly. The Company is currently experiencing serious financial challenges. We do not want to be faced with having to choose between hauling water to maintain the supply and running out of water. Without an augmentation tariff, the Company could be forced to run out of water because it simply cannot afford to pay for hauling without recovery through rates.

Q. **BUT ISN'T HAULING JUST A TEMPORARY MEASURE?**

A. Maybe. We have already agreed to do the analysis recommended by Staff in its engineering report. PWC is currently working with its engineer to apply to WIFA for a grant to be able to study the water supply issues in EVP. When that analysis is complete, we hope to know what options are available to augment the existing supply and what the estimated costs will be. At that time we can assess whether the cost of permanent water supply augmentation is warranted for this small system.

Q. **WHY WASN'T THIS SORT OF ANALYSIS ALREADY DONE?**

A. I do not know, we would have to ask the prior shareholders. As I have testified, JW Holdings acquired the Company about 7 months ago. Since then we have been

[4] See **Exhibit JW-SRJ2**, which depicts the gallons hauled and associated costs for the last three years.

focused primarily on staying solvent and getting ready for this summer's water supply challenges.

Q. HAS THE COMPANY HAULED WATER OUT OF EVP TO DELIVER ELSEWHERE?

A. Certainly not since we took over ownership and operation. Nor do I find any evidence that this has occurred in the recent past.

B. WATER USAGE DATA

Q. BREMER QUESTIONS THE NEED FOR A HAULING TARIFF BASED ON REFERENCE TO WATER PRODUCTION AND USGAGE DATA (SURREBUTTAL AT PAGE 4). HOW DOES THE COMPANY RESPOND?

A. PWC was concerned with Bremer's figures. After researching, the Company determined that the figures provided in the 2012 annual report were both incomplete and incorrect. In fact, it appears the correct percent of water loss for EVP is only 1.6 percent.[5] We appreciate Bremer's having brought these errors to the Company's attention. An amended report has been forwarded to the Utilities Division.

IV. TIMING OF THE IMPLEMENTATION OF RATES

A. PROCEDURAL BACKGROUND

Q. WHEN DID PWC FILE ITS RATE APPLICATION, AND WHEN DID THE APPLICATION REACH SUFFICIENCY?

A. The Company filed on April 22, 2013. The application was deemed sufficient on June 3. Originally, hearing was set for early December 2013. A final decision in this case would have been due in late February 2014.

[5] See **Exhibit JW-SRJ3** (well reading).

Q. WHY DID THE SCHEDULE CHANGE?

A. On August 15, PWC moved the Commission to consolidate its rate and financing applications and order an expedited procedural schedule so that PWC could pursue an opportunity to build an interconnection between the Town of Payson and Mesa del Caballo ("MDC-TOP line"). The case was ultimately bifurcated into two phases.

Phase 1 addressed a portion of the Company's financing request, which, if approved, would enable PWC to borrow funds from WIFA to build the MDC-TOP line and avoid having to haul water to MDC during the summer of 2014. The Commission did approve the Company's request in Decision No. 74175 (October 25, 2013), authorizing the Company to borrow up to $275,000 from WIFA.

This Phase 2 is addressing the remaining portion of the Company's financing request and its request for a rate increase.

B. IMPLEMENTATION OF NEW RATES

Q. AS FAR AS THE TIMING OF THE NEW RATES WHAT ARE THE COMPANY'S CONCERNS?

A. We recognize that scheduling conflicts in December of 2013, as well as our request for expedited approval for financing (Phase 1) contributed to the delay. But the Company is in dire need for new rates. Our initial proposal in August 2013 was actually to consolidate and expedite the entire proceedings, and for a decision on the financing <u>and</u> the rate application to go before the Commission in December 2013. That's how desperate we are. Unfortunately for us, Staff opposed expediting the entire proceedings. While we ultimately worked out a new schedule, it was always done with the anticipation that new rates would be in effect before the summer water supply limits start. Even with the approved financing we're still in

the same boat. We need new rates to be in effect now, or at least by May 1, 2014 as was our understanding when the phasing and new schedule was worked out and approved.

Q. WHAT IF NEW RATES ARE NOT IN EFFECT BY MAY 1, 2014, MR. WILLIAMSON?

A. The impacts would be numerous and potentially dangerous. I'll try to identify a few that are most concerning. First, we would be in a situation where we have installed the new TOP-MDC connection, funded by WIFA and approved in Phase 1 of this proceeding, but without the means of paying Payson for the water to send through the line to customers in MDC.

Second, the Company will continue to be unable to pay all of its bills, including the bills associated with this rate case which, due to the complexity of the proceedings and the number of intervenors, continue to accrue at concerning rates.

Finally, and similar to our reasons for requesting an augmentation tariff for EVP, we would be forced to make some very difficult decisions that could impact our core responsibility as a water company: To provide safe and reliable water utility service for our customers. In the case of water shortages in EVP and MDC, we would be forced to decide between providing water through alternate methods or running out of water, simply because we may not have the means to afford the alternative measures.

Q. WHAT ABOUT THE HAULING TARIFF FOR MDC?

A. It is still in effect and will be until we make a filing and the Commission issues another order. But that tariff cannot be used to just buy the water from the Town to deliver through the TOP-MDC line. So we can buy the same water and haul it, but we won't be able to use the TOP-MDC line until the Commission approves new rates that include a PWAM.

Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL REJOINDER TESTIMONY?

A. Yes.

EXHIBIT JW-SRJ1

FILED

AT _____ M

2012 APR 12 AM 11: 13

ANITA ESCOBEDO, CLERK

BY _____ DEPUTY

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Attorneys for Plaintiff Town of Star Valley

IN THE SUPERIOR COURT OF THE STATE OF ARIZONA

IN AND FOR THE COUNTY OF GILA

TOWN OF STAR VALLEY, a municipal corporation of the State of Arizona, Plaintiff, v. PAYSON WATER CO., INC., an Arizona corporation; COUNTY OF GILA, a political subdivision of the State of Arizona; JOHN DOES 1 through 10; and BLACK AND WHITE PARTNERSHIPS 1 through 10, Defendants.	No. CV 2011-00438 **STIPULATED FINAL JUDGMENT IN CONDEMNATION** (Hon. Peter J. Cahill)

cc: M. Patten, T. Grier, J. Shaping

This matter came before the Court pursuant to the complaint to condemn a portion of the system of Payson Water Co., Inc., an Arizona corporation ("PWC"), by Plaintiff, the Town of Star Valley, a municipal corporation (the "Town"). After considering the complaint, the Court noting the consent of the parties to entry of this judgment, it

ORIGINAL 4/10/12

appearing that other than Gila County, there are no persons other than PWC having any right, title, claim or interest in and to the property and/or title, claim, or interest in and to the property and/or assets which are the subject of this condemnation proceeding and this Stipulated Final Judgment in Condemnation, and good cause appearing, hereby finds and concludes as follows:

NOW, THEREFORE, IT IS ORDERED, ADJUDGED, AND DECREED that judgment be, and the same is, hereby entered as follows:

1. That the Town have judgment condemning for its sole use, possession, and ownership all of the plant, system, and business of PWC, including, but not limited to, all fee and/or leaseholds in real property legally described in **Exhibit A** attached hereto, all easements, water wells, pumps, water plants, substations, water distribution systems, customer accounts, books and records used and useful in providing water utility services, and all tangible, intangible, personal, or real property rights or interests in any way related to PWC (the "Town System"). The Town System also includes that portion of the PWC Certificate of Convenience and Necessity as shown the "Star/Quail Valley" system on the map attached hereto as **Exhibit B**. PWC shall, upon satisfaction of this Stipulated Final Judgment in Condemnation, be forever barred from asserting any right, title, or interest contrary to the sole and exclusive ownership and possessory interest vested in the Town in said property;

2. That the Town shall pay by wire transfer into escrow the total sum of $775,000.00 to be released to PWC on May 1, 2012 at 9:00 a.m., in accordance with the Escrow Instructions attached hereto as **Exhibit C**;

3. That Gila County will receive from escrow the sum of $2,494.53 for any property taxes due and unpaid relating to the Town System for the period ending May 1, 2012. This sum will be applied to parcel 941-01-005 (which consists of parcels 302-57-

036, 302-60-004E, 302-60-052A, and 302-80-138). Other than as set forth in this Paragraph, all claims to property tax by Gila County for the Town System (parcels 302-57-036, 302-60-004E, 302-60-052A, and 302-80-138) are extinguished.

4. That said payment shall constitute full, fair, and final just compensation to PWC for the condemnation of its property in its "as is, where is, with all faults" condition, and no further payments of any kind by the Town to PWC for the Town System shall be required. Provided, however, that the foregoing is limited by the representations and warranties of PWC set forth in Paragraph 6 of the Settlement Memorandum entered into on or about December 29, 2011 (attached as **Exhibit D**) by and between PWC and the Town, and that the provisions of the said Paragraph 6 are incorporated herein by reference.

5. That each party shall bear its own attorneys' fees, costs, and expenses in connection with this action;

6. That PWC shall, upon payment from escrow of the sum specified in Paragraph 2 (less any taxes claimed by Gila County), promptly execute a Satisfaction of Judgment with regard to the Stipulated Final Judgment in Condemnation and deliver same to the Town, which Satisfaction of Judgment shall be promptly filed with this Court;

7. That the Court shall, upon the filing of the Satisfaction of Judgment, enter the Stipulated Final Order of Condemnation in the form attached hereto as **Exhibit E**, vesting in the Town sole use, possession, and ownership to all of the property and property rights described in Paragraph 1, free and clear of any and all claims by, through, or on behalf of PWC and without the necessity of any other consents, orders, or approvals by any governmental entities;

8. That this Stipulated Final Judgment in Condemnation constitutes a final and conclusive determination as to all issues raised in the Town's complaint, and all matters pertaining to just compensation due for the taking of the PWC property and property

rights, including, without limitation, any claims for damages of any kind or other relief resulting from this proceeding, and shall constitute the final judgment in this proceeding in all respects. To the extent necessary, PWC specifically waives any right it may otherwise possess, in law or in equity, to appeal this Stipulated Final Judgment in Condemnation;

9. That PWC shall execute such documents and take such further action as may be reasonably required and necessary to fully implement the intent of the parties and as may be reasonably required and necessary to fully effectuate the provisions set forth in this Stipulated Final Judgment in Condemnation.

10. That PWC shall surrender possession of the Town System to the Town on May 1, 2012 at 9:00 AM, and that the Town shall be authorized to take possession of the Town System on the same time and date.

11. That as of May 1, 2012, at 9:00 AM, that portion of PWC's Certificate of Convenience and Necessity for the Town System (as shown the "Star/Quail Valley" system on the map attached hereto as **Exhibit B)** be forever terminated and extinguished.

DONE IN OPEN COURT ~~this ____ day of~~ April 11, 2012.

Hon. Peter J. Cahill
Judge of the Superior Court

APPROVED AS TO FORM AND CONTENT:

TOWN OF STAR VALLEY

By: _____
Timothy W. Grier
Town Attorney
Town of Star Valley
3675 East Highway 260
Star Valley, Arizona 85541
Telephone: (928) 472-7752
townmanager@ci.star-valley.az.us

and

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Attorneys for Plaintiff Town of Star Valley

FENNEMORE CRAIG, P.C.

_____
Jay L. Shapiro
Attorneys for Defendant Payson Water Co., Inc.

GILA COUNTY, ARIZONA
Daisy Flores, County Attorney

By: _____
Bryan B. Chambers
Chief Deputy County Attorney

ORIGINAL of the foregoing filed
this 10th day of April, 2012 with:

Clerk of the Court
Gila County Superior Court
1400 E. Ash Street
Globe, Arizona 85501

COPY of the foregoing hand-delivered
this 10th day of April, 2012 with:

Hon. Peter J. Cahill
Judge of the Superior Court
Gila County Superior Court
1400 E. Ash Street
Globe, Arizona 85501

COPY of the foregoing mailed
this 10th day of April, 2012, to:

Jay Shapiro, Esq.
Fennemore Craig, P.C.
3003 North Central Avenue, Suite 2600
Phoenix, Arizona 85012

Attorneys for Defendant Payson Water Co., Inc.

Bryan B. Chambers, Esq.
Gila County Attorney's Office
1400 E. Ash Street
Globe, Arizona 85501

Attorneys for Defendant Gila County, Arizona

EXHIBIT A

to

STIPULATED FINAL JUDGMENT IN CONDEMNATION

Exhibit A

All of the real and personal property and all other assets, if any, within the area described below used or useful in providing water services to the public in:

Township 11 North, Range 10 East, Section 36
Township 11 North, Range 11 East, Sections 31 and 32
Township 10 North, Range 11 East, Section 05

All of the foregoing in Gila County, Arizona

EXHIBIT B

to

STIPULATED FINAL JUDGMENT IN CONDEMNATION

Payson Water Company, Inc.

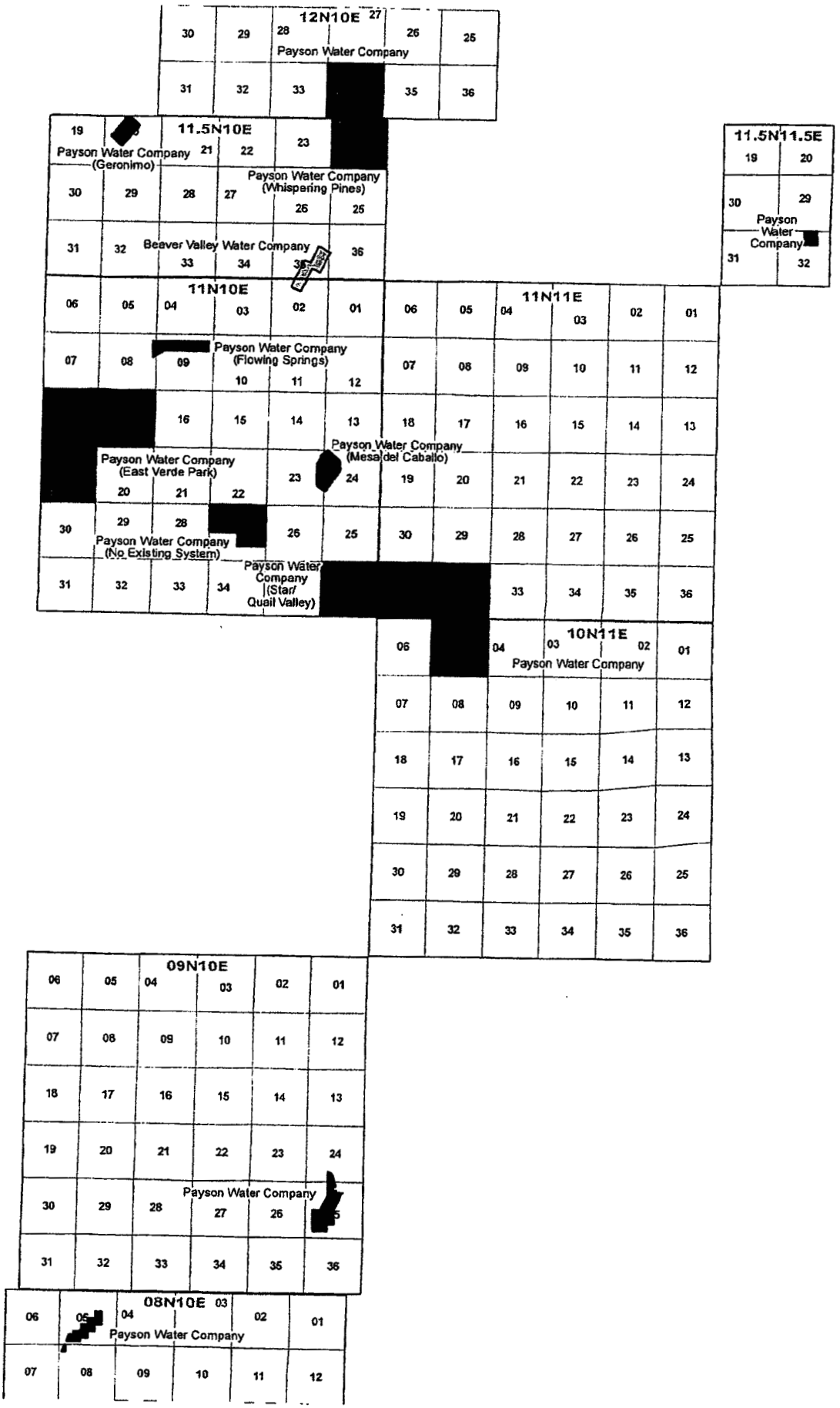


EXHIBIT C

to

STIPULATED FINAL JUDGMENT IN CONDEMNATION

Escrow Instructions

February __, 2012

First American Title Insurance Company
2425 East Camelback Road, Suite 300
Phoenix, Arizona 85016
Attention: Neil Moffett

Dear Neil:

First American Title Insurance Company, a California corporation, has been selected to act as the escrow office (the "**First American**") in connection with that certain *Settlement Memorandum* (the "**Memorandum**"), dated December ____, 2011, between Payson Water Company, Inc., an Arizona corporation (the "**Water Company**"), and the Town of Star Valley, a municipal corporation and a political subdivision of the State of Arizona (the "**Town**"). Except as otherwise defined herein, all capitalized terms used herein shall have the meanings ascribed thereto in the Memorandum.

As set forth in the Memorandum, on or before December 30, 2011, the Town will initiate an action in Eminent Domain in Gila County Superior Court (the "**Court**") pursuant to ARS § 12-1111 *et seq.* to condemn the Town System (the "**Proceeding**"). As part of the Proceeding, the Town has agreed to pay to Water Company the sum of Seven Hundred Seventy-five Thousand and 00/100 Dollars ($775,000.00) as compensation (the "**Compensation**"). The Town shall pay the compensation into escrow not later than the earlier of: (1) three days after the Court issues the Stipulated Final Judgment in Condemnation; or (2) May 1, 2012. The Compensation shall be escrowed and disbursed as set forth below.

First American is hereby directed to hold, deal with, and dispose of the Compensation in accordance with the following terms and conditions:

1. Within 3 days of entry of a final judgment of condemnation by the Court authorizing the Town to take possession of the Town System, the Town shall deposit with First American the Compensation. The Compensation shall be wired to First American in accordance with the account and wiring information you have provided and which is enclosed herein.

2. First American is instructed to invest the Compensation in an interest-bearing savings or money market account or short term U.S. Treasury Bills or similar cash equivalent securities, as Water Company may direct. Any interest earned on the Compensation, after deduction of First American's customary investment charges, shall become and be deemed to be a part of the Compensation. Any escrow fee to be charged by First American is to be borne by the Town.

3. On May 1, 2012, at 9:00 a.m., Mountain Standard Time, First American shall release to Gila County from the Compensation the sum of $2,494.53 for any property taxes due and unpaid relating to the Town System up for the period ending May 1, 2012.

4. On May 1, 2012, at 9:00 a.m., Mountain Standard Time, First American shall release the Compensation (less the $2,494.53 paid to Gila County) to Water Company pursuant to the wiring instructions to be provided by Water Company.

All notices, requests, demands or other communications required or permitted under these Escrow Instructions shall be in writing and delivered personally, by certified mail, return receipt requested, postage prepaid, by overnight courier (such as Federal Express), or by facsimile transmission with confirmation of error-free transmission (with a copy to follow by certified mail, return receipt requested, postage paid or by overnight courier), addressed as follows:

If to Water Company:

Payson Water Company, Inc.
3101 State Road
Bakersfield, California 93308
Attn: Robert T. Hardcastle
Email: RTH@brookeutilities.com
Facsimile: (661) 633-7551

With a copy to:

Jay L. Shapiro
Fennemore Craig
3003 North Central Avenue
Suite 2600
Phoenix, Arizona 85012-2913
Facsimile: (602) 916-5566

If to Town:

Timothy W. Grier (No. 020472)
Town Attorney
Town of Star Valley
3675 East Highway 260
Star Valley, Arizona 85541
Telephone: (928) 472-7752

With a copy to:

Timothy J. Sabo
Roshka DeWulf & Patten, PLC
One Arizona Center
400 East Van Buren, Suite 800
Phoenix, Arizona 85004

If to Gila County:

Brian Chambers, Esq.
Gila County Attorney's Office
1400 E. Ash Street
Globe, Arizona 85501

If to First American:

First American Title Insurance Company
2425 East Camelback Road, Suite 300
Phoenix, Arizona
Attention: Neil Moffett
Facsimile: (602) 567-8101

All notices given in accordance with the terms hereof shall be deemed received on the earliest of the next business day if sent by overnight courier, on the same day if sent by facsimile transmission before 5:00 p.m. (Mountain Standard Time) on a business day or on the following business day if sent on a non-business day or after 5:00 p.m. (Mountain Standard Time), on the third (3rd) business day following deposit with the United States Mail as a registered or certified matter with postage prepaid, or when delivered personally or otherwise received. Any party hereto may change the address for receiving notices, requests, demands or other communication by notice sent in accordance with the terms of this paragraph.

These Escrow Instructions are being entered into to implement the Memorandum and shall not (nor be deemed to) amend, modify or supersede the Memorandum or act as a waiver of any rights, obligations or remedies set forth therein; provided, however, that First American may rely solely upon these Escrow Instructions.

Agreed and Acknowledged this _____ day of February, 2011.

WATER COMPANY:

Payson Water Company, an Arizona corporation

By:_____
Name:_____
Title:_____

TOWN:

Town of Star Valley, a municipal corporation and a political subdivision of the State of Arizona

By:_____
Name:_____
Title:_____

ATTEST:

_____
Town Clerk

6537646.1/073283.0003

APPROVED AS TO FORM:

_____
Town Attorney

Agreed and Acknowledged this _____ day of December, 2011.

GILA COUNTY, ARIZONA
Daisy Flores, County Attorney

By:_____
Brian Chambers
Assistant County Attorney

FIRST AMERICAN:

First American Title Insurance Company,
a California corporation

By: _____
Name: _____
Title: _____

EXHIBIT D

to

STIPULATED FINAL JUDGMENT IN CONDEMNATION

SETTLEMENT MEMORANDUM

THIS SETTLEMENT MEMORANDUM (the "Memorandum") is made and entered into as of the 29th day of December 2011 by and between **PAYSON WATER COMPANY, INC.**, an Arizona corporation (the "Water Company") and the **TOWN OF STAR VALLEY**, a municipal corporation and a political subdivision of the State of Arizona (the "Town") (individually, a "Party" and collectively, "Parties").

RECITALS

A. Water Company is a public service corporation, and holds a Certificate of Convenience and Necessity ("CC&N") granted by the Arizona Corporation Commission ("Commission"), together with other required permits and governmental approvals authorizing it to serve the public with water utility service in certain parts of Gila County, Arizona.

B. Water Company owns two water systems serving the Town of Star Valley, which system's location and make up are generally described on **Exhibit A** attached hereto and incorporated herein by this reference (the "Town System"). The Town System is Public Water System No. 04-037 as registered with the Arizona Department of Environmental Quality ("ADEQ"). There are approximately 403 residential and 6 commercial meter connections serving 361 customers on the Town System as of the date first set forth above.

C. Town intends to acquire the Town System from Water Company through the exercise of its power of eminent domain as set forth in A.R.S. § 12-1111 *et seq.* However, rather than engage in contested proceedings that will require the unnecessary expenditure of the Parties' resources, the Town and Water Company have reached an agreement to resolve the condemnation proceedings in an uncontested manner.

D. Upon the entry of final judgment of condemnation in the Gila County Superior Court and payment by the Town into escrow of the sum of SEVEN HUNDRED SEVENTY-FIVE THOUSAND and NO DOLLARS ($775,000.00), beginning on May 1, 2012 at 9:00 AM, the Town will be the sole owner of the Town System and solely responsible for the provision of water utility service to the customers on the Town System, and Water Company will only be responsible for completion of any remaining Post-Condemnation Administration contemplated herein, which will require the parties to cooperate to accomplish various administrative matters related to the Town's acquisition of the Town System as addressed herein.

AGREEMENT

NOW, THEREFORE, in consideration of the promises and the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged Water Company and Town, intending to be legally bound, agree as follows:

1. Incorporation of Recitals. By this reference, the parties hereby agree to incorporate the recitals above as part of the terms and conditions of this Memorandum as if fully set forth herein.

2. Eminent Domain Proceedings. As soon a practicable but in no event later than December 30, 2011, the Town will initiate an action in Eminent Domain pursuant to A.R.S. § 12-1111 *et seq.* in Gila County Superior Court to condemn the Town System (the "Proceeding"). In connection with the Proceeding, the Parties further agree as follows:

A. To cooperate and prepare all documents, pleadings and other things necessary for the Proceeding to commence, be litigated and conclude with entry of a final judgment of condemnation to be followed by a final order of condemnation. The final judgment of condemnation shall also require the Town to pay into escrow the just compensation contemplated herein within 3 days of entry of judgment.

B. Water Company waives any claim that the Town has failed to comply with A.R.S. § 12-1116.A which requires the Town to first provide Water Company with an appraisal of the assets subject to the condemnation.

C. Town shall not seek immediate possession of the Town System, rather, the final judgment of condemnation will authorize the Town to take possession of the Town System on May 1, 2012 at 9:00 AM.

D. The Town System has a fair market value of no less than SEVEN HUNDRED SEVENTY-FIVE THOUSAND and NO DOLLARS ($775,000.00) and that a condemnation award ("Compensation") to Water Company in that amount is just compensation for the taking of Water Company's Town System.

3. Payment of the Compensation. Within 3 days of entry of a final judgment of condemnation authorizing Town to take possession of the Town System, Town shall pay the Compensation into Escrow as contemplated herein. Water Company shall be entitled to receive payment of the Compensation from Escrow on May 1, 2012 at 9:00 a.m. Town further acknowledges and agrees that the consideration for Water Company's agreement not to contest the Proceeding specifically includes Town's agreement to pay the Compensation. Once the Compensation has been placed in Escrow, the Escrow Instructions agreed to herein shall govern its distribution.

4. Post-Condemnation Administration. Water Company and Town also agree that certain additional actions will need to be taken following entry the final judgment of condemnation. The Parties agree to fully and reasonably cooperate in all matters necessary to

complete the transfer of the Town System to the Town. In connection therewith, the Parties agree as follows:

a. Commission Notice. Following payment of the Compensation into Escrow, Water Company will notify the Commission of the final judgment of condemnation and ask that the Town System be administratively deleted from its CC&N or file any other necessary or appropriate information to allow the Commission to delete the Town System from Water Company's CC&N. In such notice, Water Company will indicate the treatment of meter deposits and line extension agreements applicable to the Town System. This provision does not constitute an admission by Water Company that Commission approval to transfer the Town System or cancel the CC&N is necessary under applicable law and regulation.

b. Customer Meter Deposits. Town is entitled to a credit for the value of meter deposits received by Water Company from customers within the Town System as May 1, 2012, and not applied to delinquent accounts by Water Company. Town acknowledges and agrees that as a result of the condemnation that, post-condemnation, Town shall assume all obligations for refunding the existing customer meter deposits.

c. Customer Receivables. In addition to and separate from the Compensation, Water Company shall be entitled to receive payment for the value of services rendered to customers in the Town System but not billed and services billed but not received as of the date of entry of the final judgment in the Proceedings (the "Customer Receivables"). Within thirty (30) days following May 1, 2012, Town and Water Company shall reach an accounting of Customer Receivables.

d. Water Well Documentation. Water Company and Town acknowledge that part of the Town System are water wells registered with the Arizona Department of Water Resources as Well Registration Numbers 55-501381, 55-605247, 55-519703, 55-538696, 55-548773 (the "Water Company Wells"). Water Company presently has on file documents with the Arizona Department of Water Resources relating to the Water Company Wells and agrees that it will cooperate with Town to accomplish the transfer or assignment of any such documentation following Water Company's lodging of a satisfaction of judgment.

5. Escrow Instructions. The Parties have agreed to the Escrow Instructions attached hereto as **Exhibit B**, which instructions authorize the Escrow Office to, among other things, release the Compensation to Water Company on May 1, 2012 at 9:00 a.m. Following payment of the Compensation from Escrow, Water Company shall promptly file evidence of satisfaction of judgment.

6. No Interference; Representations Regarding Condition; Waiver and Indemnity.

a. Other Systems. Town acknowledges that Water Company has other systems and customers and agrees that neither the Proceeding nor any aspect of the transition shall inhibit Water Company's operations in any manner.

b. "As is" condition. Town further acknowledges and agrees that it is taking title to a public water system in its existing condition subject only to the representations made herein.

c. Representations by the Water Company. The Water Company represents and warrants to the Town as follows:

i. *No known defects.* The Water Company is not aware of any material defects in the Town System;

ii. *Plans and specifications.* To the Water Company's knowledge, all plans and specifications of the Town System accurately reflect the system, and copies of all such plans and specifications will be provided to the Town on or before the entry of final judgment of condemnation.

iii. *Environmental liabilities.* The Water Company is not aware of any actual, probable or threatened environmental liabilities pertaining to the Town System;

iv. *Title.* The Water Company has good and marketable title to the Town System, and all the assets thereof including all easements used or necessary to operate the Town System.

v. *Valid corporate existence and powers.* The Water Company has been duly incorporated and validly exists under the laws of the State of Arizona. The Water Company has all requisite corporate power and authority to own its property and to carry on its business as now being conducted in the Town System.

vi. *Power to execute Memorandum.* The Water Company has all requisite corporate power and authority to execute and deliver this Memorandum, to perform its obligations hereunder and to consummate the transactions contemplated hereby. The execution and delivery of this Memorandum and the consummation of the transactions contemplated hereby have been duly and validly authorized by all necessary corporate action on the part of the Water Company. This Memorandum has been duly and validly executed and delivered by Water Company and constitutes a valid and binding agreement of Water Company, enforceable against the Water Company in accordance with its terms.

vii. *No violation from execution and consummation of Memorandum.* The execution and delivery of this Memorandum by the Water Company and the consummation of the transactions contemplated hereby will not result in the violation of: (A) the Articles of Incorporation or Bylaws of the Water Company, (B) any material contract of the Water Company or (C) any statute, law, ordinance, rule or regulation (the "Law") or any order or judgment of any court or other governmental agency applicable to it or the transactions contemplated hereby.

viii. *No regulatory approvals needed.* No regulatory approval or consent of any other third party is required to be obtained by Water Company with respect to the execution and delivery of this Memorandum or the consummation of the transactions contemplated hereby.

ix. *No violations.* The Water Company is not in violation of, nor, to the knowledge of the Water Company, under investigation with respect to, any violation of, any

laws or any orders of the Commission, the ADWR, ADEQ, the USEPA or any other governmental agency with respect to the Town System.

x. *Receipt of authorizations.* The Water Company is duly authorized by the Commission to conduct the business of a water utility in the area served by the Town System and has all permits, licenses, franchises and other governmental authorizations, consents and approvals necessary to conduct its business therein.

xi. *Articles and Bylaws.* The Water Company is not in violation of any provision of its Articles of Incorporation or Bylaws.

xii. *Violation of other contracts.* The Water Company is not in violation of any contract applicable to the Water Company or its properties or assets, except for violations which would not, individually or in the aggregate, reasonably be expected to have a material adverse effect with respect to the Town System.

xiii. *Regulatory filings.* All filings required to be made by Water Company since December 31, 2010, under any applicable Laws or orders of the Commission, the ADWR, the USEPA, the ADEQ or other applicable governmental agency, have been filed and all such filings complied, as of their respective dates, in all material respects with all applicable requirements of such laws or orders, except for such filings or such failures to comply that would not, individually or in the aggregate, reasonably be expected have a material adverse effect with respect to the Town System.

xiv. *Environmental Matters.* Neither the Water Company nor any of its property or operations is subject to any outstanding order, decree or agreement with any person relating to any environmental law. To Water Company's knowledge, there have been no conditions or occurrences (including the release of hazardous materials in, on, under or migrating from any of the Water Company's property or any failure by the Water Company to use store, transport or dispose of hazardous materials in compliance with Environmental Laws) which is reasonably expected to form the basis of a claim arising under any environmental law against the Water Company with respect to the Town System. The Town has been provided access to all environmental reports concerning any property of Water Company in its Town System (04-037) in the possession of the Water Company or its affiliates.

xv. *Water Quality.* The quality of water supplied by Water Company to its customers meets or exceeds all standards for quality and safety of water in all material respects in accordance with applicable laws and orders of any applicable governmental agency with respect to the Town System.

xvi. *Upgrades or improvements.* The Water Company has provided the Town with a Capital Expenditures Budget that represents its reasonably expected improvements, upgrades, and modifications in the Town System.

D. Knowledge. For the purposes of this paragraph, the words "knowledge" and "aware" refer to the actual knowledge of the officers, directors, managers, or employees of the Water Company or its affiliate Brooke Utilities, Inc.

E. Waiver and Indemnity Regarding CC&N. Water Company, for itself, and its successors, beneficiaries, heirs, assigns, partners, limited partners, constituent entities, affiliates, officers, directors, stockholders, members, managers, principals, servants, employees, agents, insurers and representatives, and each of them, fully and forever waives any and all rights under its CC&N for the Town System. This waiver shall take effect upon the Town's payment of the Compensation into escrow in accordance with Section 3. In addition, Water Company agrees to indemnify, defend and hold harmless the Town from any and all claims made by any other person, entity or governmental agency making a claim due to the ACC's failure to reflect the deletion of the Town System from Water Company's CC&N. The indemnity contemplated herein shall expire on November 1, 2012.

F. Incorporation. The provisions of this Paragraph 6 shall be incorporated into the proposed final order of condemnation to be submitted to the Court in the Proceeding. The provisions of this Paragraph 6 shall remain in effect following the Courts approval of the final order of condemnation.

7. Term. The terms of this Memorandum shall continue in full force and effect until the parties have completed all of the necessary Post-Condemnation Administrative Proceedings contemplated herein, and in no event shall it terminate before Water Company has received full payment of the Compensation and notice from the Commission that the Town System has been removed from Water Company's CC&N and nothing further is required of the Water Company from the Commission or any other agency with applicable authority with respect to the Town System.

8. Ordinary Couse of Business. For the period of time after the execution of this Memorandum and before the Town takes possession of the Town System on May 1, 2012, the Water Company shall operate the Town System in accordance with its ordinary course of business. Any deviations from the ordinary course of business shall not take place without prior notice to the Town and opportunity for comment by the Town, unless exigent circumstances prevent such notice.

9. Mutual release.

a. Release by the Water Company. Except as otherwise set forth herein and except as limited by the terms of this Memorandum, the Water Company, for itself, and its successors, beneficiaries, heirs, assigns, partners, limited partners, constituent entities, affiliates, officers, directors, stockholders, members, managers, principals, servants, employees, agents, insurers and representatives, and each of them, fully and forever release, relieve, waive, absolve and acquit the Town, including without limitation, the Town's successors, beneficiaries, heirs, assigns, partners, constituent entities, affiliates, officers, directors, stockholders, members, managers, principals, servants, employees, agents, insurers and representatives, and each of them, from and of any and all claims including, without limitation, all demands, promises, causes of action, actions, suits, debts, liabilities, obligations, costs, expenses, sums of money, controversies, damages, accounts, reckonings, and liens of every kind or nature whatsoever, whether mature, contingent, past, present, future, direct, derivative, subrogated, personal, assigned, discovered, undiscovered, suspected, unsuspected, legal or equitable, which it has or

may have or have had, owned, or held at any time by reason of any matter, cause or thing, involving or reasonably related to the Town System or the Proceeding.

b. Release by the Town. Except as otherwise set forth herein and except as limited by the terms of this Memorandum, the Town, for itself, and its successors, beneficiaries, heirs, assigns, partners, partners, constituent entities, affiliates, officers, directors, stockholders, members, managers, principals, servants, employees, agents, insurers and representatives, and each of them, fully and forever release, relieve, waive, absolve and acquit the Water Company, including without limitation, its successors, beneficiaries, heirs, assigns, spouses, partners, limited partners, constituent entities, affiliates, officers, directors, stockholders, members, managers, principals, servants, employees, agents, insurers and representatives, and each of them, from and of any and all claims including, without limitation, all demands, promises, causes of action, actions, suits, debts, liabilities, obligations, costs, expenses, sums of money, controversies, damages, accounts, reckonings, and liens of every kind or nature whatsoever, whether mature, contingent, past, present, future, direct, derivative, subrogated, personal, assigned, discovered, undiscovered, suspected, unsuspected, legal or equitable, which they have or may have or have had, owned, or held at any time by reason of any matter, cause or thing, involving or reasonably related to the Town System or the Proceeding.

10. Deadlines. The Town and the Water Company shall use best efforts to meet the deadlines specified in this Memorandum, including the December 23, 2011 date for filing the Proceeding. However, no monetary claim shall arise against any party for the failure to meet any such deadlines.

11. Binding Effect. This Memorandum shall be binding upon the parties and their respective successors and assigns.

12. Severability. If any portion of this Memorandum is found to be invalid, such finding will not affect the validity of the remainder of this Memorandum and to this end the provisions of this Memorandum are severable.

13. No Waiver. No waiver of any provision of this Memorandum shall be deemed or constitute a waiver of any other provision, nor shall it be deemed to be a continuing waiver unless expressly provided for by a written amendment to this Memorandum signed by the parties; nor will the waiver of any default under this Memorandum be deemed a waiver of any subsequent default of the same type. The Town's failure to exercise any right under this Memorandum will not constitute the approval of any wrongful act by the Water Company.

14. Notices. All notices, requests and other communications hereunder shall be given in writing and either (i) personally served on the party to whom it is given, or (ii) mailed by registered or certified mail, postage prepaid, return receipt requested, (iii) sent by a nationally recognized overnight courier service, or (iv) sent by facsimile transmission, addressed to the party at the address provided below:

Water Company: Payson Water Company, Inc.
3101 State Rd.
Bakersfield, CA 93308

Attn: Robert T. Hardcastle
Email: RTH@brookeutilities.com
FAX: (661) 633-7551

With a copy to: Jay L. Shapiro
Fennemore Craig
3003 North Central Avenue
Suite 2600
Phoenix, AZ 85012-2913
FAX: (602) 916-5566

Town: Town of Star Valley
Attention: Town Manager
3675 East Highway 260
Star Valley, Arizona 85541

With a copy to: Timothy J. Sabo
Roshka DeWulf & Patten, PLC
One Arizona Center
400 East Van Buren, Suite 800
Phoenix, Arizona 85004

All notices shall be deemed delivered and received upon the earliest of (a) actual receipt, (b) the third (3rd) day after the day of mailing, (c) the next business day after the date of deposit with a nationally recognized overnight courier service, or (d) upon confirmation of error-free facsimile transmission. Any notices received on a Saturday, Sunday or on an Arizona State or federal holiday, or after 5:00 p.m., Arizona time, on a business day shall be deemed received on the next succeeding business day. Any party may change its address for the receipt of notices at any time by giving written notice thereof to the other parties in accordance with the terms of this paragraph. The inability to deliver notice because of a changed address of which no notice was given, or the rejection or other refusal to accept any notice, shall be deemed to be the effective receipt of the notice as of the date of such inability to deliver or rejection or refusal to accept.

15. Effective Date of Memorandum. This Memorandum shall become effective upon execution.

16. Controlling Law. This Memorandum and the rights of the Parties hereto shall be governed by and construed in accordance with the internal laws of the State of Arizona without regard to conflicts of laws principles.

17. Authority. The Parties acknowledge and warrant that each of them is fully authorized and empowered to execute this Memorandum by and through the individual(s) executing hereinafter.

18. Further Documents. The Parties shall execute and deliver any and all such documents and perform any and all such acts as reasonably necessary or required to carry out the matters contemplated by this Memorandum, including, without limitation, all documents

necessary for Town to initiate and prosecute an action for condemnation of the Town System in Gila County Superior Court and all documents necessary to seek confirmation of the deletion of the Town System from Water Company's CC&N.

19. Representations. Each of the Parties acknowledges and warrants that it has been, or has had an opportunity to be represented by independent counsel. This Memorandum is the result of negotiation between the Parties and their respective attorneys, and the terms, conditions and provisions of this Memorandum shall be construed in a fair and even manner regardless of the Party who drafted this Memorandum or any provision or portion thereof.

20. Counterparts. This Memorandum may be executed in one or more counterparts. Each executed counterpart shall for all purposes be deemed an original, but all of which together shall constitute in the aggregate but one and the same instrument. The signature pages from one or more counterparts may be removed there from and attached to one or more duplicate agreements containing all original signatures.

21. Date of Performance. If this Memorandum provides that any time period expires or date for performance specified in this Memorandum falls on a non-business day (a Saturday, Sunday or legal holiday recognized by the Town), such time period or performance deadline shall be extended to the Town's next business day. Except as may otherwise be set forth herein, any performance shall be timely made and completed no later than 5:00 p.m. (Arizona time) on the date the performance is due.

22. Complete Agreement. This Memorandum and additional written agreements described herein, if any, contain and set forth the entire and exclusive Memorandum and understanding between the Parties hereto pertaining to the subject matter of this Memorandum and reflect the reasonable expectations of the Parties hereto. This Memorandum may not be amended or modified in any way whatsoever without the prior written consent of all Parties to this Memorandum. Notwithstanding anything to the contrary contained in this Memorandum, this Memorandum is not intended to modify, amend, replace, abridge, abrogate or otherwise affect any other rights or obligations of Water Company.

23. Dispute Resolution. Any dispute, controversy, claim, or cause of action arising out of or related to this Memorandum shall be governed by Arizona law and may, but in no event need, be settled by submission with the consent of all parties to binding arbitration in accordance with the rules of the American Arbitration Association and the Arizona Uniform Arbitration Act, A.R.S. § 12-1501, *et seq.*, and judgment upon any award rendered by the arbitrator(s) may be entered in the Superior Court of Maricopa County, or any such dispute, controversy, claim or cause of action may be litigated in a court. The venue for any such dispute shall be Maricopa County, Arizona.

24. Conflict of Interest. This Memorandum is subject to the provisions of A.R.S. § 38-511 and Town represents, to the best of its knowledge that no such conflict exists.

25. No Other Party Benefit. This Memorandum inures to the benefit of the Parties and is not executed for the benefit of other parties, such as, but not limited to, material men, laborers, or others providing work, services or materials in furtherance of the Water Company.

THE REMAINDER OF THIS PAGE LEFT INTENTIONALLY BLANK

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum as of the date first set forth above.

WATER COMPANY:

Payson Water Company

By: _____
Name: Robert T. Hardcastle
Title: President

TOWN:

Town of Star Valley, a municipal corporation

By: _____
Name: Timothy Carter
Title: Town Manager

ATTEST:

_____
Town Clerk

APPROVED AS TO FORM:

_____
Town Attorney

Exhibit "A"

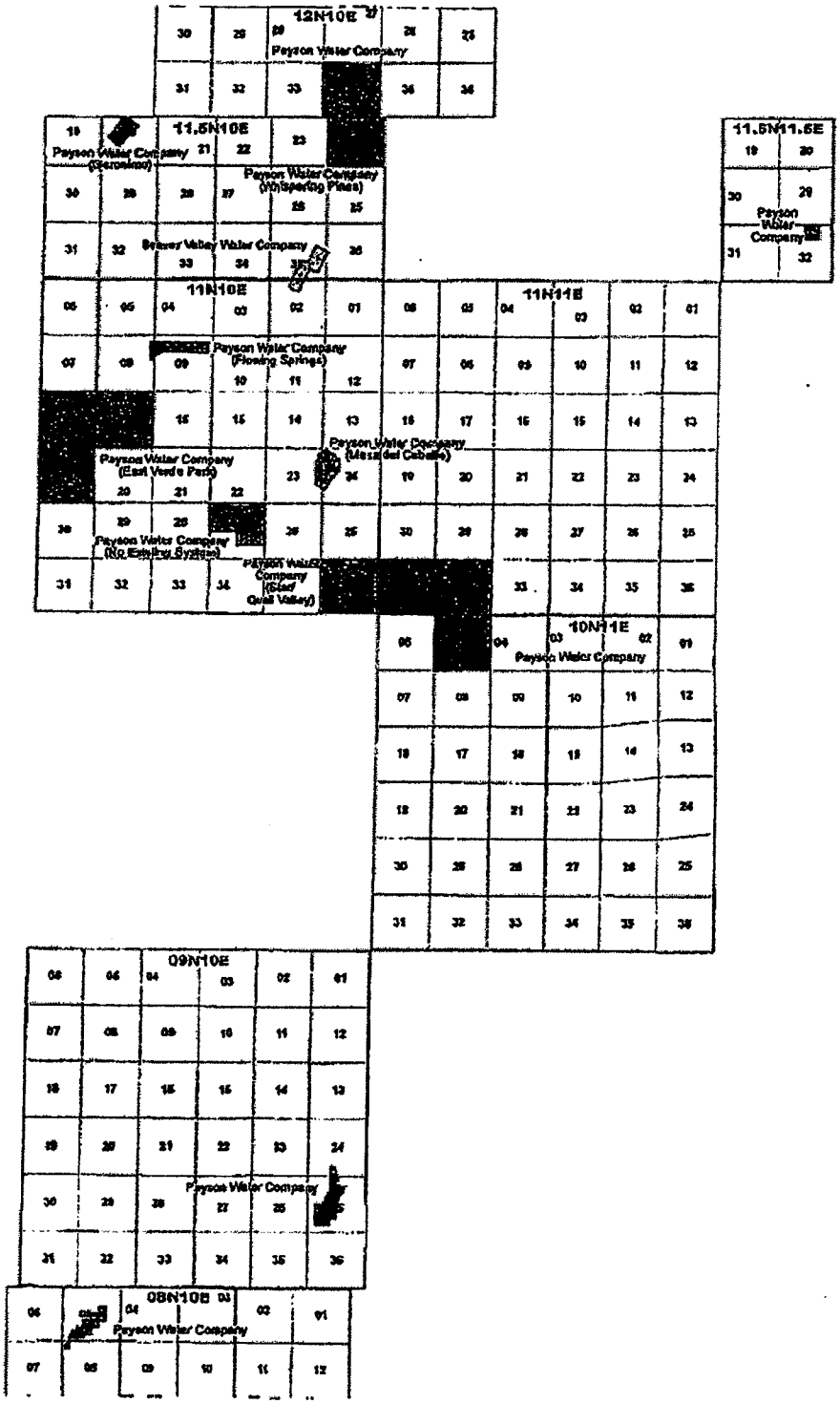
Description of Town System

Exhibit "B"

Escrow Instructions

EXHIBIT A

Payson Water Company, Inc.



Star Valley/Quail Valley Water System Components

2" PVC pipe (installed)
2" GI pipe (installed)
4" AC pipe (installed)
6" AC pipe (installed)
4" C900 pipe (installed)
6" C900 pipe installed
8" C900 pipe installed
SV well #1
SV well #2
QV well #1
TK well #1
TK well #2
2 hp booster pump
3 hp booster pump
5 hp booster pump
7.5 hp booster pump
15 hp well pump
7.5 hp well pump
25 hp booster pump
15,000 gallon steel storage tank
20,000 gallon steel storage tank
60,000 gallon storage tank
160,000 gallon storage tank
1,000 gallon pneumatic tank
2,000 gallon pneumatic tank
Air compressors and release valves (complete)
Well chlorinator
5/8 X 3/4 service meters
1" well meters
3" well meters
Real property (land)
Buildings & Structures
6" Fire hydrants
8" Fire hydrants
Communication equipment
4" water main valves
6" water main valves
8" water main valves
1,000 GPM Peerless Fire pump (complete)
490 ft. chain link fence, gates, locks
630 sq. ft. Well building structures (complete)
2" pressure reducing valves

BEFORE THE ARIZONA CORPORATION COMMISSION

MILTON J. HUSKY
Chairman
DICK HERDENT
Commissioner
E. T. "EDDIE" WILLIAMS, JR.
Commissioner

IN THE MATTER OF THE APPLICATION FOR TRANSFER OF CERTIFICATE OF CONVENIENCE AND NECESSITY FOR FURNISHING WATER IN THE CERTIFICATED AREA IN GILA COUNTY, ARIZONA FROM RAYMOND H. CLINE, DBA PAYSON WATER COMPANY, TO UNITED UTILITIES, AN ARIZONA CORPORATION.

DOCKET NO. U-1386
U-1993

DECISION NO. 38614

OPINION AND ORDER

BY THE COMMISSION:

The above entitled matter came on for hearing before the Commission sitting at Phoenix, Arizona on May 13, 1966

Applicant appeared by Glen L. Randall, attorney, and no appearance was entered in opposition to the granting of the approval sought.

Evidence was adduced upon the application, and from that evidence it is found as follows:

1. That applicant desires to acquire and Payson Water Company desires to transfer the physical assets and operating rights of Payson Water Company.

2. That such transfer is in the public interest.

WHEREFORE, IT IS ORDERED approving the sale of the physical assets of Payson Water Company to United Utilities, a corporation, in accord with that certain written agreement between the transferor and the transferee herein, dated December 31, 1965, and entered in evidence on the application herein.

IT IS FURTHER ORDERED that United Utilities, a corporation, shall succeed to the rights and duties of Payson Water Company under those certificates of convenience and necessity issued in Docket No. U-1386 of this Commission, and being Decisions 27729, 28947, 31492, 31603, 31921 and 33016 therein, and that this order shall constitute a certificate of convenience and necessity for the operation by United

Utilities, a corporation, of a public utility water system in the area described as follows:

TOWNSHIP 10 NORTH, RANGE 10 EAST:

Section 3; Section 4; Section 5; the North Half of Section 8; the North Half of Section 9; and the North Half of Section 10.

TOWNSHIP 10 NORTH, RANGE 11 EAST:

Section 5, except such portions as may have been within Tonto National Forest and under authority of the United States Forest Service, on June 3, 1959.

TOWNSHIP 11 NORTH, RANGE 10 EAST:

Section 27; Section 33; and Section 34; except that part of each of those sections that may have been unpatented on May 24, 1955, and
Section 17; Section 18; and Section 19; except such portions of each of those sections as may have been within Tonto National Forest, and under authority of the United States Forest Service, on April 27, 1959, and
Section 36; except such portions as may have been within Tonto National Forest, and under authority of the United States Forest Service, on June 3, 1959, and
The whole of "Homestead Entry Survey No. 123," a parcel of land more particularly described as follows: beginning at the common corners of Sections 33 and 34, Township 11 North, Range 10 East, and of Sections 3 and 4, Township 10 North, Range 10 East, thence North 0° 38' East for a distance of 83.97 chains (5542.02') to the true point of beginning, thence North 64° 22' West for a distance of 70.69 chains (4665.54'), thence North 10° 18' East for a distance of 15.11 chains (797.26'), thence South 64° 36' East for a distance of 26.30 chains (1735.8'), thence North 76° 37' East for a distance of 20.17 chains (1331.22'), thence South 40° 45' East for a distance of 48.92 chains (3228.72'), thence South 82° 51' West for a distance of 14.47 chains (955.02') to the true point of beginning, and

the whole of "Homestead Entry Survey No. 577," a parcel of land more particularly described as follows: beginning at the northeast corner of Section 24, Township 11 North, Range 10 East, thence South 74° 44' West for a distance of 61.39 chains (4051.74') to the true point of beginning, thence South 2° 42' East for a distance of 13.6 chains (897.6'), thence South 33° 45' West for a distance of 37.28 chains (2460.48'), thence North 55° 48' West for a distance of 15.28 chains (1008.48'), thence North 1° 49' East for a distance of 30.57 chains (2017.62'), thence North 18° 32' East for a distance of 13.38 chains (883.08'), thence North 46° 45' East for a distance of 12.77 chains (842.82'), thence South 48° 31' East for a distance of 24.28 chains (1602.48') to the true point of beginning.

U-1986
DOCKET NO. U-1993 DECISION NO. 38614

TOWNSHIP 11 NORTH, RANGE 11 EAST:

Section 31; and Section 32; except such portions of each of those sections as may have been within Tonto National Forest, and under authority of the United States Forest Service, on June 3, 1959.

AND IT IS FURTHER ORDERED that the rates and charges of the transferee shall be as heretofore authorized for Payson Water Company within the areas above described.

BY ORDER OF THE ARIZONA CORPORATION COMMISSION.

IN WITNESS WHEREOF, I, GEORGE S. LIVERMORE, Executive Secretary of the Arizona Corporation Commission, have hereunto set my hand and caused the official seal of this Commission to be affixed, at the Capitol in the City of Phoenix, this 8th day of August, 1966.

GEORGE S. LIVERMORE
EXECUTIVE SECRETARY

EXHIBIT B

Exhibit B

Escrow Instructions

December ____, 2011

First American Title Insurance Company
2425 East Camelback Road, Suite 300
Phoenix, Arizona 85016
Attention: Neil Moffett

Dear Neil:

First American Title Insurance Company, a California corporation, has been selected to act as the escrow office (the "First American") in connection with that certain *Settlement Memorandum* (the "Memorandum"), dated December ____, 2011, between Payson Water Company, Inc., an Arizona corporation (the "Water Company"), and the Town of Star Valley, a municipal corporation and a political subdivision of the State of Arizona (the "Town"). Except as otherwise defined herein, all capitalized terms used herein shall have the meanings ascribed thereto in the Memorandum.

As set forth in the Memorandum, on or before December 30, 2011, the Town will initiate an action in Eminent Domain in Gila County Superior Court (the "Court") pursuant to ARS § 12-1111 *et seq.* to condemn the Town System (the "Proceeding"). As part of the Proceeding, the Town has agreed to pay to Water Company the sum of Seven Hundred Seventy-five Thousand and 00/100 Dollars ($775,000.00) as compensation (the "Compensation"). The Compensation shall be escrowed and disbursed as set forth below.

First American is hereby directed to hold, deal with, and dispose of the Compensation in accordance with the following terms and conditions:

1. Within 3 days of entry of a final judgment of condemnation by the Court authorizing the Town to take possession of the Town System, the Town shall deposit with First American the Compensation. The Compensation shall be wired to First American in accordance with the account and wiring information you have provided and which is enclosed herein.

2. First American is instructed to invest the Compensation in an interest-bearing savings or money market account or short term U.S. Treasury Bills or similar cash equivalent securities, as Water Company may direct. Any interest earned on the Compensation, after deduction of First American's customary investment charges, shall become and be deemed to be a part of the Compensation. Any escrow fee to be charged by First American is to be borne by the Town.

3. On May 1, 2012, at 9:00 a.m., Mountain Standard Time, First American shall release the Compensation to Water Company pursuant to the wiring instructions to be provided by Water Company.

All notices, requests, demands or other communications required or permitted under these Escrow Instructions shall be in writing and delivered personally, by certified mail, return receipt requested, postage prepaid, by overnight courier (such as Federal Express), or by facsimile

transmission with confirmation of error-free transmission (with a copy to follow by certified mail, return receipt requested, postage paid or by overnight courier), addressed as follows:

If to Water Company:

Payson Water Company, Inc.
3101 State Road
Bakersfield, California 93308
Attn: Robert T. Hardcastle
Email: RTH@brookeutilities.com
Facsimile: (661) 633-7551

With a copy to:

Jay L. Shapiro
Fennemore Craig
3003 North Central Avenue
Suite 2600
Phoenix, Arizona 85012-2913
Facsimile: (602) 916-5566

If to Town:

Town of Star Valley
_____
_____
Facsimile: (___) _____
Attention: _____

With a copy to:

Timothy J. Sabo
Roshka DeWulf & Patten, PLC
One Arizona Center
400 East Van Buren, Suite 800
Phoenix, Arizona 85004

If to First American:

First American Title Insurance Company
2425 East Camelback Road, Suite 300
Phoenix, Arizona
Attention: Neil Moffett
Facsimile: (602) 567-8101

All notices given in accordance with the terms hereof shall be deemed received on the earliest of the next business day if sent by overnight courier, on the same day if sent by facsimile transmission before 5:00 p.m. (Mountain Standard Time) on a business day or on the following business day if sent on a non-business day or after 5:00 p.m. (Mountain Standard Time), on the third (3rd) business day following deposit with the United States Mail as a registered or certified matter with postage prepaid, or when delivered personally or otherwise received. Any party

hereto may change the address for receiving notices, requests, demands or other communication by notice sent in accordance with the terms of this paragraph.

These Escrow Instructions are being entered into to implement the Memorandum and shall not (nor be deemed to) amend, modify or supersede the Memorandum or act as a waiver of any rights, obligations or remedies set forth therein; provided, however, that First American may rely solely upon these Escrow Instructions.

Agreed and Acknowledged this 29th day of December, 2011.

WATER COMPANY:

Payson Water Company, an Arizona corporation

By: _____
Name: Robert L. Hardcastle
Title: President

TOWN:

Town of Star Valley, a municipal corporation and a political subdivision of the State of Arizona

By: _____
Name: Timothy Grier
Title: Town Manager

ATTEST:

_____
Town Clerk

APPROVED AS TO FORM:

_____
Town Attorney

Agreed and Acknowledged this ____ day of December, 2011.

FIRST AMERICAN:

First American Title Insurance Company,
a California corporation

By: _____
Name: _____
Title: _____

6537646.1/073283.0003

EXHIBIT E

to

STIPULATED FINAL JUDGMENT IN CONDEMNATION

Michael W. Patten (No. 009796)
Timothy J. Sabo (No. 021309)
ROSHKA DEWULF & PATTEN, PLC
One Arizona Center
400 East Van Buren Street, Suite 800
Phoenix, AZ 85004
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mpatten@rdp-law.com
tsabo@rdp-law.com

Timothy W. Grier (No. 020472)
Town Attorney
Town of Star Valley
3675 East Highway 260
Star Valley, Arizona 85541
Telephone: (928) 472-7752
townmanager@ci.star-valley.az.us

Attorneys for Plaintiff Town of Star Valley

IN THE SUPERIOR COURT OF THE STATE OF ARIZONA

IN AND FOR THE COUNTY OF GILA

TOWN OF STAR VALLEY, a municipal corporation of the State of Arizona, Plaintiff, v. PAYSON WATER CO., INC., an Arizona corporation; COUNTY OF GILA, a political subdivision of the State of Arizona; JOHN DOES 1 through 10; and BLACK AND WHITE PARTNERSHIPS 1 through 10, Defendants.	No. **STIPULATED FINAL ORDER OF CONDEMNATION** (Hon. Peter J. Cahill)

It appearing to the Court that the Stipulated Final Judgment in Condemnation heretofore in the above-entitled action has been fully paid and satisfied; and

It further appearing to the Court that, pursuant to the provisions of Paragraph 6 of the Stipulated Final Judgment in Condemnation, this Court shall now enter the Stipulated

Final Order of Condemnation.

IT IS THEREFORE ORDERED, ADJUDGED AND DECREED:

1. that sole use, possession, and ownership of all the plant, system, and business of Payson Water Co., Inc. ("PWC"), including, but not limited to, all fee and/or leasehold interests in real property described in **Exhibit A** attached hereto, all easements, water wells, pumps, water plants, substations, water distribution systems, customer accounts, books and records used and useful in providing water utility services, the PWC Certificate of Convenience and Necessity as shown the Star/Quail Valley system on the map attached hereto as **Exhibit B**, and/or business, and all tangible, intangible, personal or real property rights or interests in any way related thereto (collectively, the "Town System") be, and the same are, hereby condemned for the use and benefit of the Town, and that the ownership of the same be, and is, hereby vested in the Town, a municipal corporation of the State of Arizona,

2. that the Town System is transferred in its "as is, where is, with all faults" condition, and without the necessity of any other consents, orders, or approvals by any governmental entities, free and clear of any and all claims by, through, or on behalf of PWC. Provided, however, that the foregoing is limited by the representations and warranties of PWC set forth in Paragraph 6 of the Settlement Memorandum entered into on or about December 29, 2011 (attached as **Exhibit A**) by and between PWC and the Town, and that the provisions of the said Paragraph 6 are incorporated herein by reference.

3. That the portion of PWC's Certificate of Convenience and Necessity for the Town System (as shown the "Star/Quail Valley" system on the map attached hereto as **Exhibit B)** be forever terminated and extinguished.

DONE IN OPEN COURT this ____ day of _____, 2012.

_____
Hon. Peter J. Cahill
Judge of the Superior Court

APPROVED AS TO FORM AND CONTENT:

TOWN OF STAR VALLEY

By:_____

Timothy W. Grier
Town Attorney
Town of Star Valley
3675 East Highway 260
Star Valley, Arizona 85541
Telephone: (928) 472-7752
townmanager@ci.star-valley.az.us

and

Michael W. Patten (No. 009796)
Timothy J. Sabo (No. 021309)
ROSHKA DEWULF & PATTEN, PLC
One Arizona Center
400 East Van Buren Street, Suite 800
Phoenix, AZ 85004
Telephone: (602) 256-6100
mpatten@rdp-law.com
tsabo@rdp-law.com

Attorneys for Plaintiff Town of Star Valley

FENNEMORE CRAIG, P.C.

_____

Jay L. Shapiro
Attorneys for Defendant Payson Water Co., Inc.

ORIGINAL of the foregoing hand-delivered
this ___ day of_____, 2011 with:

Hon. XXXXX
Judge of the Superior Court
Address

COPY of the foregoing mailed
this _____ day of _____, 2011, to:

Jay Shapiro
Fennemore Craig, P.C.
3003 North Central Avenue, Suite 2600
Phoenix, Arizona 85012
Attorneys for Defendant Payson Water Co., Inc.

_____

EXHIBIT JW-SRJ2

East Verde Park Hauling

Year	Water Hauled (Gal)	Cost of Hauled Water ($)	Customer Count
2011	58,873	$3,238	143
2012	207,000	$12,059	141
2013	10,900	$556	140

EXHIBIT JW-SRJ3

Brooke Utilities, Inc.

2012 Water Loss Analysis: By Public Water System

Date:

04-026 East Verde	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	2012 Total
Meter read dates (from dospoly.txt files)	12/14-1/14	1/14-2/14	2/14-3/14	3/14-4/16	4/16-5/14	5/14-6/14	6/14-7/12	7/12-8/13	8/13-9/13	9/13-10/15	10/15-11/13	11/13-12/13	
Production read dates (from meter read sheet	12/14-1/14	1/14-2/14	2/14-3/14	3/14-4/16	4/16-5/14	5/14-6/14	6/14-7/12	7/12-8/13	8/13-9/13	9/13-10/15	10/15-11/13	11/13-12/13	
Active Connections	143	141	141	141	141	142	141	140	141	141	141	140	
Production	208,780	329,120	282,390	342,100	372,520	486,840	333,180	354,120	334,400	330,130	281,550	145,630	3,800,760
Water Hauled In	0	0	0	0	0	51,817	153,359	14,531	0	0	0	0	219,707
Production + Water Hauled In	208,780	329,120	282,390	342,100	372,520	538,657	486,539	368,651	334,400	330,130	281,550	145,630	4,020,467
Consumption	179,883	251,570	268,120	311,310	369,430	494,820	414,244	356,916	304,710	314,860	242,700	228,369	3,736,932
Water Loss In Gallons	28,897	77,550	14,270	30,790	3,090	-7,980	-81,064	-2,796	29,690	15,270	38,850	-82,739	63,828
Water Loss %	13.84%	23.56%	5.05%	9.00%	0.83%	-1.48%	-16.66%	-0.76%	8.88%	4.63%	13.80%	-56.81%	1.59%

ORIGINAL

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AZ CORP COMMISSION
DOCKET CONTROL

EXHIBIT
A-17
ADMITTED

FENNEMORE CRAIG, P.C.
Jay L. Shapiro (No. 014650)
2394 E. Camelback Road, Suite 600
Phoenix, Arizona 85016
Telephone (602) 916-5000
Attorneys for Payson Water Co., Inc.

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO: W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR AUTHORITY TO: (1) ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM; AND (2) ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	DOCKET NO: W-03514A-13-0142 **NOTICE OF FILING**

At the request of the Administrative Law Judge, Payson Water Co., Inc. hereby files the following reports that address the exploration of additional water supplies: (1) 2009 Report by Payson Water Co., Inc. on Water Supply Alternatives for the Mesa del Caballo System, dated November 1, 2009 and revised December 3, 2009 (attached as **Exhibit A**); (2) Geophysical AMT Survey on the Mesa del Caballo Project, dated March 16, 2010 (attached as **Exhibit B**); and (3) Mesa del Caballo Zonge CSAMT Survey, dated March 30, 2010 (attached as **Exhibit C**).

...

...

Arizona Corporation Commission
DOCKETED
OCT 01 2013
DOCKETED BY

RESPECTFULLY SUBMITTED this 1st day of October, 2013.

FENNEMORE CRAIG, P.C.

By _____
Jay L. Shapiro
2394 E. Camelback Road
Suite 600
Phoenix, Arizona 85016
Attorneys for Payson Water Co., Inc.

ORIGINAL and thirteen (13) copies of the foregoing were filed this 1st day of October, 2013, with:

Docket Control
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

COPY of the foregoing was hand delivered this 1st day of October, 2013, to:

Dwight D. Nodes
Assistant Chief Administrative Law Judge
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

Robin Mitchell, Esq.
Legal Division
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

By: _____
8545276.1/073283.0006

EXHIBIT

A

2009 Report

by

Payson Water Co., Inc.

on

Water Supply Alternatives

for the

Mesa del Caballo

Water System

PWS- 04-030

November 1, 2009

Revision #1 December 3, 2009

Date: November 1, 2009
December 3, 2009 (revision #1)

To: Del Smith
Arizona Corporation Commission
Engineering Division

From: Robert T. Hardcastle
Brooke Utilities, Inc.

Re: ***Water Plan ("Plan") for Mesa del Caballo Water System***

On August 11, 2009 Payson Water Co. (the "Company" or "PYWCo") was contacted by the Commission's Engineering Department (the "Department") requesting a water plan that addresses perceived supply deficiencies of the Mesa del Caballo water system (the "system" or "MdC") located in Payson, Arizona. The System is also known as ADEQ's Public Water System number 04-030. In addition, the Department requested an updated Water Use Data Sheet through July 2009 that included the reported water hauling to the System for the most recent thirteen month period. The Water Use Data Sheet was attached to the previously submitted Report.

The initial deadline for submittal of this Plan was sufficiently short so as to not provide results from any water studies proposed or planned. Accordingly, the Company referred to the Report as "preliminary" in nature and submitted same on August 18, 2009.

Prior to, and since submittal of the preliminary Report, the Company has diligently and carefully worked toward reasonable, prudent and meaningful solutions to better understand and resolve the water supply deficiency at MdC while, at the same time, seeking progress on the long term solution to this problem further discussed herein.

It should be noted that the MdC water system is located on an "island" with U.S. Forest Service lands surrounding the area on all sides. Practically speaking, there are no "off system" water sources available to the Company until the long term solution, discussed herein, is made available.

COMMUNITY INVOLVEMENT: At a community meeting in MdC a group of four community members, Ed Schwebel, Irene Schwartz, Randy & Minnie Norman (the "Water Committee" or

"WC") expressed interest and volunteered to meet with the Company and its representatives on behalf of MdC. The purpose of these meetings was to gain a better understanding of the water challenges facing MdC and provide assistance, where possible, to a solution. Since early August 2009 there have been several meetings and various ideas have been discussed and been pursued in a joint effort between the Company and the WC. Without question the input and participation of the WC has been valuable and productive for the Company. The Company welcomes the participation of the WC.

WATER CONSERVATION: As can be shown by Exhibit 2 the number of mandatory water consumption days in 2009 are not unlike the two previous calendar years. Through August 11, 2009 there have been 69 mandatory water conservations days (31%) and 153 voluntary water consumption days (69%). Such statistics are not unlike the previous years where 76 mandatory water consumption days occurred in 2007 and 47 mandatory water consumption days occurred in 2008. With the balance of 2009 comprised of more seasonally cool and cold days than those experienced during the summer months it is unlikely that 2009 year end mandatory water consumption days will vary greatly from the previous two years.

WATER PRODUCTION: As can be shown clearly in Exhibit 4 MdC customer consumption peaked at the same time well production was at its lowest level at any time in any of the last eight years. It should be further noted that MdC well production was measured twice earlier in 2009 as well. On March 4, 2009 aggregate well production was 59.7 gpm and on May 5, 2009 aggregate well production was measured at 58.8 gpm. In 2008 water production was about 59 gpm when measured in July and consistent with the 2008 ACC Annual Reports showing well production at 60.9 gpm. In 2007 water production was about 60 gpm when measured in July and consistent with the 2007 ACC Annual Reports showing well production at 60.9 gpm. In 2006 water production was about 62 gpm when measured in July and consistent with the 2006 ACC Annual Reports showing well production at 61.6 gpm. However, water production measured on July 30, 2009 dropped by nearly 27% to 44.9 gpm. Since at least 2002 the Company has not seen such a dramatic water production change at MdC as that which occurred in the summer months of 2009.

CUSTOMER CONSUMPTION: While the number of water conservation days are not greatly different from years past, customer consumption continued to increase. The Company's representatives were frequently at MdC during most of the mandatory conservation days in the summer of 2009. During these periods careful monitoring of outdoor watering was noted as well as numerous discussions with customers using over 10,000 gallons monthly. In some cases, Stage 5 water conservation penalties were applied. Based on the Company's observations it appears that MdC has a larger full-time population than in years before. There were more

livestock, more families and less homes being used only on weekends. Customers were growing gardens to supplement their dietary needs, multiple families were living in one home, and increased water use was consistent as opposed to short-term periodic increases normally found in a "weekend community" Based on the fact that MdC has comparatively less expensive housing as compared to surrounding areas, it is an assumption that the current economic times are responsible for increased water demand in MdC. In a meeting with ACC Staff on October 22, 2009 the WC expressed belief that the per capita population in MdC has increased over prior years. It becomes clearer that a combination of increased water demand and dramatically lower water production rates, unlike those of prior years, occurred more quickly than the Company anticipated.

As a result, the MdC water system had to be supplemented with very expensive short-term water augmentation in the form of trucked water. As shown by Exhibit 2 nearly a half-million gallons-of-water augmented the MdC water supply through July 2009[1]. The Company expects to seek recovery of these costs as well as any future augmentation costs. The 2009 water augmentation costs were absorbed exclusively by the Company without current impact on its customers. The approximate cost of water augmentation to MdC is $4,000 per day.

SHORT TERM COMMUNITY SOLUTIONS: The WC, in conjunction with the Company, strongly supports a change in the curtailment tariff currently in place at MdC. Both the WC and the Company believe a curtailment tariff that is specific and unique to MdC is necessary instead of the existing generalized tariff for all water systems of the Company. After an informational meeting with ACC staff in on Thursday October 22, 2009, the Company and WC are in the process of drafting a new curtailment tariff that accomplishes this objective. The basic curtailment changes encourage conservation through financial measures and attempt to create a curtailment that provides a "water budget", enabling customers to conserve and "spend" their water as they see fit. The initial draft of this curtailment tariff will be circulated to ACC Staff for initial review by the end of November 2009.

The WC is also working in the community to recruit potential water sharing agreements with existing well owners. In previous years, the Company has made a similar effort and is currently contracted with three such water partners. There are approximately thirty wells in MdC and WC members have personally spoken to approximately one-third of these owners with no water sharing interest expressed thus far. When interested parties, if any, are identified the Company will follow up with these prospective water source partners and elicit the WC's assistance as needed. As part of their effort, the WC has encountered five or six wells that are dry or so low

[1] The Company trucked a total of approximately 505,000 gallons of water in 2009.

in production (i.e. economically unfeasible) that the well owner is currently a customer of the Company; two wells are on properties currently for sale and awaiting the new owners[2]; and four well owners have expressed no interest in such an arrangement. The WC members are continuing to identify additional well owners and initiate similar discussions.

A community event, "Make A Difference Day" was held on Saturday October 24, 2009 (see Exhibit 5). The Company partially-sponsored event was intended, in part, to discuss water issues related to MdC and provide customers an opportunity to ask questions about the short term and long term solutions. The event was moderately attended and the WC considered it a success.

SHORT TERM WATER SUPPLY: In an effort to better research the potential of an interim water supply for MdC the Company is considering drilling a new well or deepening existing wells. The MdC project area is less than one mile square and surrounded by the Tonto National Forest (TNF) on all sides. Currently the only water supply is ground water from within the MdC boundaries. It is likely not practical that off-site wells or wells situated on TNF lands are feasible.

In recent years, Town of Payson (TOP) and Bureau of Land Management (BLM) through the Mogollon Rim Water Resource Management Study (MRWRMS) have created hydrological reports and generated hydrological projections on the areas surrounding MdC. These reports indicate that MdC is built on a large block of granite and a highly unlikely place to find productive wells.

The Company has reviewed these reports with TOP's hydrologist which has recommended the Company get a more complete hydrological perspective for MdC. In this regard, the Company has received a two-phase proposal from Zonge Engineering & Research Organization, Inc. (Zonge) to complete a geophysical survey of the MdC area to determine (a) the presence of geological structures capability of transmitting water, and (b) the presence potential of water, if any, within the geological structures as indicated by low resistivity areas in the geology in and around MdC. Low resistivity indicates the potential of water production from either new or existing wells (see Exhibit 6). [3] This proposal preliminarily demonstrates that a geological fault may intersect with MdC. Such faults have sometimes proved to be likely conduits of water. When two faults intersect such areas are considered highly likely areas to find water

[2] The Company has inquired as to the purchase of one of these properties but concluded that the legal ownership of the water source is clouded and may be in question.

[3] Geophysical Survey – Mesa Del Caballo Zonge Engineering & Research Organization: Norman R. Carlson, October 20, 2009

production[4]. The Company regards this additional piece of investigatory analysis as reasonable and prudent in the search for additional water sources for MdC. The Company believes it is possible to conduct the survey in "thinned out" sections of the surrounding TNF. If these survey locations are not possible, the project may require some brushing or clearing of scrub brush along the ground to give the survey the access it requires.

To accomplish the geophysical survey the USFS will require a permit for the actual survey work dependent on the amount of forest "thinning" necessary. The geophysical survey is a relatively low-impact operation, usually requiring only three or four people in two small vehicles; the transceiver equipment is backpack portable, and can be used in areas where off-road access is limited or restricted. In initial discussions with the USFS the Company intends to keep the permit process to a minimum, based on the low impact to the surrounding TNF. USFS may only require a letter of authorization from the Payson District Ranger. It is expected that the permit process would require not more than thirty days. Once USFS permits and/or authorization are secured the survey is expected to be complete within thirty days exclusive of inclement weather conditions[5].

On November 4, 2009 the Company conducted a lengthy telephonic conference with representatives of Zonge to pose additional questions concerning the proposal and what reasonable output expectations are anticipated. Zonge explained that Phase I and Phase II of the proposal related to "cultural noise" distortion from utility power lines crossing the MdC area in a northeast-southwest direction. Phase II of the proposal may be necessary if the distortion experienced in Phase I prevents the collection of sound geological resistivity conclusions. Zonge indicates that their work will *not* predict the presence or absence of water within faults that may be identified. Accordingly, any projection for any available sustainable water production should not be expected from Zonge's report as well. Depending upon the conclusions reached by Zonge they may recommend that the Company further contract with an experienced hydrologist familiar with the area that can interpret the geophysical work provided by Zonge[6].

Accordingly, the following proposed well development schedule was discussed with Zonge and is believed to be conservatively realistic:

---

[4] See page 2 of Exhibit 6 where prospective survey lines have been identified by Zong and TOP.

[5] The Company has learned from USFS that the geophysical lines from which Zonge will collect data, for the purposes of their report, will require location by survey. The Company has approved the cost of Phase I geophysical survey lines in the amount of $1,800. The project schedule impact has been considered in Table 1 as part of USFS granting permission for this work.

[6] The Company would expect a hydrologist to interpret the data provided by Zonge and make specific recommendations for well development that would represent the Company's best opportunity for sustainable water production.

Table 1

Project Event	Date
Notice to Proceed	4-Nov-09
Permission Request USFS	3-Dec-09
Permission Granted USFS	10-Dec-09
Site Mobilization	14-Dec-09
Zonge site work Phase 1	18-Dec-09
Zonge site work Phase 2 (as necessary)	28-Dec-09
Zonge Report	5-Feb-09
Hydrological interpretation	15-Feb-10
Well development begins	1-Mar-10
Well development completes	1-Apr-10
Water testing	1-Apr-10
Water testing results	30-Apr-10
Well placed in service	10-May-10

It should be noted that these proposed well development project dates are conservative in nature and represent several opportunities for improvement.

On November 4, 2009 the Company issued a Notice to Proceed to Zonge for Phase I of the proposed work (see Exhibit 7)[7] believing this course of action represents a reasonable and prudent expenditure of funds.

LONG TERM WATER SUPPLY: It seems appropriate that the Company needs to supplement the current exclusive ground water supply during annual nine month periods with proposed water supplied through the TOP pipeline from the C.C. Cragin Reservoir.

According to TOP the anticipated time of construction for the CC Cragin Pipeline (CCC) is to begin in early 2014 and expected to be complete before the fall of 2015. This timeline is subject to delay based on the current reduction in TOP customer demand also credited to the recent economic downturn[8]. If customer demand continues in its current direction there is the potential that the CCC pipeline project would be further delayed. However, TOP's contract with Salt River Project (SRP) includes a condition requiring an established water right be used

[7] Zonge indicated they would immediately place this project on their work schedule and attempt to expedite the work as much as possible.

[8] According to TOP.

within five years on the contract date. TOP believes this condition could cause the project to proceed despite the decreased customer demand.

TOP is developing a water delivery agreement at this time for the purpose of pricing turn-out improvements in the CCC project at location consistent with the Company's supplemental water requirements. TOP expects to submit an initial agreement for its review before the end of November 2009.

The Company has submitted to SRP a March 2009 Water Demand and Analysis Report that indicates potential water rights claim based on water deliveries.. This report includes communities within the Companies existing certificated areas and communities not currently served by a water company or a water district. This report is the first step in developing a water right to the CCC project. Once new water rights are established by the Company, TOP can specifically reference and include them in the water delivery agreement between the Company and TOP.

The current plan places TOP's necessary water treatment plant near the Houston Mesa Road immediately southeast of MdC enabling the Company to receive treated water directly from the plant and avoid operating individual treatment plants for the Houston Mesa Road communities.

The Company has identified the following steps necessary to establish water rights with SRP:

1. agree to a quantity of CCC project water for each service area based on necessary supplemental supply and existing water rights. The Company expects to complete this phase of the project by December 2009.

2. execute a Water Delivery Agreement, the basic principles of which are attached. The Company expects to complete this phase of the project by February 2010.

3. reach agreement on use of pipeline. The Company expects to complete this phase of the project by April 2010.

4. ADWR processes the Severance & Transfer. The Company expects to complete this phase of the project by August 2010.

5. The Company obtains necessary permits and builds the necessary infrastructure for the CCC project.. The Company expects to complete this phase of the project in conjunction with TOP.

FINANCIAL IMPACT: The financial rate impact on customers for additional water development at MdC should be expected to be substantial but cannot be specifically determined at this time. Such investment in reasonable, prudent and necessary water resources will greatly impact the

small number of customers at MdC. The Company intends to seek recovery through rates for any required investment.

EXHIBIT 1

Brooke Utilities, Inc.

2008-2009 Consumption Mesa del Caballo

15-Aug-09

	2008 Consumption	2009 Consumption	% Change
January	1,254,509	1,316,542	4.9%
February	1,314,276	1,050,630	-20.1%
March	1,271,005	1,388,422	9.2%
April	1,708,755	1,476,899	-13.6%
May	1,465,558	1,598,318	9.1%
June	1,742,396	1,594,111	-8.5%
July	1,521,037	1,962,007	29.0%
Total	10,277,536	10,386,929	1.1%

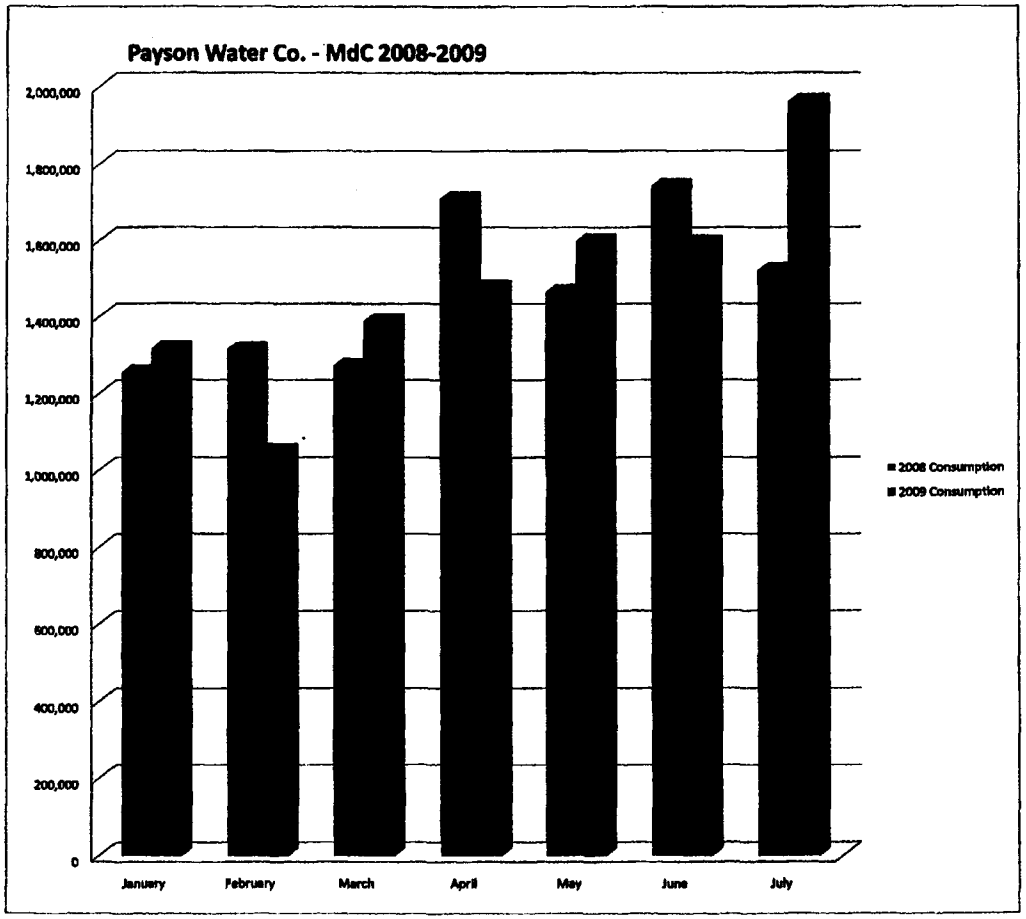


EXHIBIT 2

Payson Water Co.

Water Use Data Sheet

15-Aug-09

NAME OF COMPANY: PAYSON WATER CO. (Mesa del Caballo)
ADEQ PUBLIC WATER SYSTEM: PWS # 04-030

Month/Year	No. Active Customers	Gallons Sold (thousands)	Gallons Pumped (thousands)	Gallons Purchased	Gallons Hauled
Jul-08	376	1,386	840	772	0
Aug-08	378	1,416	794	741	0
Sep-08	376	1,418	897	740	0
Oct-08	374	1,813	718	912	0
Nov-08	373	1,335	775	699	0
Dec-08	371	1,202	508	759	0
Jan-09	373	1,316	731	808	0
Feb-09	371	1,050	714	680	0
Mar-09	372	1,388	739	688	0
Apr-09	371	1,477	878	647	0
May-09	371	1,598	1,017	533	65,000
Jun-09	383	1,594	1,022	508	71,500
Jul-09	385	1,962	1,181	622	292,500

Storage Tank Capacity (Gallons)	Number Each	ADWR Well ID Number	Actual Well Production (gpm)
15,000	3	55-631113	9.0
20,000	1	55-500270	3.6
40,000	1	55-801698	0.0
		55-801699	6.0
		55-631112	3.7
		55-513409	7.2
		55-556158	2.8
		55-588967	1.2
		55-560398	6.6
		55-58229	4.8

Other Water Sources in GPM:	None
Fire Hydrants on System:	No
Total Water Pumped Last 13 Months (000's Gallons):	10,814
Estimated	

EXHIBIT 3

Brooke Utilities, Inc.

2007-2009 Mesa del Caballo Water Conservation

15-Aug-09

	Water Conservation Days			Mandatory Water Conservation Days			Percent Water Conservation Days		
Stage	2007	2008	2009	2007	2008	2009	2007	2008	2009
1	252	259	99						
2	38	59	54	290	318	153	79.5%	87.1%	68.9%
3	65	47	58						
4	10	0	6						
5	0	0	5	75	47	69	20.5%	12.9%	31.1%
Total Days	365	365	222	365	365	222	100.0%	100.0%	100.0%

Note: 2009 data presented through August 11

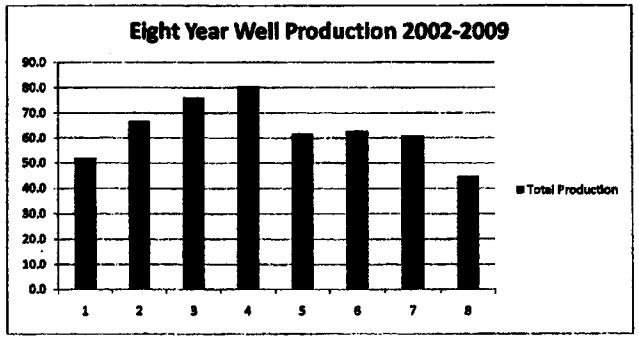
EXHIBIT 4

Brooke Utilities, Inc.

2007-2009 Mesa del Caballo Water Conservation

15-Aug-09

	Well Production (GPM)							
	2002	2003	2004	2005	2006	2007	2008	2009
55-631113	12.0	12.0	8.4	8.0	8.0	8.0	9.0	9.0
55-500270	5.0	5.0	4.0	5.2	5.2	5.2	4.0	3.6
55-801698	5.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0
55-801699	5.0	5.0	4.0	6.4	6.4	6.4	6.4	6.0
55-631112	5.0	5.0	4.0	5.1	5.1	5.1	5.1	3.7
55-513409	10.0	10.0	5.7	7.0	7.0	7.0	3.7	7.2
55-556158	10.0	10.0	9.5	11.0	11.0	11.0	11.2	2.8
55-588967	0.0	12.0	14.6	13.0	11.0	11.0	12.0	1.2
55-560398	0.0	3.0	1.0	1.0	1.0	1.0	1.0	6.6
55-580229	0.0	0.0	25.0	24.0	6.9	8.0	8.5	4.8
Total Production	52.0	67.0	76.2	80.7	61.6	62.7	60.9	44.9



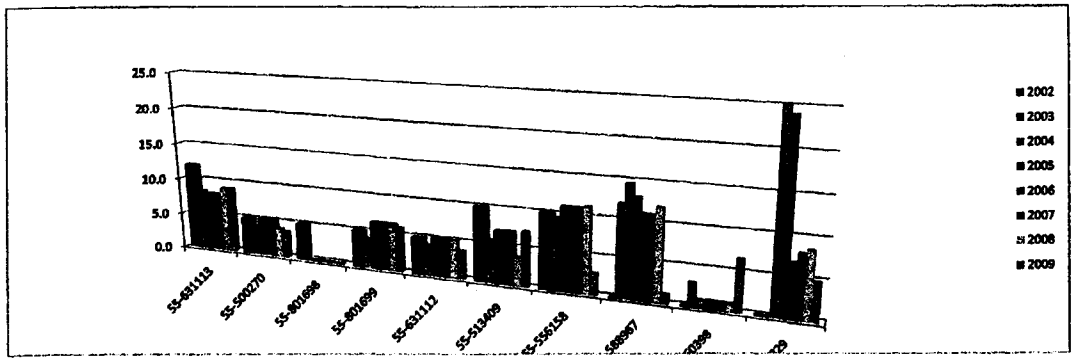


EXHIBIT 5

Saturday Oct. 24

Let's visit with our neighbors and do a little clean up of our streets.

9 am Meet at the El Caballo Club House

9:30-10:30 Pickup trash off our streets

10:30-11:30 Visit with your neighbors, community business people, Payson Water Company spokesperson Myndi Brogdon and the Water Committee. Houston Mesa Fire Department's equipment & facility will be open for viewing. Conservation information will be available and more!

11:30-12:30 Hot dogs and drinks

Make a Difference (in Mesa Del Caballo) Day

RSVP by Tuesday October 20
(so we know how many hot dogs to buy!!)
Ed Schwebel 478-3712
eschwebel1@gmail.com

Music provided by "Sounds Unlimited"

Sponsored by
El Caballo Club & Payson Water Co.

EXHIBIT 6

Zonge Engineering & Research Organization, Inc.
3322 E Fort Lowell
Tucson, AZ 85716
520-327-5501

Geophysical Survey- Mesa Del Caballo

for
Mesa Del Caballo

by
Zonge Engineering & Research Organization, Inc.
Tucson, Arizona
October 20, 2009

Introduction: Zonge Engineering has prepared a brief proposal and preliminary cost estimate for a geophysical survey near Mesa Del Caballo, near Payson, Arizona. The geophysical survey is intended to provide a better understanding of the subsurface structure as it relates to groundwater production. This proposal is based on a topographic and geologic map provided by Mike Plough, as well as on Zonge's prior experience in geophysical surveys as applied to groundwater exploration in the Payson area specifically, and in northern Arizona and Nevada in general. Zonge has not scouted this specific site to date, however.

The geophysical survey will map subsurface changes in resistivity, which can often be related to changes in pore space and pore fluids. Bedrock is often high resistivity relative to overlying material, and fractured, saturated bedrock is often lower resistivity than unfractured bedrock. Areas of high TDS in the groundwater should appear more conductive than equivalent areas of low TDS. Variations in depth to bedrock, faulting, and other structural changes are often also evident as changes in resistivity. Based on prior experience in this area, we propose to use natural source audio-frequency magnetotellurics (AMT), which is a resistivity sounding method used commonly in the minerals, geothermal, and groundwater exploration industries. This method typically has higher lateral resolution than other resistivity methods, and is usually logistically more efficient.

In the area of interest, a portable microprocessor controlled receiver amplifies, filters, processes, and records the naturally occurring magnetic field and electric field signals along lines or at individual stations. Typically, the field crew includes 3 or 4 people total, in one or two pick-up truck-size vehicles. The receiver equipment can be carried by backpack, and no off-road driving is necessary, although the ability to drive off-road often increases the survey speed thereby reducing survey costs.

The geophysical survey data will be sent to Zonge's Tucson office each night for processing and modeling the following day. Preliminary results will then be sent to the client to allow adjustments to the scope of work while the survey is in progress.

Scope of Work: The approximate locations of the suggested survey lines are shown in Figure 1 below.

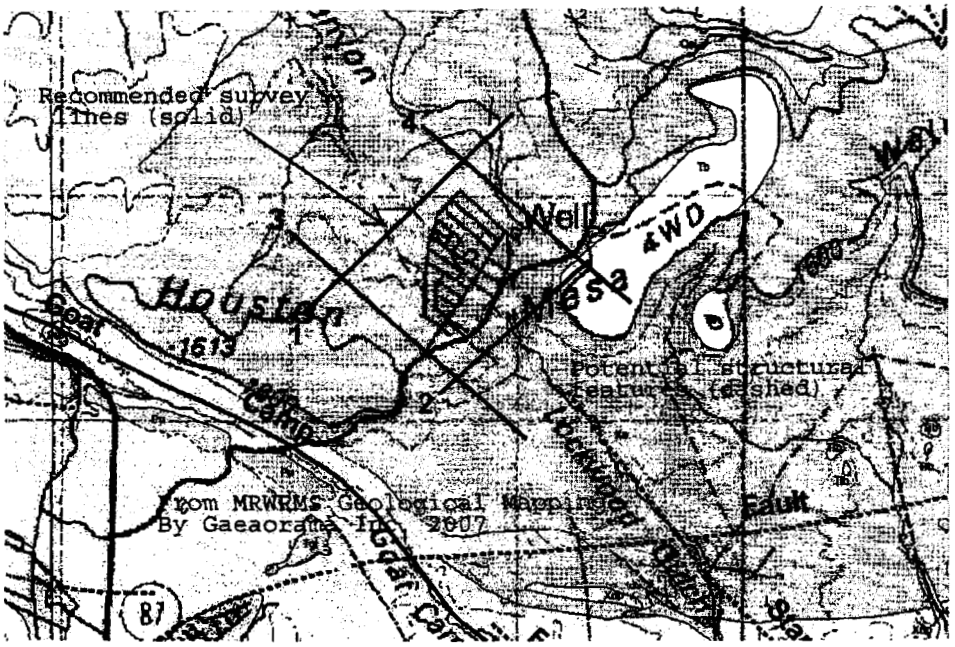


Figure 1: Proposed locations of four survey lines surrounding Mesa Del Caballo.

The exact location of the lines will depend on access, ground cover and cultural features (man-made features such as fences, power lines, pipelines, etc.) that may influence the data. The four lines shown above total approximately 20,000 line feet, and stations will be spaced 200 feet apart along the lines.

A large power line crosses the survey area from southwest to northeast, through the Mesa Del Caballo community, intersecting Lines 3 and 4. It is not known at this time how much influence this power line will have on the data acquisition. As a result, Zonge suggests running this survey as a two phase project in order to evaluate cultural noise from the power line as well as the community itself. In the cost breakdown below, Phase I includes Lines 1 and 2; these lines cross the potential structures of interest approximately perpendicular, and should provide the best resolution of the structures. The data from these lines will be evaluated, and a decision will then be made regarding the value of acquiring data on Lines 3 and 4. During Phase I, if the cultural noise is too strong to acquire valid, useful data, the survey will be discontinued and the possibility of installing a fixed transmitter for a CSAMT survey (controlled source audio-frequency magnetotelluric) will be evaluated and discussed with Mesa Del Caballo.

It is assumed that Mesa Del Caballo representatives will acquire property access rights for the survey, but Zonge will assist in obtaining access permits on USFS property if requested. If line-brushing is necessary due to dense vegetation, the line-brushing costs will be passed on to Mesa Del Caballo at cost, with no handling charges.

Deliverables: The deliverables for this project will be five copies of a report, including the following:

1. Logistical summary of the field activity.
2. Brief review of the CSAMT method, with equipment specifications.
3. Location maps showing station locations with pertinent landmarks and cultural features.
4. Color cross section plots of resistivity results for each survey line.
5. Plan view plots of resistivity at selected depths if applicable.
6. Interpretive maps showing our interpretation of the data with respect to the survey goals.
7. Discussion of our interpretation of the data with respect to any background information that can be provided by Mesa Del Caballo such as geologic maps, prior drilling results, and well logs.
8. The final report, including raw geophysical data, and figures in digital form on diskette or CD.

Proposed Survey Costs: The estimated cost of the AMT survey is shown below. In this estimate, the "Production Survey Costs" include a three-to-four person field crew, vehicles, and all geophysical equipment necessary for the survey operations. Expenses for expendable field supplies (gasoline, survey stakes, motel, per diem, etc.) are estimated, and would be billed at actual cost with no handling charges. Mobilization/demobilization charges may be reduced by 50% if this project is scheduled with another project in the northern Arizona area.

Phase I Estimated Survey Costs (Lines 1 and 2)	
Mobilization/demobilization if necessary (Tucson-Payson-Tucson)	
190 miles X 2 @ $2.60/mile	$ 988.00
Production Survey Costs:	
20 hours @ $225.00/ field hour	$ 4,500.00
Estimated Expenses: (to be billed at actual cost)	
3 days @$500/ day	$ 1,500.00
Data processing:	
2 field days @ $600/field day	$ 1,200.00
Final Report if requested (estimated)	$ 1,500.00
Total Estimated Phase I Survey Cost	**$ 9,688.00**

Phase II Estimated Survey Costs (Lines 3 and 4)	
Production Survey Costs:	
20 hours @ $225.00/ field hour	$ 4,500.00
Estimated Expenses: (to be billed at actual cost)	
2 days @$500/ day	$ 1,000.00
Data processing:	
2 field days @ $600/field day	$ 1,200.00
Final Report if requested (estimated)	(included in Phase I)
Total Estimated Phase II Survey Cost	**$ 6,700.00**

The total estimated survey cost is an estimate only, and not a fixed-price quote. In the event that the survey progresses faster than expected, the total cost would be reduced. The survey scope may be adjusted during the course of the survey if it appears that lines should be extended, deleted, or added. Professional time for meetings and special requests will be billed at $110.00/hour.

Respectfully Submitted,

Zonge Engineering & Research Organization, Inc.
3322 E. Fort Lowell Road
Tucson, AZ 85716
Phone: 520-327-5501
FAX: 520-325-1588
For further information regarding this proposal, contact Norman Carlson.

EXHIBIT

B

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MAR 25 2010
BROOKE UTILITIES

Zonge Engineering and Research Organization. Inc
3322 E. Fort Lowell Rd
Tucson. AZ 85716
Office: (520)327-5501
Fax: (520) 325-1588
www.zonge.com

March 16. 2010

Attention: Myndi Brogdon
Brooke Utilities. Inc.
P.O. Box 82218
Bakersfield. CA 93380

Re: Geophysical AMT survey on the Mesa del Caballo Project

Survey Summary: On February 18th and 19th. 2010. Zonge Engineering and Research Organization. Inc. acquired geophysical natural source audio-frequency magnetotelluric (AMT) survey data on the Mesa del Caballo project. near Payson. Arizona. The survey was intended to assist in understanding the subsurface structure as it relates to groundwater production. Zonge's crew chief on this survey was Tim Nordstrom. and Brooke Utilities' Myndi Brogdon was the primary client contact for this survey. The survey consisted of two short lines. as shown on Figure 1. Due to the dense vegetation. the lines were brushed in advance of the field crew. Stations were spaced 200 feet apart. and the frequency range acquired was from 3 Hz to 1024 Hz. Lines 1 and 2 were oriented southwest to northeast. in order to intersect suspected faulting that is oriented northwest-southeast.

This type of geophysical survey maps subsurface changes in resistivity. which can be related to changes in pore spaces and pore fluids. Bedrock is often high resistivity relative to overlying material. and fractured. saturated bedrock is often lower resistivity than un-fractured bedrock. In addition. areas of high TDS in the groundwater are often more conductive than equivalent areas of low TDS. Variations in depth to bedrock. faulting. and other structural changes are often also evident as changes in resistivity. At the Mesa del Caballo site. the AMT survey was intended to delineate the location of suspected faults (see Figure 2). and to determine whether or not these faults appear low resistivity relative to background.

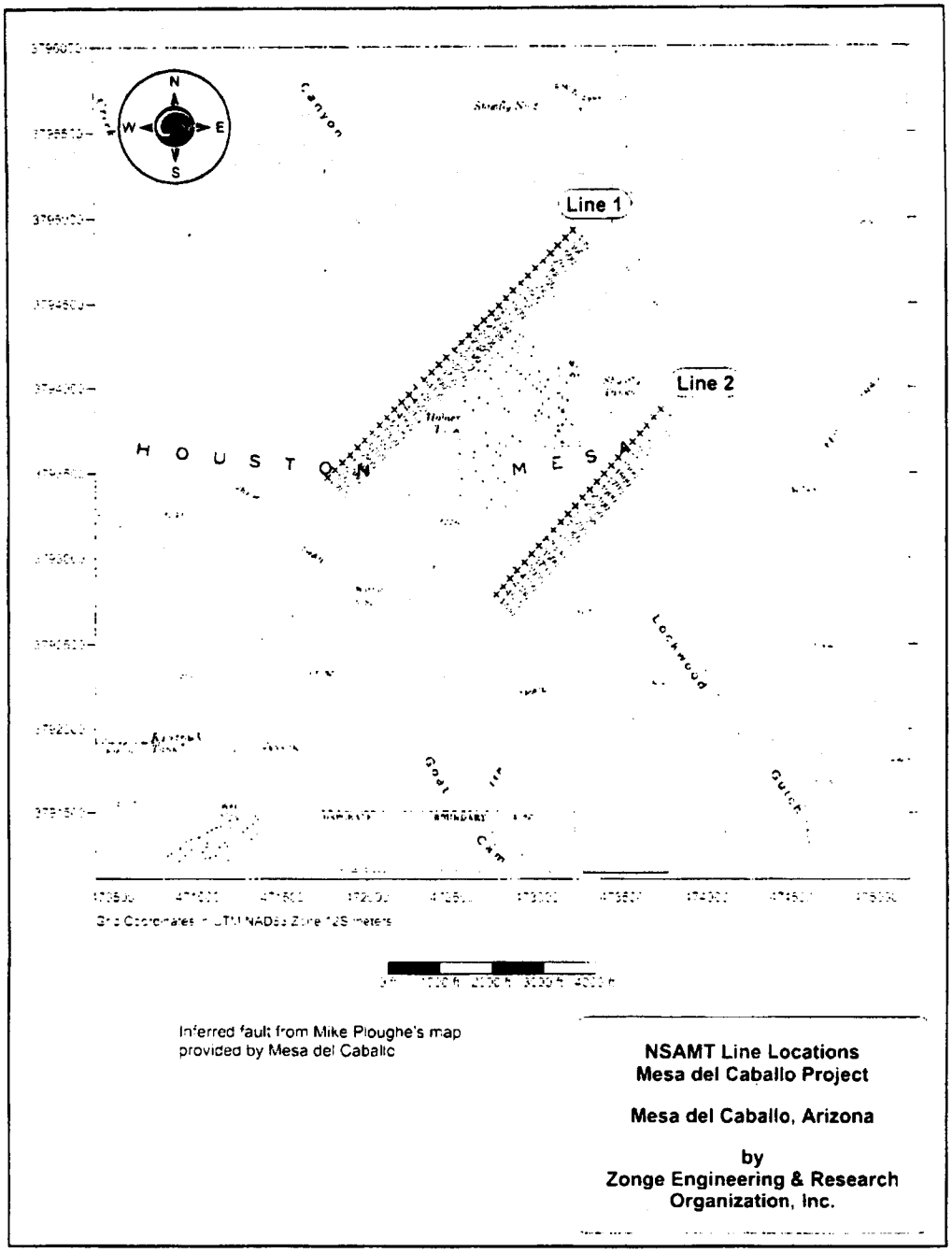


Figure 1- Line and station locations. with faults redrawn from Mike Ploughe's map.

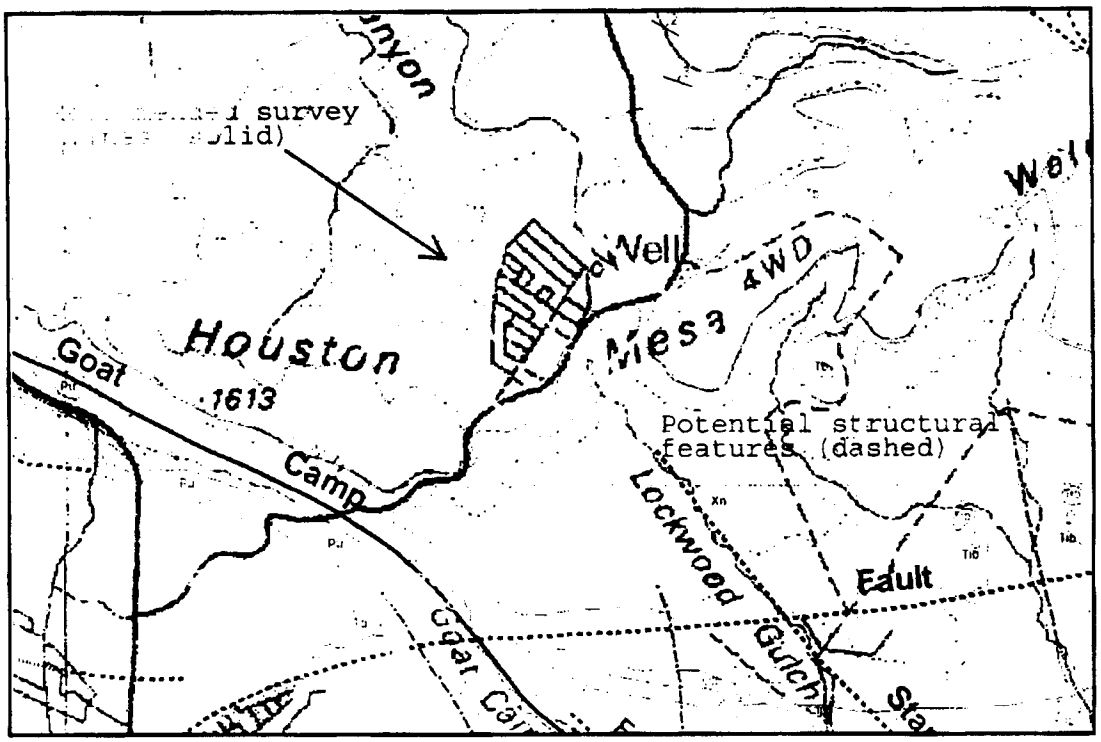


Figure 2- Fault location map provided by Brooke Utilities, showing lines recommended by Mike Ploughe.

Data at the Mesa del Caballo site were moderately noisy, primarily due to culture associated with the housing development itself. Culture includes man-made metallic conductors such as fences, pipelines, and power lines, as well as objects that actually radiate electrical noise such as active power lines, cathodically-protected pipelines, and radio transmitters. It is possible that the cultural effects have masked valid changes in resistivity, or that some of the changes in resistivity that are seen in the data are actually the result of culture.

Summary of Results: Lines 1 and 2 were parallel and intended to map suspected faults oriented approximately northwest-southeast. For discussion purposes, the suspected faults are called Faults A, B, and C, as shown on Figure 1. Figure 3 shows the smooth-model inversion results in the form of the resistivity cross sections for each line. On these cross sections, low resistivities

are shaded toward the red end of the spectrum (yellow-orange-red). and high resistivities are shaded toward the blue end of the spectrum (green-blue). Station numbers. in feet. are shown along the top of each cross section. elevations in meters are down the right side of the plot. with approximate depth in feet down the left side of the plot.

Line 1 was located northwest of Mesa del Caballo. and crossed all three faults. According to geologic maps of the area. this entire line was probably on a thin layer of Tapeats Sandstone. which overlies gneissic granitoid. Resistivities along this line are very high. as would be expected from the geology and from Zonge's prior work in the general area. North of station 1900. surface resistivities are noticeably lower than south of that location. suggesting a possible contact or change in surface material. At depths greater than 400 feet. resistivities between stations 4200 and 3600 are lower than background: this area correlates to the region between Faults A (which intersects the line at station 4200) and B (which intersects the line at station 3400). Fault C. which intersects this line at station 900. is not associated with any change in resistivity.

Line 2 was located southeast of Mesa del Caballo. and according to geologic maps is probably located on the gneissic granitoid. In good agreement with Line 1. the northern part of Line 2 is low resistivity at the surface. from approximately station 1500 to the north end of the line. According to the geologic map. this part of the line (approximately station 1500 to the north end of the line) is on tertiary basalt. which may explain the low resistivities. (Note that Line 1. which also shows surface low resistivities on the north end of the line. does not appear to cross the tertiary basalt. according to the geologic map.) Line 2 crosses Fault A at approximately station 3400. and a narrow zone of low resistivities is evident centered at station 3500. Faults B and C merge. and cross Line 2 at station 2600. but there is no significant change in the resistivity in that vicinity. In the deeper data (greater than 400 feet). low resistivities are evident. however. from station 1300 to station 600.

In this environment. where fractured zones in the bedrock may be more likely to produce more groundwater than un-fractured areas. it is encouraging that an independently inferred fault from the geologic map (Fault A) shows lower resistivities than background on both lines that it crosses. This zone of decreased resistivity is centered at station 3900 on Line 1 and station 3500 on Line 2. and may represent a fractured bedrock zone.

Resistivities do not change in the vicinity of Fault C on either line. and Fault B shows no change on Line 2. but may be the boundary of a low resistivity zone on Line 1. The data from prior work in this area showed that some mapped faults exhibited a decrease in resistivity. but others showed no change or appeared to be a resistive boundary.

A second low resistivity zone (in addition to Fault A) is seen on Line 2. and extends from station 1300 to 600: the geologic map indicates no faults in this area. This zone may correlate with a weaker low resistivity zone on Line 1 that extends from station 2900 to 1900. although there are resistive stations within this stretch online 1.

The geophysical data should now be correlated with other available background geologic. hydrologic. and borehole information for this area. This background information may assist in interpreting which of the above described zones of decreased resistivity might represent the best groundwater target. for example. or whether or not the low resistivities associated with the basalts might represent a good shallow groundwater target. Although the changes in resistivity indicating possible faults or fracture zones discussed above appear valid based on our experience in this environment. other interpretations are possible.

PROJECT LOGISTICS

Survey Summary: The AMT lines were acquired using an electric-field receiver dipole size of 200 feet. Electric-field measurements were made in groups, or "set-ups", of five dipoles concurrently. For each set-up of electric-field measurements, a magnetic field measurement was made simultaneously at the center of the set-up. A total of 58 stations were acquired on the two lines.

The line locations were suggested by Mike Ploughe and Brooke Utilities in conjunction with Zonge, based primarily on the location of inferred faults and on cultural features in the area. Endpoints of the lines were provided to Brooke's survey crew, who flagged the line location for the brush cutting crew. Lines 3 and 4 were considered optional, and have not been surveyed or brushed to date. The Zonge crew used a GPS to verify the locations of the lines. Station location coordinates are appended below to this report.

Field Instrumentation: The receiver used for the AMT survey was a Zonge GDP-32II multi-purpose receiver. This receiver is a backpack-portable, 16-bit, microprocessor-controlled receiver capable of gathering data on as many as 16 channels simultaneously. The electric-field signals were sensed using non-polarizable porous pot electrodes, connected to the receiver with 16-gauge insulated wire. The AMT magnetic-field signal was sensed with a Zonge Ant'4 magnetic field antenna.

Data Quality: Data quality was relatively good throughout this project, and good repeatability between stacks of data was achieved. Standard Zonge field procedure requires that the receiver operator make multiple measurements of each data point while monitoring real-time standard-error values displayed on the screen of the receiver and correlation coefficients. For AMT, multiple blocks of the data are also displayed graphically as resistivity-versus-frequency curves (plotted on a log-log scale), with error bars denoting data scatter for the operator in the field.

Cultural Contamination: A grounded fence crossed Line 1 as shown on Figure 3, but no other known culture intersected the lines. The Mesa del Caballo subdivision is very close to both lines, however, and noise is apparent in the data, particularly around 60 Hz, as would be expected.

Smooth-Model Inversion: Briefly, smooth-model inversion mathematically "back-calculates" (or "inverts") from the measured data to determine a likely location, size and depth of the source or sources of resistivity changes. The results of the smooth-model inversion are intentionally gradational, rather than showing abrupt, "blocky" changes in the subsurface.

The AMT lines were modeled using both 1D and 2D smooth-model inversion programs, called SCSINV and SCS2D respectively. Both sets of model results are used in the interpretation, although Figure 1 shows 1D results, since these results preserve narrow features. The 2D model differs from the 1D model in that the iterative adjustment utilizes information from adjacent stations, and when modeling a given station, it does not assume that the subsurface changes in resistivity only occur vertically. As a result, 2D results are usually smoother horizontally than the 1D results. However, 2D results also often smooth out real, but weak, lateral changes, and when lines are very short, the 2D models often overemphasize and exaggerate small, local features and noise.

The inversion results should not be considered a unique solution, and some ambiguity remains in any mathematical representation of the data.

Respectfully submitted,

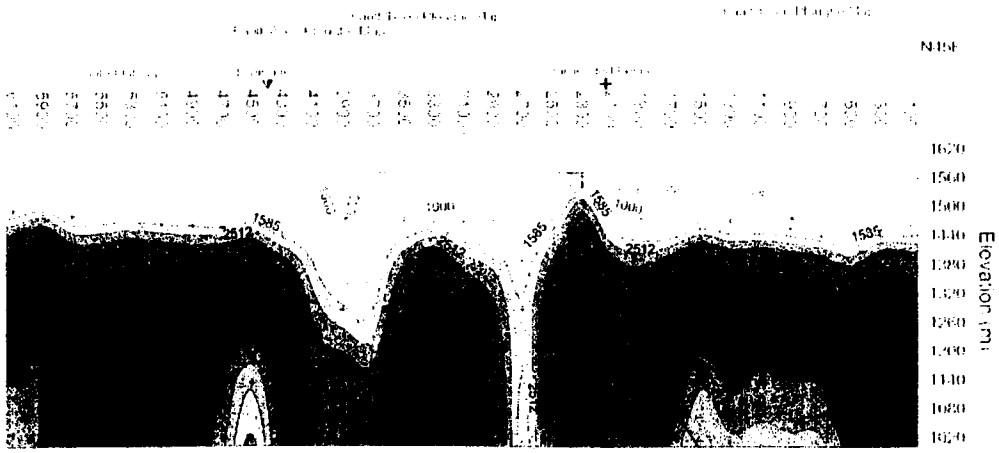
Norman Carlson
Chief Geophysicist
Zonge Engineering & Research Organization, Inc.
3322 E Fort Lowell Road
Tucson, AZ 85716 USA

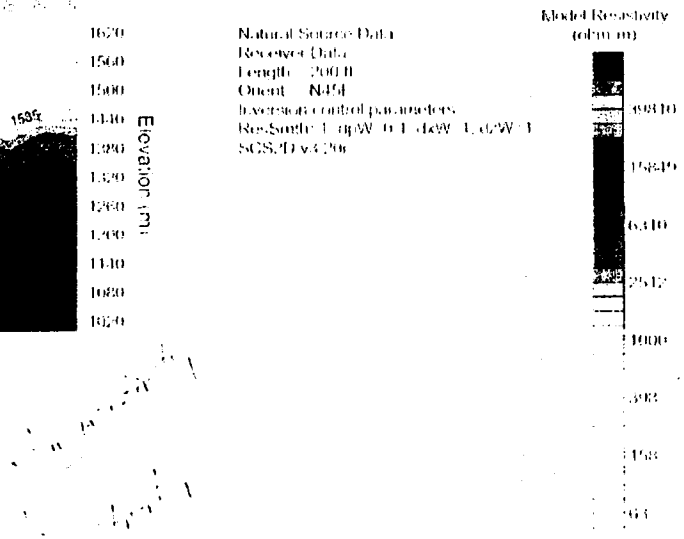
Station Locations in UTM NAD83 Zone 12S meters

Line	Station Center	Easting	Northing
1	100	473217	3794929
1	300	473173	3794885
1	500	473129	3794841
1	700	473085	3794797
1	900	473041	3794753
1	1100	472997	3794709
1	1300	472953	3794665
1	1500	472909	3794621
1	1700	472865	3794577
1	1900	472822	3794532
1	2100	472778	3794488
1	2300	472734	3794444
1	2500	472690	3794400
1	2700	472646	3794356
1	2900	472602	3794312
1	3100	472558	3794268
1	3300	472514	3794224
1	3500	472470	3794180
1	3700	472426	3794136
1	3900	472382	3794092
1	4100	472338	3794048
1	4300	472294	3794004
1	4500	472250	3793960
1	4700	472206	3793916
1	4900	472162	3793872
1	5100	472119	3793827
1	5300	472075	3793783
1	5500	472031	3793739
1	5700	471987	3793695
1	5900	471943	3793651
1	6100	471899	3793607
1	6300	471855	3793563
1	6500	471811	3793519
1	6700	471767	3793475
2	100	473735	3793870
2	300	473693	3793823
2	500	473650	3793776
2	700	473608	3793729
2	900	473565	3793682
2	1100	473523	3793635
2	1300	473480	3793588
2	1500	473438	3793541
2	1700	473396	3793494
2	1900	473353	3793447
2	2100	473311	3793400
2	2300	473268	3793353

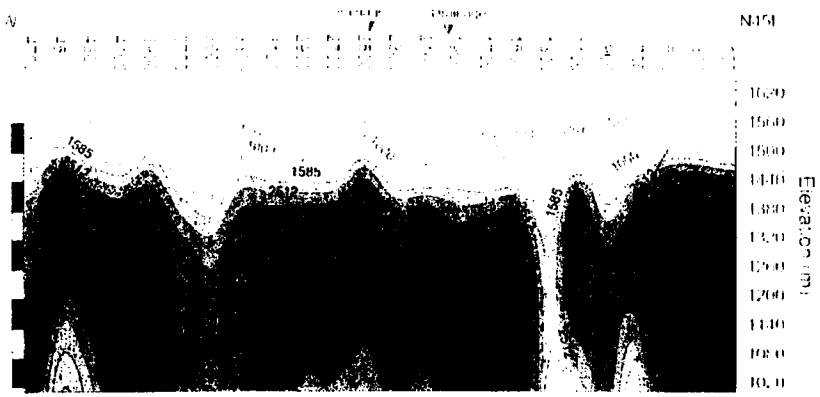
2	2500	473226	3793305
2	2700	473183	3793258
2	2900	473141	3793211
2	3100	473098	3793164
2	3300	473056	3793117
2	3500	473014	3793070
2	3700	472971	3793023
2	3900	472929	3792976
2	4100	472886	3792929
2	4300	472844	3792882
2	4500	472801	3792835
2	4700	472759	3792788

Resistivity Cross Section- Line 1



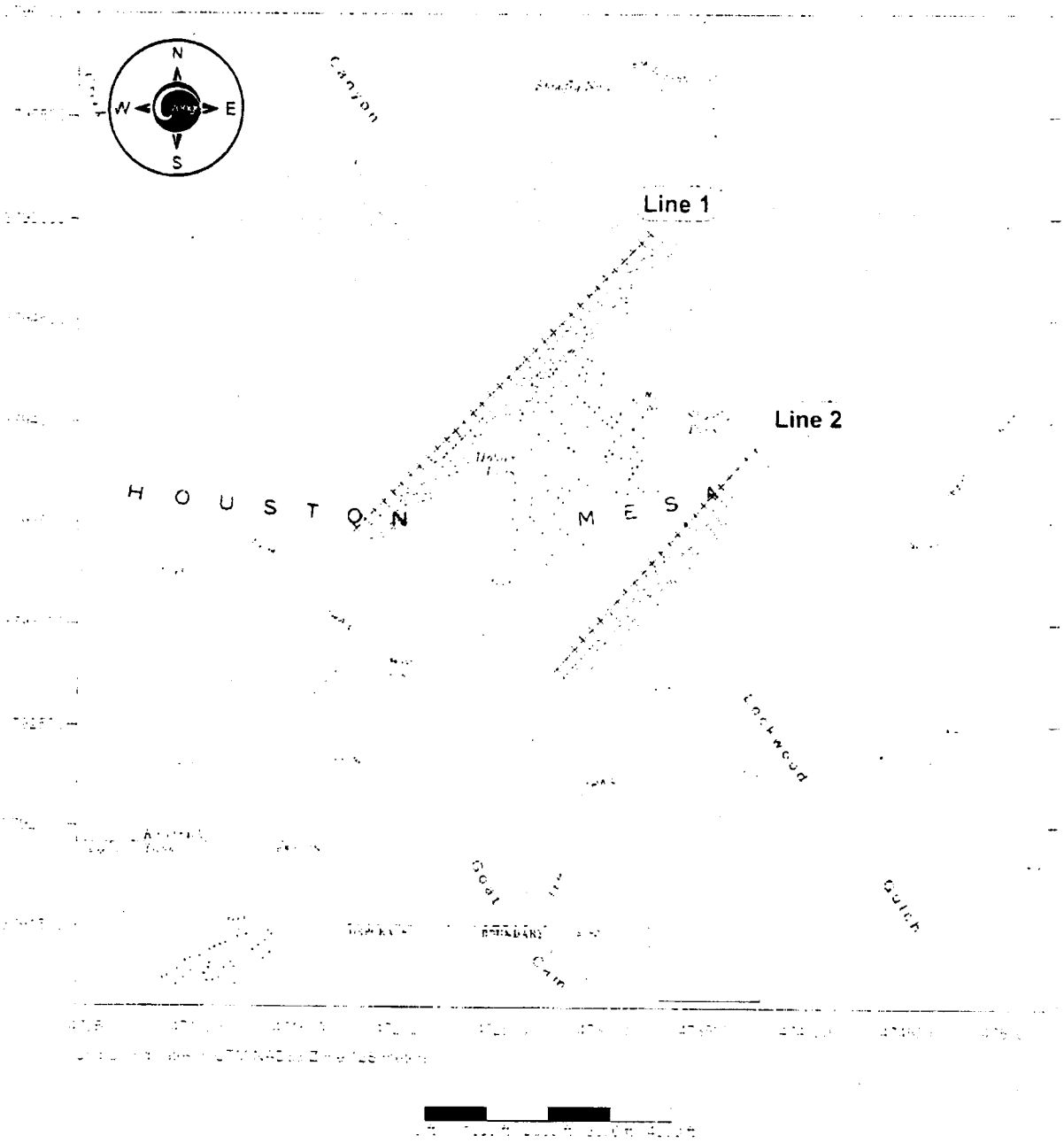


Resistivity Cross Section- Line 2



Mesa Del Caballo Project
Lines 1 and 2

1D Smooth-Model Inversion
Scalar NSAMT Data
by Zonge Engineering

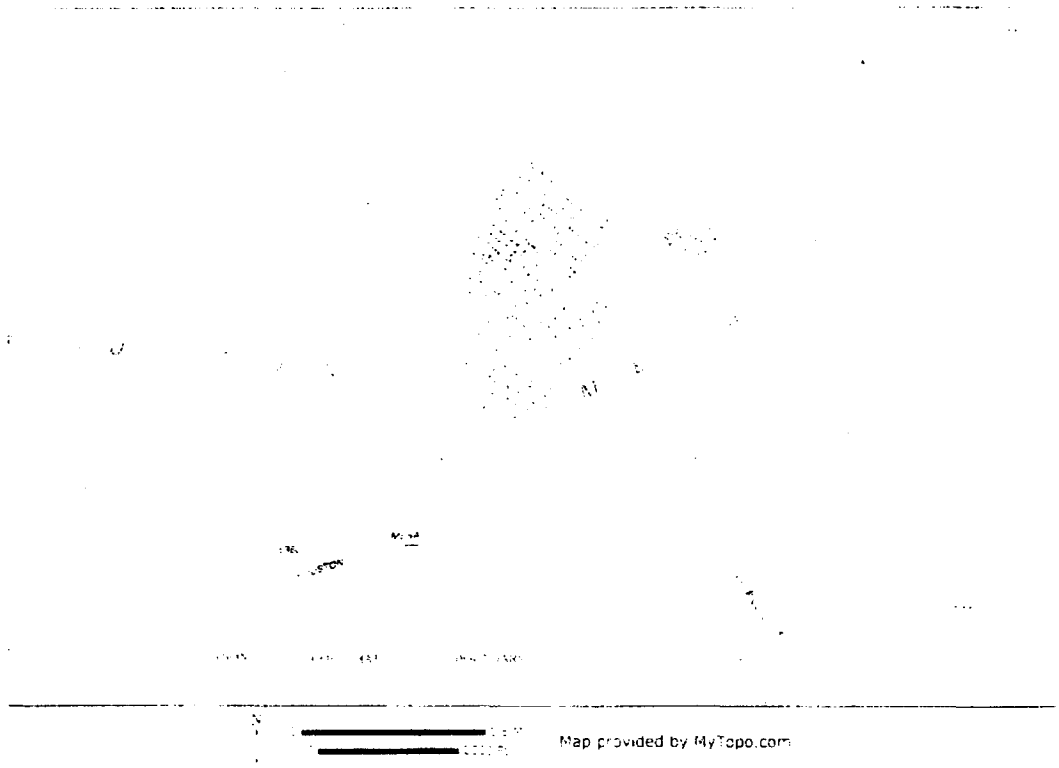


Inferred fault from Mike Ploughe's map
provided by Mesa del Caballo

NSAMT Line Locations
Mesa del Caballo Project

Mesa del Caballo, Arizona

by
Zonge Engineering & Research Organization, Inc.



Map provided by MyTopo.com

EXHIBIT

C

Southwest Ground-water Consultants, Inc.

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APR 20 2010

BROOKE UTILITIES

LETTER OF TRANSMITTAL

PRIVILEGED AND CONFIDENTIAL

TO:	Mr. Bob Hardcastle President Brooke Utilities P. O. Box 82218 Bakersfield, CA 93380	DATE:	April 16, 2010
		DELIVERY:	Mail
FROM:	Kevin Goldman Southwest Ground-water Consultants, Inc. 3033 N. 44th Street, Suite 120 Phoenix, AZ 85018	PAGES:	One report plus this cover
		PROJECT:	Mesa Del Caballo
Copy:	Stephen D. Noel, SGC Ms. Myndi Brogdon, Brooke Utilities	PROJECT NO.	B.1793

REMARKS

Bob:

Please find enclosed one original letter report entitled, "*Mesa del Caballo Zonge CSAMT Survey,*" dated March 30, 2010.

Please let me know if you have any questions or need additional information.

Thank you,

Kevin Goldman
Staff Geologist

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Phoenix, Arizona 85018
(602) 955-5547 Fax (602) 955-7585

Phoenix, Arizona
Prescott, Arizona
Cottonwood, Arizona

Southwest Ground-water Consultants, Inc.

RECEIVED
APR 20 2010
BROOKE UTILITIES

March 30, 2010

Mr. Bob Hardcastle
President, Brooke Utilities
P.O. Box 82218
Bakersfield, California 93380

SUBJECT: MESA DEL CABALLO ZONGE CSAMT SURVEY

Dear Mr. Hardcastle,

Southwest Ground-water Consultants, Inc. (SGC) has prepared the following letter report summarizing the results and findings of Zonge Engineering and Research Organization (Zonge), Inc. The Zonge report is entitled *Geophysical AMT Survey on the Mesa Del Caballo Project*, dated March 16, 2010. A copy of the Zonge report is presented in Attachment I for reference. The SGC interpretation of the Zonge data with respect to the local hydrogeologic conditions and recommended well locations and depths are also presented

ZONGE REPORT REVIEW

Geophysical Survey

Zonge conducted a natural source Audio-frequency Magnetotelluric (AMT) geophysical survey in the immediate vicinity of the Mesa del Caballo development near Payson, Arizona in February, 2010. The purpose of the survey was to identify sub-surface structures that may be areas of increased hydraulic conductivity and subsequent areas of higher ground-water production. These sub-surface structures were then correlated to mapped or inferred surface geologic features to evaluate if these structures extended beneath the Mesa del Caballo community.

The geophysical survey measured the resistivity of the sub-surface material, which is controlled in part by the density and extent of pores (voids) in the rock material and the amount and conductivity of the fluid in the pore space. Bedrock, in this case granite and granitic type rock, is typically more resistant than unconsolidated, fractured, and/or saturated bedrock. The resistivity difference between the more competent granitic bedrock and decomposed and/or fractured bedrock was the key factor in mapping sub-surface fracture zones.

Two survey lines were run in the immediate vicinity of the property roughly perpendicular to mapped and/or inferred northwest and southeast trending structures passing through the development (Figure 1 in Attachment I). Details of the field operations and survey are presented in the Zonge report.

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Survey Results

Review of the geophysical survey results indicates that the upper 200 to 500 feet of material has the lowest measured resistivity values and that these values generally increase with depth. In two specific areas in Line 2 and in three areas in Line 1, the lower resistivity values extend to 2,000 feet in depth. In these zones, the deeper resistivity values are similar to values observed in the upper shallower zones. For example, in the southern resistivity zone mapped on Figure 1 (Attachment II), a resistivity of 6,310 ohm-m observed at a depth of 1,700 feet is the same value as observed at a depth of 700 feet. These resistivity values strongly imply a fractured rock zone exists versus the surrounding higher resistive competent rock material.

SGC has correlated the trends of these lower resistivity zones between Survey Lines 1 and 2, with the surface geologic map prepared by Gaeorama, Inc. (2007, Figure 2, Attachment II). This correlation is presented as Figure 3 (Attachment II) where the low resistivity zones in each survey line are extended through the project area along the general trends of the surface geologic structures mapped by Gaeorama (2007) and expanded by Mr. Mike Ploughe (Faults A, B, and C) as shown on Figure 1 (Attachment II).

These lower resistivity zones have been interpreted as fractured zones within the granitic bedrock associated with the local and regional structures, for example the Lockwood Gulch Fault trending from the southeast to the northwest through the development.

RECOMMENDED WELL LOCATIONS

Review of existing well information in and around the property from the records of the Arizona Department of Water Resources indicates that the local production wells range in depth from approximately 200 feet to 500 feet below land surface (bls). These wells have been completed in the shallower lower resistive material as noted in Figure 4 (Attachment II), and have reported yields ranging from less than 5 gallons per minute (gpm) to 25 gpm. The specific capacity of these wells range from 0.05 gallons per minute per foot of drawdown (gpm/ft) to 0.55 gpm/ft. Based on the local hydrogeologic conditions supported by the geophysical cross-sections, the yield of wells designed to be production wells completed to depths up to 500 feet will be in the 10 to 25 gpm range.

By completing new wells or extending existing wells (if possible) deeper into the similar less resistive/fractured rock, the yield of the wells would be expected to increase at rates similar to the calculated specific capacity of the shallower wells. For example, a 1,000 foot well drilled in the Southern Low Resistivity Zone could yield up to 380 gpm based on a specific capacity on 0.55 gpm/ft where the estimated saturated thickness is 800 feet. This type of projection based on specific capacity data is an upper end estimate because the fractured material tightens (becomes

less fractured/porous) with depth as observed in the geophysical cross-section data (Figure 3, Attachment I) resulting in declining specific capacity values and ultimately lower production rates. However, doubling the potential yield of wells to 50 gpm +/- by completing them to depths of 1,000 feet would be a realistic expectation. Extending wells deeper than 1,000 feet may further increase the well yield, but the specific capacity of the well would be expected to decrease with depth.

The preferred locations for larger capacity wells (1,000 feet +/-) are presented in Figure 3 (Attachment II). These locations are identified as the shaded lower resistivity zones where the low resistivity material, believed to be zones of fractured rock, extends to depths of 2,000 feet bls. Within these areas, two well sites have been identified based on location within the development and within the immediate vicinity of water system facilities that may better support the location of a production well.

Well sites, including Site A, in the Southern Low Resistivity Zone are preferred over the Northern Low Resistivity Zone, including Site B, because the width of the fractured zone in this area appears to be wider at depth. In addition, the Northern Low Resistivity Zone extending from Survey Line 1 is bifurcated and it is unknown where the fracture zone trends into one larger zone as observed in Survey Line 2 (between stations 700 and 1350).

Please call if you have any questions or require additional information.

Sincerely,
Southwest Ground-water Consultants, Inc.

Stephen D. Noel, R.G.
President

REGISTERED GEOLOGIST
CERTIFICATE NO.
17065
STEPHEN D.
NOEL
Date Signed: 4/15/10
ARIZONA, U.S.A.
Expires: 9/30/12

C: Myndi Brogdon

Attachments: I – Zonge Report, March 16, 2010
II – Figures
1 – Low Resistivity Zones
2 – Surface Geologic Map
3 – Proposed Production Well Locations
4 – Well Location Map

ATTACHMENT I

Zonge Report, March 16, 2010

Zonge Engineering and Research Organization, Inc
3322 E. Fort Lowell Rd
Tucson, AZ 85716
Office: (520)327-5501
Fax: (520) 325-1588
www.zonge.com

March 16, 2010

Attention: Myndi Brogdon
Brooke Utilities, Inc.
P.O. Box 82218
Bakersfield, CA 93380

Re: Geophysical AMT survey on the Mesa del Caballo Project

Survey Summary: On February 18th and 19th, 2010, Zonge Engineering and Research Organization, Inc. acquired geophysical natural source audio-frequency magnetotelluric (AMT) survey data on the Mesa del Caballo project, near Payson, Arizona. The survey was intended to assist in understanding the subsurface structure as it relates to groundwater production. Zonge's crew chief on this survey was Tim Nordstrom, and Brooke Utilities' Myndi Brogdon was the primary client contact for this survey. The survey consisted of two short lines, as shown on Figure 1. Due to the dense vegetation, the lines were brushed in advance of the field crew. Stations were spaced 200 feet apart, and the frequency range acquired was from 3 Hz to 1024 Hz. Lines 1 and 2 were oriented southwest to northeast, in order to intersect suspected faulting that is oriented northwest-southeast.

This type of geophysical survey maps subsurface changes in resistivity, which can be related to changes in pore spaces and pore fluids. Bedrock is often high resistivity relative to overlying material, and fractured, saturated bedrock is often lower resistivity than un-fractured bedrock. In addition, areas of high TDS in the groundwater are often more conductive than equivalent areas of low TDS. Variations in depth to bedrock, faulting, and other structural changes are often also evident as changes in resistivity. At the Mesa del Caballo site, the AMT survey was intended to delineate the location of suspected faults (see Figure 2), and to determine whether or not these faults appear low resistivity relative to background.

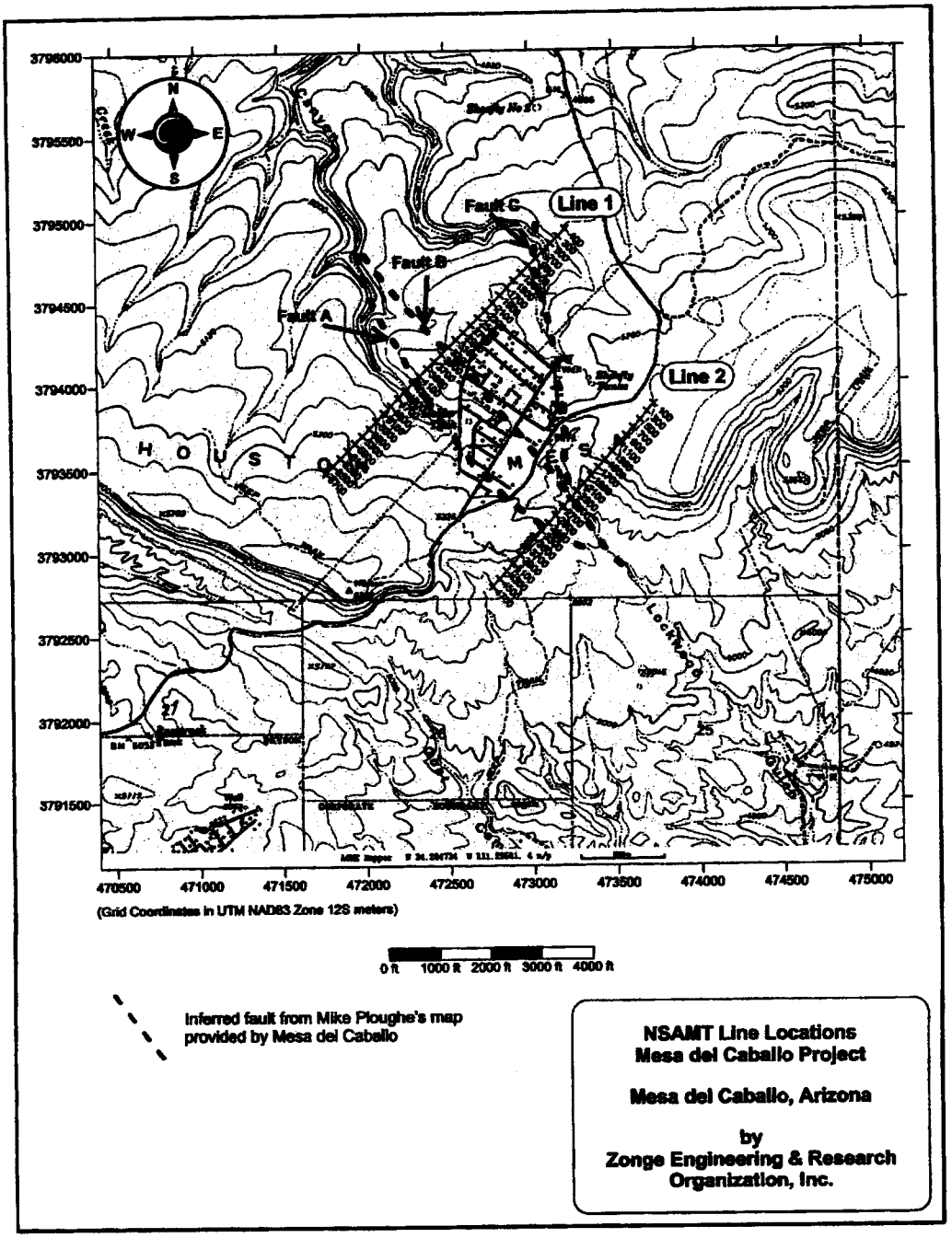


Figure 1- Line and station locations, with faults redrawn from Mike Ploughe's map.

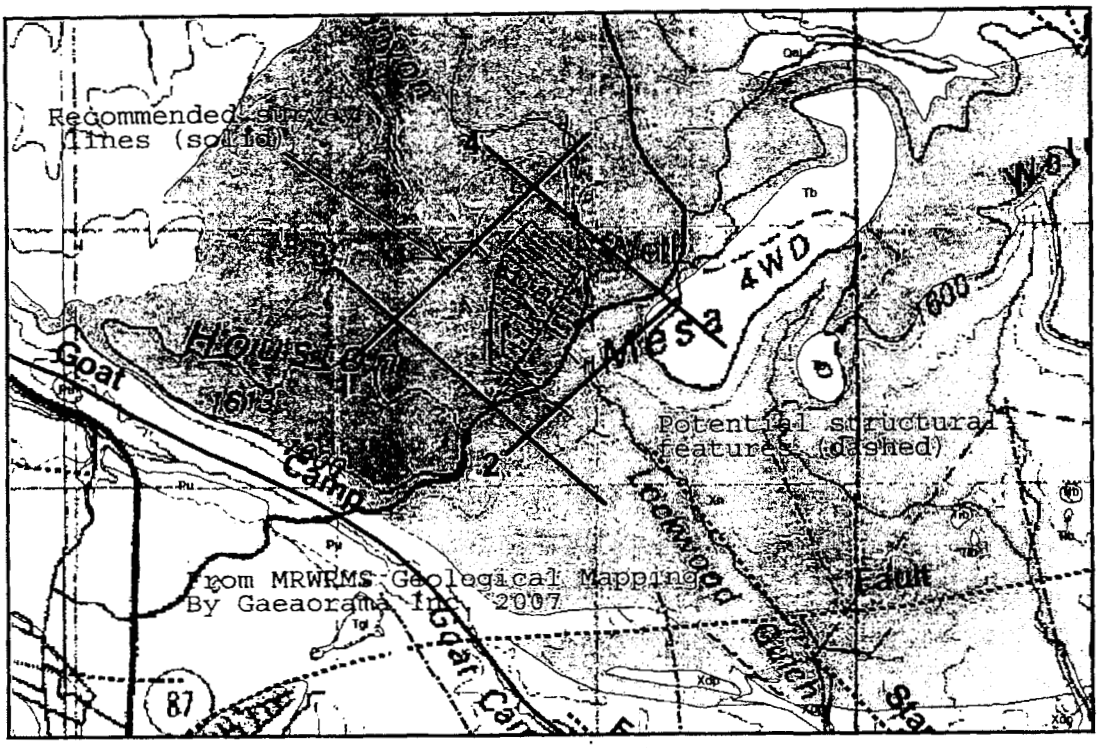


Figure 2- Fault location map provided by Brooke Utilities, showing lines recommended by Mike Ploughe.

Data at the Mesa del Caballo site were moderately noisy, primarily due to culture associated with the housing development itself. Culture includes man-made metallic conductors such as fences, pipelines, and power lines, as well as objects that actually radiate electrical noise such as active power lines, cathodically-protected pipelines, and radio transmitters. It is possible that the cultural effects have masked valid changes in resistivity, or that some of the changes in resistivity that are seen in the data are actually the result of culture.

Summary of Results: Lines 1 and 2 were parallel and intended to map suspected faults oriented approximately northwest-southeast. For discussion purposes, the suspected faults are called Faults A, B, and C, as shown on Figure 1. Figure 3 shows the smooth-model inversion results in the form of the resistivity cross sections for each line. On these cross sections, low resistivities

are shaded toward the red end of the spectrum (yellow-orange-red), and high resistivities are shaded toward the blue end of the spectrum (green-blue). Station numbers, in feet, are shown along the top of each cross section, elevations in meters are down the right side of the plot, with approximate depth in feet down the left side of the plot.

Line 1 was located northwest of Mesa del Caballo, and crossed all three faults. According to geologic maps of the area, this entire line was probably on a thin layer of Tapeats Sandstone, which overlies gneissic granitoid. Resistivities along this line are very high, as would be expected from the geology and from Zonge's prior work in the general area. North of station 1900, surface resistivities are noticeably lower than south of that location, suggesting a possible contact or change in surface material. At depths greater than 400 feet, resistivities between stations 4200 and 3600 are lower than background; this area correlates to the region between Faults A (which intersects the line at station 4200) and B (which intersects the line at station 3400). Fault C, which intersects this line at station 900, is not associated with any change in resistivity.

Line 2 was located southeast of Mesa del Caballo, and according to geologic maps is probably located on the gneissic granitoid. In good agreement with Line 1, the northern part of Line 2 is low resistivity at the surface, from approximately station 1500 to the north end of the line. According to the geologic map, this part of the line (approximately station 1500 to the north end of the line) is on tertiary basalt, which may explain the low resistivities. (Note that Line 1, which also shows surface low resistivities on the north end of the line, does not appear to cross the tertiary basalt, according to the geologic map.) Line 2 crosses Fault A at approximately station 3400, and a narrow zone of low resistivities is evident centered at station 3500. Faults B and C merge, and cross Line 2 at station 2600, but there is no significant change in the resistivity in that vicinity. In the deeper data (greater than 400 feet), low resistivities are evident, however, from station 1300 to station 600.

In this environment, where fractured zones in the bedrock may be more likely to produce more groundwater than un-fractured areas, it is encouraging that an independently inferred fault from the geologic map (Fault A) shows lower resistivities than background on both lines that it crosses. This zone of decreased resistivity is centered at station 3900 on Line 1 and station 3500 on Line 2, and may represent a fractured bedrock zone.

Resistivities do not change in the vicinity of Fault C on either line, and Fault B shows no change on Line 2, but may be the boundary of a low resistivity zone on Line 1. The data from prior work in this area showed that some mapped faults exhibited a decrease in resistivity, but others showed no change or appeared to be a resistive boundary.

A second low resistivity zone (in addition to Fault A) is seen on Line 2, and extends from station 1300 to 600; the geologic map indicates no faults in this area. This zone may correlate with a weaker low resistivity zone on Line 1 that extends from station 2900 to 1900, although there are resistive stations within this stretch online 1.

The geophysical data should now be correlated with other available background geologic, hydrologic, and borehole information for this area. This background information may assist in interpreting which of the above described zones of decreased resistivity might represent the best groundwater target, for example, or whether or not the low resistivities associated with the basalts might represent a good shallow groundwater target. Although the changes in resistivity indicating possible faults or fracture zones discussed above appear valid based on our experience in this environment, other interpretations are possible.

PROJECT LOGISTICS

Survey Summary: The AMT lines were acquired using an electric-field receiver dipole size of 200 feet. Electric-field measurements were made in groups, or "set-ups", of five dipoles concurrently. For each set-up of electric-field measurements, a magnetic field measurement was made simultaneously at the center of the set-up. A total of 58 stations were acquired on the two lines.

The line locations were suggested by Mike Ploughe and Brooke Utilities in conjunction with Zonge, based primarily on the location of inferred faults and on cultural features in the area. Endpoints of the lines were provided to Brooke's survey crew, who flagged the line location for the brush cutting crew. Lines 3 and 4 were considered optional, and have not been surveyed or brushed to date. The Zonge crew used a GPS to verify the locations of the lines. Station location coordinates are appended below to this report.

Field Instrumentation: The receiver used for the AMT survey was a Zonge GDP-32II multi-purpose receiver. This receiver is a backpack-portable, 16-bit, microprocessor-controlled receiver capable of gathering data on as many as 16 channels simultaneously. The electric-field signals were sensed using non-polarizable porous pot electrodes, connected to the receiver with 16-gauge insulated wire. The AMT magnetic-field signal was sensed with a Zonge Ant/4 magnetic field antenna.

Data Quality: Data quality was relatively good throughout this project, and good repeatability between stacks of data was achieved. Standard Zonge field procedure requires that the receiver operator make multiple measurements of each data point while monitoring real-time standard-error values displayed on the screen of the receiver and correlation coefficients. For AMT, multiple blocks of the data are also displayed graphically as resistivity-versus-frequency curves (plotted on a log-log scale), with error bars denoting data scatter for the operator in the field.

Cultural Contamination: A grounded fence crossed Line 1 as shown on Figure 3, but no other known culture intersected the lines. The Mesa del Caballo subdivision is very close to both lines, however, and noise is apparent in the data, particularly around 60 Hz, as would be expected.

Smooth-Model Inversion: Briefly, smooth-model inversion mathematically "back-calculates" (or "inverts") from the measured data to determine a likely location, size and depth of the source or sources of resistivity changes. The results of the smooth-model inversion are intentionally gradational, rather than showing abrupt, "blocky" changes in the subsurface.

The AMT lines were modeled using both 1D and 2D smooth-model inversion programs, called SCSINV and SCS2D respectively. Both sets of model results are used in the interpretation, although Figure 1 shows 1D results, since these results preserve narrow features. The 2D model differs from the 1D model in that the iterative adjustment utilizes information from adjacent stations, and when modeling a given station, it does not assume that the subsurface changes in resistivity only occur vertically. As a result, 2D results are usually smoother horizontally than the 1D results. However, 2D results also often smooth out real, but weak, lateral changes, and when lines are very short, the 2D models often overemphasize and exaggerate small, local features and noise.

The inversion results should not be considered a unique solution, and some ambiguity remains in any mathematical representation of the data.

Respectfully submitted,

Norman Carlson
Chief Geophysicist
Zonge Engineering & Research Organization, Inc.
3322 E Fort Lowell Road
Tucson, AZ 85716 USA

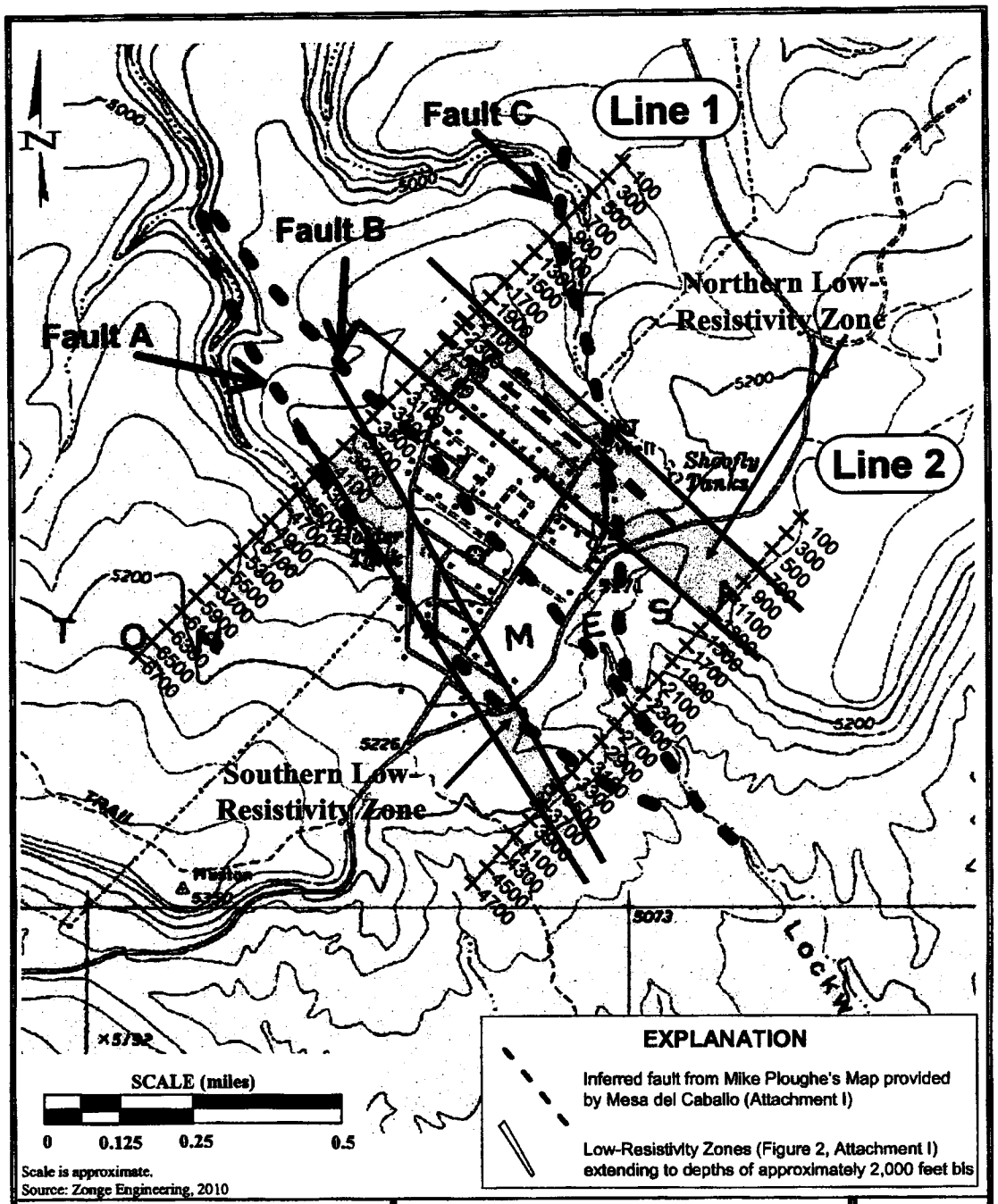
Station Locations in UTM NAD83 Zone 12S meters

Line	Station Center	Easting	Northing
1	100	473217	3794929
1	300	473173	3794885
1	500	473129	3794841
1	700	473085	3794797
1	900	473041	3794753
1	1100	472997	3794709
1	1300	472953	3794665
1	1500	472909	3794621
1	1700	472865	3794577
1	1900	472822	3794532
1	2100	472778	3794488
1	2300	472734	3794444
1	2500	472690	3794400
1	2700	472646	3794356
1	2900	472602	3794312
1	3100	472558	3794268
1	3300	472514	3794224
1	3500	472470	3794180
1	3700	472426	3794136
1	3900	472382	3794092
1	4100	472338	3794048
1	4300	472294	3794004
1	4500	472250	3793960
1	4700	472206	3793916
1	4900	472162	3793872
1	5100	472119	3793827
1	5300	472075	3793783
1	5500	472031	3793739
1	5700	471987	3793695
1	5900	471943	3793651
1	6100	471899	3793607
1	6300	471855	3793563
1	6500	471811	3793519
1	6700	471767	3793475
2	100	473735	3793870
2	300	473693	3793823
2	500	473650	3793776
2	700	473608	3793729
2	900	473565	3793682
2	1100	473523	3793635
2	1300	473480	3793588
2	1500	473438	3793541
2	1700	473396	3793494
2	1900	473353	3793447
2	2100	473311	3793400
2	2300	473268	3793353

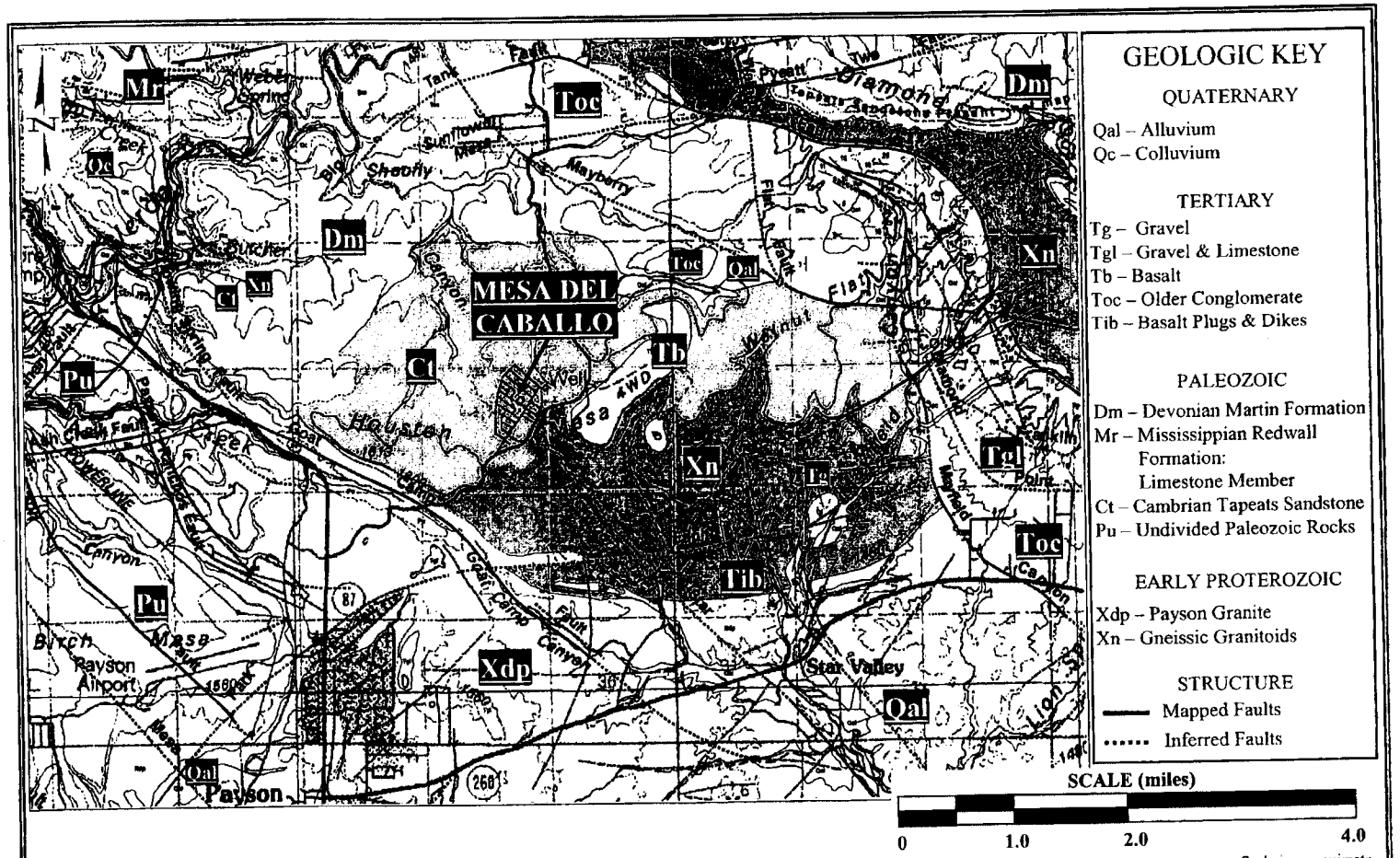
2	2500	473226	3793305
2	2700	473183	3793258
2	2900	473141	3793211
2	3100	473098	3793164
2	3300	473056	3793117
2	3500	473014	3793070
2	3700	472971	3793023
2	3900	472929	3792976
2	4100	472886	3792929
2	4300	472844	3792882
2	4500	472801	3792835
2	4700	472759	3792788

ATTACHMENT II

Figure 1 – Low Resistivity Zones
Figure 2 – Surface Geologic Map
Figure 3 – Proposed Production Well Locations
Figure 4 – Well Location map



Southwest Ground-water Consultants, Inc. **March 26, 2010** **Project B.1793**	**LOW-RESISTIVITY ZONES** **Mesa del Caballo, Gila County, Arizona**	**Figure 1**



Source: Gaeaorama, Inc., 2007, Geologic Map of the Mogollon Rim Water Resources Management Study Area, Northern Gila County, Arizona. 1:50,000.

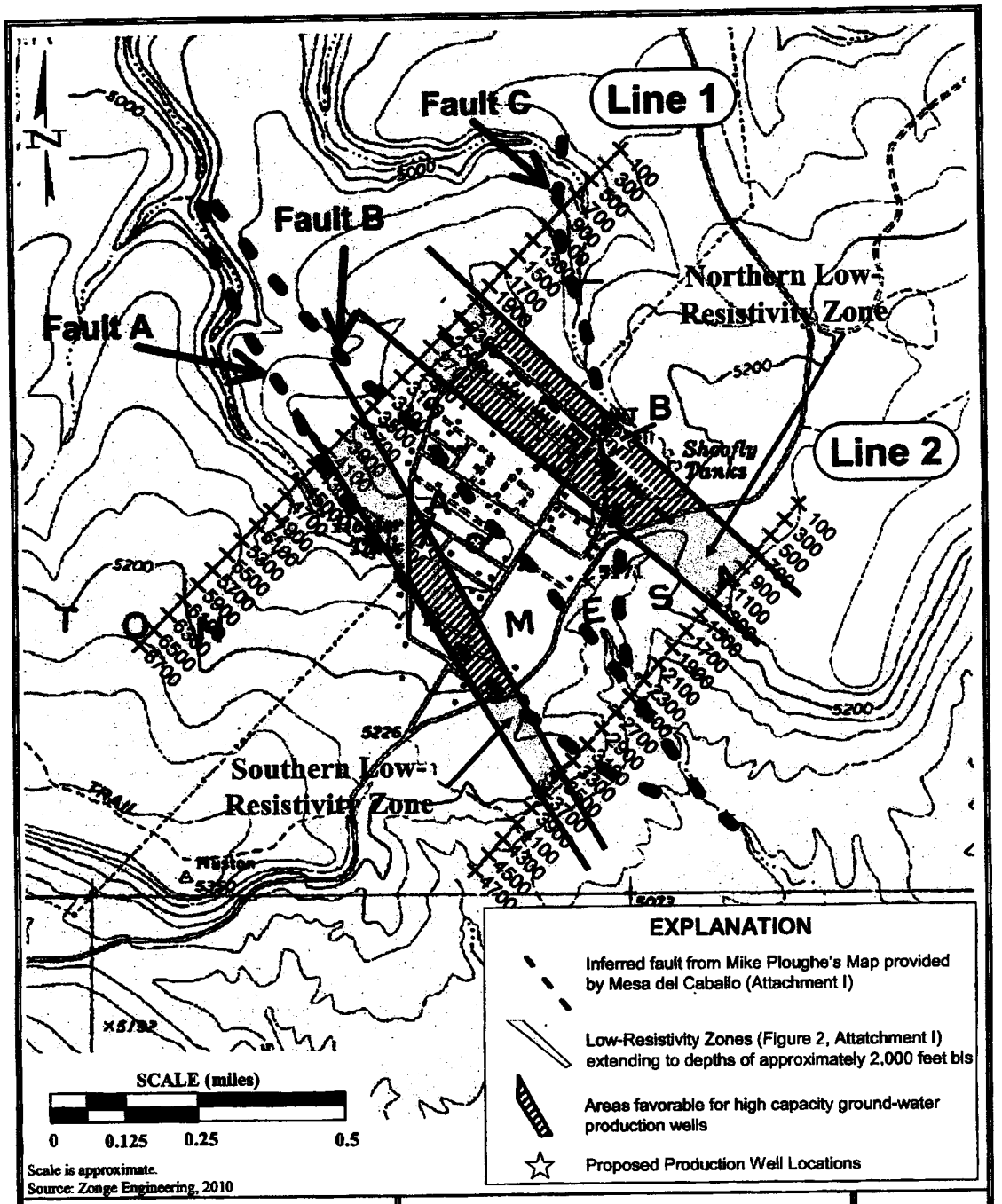
Southwest Ground-water Consultants, Inc.

March 26, 2010 **Project B.1793**

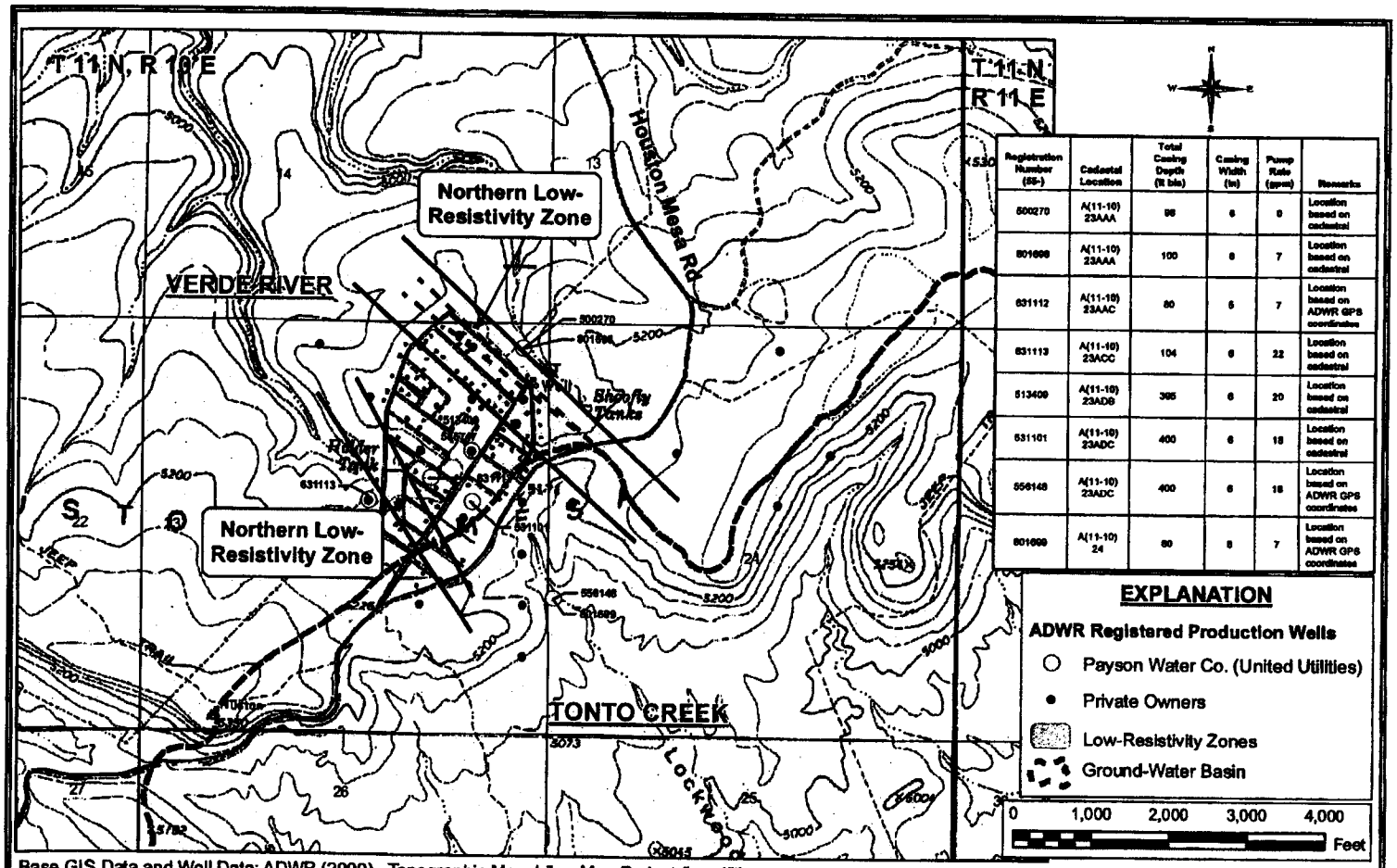
SURFACE GEOLOGIC MAP

Mesa del Caballo, Gila County, Arizona

Figure 2



Southwest Ground-water Consultants, Inc. **March 26, 2010** **Project B.1793**	**PROPOSED PRODUCTION WELL LOCATIONS** **Mesa del Caballo, Gila County, Arizona**	**Figure 3**



Registration Number (55-)	Cadastral Location	Total Casing Depth (ft bls)	Casing Width (in)	Pump Rate (gpm)	Remarks
500270	A(11-10) 23AAA	99	6	9	Location based on cadastral
501698	A(11-10) 23AAA	100	6	7	Location based on cadastral
631112	A(11-10) 23AAC	80	6	7	Location based on ADWR GPS coordinates
631113	A(11-10) 23ACC	104	6	22	Location based on cadastral
513409	A(11-10) 23ADB	395	6	20	Location based on cadastral
631101	A(11-10) 23ADC	400	6	18	Location based on cadastral
556148	A(11-10) 23ADC	400	6	18	Location based on ADWR GPS coordinates
501699	A(11-10) 24	80	6	7	Location based on ADWR GPS coordinates

Base GIS Data and Well Data: ADWR (2009) Topographic Map: Libre Map Project (http://libremap.org - Accessed 3/25/10)

Southwest Ground-water Consultants, Inc.

March 26, 2010 Project B.1793

WELL LOCATION MAP

Mesa del Caballo, Gila County, Arizona

Figure 4

EXHIBIT
KMR-1

Document # 149527

Kathleen M. Reidhead
14406 S. Cholla Canyon Dr.
Phoenix, AZ 85044
Telephone: 480-704-0261

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO: W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR AUTHORITY TO: (1) ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM; AND (2) ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	DOCKET NO: W-03514A-13-0142

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2013 NOV 14 P 1:39
AZ CORP COMMISSION
DOCKET CONTROL

DIRECT TESTIMONY BY INTERVENORS
PHASE 2

Pursuant to the Procedural Order issued on October 29, 2013, Kathleen M. Reidhead, "KMR", is granted Intervention in the above-captioned matter.

KMR is a long-standing residential customer served by the Public Service Utility Company, Payson Water Company, "PWC", residing part-time within the physical boundaries of the CC&N in the community of Deer Creek Village, "DCV", that is part of the former United Utilities system and has a vested interest in the ramifications of these proceedings. The system is also known as ADEQ's Public Water System number 04-~~070~~ 064 KR

PWC has a history of complaints of poor service and allegations of unlawful practices which have created a public atmosphere of distrust towards the Company by the Ratepayers. Public comment at the Phase 1 Hearing attests to that. Attached as Exhibit A are six newspaper articles published by the Payson Roundup between 2009 and 2013 documenting some of these allegations. Also noted, as

evidence of this claim, are two yet-unresolved formal complaints filed with the Arizona Corporation Commission, "ACC", against PWC, Docket Nos. W-03514A-12-007 and W-03514A-12-008.

KMR received a ***Public Notice of Applications by Payson Water Co., Inc., Docket Nos. W-03514A-13-0111 and W-03514A-13-0142 (consolidated)*** on September 20, 2013 in her regular monthly water bill. In this notice, details of the consolidated case were disclosed. This was her first knowledge of any water shortages in a community called Mesa del Caballo, "MdC", which is physically located approximately 20 miles away from DCV. The 5-day notice received of the Public Hearing scheduled for September 25, 2013 was in violation of the Arizona Administrative Code R14-3-109.

The public notice issued in this case incorrectly informed the ratepayers of DCV of the Company's proposal to increase the base rate from $17.00 to $39.24/month. As a ratepayer of DCV, KMR asserts that her household has been paying $16.00/month for the base rate and $1.93/1,000 gallons for the commodity charge for as long as she and her husband can remember. She believes that DCV was actually part of the former United Utilities, not the former C & S System, as stated on the Public Notice. She has reviewed ACC Decision No. 62401 from 03/30/2000, which shows an Intervenor from the Deer Creek Village Homeowners Association in the prior United Utilities rate case, which provides evidence of this assertion. It appears that the ratepayers of Gisela and the Triple T Water System were actually the former C & S System and were ordered in ACC Decision No. 62320 on 02/17/2000 to pay $17.00/month for the base rate, not $16.00/month as stated on the Public Notice for this case. These inaccuracies on the Public Notice , in addition to the late notice, serve to erode public confidence in the management abilities of the new President of PWC (effective as of June 1, 2013), Mr. Jason Williamson.

On September 25, 2013, KMR attended the Phase 1 Public Hearing at 10:00 am at the Arizona Corporation Commission's offices, 1200 West Washington Street, Hearing Room No. 2, Phoenix, Arizona 85007 and gave a public comment, objecting to the late notice and expedited nature of the case. It was stated by her, among other things, that 5 days had not been enough time to digest the details of the case and she thought that she was being treated unfairly. She submitted a Motion to Intervene in the case on September 26, 2013 and was granted Intervenor status on October 29, 2013. She requests an explanation as to why the two cases were consolidated as they were? If the costs for the MdC pipeline debt (case W-03514A-13-0142) was intended to be imposed solely on MdC ratepayers, as was stated during the ACC's Open Meeting on October 16, 2013, why then were the two cases filed separately, then later consolidated and bifurcated on August 26, 2013? This action had the effect of further increasing the public's distrust of PWC and its new President, Mr. Jason Williamson, as is evidenced by the more than 45 letters submitted by ratepayers of the 8 communities shortly after the Public Notice was delivered. Those letters to the ACC were overwhelmingly in opposition. PWC's action of consolidating, bifurcating & expediting the case is the main source of confusion and public distrust in this proceeding.

After reviewing documents posted on the docket of the consolidated case, KMR lodged complaints with the ACC relating to lack of supporting evidence, discrepancies in testimony, lack of alternate solutions offered and the expedited nature of the proceedings, among other things, which she alleges unfairly advantages PWC and disadvantages ratepayers in this matter. These complaints are

documented in letters dated September 26, 2013, September 30, 2013, October 1, 2013, October 4, 2013, October 7, 2013 (2 separate letters), October 10, 2013, October 11, 2013 and October 14, 2013, all of which are currently posted to the Docket. These letters (and letters from other ratepayers) note numerous and specific details of the case that expand the atmosphere of distrust the public has for PWC.

PWC asserts that it has chosen to solve water shortages in the MdC community via a connection to a future supply of renewable water from the Cragin Reservoir via a pipeline project. KMR asserts that only ratepayers from MdC participated in any such discussions leading to this decision. Therefore, ratepayers from the other 7 communities have not been informed about the matter, afforded ample time to understand the cause of the water shortages, or the other options available to solve the problem, nor the viability, benefits, cost & scope of this expensive project. She asserts that ratepayers from the other 7 communities should not pay for any portion of this infrastructure project or any future costs associated with delivery of water from the Cragin Reservoir to MdC, as they will receive no benefit from it.

KMR is firmly opposed to consolidation of the 8 communities (specifically, Mesa del Caballo, Mead's Ranch, East Verde Estates, Flowing Springs, Geronimo Estates/Elusive Acres, Whispering Pines, Gisela/Tonto Creek Shores and Deer Creek Village) for ratemaking purposes. As is evidenced by the strong and clear opposition expressed from ratepayers of the 7 outlying communities served by PWC to paying for any portion of the estimated $1,238,000 pipeline infrastructure project for the MdC community, it is not perceived to be just and reasonable to pay for something without receiving benefit. These 8 communities served by PWC are in rural areas, separated by many miles distance. Each community has its own water resources (some with wells, others will have wells + surface water pipelines + possible water hauling), infrastructure, equipment and deficiencies that are unique to each community and are not interconnected with the others. Accordingly, KMR proposes that each community be treated separately for ratemaking, based on each community's separate costs of service.

KMR is requesting full cost of service studies be conducted for each of the 8 communities served by PWC so that all parties may make their own reasoned proposals for rates, consistent with sound ratemaking principles. Some of the following considerations may be important to evaluate for each of the 8 PWC communities:

1) What is the utility's allowed rate of return on investment?
2) What are the current operating expenses, depreciation, taxes + rate of return for water service provided in that community?
3) What is the asset value for the plant in that community?
4) Is the utility using ground water, surface water, or a combination? Identify all sources and anticipated costs to produce.
5) At what rate are the wells producing water? Are there any known hydrology problems?
6) Has PWC ever experienced water shortages there, even during peak summer periods?
7) Has water ever been hauled into that community from any other PWC community? If so, how much is typical?

8) Has water ever been hauled out from that community's supply to other PWC communities? If so, how much is typical?
9) What is the system age? Is the infrastructure adequate at the current time for servicing that community? Are there any known infrastructure deficiencies currently needing addressed? If so, what are they?
10) What is the business plan and correlating budget allocated by PWC to maintain and renovate that community's water system?

The ACC has long been aware of the inferior infrastructure of some of PWC's systems. As noted in Decision No. 71902 dated September 28, 2010, Mr. Marlin Scott, a Staff Engineer for ACC, states that "the MdC System's 105,000 gallons of storage capacity is sufficient to serve only 305 connections, and this factor, coupled with the poor water production of the nine wells on the system, create the Company's water shortages on the MdC system." It appears that the ACC desired to address those concerns at the next permanent rate case, but PWC delayed filing for that rate increase as ordered, which was "no later than one year from the effective date of the order". On November 11, 2011, in Decision 72679, the ACC granted PWC an extension of time to file until March 12, 2012. On March 21, 2013, more than one year past PWC's missed deadline, the ACC ordered PWC, in Decision No. 73774, to file their permanent rate case within 30 days. It is stated in that Decision that "Continued noncompliance with Commission decisions could result in the Company being charged with a violation of A.R.S. §40-424 for being in contempt of the Commission, as well as the termination of the surcharge." PWC did then file their rate application on April 22, 2013.

The Phase 1 Order #74175 issued on October 25, 2013 in this case indicates that the Phase 2 permanent rate case must result in a debt service coverage, "DSC", of 1.2 or greater, as PWC needs that DSC for the resulting WIFA loan approval for the MdC pipeline project. KMR asserts that it would be unjust for the ratepayers of the other 7 outlying communities to pay higher rates, simply to achieve that DSC, without any benefit coming to them. Accordingly, higher rates made solely to achieve that DSC should be borne solely by the ratepayers in MdC, since the ratepayers of MdC will be the only ones that will benefit from the pipeline project being proposed and funded via that WIFA loan. This bolsters the argument for not consolidating the 8 communities for ratemaking purposes, but for separating them instead. KMR firmly believes that separate rates for each community based on cost of service will be perceived as just and reasonable by the ratepayers of all 8 communities. Numerous letters written by ratepayers have already attested to this. Additional witnesses can be called at the Phase 2 hearing to substantiate this further. The law requires this standard, per A.R.S. §40-361, in relevant part: "Charges demanded or received by a public service corporation for any commodity or service shall be just and reasonable. Every unjust or unreasonable charge demanded or received is prohibited and unlawful" .

Over a number of years, PWC has been viewed with suspicion, distrust and ill will amongst its ratepayers over the way it has conducted itself. The filing of this rate case and the way it was consolidated, bifurcated and expedited did not help improve PWC's standing with the public. While there is a new face on PWC in the form of Mr. Jason Williamson, there has been little time to evaluate whether the ratepayers will be treated in a more ethical manner than in the past. Mr. Williamson has

adopted the former owner's strategy to proceed with consolidating the two cases. In addition to that, on August 15, 2013, Mr. Williamson filed a ***Motion to Consolidate and Request for Expedited Procedural Schedule*** to expedite the entire matter. While the expedited nature of the Phase 1 portion of the case may have been advantageous to the interests of PWC, it has not yet been demonstrated that the pipeline plan for MdC was just or reasonable for the ratepayers of PWC. KMR asserts that the ratepayers have a reasonable expectation to fully understand the specific intention for encumbering PWC with a large amount of debt and to fully understand the scope of the proposed project before any funds are borrowed. That did not happen in this case. It is evident that the expedited nature of the case did not allow for that level of scrutiny, which alarmed many ratepayers, who have expressed strong and clear discontent with the process. As such, KMR requests that the ACC makes a thorough and complete evaluation of all details of the case during the Phase 2 portion before any ratemaking decision is made and that the decision be deemed just and reasonable for both the Company and the ratepayers, as required by law.

As stated in her letter dated September 30, 2013, KMR believes that by creating an atmosphere of working together, PWC will regain the public trust and assure a better relationship between all parties, and that is a goal we should all work towards.

EXHIBIT A

Payson Roundup | Payson, AZ

No Water Irritates Residents

Arizona Corporation Commission may order investigation into Stage 5 alerts, water hauling and cutoffs at Mesa del Caballo

Friday, August 7, 2009

Andy Towle/Roundup - atowle@payson.com

Stephen Gehring, owner of the Houston Mesa General Store, demonstrates the regulating defect in a water flow meter used by Brooke Utilities in the Mesa del Caballo housing complex.

Repeated water rationing and the cutoff of customers for using too much water in Mesa del Caballo have triggered a slew of complaints to the Arizona Corporation Commission, which has promised to investigate the actions of Brooke Utilities.

Twice in three weeks, residents have lived through Stage 5 restrictions, which imposes heavy fines for any non-essential use of water — including shutdowns for people who use too much.

On Thursday, the conservation level had dropped to Stage 3, as the private water company reportedly hauled reportedly hauled water from Gisela sometime during the week.

Residents say they feel their small community has become a "police state" with "water Nazis" watching every drop of water, waiting with disconnection notices in hand.

Brooke Spokesman Myndi Brogdon said she had been instructed to make no comment on any issue to any newspaper.

Arizona Corporation Commission Chairman Kristin Mayes said the board that regulates utilities has received multiple complaints about Brooke's actions. Residents have complained wildly inaccurate meter readings have prompted water cutoffs. Residents have also complained they have been cut off without receiving the required written notice.

"We are definitely investigating it," said Mayes. "A formal investigation would take a vote of the commissioners and we haven't had a chance to do that, but we'll look into that next week."

Mayes said company officials have said the water restrictions were imposed because of increased use and dropping supply, perhaps because of an increase in full-time residents in the 400-home community this summer.

But that doesn't excuse repeatedly running out of water, said Mayes.

"Whatever the reason is, the bottom line is the company has to provide for its customers. So the first question I ask is, what additional storage or well capacity does the company need to have and what are they doing to get it."

Caballo Club formed

At least two separate movements are coalescing to gain water freedom. The community's version of a homeowner's association, the Caballo Club, has appointed three people to head a water committee for exploring possible solutions. Two members, Randy Norman and Ed Schwebel, say they want to increase communication with Brooke Utilities and work toward securing a share of Blue Ridge water. The men say they do not want an adversarial relationship with the utility company. They add that Brooke has ignored attempts at discussion.

Payson's Blue Ridge Pipeline will pass right by the community, but only water providers can negotiate with Salt River Project and Payson for a share of the 500 acre feet of water reserved by federal law for water users in Northern Gila County other than Payson. Brooke utilities has expressed interest in contracting for that water, but many residents have expressed doubts about whether the company will follow through.

Many residents this week were complaining of poor communications and arbitrary actions by the water company.

Stephen Gehring, who owns Houston Mesa General Store, is building his case against Brooke Utilities for shutting his water off for what he says is no reason. He denies watering plants outside, washing his car, or engaging in activities banned by elevated conservation levels.

"It was arbitrary and capricious on their part," he said, calling the company "water Nazis."

Gehring is preparing a roughly 13-page packet of information for the Arizona Corporation Commission, and he says he'll include damning information from former employees of Brooke Utilities that alleges leaks in the system which allow air to register on the meters. Gehring says

this means residents appear to be using excessive amounts of water due to an error by the water meters.

Gehring speculates Brooke Utility cut off his water in retribution after he talked to a local newspaper. Thirty other residents also had their water shut-off for no reason — according to Gehring.

Brooke Utilities declined to comment on any of the allegations.

In an earlier interview, Brogdon said water use had increased, triggering the shift to stage five restrictions and water hauling. However, she did not provide any water use figures to support her statement. She said the company has difficulty finding well sites in the community, since drinking water wells have to be a certain distance for any septic system and all the houses rely on septic tanks.

Brooke Utilities disconnected Gehring's water Monday during a Stage 5 conservation level. He has since bathed in the nearby East Verde River because he cannot afford the $600 reconnection fee.

'Unfortunate responsibility'

Monday, Brooke Utilities sent an e-mail to residents, alerting them of the "unfortunate responsibility" which required the company to disconnect water service to some customers.

"This action was not taken lightly and only after careful consideration," the e-mail read.

Arizona Corporation Commission rules require written notification before cutting off a customer for violation of water restrictions during a Stage 5 alert.

Schwebel said that earlier this summer sprinklers accidentally turned on at a property he owns, but in which he does not live. A Brooke Utilities employee was driving around, looking for conservation violators, and eventually turned off his water.

"She said you're not supposed to be watering," Schwebel said. He told her, "If I was going to break the rule, I'd water at midnight."

Through the newly formed water committee, Schwebel and Norman will explore long-term options. They fear Brooke will not work to gain a portion of the 500 acre feet of Blue Ridge Pipeline water available for communities outside of Payson.

Access to Blue Ridge water

Gehring also wants the community to gain access to Blue Ridge water. However, he says the company is too cheap to build a filtration system.

"They don't care; they're going to do the minimum," Gehring said.

Residents formed the water committee after they heard at a meeting that communities wanting a part of Blue Ridge water need to get in line within the next two years.

The Normans say perhaps targeted reductions could be developed so residents have an identifiable goal.

"Conservation is a part of (the final picture)," said Norman.

Brooke pays dearly when the community runs out of water and it has to haul water in from other wells it owns, because the Corporation Commission hasn't given it permission to impose a water hauling surcharge – as it has in Pine and Strawberry. As a result, the company must haul water, but charge the normal rate. During a recent water shortage in Pine, the company hauled water from its wells in Star Valley. But Star Valley then banned heavy hauling trucks on the roads leading to Brooke's well. As a result, this time Brooke is reportedly hauling water from Gisela, which also has water problems.

"It's a monopoly," said Schwebel. "We can't choose. We don't have another alternative We're nearly held hostage by all of this. It feels like a police state."

Mayes said "It's just not acceptable to be subject to stage five curtailment twice in one month – that is really extraordinary. It's cause for concern."

She said the investigation could result in fines for the company, imposition of a building moratorium like the one in effect in Pine and even cancellation of the company's monopoly right to provide water service in the community.

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- Some Mesa del Caballo water complaints still outstanding
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- Complaint claims Brooke defrauded customers
- Mesa del residents, Hardcastle are talking
- New ACC complaints filed in Mesa del Caballo water dispute

Payson Roundup | Payson, AZ

Angry Mesa Del Residents Face Off With Brooke

By Alexis Bechman

As of Tuesday, August 9, 2011

An angry group of Mesa del Caballo residents frustrated with a new water hauling fee nearly drove Brooke Utilities officials home before a planned informational meeting about the Blue Ridge pipeline could even start Thursday.

Some 200 residents were more concerned with big charges for water hauling this summer than with options for hooking up to Payson's pipeline that could put an end to years of restrictions and frustrations.

"We are all here because of the bill," one resident shouted.

Brooke's President Robert Hardcastle said he was not there to discuss bills and would only dive into the five water supply alternatives, including plans to hook up Mesa del to the C.C. Cragin pipeline that will run past the 400-home subdivision's doorstep.

However, The meeting was dominated by a gush of anger about years of strict water restrictions that at times force homeowners to ration their water usage and cut out showers, flushing and washing or face high fees.

"You have lied to the people the eight years I have been here," said one resident.

"Why can't we get answers?" said another.

One woman said the water use restrictions meant her children could not shower at times.

As the uproar grew, a man sitting in the front row said Hardcastle should leave if he wasn't going to answer the questions.

"You have asked me to leave and I will," Hardcastle said.

Randy Norman, treasurer with the Mesa del Caballo Water Committee, reminded residents that Hardcastle was there to talk about the pipeline and to hold their questions until the end.

"All of our future lifestyles are involved in this choice," he said.

Mesa del sits on granite rock. This underground layer has put 367 active water customers and Brooke Utilities literally between a rock and a hard place for years.

During peak use months, water seeps into the wells so slowly that Brooke must haul water from Payson.

In years past, Brooke ate this charge.

In the summer of 2009, then-spokesperson Myndi Brogdon told residents Brooke had paid $59,000 to haul water, said Minnie Norman, secretary of the water committee.

Last year, the Arizona Corporation Commission approved a tariff that allows Brooke to charge residents for water hauling. Just recently, residents received their first water bill with the new fee.

Residents have known for a year that Brooke would begin charging for water hauling, but many were still shocked at the tripling of their bills, Norman said.

Hardcastle said the subdivision can put an end to water hauling forever if it hooks into Payson's Blue Ridge pipeline, pays for a temporary line each summer to connect to Payson's existing water system or drill new, deep wells.

Hardcastle provided an overview of several options and promised to have rough cost estimates for each alternative at an Aug. 25 meeting.

But by the end of Thursday's meeting, most residents had more questions than answers.

As the crowd quieted, Hardcastle explained that during June and July, residents used 1.79 million gallons of water, twice as much as during low-use winter months.

The system couldn't handle the jump, so the company bought water from Payson and hauled it to the subdivision's storage tanks at a cost of $16,000. Brooke charged users $13.65 per 1,000 gallons.

"It is expensive, it is very expensive," Hardcastle said.

Norman said her bill increased $70 in the last month to cover water hauling. Norman said she heard from other residents that their bills had gone up more than $300, but they had also used more than 25,000 gallons.

Those that use more water pay more, Hardcastle said, but with such a narrow base of customers to pass the cost of water hauling over, everyone pays something.

On its end, Brooke Utilities is not allowed by the Corporation Commission to collect a dime over what it costs to haul water, Hardcastle said. The company has the exclusive right to provide water in the subdivision, but it must then abide by ACC rules.

Some residents said they believe Hardcastle is inflating the cost so he can turn a profit on the water hauling.

Hardcastle adamantly denied charging anymore than cost.

The price tag to end water hauling forever may come as even more of a surprise.

One alternative is using an above-ground pipeline to deliver water from Payson to Mesa del. This option would cost roughly $100,000 a year and Brooke would have to reinstall the pipeline annually. That would work out to about $272, if divided by the 367 customers.

Although effective, that expensive solution would make the subdivision dependent on Payson, Hardcastle said.

Alternatively, Brooke could drill new wells and add additional storage tanks to hold some 200,000 gallons, which would likely cover water needs.

Experts have identified two potential sites for wells, each with water 1,200 to 1,600 feet underground.

Costs for the new wells and storage range from $625,000 to $880,000, with no guarantee that either well will deliver a substantial yield.

Hardcastle painted a doomsday scenario of paying a million dollars for the wells, but getting no new water.

Payson's C.C. Cragin pipeline could also guarantee water indefinitely, said Hardcastle.

For nine months out of the year, Mesa del would receive about 75 acre-feet of water. Currently, the subdivision's seven wells produce 54 acre-feet of water annually, Hardcastle said.

But like the other alternatives, the C.C. Cragin water comes at a cost. Current estimates put the project at more than a million dollars, which the 367 customers will have to cover.

The pipeline is expected to run across the street from Mesa del and come online in September 2015.

If Mesa del signs on, Brooke would have to sign an agreement with the Salt River Project not to drill any new wells within the community. However, the company could deepen any existing wells, Hardcastle said.

Residents must decide by Labor Day if they want a share of Blue Ridge.

"The window of opportunity is closing and a decision must be made," Brooke said in a letter to residents. "It is important that the majority preferences of the Mesa del Caballo community be considered."

Whatever users choose, Mesa del needs a long-term, renewable water source that will deliver users from the frequent water shortages that plague the community, Hardcastle said.

If residents go with Blue Ridge, Hardcastle hopes to finalize agreements with Payson and SRP by September.

Hardcastle said he does not care which alternative residents choose and that he is not advocating for one over the other. Residents are asked to send their questions and comments to elcaballoclub@gmail.com.

Hardcastle will discuss project costs at 5:30 p.m., Thursday, Aug. 25 at the Payson First Church of the Nazarene, 200 E. Tyler Parkway.

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Payson Roundup | Payson, AZ

Ending Mesa Del Shortage Will Be Costly

By Alexis Bechman

As of Tuesday, August 30, 2011

From pipelines to deepwater wells, several proposals may put an end to years of water shortages in Mesa del Caballo, but all come at a cost.

Brooke Utilities President Robert Hardcastle presented a list of options at the third and final community meeting Thursday, stressing residents must come to a consensus on one by Labor Day.

From an above-ground pipeline connecting Payson with Mesa del, to two new wells and water from the Blue Ridge pipeline, each has the promise of delivering badly needed water, but each will at least double the average water user's bill. Rates could go from $23 a month to $49 or $54.

Any of the options would avert water hauling, which can triple bills during summer months.

Furthermore, any of the options could eliminate strict water use restrictions and potentially boost property values.

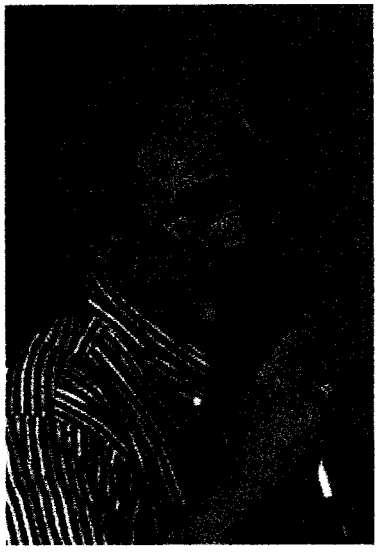


Photo by Andy Towle

Robert Hardcastle

Of all the choices, water from the C.C. Cragin (Blue Ridge) pipeline is the most viable and longstanding, Hardcastle said. It also comes with the highest price tag at just over $1 million.

An above-ground pipeline with Payson would be the cheapest option long-term at $147,600 for the first year and $90,000 for subsequent years. Drilling two new wells is the second highest option at $862,300.

Mesa del residents will shoulder the cost of any improvements.

Just before Hardcastle's presentation, Steve Westwood with SRP's water rights and contracts, gave a lengthy overview of the Blue Ridge Reservoir in northern Arizona.

SRP has already poured $13.6 million into the project for upgrades and maintenance and has plans to deliver 3,000 acre-feet of water to Payson in the coming years. On the pipeline's journey to Payson, it will pass just east of Mesa del, making the community the perfect pick for an additional 350 acre-feet of water set aside for other northern Gila County communities.

While just one of several water options, Hardcastle said it is a "pretty good alternative."

"Is it guaranteed permanent? Steve would be the first to tell you not necessarily, but it is pretty darn close. It is enough that if you were a betting man, it is probably a pretty good bet," he said.

There is no guarantee the other two options will deliver the 68 gallons per minute of water the community needs to end water conservation and hauling fees long-term.

Each of the proposals include 200,000 gallons of water storage through several new tanks.

1,200- to 1,600-foot wells

Preliminary engineering determined two areas in Mesa del could support new 1,200- to 1,600-foot deep wells.

Currently, the subdivision's seven wells produce just 54 acre-feet of water annually. While engineers are confident two sites will deliver water, there is no guarantee either will produce.

The doomsday scenario of paying nearly a million dollars for the wells and getting no new water is possible, Hardcastle said.

Best guesses put the cost of two new wells at $862,000, which for the average water user, doubles their monthly bill.

Forest Service pipeline

Alternative No. 2 includes installing a pipeline through Forest Service land that connects Mesa del with Payson. Payson would then pump approximately 1 million gallons of water a year to Mesa del at cost.

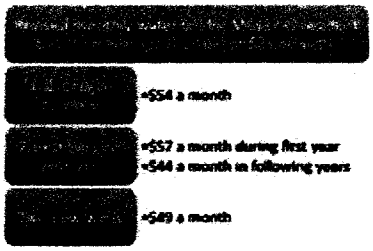
For the first year, that cost is expected to run $148,000 and decrease to $90,000 in following years. The first year would cost more due to an environmental study.

A major drawback with the project is that Brooke would have to reinstall the pipeline annually and Mesa del would be dependent on Payson delivering the water.

For the average water user in Mesa del, the project would bump water bills up 143 percent in the first year and 87 percent in year two and beyond.

"We have been talking about three projects. We have been talking about the pipeline, deep-water wells and we've been talking about Cragin water," Hardcastle said.

"The pipeline is different from the other two in that it is a repetitive annual project. It is not a project we build and start taking water from and we just pay for it over time. (The contract) happens year after year."



Water bill illustration

C.C. Cragin pipeline

The final option is tapping into the Blue Ridge pipeline.

Brooke Utilities would sign agreements with SRP for 70 to 84 acre-feet of water a year and with the Town of Payson for the infrastructure to deliver the water.

Mesa del would get water from the reservoir for nine months out of the year with the connection shut off in the winter. To cover winter water needs, Brooke would use water from the new storage tanks as well as the existing wells.

No one can say how long the agreement with SRP will last, but it is as close to forever as any of the alternatives Brooke has identified, Hardcastle said.

"Is it guaranteed forever into perpetuity? Probably not. Is it as close to guaranteed as we have been able to develop? Yes it is," he said.

Cost wise, Cragin is the most expensive option. With a total project cost of $1,073,000, including $2,700 in annual operations and maintenance fees, the average water user will see their bill increase 130 percent.

One resident asked Hardcastle if any of these options would actually end the need for water hauling. During the summer months, water hauling doubles and even triples users' bills.

And even when Brooke is not hauling water, residents are often on water restrictions that prevent them from watering outside and sometimes even taking showers.

"If we are not doing this to eliminate water augmentation and curtailment then this whole process is a waste of time," he said. "That is exactly what we are doing."

Hardcastle added it is up to the residents to decide which option to go with since they are the ones who will pay for the system.

"We understand there is a risk analysis here, a benefit analysis and we understand there is an economic analysis and a hydrological analysis.

"Each of you need to look at those for yourself, look at your water bill and say based upon the $23 average water bill, where am I?" he said.

"You need to decide for yourself if this is what you want to do."

While Brooke has already been working on a preliminary contract for Cragin water, it will not be until after pipeline construction starts in September 2015 that residents get water from it.

Residents only have until Labor Day to decide which option they would like Brooke to pursue.

None of the options include help from the Water Infrastructure Finance Authority of Arizona's (WIFA).

WIFA gets federal funding for public improvement projects and if it gets involved with this project, it could drive costs down for residents, Hardcastle said.

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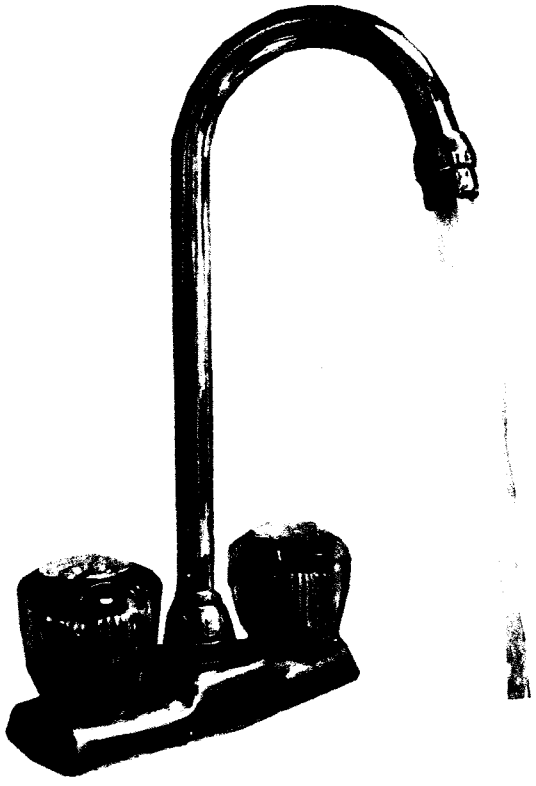
Payson Roundup | Payson, AZ

Mesa Del Water Woes Worsening

Explosion uncovers the twisted tale of mystery well



By Michele Nelson

As of Thursday, July 18, 2013

For years, Brooke Utilities has apparently gotten the bulk of the water it has been selling to residents of Mesa del Caballo from an undocumented, unregulated well, according to documents obtained by the Roundup.

The murky sequence of events came to light after the well blew up because of a closed pressure release valve, revealing the still confusing history of a well that has not undergone state-required inspections for an unknown period, although it has provided Brooke Utilities with roughly 500,000 gallons of water monthly, according to documents obtained by the Roundup.

The new well owner, Mary Hansen, has disconnected the well from the community's water system, resulting in a sharp increase in bills as a result of increased water hauling.

Brooke Utilities did not return calls seeking comment.

However, the man who recently bought the Payson Water Company from Brooke said he hopes to settle the problem soon.

Jason Williamson, owner of JW Holdings/Pivotal Companies, wrote in an e-mail, "I do believe we have resolved the dispute and that the well will be back in service soon."

The documents provided by Hansen and records from the Arizona Department of Water Resources, the Arizona Corporation Commission and the Arizona Department of Environmental Quality (ADEQ) seem to suggest that Brooke Utilities provided half the water it sold Mesa del Caballo residents from an undocumented, unregulated well, perhaps without paying for the water for an extended period. The well number listed required reports to the ADEQ correspond to a capped, inactive well several blocks away.

Reportedly the company that owned Payson Water Company before Brooke bought it had paid an elderly couple who owned the home for the water. Apparently, Brooke stopped paying for the water after it bought out the previous water company operator. Sometime after that, the elderly couple went into bankruptcy and lost the house in foreclosure.

The new owner didn't register as owner of the well with the state. Hansen says Brooke did not pay that owner for the water, either.

As a result of the gap in the records, it's unclear whether the well underwent required tests for contamination and heavy metals during that period.

The interim owner of the property also lost it in foreclosure and Hansen bought the home at an auction, without realizing the well constituted a crucial part of the water system for the whole community. She only discovered the well's intricate history after a pump blew out the side of the garage.

Hansen provided documents suggesting Brooke had mislabeled the well in documents submitted to regulators and used it without paying the previous homeowners for the water or performing required tests.

After repairing the well, she disconnected it from Brooke's system, which effectively forced the private water company to increase the amount of water it bought from Payson and hauled to Mesa del's water storage tanks.

The Arizona Corporation Commission allows Brooke to charge Mesa del residents extra for water it hauls in, which has driven some homeowners' monthly water bills over $500.

Some residents are now accusing Hansen of forcing them to pay exorbitant water bills.

However, Hansen said she only shut off the well after a pressure tank and an electrical panel blew up on her property. She said Brooke Utilities refused to pay for the damages, so Hansen and her partner rebuilt the tank and electrical panel. Then Brooke hooked up the well again and started pumping water. Brooke made several payments for the water and then stopped, Hansen claimed.

E-mails provided by Hansen detail year-long communications between Hansen and Brooke Utilities owner Robert Hardcastle. The e-mails show that when Hansen tried to get Brooke to pay for the water it had used and enter into a water sharing agreement, Brooke owner Hardcastle refused.

Hansen said when she called the ADEQ, it could not find any evidence of her well in its records — and therefore no record of any required water quality testing.

Adding insult to injury, Brooke Utilities not only stopped paying Hansen for the water it used from her well, but also charged her almost $700 for the water she used from her own well.

So she pulled the plug.

"It has now been a year and still no agreement, no inducement, no reimbursement, and Brooke has gained $687 in revenue by the residency being billed," wrote Hansen in an e-mail to Hardcastle in March, "If all terms and conditions are not met, the home will hook back up to the well directly and Brooke will be disconnected as we will not pay any more hauling fees."

In the process of untangling the mess, Hansen discovered what she termed a cover up by Hardcastle. He took full advantage of a mislabeled well to hide his responsibility to test the water for toxins, said Hansen.

When Hansen took her well off-line, Brooke Utilities claimed her well produced more than 13,000 gallons per day. The company listed the well as an asset on reports to the Arizona Corporation Commission, which bases the rates it allows a company to charge on its assets and investments. On the Corporation Commission report, Brooke reported the well produced 6 to 7 gallons a minute.

Yet, when Hansen went to figure out how to make Brooke responsible for the damages and insurance, she had to pay for a year, none of the Arizona Department of Water Resources (ADWR) production reports listed her well.

"When I went to ADEQ, (Arizona Department of Environmental Quality) they said they did not see my well," said Hansen.

A quick search on the Arizona Department of Water Resources well registry site for the well number listed on Brooke's Arizona Corporation Commission production report, lists the well as being owned by William Huddleston from Mesa.

The paperwork with the well claims its physical location is on Lot number 26 off of Vista del Norte Street in Mesa del.

Hansen's well, however, is on Lot 164 on Gunsight Ridge.

On the ACC production report, while the well registry number is listed erroneously, the lot number is listed correctly.

As a result, when Hansen went to report the damage on her property, the ADEQ said it had no record of the well.

"If you put the well number into the Arizona well registry, it brings up the information on Huddleston," said Hansen. "If you read it carefully, that well is not in use, it's a capped well. Hardcastle had to find a well not in use and put in fake numbers ... (and so) ADEQ was led to del Norte."

Hansen said when ADEQ arrived at the del Norte address, inspectors would see the capped well and therefore not require testing for arsenic or bacteria.

Yet, Hansen said Hardcastle could then report the water the well produced on the Arizona Corporation Commission well production report.

It was a classic case of the right hand not understanding what the left hand was doing.

Hansen said it was very difficult for ADEQ to admit water from her untested, undocumented well was going into a public system. She said she had to resort to calling the Environmental Protection Agency (EPA) to get the federal regulators to pressure ADEQ to go to her property and verify the well.

"I said, why would I lie to you for a year? Yes, I know what's on paper, but it's wrong," she said of her conversation with the public safety organization.

When the ADEQ finally arrived on her property, she said representatives from Brooke Utilities were in tow.

"When I asked why the Brooke guys were there, they yelled, 'None of your f*king business,'" said Hansen. "I got on the phone with the EPA Region 9 representative and he said, 'Is that Brooke screaming at you?'"

The story of how the well fell off the official reports goes back for more than a decade.

Mesa del resident, and owner of the local store Steve Gehring said the story started in 1996 when Benny and Lisa Harmon drilled the well as an investment. Records from the Gila County Recorder's Office confirm that fact.

Gehring, along with other residents, have started a case against Brooke Utilities and Hardcastle with the ACC.

Gehring said the Harmons then entered into an agreement with United Utilities owned by Rich Williamson.

As Gehring understands the local lore, the Harmons enjoyed a fair relationship with United Utilities, until Hardcastle bought the water company.

Soon Brooke stopped paying, said Gehring.

The Harmons fell on tough times and lost the house to foreclosure. A man named John Olson bought the property. He never registered the well in his name.

Then Olson lost the property to foreclosure, said Gehring.

Hansen and her partner Svanhilbur Jafetsdotti bought the house from Olson.

Three days before they closed on the property — the tank blew up — exposing the whole mess.

The new owner of the water company hopes to straighten out the problem going forward. He responded readily to requests for information from the Roundup.

Hansen confirmed that she has a pending agreement with Williamson. She said he has also sent her a check for her physical damages and has started paying for insurance on the well.

"Jason and I — I think — have an agreement that instead of taking an inducement fee, in lieu the fire department will get access to water," said Hansen. "I have given them permission to go back on line."

However, Williamson did say in his e-mail, "Unfortunately, while reinstating this source will help, it will not alleviate the need for hauling."

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Payson Roundup | Payson, AZ

Water Not Tested

'This is a nightmare' says water expert of Mesa del well reports

Mary Hansen bought a home only to discover Brooke Utilities had been using a well on the property for years without state-mandated water testing. Photo by Andy Towle. | Buy a print of this

By Michele Nelson

As of Friday, September 13, 2013

Mesa del Caballo residents have been drinking water from an untested well — perhaps for years, according to documents obtained by the Roundup.

However, tests on water from the well sought by the Roundup last week showed no contamination.

Still, the clean recent test doesn't guarantee that the well remained free of bacteria or other contaminates during the years it apparently fed into the Brooke Utilities system in the unincorporated subdivision with about 400 homes.

The Arizona Department of Environmental Quality (ADEQ) confirmed that a well now owned by Mary Hansen, which produces about half of Mesa del's water, has not been tested as required by law since it was drilled in 1996.

When asked if well no. 55-553798 (aka Mary's well) had a record with ADEQ at all, Mark Shaffer, communications director for ADEQ wrote that the only mention of it is an April 3, 2013 inspection report.

Photo by Andy Towle

Mary Hansen explains how a mistakenly closed pressure valve caused an explosion that revealed her untested well was connected to the Mesa del Caballo water system.

That report found other violations for the Mesa del well system that was under Brooke Utilities management until this year when JW Water Holdings purchased the company. The ADEQ inspector found three unidentified wells connected to the water system. Those wells included:

• Well no. 55-553798 (aka Mary's well) registered to Savanhildur Jafetsdottir, her partner.

• The second was well 55-560-560398 registered to Patty Caldwell (Behm).

• The third was well 55-553798 registered to the U.S. Geological Service, with coordinates that show it's located in the San Pedro water basin in Southeastern Arizona.

The inspection also revealed several minor problems, like the lack of a turned-down vent on one well and a well (55-801698) without its state well number posted.

Over the years, Brooke Utilities had listed some of these wells in reports to the ACC listing sources of drinking water for Mesa del, which means state law requires regular testing of the water.

The Caldwell well did get tested regularly, said Behm, although she had no water sharing agreement with Brooke and wasn't paid for the use of her water as far as she knew.

Mary's well never did show up under that number in any of Brooke filings with either ADEQ or the Arizona Corporation Commission, according to the records reviewed by the Roundup.

The new owner of the water system, Jason Williamson, confirmed he received a certified letter from ADEQ on Aug. 12 listing several violations. Alleged violations include:

• Failing to receive approval from ADEQ before altering the existing water system

• Failure to request a permit to make changes that affected how the water is treated, its quality, the capacity of the system, distribution of the water and general performance of the system.

The Roundup has secured the services of Rim Country Water Testing Co. run by Don Ascoli, a certified water operator (OP#025325) in Rim Country. The company provides a complete array of water testing services, usually for private well owners. The state requires companies that sell water to test water monthly, but private well owners often don't test their wells at all.

Ascoli said Williamson was to have met with the ADEQ requests by Sept. 12 or face consequences.

The Aug. 12 letter from ADEQ states Williamson could face civil penalties or the suspension or revocation of the company's license.

The Roundup asked Ascoli to test the water from Mary's well.

Ascoli's tests confirmed that Hansen's well is free of bacteria, nitrates and arsenic, the three most dangerous substances in drinking water from a well.

Ascoli said ADEQ requires him to test the water systems he oversees every month.

"If it's a public water system, I and the owner of the system get a letter from ADEQ stating we are out of compliance if we don't have test results in every month," said Ascoli.

When Ascoli heard of Brooke's mislabeling of Mary's well and other wells in the Mesa del system he said, "This is a nightmare."

Williamson said he and his company, JW Water Holdings are working to fix the issues, which all date back to before he bought the company.

"We are well aware of the inspection report and the findings in the ADEQ notices and are working with ADEQ to resolve them in a timely manner," Williamson wrote in an e-mail. "After we work through the process, we have confidence all of the outstanding issues will be addressed. We would like to stress that the water sources currently used in Mesa del Caballo are safe and Payson Water Company is currently abiding by all of the ADEQ sampling and testing protocols."

Shaffer wrote in an e-mail that ADEQ requires operators of water systems such as Mesa del's to test for 100 different contaminants.

The agency requires testing on various timelines depending on the quality of the system.

If a water system has brown water, as has sometimes affected the Pine-Strawberry water system, ADEQ may require continuous testing.

Other systems can only be required to test once a year for nitrates.

For a list of requirements for testing see: http://www.azdeq.gov/ environ/water/dw/download/dw_ rules.pdf.

Shaffer wrote that if a system needs to be on its Monitoring Assistance Program, a qualified contracted laboratory takes samples. If tests are needed for coliform, ADEQ requires a monthly test. In the case of turbidity or "mud in the water" the system must do tests once every three months.

Brooke Utilities did file reports with ADEQ. They may be viewed at: http://azsdwis.azdeq.gov/DW W_EXT/index.jsp. Search under "Payson Water — Mesa del Caballo"

But did Brooke Utilities report findings on the correct wells? At least in the case of Mary's well, ADEQ has no test records.

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- Another fine mess Brooke left for us

Payson Roundup | Payson, AZ

Neighboring Communities May See Steep Rate Hike

By Michele Nelson

As of Tuesday, September 24, 2013

Jason Williamson, manager of the Payson Water Company, wants the Arizona Corporation Commission (ACC) to give him permission to more than double water rates for more than 1,100 Rim Country customers in several unincorporated communities.

A Sept. 25 meeting 10 a.m. in the Commission's Hearing Room No. 2 in Phoenix, the ACC will discuss increasing rates by about 118 percent for Mead Ranch, East Verde Estates, Flowing Springs, Geronimo Estates/Elusive Acres, Mesa del Caballo, Whispering Pines and Gisela/Tonto Creek Shores.

The Roundup will explore that rate increase request in a future article.

But first, Williamson hopes to fix the Mesa del problem where residents have faced staggering increases in their water bills every summer due to ACC-approved water hauling charges when the system runs short of water.

Williamson has asked for a hearing before the ACC tomorrow, Sept. 25 at 10 a.m. in the Commission's offices located at 1200 W. Washington St., Hearing Room No. 2. The public can view the meeting online at: www.azcc.gov then click on "Live Meeting Broadcast."

At the Wednesday hearing, Williamson will ask the ACC to let the company impose a $7.44-monthly charge on some 400 Mesa del residents to pay for a loan from the Water Infrastructure Finance Authority (WIFA) so his company can immediately build a pipeline to the Town of Payson water system. "The Company is requesting expedited processing 'so that it will be able to pursue an opportunity to build an interconnection between the Town of Payson and the Company's Mesa del Caballo Water system,'" writes ACC staff in a report from Sept. 18. "The Company anticipates completing construction by May 2014 if it obtains financing of $275,000 before the end of the year."

The connection would eliminate the water hauling charges that have increased water bills 100 to 400 percent the past several summers.

Williamson would apply the $265,000 loan for the connection to the Payson water system against the full $1.2-plus-million it will cost to hook up the unincorporated subdivision to the C.C. Cragin/Blue Ridge Pipeline, said ACC staff in its report.

ACC staff recognizes Williamson has a timing issue. Unless he can find some sort of relief for Mesa del residents before the next set of dry summer months, he will have to truck in water again to keep the taps running.

Neither Williamson nor the ACC want to see obnoxious water bills again — nor do Mesa del residents.

"Consumer Services Staff has processed several informal complaints forwarded by the Commissioners office this summer regarding the high cost of MDC's (Mesa del Caballo) Water Augmentation Surcharge," wrote ACC staff in their report. "Several articles were written in the Payson Roundup this summer concerning the situation."

The idea is to hook up Mesa del with the pipeline the town is building to reach the not-yet-built C.C. Cragin/Blue Ridge water treatment plant off of Houston Mesa Road near Mesa del.

Williamson told ACC staff he estimates it will cost $275,000 to complete the project.

The ACC staff agrees with the estimate and does not anticipate a huge increase for Mesa del residents at first.

"Approval of a WIFA Loan Surcharge mechanism that may result in a surcharge of $7.44 per month per MDC customer," writes ACC staff.

"A utility has an obligation to provide adequate services," Jodi Jerich, executive director ACC, "(But) a water utility is entitled to fair and reasonable rates, (and) customers are entitled to fair and reasonable rates (too)."

Jerich confirmed that providing adequate services means keeping the water or electricity running while charging reasonable rates.

Jerich said ACC staff has done a cost benefit analysis to decide what is more reasonable, drilling a well that might or might not produce enough water to cover the needs of Mesa del, or hooking up to the C.C. Cragin pipeline — a guaranteed source of water that will permanently end the need for water hauling.

The ACC hearing schedule shows additional time on the matter scheduled at 9:30 a.m., Thursday, Sept. 26.

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- End to water hauling
- Mesa del water woes: How did things get so bad?
- Residents protest water bills
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EXHIBIT
KMR-2
ADMITTED

Document #149903

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Kathleen M. Reidhead
14406 S. Cholla Canyon Dr.
Phoenix, AZ 85044
Telephone: 480-704-0261

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO: W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR AUTHORITY TO: (1) ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM; AND (2) ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	DOCKET NO: W-03514A-13-0142 **SURREBUTTAL TESTIMONY BY INTERVENERS** **PHASE 2**

Kathleen M. Reidhead, "KMR", is an Intervener in the above-captioned matter. KMR is a long-standing residential customer served by the Public Service Utility Company, Payson Water Company, "PWC" or "Company", residing part-time within the physical boundaries of the CC&N in the community of Deer Creek Village, "DCV", that is part of the former United Utilities system and has a vested interest in the ramifications of these proceedings. The system is also known as ADEQ's Public Water System number 04-064 (incorrectly identified as 04-030 in her Direct Testimony on 11/14/13).

KMR notes that the Rebuttal Testimony submitted by PWC[1] ignores her Direct Testimony[2] and only addresses the Direct Testimony by the Arizona Corporation Commission, "ACC"[3]. In rebuttal testimony, PWC addresses issues that will provide benefit to the Company, yet offers no response to the

[1] Document #0000150385 submitted on December 6, 2013.
[2] Document #0000149527 submitted on November 14, 2013.
[3] Documents #0000149555 submitted on November 15, 2013 and #0000149600 submitted on November 19, 2013.

numerous issues that have been raised by KMR and other ratepayers over the course of this rate case. KMR's specific request that cost of service studies be conducted for each of the eight communities was not answered in the Company's Rebuttal Testimony. Nor was a business plan and correlating budget to maintain and renovate each of the eight communities water systems submitted by PWC. KMR has observed that submissions of other Interveners in this case have gone unanswered as well. For example, a motion submitted by Bill Sheppard to take public comment in the Payson area[4] has not been responded to. This does not foster an atmosphere of working together, which was a stated goal in KMR's Direct Testimony[5].

KMR opposes the request by PWC to consolidate rates for the former United Utilities and the former C & S System and Staff's agreement with that proposal[6]. Consolidation is discriminatory to ratepayers in Gisela and DCV, due to the fact that these two communities have abundant and stable water resources, unlike some of the other communities served by PWC. They should not be treated the same as the other water systems merely because it benefits the Company via administrative efficiencies. In fact, Gisela and DCV are located in an entirely different water basin than the other six communities served by PWC and as such, should be treated separately for ratemaking, based on different hydro-geological conditions that exist between the two separate water basins. Please refer to Exhibit KMR-1 attached, relevant part of a report from the Arizona Department of Water Resources website, titled "Arizona Water Atlas - Volume 5", which is posted at the following link: http://www.azwater.gov/AzDWR/StatewidePlanning/wateratlas/CentralHighlands/default.htm . This exhibit is Section 5.3 - Tonto Creek Basin of the complete report, which shows that DCV and Gisela are physically located within the Tonto Creek Basin. The other 6 communities of PWC are located within the Verde River Basin. This exhibit shows the geography, land ownership, climate and groundwater conditions, among other things, of the Tonto Creek Basin. It is documented in this report (see pages 183-185) that a major aquifer runs directly through the area where DCV is located. DCV is physically located approximately 4 miles south of Rye and 2 miles north of the intersection of Rt. 87 and Rt. 188, on the eastern side of Rt. 87. The blue arrow on Figure 5.3-7 on page 185 indicates this to be an alluvial aquifer, which refers to a fine-grained fertile soil consisting of mud, silt, and sand deposited by flowing water. One source of well yield information, based on 51 reported wells, indicates that the median well yield in the Tonto Creek Basin is 120 gallons per minute (see page 183). It is clear throughout this report that water resources are abundant in the Tonto Creek Basin and that 97.5% of the land is federally owned and managed by the United States Forest Service with vast wilderness areas and only 2.4% of the land is private (see pages 169 and 170). Accordingly, very little demand is put on the underground water resources. It is estimated that water in storage underground for this basin ranges from 2.0 million acre-feet to 9.4 million acre-feet to a depth of 1,200 feet (see page 183). Groundwater use in the basin has been estimated to average between 2,000 to 4,000 acre-feet/year over the period from the 1970s until now (see pages 191-192), a mere fraction of a percentage of the water that exists in storage. As such, it would be discriminatory to impose a more stringent ratemaking structure on the ratepayers in the Tonto Creek Basin than what is necessary, in violation of A.R.S. §40-203. That would have the

[4] Document #0000149540 submitted on November 15, 2013.
[5] Document #0000149527, Page 5, lines 15-17.
[6] Document #0000149555, Page 23 of the Direct Testimony of Crystal S. Brown, Public Utilities Analyst V.

impact of placing an unfair financial burden on customers in those communities, driving them to conserve, with no benefit to anybody for those conserved resources. It would be entirely different if that water could be pumped uphill to help serve the other 6 communities that may have water supply deficiencies, but that is not likely a viable proposition and is not being sought by the Company. Please refer to Exhibits KMR-2 and KMR-3 to see the financial impact the Staff and PWC proposed rates would have on customers in these two communities. This proposal for consolidation and the proposed significant rate hikes is short sighted on the part of the Company. The potential unintended consequences (and risk to PWC) of imposing such significant rate hikes might be that more households decide to drill their own wells and disconnect service from PWC, especially in Gisela and DCV, where water is plentiful. Worse yet, those two communities may decide to take over their own water systems, as has happened in Star Valley/Quail Valley and Pine/Strawberry in recent years. A more reasonable approach would be to implement a rate structure that allows customers in these two communities to use as much water as they demand, hence ratemaking should be designed to allow for maximum consumption at very affordable costs. By that method, both PWC and its customers can maximize their benefit. This would also help improve the relationship between PWC and customers in those communities. This is an example of why separate rates for separate communities of PWC makes sense.

KMR requests that DCV be released from the curtailment tariff authorized in Decision #67821 on Docket W-03514A-04-0906 and that the sign posted at the entrance to DCV showing water curtailment stages be removed, as DCV should never have been required to participate in a curtailment plan, based on the volume of water available in the underground aquifer at DCV. That should now be corrected.

KMR has reviewed the Phase 2 rate increase proposals for PWC suggested by the Company and the ACC, and is rejecting both proposals for reasons discussed throughout this document, requesting instead that cost of service studies be conducted and separate rate proposals be made, as appropriate, for each of the eight separate communities served by PWC or by grouping communities with similar hydro-geology conditions and costs. It is widely perceived by the ratepayers that they are subsidizing the costs of other systems within PWC and there is evidence presented here to support that perception. Cost of service principles fairly dictate that those who use water services pay for them. And while cost of service is only one important criteria in determining rates, it is probably the most important criteria and, so far, it has not been brought into consideration in this case.

In the Direct Testimony by Crystal S. Brown of the ACC, "Staff", it is stated that a review of the Commission's records for the years 2010 to 2013 indicate that all complaints have been resolved and closed[7]. This is inaccurate, as two formal complaints filed in 2012 remain open and unresolved: W-03514A-12-0007 and W-03514A-12-0008.

As previously noted by KMR in her Direct Testimony, there is a well established history of poor service and allegations of unlawful practices by PWC, which has created a public atmosphere of distrust towards the Company by the Ratepayers. Additional evidence is presented in the Staff Report to expand this atmosphere of distrust. It is documented that PWC gained $755,709 as a result of the

[7] Document #0000149555, Page 3 of the Direct Testimony of Crystal S. Brown, Public Utilities Analyst V.

condemnation sale of the Star Valley/Quail Valley water system[8]. Per Staff, that gain belongs to the Company[9], yet it appears that the money had been removed from the Company before Jason Williamson became the new owner of the Company[10] on June 1, 2013. It is shown on the original rate application that a Note Receivable was issued for $637,794.[11] On supporting schedule E-3, that amount appears as a Receivable/Payable to Associated Company.[12] KMR alleges that the removal of Company monetary assets is a violation of the law, **A.R.S. §40-426**, and requests the ACC take action pursuant to **A.R.S. §40-421.**

Perhaps 44-1211 or 44-1212
44-1522 or 44-1376.03

The Company's Income Statement would look quite different if the money from the sale of the Star Valley/Quail Valley system had remained on the books of PWC. The value of the Company's retained earnings would be much higher and PWC would not be operating in a deficit financial condition, in fact. That money could have aided the renovation of some of its other aging and deteriorating systems or paid a good share of the MdC pipeline project. It is not just or reasonable for the ratepayers to pay, through higher rates, to correct the actions of a person who raided the coffers of PWC sometime prior to June 1, 2013. This completely altered the Test Year data, which significantly impacts the rate case. This is patently unfair to the ratepayers. They had already paid $488,308 towards the Star Valley/Quail Valley plant cost, plus funded repair and maintenance expenses for that system while it was in service[10] and entrusted PWC to safeguard that investment, which PWC did not, and now, because the money from the sale of that asset is missing, PWC is asking them to pay exorbitantly higher rates so that it can regain a sound financial condition. KMR has filed a Motion for Discovery[13] requesting Staff answer numerous questions on this subject and has received answers. KMR asserts that the Company is liable to the ratepayers for this loss, pursuant to **A.R.S. §40-423.** Accordingly, KMR requests the rate case be continued to a later date until remedies for damages incurred as a result of this loss can be pursued and achieved.

Since the former owner of PWC, Brooke Utilities Inc., "BUI", was under the management of Mr. Robert Hardcastle prior to June 1, 2013 when the removal of assets is alleged to have occurred, KMR is asking for a full disclosure about Mr. Jason Williamson's relationship to him. KMR filed a Motion for Discovery[10] asking Mr. Williamson to answer numerous questions on this subject and has received objections (to questions 1, 2, 4, 5 and 6) and responses (to questions 3 and 6), attached as Exhibit KMR-4. KMR requests that the objections be overruled and Mr. Williamson be compelled to answer, as KMR did not ask the Company to answer, she asked for Mr. Jason Williamson, President of PWC, to answer. KMR asserts the information requested in her Motion for Discovery is highly relevant to the rate case, as Mr. Williamson has adopted and is supporting the rate application originally submitted by Mr. Robert Hardcastle. In light of the disclosure of missing assets, which significantly alters the fair value of the

[8] The Stipulated Final Judgment in Condemnation was entered by the Gila County Superior Court on April 12, 2012 per Document #0000137243 on the ACC Docket W-03514A-98-0084.
[9] Document #0000149555, Page 7 of the Direct Testimony of Crystal S. Brown, Public Utilities Analyst V.
[10] Document #0000149555, Page 8 of the Direct Testimony of Crystal S. Brown, Public Utilities Analyst V.

[11] Document #0000145511 filed on April 23, 2013, Schedule A-5 of Thomas Bourassa's testimony, page 115/279.
[12] Document #0000145511 filed on April 23, 2013, Schedule E-3 of Thomas Bourassa's testimony, page 165/279.
[13] Document #0000149758 filed on December 3, 2013.

Company's utility property and impacts the setting of rates, it is important to know whether any collusion exists.

Staff requested PWC provide source documentation to substantiate the cost of plant additions from the years 2000 to 2012, but PWC indicated that it was unable to provide invoices for plant expenditures prior to 2009 because it was unable to obtain them from the prior owner, which is a violation of Arizona Administrative Code R14-2-610, D.1[14]. As suggested by Staff, a signed affidavit by the current owner "stating that it believes that the Company actually paid for the unsupported plant"[15] is **not** an acceptable solution to the Company's violation of this rule. Per the affidavit of Jason Williamson[16], it was the Company's prior owner, BUI, who maintained control over the records that Staff requested and that, "BUI's accounting practices were sound". If so, then the requested records can and should be produced. KMR requests that the ACC execute its powers under Article 15, Section 4 of the Arizona Constitution to subpoena such records from the prior owner of BUI, Mr. Robert Hardcastle. She asks for strict adherence to Arizona Administrative Code R14-3-109 (J), which states in relevant part, "The Commission or presiding officer, may, however, require proof by evidence of the facts stipulated to, notwithstanding the stipulation of the parties". Strict adherence to the rules is clearly warranted in this case, as there are allegations of unethical activities on the part of the Company and/or its employees. Furthermore, per AAC R14-3-109 (K) in relevant part, "Rules of evidence before the Superior Court of the state of Arizona will be generally followed but may be relaxed in the discretion of the Commission or presiding officer when deviation from the technical rules of evidence will aid in ascertaining the facts". KMR asserts that any "deviation from the technical rules of evidence" in this case will not aid in ascertaining the facts, but will, in fact, hide and distort the facts of the case. Until the evidence is produced, no adjustments to Contributions In Aid of Construction, "CIAC" or amortization of CIAC for unsupported plant costs should be allowed.

The Arizona Administrative Code R14-3-109 (A) was violated during the Phase 1 portion of this case in order to expedite financing approval for a WIFA loan for an interconnection pipeline project for Mesa del Caballo, "MdC". That violation has led to a Decision in the Phase 1 portion of this case that has encumbered PWC (and by relation, it's ratepayers) with debt that will take 20 years to pay for. KMR asserts that the expedited nature of Phase 1 unfairly advantaged PWC and disadvantaged ratepayers. Decision #74175 was issued on October 25, 2013, which granted financing approval of $275,000 for an interconnection pipeline project after an expedited examination of evidence in the case, despite loud and clear opposition by many ratepayers. Perhaps a different decision would have been reached if a closer examination of the facts had been achieved. For example, PWC's water augmentation costs are reported to be $2,438[17] for the test year 2012. It is not rational to construct an interconnection pipeline (to be used for only two or three years), at a cost of $275,000 in order to avoid water augmentation charges that are significantly lower. The Company's costs of $2,438 per year x 3 years amounts to less than 3% of the cost of the interconnect pipeline. Although the violation of that rule was

my mistake

[14] Document #0000149555, Page 9 of the Direct Testimony of Crystal S. Brown, Public Utilities Analyst V.
[15] Document #0000149555, Page 10 of the Direct Testimony of Crystal S. Brown, Public Utilities Analyst V.
[16] Document #0000150385, Exhibit JW-RB2, Affidavit of Jason Williamson, Page 1.
[17] Document #0000149555, Page 20 of the Direct Testimony of Crystal S. Brown, Public Utilities Analyst V.

stated to have been made in order to preemptively save MdC customers from high summer water bills over the next 2 or 3 summers, it must be clarified that this relief will be only in the short-term (for the next 2 or 3 years use of the pipeline interconnection). They will be required to pay for that short-term relief for the next 20 years. Over the course of the 20-year loan, MdC ratepayers will pay significantly more than they likely would have paid for the next 3 years of water hauling charges - see Exhibit KMR-5. Additionally, if/when the remaining portion of the Cragin pipeline project is authorized in Phase 2, they will then suffer significantly higher year round water bills and there is no guarantee that they won't still have to pay additional water hauling charges during peak summer shortage periods[18]. See Exhibit KMR-6 to see the financial impact the Staff and PWC proposed rates would have on customers in this community. Furthermore, KMR was dismayed to learn that PWC is spending "tens of thousands of extra dollars in expedited Commission proceedings. Because building the Interconnection as soon as possible is the best thing for the Company and its customers"[19]. KMR refutes that this decision is the best thing for its customers, based on her analysis in Exhibit KMR-5. Accordingly, strict adherence to the rules is requested by KMR in all future examination of the evidence in this case. Any additional violations to the Arizona Administrative Code Rules will be viewed as egregious, particularly in light of the evidence of unscrupulous activity by PWC that has been revealed in the record of this case.

It is also noted in the Staff Report that at the beginning of the test year, PWC was composed of eight separate water systems[20]. This is inaccurate, as PWC was actually composed of nine separate water systems at the beginning of the test year until the Star Valley/Quail Valley system was sold in a condemnation sale on April 12, 2012[21]. After that, PWC was composed of eight water systems, specifically Mesa del Caballo, Mead's Ranch, East Verde Estates, Flowing Springs, Geronimo Estates/Elusive Acres, Whispering Pines, Gisela/Tonto Creek Shores and Deer Creek Village, yet the accounting for the eight/nine water systems was recorded using only one accounting system and one chart of accounts by PWC. This is particularly troubling, since there were at least two separate rate structures in place and nine separate plants in service during the first part of the Test Year and eight separate plants in service during the other part of the Test Year. As such, Staff had to do some fancy calculations to come up with recommendations for plausible CIAC, which caused adjustments to the rate base. Throughout Staff's audit of the Company's accounting figures, there were adjustments made to Operating Income, Salaries and Wages, Contractual Services Expense, Corporate Office Allocations and removal of costs incurred by the prior owner while exploring the possibility of purchasing another water company. In addition, Staff had to adjust depreciation expenses, income tax expenses and sales taxes. It is clear throughout this testimony that inaccurate and/or misleading accounting figures had been submitted by PWC in the filing of this case, despite the Affidavit of Jason Williamson stating "that BUI's accounting practices were sound"[22]. As such, it seems reasonable, and KMR requests that the ACC orders PWC, pursuant to **A.R.S. §40-221**, to record the accounting for each separate water system, with

[18] Per the testimony of Jason Williamson at the Phase 1 Hearing on September 25, 2013, from 04:09:30 through 04:12:20 of the video archive.

[19] Per the Responsive Testimony of Jason Williamson, Document #0000148449, Page 4 lines 22-25.

[20] Document #0000149555, Page 11 of the Direct Testimony of Crystal S. Brown, Public Utilities Analyst V.

[21] The Stipulated Final Judgment in Condemnation was entered by the Gila County Superior Court on April 12, 2012 per Document #0000137243 on the ACC Docket W-03514A-98-0084.

[22] See Document #0000150385, Exhibit JW-RB2, Page 1 of the Affidavit of Jason Williamson.

eight separate chart of accounts from this point forward. Otherwise, it is possible that a similar situation may occur again in the future if/when PWC no longer owns one or more of these current water systems. The ratepayers deserve accurate and honest reporting of all accounting by PWC, especially in light of the high level of distrust that already exists. Any future occurrences of similar "fuzzy math" will be seen as egregious, in light of these discrepancies that are documented in the record of this case. Further, a high level of accounting transparency will aid the ratepayers in establishing trust. Accordingly, it should be ordered that all normal components of a company's cost of service for each community be tracked separately. Since these eight communities are separated by great distances and some have different hydro-geology conditions, it is common that residents of one community would not be aware of costly expenditures, such as water hauling exercises, infrastructure improvements or other maintenance improvements that are being made in any of the other communities. Hence, PWC stands the risk of alarming ratepayers at each future rate case, as it did in this one. Separate accounting for each community can easily show cost of service and provide clear evidence that PWC is establishing "just and reasonable rates" as required by **A.R.S. §40-361.**

Throughout this rate case, ratepayers from the seven communities outside of the MdC community have expressed strong and clear opposition to paying for any portion of the Cragin pipeline project being proposed for MdC . At the October 15, 2013 ACC Open Meeting, Commissioner Brenda Burns asked Judge Dwight Nodes for clarification on whether the decision in Phase 1 will set in motion an impact on other ratepayers of PWC in the future[23]? Judge Nodes states in his response (in part), "the order clearly reflects that nothing in Phase 1 or Phase 2 regarding this project is going to be imposed on anyone other than the MdC customers, that was the testimony at the hearing, there is not one bit of record evidence anywhere that indicates anyone other than the MdC customers will ever pay anything for the Cragin pipeline in either Phase 1 or Phase 2."[24] The Commissioners voted 5-0 in favor of adopting the recommended Phase 1 Order prepared by Judge Nodes after this strong clarification was given. Accordingly, KMR expects the ACC to honor that intention fully...that only the ratepayers of MdC be expected to pay for any of the costs relating to the Cragin pipeline project or its financing requirements. That would include a requirement from the Phase 1 Decision #74175 issued on October 25, 2013 in this case, which indicates that the Phase 2 permanent rate case must result in a debt service coverage, "DSC", of 1.2 or greater, as PWC needs that DSC for the resulting WIFA loan approval for the MdC pipeline project. KMR asserts that it would be unjust for the ratepayers of the other seven outlying communities to pay higher rates, simply to achieve that DSC, without any new benefit coming to them. Accordingly, higher rates made solely to achieve that DSC should be borne <u>solely</u> by the ratepayers in MdC, since the ratepayers of MdC will be the only ones that will benefit from the pipeline project being proposed and funded via that WIFA loan. Therefore, it is unacceptable that there is only <u>one</u> proposal from PWC and Staff to consolidate the rates of all eight communities, when we should expect to see <u>at least two</u> separate proposals, one for the other 7 communities that is aligned with actual costs of service (and provides credible assurance that they are not paying for any costs associated with the MdC pipeline project or its financing requirements), and one showing the proposed rates for MdC that then strives to achieve that DSC of 1.2 or greater, independent of the other communities. It is unacceptable to ask the

[23] ACC Open Meeting on October 16, 2013, Item 33, beginning at 00:09:54 of the video archive.
[24] ACC Open Meeting on October 16, 2013, Item 33, from 00:12:40 through 00:13:25 of the video archive.

ratepayers from all eight communities to pay higher rates simply to help PWC meet the DSC of 1.2 or greater to qualify for financing for the MdC pipeline project. This single proposal is evidence that supports the widely perceived notion by ratepayers that they are subsidizing the costs of other systems within PWC. KMR asserts that a single proposal for consolidated rates in this case is unjust and unreasonable, which is prohibited by **A.R.S. §40-361.**

Attached as Exhibit KMR-7 is a summary of the current consolidated rate increase proposals offered by both Company and Staff. This analysis shows the percentage increases, as calculated for the most common 5/8 x 3/4 inch and 3/4 inch residential meter customers, for both Base Rate and Commodity Rates. These increases are significant, especially in the Staff recommendation for the Commodity Rates for ratepayers in the former C & S System, ranging from 170% to 509% higher than the current rate for comparable usage. The Company's Rebuttal proposal[25] is even more aggressive, with Commodity Rates for ratepayers in the former C & S System ranging from 299% to 518% higher than the current rate for comparable usage. No justification is offered by the ACC or PWC for this exorbitant level of increase, but it can be concluded that the ratepayers are being asked to reinstate operating income lost due to the condemnation sale of the Star Valley/Quail Valley system and the loss of a $755,709 gain on that sale that vanished from the Company's accounts sometime between April 2012 and June 2013. By way of the consolidation proposal, ratepayers in the former C & S System are being asked to pay a larger percentage than the ratepayers in the former United Utilities System, which is discriminatory to those ratepayers and should, therefore, be denied, pursuant to **A.R.S. §40-203.** The former C & S System is comprised of Gisela and Tonto Creek Shores, not DCV, as was incorrectly stated on the Public Notice[26] issued in this case.

At the Direct Testimony of Jian Liu, Utilities Engineer - Water/Wastewater in the Utilities Division of the ACC, Mr. Liu states that an ADEQ report noted significant violations in the MdC system[27]. Also noted in his testimony is an ADWR report that shows PWC is not in compliance with departmental requirements governing water providers and/or community water systems[28]. KMR has filed a Motion for Discovery requesting Staff provide a copy of these ADEQ and ADWR compliance status reports and has received them. KMR asks that no decision is rendered in this case until it can be shown that PWC has achieved compliance with both ADEQ and ADWR requirements.

It is also noted in the Engineering section of the Staff Report that PWC is not located in any Active Management Area, "AMA", and therefore PWC is not subject to ADWR AMA reporting and conservation requirements[28]. It is unreasonable, therefore, to impose "conservation" type of rates (a tiered structure) on any of these rural communities, without just cause. The communities of Gisela and DCV are at a much lower elevation than the other six communities, which means that seasonal daily temperatures can be significantly hotter there. Please refer to Exhibit KMR-8 for documentation showing the elevation of each of these eight communities. Consumers in the communities of Gisela and

[25] See Document #0000150385, Rebuttal Testimony of Thomas J. Bourassa, pages 13 & 14.
[26] See Document #0000149527, Direct Testimony of Kathleen M. Reidhead, page 2, lines 11-22.
[27] See Document #0000149555, Page 13 of the Engineering Report by Jian Liu, Utilities Engineer.
[28] See Document #0000149555, Direct Testimony of Jian W. Liu, Utilities Engineer, Page 4, lines 5-9.

DCV exhibit higher water usage patterns, as noted on Page 11 of the Engineering Report, than consumers in the other 6 communities, which can reasonably be attributed to different weather conditions as well as abundant water resources[29]. Based on this evidence, it would be discriminatory to impose conservation rates on these 2 communities. The current rate proposals should, therefore, be denied, pursuant to **A.R.S. §40-203**.

It is noted that the ACC has not ruled on a Motion for Intervention filed by Glynn Ross of Gisela[30]. KMR requests that Judge Nodes rule on that request without further delay. As a member of the class of ratepayers from the former C & S System, Glynn Ross has much at stake with the consolidation of rates being proposed. Therefore, Glynn Ross should be granted his legal right to participate as an Intervener, as requested in his timely filed Application for Intervention.

Lastly, KMR attaches her water bill for her Phoenix home as Exhibit KMR-9 to show that for the period of 10/8/2013 through 11/7/2013, her 2-person household consumed 10,472 gallons of water with no "conservation" type of restrictions being imposed. It is shown on the water usage chart that usage was at or above 20,000 gallons/month for 3 months last year because her household uses water without restraint. She enjoys a swimming pool and grass and beautiful plants and trees in the yard, which are all important elements in the quality of her life. While intrinsic value may be difficult to quantify, it should also be afforded consideration in this matter. She asks that the people of Gisela and DCV are shown similar consideration for quality of their lifestyle, where water should be delivered at very low rates, as there is no scarcity of water in those communities.

KMR requests a continuance in this case until such time that the following can be accomplished: 1) Full cost of service studies be conducted for each of the eight communities and new proposals be made for rates based, in part, on results of these studies 2) Business plan and budget to renovate each water system be submitted by PWC 3) Investigation into the missing $755,709 Company owned asset from the condemnation sale of the Star Valley/Quail Valley water system be conducted and that asset be returned to the Company 4) Subpoena source documentation from BUI to substantiate the cost of plant additions claimed during the years 2000 to 2012 5) Acquire compliance certifications from ADEQ and ADWR 6) Public comment be taken in the Payson area, as requested by Intervener Bill Sheppard and 7) Curtailment tariff be modified to remove DCV.

Respectfully submitted this 20th day of December, 2013.

By Kathleen M. Reidhead

Kathleen M. Reidhead, Intervener
14406 S. Cholla Canyon Dr.
Phoenix, AZ 85044

[29] See Exhibit KMR-1 attached.
[30] Document #0000149163 submitted on October 29, 2013.

ORIGINAL and thirteen (13) copies
of the foregoing were filed this 20th
day of December, 2013 with:

Docket Control
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

COPY of the foregoing was mailed
this 20th day of December, 2013 to:

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EXHIBIT KMR-1

Section 5.3
Tonto Creek Basin

from the Report: Arizona Water Atlas - Volume 5

available at:

http://www.azwater.gov/AzDWR/StatewidePlanning/wateratlas/CentralHighlands/default.htm

37 pages numbered from 166 to 202

5.3.1 Geography of the Tonto Creek Basin

The Tonto Creek Basin, located in the east central part of the planning area is 955 square miles in area. Geographic features and principal communities are shown on Figure 5.3-1. The basin is characterized by mid-elevation mountain ranges. Vegetation types include Arizona uplands Sonoran desertscrub, semi-desert grassland, interior chaparral, Great Basin conifer and madrean evergreen woodlands and montane conifer forests. (see Figure 5.0-10) Riparian vegetation is found along streams including mixed broadleaf, tamarisk and mesquite along Tonto Creek.

- Principal geographic features shown on Figure 5.3-1 are:
    - Tonto Creek running north to south through the center of the basin from Kohls Ranch and exiting the basin about eight miles south of Punkin Center
    - Rye Creek flowing through Rye in the western portion of the basin
    - Spring Creek and Hayler Creek flowing from the eastern basin boundary to Tonto Creek
    - Tonto Basin located in the south central part of the basin along Tonto Creek
    - Mogollon Rim along the northern basin boundary and the Sierra Ancha Mountains (not labeled on the map) along the eastern boundary
    - Mazatzal Mountains along the western boundary, which contain the highest point in the basin, Mazatzal Peak at 7,888 feet
    - The lowest point in the basin is about 5,000 feet along Tonto Creek where it exits the basin

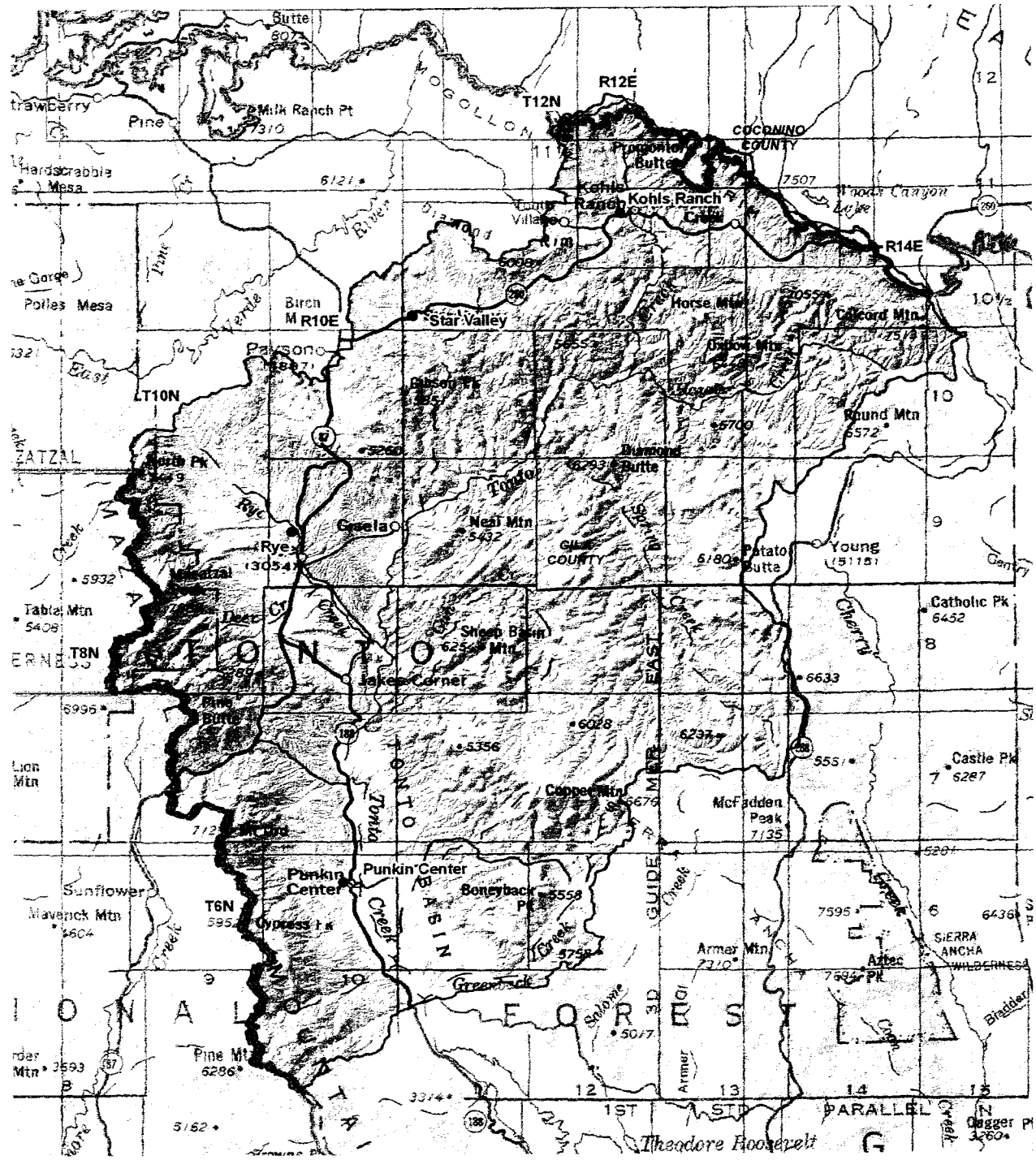


Figure 5.3-1
Tonto Creek Basin
Geographic Features

5.3.2 Land Ownership in the Tonto Creek Basin

Land ownership, including the percentage of ownership by category, for the Tonto Creek Basin is shown in Figure 5.3-2. The principal feature of land ownership in this basin is the large amount of forest service land. A description of land ownership data sources and methods is found in Volume 1, Appendix A. More detailed information on protected areas is found in Section 5.0.4. Land ownership categories are discussed below in the order from largest to smallest percentage in the basin.

National Forest

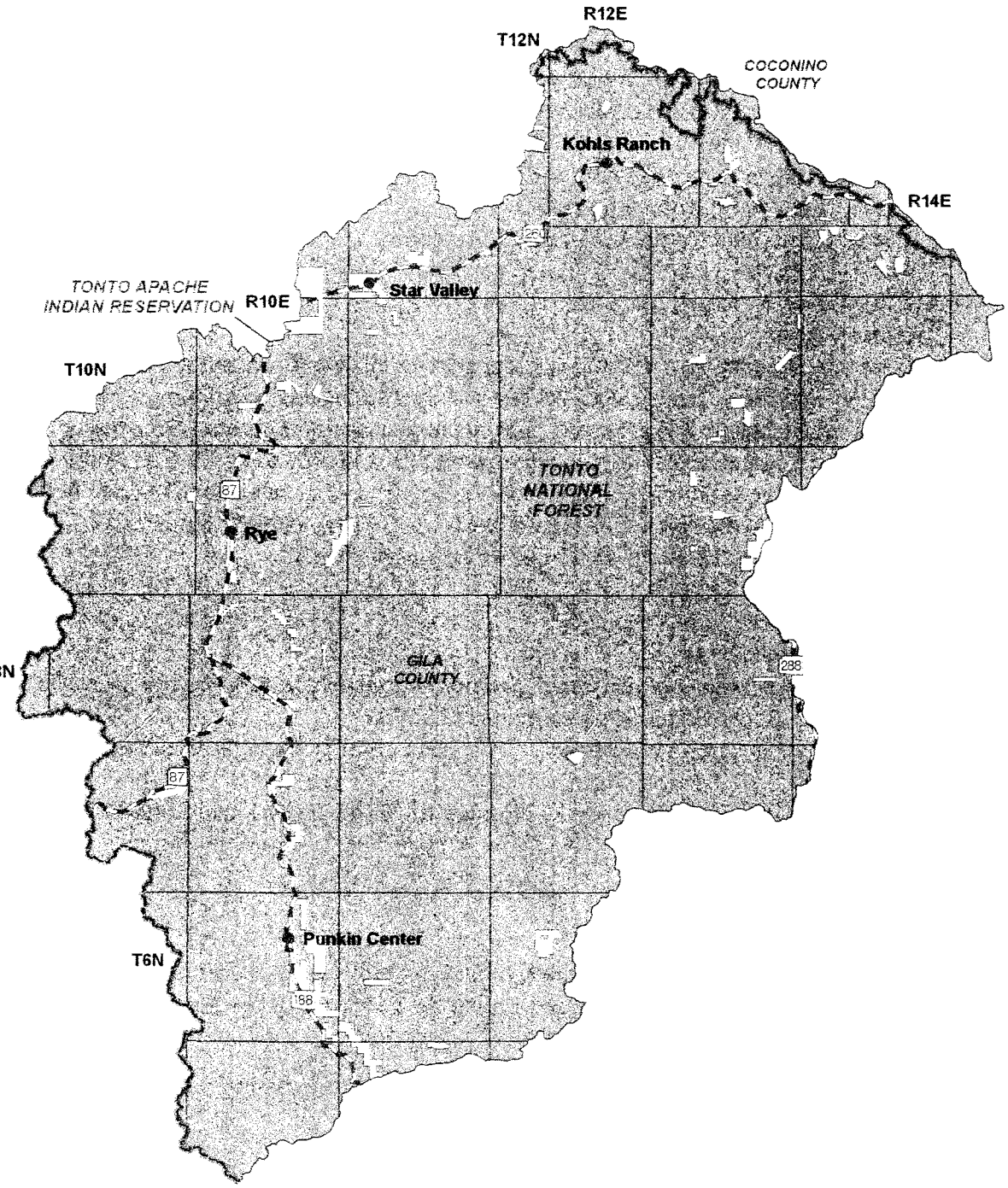
- 97.5% of the land is federally owned and managed by the United States Forest Service (USFS); the largest percentage of any basin in the planning area.
- Forest lands in the basin are part of the Tonto National Forest.
- The basin contains two wilderness areas, a portion of the 250,053-acre Mazatzal Wilderness and the entire 37,399-acre Hellsgate Wilderness. (see Figure 5.0-13)
- There are numerous small private in-holdings.
- Land uses include recreation, grazing and timber production.

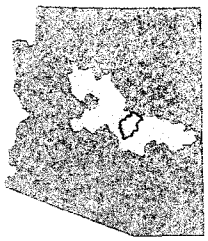
Private

- 2.4% of the land is private.
- Small in-holdings of private land are scattered throughout the basin with a number of larger parcels in the vicinity of Punkin Center and Star Valley.
- Land uses include domestic, commercial and ranching.

Indian Reservation

- 0.1% of the land is under ownership of the Tonto Apache tribe, located southwest of Star Valley.
- Land use includes domestic and ranching.





Source: ALRIS, 2004

0 3 6 Miles

Land Ownership (Percentage in Basin)

National Forest (97.5%)
Private (2.4%)
Indian Reservation (0.1%)

COUNTY
Major Road
City, Town or Place

Figure 5.3-2
Tonto Creek Basin
Land Ownership

5.3.3 Climate of the Tonto Creek Basin

Climate data from NOAA/NWS Co-op Network and SNOTEL/Snowcourse stations are compiled in Table 5.3-1 and the locations are shown on Figure 5.3-3. Figure 5.3-3 also shows precipitation contour data from the Spatial Climate Analysis Service (SCAS) at Oregon State University. The Tonto Creek Basin does not contain Evaporation Pan or AZMET stations. More detailed information on climate in the planning area is found in Section 5.0.3. A description of the climate data sources and methods is found in Volume 1, Appendix A.

NOAA/NWS Co-op Network

- Refer to Table 5.3-1A
- There are three NOAA/NWS Co-op network climate stations in the basin. The average monthly maximum temperature occurs in July at all stations and ranges between 86.8°F at Reno R.S. and 81.9°F at Gisela. The average monthly minimum temperature occurs in January or December and ranges between 40.8°F at Gisela and 45.3°F at Punkin Center.
- Highest average seasonal rainfall occurs in the winter (January – March) and fall (October-December). For the period of record used, the highest annual rainfall is 19.77 inches at Reno R.S. and the lowest is 18.23 inches at Punkin Center.

SNOTEL/Snowcourse

- Refer to Table 5.3-1D
- There are two stations in this basin, Promontory Butte and Promontory (SNOTEL). The Promontory Butte station was discontinued in 1989.
- Both stations are at an elevation of 7,930 feet and record highest average snowpack in April.
- The highest average snowpack at Promontory Butte is 15.1 inches and at Promontory (SNOTEL) is 13.8 inches.

SCAS Precipitation Data

- See Figure 5.3-3
- Additional precipitation data shows rainfall as high as 38 inches on the northern basin boundary at the Mogollon Rim and as low as 14 inches on the southern basin boundary south of Punkin Center.

Table 5.3-1 Climate Data for the Tonto Creek Basin

A. NOAA/NWS Co-op Network:

Station Name	Elevation (in feet)	Period of Record Used for Averages	Average Temperature Range (in F)		Average Total Precipitation (in inches)				
			Max/Month	Min/Month	Winter	Spring	Summer	Fall	Annual
Gisela	2,900	1895-2004[1]	81.9/Jul	40.8/Dec	6.53	1.39	6.10	4.89	18.91
Reno R.S.	2,420	1915-1973[1]	86.8/Jul	45.1/Jan	3.51	1.05	6.58	8.61	19.77
Punkin Center	2,360	1971-2000	85.9/Jul	45.3/Dec	6.92	1.23	4.83	5.24	18.23

Source: WRCC, 2005

Notes:
[1]Average temperature for period of record shown; average precipitation from 1971-2000

B. Evaporation Pan:

Station Name	Elevation (in feet)	Period of Record Used for Averages	Avg. Annual Evap (in inches)
None			

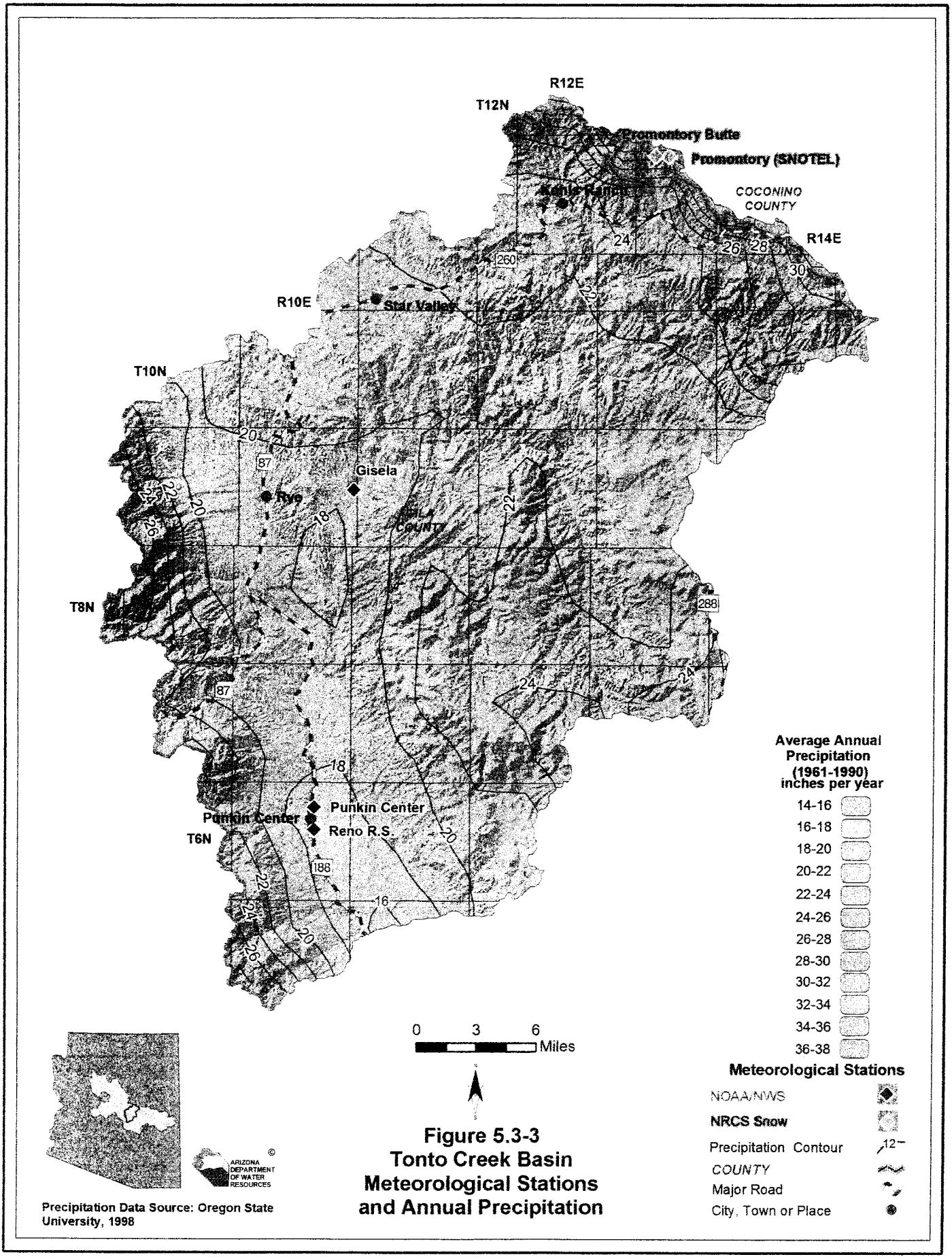
C. AZMET:

Station Name	Elevation (in feet)	Period of Record	Average Annual Reference Evapotranspiration, in inches *(Number of years to calculate averages)*
None			

D. SNOTEL/Snowcourse:

Station Name	Elevation (in feet)	Period of Record	Average Snowpack, at Beginning of the Month, as Inches Snow Water Content *(Number of measurements to calculate average)*					
			Jan.	Feb.	March	April	May	June
Promontory Butte	7,930	1973 - 1989 (discontinued)	4.2 *(10)*	8.4 *(13)*	13.7 *(16)*	15.1 *(15)*	11.3 *(1)*	0 *(0)*
Promontory SNOTEL	7,930	1973 - current	3.7 *(27)*	8.0 *(30)*	13.4 *(33)*	13.8 *(32)*	2.1 *(24)*	0 *(23)*

Source: Natural Resources Conservation Service, 2006



Precipitation Data Source: Oregon State University, 1998

Figure 5.3-3
Tonto Creek Basin
Meteorological Stations and Annual Precipitation

5.3.4 Surface Water Conditions in the Tonto Creek Basin

Streamflow data, including average seasonal flow, average annual flow and other information is shown in Table 5.3-2. Flood ALERT equipment in the basin is shown in Table 5.3-3. Reservoir and stockpond data, including maximum storage or maximum surface area, are shown in Table 5.3-4. The location of streamflow gages identified by USGS number, flood ALERT equipment and USGS runoff contours are shown on Figure 5.3-5. Descriptions of stream, reservoir and stockpond data sources and methods are found in Volume 1, Appendix A.

Streamflow Data

- Refer to Table 5.3-2.
- Data from four stations located on two watercourses are shown in the table and on Figure 5.3-5.
- The average seasonal flow at all stations is highest in the winter (January-March) and lowest in the summer (July-September).
- The largest annual flow recorded is 469,256 acre-feet in 1978 at the Tonto Creek above Gun Creek near Roosevelt station and the smallest is 1,245 acre-feet in 1971 at the Rye Creek near Gisela station. For a hydrograph of Tonto Creek above Gun Creek near Roosevelt station from 1941-2008 see Figure 5.3-4.

Flood ALERT Equipment

- Refer to Table 5.3-3.
- As of October 2005 there were nine stations in the basin.

Reservoirs and Stockponds

- Refer to Table 5.3-4.
- The basin does not contain any large reservoirs.
- Surface water is stored or could be stored in one small reservoir in the basin.
- There are 389 registered stockponds in this basin.

Runoff Contour

- Refer to Figure 5.3-5.
- Average annual runoff is two inches per year, or 106.6 acre-feet per square mile, in the southern tip of the basin and increases to five inches per year, or 266.5 acre-feet per square mile, in the northern portion of the basin.

Figure 5.3-4 Annual Flows (acre-feet) at Tonto Creek above Gun Creek near Roosevelt, water years 1941-2008 (Station #9499000)

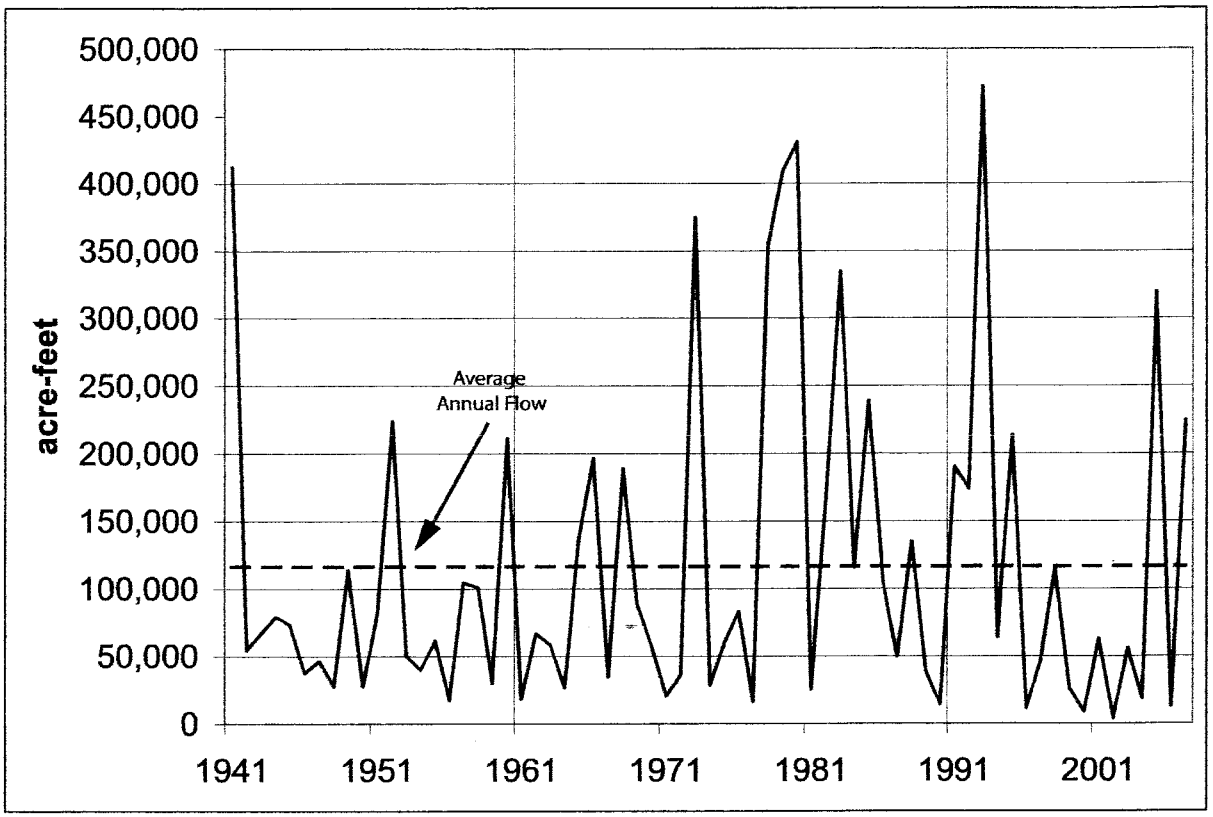


Table 5.3-2 Streamflow Data for the Tonto Creek Basin

Station Number	USGS Station Name	Drainage Area (in mi²)	Gage Elevation (in feet)	Period of Record	Average Seasonal Flow (% of annual flow)				Annual Flow (in acre-feet/year)				Years of Annual Flow Record
					Winter	Spring	Summer	Fall	Minimum	Median	Mean	Maximum	
9498800	Tonto Creek near Gisela	430	2,940	12/1964-9/1975 (discontinued)	43	15	8	33	32,796 (1974)	68,705	93,147	236,741 (1965)	10
9498870	Rye Creek near Gisela	122	2,730	12/1965-9/1985 (discontinued)	65	10	7	18	1,245 (1971)	9,267	19,030	64,289 (1978)	19
9499000	Tonto Creek above Gun Creek near Roosevelt	675	2,523	12/1940-current (real-time)	61	12	8	19	2,853 (2002)	66,297	113,232	469,256 (1978)	62
9499500	Tonto Creek near Roosevelt	841	NA	10/1913-12/1940 (discontinued)	59	17	10	15	17,452 (1934)	89,796	104,292	225,214 (1916)	27

Source: USGS (NWIS) 2005 & 2008

Notes:
Statistics based on Calendar Year
Annual Flow statistics based on monthly values
Summation of Average Annual Flows may not equal 100 due to rounding
Period of record may not equal Year of Record used for annual Flow/Year statistics due to only using years with a 12 month record
In Period of Record, current equals November 2008
Seasonal and annual flow data used for the statistics was retrieved in 2005
NA = Data not currently available to ADWR

Table 5.3-3 Flood ALERT Equipment in the Tonto Creek Basin

Station ID	Station Name	Station Type	Install Date	Responsibility
51	Upper Deer Creek	Precipitation	NA	Gila County FCD
54	Christopher Creek	Precipitation	5/1/2005	Gila County FCD
67	Rock Creek (Rye Tributary)	Precipitation	NA	Gila County FCD
80	Hardt Creek @ SR 87	Precipitation/Stage	NA	Gila County FCD
92	Little Pine Flat	Precipitation	8/29/2005	Gila County FCD
930	Deer Creek Shake Ridge (Bar T Bar North)	Precipitation	NA	Gila County FCD
931	Upper Rye Creek	Precipitation	NA	Gila County FCD
3900	Houston Creek	Precipitation/Stage	10/26/2005	Gila County FCD
5960	Mt. Ord Repeater	Repeater/Precipitation	10/28/1982	Maricopa County FCD

Source: ADWR 2005b

Notes:
FCD = Flood Control District
NA = Data not currently available to ADWR

Table 5.3-4 Reservoirs and Stockponds in the Tonto Creek Basin

A. Large Reservoirs (500 acre-feet capacity and greater)

MAP KEY	RESERVOIR/LAKE NAME (Name of dam, if different)	OWNER/OPERATOR	MAXIMUM STORAGE (AF)	USE	JURISDICTION
None identified by ADWR at this time					

B. Other Large Reservoirs (50 acre surface area or greater)

MAP KEY	RESERVOIR/LAKE NAME (Name of dam, if different)	OWNER/OPERATOR	MAXIMUM SURFACE AREA (acres)	USE	JURISDICTION
None identified by ADWR at this time					

Source: Compilation of databases from ADWR & others

C. Small Reservoirs (greater than 15 acre-feet and less than 500 acre-feet capacity)

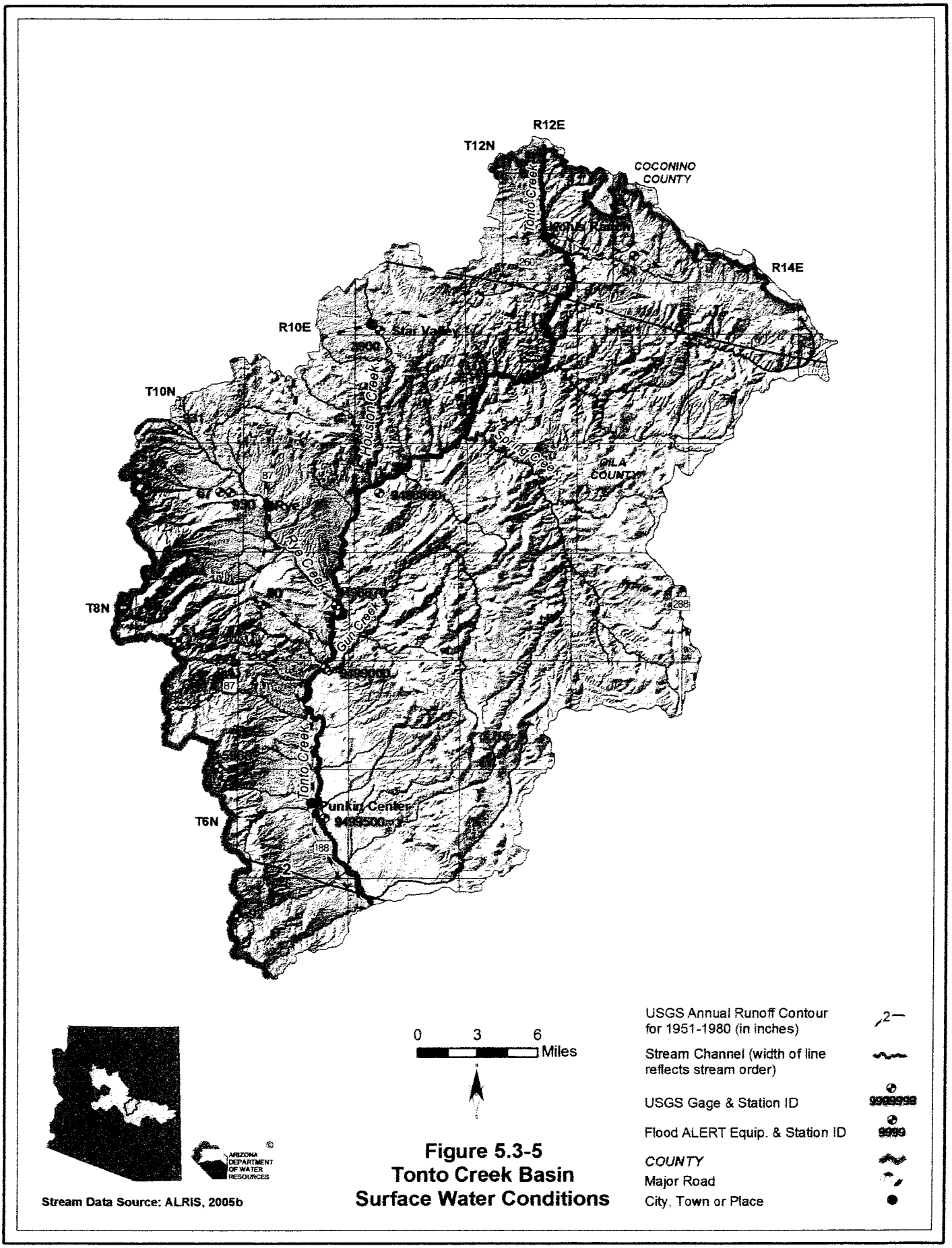
Total number: 1
Total maximum storage: 20 acre-feet

D. Other Small Reservoirs (between 5 and 50 acres surface area)

Total number: 0
Total surface area: 0 acres

E. Stockponds (up to 15 acre-feet capacity)

Total number: 389 (from water right filings)



Stream Data Source: ALRIS, 2005b

Figure 5.3-5
Tonto Creek Basin
Surface Water Conditions

5.3.5 Perennial/Intermittent Streams and Major Springs in the Tonto Creek Basin

Major and minor springs with discharge rates and date of measurement, and the total number of springs in the basin are shown in Table 5.3-5. The locations of major springs and perennial and intermittent streams are shown on Figure 5.3-6. Descriptions of data sources and methods for intermittent and perennial reaches and springs are found in Volume 1, Appendix A.

- Perennial streams in this basin include Tonto Creek, Haigler Creek, Spring Creek, Dell Shay Creek, Houston Creek, Christopher Creek and Greenback Creek.
- There are numerous intermittent streams located throughout the basin.
- There are 10 major springs with a measured discharge of 10 gallons per minute (gpm) or greater at any time. The largest discharge rate is 1,291 gpm at Tonto spring.
- Springs with measured discharge of 1 to 10 gpm are not mapped but coordinates are given in Table 5.3-5B. There are seven minor springs identified in this basin.
- Listed discharge rates may not be indicative of current conditions. Only six springs have measured discharges in the past decade.
- The total number of springs, regardless of discharge, identified by the USGS varies from 169 to 175, depending on the database reference.

Table 5.3-5 Springs in the Tonto Creek Basin

A. Major Springs (10 gpm or greater):

Map Key	Name	Location		Discharge (in gpm)[1]	Date Discharge Measured
		Latitude	Longitude		
1	Tonto	342312	1110541	1,291	During or prior to 2001
2	R-C	341827	1110311	800	5/14/1952
3	Horton	342217	1110333	392	10/2/2002
4	See	342108	1110039	84	During or prior to 2002
5	Nappa	342118	1110111	70	8/17/1966
6	Henturkey[2]	342037	1110541	60	10/17/1952
7	Wildcat/Arsenic	341726	1111031	59	10/20/1952
8	Indian Gardens	341926	1110610	26	During or prior to 2002
9	Winters # 3	342235	1110633	20	5/16/1952
10	Unnamed[2]	342043	1110054	15	8/17/1966

B. Minor Springs (1 to 10 gpm):

Name	Location		Discharge (in gpm)[1]	Date Discharge Measured
	Latitude	Longitude		
Bootleg	341852	1110358	8	During or prior to 2001
Allenbaugh	341620	1105353	8[3]	4/19/2001
Turkey-south	341356	1111752	5[4]	5/14/1952
Blue-south	341007	1111943	4	5/14/1952
Bear Flat/ Columbine	341716	1110357	4	7/16/1975
Winters # 1	342233	1110634	1	5/16/1952
Winters # 2	342233	1110634	1	During or prior to 1952

Source: Compilation of databases from ADWR & others

C. Total number of springs, regardless of discharge, identified by USGS (see ALRIS, 2005a and USGS, 2006a): 169 to 175

Notes:
[1]Most recent measurement identified by ADWR
[2]Spring is not displayed on current USGS topo maps
[3]Discharge measurements vary. Shown is greatest measured discharge; most recent measurement < 1 gpm
[4]Average gpm

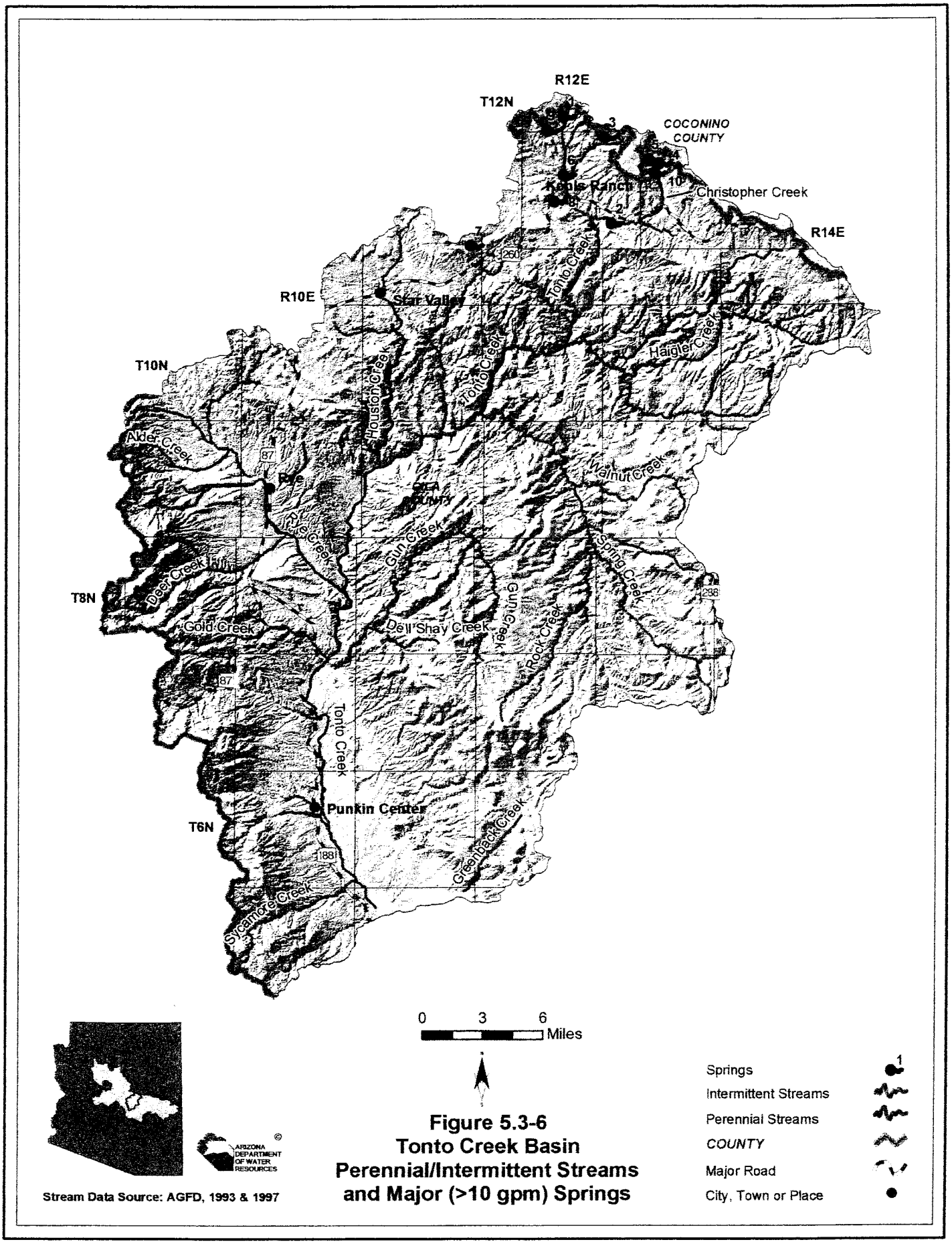


Figure 5.3-6
Tonto Creek Basin
Perennial/Intermittent Streams and Major (>10 gpm) Springs

5.3.6 Groundwater Conditions of the Tonto Creek Basin

Major aquifers, well yields, estimated natural recharge, estimated water in storage, number of index wells and date of last water-level sweep are shown in Table 5.3-6. Figure 5.3-7 shows aquifer flow direction and water-level change between 1990-1991 and 2003-2004. Figure 5.3-8 contains hydrographs for selected wells shown on Figure 5.3-7. Figure 5.3-9 shows well yields in five yield categories. A description of aquifer data sources and methods as well as well data sources and methods, including water-level changes and well yields are found in Volume 1, Appendix A.

Major Aquifers

- Refer to Table 5.3-6 and Figure 5.3-7.
- The major aquifers in the basin are basin fill and sedimentary rock (C and R aquifers).
- Most of the basin geology consists of consolidated crystalline and sedimentary rocks.
- Flow direction is generally from the north to the south.

Well Yields

- Refer to Table 5.3-6 and Figure 5.3-9.
- As shown on Figure 5.3-9, well yields in this basin range from less than 100 gallons per minute (gpm) to greater than 2,000 gpm.
- One source of well yield information, based on 51 reported wells, indicates that the median well yield in this basin is 120 gpm.
- The highest well yields in the basin are located along Highway 188 north of Punkin Center.

Natural Recharge

- Refer to Table 5.3-6.
- Natural recharge estimates for this basin range from 17,000 acre-feet per year (AFA) to 37,000 AFA.

Recharge Sites

- Refer to Figure 5.3-7.
- There is one permitted recharge facility in this basin, ADOT-Payson (permit no. 71-579155.0001), that recharges surface water to the aquifer.
- Under the permit the facility's maximum annual storage is 150 acre-feet.

Water in Storage

- Refer to Table 5.3-6.
- Storage estimates for this basin range from 2.0 million acre-feet (maf) to 9.4 maf to a depth of 1,200 feet.

Water Level

- Refer to Figure 5.3-7. Water levels are shown for wells measured in 2003-2004.
- The Department annually measures 13 index wells in this basin. Hydrographs for three of these wells are shown in Figure 5.3-8.
- There is one ADWR automated water-level recording device in this basin located near Star

Valley.

- These data show the deepest recorded water level in the basin is 106 feet east of Kohls Ranch and the shallowest is 14 feet near Punkin Center.

Table 5.3-6 Groundwater Data for the Tonto Creek Basin

Basin Area, in square miles:	955	
Major Aquifer(s):	**Name and/or Geologic Units**	
	Basin Fill	
	Sedimentary Rock (C and R Aquifers)	
Well Yields, in gal/min:	N/A	Measured by ADWR (GWSI) and/or USGS
	Range 5-2,200 Median 120 (51 wells reported)	Reported on registration forms for large (>10-inch) diameter wells (Wells55)
	Range 10-50	ADWR (1990)
	Range 0-500	Anning and Duet (1994)
Estimated Natural Recharge, in acre-feet/year:	17,000	ADWR (1994b)
	37,000	Freethey and Anderson (1986)
Estimated Water Currently in Storage, in acre-feet:	3,000,000 (to 1,200 feet)	ADWR (1994b)
	9,400,000 (to 1,200 feet)	ADWR (1992)
	2,000,000[1] (to 1,200 feet)	Freethey and Anderson (1986)
Current Number of Index Wells:	13	
Date of Last Water-level Sweep:	2008 (216 wells measured)	

[1] Predevelopment Estimate
N/A = not available

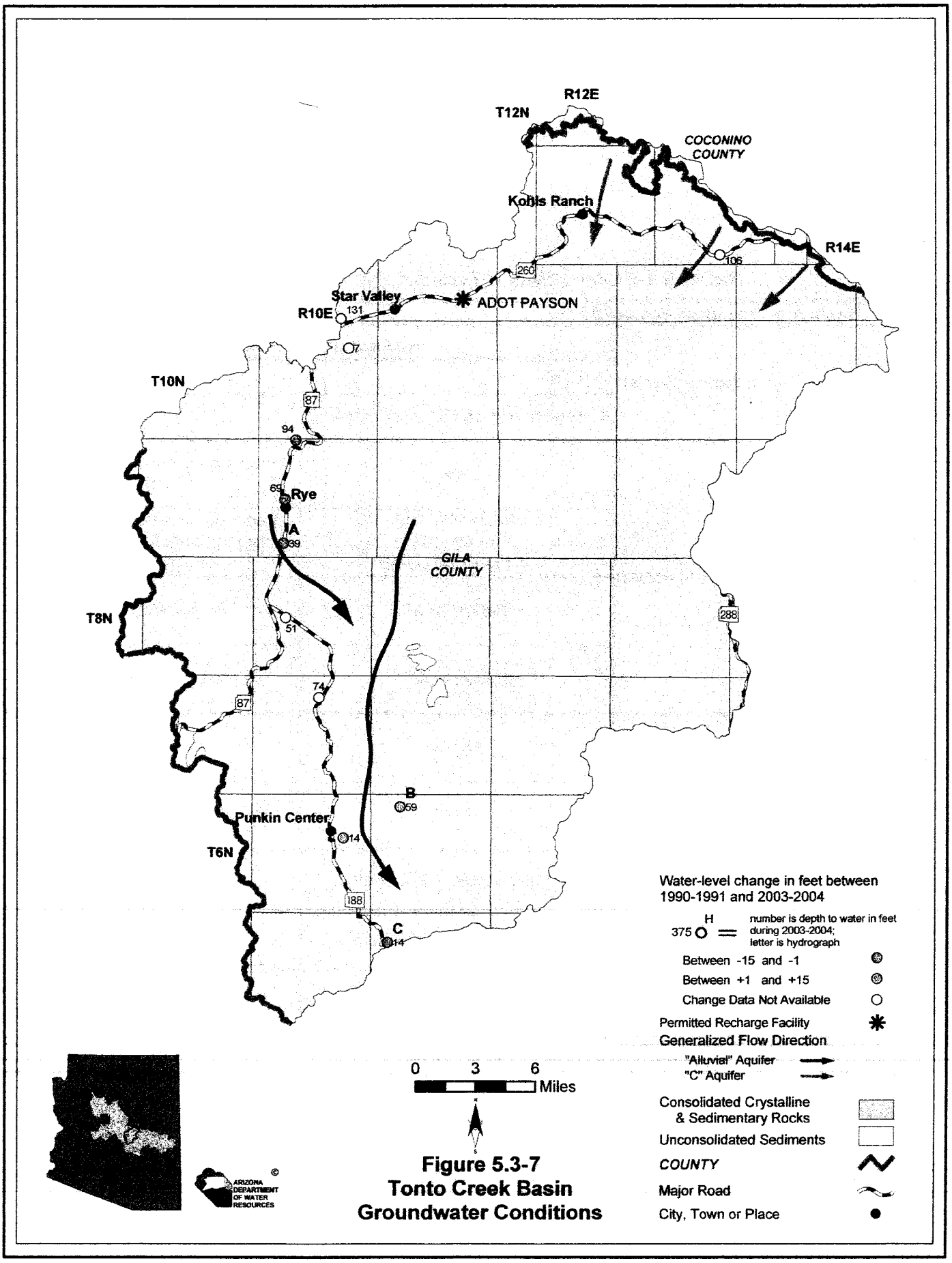
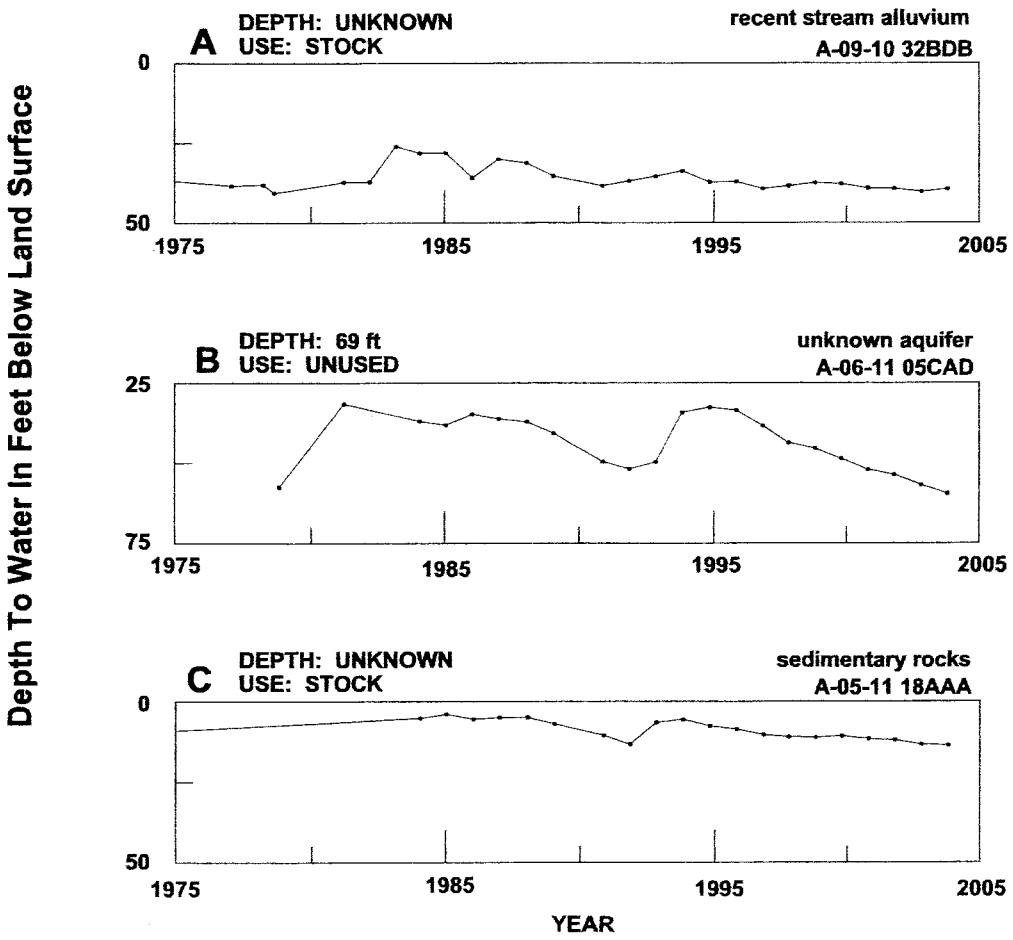


Figure 5.3-7
Tonto Creek Basin
Groundwater Conditions

Figure 5.3-8
Tonto Creek Basin
Hydrographs Showing Depth to Water in Selected Wells



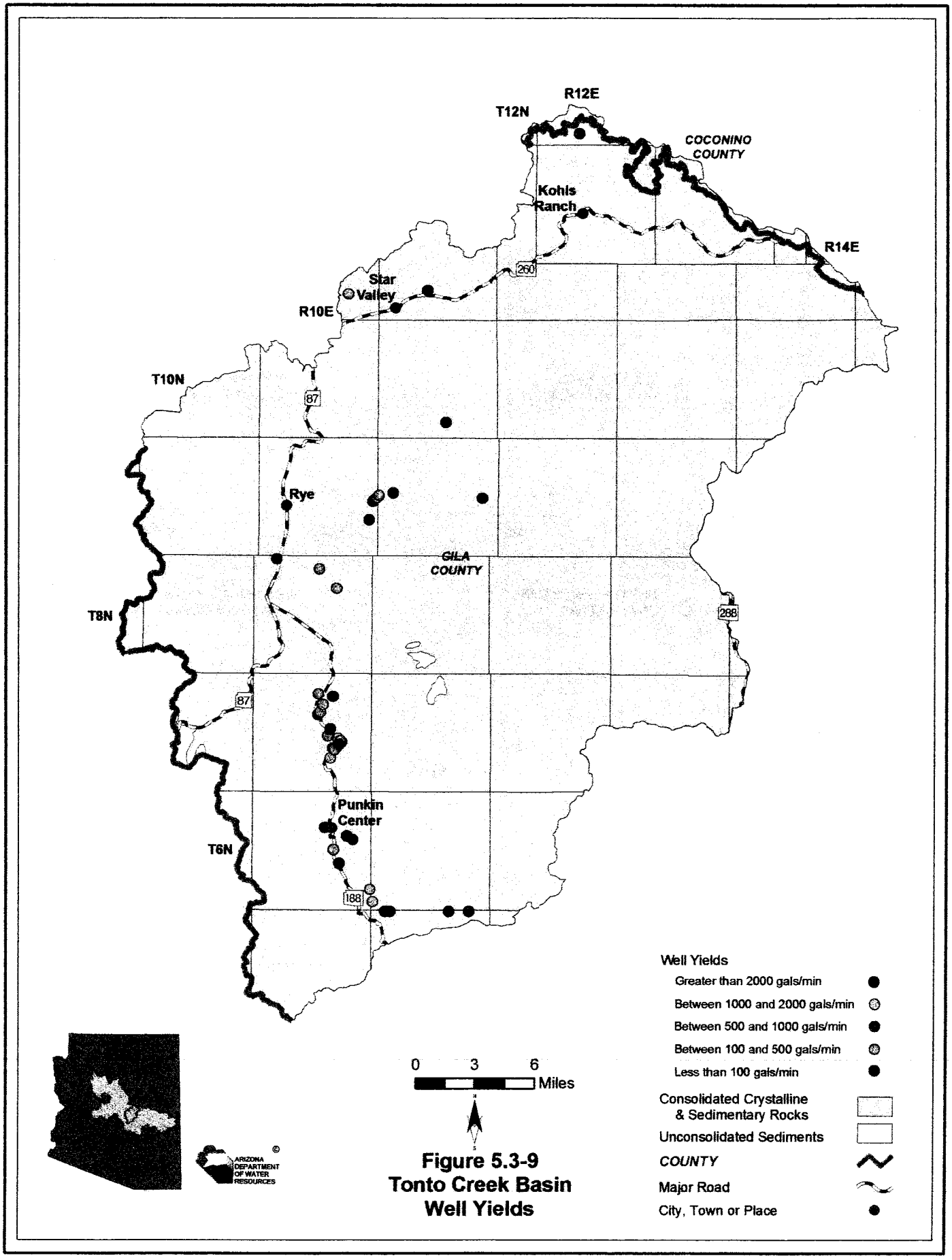


Figure 5.3-9
Tonto Creek Basin
Well Yields

5.3.7 Water Quality of the Tonto Creek Basin

Wells, springs and mine sites with parameter concentrations that have equaled or exceeded drinking water standard(s), including location and parameter(s) are shown in Table 5.3-7A. Impaired lakes and streams with site type, name, length of impaired reach, area of impaired lake, designated use standard and parameter(s) exceeded is shown in Table 5.3-7B. Figure 5.3-10 shows the location of water quality occurrences keyed to Table 5.3-7. All community water systems are regulated under the Safe Drinking Water Act and treat water supplies to meet drinking water standards. Not all parameters were measured at all sites; selective sampling for particular constituents is common. A description of water quality data sources and methods is found in Volume 1, Appendix A.

Well, Mine or Spring sites that have equaled or exceeded drinking water standards (DWS)

- Refer to Table 5.3-7A.
- Nine sites have parameter concentrations that have equaled or exceeded drinking water standards
- Standards equaled or exceeded in this basin include arsenic, nitrate, beryllium, radionuclides and organic compounds.

Lakes and Streams with impaired waters

- Refer to Table 5.3-7B.
- Water quality standards were equaled or exceeded in three stream reaches on two streams.
- The standard exceeded in all reaches was E. coli. The two reaches on Tonto Creek also exceeded the standard for nitrogen.
- All three impaired reaches are part of the ADEQ water quality improvement effort called the Total Maximum Daily Load (TMDL) program. The final TMDL reports for the streams have been completed and draft implementation plans are available for the two reaches on Tonto Creek.

Table 5.3-7 Water Quality Exceedences in the Tonto Creek Basin[1]

A. Wells, Springs and Mines

Map Key	Site Type	Site Location			Parameter(s) Concentration has Equaled or Exceeded Drinking Water Standard (DWS)[2]
		Township	Range	Section	
1	Well	11 North	12 East	34	Rad
2	Well	9 North	10 East	25	As
3	Well	9 North	11 East	18	Rad
4	Well	9 North	12 East	23	As, NO3
5	Well	8 North	10 East	13	NO3
6	Well	8 North	10 East	26	Be
7	Well	8 North	10 East	26	As
8	Well	8 North	10 East	27	As
9	Well	5 North	11 East	8	Organics

Source: Compilation of databases from ADWR & others

B. Lakes and Streams

Map Key	Site Type	Site Name	Length of Impaired Stream Reach (in miles)	Area of Impaired Lake (in acres)	Designated Use Standard[3]	Parameter(s) Exceeding Use Standard[2]
a	Stream	Christopher Creek (headwaters to Tonto Creek)	8	NA	FBC	E. coli
b	Stream	Tonto Creek (headwaters to unnamed tributary latitude 341810, longitude -1110414)	8	NA	A&W, FBC	E. coli, N, DO
c	Stream	Tonto Creek (unnamed tributary latitude 341810, longitude -1110414 to Haigler Creek)	9	NA	A&W, FBC	E. coli, N

Source: ADEQ 2005d

Notes:

[1] Water quality samples taken from 1979 to 2002

[2] As = Arsenic
Be = Beryllium
DO = Dissolved Oxygen
N = Nitrogen
NO3 = Nitrate
Organics = One or more of several volatile and semi-volatile organic compounds and pesticides
Rad = One or more of the following radionuclides - Gross Alpha, Gross Beta, Radium, and Uranium

[3] A&W = Aquatic and Wildlife
FBC = Full Body Contact
NA = Not Applicable

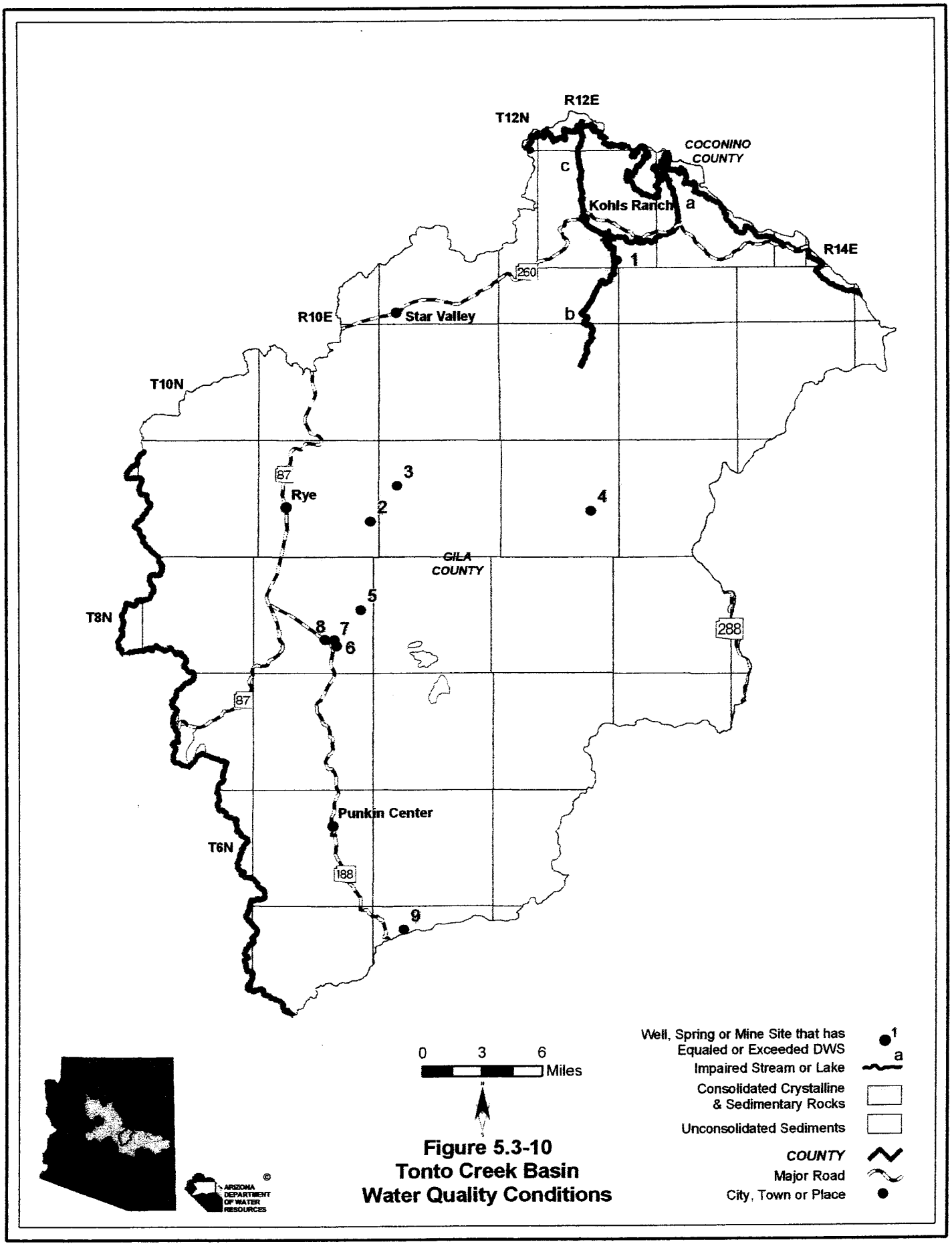


Figure 5.3-10
Tonto Creek Basin
Water Quality Conditions

5.3.8 Cultural Water Demand in the Tonto Creek Basin

Cultural water demand data including population, number of wells and the average well pumpage and surface water diversions by the municipal, industrial and agricultural sectors are shown in Table 5.3-8. Effluent generation including facility ownership, location, population served and not served, volume treated, disposal method and treatment level is shown in Table 5.3-9. Figure 5.3-11 shows the location of demand centers. A description of cultural water demand data sources and methods is found in Volume 1, Appendix A. More detailed information on cultural water demand is found in Section 5.0.7.

Cultural Water Demand

- Refer to Table 5.3-8 and Figure 5.3-11.
- Population in this basin has increased from 1,934 in 1980 to 7,975 in 2000.
- Groundwater use has fluctuated from a low of 2,000 AFA in the 1970s to an average of 4,000 AFA from 1986-1990. During 2001-2005 the average annual groundwater demand was 3,050 AFA.
- Municipal groundwater use has increased from an average of 1,600 AFA in 1991-1995 to 2,400 AFA in 2001-2005.
- There was no reported industrial groundwater use in 1991-1995. In 2001-2005, industrial demand was less than 300 AFA.
- Groundwater demand for irrigation was less than 1,000 AFA during 1991-2005.
- Information on surface water diversions is not available from 1971-1990. From 1991-2005, 1,000 AFA was used for irrigation.
- Municipal and industrial demand is principally found in the vicinity of Payson and Star Valley with smaller demand centers scattered along State Highways 188 and 260 as well as east of Rye.
- A small amount of agriculture is located east of Rye and in T9N, R10E.
- There is one small mine or quarry in this basin along Highway 87 south of Payson.
- As of 2005 there were 1,948 registered wells with a pumping capacity of less than or equal to 35 gpm and 280 wells with a pumping capacity of more than 35 gpm.

Effluent Generation

- Refer to Table 5.3-9.
- There are three wastewater treatment facilities in this basin. Data on population served, volume treated and disposal method was only available for one facility. This facility serves approximately 100 people, generates 13 acre-feet of effluent each year and discharges to Houston Creek.

Table 5.3-8 Cultural Water Demand in the Tonto Creek Basin[1]

Year	Estimated and Projected Population	Number of Registered Water Supply Wells Drilled		Average Annual Demand (in acre-feet)						Data Source
				Well Pumpage			Surface-Water Diversions			
		Q ≤ 35 gpm	Q > 35 gpm	Municipal	Industrial	Agricultural	Municipal	Industrial	Agricultural	
1971		724[2]	102[2]	2,000			NR			ADWR (1994a)
1972										
1973										
1974										
1975										
1976				2,000			NR			
1977										
1978										
1979										
1980	1,934									
1981	2,202	237	33	3,000			NR			
1982	2,470									
1983	2,738									
1984	3,006									
1985	3,275									
1986	3,543	283	28	4,000			NR			
1987	3,811									
1988	4,079									
1989	4,347									
1990	4,615									
1991	4,951	191	25	1,600	NR	<1,000	NR	NR	1,000	USGS (2007) ADWR (2008b) ADWR (2005a) ADWR (1992)
1992	5,287									
1993	5,623									
1994	5,959									
1995	6,295									
1996	6,631	300	62	1,900	<300	<1,000	NR	NR	1,000	
1997	6,967									
1998	7,303									
1999	7,639									
2000	7,975									
2001	8,186	213	30	2,400	<300	<1,000	NR	NR	1,000	
2002	8,398									
2003	8,609									
2004	8,820									
2005	9,032									
2010	10,088									
2020	12,641									
2030	14,538									
	WELL TOTALS:	1,948	280							

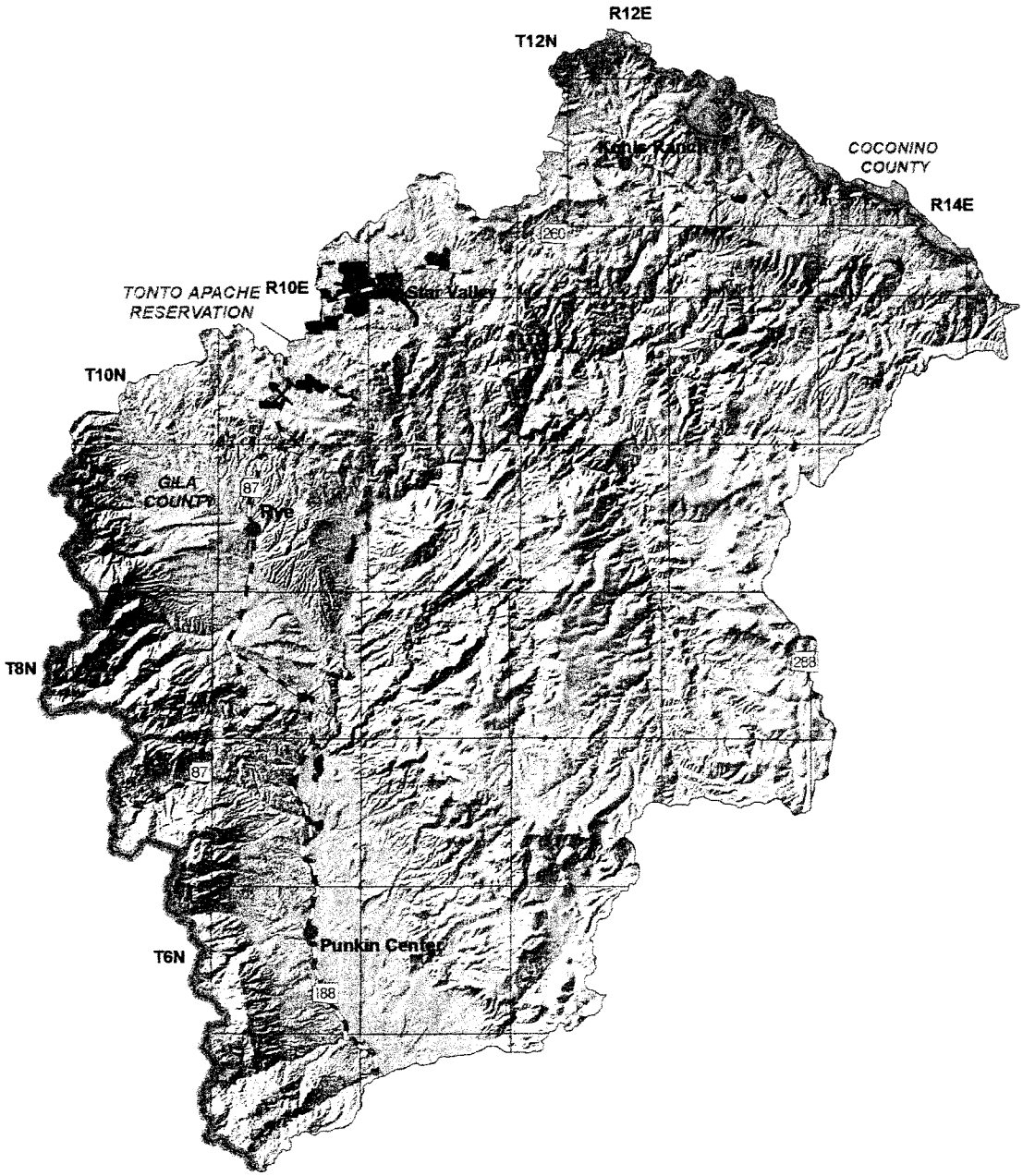
Notes:
NR - Not reported
[1] Does not include effluent or evaporation losses from stockponds and reservoirs.
[2] Includes all wells through 1980.

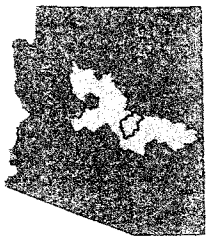
Table 5.3-9 Effluent Generation in the Tonto Creek Basin

Facility Name	Ownership	City/Location Served	Population Served	Volume Treated/Generated (acre-feet/year)	Disposal Method							Current Treatment Level	Population Not Served	Year of Record
					Water-course	Evaporation Pond	Irrigation	Golf Course/Turf/ Landscape	Wildlife Area	Discharge to another Facility	Infiltration Basins			
Houston Creek Landing WWTP	NA	Star Valley	NA											
Hunter Creek WWTP	Private	Hunter Creek	NA											
Pine Meadows WWTP	Private	Star Valley	108[1]	13	Houston Creek							Tertiery	NA	2007

Source: Compilation of databases from ADWR & others

Notes:
NA: Data not currently available to ADWR
WWTP: Waste Water Treatment Plant
[1]Population increases in the summer





ARIZONA DEPARTMENT OF WATER RESOURCES ©

Primary Data Source: USGS National Gap Analysis Program, 2004

0 3 6 Miles

Demand Centers

- Agriculture
- M&I - High Intensity
- M&I - Low Intensity
- Small Mine / Quarry
- Indian Reservation
- COUNTY
- Major Road
- City, Town or Place

Figure 5.3-11
Tonto Creek Basin
Cultural Water Demand

5.3.9 Water Adequacy Determinations in the Tonto Creek Basin

Water adequacy determination information including the subdivision name, location, number of lots, adequacy determination, reason for the inadequacy determination, date of determination and subdivision water provider are shown in Table 5.3-10A and B for water reports and analysis of adequate water supply. Figure 5.3-12 shows the locations of subdivisions keyed to the Table. A description of the Water Adequacy Program is found in Volume 1, Appendix C. Adequacy determination data sources and methods are found in Volume 1, Appendix A.

- All subdivisions receiving an adequacy determination are in Gila County. Sixty-two water adequacy determinations for 4,184 lots have been made in this basin through December 2008. Four hundred and forty-one lots in eight subdivisions, or 13% of lots, were determined to be adequate.
- The most common reason for an inadequate determination was because the applicant did not submit the necessary information and/or available hydrologic data were insufficient to make a determination.
- One Analysis of Adequate Water Supply application for 34 lots has been approved for this basin.

Table 5.3-10 Adequacy Determinations in the Tonto Creek Basin[1]

A. Water Adequacy Reports

Map Key	Subdivision Name	County	Location			No. of Lots	ADWR File No.[2]	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination[3]	Date of Determination	Water Provider at the Time of Application
			Township	Range	Section						
1	Alpine Heights	Gila	11 North	10 East	26,27,34,35	257	NA	Inadequate	A1,A2	7/11/1978	United Utilities Company
2	Boulder Creek	Gila	10 North	10 East	11	20	53-401552	Inadequate	A1	11/18/2004	Town of Payson
4	Chaparral Estates	Gila	11 North	10 East	35	88	53-400536	Inadequate	A1	6/29/2001	Town of Payson
5	Chaparral Highlands	Gila	11 North	10 East	26	19	53-500026	Inadequate	A1	11/20/2006	Town of Payson
6	Chaparral Pines #1	Gila	11 North	10 East	25, 35, 36	475	53-300080	Inadequate	A1, A2	4/26/1996	Town of Payson
7	Chaparral Pines #2	Gila	11 North	10 East	25, 35, 36	281	53-300281	Inadequate	A1	4/3/1997	Town of Payson
8	Chaparral Ranch	Gila	11 North	10 East	25, 26	14	53-500442	Inadequate	A2, C	2/23/1995	Town of Payson
9	Collins Ranch	Gila	12 North	12 East	32	36	53-500484	Inadequate	A1	1/15/1980	Dry Lot Subdivision
10	Deer Creek Village	Gila	8 North	10 East	5	154	53-500545	Inadequate	A1 ,A2	4/9/1982	NA
11	East Gateway	Gila	10 North	10 East	2	19	53-401982	Inadequate	A1	2/9/2006	Town of Payson
12	East Gateway Phase 2, Lots 20 thru 25	Gila	10 North	10 East	2	6	53-500025	Inadequate	A1	1/18/2007	Town of Payson
13	Elk Ridge	Gila	10 North	10 East	10	108	53-300056	Inadequate	A2, C	10/5/1995	Town of Payson
14	Evergreen Meadows	Gila	10 North	11 East	5, 8	63	53-500626	Inadequate	B	8/11/1975	Dry Lot Subdivision
15	Foothills East	Gila	11 North	10 East	35	6	53-300599	Inadequate	A1	10/19/1998	Town of Payson
16	Forest Edge	Gila	10 North	10 East	11	31	53-700366	Inadequate	A1	7/6/2007	Town of Payson
17	Gisela Heights	Gila	9 North	10 East	24, 25	47	53-500705	Adequate		3/30/1977	Dry Lot Subdivision
18	Golden Frontier #1	Gila	10 North	10 East	10	112	53-500715	Inadequate	A1, A2	1/17/1980	United Utilities Company
19	Golden Frontier #2	Gila	10 North	10 East	10	87	53-500716	Inadequate	A1, A2	8/15/1984	Town of Payson
20	Gordon Canyon Creek	Gila	10.5 North 11 North	14 East 13 East	20 36	7	53-500722	Inadequate	A1, A2	8/10/1976	Dry Lot Subdivision
21	Granite Dells Estates	Gila	10 North	10 East	2, 11	20	53-500725	Inadequate	A1, A2	1/19/1977	Dry Lot Subdivision
22	Greenback Vista Estates	Gila	6 North	10 East	14	35	53-300392	Adequate		9/22/1998	United Utilities Company
23	Green Valley Estates	Gila	10 North	31 East	NA	53	NA	Inadequate	A1	4/26/1994	Town of Payson
24	Heigler Creek Haciendas	Gila	10 North	13 East	13	29	53-500770	Inadequate	A1, B	4/11/1983	Dry Lot Subdivision
25	Highlands at the Rim	Gila	10 North	10 East	2	130	53-400671	Inadequate	A1	2/12/2002	Town of Payson
26	Houston Creek Landing	Gila	11 North	11 East	32	91	53-400372	Inadequate	A1	8/25/2000	Brooke Utilities
27	Hunter Creek Ranch	Gila	11 North	13 East	29, 30, 31, 32	118	53-500811	Adequate		2/27/1990	Hunter Creek Ranch HOA
28	Juniper Ridge	Gila	11 North	10 East	26	6	53-400015	Inadequate	A1	2/9/1999	Town of Payson
29	Knolls, The #01	Gila	11 North	11 East	31	34	53-500845	Inadequate	A1, A2	8/24/1993	United Utilities Company
30	Knolls, The #02	Gila	11 North	11 East	31	22	53-500846	Inadequate	A1, A2	3/28/1994	United Utilities Company
31	Knolls, The #03	Gila	11 North	11 East	31	27	53-300048	Inadequate	A2	1/11/1996	United Utilities Company
32	Kohl's Ranch	Gila	11 North	12 East	21	123	53-300010	Inadequate	A1, A2	5/16/1995	Kohl's Ranch Water Company
33	Kohl's Tonto Creek Ranch	Gila	11 North	12 East	21	20	53-500848	Adequate		7/8/1977	Kohl's Ranch Water Company
34	Oak Ridge Hills	Gila	11 North	10 East	26	9	53-300168	Inadequate	A2	7/1/1996	Town of Payson
35	Pine Gate	Gila	11 North	10 East	36	11	53-300435	Inadequate	A1	4/21/1998	Town of Payson
36	Pine Island at Chaparral Pines	Gila	11 North	10 East	36	43	53-300081	Inadequate	A1, A2	4/26/1996	Town of Payson
37	Pine Ridge	Gila	11 North	11 East	32	36	53-300600	Inadequate	A1, A2	2/2/1999	Brooke Utilities
38	Pinon Ridge #1	Gila	10 North	10 East	10	41	53-300286	Inadequate	A1	5/14/1997	Town of Payson
39	Pinon Ridge Unit Two	Gila	10 North	10 East	10	39	53-300433	Inadequate	A1	3/20/1998	Town of Payson

Table 5.3-10 Adequacy Determinations in the Tonto Creek Basin (Cont)[1]

A. Water Adequacy Reports

Map Key	Subdivision Name	County	Location			No. of Lots	ADWR File No.2	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination3	Date of Determination	Water Provider at the Time of Application
			Township	Range	Section						
40	Ponderosa Springs (Colcord Sps)	Gila	11 North	14 East	26, 27, 34, 35	28	53-501205	Adequate		1/2/1980	Dry Lot Subdivision
41	Preserve, The, on Haigler Creek	Gila	10 North	13 East	13	29	53-501212	Inadequate	A1	1/13/1986	Dry Lot Subdivision
42	Punkin Center Village	Gila	6 North	10 East	13, 14	91	53-501228	Inadequate	A1	10/15/1984	Sheer Speed Water Company
43	Quail Valley	Gila	11 North	11 East	34	160	53-501239	Inadequate	A1, A2	4/30/1982	United Utilities Company
44	Quail Valley #2	Gila	11 North	11 East	32	9	53-501240	Inadequate	A1, A2	3/17/1987	United Utilities Company
45	Ridge at Hunter Creek	Gila	11 North	13 East	29	19	53-300505	Adequate		8/10/1998	Hunter Creek Ranch HOA
46	Rim Club Cabins, Unit One	Gila	10 North	10 East	1	9	53-401384	Inadequate	D	9/2/2004	Town of Payson
47	Rim Golf Club	Gila	11 North	10 East	36,1	317	53-300426	Inadequate	A1	4/21/1998	Town of Payson
48	Rim View Heights Estates	Gila	10 North	10 East	10, 11	101	53-501299	Inadequate	A1, A2	3/21/1988	Town of Payson
49	San Gianni Hills	Gila	11 North	10 East	26	15	53-401759	Inadequate	A1	5/31/2005	Town of Payson
50	Settle in at Pine Meadows	Gila	11 North	12 East	32, 33	210	53-400482	Inadequate	A1	4/6/2001	Pine Meadows Domestic Water System
51	Siena Creek	Gila	11 North	10 East	36	25	53-400859	Inadequate	A1	12/23/2002	Town of Payson
52	Star Valley Vista	Gila	11 North	11 East	31, 32	12	53-501450	Inadequate	A1, A2	3/18/1987	United Utilities Company
53	Tonto Creek Shores	Gila	9 North	10 East	25	8	53-300532	Inadequate	A1	9/9/1998	United Utilities Company
54	Tonto Creek Shores B	Gila	9 North	10 East	25	13	53-400392	Inadequate	A1	9/18/2000	NA
55	Tonto Rim Ranch	Gila	11 North	12 East	4, 9	12	53-300557	Inadequate	A1	11/13/1998	Tonto Creek Utility Co.
56	Tonto Village #3	Gila	11 North	12 East	5, 8	89	53-501565	Adequate		7/17/1978	Tonto Village Water Co.
57	Walnut Springs	Gila	6 North	10 East	26	85	53-501664	Adequate		1/6/1998	United Utilities Company
58	Whisper Ridge	Gila	10 North	10 East	2	20	53-400774	Inadequate	A1	8/8/2002	Town of Payson
59	Wilderness Rim	Gila	11 North	10 East	36	6	53-700531	Inadequate		6/17/2008	NA
60	Wildflower Ridge	Glla	11 North	10 East	35	50	53-401559	Inadequate	A1	11/17/2004	Town of Payson
61	Wood Canyon Ranch	Gila	11 North	12 East	32	320	53-401556	Inadequate		3/16/2005	NA
62	Woods of Payson, The	Gila	11 North	10 East	26	8	53-300372	Inadequate	A1	10/8/1997	Town of Payson
63	Zane Grey Ranch	Gila	12 North	12 East	32	5	53-501717	Inadequate	A1	8/5/1993	Zane Grey Ranch Homeowners

B. Analysis of Adequate Water Supply

Map Key	Subdivision Name	County	Location			No. of Lots	ADWR File No.[2]	Date of Determination	Water Provider at the Time of Application
			Township	Range	Section				
3	Boulder Ridge	Gila	11 North	10 East	35	34	53-700562	9/8/2008	Town of Payson

Source: ADWR 2008a

Notes:

[1]Each determination of the adequacy of water supplies available to a subdivision is based on the information available to ADWR and the standards of review and policies in effect at the time the determination was made. In some cases, ADWR might make a different determination if a similar application were submitted today, based on the hydrologic data and other information currently available, as well as current rules and policies.

[2] Prior to February 1995, ADWR did not assign file numbers to applications for adequacy. Between 1995-2006 all applications for adequacy were given a file number with a 22 prefix. In 2006 a 53 prefix was assigned to all water adequacy reports and applications regardless of their issue date.

[3] A. Physical/Continuous
1) Insufficient Data (applicant chose not to submit necessary information, and/or available hydrologic data insufficient to make determination)
2) Insufficient Supply (existing water supply unreliable or physically unavailable; for groundwater, depth-to-water exceeds criteria)
3) Insufficient Infrastructure (distribution system is insufficient to meet demands or applicant proposed water hauling)
B. Legal (applicant failed to demonstrate a legal right to use the water or failed to demonstrate the provider's legal authority to serve the subdivision)
C. Water Quality
D. Unable to locate records
NA = Not Available

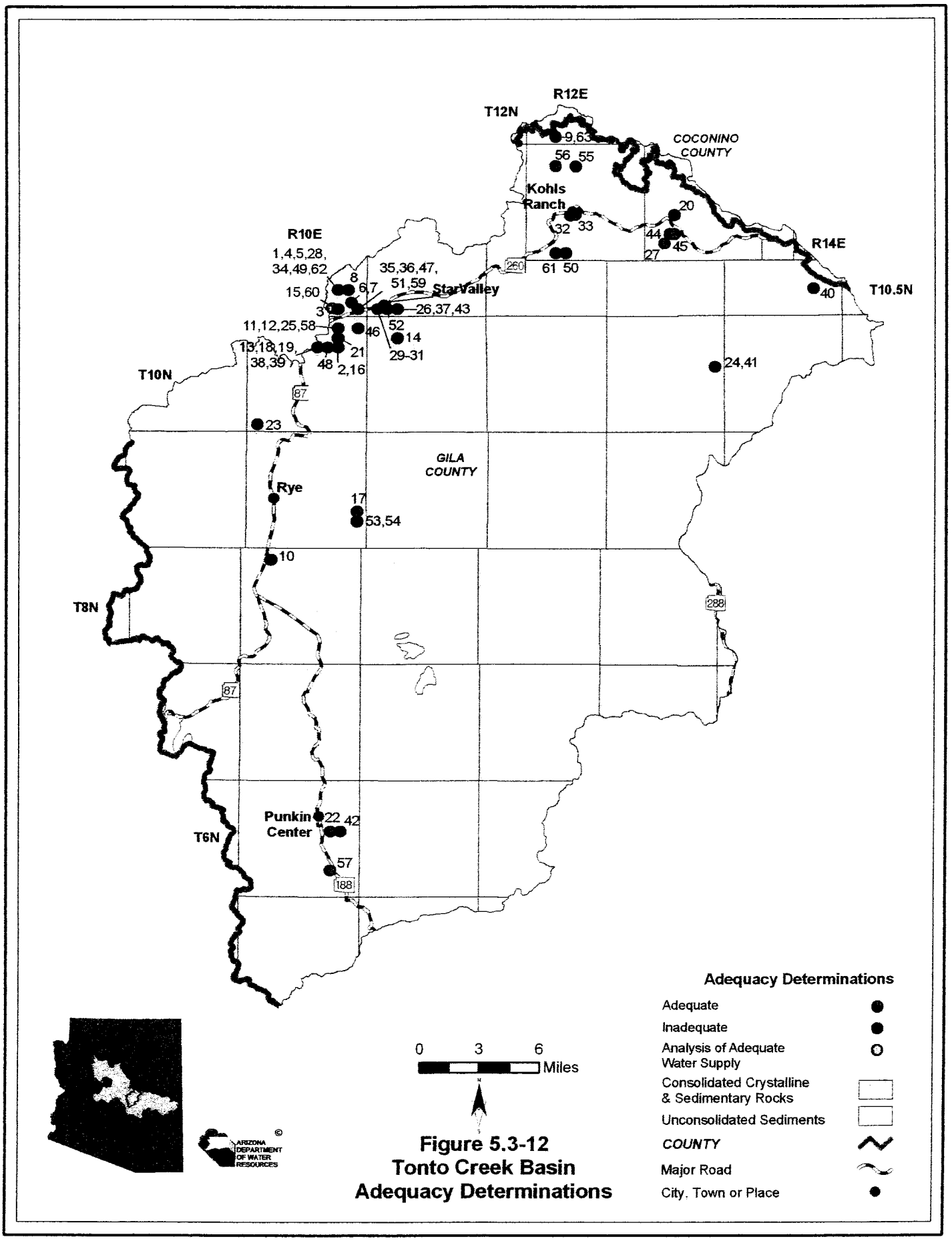


Figure 5.3-12
Tonto Creek Basin
Adequacy Determinations

Tonto Creek Basin
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EXHIBIT KMR-2

Summary of Staff Proposal as of December 20, 2013

Estimated water bills for **Deer Creek Village** Customers

(Deer Creek Village is part of the former United Utilities System)

Example #1 - Water Use for June (reported as High Water Usage Month)[1]	Monthly Cost
Staff Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 20.00
Staff Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ 36.83
TOTAL	**$ 56.83****

*Based upon high water use of 215 gallons per day per connection[3] = 6,450 gallons/month

**Current cost for this same level of usage is $31.05

(This is a 83% increase)

Example #2 - Water Use for January (reported as Low Water Usage Month)[1]	Monthly Cost
Staff Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 20.00
Staff Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ 11.28
TOTAL	**$ 31.28****

*Based upon low water use of 94 gallons per day per connection[3] = 2,820 gallons/month

**Current cost for this same level of usage is $21.44

(This is a 46% increase)

Example #3 - Water Use Average (reported as Average Water Usage Month)[1]	Monthly Cost
Staff Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 20.00
Staff Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ 21.71
TOTAL	**$ 41.71****

*Based upon average water use of 145 gallons per day per connection[3] = 4,350 gallons/month

**Current cost for this same level of usage is $24.77

(This is a 68% increase)

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[1] Per Direct Testimony of Jian W. Liu, Document #0000149555, Page 11

[2] Per Direct Testimony of Crystal S. Brown, Document #0000149555, Schedule CSB-17, Page 1

[3] Per Direct Testimony of Jian W. Liu, Document #0000149555, Page 11

EXHIBIT KMR-2

Summary of Company Proposal as of December 20, 2013
Estimated water bills for **Deer Creek Village** Customers

(Deer Creek Village is part of the former United Utilities System)

Example #1 - Water Use for June (reported as High Water Usage Month)[1]	Monthly Cost
Company Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 25.42
Company Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ 44.09
*Based upon high water use of 215 gallons per day per connection[3] = 6,450 gallons/month	
TOTAL	**$ 69.51****

**Current cost for this same level of usage is $31.05
(This is a 124% increase)

Example #2 - Water Use for January (reported as Low Water Usage Month)[1]	Monthly Cost
Company Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 25.42
Company Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ 16.64
*Based upon low water use of 94 gallons per day per connection[3] = 2,820 gallons/month	
TOTAL	**$ 42.06****

**Current cost for this same level of usage is $21.44
(This is a 96% increase)

Example #3 - Water Use Average (reported as Average Water Usage Month)[1]	Monthly Cost
Company Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 25.42
Company Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ 28.03
*Based upon average water use of 145 gallons per day per connection[3] = 4,350 gallons/month	
TOTAL	**$ 53.54****

**Current cost for this same level of usage is $24.77
(This is a 116% increase)

[1] Per Direct Testimony of Jian W. Liu, Document #0000149555, Page 11
[2] Per Rebuttal Testimony of Thomas J. Bourassa, Document #0000150385, Pages 13 & 14
[3] Per Direct Testimony of Jian W. Liu, Document #0000149555, Page 11

EXHIBIT KMR-3

Summary of Staff Proposal as of December 20, 2013

Estimated water bills for **Gisela/Tonto Creek Shores** Customers

(Gisela is part of the former C & S System)

Example #1 - Water Use for June (reported as High Water Usage Month)[1]	Monthly Cost
Staff Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 20.00
Staff Recommended Commodity Rate (5/8 x 3/4-inch meter)*	$ 71.76
*Based upon high water use of 368 gallons per day per connection[3] = 11,040 gallons/month	
TOTAL	**$ 91.76****

**Current cost for this same level of usage is $33.34

(This is a 175% increase)

Example #2 - Water Use for March (reported as Low Water Usage Month)[1]	Monthly Cost
Staff Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 20.00
Staff Recommended Commodity Rate (5/8 x 3/4-inch meter)*	$ 17.62
*Based upon low water use of 126 gallons per day per connection[3] = 3,780 gallons/month	
TOTAL	**$ 37.62****

**Current cost for this same level of usage is $22.59

(This is a 67% increase)

Example #3 - Water Use Average (reported as Average Water Usage Month)[1]	Monthly Cost
Staff Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 20.00
Staff Recommended Commodity Rate (5/8 x 3/4-inch meter)*	$ 39.21
*Based upon average water use of 226 gallons per day per connection[3] = 6,780 gallons/month	
TOTAL	**$ 59.21****

**Current cost for this same level of usage is $27.03

(This is a 119% increase)

[1] Per Direct Testimony of Jian W. Liu, Document #0000149555, Page 11

[2] Per Direct Testimony of Crystal S. Brown, Document #0000149555, Schedule CSB-17, Page 1

[3] Per Direct Testimony of Jian W. Liu, Document #0000149555, Page 11

EXHIBIT KMR-3

Summary of Company Proposal as of December 20, 2013
Estimated water bills for **Gisela/Tonto Creek Shores** Customers

(Gisela is part of the former C & S System)

Example #1 - Water Use for June (reported as High Water Usage Month)[1]	Monthly Cost
Company Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 25.42
Company Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ 80.77
*Based upon high water use of 368 gallons per day per connection[3] = 11,040 gallons/month	
TOTAL	**$ 106.19****

**Current cost for this same level of usage is $33.34
(This is a 219% increase)

Example #2 - Water Use for March (reported as Low Water Usage Month)[1]	Monthly Cost
Company Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 25.42
Company Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ 23.67
*Based upon low water use of 126 gallons per day per connection[3] = 3,780 gallons/month	
TOTAL	**$ 49.09****

**Current cost for this same level of usage is $22.59
(This is a 117% increase)

Example #3 - Water Use Average (reported as Average Water Usage Month)[1]	Monthly Cost
Company Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 25.42
Company Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ 46.62
*Based upon average water use of 226 gallons per day per connection[3] = 6,780 gallons/month	
TOTAL	**$ 72.04****

**Current cost for this same level of usage is $27.03
(This is a 167% increase)

[1] Per Direct Testimony of Jian W. Liu, Document #0000149555, Page 11
[2] Per Rebuttal Testimony of Thomas J. Bourassa, Document #0000150385, Pages 13 & 14
[3] Per Direct Testimony of Jian W. Liu, Document #0000149555, Page 11

Exhibit KMR-4

PAYSON WATER COMPANY
DOCKET NO. W-03514A-13-0111
RESPONSE TO K M REIDHEAD, INTERVENOR

December 10, 2013

Response provided by:

Title:

Company: Payson Water Company

Address: 7581 E. Academy Blvd., Suite 229
Denver, CO 80230

Company Response Number: 1

Q. How long have you known Mr. Robert Hardcastle and what exactly has that relationship been?

OBJECTION: This data request is not reasonably calculated to lead to the discovery of admissible evidence in this rate case, the purpose of which is to establish the fair value of the Company's utility property and set rates thereon. Additionally, the Company cannot know a person in the manner expressed by this data request, although the Company does state that the only relationship between Mr. Hardcastle and Mr. Williamson is that of members of the buyer and seller entities in the recent stock sale.

(7 pages total)

Exhibit KmR-4

PAYSON WATER COMPANY
DOCKET NO. W-03514A-13-0111
RESPONSE TO K M REIDHEAD, INTERVENOR

December 10, 2013

Response provided by:

Title:

Company: Payson Water Company

Address: 7581 E. Academy Blvd., Suite 229
Denver, CO 80230

Company Response Number: 2

Q. Is there any family relationship between Mr. Robert Hardcastle and you?

OBJECTION: This data request is not reasonably calculated to lead to the discovery of admissible evidence in this rate case, the purpose of which is to establish the fair value of the Company's utility property and set rates thereon. Additionally, the Company cannot have a familial relationship in the manner expressed by this data request.

Exhibit KMR-4

PAYSON WATER COMPANY
DOCKET NO. W-03514A-13-0111
RESPONSE TO K M REIDHEAD, INTERVENOR

December 10, 2013

Response provided by:	Jason Williamson
Title:	President
Company:	Payson Water Company
Address:	7581 E. Academy Blvd., Suite 229 Denver, CO 80230

Company Response Number: 3

Q. Does Mr. Hardcastle or any of his other business entities still own any remaining shareholder stake in PWC?

RESPONSE: No.

Exhibit KMR-4

PAYSON WATER COMPANY
DOCKET NO. W-03514A-13-0111
RESPONSE TO K M REIDHEAD, INTERVENOR

December 10, 2013

Response provided by:

Title:

Company: Payson Water Company

Address: 7581 E. Academy Blvd., Suite 229
Denver, CO 80230

Company Response Number: 4

Q. Are you and Mr. Hardcastle engaged in any business ventures together?

OBJECTION: This data request is not reasonably calculated to lead to the discovery of admissible evidence in this rate case, the purpose of which is to establish the fair value of the Company's utility property and set rates thereon. **Additionally, the Company cannot have a familial relationship in the manner expressed by this data request.**

Exhibit KMR-4

PAYSON WATER COMPANY
DOCKET NO. W-03514A-13-0111
RESPONSES TO K. M. REIDHEAD, INTERVENOR

December 10, 2013

Response provided by:

Title:

Company: Payson Water Company

Address: 7581 E. Academy Blvd., Suite 229
Denver, CO 80230

Company Response Number: 5

Q. It is noted that, through Brooke Utilities, Mr. Hardcastle acquired the outstanding stock in United Utilities and C & S Water Company on or about August 8, 1996 from a Mr. Richard S. Williamson. What is the relationship, if any, between Mr. Richard S. Williamson and you?

OBJECTION: This data request is not reasonably calculated to lead to the discovery of admissible evidence in this rate case, the purpose of which is to establish the fair value of the Company's utility property and set rates thereon. Additionally, the Company cannot have a relationship in the manner expressed by this data request. The Company can state, however, that its current President does not know Mr. Richard Williamson.

Exhibit KMR-4

PAYSON WATER COMPANY
DOCKET NO. W-03514A-13-0111
RESPONSE TO K M REIDHEAD, INTERVENOR

December 10, 2013

Response provided by: Jason Williamson

Title: President

Company: Payson Water Company

Address: 7581 E. Academy Blvd., Suite 229
Denver, CO 80230

Company Response Number: 6

Q. What specifically does PWC do to monitor/maintain the water system in Deer Creek Village, "DCV"?

a. Please describe specifically what is involved in delivering the water to the residents of DCV.

b. Provide a detailed description of the costs involved in that delivery. Please provide recent invoices for the period of 2009 - 2013 that substantiate those costs.

OBJECTION: The information required to set the Company's rates, including its test year rate base, revenues and expenses are set forth in the schedules attached to the Company's filings, which schedules are the schedules required by the Commission for a Class C water utility. These schedules include the E Schedules, which provide expense information for years outside the test year. Beyond that, the information sought in subsection (b), to the extent available, would be extremely burdensome if not impossible to produce. The Company does not have invoices specific to every cost of serving each of its separate systems, let alone communities within systems, nor would it be in the ordinary course of business or required by NARUC to retain an "invoice" for every "cost" of service, related to serving an individual community within a separate system of a regulated water utility.

RESPONSE: Without waiting its objection, the Company's response to subsection (a) of this data request is that the operations of the Deer Creek include maintenance and monitoring of the wells and well pumps (including regular lab

Exhibit KMR-4

sampling in accordance with ADEQ MAP testing guidelines to ensure water quality), pressure tank & booster pumps, storage tank and associated electrical controls. Daily remote monitoring of the storage tank volume to ensure sufficient supply is available. 24/7 emergency response for repair of leaks and service mains when damaged. Monthly meter reads, and customer service order requests (like re-reading of meters). The Company's response to subsection (b) of this data request is that the Company does not keep system specific accounting for the majority of expenses since all of the Company's water systems benefit from centralized and aggregated expenses such as operator salaries, chemicals, management, billing, customer service center, vehicles, fuel, etc.

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EXHIBIT KMR-5

Comparison of Interconnection Pipeline Costs to Potential Water Hauling Costs for Payson Water Company Ratepayers in Mesa del Caballo

INTERCONNECTION PIPELINE COSTS:

Phase 1 WIFA Surcharge (5/8 x 3/4-inch meter)[1]	$ 7.44 / month / customer
	X 12 months
	= $ 89.28 annually / customer
	X 20 years
	= **$1,785.60 TOTAL / customer**

WATER HAULING COSTS (estimated for 2014, 2015 & 2016):

Based upon 2013 (the worst year yet) Water Hauling Costs[2]	$ 247.00 / customer / year
Number of years the interconnection pipeline will be operational	X 3 years[3]
	= **$ 741.00 TOTAL / customer**

CONCLUSION:

The Phase 1 Decision #74175 authorizing a $275,000 Interconnection Pipeline project and imposing the WIFA surcharge on Mesa del Caballo ratepayers will cost the ratepayers of Mesa del Caballo more over the long run than water hauling costs would likely have cost for the 3 years that the Interconnection Pipeline will be operational. Furthermore, there is no assurance that the ratepayers won't still have to pay additional water hauling charges during peak summer shortage periods[4].

[1] Per ACC Decision #74175, Page 12

[2] Per Rebuttal Testimony of Jason Williamson, Document #0000150385, Page 9, lines 17 & 18

[3] Per Rebuttal Testimony of Jason Williamson, Document #0000150385, Page 9, lines 23-25

[4] Per the testimony of Jason Williamson at the Phase 1 Hearing, 04:10:05 through 04:12:20 of the video archive.

EXHIBIT KMR-6

Summary of Staff Proposal as of December 20, 2013
Estimated water bills for **Mesa del Caballo** Customers

(Mesa del Caballo is part of the former United Utilities System)

Example #1 - Water Use for June (reported as High Water Usage Month)[1]	Monthly Cost
Phase 1 WIFA Surcharge (5/8 x 3/4-inch meter)[2]	$ 7.44
Proposed Phase 2 WIFA Surcharge (5/8 x 3/4-inch meter)[3]	$ 22.87
Staff Recommended Base Rate (5/8 x 3/4-inch meter)[4]	$ 20.00
Staff Recommended Commodity Rate (5/8 x 3/4-inch meter)*	$ 15.89
TOTAL	**$ 66.20****

*Based upon high water use of 118 gallons per day per connection[5] = 3,540 gallons/month

**Current cost for this same level of usage is $22.83

(This is a 190% increase)

Example #2 - Water Use for March (reported as Low Water Usage Month)[1]	Monthly Cost
Phase 1 WIFA Surcharge (5/8 x 3/4-inch meter)[2]	$ 7.44
Proposed Phase 2 WIFA Surcharge (5/8 x 3/4-inch meter)[3]	$ 22.87
Staff Recommended Base Rate (5/8 x 3/4-inch meter)[4]	$ 20.00
Staff Recommended Commodity Rate (5/8 x 3/4-inch meter)*	$ 9.96
TOTAL	**$ 60.27****

*Based upon low water use of 83 gallons per day per connection[5] = 2,490 gallons/month

**Current cost for this same level of usage is $20.81

(This is a 190% increase)

Example #3 - Water Use Average (reported as Average Water Usage Month)[1]	Monthly Cost
Phase 1 WIFA Surcharge (5/8 x 3/4-inch meter)[2]	$ 7.44
Proposed Phase 2 WIFA Surcharge (5/8 x 3/4-inch meter)[3]	$ 22.87
Staff Recommended Base Rate (5/8 x 3/4-inch meter)[4]	$ 20.00
Staff Recommended Commodity Rate (5/8 x 3/4-inch meter)*	$ 11.76
TOTAL	**$ 62.07****

*Based upon average water use of 98 gallons per day per connection[5] = 2,940 gallons/month

**Current cost for this same level of usage is $21.67

(This is a 186% increase)

[1] Per Direct Testimony of Jian W. Liu, Document #0000149555, Page 11

[2] Per ACC Decision #74175, Page 12

[3] Per Direct Testimony of John A. Cassidy, Document #0000149600, Page 6 and Schedule JAC-2

[4] Per Direct Testimony of Crystal S. Brown, Document #0000149555, Schedule CSB-17, Page 1

[5] Per Direct Testimony of Jian W. Liu, Document #0000149555, Page 11

EXHIBIT KMR-6

Summary of Company Proposal as of December 20, 2013

Estimated water bills for **Mesa del Caballo** Customers

(Mesa del Caballo is part of the former United Utilities System)

Example #1 - Water Use for June (reported as High Water Usage Month)[1]	Monthly Cost
Phase 1 WIFA Surcharge (5/8 x 3/4-inch meter)[2]	$ 7.44
Proposed Phase 2 WIFA Surcharge (5/8 x 3/4-inch meter)[3]	$ 22.87
Company Recommended Base Rate (5/8 x 3/4-inch meter)[4]	$ 25.42
Company Recommended Commodity Rate (5/8 x 3/4-inch meter)[4]*	$ 21.82
*Based upon high water use of 118 gallons per day per connection[5] = 3,540 gallons/month	
TOTAL	**$ 77.55****

**Current cost for this same level of usage is $22.83

(This is a 240% increase)

Example #2 - Water Use for March (reported as Low Water Usage Month)[1]	Monthly Cost
Phase 1 WIFA Surcharge (5/8 x 3/4-inch meter)[2]	$ 7.44
Proposed Phase 2 WIFA Surcharge (5/8 x 3/4-inch meter)[3]	$ 22.87
Company Recommended Base Rate (5/8 x 3/4-inch meter)[4]	$ 25.42
Company Recommended Commodity Rate (5/8 x 3/4-inch meter)[4]*	$ 14.69
*Based upon low water use of 83 gallons per day per connection[5] = 2,490 gallons/month	
TOTAL	**$ 70.42****

**Current cost for this same level of usage is $20.81

(This is a 238% increase)

Example #3 - Water Use Average (reported as Average Water Usage Month)[1]	Monthly Cost
Phase 1 WIFA Surcharge (5/8 x 3/4-inch meter)[2]	$ 7.44
Proposed Phase 2 WIFA Surcharge (5/8 x 3/4-inch meter)[3]	$ 22.87
Company Recommended Base Rate (5/8 x 3/4-inch meter)[4]	$ 25.42
Company Recommended Commodity Rate (5/8 x 3/4-inch meter)[4]*	$ 17.35
*Based upon average water use of 98 gallons per day per connection[5] = 2,940 gallons/month	
TOTAL	**$ 73.08****

**Current cost for this same level of usage is $21.67

(This is a 237% increase)

[1] Per Direct Testimony of Jian W. Liu, Document #0000149555, Page 11

[2] Per ACC Decision #74175, Page 12

[3] Per Direct Testimony of John A. Cassidy, Document #0000149600, Page 6 and Schedule JAC-2

[4] Per Rebuttal Testimony of Thomas J. Bourassa, Document #0000150385, Page 13 & 14

[5] Per Direct Testimony of Jian W. Liu, Document #0000149555, Page 11

EXHIBIT KMR-7

	Present		Company Proposal			Staff Proposal		
Monthly Usage Charge	United System Present	C & S System Present	PWC Rebuttal Rates Consolidated	PWC Rebuttal Proposed % Increase	PWC Rebuttal Proposed % Increase	Staff Recommended Rates Consolidated	Staff Recommended % Increase	Staff Recommended % Increase
Base Rate:								
Meter Size:				United	C & S		United	C & S
5/8 x 3/4 Inch	$ 16.00	$ 17.00	$ 25.42	59%	50%	$ 20.00	25%	18%
3/4 inch	$ 18.40	$ 25.50	$ 38.12	107%	49%	$ 33.00	79%	29%
Commodity Rate (per 1,000 gal):								
C & S System:					C & S			C & S
For all gallons		$ 1.48						
Meter Size:								
5/8 x 3/4 Inch								
1 to 3,000 gallons		$ 1.48	$ 5.90		299%	$ 4.00		170%
3,001 to 10,000 gallons		$ 1.48	$ 7.65		417%	$ 7.20		386%
Over 10,000 gallons		$ 1.48	$ 9.15		518%	$ 9.009		509%
3/4 inch (Residential)								
1 to 3,000 gallons		$ 1.48	$ 5.90		299%	$ 4.00		170%
3,001 to 10,000 gallons		$ 1.48	$ 7.65		417%	$ 7.20		386%
Over 10,000 gallons		$ 1.48	$ 9.15		518%	$ 9.009		509%
Commodity Rate (per 1,000 gal):								
United Utilities System:				United			United	
First 4,000 gallons	$ 1.93							
Over 4,000 gallons	$ 2.99							
Meter Size:								
5/8 x 3/4 Inch								
1 to 3,000 gallons	$ 1.93		$ 5.90	206%		$ 4.00	107%	
3,001 to 4,000 gallons	$ 1.93		$ 7.65	296%		$ 7.20	273%	
4,001 to 10,000 gallons	$ 2.99		$ 7.65	156%		$ 7.20	141%	
Over 10,000 gallons	$ 2.99		$ 9.15	206%		$ 9.009	201%	
3/4 inch (Residential)								
1 to 3,000 gallons	$ 1.93		$ 5.90	206%		$ 4.00	107%	
3,001 to 4,000 gallons	$ 1.93		$ 7.65	296%		$ 7.20	273%	
4,001 to 10,000 gallons	$ 2.99		$ 7.65	156%		$ 7.20	141%	
Over 10,000 gallons	$ 2.99		$ 9.15	206%		$ 9.009	201%	

Exhibit KmR-8

Home : USA : Arizona : Gila County : Populated Places

Place Names

Mesa Del Caballo Subdivision

Populated Place in Gila County, Arizona, USA.
Latitude: 34.28556 : Longitude: -111.29444 : Elevation: 5200 ft

Historical Aerial Photos
www.waccorp.com
California - Oregon - Washington - Original Negatives - IN STOCK

Local Links

Blogs and Websites Near Mesa Del Caballo Subdivision, Arizona - GeoURL

Maps and Photos

Mesa Del Caballo Subdivision Map - Multimap
Mesa Del Caballo Subdivision Street Map and Satellite Photo - Google Maps
Mesa Del Caballo Subdivision Aerial Photo and Topo Map - Terraserver
Mesa Del Caballo Subdivision Map - MSN
Environmental Hazards, Flood Area Maps, Boundaries - EPA
Mesa Del Caballo Subdivision Area Map - MapQuest

Weather and Climate

Mesa Del Caballo Subdivision AZ Weather Forecast - National Weather Service
Weather Forecast near Mesa Del Caballo Subdivision - Multimap
The weather forecast links don't work for all places yet.

Some random places: Ocampo Beloh Bridge Psyche Butte Erphit Lake Onserud Airfield

2013 Dec 08 - 23:36:01 -- © Copyright 2000-2013 Placenames.com -- 20.292mS
Home - Help and FAQ

Pg. 1/8

Exhibit KMR-8

Home : USA : Arizona : Gila County : Locales

Place Names

Mead Ranch

Locale in Gila County, Arizona, USA.
Latitude: 34.33917 : Longitude: -111.14667 : Elevation: 5960 ft

Arrest Records: 2 Secrets
instantcheckmate.com
1) Enter Name and State. 2) Access Full Background Checks Instantly.

Local Links

Blogs and Websites Near Mead Ranch, Arizona - GeoURL

Maps and Photos

Mead Ranch Map - Multimap
Mead Ranch Street Map and Satellite Photo - Google Maps
Mead Ranch Aerial Photo and Topo Map - Terraserver
Mead Ranch Map - MSN
Environmental Hazards, Flood Area Maps, Boundaries - EPA
Mead Ranch Area Map - MapQuest

Weather and Climate

Weather Forecast near Mead Ranch - Multimap
The weather forecast links don't work for all places yet.

Some random places: Ipp Adelanto Heliport Opossum Cehollita, Canon Edalgo LSR Medical Center Heliport

Historical Aerial Photos
www.waccorp.com
California - Oregon - Washington - Original Negatives - IN STOCK

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Pg. 2/8

Exhibit KmR-8

Home : USA : Arizona : Gila County : Parks

Place Names

East Verde Park

Park in Gila County, Arizona, USA.
Latitude: 34.29333 : Longitude: -111.36583 : Elevation: 4640 ft

Historical Aerial Photos
www.waccorp.com
California - Oregon - Washington - Original Negatives - IN STOCK

Local Links

Blogs and Websites Near East Verde Park, Arizona - GeoURL

Maps and Photos

East Verde Park Map - Multimap
East Verde Park Street Map and Satellite Photo - Google Maps
East Verde Park Aerial Photo and Topo Map - Terraserver
East Verde Park Map - MSN
Environmental Hazards, Flood Area Maps, Boundaries - EPA
East Verde Park Area Map - MapQuest

Weather and Climate

Weather Forecast near East Verde Park - Multimap
The weather forecast links don't work for all places yet.

Some random places: Egaksrak Entrance Oiyer Spring Vie Mountain JD Cabin En Medio

Check Property Ownership
housereports.org/Owner
Enter Any Address & Search It Get Value, Property Taxes & More

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Home - Help and FAQ

Pg. 3/8

Exhibit KmR-8

Home : USA : Arizona : Gila County : Populated Places

Place Names

Flowing Springs Subdivision

Populated Place in Gila County, Arizona, USA.
Latitude: 34.31528 : Longitude: -111.33389 : Elevation: 4640 ft

Local Links

Blogs and Websites Near Flowing Springs Subdivision, Arizona - GeoURL

Maps and Photos

Flowing Springs Subdivision Map - Multimap
Flowing Springs Subdivision Street Map and Satellite Photo - Google Maps
Flowing Springs Subdivision Aerial Photo and Topo Map - Terraserver
Flowing Springs Subdivision Map - MSN
Environmental Hazards, Flood Area Maps, Boundaries - EPA
Flowing Springs Subdivision Area Map - MapQuest

Weather and Climate

Flowing Springs Subdivision AZ Weather Forecast - National Weather Service
Weather Forecast near Flowing Springs Subdivision - Multimap
The weather forecast links don't work for all places yet.

Some random places: Aello Peak Easom Mine Auburn Eek Oacoma

2013 Dec 08 - 23:37:29 -- © Copyright 2000-2013 Placenames.com -- 6.082mS
Home - Help and FAQ

Pg. 4/8

Exhibit KmR-8

Home : USA : Arizona : Gila County : Populated Places

Place Names

Geronimo Estates Subdivision

Populated Place in Gila County, Arizona, USA.
Latitude: 34.36694 : Longitude: -111.35806 : Elevation: 5280 ft

Historical Aerial Photos
www.waccorp.com
California - Oregon - Washington - Original Negatives - IN STOCK

Local Links

Blogs and Websites Near Geronimo Estates Subdivision, Arizona - GeoURL

Free Maps & Directions

Maps and Photos

Geronimo Estates Subdivision Map - Multimap
Geronimo Estates Subdivision Street Map and Satellite Photo - Google Maps
Geronimo Estates Subdivision Aerial Photo and Topo Map - Terraserver
Geronimo Estates Subdivision Map - MSN
Environmental Hazards, Flood Area Maps, Boundaries - EPA
Geronimo Estates Subdivision Area Map - MapQuest

Weather and Climate

Geronimo Estates Subdivision AZ Weather Forecast - National Weather Service
Weather Forecast near Geronimo Estates Subdivision - Multimap
The weather forecast links don't work for all places yet.

Some random places: Eaker Cemetery Dok Point Se Do Mo Cha Middle School Vepco Flash Board Dam Amak Island

Northwoods Cottages
www.northwoodsaz.com
Cottages with Fireplaces, Kitchens Pet Freindly and spas available

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Pg. 5/8

Exhibit KmR-8

Home : USA : Arizona : Gila County : Populated Places

Place Names

Whispering Pines Subdivision

Populated Place in Gila County, Arizona, USA.
Latitude: 34.37111 : Longitude: -111.28278 : Elevation: 5620 ft

Local Links

Blogs and Websites Near Whispering Pines Subdivision, Arizona - GeoURL

Maps and Photos

Whispering Pines Subdivision Map - Multimap
Whispering Pines Subdivision Street Map and Satellite Photo - Google Maps
Whispering Pines Subdivision Aerial Photo and Topo Map - Terraserver
Whispering Pines Subdivision Map - MSN
Environmental Hazards, Flood Area Maps, Boundaries - EPA
Whispering Pines Subdivision Area Map - MapQuest

Weather and Climate

Whispering Pines Subdivision AZ Weather Forecast - National Weather Service
Weather Forecast near Whispering Pines Subdivision - Multimap
The weather forecast links don't work for all places yet.

Some random places: Esek Hopkins Middle School Ogdonia JTH Canyon Gdowski Dam NCSU Pond Number One

2013 Dec 08 - 23:33:50 -- © Copyright 2000-2013 Placenames.com -- 20.326mS

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Exhibit KMR-8

Home : USA : Arizona : Gila County : Populated Places

Place Names

Gisela

Populated Place in Gila County, Arizona, USA.
Latitude: 34.10167 : Longitude: -111.27917 : Elevation: 2880 ft

Local Links

Blogs and Websites Near Gisela, Arizona - GeoURL

Maps and Photos

Gisela Map - Multimap
Gisela Street Map and Satellite Photo - Google Maps
Gisela Aerial Photo and Topo Map - Terraserver
Gisela Map - MSN
Environmental Hazards, Flood Area Maps, Boundaries - EPA
Gisela Area Map - MapQuest

Weather and Climate

Gisela AZ Weather Forecast - National Weather Service
Weather Forecast near Gisela - Multimap
The weather forecast links don't work for all places yet.

Some random places: Lpon Island Seafairers Marina Lingle Ogre Creek Foam Creek

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Pg. 7/8

Exhibit KmR-8

Home : USA : Arizona : Gila County : Populated Places

Place Names

Deer Creek Village Subdivision

Populated Place in Gila County, Arizona, USA.
Latitude: 34.06528 : Longitude: -111.35556 : Elevation: 3100 ft

Historical Aerial Photos
www.waccorp.com
California - Oregon - Washington - Original Negatives - IN STOCK

Local Links

Blogs and Websites Near Deer Creek Village Subdivision, Arizona - GeoURL

Satellite View My House

Maps and Photos

Deer Creek Village Subdivision Map - Multimap
Deer Creek Village Subdivision Street Map and Satellite Photo - Google Maps
Deer Creek Village Subdivision Aerial Photo and Topo Map - Terraserver
Deer Creek Village Subdivision Map - MSN
Environmental Hazards, Flood Area Maps, Boundaries - EPA
Deer Creek Village Subdivision Area Map - MapQuest

Weather and Climate

Deer Creek Village Subdivision AZ Weather Forecast - National Weather Service
Weather Forecast near Deer Creek Village Subdivision - Multimap
The weather forecast links don't work for all places yet.

Some random places: Hu Bar Spring Beowawe Ookala Park VR 33 Reservoir Fike and Inman Cemetery

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Exhibit KMR-9

005459

City of Phoenix
City Services Bill

KATHLEEN[redacted]
Account Number: 1440900000
Billing Date: 11/7/2013
Due Date: 12/2/2013

There is no trash or recycling collection on Christmas Day. Residents with collection days on Wednesday, Thursday and Friday of that week will have their containers collected the following day.

As the cool weather season begins, remember to lessen your garden and lawn watering times. Also, fall is the prime planting season for desert adapted plants that use less water.

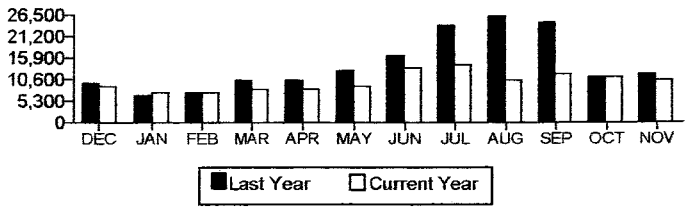
City Services Statement as of 11/7/2013	
Previous Balance	$98.21
Payments Received - Thank You	-98.21
Balance Forward	0.00
Current Charges	94.13
Total Amount Due	**$94.13**

Service Address: 14406 S CHOLLA CANYON DR, PHOENIX, AZ 85044

Meter Number	Previous Meter Read		Current Meter Read		Water Used in Billing Cycle	
	Date	Reading	Date	Reading		
17958549	10/8/2013	465	11/7/2013	479	14 Units	10472 Gallons

1 unit = 748 gallons

Your Monthly Water Usage (gallons)



Water/Sewer Service: (602) 262-6251
Solid Waste: (602) 262-7251
TDD: (602) 534-1113
To Pay Online: www.phoenix.gov

Water/Sewer Service from 10/9/2013 to 11/7/2013

Water Base Fee	$4.36
Water Usage Fee	26.96
Environmental Mandates - Water	5.32
Sewer Fee	20.23
Environmental Mandates - Sewer	4.67
State Mandated Jail Costs	1.00
City Tax	1.66
State and Other Taxes	3.08
Subtotal	**$67.28**

Solid Waste Service from 10/9/2013 to 11/7/2013

Refuse	$26.80
State Landfill Disposal Fee	0.05
Subtotal	**$26.85**

Please detach and return the portion below with your payment.

EXHIBIT
KMR-3
ADMITTED

Document #150656

Kathleen M. Reidhead
14406 S. Cholla Canyon Dr.
Phoenix, AZ 85044
Telephone: 480-704-0261

RECEIVED
2014 JAN -6 A 10:11
AZ CORP COMMISSION
DOCKET CONTROL

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO: W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR AUTHORITY TO: (1) ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM; AND (2) ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	DOCKET NO: W-03514A-13-0142 **SUPPLEMENT TO PRE-FILED TESTIMONY** **PHASE 2** Filed 1/6/14

Kathleen M. Reidhead, "KMR", is an Intervener in the above-captioned matter. KMR submits the attached Exhibits, labeled as Exhibits KMR-A, KMR-B, KMR-C, KMR-D, KMR-E and KMR-F as evidence related to groundwater supplies in and around Mesa del Caballo, "MdC".

Exhibit KMR-A is part of a report from the Arizona Department of Water Resources website, located at this link: http://www.azwater.gov/azdwr/StatewidePlanning/WaterAtlas/CentralHighlands/PlanningAreaOverview/HydrologyHighlandBasins.htm which describes the Hydrology for the Central Highlands Planning Area.

Exhibit KMR-B describes two wells owned by the Town of Payson, "Town", each physically located less than one mile from the community of MdC. These two Town wells are used specifically for the purpose of monitoring the level of groundwater in the area, and have reported data several times each year since 2008. This data documents the level of groundwater in these wells since 2008. The fluctuations noted appear to be consistent with the data in Exhibit KMR-A that states, "the shallow

water-bearing zones around Payson depend on winter recharge and are therefore very sensitive to drought." The report goes on to say, "Water in deeper fracture systems in the area may be fed from the Mogollon Rim and less affected by drought."

Per the analysis by Southwest Water Consultants dated March 30, 2010, entered into evidence by PWC on October 1, 2013, Document #148688, Exhibit C, MdC is strongly believed to sit on a fractured granite zone. In the letter written by Stephen D. Noel, President of Southwest Groundwater Consultants, Mr. Noel states, "Based on the local hydrogeologic conditions supported by the geophysical cross-sections, the yield of wells designed to be production wells completed to depths up to 500 feet will be in the 10 to 25 gpm range."

Exhibit KMR-C is a portion of the Payson Water Company, "PWC", original rate application filing of 04/22/13, Document #145511, Exhibit A, which lists the 7 PWC-owned wells in MdC by ADWR ID Number. In this filing, PWC reports the pump yield for each of these wells FAR below the tested capacity of each well, per the ADWR database, shown on Exhibit KMR-D. The PWC wells appear to be significantly underperforming from what they have been tested to yield. There is no evidence that other wells in MdC are similarly underperforming from their tested capabilities. Several new private wells have been drilled in MdC in the last 2 years, and those wells have tested to yield between 15 gpm and 5 gpm, with groundwater depth reported between 234 and 276 feet, see Exhibit KMR-E. The PWC wells in MdC are between 565 feet deep and 200 feet deep, as evidenced on Exhibit KMR-D. Deepening of the 3 PWC wells that are currently shallower than 250 feet would very likely yield additional water production for that community. The other 4 low-yielding wells should be evaluated for other potential problems, as described in Exhibit KMR-F .

Respectfully submitted this 6th day of January, 2014.

By Kathleen M. Reidhead

Kathleen M. Reidhead, Intervener
14406 S. Cholla Canyon Dr.
Phoenix, AZ 85044

ORIGINAL and thirteen (13) copies of the foregoing were filed this 6th day of January, 2014 with:

Docket Control
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

COPY of the foregoing was mailed
this 6th day of January, 2014 to:

Jay Shapiro (Attorney for Payson Water Co., Inc.)
Fennemore Craig P.C.
2394 E. Camelback Road, Suite 600
Phoenix, AZ 85016

Robert Hardcastle
3101 State Road
Bakersfield, CA 93308

William Sheppard
6250 North Central Avenue
Phoenix, AZ 85012

Thomas Bremer
6717 E. Turquoise Ave.
Scottsdale, AZ 85253

J. Stephen Gehring & Richard M. Burt
8157 W. Deadeye Rd.
Payson, AZ 85541

Glynn Ross
405 S. Ponderosa
Payson, AZ 85541

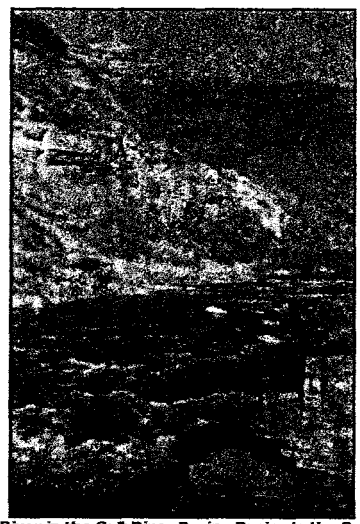
Suzanne Nee
2051 E. Aspen Dr.
Tempe, AZ 85282

Kathleen M. Reidhead

EXHIBIT KMR-A

Central Highlands Planning Area Hydrology - Groundwater (Highland Basins, Cont)

Anderson, Freethey and Tucci (1992) divided the alluvial basins in south-central Arizona into five categories based on similar hydrologic and geologic characteristics. One of these, the "Highland Basins", covers most of the planning area with the exception of the **Upper Hassayampa Basin**, categorized as a "West Basin", and the southern half of the **Agua Fria Basin**, categorized as a "Central Basin". Highland Basins include: **Agua Fria** (northern half), **Salt River Basin** (**Salt River Lakes Sub-basin**, **Salt River Canyon Sub-basin**, **White River Sub-basin** and **Black River Sub-basin**), **Tonto Creek Basin** and the **Verde River Basin** (**Big Chino Sub-basin**, **Verde Valley Sub-basin** and **Verde Canyon Sub-basin**).



Salt River in the Salt River Basin. Basins in the Central Highlands Planning Area are part of the Highland, West or Central Basins cateogrized by Anderson, Freethey and Tucci (1992)

Highland Basins

The Highland Basins include the Salt River, Tonto Creek and Verde River basins, and the northern half of the Agua Fria Basin. Basin-fill aquifers in the highlands are limited in areal extent and are hydrologically connected with stream alluvium. Consolidated rock aquifers surround and underlie the basin-fill aquifers and contribute underflow. Basin-fill aquifers also receive inflow from stream infiltration and mountain front recharge. Where the basin-fill aquifers are discontinuous, underflow between them may be restricted (Anderson, et al., 1992).

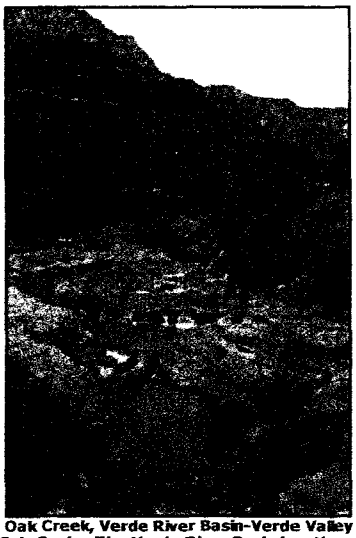
Tonto Creek Basin

In the Tonto Creek Basin groundwater is found in stream alluvium, basin-fill sand and gravel, Paleozoic sedimentary rocks and Precambrian igneous, metamorphic and sedimentary rocks. The primary aquifer occurs in basin fill, which underlies a large portion of the basin, from near Rye to the southern basin boundary. The basin fill consists of coarse-grained conglomerate in the lower part of the basin and along the basin margins and locally is overlain by fine-grained mudstone in the center of the basin. The conglomerate may be up to 500 feet thick. Groundwater is also found in the floodplain alluvium, which may be as much as 65 feet thick along Tonto Creek. Along this Creek, the basin fill and alluvial aquifers are recharged primarily by stream infiltration.

A limestone aquifer is utilized along the Mogollon Rim where groundwater movement and well yield are dependent on faults, fractures and solution cavities. Wells in the limestone aquifer generally yield less than 100 gpm. Fractured bedrock also yields small volumes of water to wells east of Payson (ADWR, 1992). These and other sedimentary-rock aquifers are recharged from precipitation on the southern edge of the Colorado Plateau (USGS, 2005a).

Groundwater flow directions are from the Mogollon Rim to the south in the C-aquifer and from north to south along the Rye Creek and Tonto Creek drainages in the alluvial aquifer (**Figure 5.3-7**). Natural recharge for the basin has been estimated at 17,000 to 37,000 AFA. Estimates of groundwater in storage range from 2.0 to 9.4 maf. With one exception, all wells measured in 2003-'04 had a water level below 100 feet. Water levels in wells measured between 1990-'91 and 2003-'04 were either slightly declining or slightly rising (**Figure 5.3-7**). The median well yield reported on registration forms for large (>10-inch) diameter wells was 120 gpm. Since most of the basin is National Forest land, there has been little basin-wide groundwater development and aquifer characteristics are not well defined. Groundwater quality is generally good, although drinking water standards for arsenic, radionuclides, nitrate and organics have been equaled or exceeded in some wells.

Top



Oak Creek, Verde River Basin-Verde Valley Sub-Basin. The Verde River Basin has three sub-basins: Big Chino, Verde Valley and Verde Canyon.

Verde River Basin

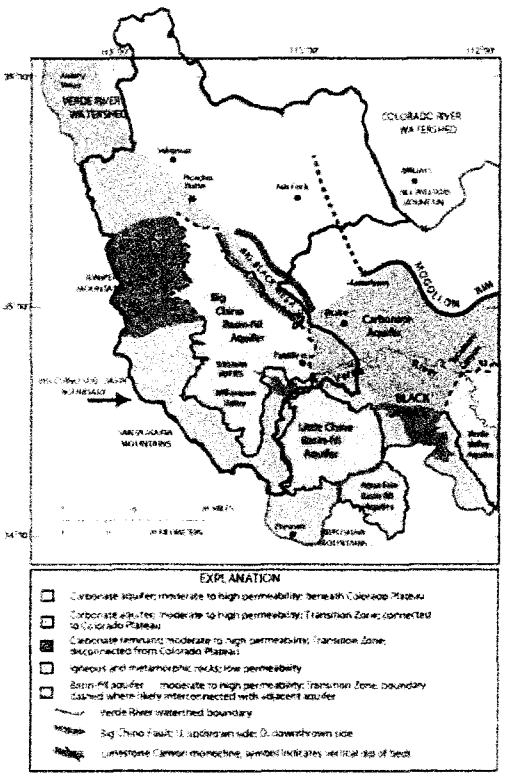
The Verde River Basin is a relatively large basin that encompasses part of the Coconino Plateau in its northern portion with the Mogollon Rim defining its eastern boundary. It is characterized by steep canyons, rugged mountains and by broad alluvial valleys in the north and west-central portions of the basin. The basin is divided into the Big Chino, Verde Valley and Verde Canyon sub-basins as shown in **Figure 5.5-6** and **Figure 5.5-8**.

Natural recharge and groundwater in storage estimates for the basin, sub-basins and local areas are listed in Table 5.5-6. Groundwater recharge estimates for the entire basin range from 107,000 AFA to more than 138,000 AFA. Groundwater in storage is estimated to range from 13 maf to more than 22 maf for the entire basin. Few water level measurements were taken in the basin in both 1990-'91 and 2003-'04 (**Figure 5.5-6**). Water level change measurements taken during different time periods are shown for the Big Chino Sub-basin (**Figure 5.5-6A**) and the Verde Valley Sub-basin (**Figure 5.5-6B**) and are discussed in the sub-basin sections below. Well yield varies throughout the basin with the most productive wells located in the Big Chino Sub-basin (**Figure 5.5-8**). The median well yield for the entire basin is 260 gpm reported on registration forms for 262 large (>10-inch) diameter wells.

A number of hydrogeologic studies of the Big Chino and Verde Valley sub-basins, and to a lesser extent the Verde Canyon Sub-basin, have been conducted and are briefly referenced here. These studies, many of them recent, contain detailed information about the groundwater and surface water systems in the basin and are referenced in this section and in the Verde River Basin references and supplemental reading. Each sub-basin is discussed below from north to south across the basin.

Big Chino Sub-basin

The Big Chino Sub-basin has an area of about 1,850 square miles. The principal aquifer consists of basin-fill sediments interbedded with volcanic rocks of Cenozoic age that fill the sub-basin. This basin-fill aquifer is commonly referred to as the Chino Valley Unit and is the major source of water for irrigation and domestic purposes. Chino Valley runs northwest to southeast from Seligman to Paulden. Well yields in Chino Valley wells are commonly greater than 1,000 gpm to greater than 2,000 gpm. A carbonate aquifer comprised of Paleozoic rocks underlies most of the Big Chino Valley Sub-basin and the area north of the Verde River near Paulden. It is assumed that there is a hydraulic connection between the two aquifers in the Big Chino Valley and the Williamson Valley, which runs north-south along the southeastern sub-basin boundary. The general location of aquifers and other features are shown in the graphic from Wirt, 2005.



General location of Big Chino aquifers. (Figure modified from Wirt, 2005)

Groundwater occurs under unconfined and confined (artesian) conditions in the basin-fill aquifer. Artesian conditions occur primarily where buried lava flows and coarse-grained sediments are interbedded with clays and volcanic ash. In the northwesternmost part of the sub-basin, basin-fill deposits may be as much as 2,500 feet thick. Further south and

drainage and exits the sub-basin in the southeast through alluvium and volcanic rocks along the river (**Figure 5.5-6**).

Groundwater recharge to the Verde Formation aquifer is from high elevation precipitation along the Mogollon Rim and on the Coconino Plateau with additional contributions from stream infiltration. The carbonate aquifer also receives recharge from high altitudes along the Mogollon Rim, and from an area between the San Francisco Peaks and Bill Williams Mountain (USGS, 2006). Most recharge comes from winter precipitation. Groundwater recharge was estimated at 167,470 AFA on average during the period 1990-2003 (Blasch and others, 2006). An estimate of groundwater in storage is not available for the sub-basin. **Figure 5.5-6B** shows water level changes in the sub-basin from 1994 to 2003-'04 and water level elevation during 2003-'04. More than half the wells measured showed some decline although water level increases of more than 30 feet were measured at a few scattered locations. Reported well yields generally range from less than 100 gpm to 1,000 gpm in the sub-basin (**Figure 5.5-8**). Groundwater is generally of good quality at most locations, although the drinking water standard for arsenic has been equaled or exceeded in a number of wells (see **Table 5.5-7**).

Top

PAYSON area

Verde Canyon Sub-basin

There is relatively little groundwater development in the Verde Canyon Sub-basin with the exception of the Payson area. Basalt flows, conglomerates and semi-consolidated silt units cover a large part of the sub-basin. The groundwater system is complex, with disconnected recharge areas and multiple water-bearing zones. Because of its complexity, knowledge of the groundwater system is often limited to local analysis of spring and well data. Groundwater recharge originates primarily along the crest of the Mogollon Rim, where precipitation and snowmelt percolate through permeable volcanic, limestone or sandstone units (USGS 2005a). Spring discharge and stream base flow appear to be the largest components of aquifer outflow.

In Payson groundwater is withdrawn primarily from fractured and faulted granite. Most wells are shallow, although the Town of Payson has conducted exploratory drilling north of the town where deep water-bearing zones were found. A recent study suggests that a segment of the Diamond Rim fault system northeast of Payson may have groundwater supply potential (Gæaorama, 2006). The shallow water-bearing zones around Payson depend on winter recharge and are therefore very sensitive to drought. Water in deeper fracture systems in the area may be fed from the Mogollon Rim and less affected by drought. Water levels in wells measured in the Payson area in 2003-'04 varied from 115 feet to 339 feet bls. Water levels in most of these wells declined by more than 30 feet between 1990-'91 and 2003-'04 (**Figure 5.5-6**). Well yields in the area are typically less than 500 gpm.

In Strawberry, most wells are completed in the Schnebly Hill Formation, a sandstone unit that is the major component of the "Red Rocks" of Sedona. Well yields in the area typically range from 20 to 80 gpm. An exploratory well drilled near Strawberry in 2000 encountered water in the Redwall Limestone at about 1,380 feet (Corkhill, 2000). At nearby Pine most wells are completed in the Supai Formation, which is composed of sandstone, siltstone and mudstone with some interbedded limestone. Well yields in Pine are typically lower than Strawberry and range from 10 to 30 gpm. These relatively low well yields suggest a more localized groundwater system (USGS, 2005a). Little water level change data are available with one well near Pine showing a modest water level increase between 1990-'91 and 2003-'04. However, a nearby domestic well experienced a decline of about 160 feet between 1993 and 2003-'04 (**Figure 5.5-7**, hydrograph V). There is little water use in the southern half of the sub-basin where unconsolidated sediments are found.

Water quality is generally good in the sub-basin although the drinking water standards for arsenic, beryllium, cadmium, lead, selenium and organics have been equaled or exceeded in wells in the Payson area and for arsenic in Pine.

Top

For more information on Groundwater see the menu to the right.

Click here to continue to **Section 5.0.2 Hydrology - Groundwater (West and Central Basins)**

EXHIBIT KMR-B

Town of Payson Well

Director
Sandra A. Fabritz-Whitney

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Search Map Data Export Well Registry Help Email

Well Registry Information

Registration Number 55- 565428

General Construction Status Owner Driller Pump Data

Well Information

Site Type W - WELL Well Type N - NON-EXEMPT Replaces Well 55-

Location Information

Cadastral A11010026DAB Book Map Parcel Latitude 34 15 58.26 Longitude 111 17 35.53

Basin and County Information

Basin TONTO CREEK Sub Basin 73 - TONTO CREEK Watershed 07 - SALT RIVER

AMA/INA 0 - NOT WITHIN ANY AMA OR INA County 4 - GILA

Site Uses	Water Uses
Site Use 1 WATER PRODUCTION	Water Use 1 MUNICIPAL USES
Site Use 2 OBSERVATION	Water Use 2 MONITORING
Site Use 3	Water Use 3

GWSI Well Information What is this?

GWSI Site ID 341558111173301 GWSI Local ID A-11-10 26DAB

Well Registry is ADWR's well database containing reported information on well status, location and construction.

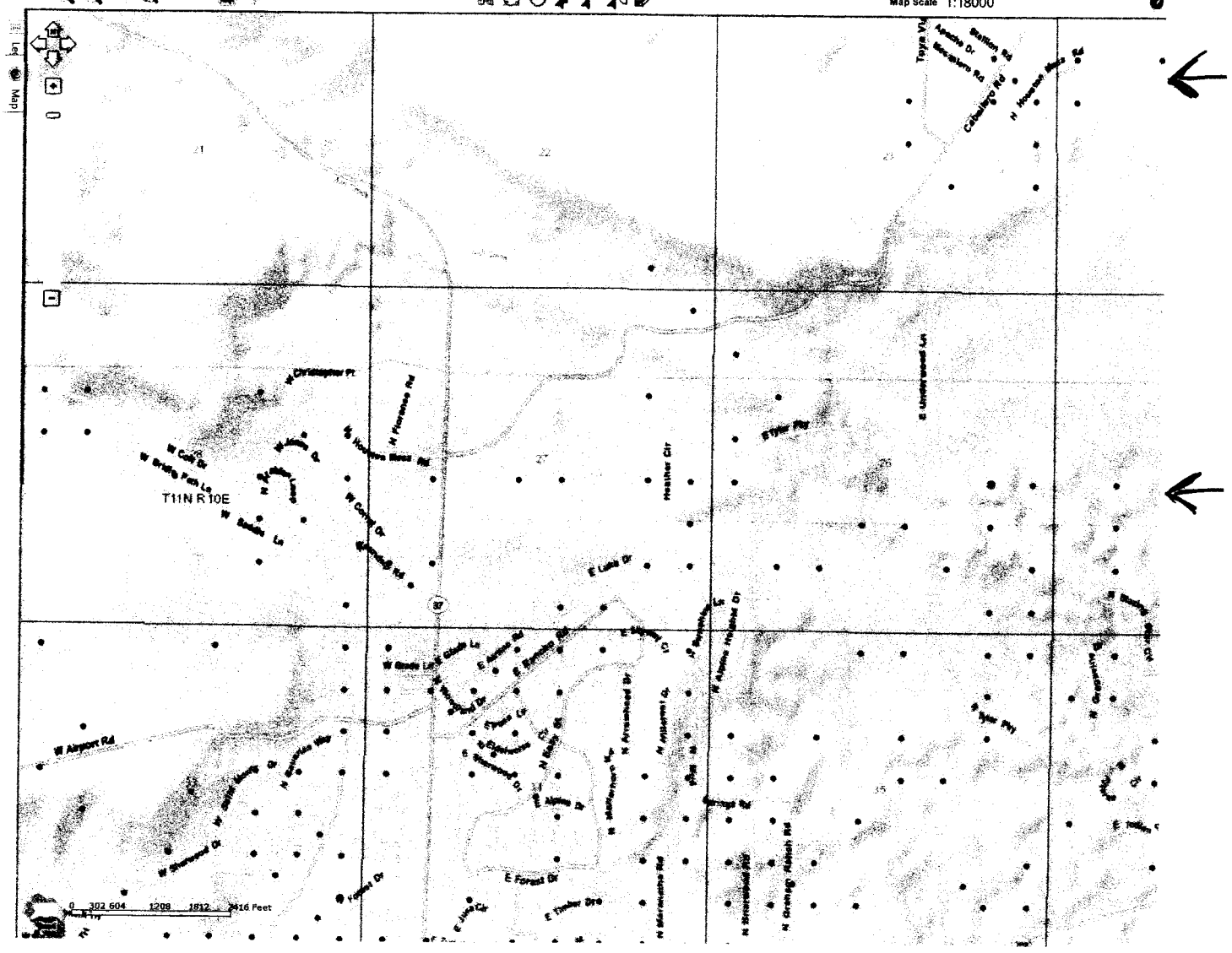
e:

Location is Goat Camp #2
Underwood Lane East of Tyler Parkway
less than 1 mile south of Mesa del Caballo

Arizona Department of Water Resources - Well Registry

Water Resource Data GIS Data Map FAQs ADWR

Map Scale 1:18000



Blue dot near center right side of map is Town of Payson Well # 55-565428

Arrow at top right shows Mesa del Caballo

Well 55-565428 Depth Report 010314

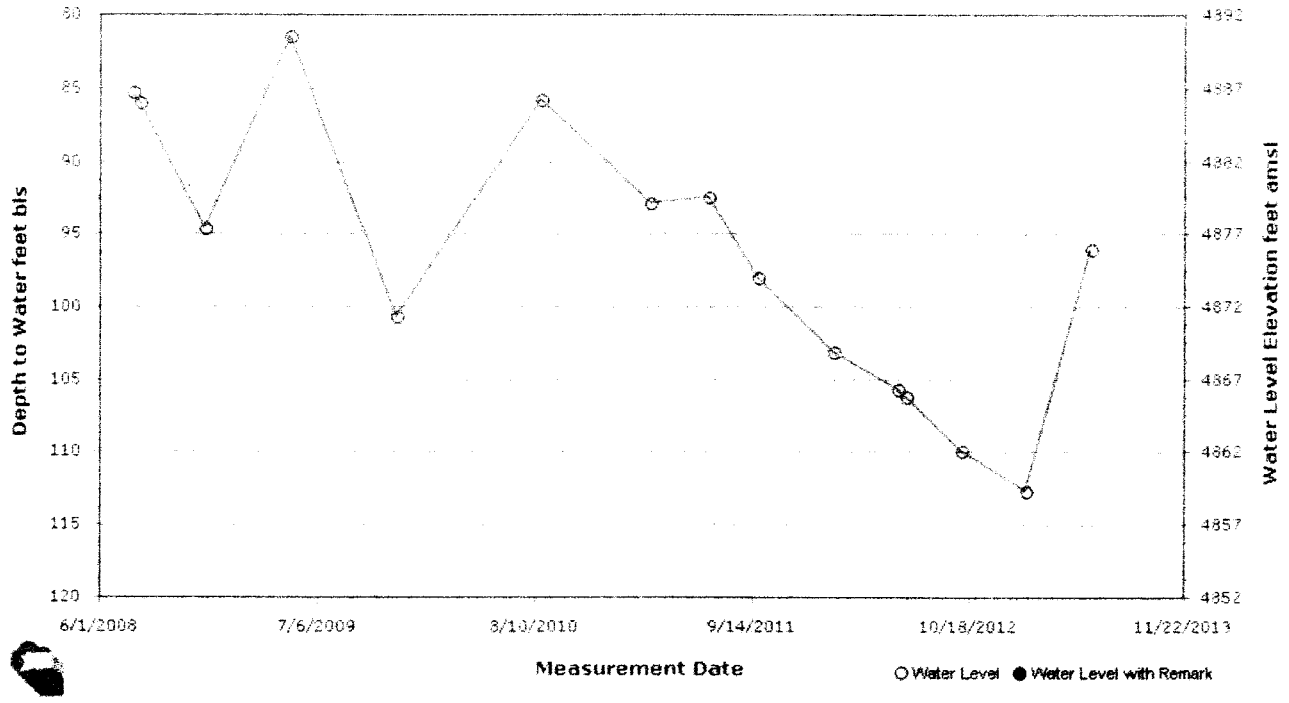
Date	Depth to Water ft.	Measurement Method	Meas. Code	Remark	Rem. Code	Source	Src. Code	Altitude ft amsl
7/30/2008	85	CALIBRATED ELECTRIC TAPE (ADWR SOURCED ONLY)	VT			ADWR	A	4887
8/12/2008	86	CALIBRATED ELECTRIC TAPE (ADWR SOURCED ONLY)	VT			ADWR	A	4886
12/9/2008	95	CALIBRATED ELECTRIC TAPE (ADWR SOURCED ONLY)	VT			ADWR	A	4877
5/14/2009	81	CALIBRATED ELECTRIC TAPE (ADWR SOURCED ONLY)	VT			ADWR	A	4890
11/24/2009	101	CALIBRATED ELECTRIC TAPE (ADWR SOURCED ONLY)	VT			ADWR	A	4871
8/18/2010	86	CALIBRATED ELECTRIC TAPE (ADWR SOURCED ONLY)	VT			ADWR	A	4886
3/8/2011	93	CALIBRATED ELECTRIC TAPE (ADWR SOURCED ONLY)	VT			ADWR	A	4879
6/21/2011	92	CALIBRATED ELECTRIC TAPE (ADWR SOURCED ONLY)	VT			ADWR	A	4879
9/20/2011	98	CALIBRATED ELECTRIC TAPE (ADWR SOURCED ONLY)	VT			ADWR	A	4874
2/7/2012	103	CALIBRATED ELECTRIC TAPE (ADWR SOURCED ONLY)	VT			ADWR	A	4869
6/5/2012	106	CALIBRATED ELECTRIC TAPE (ADWR SOURCED ONLY)	VT			ADWR	A	4866
6/21/2012	106	STEEL TAPE	S			ADWR	A	4866
10/2/2012	110	CALIBRATED ELECTRIC TAPE (ADWR SOURCED ONLY)	VT			ADWR	A	4862
1/30/2013	113	CALIBRATED ELECTRIC TAPE (ADWR SOURCED ONLY)	VT			ADWR	A	4859
5/31/2013	96	CALIBRATED ELECTRIC TAPE (ADWR SOURCED ONLY)	VT			ADWR	A	4876

Well Info | Map | Reset Graph | Auto Site Hydrograph | Email | Help

Set x-axis | Set y-axis | Measurement Remarks

Arizona GroundWater Monitoring Site Hydrograph

Local ID	Site ID	Registry ID	Latitude NAD27	Longitude NAD27	Alt. (ft amsl)	Water Use	Well Depth (ft)	Case Dia.(in)	Drill Date	Latest WL Date	DTW (ft)	WL Elv. (ft)
A-11-10 26DAB	341558111173301	565428	34° 15' 58.1"	111° 17' 33.0"	4971.9	UNUSED	500	6	7/17/1998	5/31/2013	96.05	4875.85



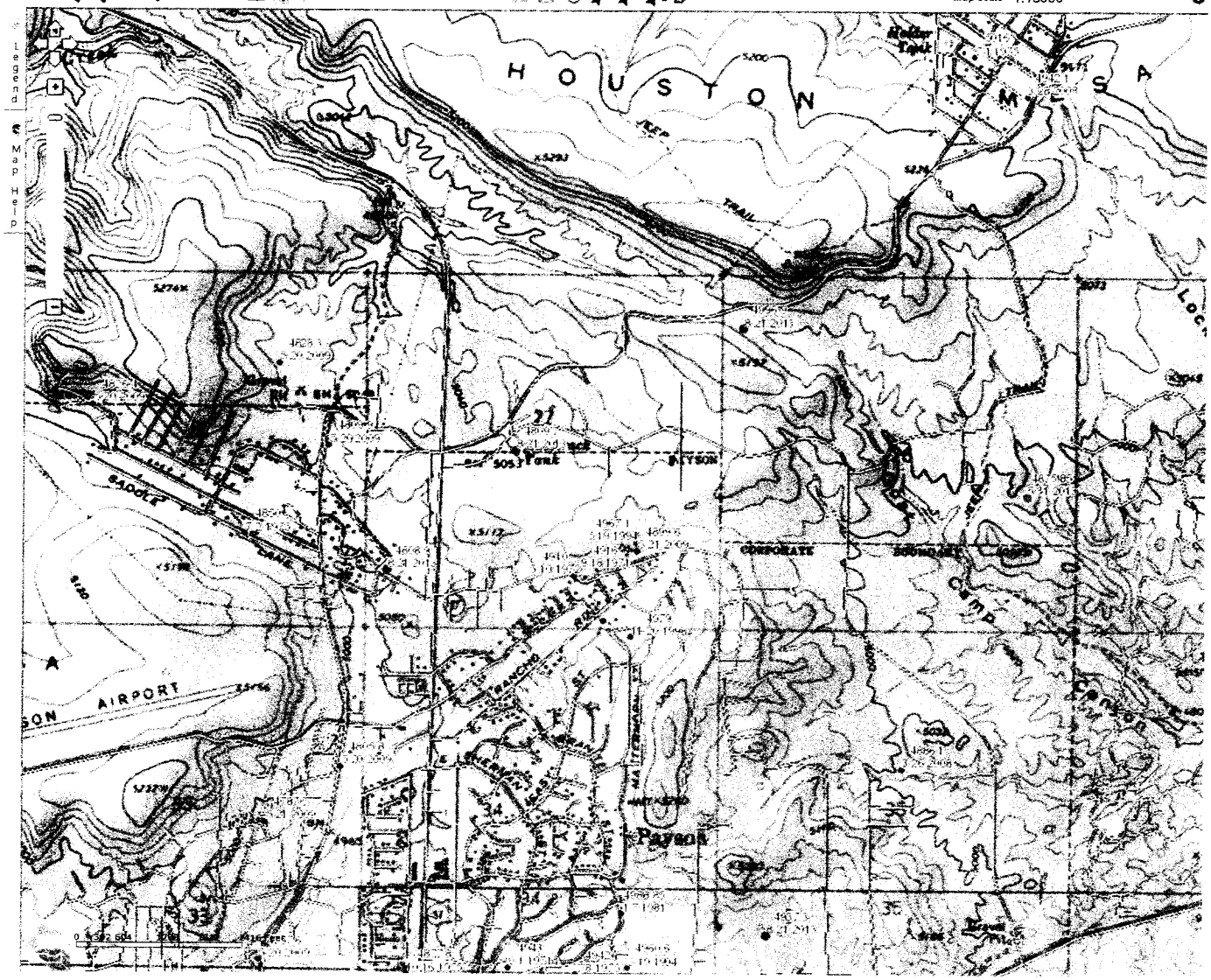
GWSI is ADWR's technical database of well locations, construction data, and water levels.

Created on 1/3/2014

Arizona Department of Water Resources - Groundwater Data

Water Resource Data GIS Data Map FAQs ADWR Feedback

Map Scale 1:18000



Blue dot near center right side of map is
Town of Payson Well # 55-565428

Director
Sandra A. Fabritz-Whitney

ADWR
Arizona Department of Water Resources

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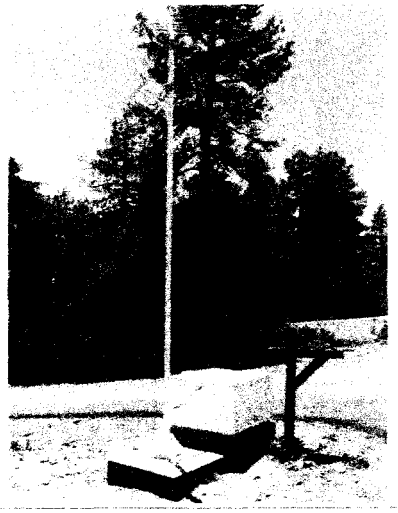
GWSI Well Information

Site ID **341558111173301** Local ID **A-11-10 26DAB** 55 Registration No. **565428**

General | Water Levels* | Construction | Remark | Owner | Pump | Water Quality | Spring | Photo

Photos



Picture 1 of 2

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*Automated Groundwater Site GWSI is ADWR's technical database of well locations, construction data, and water levels.

exportwls

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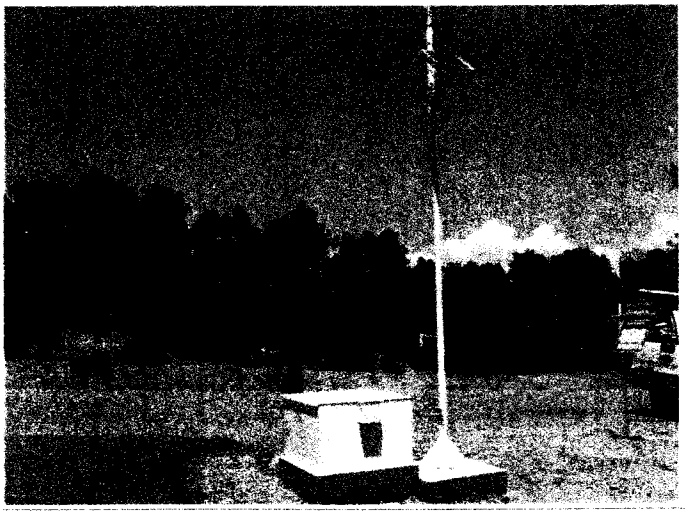
GWSI Well Information

Site ID **341558111173301** Local ID **A-11-10 26DAB** 55 Registration No. **565428**

General | Water Levels* | Construction | Remark | Owner | Pump | Water Quality | Spring | Photo

Photos



Picture 2 of 2

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exportwls

Town of Payson Well

Arizona Department of Water Resources

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Search Map Data Export Well Registry Help Email

Well Registry Information

Registration Number 55- 577330

General Construction Status Owner Driller Pump Data

Well Information

Site Type W - WELL Well Type N - NON-EXEMPT Replaces Well 55-

Location Information

Cadastral A11010026BBC Book Map Parcel Latitude 34 16 22.74 Longitude 111 18 26.03

Basin and County Information

Basin TONTO CREEK Sub Basin 73 - TONTO CREEK Watershed 07 - SALT RIVER

AMA/INA 0 - NOT WITHIN ANY AMA OR INA County 4 - GILA

Site Uses

Site Use 1 WATER PRODUCTION

Site Use 2 OBSERVATION

Site Use 3

Water Uses

Water Use 1 MUNICIPAL USES

Water Use 2 MONITORING

Water Use 3

GWSI Well Information What is this?

GWSI Site ID 341623111182401 GWSI Local ID A-11-10 26BBC

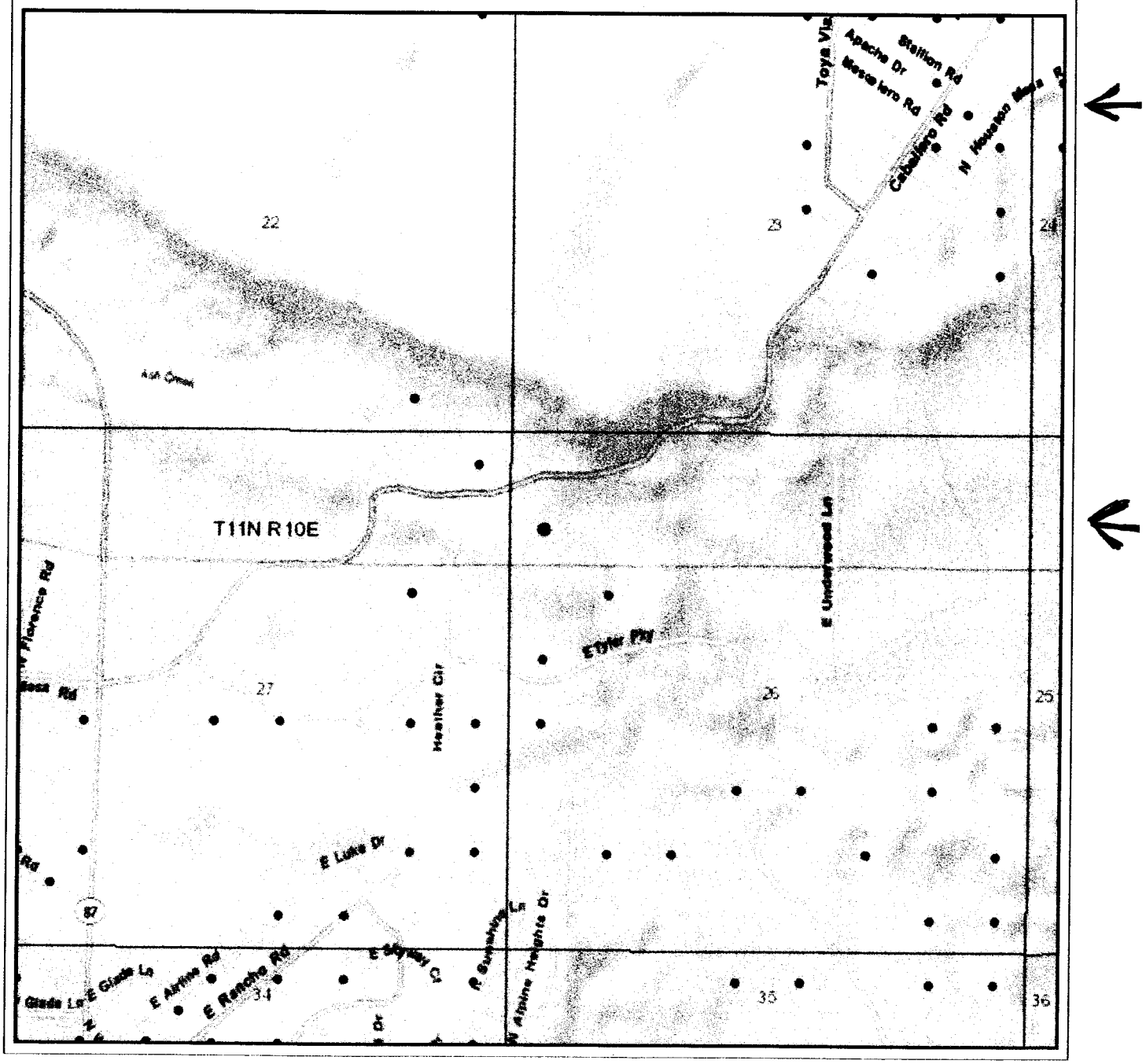
Well Registry is ADWR's well database containing reported information on well status, location and construction.

e:

Location is along Houston Mesa Rd., East of Rt. 87 less than 1 mile before Mesa del Caballo

Town of Payson Well 55-577330

Well Registry Map

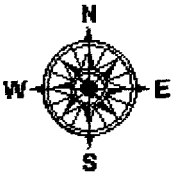


Blue dot near center of map is
Town of Payson well #55-577330

Arrow at top right shows Mesa del Caballo

- Registered Well(s)*
- Selected Well
- Selection Area
- CAP Aqueduct
- River
- Interstate
- State Route
- US Route

*Locations are approximate and based on the well's legal description



0 0.05 0 0.1 Miles

ARIZONA DEPARTMENT OF WATER RESOURCES

For more information about this map contact:
Arizona Department of Water Resources
3550 N Central Avenue
Phoenix, AZ 85012
Phone: (602)771-8500 or 1-800-352-8488

Map created on 1/3/2014

Well 55-577330 Depth Report 010214

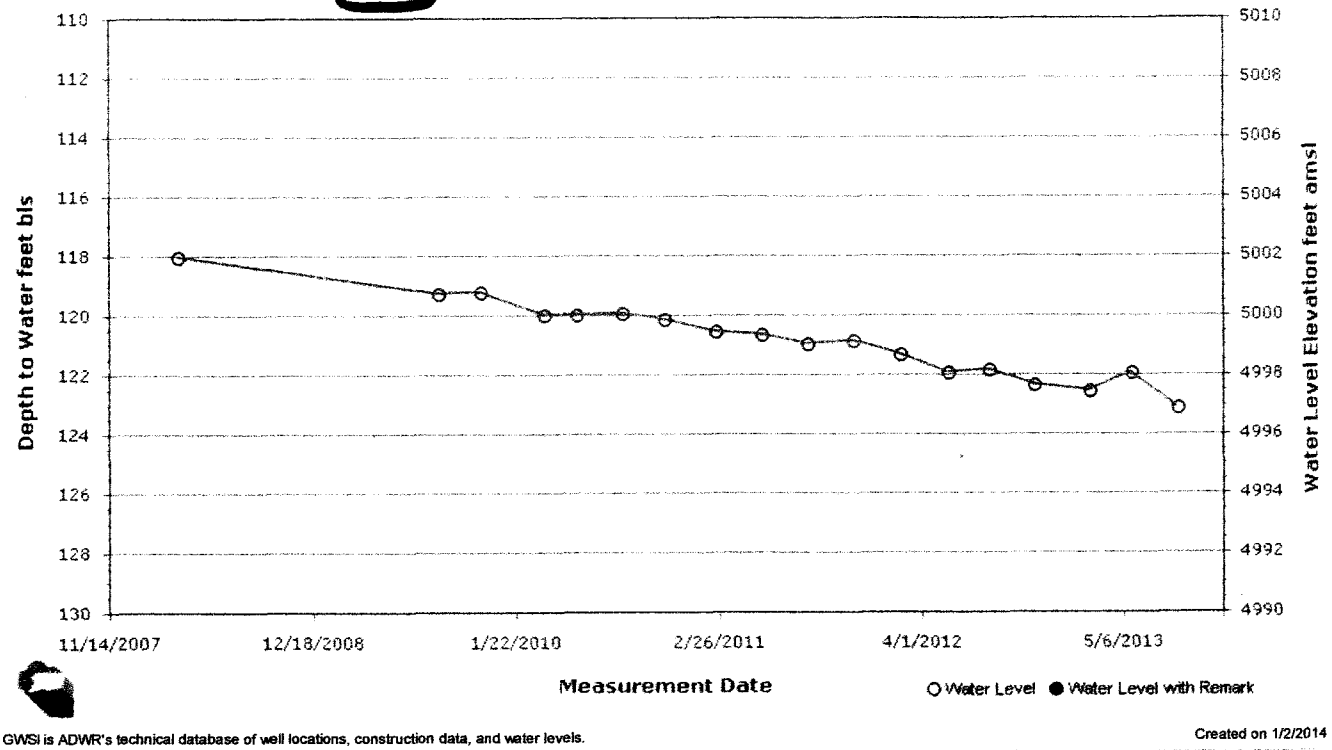
Date	Depth to Water ft.	Measurement Method	Meas. Code	Rema	Rem. Code	Source	Src. Code	Altitude ft amsl
3/26/2008	118	CALIBRATED ELECTRIC SOUNDER/TAPE (TAPE NON-ADWR SOURCED)	V			ADWR	A	5002
8/20/2009	119	STEEL TAPE	S			ADWR	A	5001
11/11/2009	119	CALIBRATED ELECTRIC SOUNDER/TAPE (TAPE NON-ADWR SOURCED)	V			ADWR	A	5001
3/16/2010	120	STEEL TAPE	S			ADWR	A	5000
5/18/2010	120	STEEL TAPE	S			ADWR	A	5000
8/17/2010	120	CALIBRATED ELECTRIC SOUNDER/TAPE (TAPE NON-ADWR SOURCED)	V			ADWR	A	5000
11/8/2010	120	CALIBRATED ELECTRIC SOUNDER/TAPE (TAPE NON-ADWR SOURCED)	V			ADWR	A	5000
2/16/2011	121	CALIBRATED ELECTRIC SOUNDER/TAPE (TAPE NON-ADWR SOURCED)	V			ADWR	A	5000
5/17/2011	121	CALIBRATED ELECTRIC SOUNDER/TAPE (TAPE NON-ADWR SOURCED)	V			ADWR	A	4999
8/16/2011	121	CALIBRATED ELECTRIC SOUNDER/TAPE (TAPE NON-ADWR SOURCED)	V			ADWR	A	4999
11/14/2011	121	CALIBRATED ELECTRIC SOUNDER/TAPE (TAPE NON-ADWR SOURCED)	V			ADWR	A	4999
2/16/2012	121	CALIBRATED ELECTRIC SOUNDER/TAPE (TAPE NON-ADWR SOURCED)	V			ADWR	A	4999
5/21/2012	122	CALIBRATED ELECTRIC SOUNDER/TAPE (TAPE NON-ADWR SOURCED)	V			ADWR	A	4998
8/10/2012	122	CALIBRATED ELECTRIC SOUNDER/TAPE (TAPE NON-ADWR SOURCED)	V			ADWR	A	4998
11/8/2012	122	CALIBRATED ELECTRIC SOUNDER/TAPE (TAPE NON-ADWR SOURCED)	V			ADWR	A	4998
2/27/2013	123	CALIBRATED ELECTRIC SOUNDER/TAPE (TAPE NON-ADWR SOURCED)	V			ADWR	A	4998
5/20/2013	122	CALIBRATED ELECTRIC SOUNDER/TAPE (TAPE NON-ADWR SOURCED)	V			ADWR	A	4998
8/21/2013	123	CALIBRATED ELECTRIC SOUNDER/TAPE (TAPE NON-ADWR SOURCED)	V			ADWR	A	4997

Well Info Map Reset Graph Email Help

Set x-axis Set y-axis Measurement Remarks

Arizona GroundWater Monitoring Site Hydrograph

Local ID	Site ID	Registry ID	Latitude NAD27	Longitude NAD27	Alt. (ft amsl)	Water Use	Well Depth (ft)	Case Dia.(in)	Drill Date	Latest WL Date	DTW (ft)	WL Elv. (ft)
A-11-10 26BBC	341623111182401	577330	34° 16' 22.7"	111° 18' 23.6"	5120	UNUSED	43	6	8/20/2000	8/21/2013	123.1	4996.9



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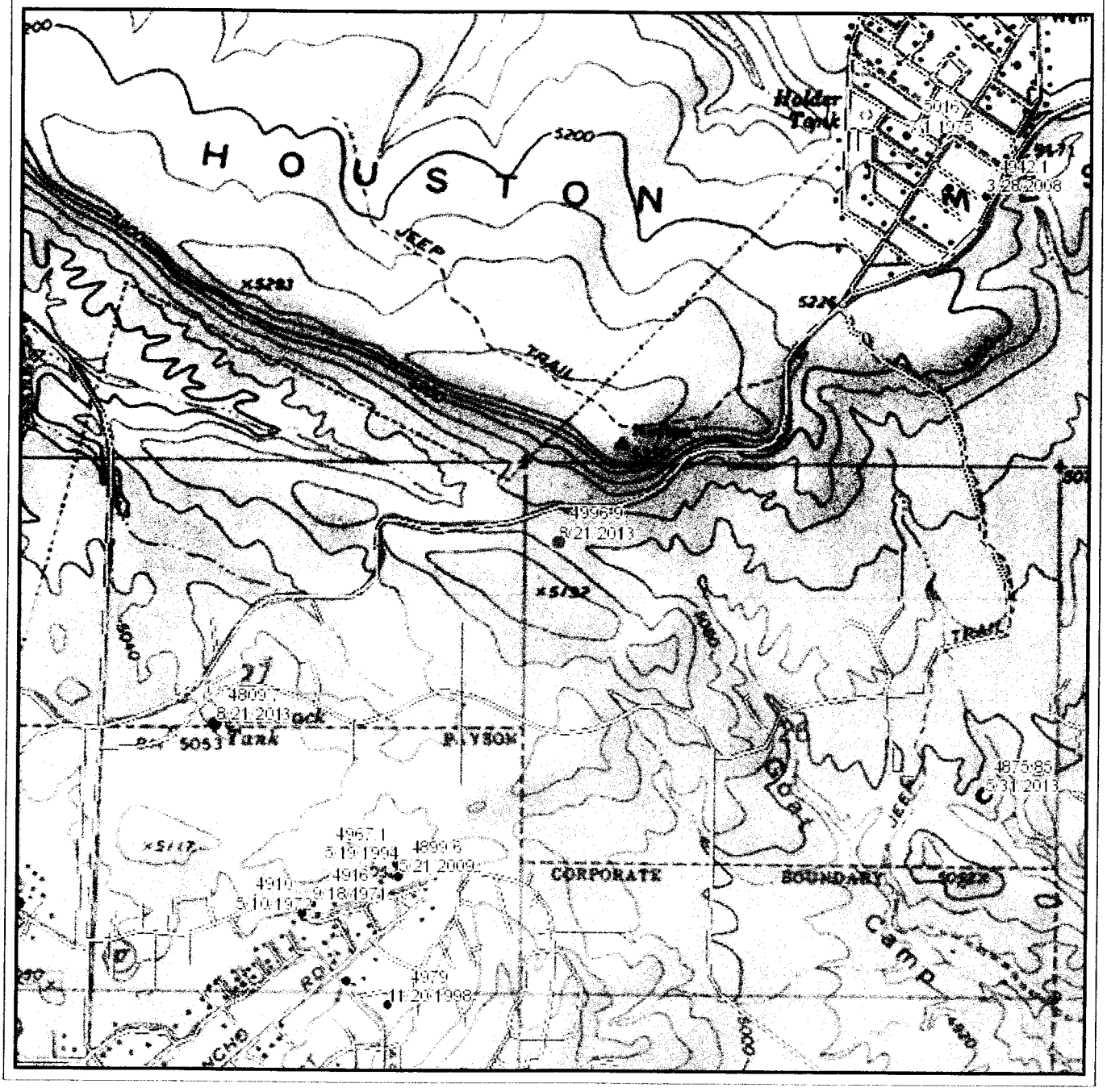
Created on 1/2/2014

GWSI Map



Blue dot near center of map is
Town of Payson Well #55-577330

- ADWR Non-Telemetry Site
- ADWR Telemetry Site
- Non-ADWR Automated Site
- Index Well
- ADWR GWSI Well
- CAP Aqueduct
- River

N
W E
S

0.0250 0.1 Miles

ARIZONA DEPARTMENT OF WATER RESOURCES

For more information about this map contact:
Arizona Department of Water Resources
3550 N Central Avenue
Phoenix, AZ 85012
Phone: (602)771-8500 or 1-800-352-8488

Map created on 1/3/2014

Director
Sandra A. Fabritz-Whitney

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Arizona's Official Web Site

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GWSI Well Information

Site ID **341623111182401** Local ID **A-11-10 26BBC** 55 Registration No. **577330**

General | Water Levels | Construction | Remark | Owner | Pump | Water Quality | Spring | Photo

Photos

Picture 1 of 2

Previous Next

GWSI is ADWR's technical database of well locations, construction data, and water levels.

exportwls

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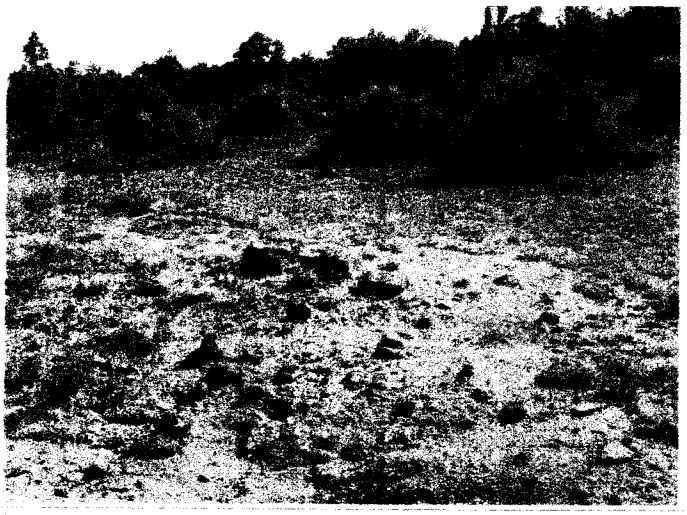
GWSI Well Information

Site ID **341623111182401** Local ID **A-11-10 26BBC** 55 Registration No. **577330**

General | Water Levels | Construction | Remark | Owner | Pump | Water Quality | Spring | Photo

Photos



Picture 2 of 2

Previous Next

GWSI is ADWR's technical database of well locations, construction data, and water levels.

exportwls

EXHIBIT KMR-C

From Exhibit A of
original rate application
filed on 04/22/13
Document # 145511
Pgs. 41-45 / 279

Mesa del Caballo

COMPANY NAME	Payson Water Co., Inc.		
Name of System:	Mesa del Caballo	ADEQ Public Water System Number:	PWS 04-030

WATER COMPANY PLANT DESCRIPTION

WELLS

ADWR ID Number*	Pump Horsepower	Pump Yield (gpm)	Casing Depth (Feet)	Casing Diameter (Inches)	Meter Size (inches)	Year Drilled
55-631113	5	4	104	6	5/8X3/4	1977
55-500270	3	2.2	450	6	5/8X3/4	1981
55-801698	2	0	100	6	5/8X3/4	1984
55-513409	1	3	395	6	5/8X3/4	1986
55-556148	2	8.5	400	6	1	1996
55-801699	1	0	80	6	5/8X3/4	1984
55-631112	0	0	80	6	5/8X3/4	1985

* Arizona Department of Water Resources Identification Number

OTHER WATER SOURCES

US Geological Survey

Brooke Utilities

Name or Description	Capacity (gpm)	Gallons Purchased or Obtained (in thousands)
55-588967, 55-560398, 55-585747	4,11,9	see attached
Town of Payson	unknown	see attached

Patti Caldwell well drilled 11/4/97 Depth to water 198 ft.

BOOSTER PUMPS		FIRE HYDRANTS	
Horsepower	Quantity	Quantity Standard	Quantity Other
7.5	1	none	
5	1		
10	1		
20	1		

STORAGE TANKS		PRESSURE TANKS	
Capacity	Quantity	Capacity	Quantity
40,000	1		
20,000	1	80	2
15,000	3	2000	4

Note: If you are filing for more than one system, please provide separate sheets for each system.

Pump Data shows 2007 → 0.42 acre-feet Withdrawn

Patti Caldwell
605 W. Arabian Way
Payson, AZ 85541

COMPANY NAME	Payson Water Co., Inc.		
Name of System: Mesa del Caballo		ADEQ Public Water System Number:	PWS 04-030

WATER COMPANY PLANT DESCRIPTION (CONTINUED)

MAINS

Size (in inches)	Material	Length (in feet)
2	PVC	738
3	PVC	1422
4	ACP	22,455
5		
6		
8		
10		
12		

CUSTOMER METERS

Size (in inches)	Quantity
5/8 X ¾	363
3/4	
1	1
1 1/2	
2	
Comp. 3	
Turbo 3	
Comp. 4	
Turbo 4	
Comp. 6	
Turbo 6	

For the following three items, list the utility owned assets in each category for each system.

TREATMENT EQUIPMENT:

2- pelley chlorinator

STRUCTURES:

785 ft. of 6 ft. chain link security fence
1- 6X6 wood structure
7- 8X8 concrete block buildings

OTHER:

4- T100GS remote tank monitoring devices

Note: If you are filing for more than one system, please provide separate sheets for each system.

COMPANY NAME: Payson Water Co., Inc.	
Name of System: Mesa del Caballo	ADEQ Public Water System Number: PWS 04-030

WATER USE DATA SHEET BY MONTH FOR CALENDAR YEAR 2012

MONTH	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED (Thousands)	GALLONS PURCHASED (Thousands)
JANUARY	364	1001	1005	
FEBRUARY	361	1010	1170	
MARCH	364	940	977	
APRIL	364	1093	1192	
MAY	361	1125	1187	508
JUNE	362	1279	1226	
JULY	365	1292	1298	
AUGUST	360	1129	1163	
SEPTEMBER	362	1072	1243	2874
OCTOBER	363	1022	1105	12
NOVEMBER	363	951	1003	
DECEMBER	364	1029	1066	10
	TOTALS →	12948	13441	3404

What is the level of arsenic for each well on your system? .003 mg/l
(If more than one well, please list each separately.)

If system has fire hydrants, what is the fire flow requirement? ____GPM for ____hrs

If system has chlorination treatment, does this treatment system chlorinate continuously?
(X) Yes ( ) No

Is the Water Utility located in an ADWR Active Management Area (AMA)?
( ) Yes (X) No

Does the Company have an ADWR Gallons Per Capita Per Day (GPCPD) requirement?
( ) Yes (X) No

If yes, provide the GPCPD amount: n/a

Note: If you are filing for more than one system, please provide separate data sheets for each system.

	2012 Gallons						
	MdC Water Purchased TOP	MdC Water Purchased WSA	MdC Water Purchased Total	EVP Water Purchased TOP	EVP Water Purchased WSA	EVP Water Purchased Total	Water Purchased Total
January	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0
May	51,000	508,000	559,000	0	0	0	559,000
June	286,000	0	286,000	74,000	0	74,000	360,000
July	163,000	0	163,000	74,000	0	74,000	237,000
August	47,000	0	47,000	15,000	0	15,000	62,000
September	0	2,874,000	2,874,000	0	0	0	2,874,000
October	42,000	12,470	54,470	26,000	0	26,000	80,470
November	0	0	0	18,000	0	18,000	18,000
December	0	10,110	10,110	0	0	0	10,110
Total	589,000	3,404,580	3,993,580	207,000	0	207,000	4,200,580

EXHIBIT KMR-D

Director
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Well Registry Information

Registration Number 55- 631113

General Construction Status Owner Driller Pump Data

Well Construction Information

Well Depth (ft)	565	Water Level (ft bls)	120		
Casing Depth (ft)	104	Casing Diameter (in)	6	Casing Type	P - STEEL - PERFORATED OR SLOTTED CASING

Well Data

No. of Holes		Irrigated Acres	0	Acre Ft Annum		Intended Capacity (GPM)	0

Pump Completion Report

Tested Capacity(GPM)	22	Pump Capacity(GPM)	22	Draw Down (ft)	0
Pump Type	0 - NO PUMP CODE LISTED	Power Type	0 - NO POWER CODE LISTED	Method of Discharge	X - NONE

Place of Use

Township	N/S	1/2 T	Range	E/W	1/2 R	Section	160 Acre	40 Acre	10 Acre	Cadastral

No records to display.

Well Registry is ADWR's well database containing reported information on well status, location and construction.

e:

Director
Sandra A. Fabritz-Whitney

ADWR
Arizona Department of Water Resources

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Arizona's Official Web Site

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Well Registry Information

Registration Number 55- 500270

General Construction Status Owner Driller Pump Data

Well Construction Information

Well Depth (ft)	450	Water Level (ft bls)	146		
Casing Depth (ft)	98	Casing Diameter (in)	6	Casing Type	P - STEEL - PERFORATED OR SLOTTED CASING

Well Data

No. of Holes		Irrigated Acres	0	Acre Ft Annum		Intended Capacity (GPM)	0

Pump Completion Report

Tested Capacity(GPM)	18	Pump Capacity(GPM)	0	Draw Down (ft)	0
Pump Type	S - SUBMERSIBLE	Power Type	T - ELECTRIC MOTOR 1 - 5 HP	Method of Discharge	1 - BUCKET - BARREL - STOPWATCH

Place of Use

Township	N/S	1/2 T	Range	E/W	1/2 R	Section	160 Acre	40 Acre	10 Acre	Cadastral

No records to display.

Well Registry is ADWR's well database containing reported information on well status, location and construction.

e:

Director
Sandra A. Fabritz-Whitney

ADWR
Arizona Department of Water Resources

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Arizona's Official Web Site

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Search Map Data Export Well Registry Help Email

Well Registry Information

Registration Number 55- 801698

General Construction Status Owner Driller Pump Data

Well Construction Information

Well Depth (ft)	250	Water Level (ft bls)	120		
Casing Depth (ft)	100	Casing Diameter (in)	6	Casing Type	P - STEEL - PERFORATED OR SLOTTED CASING

Well Data

No. of Holes		Irrigated Acres	0	Acre Ft Annum	Intended Capacity (GPM) 0

Pump Completion Report

Tested Capacity(GPM)	7	Pump Capacity(GPM)	7	Draw Down (ft)	0
Pump Type	0 - NO PUMP CODE LISTED	Power Type	0 - NO POWER CODE LISTED	Method of Discharge	X - NONE

Place of Use

Township	N/S	1/2 T	Range	E/W	1/2 R	Section	160 Acre	40 Acre	10 Acre	Cadastral

No records to display.

Well Registry is ADWR's well database containing reported information on well status, location and construction.

e:

Director
Sandra A. Fabritz-Whitney

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Well Registry Information

Registration Number 55-513409

General Construction Status Owner Driller Pump Data

Well Construction Information

Well Depth (ft)	395	Water Level (ft bls)	150		
Casing Depth (ft)	395	Casing Diameter (in)	6	Casing Type	P - STEEL - PERFORATED OR SLOTTED CASING

Well Data

No. of Holes		Irrigated Acres	0	Acre Ft Annum		Intended Capacity (GPM)	35

Pump Completion Report

Tested Capacity(GPM)	20	Pump Capacity(GPM)	20	Draw Down (ft)	254
Pump Type	S - SUBMERSIBLE	Power Type	T - ELECTRIC MOTOR 1 - 5 HP	Method of Discharge	2 - METER

Place of Use

Township	N/S	1/2 T	Range	E/W	1/2 R	Section	160 Acre	40 Acre	10 Acre	Cadastral
11	N	0	10	E	0	23				A11010023000

Well Registry is ADWR's well database containing reported information on well status, location and construction.

e:

Director
Sandra A. Fabritz-Whitney

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Well Registry Information

Registration Number 55- 556148

General Construction Status Owner Driller Pump Data

Well Construction Information

Well Depth (ft)	400	Water Level (ft bls)	190		
Casing Depth (ft)	400	Casing Diameter (in)	6	Casing Type	P - STEEL - PERFORATED OR SLOTTED CASING

Well Data

No. of Holes		Irrigated Acres	0	Acre Ft Annum		Intended Capacity (GPM)	50

Pump Completion Report

Tested Capacity(GPM)	25	Pump Capacity(GPM)	18	Draw Down (ft)	110
Pump Type	S - SUBMERSIBLE	Power Type	T - ELECTRIC MOTOR 1 - 5 HP	Method of Discharge	2 - METER

Place of Use

Township	N/S	1/2 T	Range	E/W	1/2 R	Section	160 Acre	40 Acre	10 Acre	Cadastral

No records to display.

Well Registry is ADWR's well database containing reported information on well status, location and construction.

e:

Director
Sandra A. Fabritz-Whitney

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Arizona Department of Water Resources

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Well Registry Information

Registration Number 55-801699

General Construction Status Owner Driller Pump Data

Well Construction Information

Well Depth (ft)	200	Water Level (ft bls)	124		
Casing Depth (ft)	80	Casing Diameter (in)	6	Casing Type	P - STEEL - PERFORATED OR SLOTTED CASING

Well Data

No. of Holes		Irrigated Acres	0	Acre Ft Annum	Intended Capacity (GPM) 0

Pump Completion Report

Tested Capacity(GPM)	7	Pump Capacity(GPM)	7	Draw Down (ft)	0
Pump Type	0 - NO PUMP CODE LISTED	Power Type	0 - NO POWER CODE LISTED	Method of Discharge	X - NONE

Place of Use

Township	N/S	1/2 T	Range	E/W	1/2 R	Section	160 Acre	40 Acre	10 Acre	Cadastral

No records to display.

Well Registry is ADWR's well database containing reported information on well status, location and construction.

e:

Director
Sandra A. Fabritz-Whitney

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Arizona Department of Water Resources

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Arizona's Official Web Site

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Search Map Data Export Well Registry Help Email

Well Registry Information

Registration Number 55- 631112

General Construction Status Owner Driller Pump Data

Well Construction Information

Well Depth (ft)	220	Water Level (ft bls)	124		
Casing Depth (ft)	80	Casing Diameter (in)	5	Casing Type	P - STEEL - PERFORATED OR SLOTTED CASING

Well Data

No. of Holes		Irrigated Acres	0	Acre Ft Annum	Intended Capacity (GPM) 0

Pump Completion Report

Tested Capacity(GPM)	7	Pump Capacity(GPM)	7	Draw Down (ft)	0
Pump Type	0 - NO PUMP CODE LISTED	Power Type	0 - NO POWER CODE LISTED	Method of Discharge	X - NONE

Place of Use

Township	N/S	1/2 T	Range	E/W	1/2 R	Section	160 Acre	40 Acre	10 Acre	Cadastral

No records to display.

Well Registry is ADWR's well database containing reported information on well status, location and construction.

e:

EXHIBIT KMR-E

Pump capacity 15 gpm

ARIZONA DEPARTMENT OF WATER RESOURCES
Information Management Unit
P.O. Box 36020, Phoenix, Arizona 85067-3589
(602) 771-8527 • (800) 352-8488
www.water.az.gov

Pump Installation Completion Report

- Review instructions prior to completing form
- The registered well owner should file this report with the Department within 30 days following installation of pump equipment

** PLEASE PRINT CLEARLY **

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ARIZONA DEPARTMENT OF WATER RESOURCES

FILE NUMBER: A(11-10) 23 ADD
WELL REGISTRATION NUMBER: 55-220768

SECTION 1. REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION OR INDIVIDUAL: RANDALL COOK

MAILING ADDRESS: 8071 W. SEPIA ROAD

CITY / STATE / ZIP: PAYSON, AZ 85541

CONTACT PERSON NAME AND TITLE:

TELEPHONE NUMBER: 928-474-9640

FAX:

Location of Well

WELL LOCATION ADDRESS (IF KNOWN): 8071 W. SEPIA ROAD

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
11N	10E	23	NE 1/4	SE 1/4	SE 1/4

COUNTY ASSESSOR'S PARCEL ID NUMBER (MOST RECENT): BOOK 302 MAP 34 PARCEL 003D

COUNTY WHERE WELL IS LOCATED: GILA

SECTION 2. EQUIPMENT INSTALLED

DATE PUMP INSTALLED: 9-4-12

Pump Type

CHECK ONE

- ☐ Air Lift
- ☐ Bucket
- ☐ Centrifugal
- ☐ Jet
- ☐ Piston
- ☐ Rotary
- ☒ Submersible
- ☐ Turbine
- ☐ Other (please specify)

Pitless Adaptor

CHECK ONE (SEE INSTRUCTIONS FOR DEFINITION)
Was a pitless adaptor installed? ☐ Yes ☒ No

IF YES, DEPTH BELOW GROUND LEVEL THE DEVICE WAS INSTALLED: Feet

Power Type

CHECK ONE

- ☐ Diesel Engine
- ☒ Electric Motor
- ☐ Gasoline Engine
- ☐ Hand
- ☐ Natural Gas
- ☐ Windmill
- ☐ Other (please specify)

RATED PUMP CAPACITY: 15 Gallons Per Minute

HORSE POWER RATING OF MOTOR: 1.5

SECTION 3. WELL TEST

Pump Test Data

DATE WELL TESTED: 9/4/12

STATIC WATER LEVEL (A): 276 Feet Below Land Surface

PUMPING WATER LEVEL (B): 281 Feet Below Land Surface

DRAWDOWN [(B) - (A)]: ~~DX~~ 5

TEST PUMPING RATE: [redacted]

DURATION OF PUMP TEST (Minimum 4 Hours): 4 HR. Hours

TOTAL PUMPING LIFT: 281 Feet

FOR FLOWING WELL, MEASURED SHUT IN HEAD: N/A ☐ FT ☐ PSI

Method of Discharge Measurement

CHECK ONE

- ☐ Bailer
- ☒ Bucket - Barrel - Stopwatch
- ☐ Current
- ☐ Estimated - Air Lift
- ☐ Gauge
- ☐ Meter
- ☐ Orifice
- ☐ Volume
- ☐ Weir - Flume
- ☐ Other (please specify)

Method of Measuring Water Level

CHECK ONE

- ☐ Air Line
- ☒ Electric Measuring Line (Sounder)
- ☐ Steel Tape
- ☐ Other (please specify)

SYM

I HEREBY CERTIFY *that the above statements are true to the best of my knowledge and belief according to* A.R.S § 45-600(B)

SIGNATURE OF WELL OWNER: Randall Cook, Frances C Cook

DATE: 9-4-12

DWR-55-56 (Rev. 02/06/06)

Pump capacity 12 gpm

ARIZONA DEPARTMENT OF WATER RESOURCES
Information Management Unit
P.O. Box 36020, Phoenix, Arizona 85067-3589
(602) 771-8527 * (800) 352-8488
www.water.az.gov

Pump Installation Completion Report

RECEIVED
APR 04 2013
ARIZONA DEPARTMENT OF WATER RESOURCES

- Review instructions prior to completing form
- The registered well owner should file this report with the Department within 30 days following installation of pump equipment

** PLEASE PRINT CLEARLY **

FILE NUMBER: A(11-10) 23 ADD
WELL REGISTRATION NUMBER: 55-220767

SECTION 1. REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION OR INDIVIDUAL: WESLEY COOK
MAILING ADDRESS: 8058 W. HALLWAY DR.
CITY / STATE / ZIP: PAYSON, AZ 85541
CONTACT PERSON NAME AND TITLE:
TELEPHONE NUMBER: 928-474-7805
FAX:

Location of Well

WELL LOCATION ADDRESS (IF KNOWN): 8058 W. HALLWAY DR.

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
11N	10E	23	NE 1/4	SE 1/4	SE 1/4

COUNTY ASSESSOR'S PARCEL ID NUMBER (MOST RECENT): BOOK 302 MAP 34 PARCEL 005A
COUNTY WHERE WELL IS LOCATED: GILA

SECTION 2. EQUIPMENT INSTALLED

DATE PUMP INSTALLED: 9/10/12

Pump Type

CHECK ONE

- [ ] Air Lift
- [ ] Bucket
- [ ] Centrifugal
- [ ] Jet
- [ ] Piston
- [ ] Rotary
- [x] Submersible
- [ ] Turbine
- [ ] Other (please specify)

Pitless Adaptor

CHECK ONE (SEE INSTRUCTIONS FOR DEFINITION)
Was a pitless adaptor installed? [x] Yes [ ] No

IF YES, DEPTH BELOW GROUND LEVEL THE DEVICE WAS INSTALLED: 2 Feet

Power Type

CHECK ONE

- [ ] Diesel Engine
- [x] Electric Motor
- [ ] Gasoline Engine
- [ ] Hand
- [ ] Natural Gas
- [ ] Windmill
- [ ] Other (please specify)

RATED PUMP CAPACITY: 12 Gallons Per Minute
HORSE POWER RATING OF MOTOR: 1

SECTION 3. WELL TEST

Pump Test Data

DATE WELL TESTED: 9/10/12
STATIC WATER LEVEL (A): 234 Feet Below Land Surface
PUMPING WATER LEVEL (B): 256 Feet Below Land Surface
DRAWDOWN [(B) - (A)]: 22
TEST PUMPING RATE: 12 Gallons Per Minute
DURATION OF PUMP TEST (Minimum 4 Hours): 4 Hours
TOTAL PUMPING LIFT: 256 Feet
FOR FLOWING WELL, MEASURED SHUT IN HEAD: N/A [ ] FT [ ] PSI

Method of Discharge Measurement

CHECK ONE

- [ ] Bailer
- [x] Bucket - Barrel - Stopwatch
- [ ] Current
- [ ] Estimated - Air Lift
- [ ] Gauge
- [ ] Meter
- [ ] Orifice
- [ ] Volume
- [ ] Weir - Flume
- [ ] Other (please specify)

Method of Measuring Water Level

CHECK ONE

- [ ] Air Line
- [x] Electric Measuring Line (Sounder)
- [ ] Steel Tape
- [ ] Other (please specify)

SYM

I HEREBY CERTIFY *that the above statements are true to the best of my knowledge and belief according to* A.R.S § 45-600(B)

SIGNATURE OF WELL OWNER: Wesley Cook
DATE: 9/10/12

DWR-55-56 (Rev. 02/06/06)

Pump capacity 5 gpm 5/21/13 SYM / EW

Arizona Department of Water Resources
Water Management Division
P.O. Box 36020, Phoenix, AZ 85067-6020
(602) 771-8627 • (602) 771-8690 fax

Pump Installation Completion Report

- Review instructions prior to completing form in black or blue ink.
- The registered well owner should file this report with the Department within 30 days following installation of pump equipment.

RECEIVED MAY 29 2013

FILE NUMBER: A(11-10)23 DBB
WELL REGISTRATION NUMBER: 55-[redacted]

** PLEASE PRINT CLEARLY **

SECTION 1. REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL: Frank Kemp
MAILING ADDRESS: 426 N. Toya Vista Rd.
CITY / STATE / ZIP CODE: Payson, AZ 85541
CONTACT PERSON NAME AND TITLE: Frank Kemp/ Owner
TELEPHONE NUMBER: 928-587-5266
FAX:

Location of Well

WELL LOCATION ADDRESS (IF ANY): 7426 N. Toya Vista Rd.

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
11N	10E	23	SE ¼	NW ¼	NW ¼

COUNTY ASSESSOR'S PARCEL ID NUMBER (MOST RECENT)

BOOK	MAP	PARCEL
302	34	383

COUNTY WHERE WELL IS LOCATED: Gila

SECTION 2. EQUIPMENT INSTALLED

DATE PUMP INSTALLED: [redacted]

Pump Type

CHECK ONE

- [ ] Air Lift
- [ ] Bucket
- [ ] Centrifugal
- [ ] Jet
- [ ] Piston
- [ ] Rotary
- [x] Submersible
- [ ] Turbine
- [ ] Other (*please specify*):

RATED PUMP CAPACITY: 5 Gallons Per Minute

Pitless Adaptor

CHECK ONE (*SEE INSTRUCTIONS FOR DEFINITION*)

Was a pitless adaptor installed? [ ] Yes [x] No

IF YES, DEPTH BELOW GROUND LEVEL THE DEVICE WAS INSTALLED: Feet

Power Type

CHECK ONE

- [ ] Diesel Engine
- [x] Electric Motor
- [ ] Gasoline Engine
- [ ] Hand
- [ ] Natural Gas
- [ ] Windmill
- [ ] Other (*please specify*):

HORSE POWER RATING OF MOTOR: 3/4

SECTION 3. PUMP TEST

Pump Test Data

DATE WELL TESTED: 3/18/13
STATIC WATER LEVEL (A): 236 Feet Below Land Surface
PUMPING WATER LEVEL (B): 373 Feet Below Land Surface
DRAWDOWN [(B) – (A)]: 137 Feet Below Land Surface
TEST PUMPING RATE: 5 Gallons Per Minute
DURATION OF PUMP TEST (Minimum 4 Hours): 4 Hours
TOTAL PUMPING LIFT: 373 Feet
FOR FLOWING WELL, MEASURED SHUT IN HEAD: [ ] FT [ ] PSI

Method of Discharge Measurement

CHECK ONE

- [ ] Bailer
- [x] Bucket – Barrel – Stopwatch
- [ ] Current
- [ ] Estimated – Air Lift
- [ ] Gauge
- [ ] Meter
- [ ] Orifice
- [ ] Volume
- [ ] Weir – Flume
- [ ] Other (*please specify*):

Method of Measuring Water Level

CHECK ONE

- [ ] Air Line
- [x] Electric Measuring Line (Sounder)
- [ ] Steel Tape
- [ ] Other (*please specify*):

I HEREBY CERTIFY that the above statements are true to the best of my knowledge and belief according to A.R.S. § 45-600(B).

SIGNATURE OF WELL OWNER: Frank Kemp
DATE: 5/28/13

EXHIBIT KMR-F

Drinking Water Quantity-Low Yielding Domestic Water Wells

Drinking Water and Human Health - January 04, 2011

Contents

- 1 Low-yielding domestic water wells (#Low-yielding_domestic_water_wells)
- 2 Potential health effects associated with low-yielding wells (#Potential_health_effects_associated_with_low-yielding_wells)
- 3 Options for correcting low yield (#Options_for_correcting_low_yield)
- 4 References (#References)

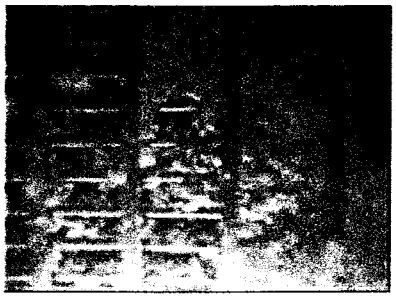
Low-yielding domestic water wells

The objective of groundwater resource development is to design and construct a well capable of yielding a pumping rate compatible with the needs of the well owner's intended use. Well yield is generally defined as the rate at which a well can be pumped while ensuring that the water level does not drop below the pump intake. It is reported as gallons per minute (gpm). Well yield is highly dependent on the characteristics of the aquifer, the construction of the well, and the maintenance of the well to assure long-term sustainability of yield.

Aquifer characteristics can vary between highly porous and transmissive sands to low-yielding clays and hard rock. Wells completed in more porous, saturated geologic materials routinely result in high-yielding wells. Wells completed in less porous clays and bedrock can retard groundwater flow to less than 5 gpm.

Well construction is important when optimizing yield. The screened portion of the well allows for the movement of water into the well while reducing the transport of silt and sands. An improperly sized screen (slots in the screen too large or too small) could allow sediment to clog the well and grit to damage the pump. A submersible pump that is too shallow could draw down water levels too quickly. This requires the pump to cycle on and off repeatedly as the water table rises and falls, often damaging the pump. If water table elevations drop after initial well construction, well yield will decline.

The development of scale within the well and screen is the most common cause of a reduction in well yield. Similar to the deposits found inside a tea kettle, scale is the hard residue that coats the inside of pipes and well screens as the result of precipitation of minerals composed of calcium and magnesium carbonates. Naturally occurring iron bacteria (/pages/31555/drinking-water-contaminant-iron-and-manganese-bacteria) can plug the pores in the aquifer and the opening of the well screen. The bacteria produce accumulations of bioslime within the well and increase the rate of scale precipitation, not unlike plaque buildup on your teeth. The combined effect of the growth of slime and precipitated minerals has been reported to reduce well yield by 75 percent within a year of well operation in some locations (Johnson Division, 1972).



A clogged well screen

Potential health effects associated with low-yielding wells

Low-yielding wells are likely to cycle on and off to meet water needs. Rapid and repeated water level changes in the area of the well screen allow for the introduction of oxygen in the aquifer. Changes in aquifer geochemistry can occur when water-saturated geologic materials are exposed to oxygen, and this can result in naturally occurring minerals dissolving into the groundwater. If the aquifer material includes arsenic (/pages/31544/drinking-water-contaminant-

arsenic) minerals, an increase in dissolved arsenic may occur (Uhlman, 2008).

In addition to the potential for loss of well yield, bioslime accumulation may allow for the growth of bacteria that can become a serious health concern. *E. coli* bacteria is the most common bacteria (/pages/31551/drinking-water-contaminant-bacteria) encountered in domestic wells and can originate from naturally occurring bacteria found in the soils. But the most common source of fecal *E. coli* in water well systems is an adjacent septic system. In regions of warm groundwater (southwestern United States) an overgrowth of bacteria in a domestic well can become a food source for other organisms, such as the amoeba *N. fowleri* (Artiola & Uhlman, 2009). Domestic wells should be tested annually for *E. coli* to assure drinking water standards are met.

Options for correcting low yield

Wells constructed in low-yielding aquifers are candidates for well deepening and pump lowering if water table elevations have dropped. Open-borehole wells, such as those constructed in bedrock, may exhibit increased yield if fractured or *fracked. Hydro-fracking* consists of sealing portions of the well and increasing the pressure sufficiently within the borehole to fracture the rock. Increasing the number and frequency of fractures around the borehole allows for the interception of a greater number of water-bearing fractures and may increase yield.

Shock chlorination (/pages/31573/drinking-water-treatment-chlorination) of a well exhibiting elevated bacterial contamination removes bioslime that may be plugging the well. Care should be taken to adequately flush the well system after shock chlorination because the introduction of chlorine can change the geochemisty of the aquifer and induce mobilization of naturally occurring minerals, such as arsenic and lead.

Anecdotal reports of well owners have suggested limited success with the introduction of dry ice into the well. As the carbon dioxide (CO_2) off-gases from the dry ice, the water becomes more acid, which dissolves some of the carbonate-based scale and lowers the bacterial count. The agitation of the bubbling dry ice in the borehole is also assumed to remove some particulate scale. Larger municipal wells are beginning to design large-capacity water well systems to use pressurized CO_2 gas to sanitize well systems. The downside of the use of CO_2 is the acidification of the water, which increases pipe corrosion.

Surging and scrubbing the interior of the well piping and screen is the most efficient means by which to increase well yield after scale formation. A licensed pump installer mobilizes a pump rig over the well, removes the pump and any interior plumbing, and scrubs the well with equipment similar to a large bottle brush. It is recommended that any pump maintenance activity that allows for open access to the well should include well surging and scrubbing to remove scale, slime, and other particulates from the domestic well.

References

Most of this text was adapted from: Artiola, J. & Uhlman, K. (2009). *Arizona Well Owners' Guide to Water Supply.* Access online: http://www.wellownerhelp.org/intro.html (http://www.wellownerhelp.org/intro.html)

Johnson Division. (1972). *Groundwater and Wells*. Second Printing. Edward E. Johnson Inc. Universal Oil Products Co., Saint Paul, Minnesota.

Uhlman, K. (2008). *Arsenic in Arizona Ground Water -- Source and Transport Characteristics*. Access online: http://cals.arizona.edu/pubs/water/az1453.pdf (http://cals.arizona.edu/pubs/water/az1453.pdf)

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EXHIBIT
KMR-4
ADMITTED

Document # 150679

Kathleen M. Reidhead
14406 S. Cholla Canyon Dr.
Phoenix, AZ 85044
Telephone: 480-704-0261

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2014 JAN - 7 A 11: 02
AZ CORP COMMISSION
DOCKET CONTROL

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO: W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR AUTHORITY TO: (1) ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM; AND (2) ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	DOCKET NO: W-03514A-13-0142 **SUPPLEMENT TO PRE-FILED TESTIMONY** **PHASE 2** Filed 1/7/14

Kathleen M. Reidhead, "KMR", is an Intervener in the above-captioned matter. KMR submits the attached Exhibit KMR-G as additional evidence related to groundwater supplies in Mesa del Caballo, "MdC".

KMR refers to the Well Registry Export Report that was previously submitted as an attachment to her letter dated October 7, 2013, posted to the docket of this case as Document #148764. She reviewed the Imaged Record for each well listed on that export taken from the Arizona Department of Water Resources, "ADWR", website, available at this link: https://gisweb.azwater.gov/WellRegistry/SearchWellReg.aspx and obtained as many Well Driller Reports and/or Completion Reports available for the 60 wells shown on that export. A number of the wells were found to have been abandoned, never drilled, or located elsewhere (not within MdC). A number of the others did not have a completion report submitted or other paperwork that showed the depth of water level. However, 32 wells did have data available and are attached as Exhibit KMR-G showing depth of water levels in MdC from 1991 to 2013. You can see from the summary that water levels in MdC have remained fairly consistent over this

22 year period of time, ranging from 80 feet to 276 feet below ground. Since 2011, 9 new wells have been drilled and all of these recent wells show water available at depths between 120 to 276 feet below ground. This evidence shows that the acquifer in MdC is productive, which refutes the claims made by Payson Water Company, "PWC", that it is "too risky" to drill new wells or to deepen their existing wells.

KMR also attaches as Exhibit KMR-H a letter written by Robert Hardcastle in April 2008 to the Town of Payson expressing an interest in participating in supplies of water from the Cragin reservoir. This letter was written a full 13 months prior to the summer 2009 season when the first water deficiencies were claimed by PWC in MdC. It is unclear why Robert Hardcastle would be interested in obtaining supplies of water for a problem that had not yet presented itself.

The volume of evidence presented by KMR clearly shows that there is no need for a tie-in to the Cragin pipeline at a cost estimated at nearly $1.2 Million. It is not even proven that there are water deficiencies in MdC, only claims of such. The evidence presented during this rate case certainly tells a different story. 32 private well owners in MdC appear to have acquired ample supplies of water. Only PWC claims to have inadequate or underperforming wells. That is a claim that warrants further investigation, but should not be accepted without proof, in light of the other inaccurate and/or misleading claims that PWC has presented throughout the course of this case.

Respectfully submitted this 7th day of January, 2014.

By Kathleen M. Reidhead

Kathleen M. Reidhead, Intervener
14406 S. Cholla Canyon Dr.
Phoenix, AZ 85044

ORIGINAL and thirteen (13) copies of the foregoing were filed this 7th day of January, 2014 with:

Docket Control
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

COPY of the foregoing was mailed this 7th day of January, 2014 to:

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Payson, AZ 85541

Suzanne Nee
2051 E. Aspen Dr.
Tempe, AZ 85282

Kathleen M. Reidhead

EXHIBIT KMR-G

Summary of Mesa del Caballo Wells
1991-2013 Depth to Water Levels

Well #	Year Drilled	Address	Depth of Well	Depth to Water
55-222540	2013	7555 N. Caballero	400	226
55-222533	2013	7511 N. Caballero Rd.	400	231
55-221744	2013	8211 W. Barranca Rd.	400	213
55-221514	2013	7426 N. Toya Vista Rd.	400	236
55-220767	2012	8058 W. Hallway Dr.	400	234
55-220768	2012	8071 W. Sepia Rd.	400	276
55-221636	2012	8129 W. Sepia Rd.	400	252
55-220514	2011	7581 N. Toya Vista	400	230
55-913123	2011	8022 W. Stallion Rd.	405	120
55-592209	2002	HC8 Box 700-S	205	80
55-592680	2002	Hallway 6F	360	189
55-585747	2001	?? Brooke Utilities ??	400	155
55-560398	1997	605 W. Arabian Way	440	198
55-558959	1997	HCR Box 588A	300	265
55-556430	1997	HC3 Box 519-M	300	185
55-553798	1996	HC3 Box 593-I	360	177
55-553768	1996	HC3 Box 519H	320	171
55-550693	1996	1620 N. McLane	320	168
55-544697	1995	HCR Box 588	420	225
55-548768	1995	HCR Box 562-E	380	174
55-549961	1995	HC 3 Box 518-K	280	184
55-550467	1995	HC 3 Box 518-C	340	185
55-545800	1995	P.O. Box 58	340	177
55-550467	1995	P.O. Box 2357	340	185
55-540604	1994	HCR 579-A	240	180
55-542028	1994	?? Phoenix Address listed ??	300	220
55-540136	1993	8166 W. Sepia Rd.	260	185
55-539625	1993	HCR 573-G	300	155
55-539488	1993	HC 3 Box 573	240	165
55-539490	1993	HC 3 Box 573-E	260	167
55-539229	1993	P.O. Box 564	220	166
55-531101	1991	P.O. Box 2880	400	177

11/19/13
BW

ARIZONA DEPARTMENT OF WATER RESOURCES
Information Management Unit
P.O. Box 36020, Phoenix, Arizona 85067-3589
(602) 771-8527 * (800) 352-8488
www.water.az.gov

Well Driller Report and Well Log

Pg. 1/2

This report should be prepared by the driller in detail and filed with the Department within 30 days following completion of the well.

** PLEASE PRINT CLEARLY **

RECEIVED
SEP 30 2013
ARIZONA DEPARTMENT OF WATER RESOURCES

FILE NUMBER: A(11-10) 23 ADB
WELL REGISTRATION NUMBER: 55- 222540
PERMIT NUMBER (IF ISSUED)

SECTION 1. DRILLING AUTHORIZATION

Mail To:

Drilling Firm

NAME	DWR LICENSE NUMBER
AERO DRILLING AND PUMPS, INC.	108
ADDRESS: P.O. BOX 499	TELEPHONE NUMBER: 928-474-2376
CITY/STATE/ZIP: PAYSON, AZ 85547-0499	FAX

SECTION 2. REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION OR INDIVIDUAL: DIANA L. HALSEY

MAILING ADDRESS: 7555 N. CABALLERO

CITY / STATE / ZIP: PAYSON, AZ 85541

CONTACT PERSON NAME AND TITLE:

TELEPHONE NUMBER: 928-474-5815 FAX:

WELL NAME (e.g., MW-1, PZ-3, Lot 25 Well, Smith Well, etc.):

Location of Well

WELL LOCATION ADDRESS (IF ANY): 7555 N. Caballero

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
11N	10E	23	NE 1/4	SE 1/4	NW 1/4

LATITUDE			LONGITUDE		
34 ° Degrees	17 ' Minutes	6.2 "N Seconds	111 ° Degrees	17 ' Minutes	36.6 "W Seconds

METHOD OF LATITUDE / LONGITUDE (CHECK ONE): [X] *GPS: Hand-Held [ ] USGS Quad Map [ ] Conventional Survey [ ] *GPS: Survey-Grade

LAND SURFACE ELEVATION AT WELL: 5182 Feet Above Sea Level

METHOD OF ELEVATION (CHECK ONE): [X] *GPS: Hand-Held [ ] USGS Quad Map [ ] Conventional Survey [ ] *GPS: Survey-Grade

*IF GPS WAS USED, GEOGRAPHIC COORDINATE DATUM (CHECK ONE): [X] NAD-83 [ ] Other (please specify):

COUNTY	ASSESSOR'S PARCEL ID NUMBER BOOK	MAP	PARCEL
Gila	302	34	011B

SECTION 3. WELL CONSTRUCTION DETAILS

Drill Method

CHECK ONE
- [X] Air Rotary
- [ ] Bored or Augered
- [ ] Cable Tool
- [ ] Dual Rotary
- [ ] Mud Rotary
- [ ] Reverse Circulation
- [ ] Driven
- [ ] Jetted
- [ ] Air Percussion / Odex Tubing
- [ ] Other (please specify)

Method of Well Development

CHECK ONE
- [X] Airlift
- [ ] Bail
- [ ] Surge Back
- [ ] Surge Pump
- [ ] Other (please specify)

Method of Sealing at Reduction Points

CHECK ONE
- [X] None
- [ ] Packed
- [ ] Swedged
- [ ] Welded
- [ ] Other (please specify)

Condition of Well

CHECK ONE
- [ ] Capped
- [X] Pump Installed

Construction Dates

DATE WELL CONSTRUCTION STARTED: 9/4/13

DATE WELL CONSTRUCTION COMPLETED: 9/6/13

I state that this notice is filed in compliance with A.R.S. § 45-596 and is complete and correct to the best of my knowledge and belief.

DRILLING FIRM	SIGNATURE OF QUALIFYING PARTY	DATE
Aero Drilling & Pumps, Inc.	[signature]	9/6/13

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Well Driller Report and Well Log

WELL REGISTRATION NUMBER
55- 222540

SECTION 4. WELL CONSTRUCTION DESIGN (AS BUILT) (attach additional page if needed)

Pg. 2/2

DEPTH OF BORING	DEPTH OF COMPLETED WELL
400 Feet Below Land Surface	400 Feet Below Land Surface

Water Level Information

STATIC WATER LEVEL	DATE MEASURED	TIME MEASURED	IF FLOWING WELL, METHOD OF FLOW REGULATION
226 Feet Below Land Surface	9/6/13		☐ Valve ☐ Other:

Borehole			Installed Casing													
DEPTH FROM SURFACE			DEPTH FROM SURFACE			MATERIAL TYPE (X)				PERFORATION TYPE (X)						
FROM (feet)	TO (feet)	BOREHOLE DIAMETER (inches)	FROM (feet)	TO (feet)	OUTER DIAMETER (inches)	STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	SLOT SIZE IF ANY (inches)
0	20	10	0	20	6	X				X						
20	400	6	0	360	4.5		X			X						
			360	400	4.5		X								Drilled	¼ X 16

Installed Annular Material

DEPTH FROM SURFACE		ANNULAR MATERIAL TYPE (X)								FILTER PACK		
						BENTONITE						
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	CHIPS	PELLETS	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	SAND	GRAVEL	SIZE
0	20			X								

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11/12/13
BM

ARIZONA DEPARTMENT OF WATER RESOURCES
Information Management Unit
P.O. Box 36020, Phoenix, Arizona 85067-3589
(602) 771-8527 • (800) 352-8488
www.water.az.gov

Well Driller Report and Well Log

Pg. 1/2

This report should be prepared by the driller in detail and filed with the Department within 30 days following completion of the well.

** PLEASE PRINT CLEARLY **

RECEIVED
SEP 11 2013
ARIZONA DEPARTMENT OF WATER RESOURCES

FILE NUMBER: A(11-10) 23 ADB
WELL REGISTRATION NUMBER: 55- 222533
PERMIT NUMBER (IF ISSUED)

SECTION 1. DRILLING AUTHORIZATION

Mail To:

Drilling Firm

NAME	DWR LICENSE NUMBER
AERO DRILLING AND PUMPS, INC.	108
ADDRESS: P.O. BOX 499	TELEPHONE NUMBER: 928-474-2376
CITY/STATE/ZIP: PAYSON, AZ 85547-0499	FAX

SECTION 2. REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION OR INDIVIDUAL: DAN & BARB PRUETT

MAILING ADDRESS: 7511 N. CABALLERO RD.

CITY / STATE / ZIP: PAYSON, AZ 85541

CONTACT PERSON NAME AND TITLE:

TELEPHONE NUMBER: 928-978-5424 FAX:

WELL NAME (e.g., MW-1, PZ-3, Lot 25 Well, Smith Well, etc.):

Location of Well

WELL LOCATION ADDRESS (IF ANY): 7511 N. Caballero, Mesa Del Caballo

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
11N	10E	23	NE 1/4	SE 1/4	NW 1/4

LATITUDE			LONGITUDE		
34 ° Degrees	17 ' Minutes	4.4 " N Seconds	111 ° Degrees	17 ' Minutes	37.6 " W Seconds

METHOD OF LATITUDE / LONGITUDE (CHECK ONE): [X] *GPS: Hand-Held [ ] USGS Quad Map [ ] Conventional Survey [ ] *GPS: Survey-Grade

LAND SURFACE ELEVATION AT WELL: 5180 Feet Above Sea Level

METHOD OF ELEVATION (CHECK ONE): [X] *GPS: Hand-Held [ ] USGS Quad Map [ ] Conventional Survey [ ] *GPS: Survey-Grade

*IF GPS WAS USED, GEOGRAPHIC COORDINATE DATUM (CHECK ONE): [X] NAD-83 [ ] Other (please specify):

COUNTY	ASSESSOR'S PARCEL ID NUMBER BOOK	MAP	PARCEL
Gila	302	34	004P

SECTION 3. WELL CONSTRUCTION DETAILS

Drill Method

CHECK ONE
- [X] Air Rotary
- [ ] Bored or Augered
- [ ] Cable Tool
- [ ] Dual Rotary
- [ ] Mud Rotary
- [ ] Reverse Circulation
- [ ] Driven
- [ ] Jetted
- [ ] Air Percussion / Odex Tubing
- [ ] Other (please specify)

Method of Well Development

CHECK ONE
- [X] Airlift
- [ ] Bail
- [ ] Surge Back
- [ ] Surge Pump
- [ ] Other (please specify)

Method of Sealing at Reduction Points

CHECK ONE
- [X] None
- [ ] Packed
- [ ] Swedged
- [ ] Welded
- [ ] Other (please specify)

Condition of Well

CHECK ONE
- [X] Capped
- [ ] Pump Installed

Construction Dates

DATE WELL CONSTRUCTION STARTED: 8/20/13

DATE WELL CONSTRUCTION COMPLETED: 8/20/13

I state that this notice is filed in compliance with A.R.S. § 45-596 and is complete and correct to the best of my knowledge and belief.

DRILLING FIRM	SIGNATURE OF QUALIFYING PARTY	DATE
Aero Drilling & Pumps, Inc.	[signature]	8/20/13

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Well Driller Report and Well Log

WELL REGISTRATION NUMBER
55- 222533

SECTION 4. WELL CONSTRUCTION DESIGN (AS BUILT) (attach additional page if needed)

DEPTH OF BORING	DEPTH OF COMPLETED WELL
400 Feet Below Land Surface	400 Feet Below Land Surface

Water Level Information

STATIC WATER LEVEL	DATE MEASURED	TIME MEASURED	IF FLOWING WELL, METHOD OF FLOW REGULATION
231 Feet Below Land Surface	8/20/13		☐ Valve ☐ Other:

Borehole			Installed Casing													
DEPTH FROM SURFACE			DEPTH FROM SURFACE			MATERIAL TYPE (X)				PERFORATION TYPE (X)						
FROM (feet)	TO (feet)	BOREHOLE DIAMETER (inches)	FROM (feet)	TO (feet)	OUTER DIAMETER (inches)	STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	SLOT SIZE IF ANY (inches)
0	20	10	0	20	6	X				X						
20	400	6	0	360	4.5		X			X						
			360	400	4.5		X								Drilled	¼ X 16

Installed Annular Material

DEPTH FROM SURFACE		ANNULAR MATERIAL TYPE (X)								FILTER PACK		
						BENTONITE						
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	CHIPS	PELLETS	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	SAND	GRAVEL	SIZE
0	20			X								

Pg. 1/2 5/21/13 SYM/EW

Arizona Department of Water Resources
Water Management Division
P.O. Box 36020, Phoenix, AZ 85067-6020
(602) 771-8627 • (602) 771-8690 fax

Pump Installation Completion Report

- Review instructions prior to completing form in black or blue ink.
- The registered well owner should file this report with the Department within 30 days following installation of pump equipment.

RECEIVED MAY 29 2013

FILE NUMBER
A(11-10)23 DBB
WELL REGISTRATION NUMBER
55- 221514

** PLEASE PRINT CLEARLY **

SECTION 1. REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL: Frank Kemp

MAILING ADDRESS: 426 N. Toya Vista Rd.

CITY / STATE / ZIP CODE: Payson, AZ 85541

CONTACT PERSON NAME AND TITLE: Frank Kemp/ Owner

TELEPHONE NUMBER: 928-587-5266

FAX:

Location of Well

WELL LOCATION ADDRESS (IF ANY): 7426 N. Toya Vista Rd.

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
11N	10E	23	SE ¼	NW ¼	NW ¼

COUNTY ASSESSOR'S PARCEL ID NUMBER (MOST RECENT)

BOOK	MAP	PARCEL
302	34	383

COUNTY WHERE WELL IS LOCATED: Gila

SECTION 2. EQUIPMENT INSTALLED

DATE PUMP INSTALLED: 3/18/13

Pump Type

CHECK ONE

- [ ] Air Lift
- [ ] Bucket
- [ ] Centrifugal
- [ ] Jet
- [ ] Piston
- [ ] Rotary
- [x] Submersible
- [ ] Turbine
- [ ] Other (*please specify*):

Pitless Adaptor

CHECK ONE (*SEE INSTRUCTIONS FOR DEFINITION*)

Was a pitless adaptor installed? [ ] Yes [x] No

IF YES, DEPTH BELOW GROUND LEVEL THE DEVICE WAS INSTALLED: Feet

Power Type

CHECK ONE

- [ ] Diesel Engine
- [x] Electric Motor
- [ ] Gasoline Engine
- [ ] Hand
- [ ] Natural Gas
- [ ] Windmill
- [ ] Other (*please specify*):

RATED PUMP CAPACITY: 5 Gallons Per Minute

HORSE POWER RATING OF MOTOR: 3/4

SECTION 3. PUMP TEST

Pump Test Data

DATE WELL TESTED: 3/18/13

STATIC WATER LEVEL (A): 236 Feet Below Land Surface

PUMPING WATER LEVEL (B): 373 Feet Below Land Surface

DRAWDOWN [(B) – (A)]: 137 Feet Below Land Surface

TEST PUMPING RATE: 5 Gallons Per Minute

DURATION OF PUMP TEST (Minimum 4 Hours): 4 Hours

TOTAL PUMPING LIFT: 373 Feet

FOR FLOWING WELL, MEASURED SHUT IN HEAD: [ ] FT [ ] PSI

Method of Discharge Measurement

CHECK ONE

- [ ] Bailer
- [x] Bucket – Barrel – Stopwatch
- [ ] Current
- [ ] Estimated – Air Lift
- [ ] Gauge
- [ ] Meter
- [ ] Orifice
- [ ] Volume
- [ ] Weir – Flume
- [ ] Other (*please specify*):

Method of Measuring Water Level

CHECK ONE

- [ ] Air Line
- [x] Electric Measuring Line (Sounder)
- [ ] Steel Tape
- [ ] Other (*please specify*):

I HEREBY CERTIFY that the above statements are true to the best of my knowledge and belief according to A.R.S. § 45-600(B).

SIGNATURE OF WELL OWNER: Frank Kemp

DATE: 5/28/13

Well Driller Report and Well Log

WELL REGISTRATION NUMBER
55- 221514

SECTION 4. WELL CONSTRUCTION DESIGN (AS BUILT) (attach additional page if needed)

DEPTH OF BORING	DEPTH OF COMPLETED WELL
380 Feet Below Land Surface	380 Feet Below Land Surface

Water Level Information

STATIC WATER LEVEL	DATE MEASURED	TIME MEASURED	IF FLOWING WELL, METHOD OF FLOW REGULATION
236 Feet Below Land Surface	3/18/13		☐ Valve ☐ Other:

Borehole			Installed Casing													
DEPTH FROM SURFACE			DEPTH FROM SURFACE			MATERIAL TYPE (X)				PERFORATION TYPE (X)						
FROM (feet)	TO (feet)	BOREHOLE DIAMETER (inches)	FROM (feet)	TO (feet)	OUTER DIAMETER (inches)	STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	SLOT SIZE IF ANY (inches)
0	20	10	0	20	6	X				X						
0	380	16	00	340	3405		X			X						
			340	400	4.5		X								Drilled	¼ X 16

Installed Annular Material

DEPTH FROM SURFACE		ANNULAR MATERIAL TYPE (X)								FILTER PACK		
						BENTONITE						
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	CHIPS	PELLETS	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	SAND	GRAVEL	SIZE
0	20			X								

ARIZONA DEPARTMENT OF WATER RESOURCES
Information Management Unit
P.O. Box 36020, Phoenix, Arizona 85067-3589
(602) 771-8527 * (800) 352-8488
www.water.az.gov

Well Driller Report and Well Log

Pg. 1/2

RECEIVED FEB 13 2013 ARIZONA DEPARTMENT OF WATER RESOURCES

- This report should be prepared by the driller in detail and filed with the Department within 30 days following completion of the well.

** PLEASE PRINT CLEARLY **

FILE NUMBER: A(11-10) 23 ACA
WELL REGISTRATION NUMBER: 55-221744
PERMIT NUMBER (IF ISSUED)

SECTION 1. DRILLING AUTHORIZATION

Mail To:

Drilling Firm

NAME	DWR LICENSE NUMBER
AERO DRILLING AND PUMPS, INC.	108
ADDRESS: P.O. BOX 499	TELEPHONE NUMBER: 928-474-2376
CITY/STATE/ZIP: PAYSON, AZ 85547-0499	FAX

SECTION 2. REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION OR INDIVIDUAL: BOB HARDMAN

MAILING ADDRESS: 8211 W. BARRANCA RD.

CITY / STATE / ZIP: PAYSON, AZ 85541

CONTACT PERSON NAME AND TITLE:

TELEPHONE NUMBER: 928-474-3827 FAX:

WELL NAME (e.g., MW-1, PZ-3, Lot 25 Well, Smith Well, etc.):

Location of Well

WELL LOCATION ADDRESS (IF ANY): 8211 W. Baranca Rd.

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
11N	10E	23	NE 1/4	SW 1/4	NE 1/4

LATITUDE			LONGITUDE		
34 ° Degrees	17 ' Minutes	3.8 "N Seconds	111 ° Degrees	17 ' Minutes	48.4 "W Seconds

METHOD OF LATITUDE / LONGITUDE (CHECK ONE): [X] *GPS: Hand-Held [ ] USGS Quad Map [ ] Conventional Survey [ ] *GPS: Survey-Grade

LAND SURFACE ELEVATION AT WELL: 5154 Feet Above Sea Level

METHOD OF ELEVATION (CHECK ONE): [X] *GPS: Hand-Held [ ] USGS Quad Map [ ] Conventional Survey [ ] *GPS: Survey-Grade

*IF GPS WAS USED, GEOGRAPHIC COORDINATE DATUM (CHECK ONE): [X] NAD-83 [ ] Other (please specify):

COUNTY	ASSESSOR'S PARCEL ID NUMBER BOOK	MAP	PARCEL
Gila	302	34	469C

SECTION 3. WELL CONSTRUCTION DETAILS

Drill Method

CHECK ONE
- [X] Air Rotary
- [ ] Bored or Augered
- [ ] Cable Tool
- [ ] Dual Rotary
- [ ] Mud Rotary
- [ ] Reverse Circulation
- [ ] Driven
- [ ] Jetted
- [ ] Air Percussion / Odex Tubing
- [ ] Other (please specify)

Method of Well Development

CHECK ONE
- [X] Airlift
- [ ] Bail
- [ ] Surge Back
- [ ] Surge Pump
- [ ] Other (please specify)

Method of Sealing at Reduction Points

CHECK ONE
- [X] None
- [ ] Packed
- [ ] Swedged
- [ ] Welded
- [ ] Other (please specify)

SYM

Condition of Well

CHECK ONE
- [X] Capped
- [ ] Pump Installed

Construction Dates

DATE WELL CONSTRUCTION STARTED: 1/29/13

DATE WELL CONSTRUCTION COMPLETED: 1/30/13

I state that this notice is filed in compliance with A.R.S. § 45-596 and is complete and correct to the best of my knowledge and belief.

DRILLING FIRM	SIGNATURE OF QUALIFYING PARTY	DATE
Aero Drilling & Pumps, Inc.	[signature]	1/30/13

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Well Driller Report and Well Log

WELL REGISTRATION NUMBER
55- 221744

SECTION 4. WELL CONSTRUCTION DESIGN (AS BUILT) (attach additional page if needed)

DEPTH OF BORING	DEPTH OF COMPLETED WELL
400 Feet Below Land Surface	400 Feet Below Land Surface

Water Level Information

STATIC WATER LEVEL	DATE MEASURED	TIME MEASURED	IF FLOWING WELL, METHOD OF FLOW REGULATION
213 Feet Below Land Surface	1/30/13		☐ Valve ☐ Other:

Borehole			Installed Casing													
DEPTH FROM SURFACE			DEPTH FROM SURFACE			MATERIAL TYPE (X)				PERFORATION TYPE (X)						
FROM (feet)	TO (feet)	BOREHOLE DIAMETER (inches)	FROM (feet)	TO (feet)	OUTER DIAMETER (inches)	STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	SLOT SIZE IF ANY (inches)
0	20	10	0	20	6	X				X						
20	400	6	0	340	4.5		X			X						
			340	400	4.5		X								Drilled	¼ X 16

Installed Annular Material

DEPTH FROM SURFACE		ANNULAR MATERIAL TYPE (X)								FILTER PACK		
						BENTONITE						
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	CHIPS	PELLETS	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	SAND	GRAVEL	SIZE
0	20			X								

ARIZONA DEPARTMENT OF WATER RESOURCES
Information Management Unit
P.O. Box 36020, Phoenix, Arizona 85067-3589
(602) 771-8527 * (800) 352-8488
www.water.az.gov

Pump Installation Completion Report

Pg. 1/2

- Review instructions prior to completing form
- The registered well owner should file this report with the Department within 30 days following installation of pump equipment

** PLEASE PRINT CLEARLY **

RECEIVED
APR 03 2013
ARIZONA DEPARTMENT OF WATER RESOURCES

FILE NUMBER: A(11-10) 23 ADD
WELL REGISTRATION NUMBER: 55-220768

SECTION 1. REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION OR INDIVIDUAL: RANDALL COOK

MAILING ADDRESS: 8071 W. SEPIA ROAD

CITY / STATE / ZIP: PAYSON, AZ 85541

CONTACT PERSON NAME AND TITLE:

TELEPHONE NUMBER: 928-474-9640

FAX:

Location of Well

WELL LOCATION ADDRESS (IF KNOWN): 8071 W. SEPIA ROAD

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
11N	10E	23	NE 1/4	SE 1/4	SE 1/4

COUNTY ASSESSOR'S PARCEL ID NUMBER (MOST RECENT): BOOK 302 MAP 34 PARCEL 003D

COUNTY WHERE WELL IS LOCATED: GILA

SECTION 2. EQUIPMENT INSTALLED

DATE PUMP INSTALLED: 9-4-12

Pump Type

CHECK ONE

- [ ] Air Lift
- [ ] Bucket
- [ ] Centrifugal
- [ ] Jet
- [ ] Piston
- [ ] Rotary
- [x] Submersible
- [ ] Turbine
- [ ] Other (please specify)

Pitless Adaptor

CHECK ONE (SEE INSTRUCTIONS FOR DEFINITION)
Was a pitless adaptor installed?
- [ ] Yes
- [x] No

IF YES, DEPTH BELOW GROUND LEVEL THE DEVICE WAS INSTALLED: Feet

Power Type

CHECK ONE

- [ ] Diesel Engine
- [x] Electric Motor
- [ ] Gasoline Engine
- [ ] Hand
- [ ] Natural Gas
- [ ] Windmill
- [ ] Other (please specify)

RATED PUMP CAPACITY: 15 Gallons Per Minute

HORSE POWER RATING OF MOTOR: 1.5

SECTION 3. WELL TEST

Pump Test Data

DATE WELL TESTED: 9/4/12

STATIC WATER LEVEL (A): 276 Feet Below Land Surface

PUMPING WATER LEVEL (B): 281 Feet Below Land Surface

DRAWDOWN [(B) - (A)]: ~~DX~~ 5

TEST PUMPING RATE: 15 Gallons Per Minute

DURATION OF PUMP TEST (Minimum 4 Hours): 4 HR. Hours

TOTAL PUMPING LIFT: 281 Feet

FOR FLOWING WELL, MEASURED SHUT IN HEAD: N/A
- [ ] FT
- [ ] PSI

Method of Discharge Measurement

CHECK ONE

- [ ] Bailer
- [x] Bucket - Barrel - Stopwatch
- [ ] Current
- [ ] Estimated - Air Lift
- [ ] Gauge
- [ ] Meter
- [ ] Orifice
- [ ] Volume
- [ ] Weir - Flume
- [ ] Other (please specify)

Method of Measuring Water Level

CHECK ONE

- [ ] Air Line
- [x] Electric Measuring Line (Sounder)
- [ ] Steel Tape
- [ ] Other (please specify)

SYM

I HEREBY CERTIFY *that the above statements are true to the best of my knowledge and belief according to* A.R.S § 45-600(B)

SIGNATURE OF WELL OWNER: Randall Cook, Frances C Cook

DATE: 9-4-12

DWR-55-56 (Rev. 02/06/06)

Pg. 10/69

Well Driller Report and Well Log

WELL REGISTRATION NUMBER
55- 220768

SECTION 4. WELL CONSTRUCTION DESIGN (AS BUILT) (attach additional page if needed)

DEPTH OF BORING	DEPTH OF COMPLETED WELL
400 Feet Below Land Surface	400 Feet Below Land Surface

Water Level Information

STATIC WATER LEVEL	DATE MEASURED	TIME MEASURED	IF FLOWING WELL, METHOD OF FLOW REGULATION
276 Feet Below Land Surface	9/4/12		☐ Valve ☐ Other:

Borehole			Installed Casing													
DEPTH FROM SURFACE		BOREHOLE DIAMETER (inches)	DEPTH FROM SURFACE		OUTER DIAMETER (inches)	MATERIAL TYPE (X)				PERFORATION TYPE (X)						SLOT SIZE IF ANY (inches)
FROM (feet)	TO (feet)		FROM (feet)	TO (feet)		STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	
0	20	10	0	20	6	X				X						
20	400	6	0	340	4.5		X			X						
			340	400	4.5		X								Drilled	¼ X 16

Installed Annular Material

DEPTH FROM SURFACE		ANNULAR MATERIAL TYPE (X)								FILTER PACK		
						BENTONITE						
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	CHIPS	PELLETS	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	SAND	GRAVEL	SIZE
0	20			X								

ARIZONA DEPARTMENT OF WATER RESOURCES
Information Management Unit
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(602) 771-8527 * (800) 352-8488
www.water.az.gov

Pump Installation Completion Report

RECEIVED
APR 04 2013
ARIZONA DEPARTMENT OF WATER RESOURCES

- Review instructions prior to completing form
- The registered well owner should file this report with the Department within 30 days following installation of pump equipment

** PLEASE PRINT CLEARLY **

FILE NUMBER: A(11-10) 23 ADD
WELL REGISTRATION NUMBER: 55- 220767

SECTION 1. REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION OR INDIVIDUAL: WESLEY COOK

MAILING ADDRESS: 8058 W. HALLWAY DR.

CITY / STATE / ZIP: PAYSON, AZ 85541

CONTACT PERSON NAME AND TITLE:

TELEPHONE NUMBER: 928-474-7805

FAX:

Location of Well

WELL LOCATION ADDRESS (IF KNOWN): 8058 W. HALLWAY DR.

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
11N	10E	23	NE 1/4	SE 1/4	SE 1/4

COUNTY ASSESSOR'S PARCEL ID NUMBER (MOST RECENT)

BOOK	MAP	PARCEL
302	34	005A

COUNTY WHERE WELL IS LOCATED: GILA

SECTION 2. EQUIPMENT INSTALLED

DATE PUMP INSTALLED: 9/10/12

Pump Type

CHECK ONE

- [ ] Air Lift
- [ ] Bucket
- [ ] Centrifugal
- [ ] Jet
- [ ] Piston
- [ ] Rotary
- [x] Submersible
- [ ] Turbine
- [ ] Other (please specify)

RATED PUMP CAPACITY: 12 Gallons Per Minute

Pitless Adaptor

CHECK ONE (SEE INSTRUCTIONS FOR DEFINITION)
Was a pitless adaptor installed? [x] Yes [ ] No

IF YES, DEPTH BELOW GROUND LEVEL THE DEVICE WAS INSTALLED: 2 Feet

Power Type

CHECK ONE

- [ ] Diesel Engine
- [x] Electric Motor
- [ ] Gasoline Engine
- [ ] Hand
- [ ] Natural Gas
- [ ] Windmill
- [ ] Other (please specify)

HORSE POWER RATING OF MOTOR: 1

SECTION 3. WELL TEST

Pump Test Data

DATE WELL TESTED: 9/10/12

STATIC WATER LEVEL (A): 234 Feet Below Land Surface

PUMPING WATER LEVEL (B): 256 Feet Below Land Surface

DRAWDOWN [(B) - (A)]: 22

TEST PUMPING RATE: 12 Gallons Per Minute

DURATION OF PUMP TEST (Minimum 4 Hours): 4 Hours

TOTAL PUMPING LIFT: 256 Feet

FOR FLOWING WELL, MEASURED SHUT IN HEAD: N/A [ ] FT [ ] PSI

Method of Discharge Measurement

CHECK ONE

- [ ] Bailer
- [x] Bucket - Barrel - Stopwatch
- [ ] Current
- [ ] Estimated - Air Lift
- [ ] Gauge
- [ ] Meter
- [ ] Orifice
- [ ] Volume
- [ ] Weir - Flume
- [ ] Other (please specify)

Method of Measuring Water Level

CHECK ONE

- [ ] Air Line
- [x] Electric Measuring Line (Sounder)
- [ ] Steel Tape
- [ ] Other (please specify)

SYM

I HEREBY CERTIFY *that the above statements are true to the best of my knowledge and belief according to* A.R.S § 45-600(B)

SIGNATURE OF WELL OWNER: Wesley Cook
DATE: 9/10/12

DWR-55-56 (Rev. 02/06/06)

Well Driller Report and Well Log

WELL REGISTRATION NUMBER
55- 220767

SECTION 4. WELL CONSTRUCTION DESIGN (AS BUILT) (attach additional page if needed)

DEPTH OF BORING	DEPTH OF COMPLETED WELL
400 Feet Below Land Surface	400 Feet Below Land Surface

Water Level Information

STATIC WATER LEVEL	DATE MEASURED	TIME MEASURED	IF FLOWING WELL, METHOD OF FLOW REGULATION
234 Feet Below Land Surface	9/10/12		☐ Valve ☐ Other:

Borehole			Installed Casing													
DEPTH FROM SURFACE			DEPTH FROM SURFACE			MATERIAL TYPE (X)				PERFORATION TYPE (X)						
FROM (feet)	TO (feet)	BOREHOLE DIAMETER (inches)	FROM (feet)	TO (feet)	OUTER DIAMETER (inches)	STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	SLOT SIZE IF ANY (inches)
0	20	10	0	20	6	X				X						
20	400	6	0	340	4.5		X			X						
			340	400	4.5		X								Drilled	¼ X 16

Installed Annular Material

DEPTH FROM SURFACE		ANNULAR MATERIAL TYPE (X)								FILTER PACK		
						BENTONITE						
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	CHIPS	PELLETS	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	SAND	GRAVEL	SIZE
0	20			X								

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Information Management Unit
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Well Driller Report and Well Log

11-1-12 BEW

Pg. 1/2

FILE NUMBER: A(11-10) 23 ADC
WELL REGISTRATION NUMBER: 55-221636
PERMIT NUMBER (IF ISSUED)

- This report should be prepared by the driller in detail and filed with the Department within 30 days following completion of the well.

OCT 03 2012
ARIZONA DEPARTMENT OF WATER RESOURCES

** PLEASE PRINT CLEARLY **

SECTION 1. DRILLING AUTHORIZATION

Mail To:

Drilling Firm

NAME	DWR LICENSE NUMBER
AERO DRILLING AND PUMPS, INC.	108
ADDRESS: P.O. BOX 499	TELEPHONE NUMBER: 928-474-2376
CITY/STATE/ZIP: PAYSON, AZ 85547-0499	FAX

SECTION 2. REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION OR INDIVIDUAL: DUMITRU HITICAS

MAILING ADDRESS: 7333 A. ACOMA

CITY / STATE / ZIP: PEORIA, AZ 85381

CONTACT PERSON NAME AND TITLE:

TELEPHONE NUMBER: 602-751-0756 FAX:

WELL NAME (e.g., MW-1, PZ-3, Lot 25 Well, Smith Well, etc.):

Location of Well

WELL LOCATION ADDRESS (IF ANY): 8129 W. Sepia Rd.

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
11N	10E	23	NE 1/4	SE 1/4	SW 1/4

LATITUDE			LONGITUDE		
34° Degrees	17' Minutes	3.1" N Seconds	111° Degrees	17' Minutes	37.2" W Seconds

METHOD OF LATITUDE / LONGITUDE (CHECK ONE): [X] *GPS: Hand-Held [ ] USGS Quad Map [ ] Conventional Survey [ ] *GPS: Survey-Grade

LAND SURFACE ELEVATION AT WELL: 5180 Feet Above Sea Level

METHOD OF ELEVATION (CHECK ONE): [X] *GPS: Hand-Held [ ] USGS Quad Map [ ] Conventional Survey [ ] *GPS: Survey-Grade

*IF GPS WAS USED, GEOGRAPHIC COORDINATE DATUM (CHECK ONE): [X] NAD-83 [ ] Other (please specify):

COUNTY	ASSESSOR'S PARCEL ID NUMBER BOOK	MAP	PARCEL
Gila	302	34	003B

SECTION 3. WELL CONSTRUCTION DETAILS

Drill Method

CHECK ONE
- [X] Air Rotary
- [ ] Bored or Augered
- [ ] Cable Tool
- [ ] Dual Rotary
- [ ] Mud Rotary
- [ ] Reverse Circulation
- [ ] Driven
- [ ] Jetted
- [ ] Air Percussion / Odex Tubing
- [ ] Other (please specify)

Method of Well Development

CHECK ONE
- [X] Airlift
- [ ] Bail
- [ ] Surge Back
- [ ] Surge Pump
- [ ] Other (please specify)

Method of Sealing at Reduction Points

CHECK ONE
- [X] None
- [ ] Packed
- [ ] Swedged
- [ ] Welded
- [ ] Other (please specify)

Condition of Well

CHECK ONE
- [ ] Capped
- [X] Pump Installed

Construction Dates

DATE WELL CONSTRUCTION STARTED: 8/30/12

DATE WELL CONSTRUCTION COMPLETED: 9/3/12

I state that this notice is filed in compliance with A.R.S. § 45-596 and is complete and correct to the best of my knowledge and belief.

DRILLING FIRM	SIGNATURE OF QUALIFYING PARTY	DATE
Aero Drilling & Pumps, Inc.	[signature]	9/3/12

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Well Driller Report and Well Log

WELL REGISTRATION NUMBER
55- 221636

SECTION 4. WELL CONSTRUCTION DESIGN (AS BUILT) (attach additional page if needed)

DEPTH OF BORING	DEPTH OF COMPLETED WELL
400 Feet Below Land Surface	400 Feet Below Land Surface

Water Level Information

STATIC WATER LEVEL	DATE MEASURED	TIME MEASURED	IF FLOWING WELL, METHOD OF FLOW REGULATION
252 Feet Below Land Surface	9/3/12		☐ Valve ☐ Other:

Borehole			Installed Casing													
DEPTH FROM SURFACE			DEPTH FROM SURFACE			MATERIAL TYPE (X)				PERFORATION TYPE (X)						
FROM (feet)	TO (feet)	BOREHOLE DIAMETER (inches)	FROM (feet)	TO (feet)	OUTER DIAMETER (inches)	STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	SLOT SIZE IF ANY (inches)
0	20	10	0	20	6	X				X						
20	400	6	0	340	4.5		X			X						
			340	400	4.5		X								Drilled	¼ X 16

Installed Annular Material

DEPTH FROM SURFACE		ANNULAR MATERIAL TYPE (X)								FILTER PACK		
						BENTONITE						
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	CHIPS	PELLETS	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	SAND	GRAVEL	SIZE
0	20			X								

ARIZONA DEPARTMENT OF WATER RESOURCES
Information Management Unit
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Well Driller Report and Well Log

* This report should be prepared by the driller in detail and filed with the Department within 30 days following completion of the well.

** PLEASE PRINT CLEARLY **

FILE NUMBER: A(11-10) 23 ACA
WELL REGISTRATION NUMBER: 55- 220514
PERMIT NUMBER (IF ISSUED)

SECTION 1. DRILLING AUTHORIZATION

Mail To:

Drilling Firm

NAME	DWR LICENSE NUMBER
AERO DRILLING AND PUMPS, INC.	108
ADDRESS: P.O. BOX 499	TELEPHONE NUMBER: 928-474-2376
CITY/STATE/ZIP: PAYSON, AZ 85547-0499	FAX

SECTION 2. REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION OR INDIVIDUAL: LOREN JOHNSON LIVING TRUST

MAILING ADDRESS: P.O. BOX 601

CITY / STATE / ZIP: PAYSON, AZ 85547

CONTACT PERSON NAME AND TITLE:

TELEPHONE NUMBER: 928-474-5796 FAX:

WELL NAME (e.g., MW-1, PZ-3, Lot 25 Well, Smith Well, etc.):

Location of Well

WELL LOCATION ADDRESS (IF ANY): 7581 N. Yoya Vista

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
11N	10E	23	NE 1/4	SW 1/4	NE 1/4

LATITUDE			LONGITUDE		
34° Degrees	17' Minutes	06.2" N Seconds	111° Degrees	17' Minutes	51.4" W Seconds

METHOD OF LATITUDE / LONGITUDE (CHECK ONE): [X] *GPS: Hand-Held [ ] USGS Quad Map [ ] Conventional Survey [ ] *GPS: Survey-Grade

LAND SURFACE ELEVATION AT WELL: 4890 Feet Above Sea Level

METHOD OF ELEVATION (CHECK ONE): [X] *GPS: Hand-Held [ ] USGS Quad Map [ ] Conventional Survey [ ] *GPS: Survey-Grade

*IF GPS WAS USED, GEOGRAPHIC COORDINATE DATUM (CHECK ONE): [X] NAD-83 [ ] Other (please specify):

COUNTY	ASSESSOR'S PARCEL ID NUMBER BOOK	MAP	PARCEL
Gila	302	34	360

SECTION 3. WELL CONSTRUCTION DETAILS

Drill Method

CHECK ONE
- [X] Air Rotary
- [ ] Bored or Augered
- [ ] Cable Tool
- [ ] Dual Rotary
- [ ] Mud Rotary
- [ ] Reverse Circulation
- [ ] Driven
- [ ] Jetted
- [ ] Air Percussion / Odex Tubing
- [ ] Other (please specify)

Method of Well Development

CHECK ONE
- [X] Airlift
- [ ] Bail
- [ ] Surge Back
- [ ] Surge Pump
- [ ] Other (please specify)

Method of Sealing at Reduction Points

CHECK ONE
- [X] None
- [ ] Packed
- [ ] Swedged
- [ ] Welded
- [ ] Other (please specify)

SYM

Condition of Well

CHECK ONE
- [ ] Capped
- [X] Pump Installed

Construction Dates

DATE WELL CONSTRUCTION STARTED: 5/30/11

DATE WELL CONSTRUCTION COMPLETED: 6/7/11

I state that this notice is filed in compliance with A.R.S. § 45-596 and is complete and correct to the best of my knowledge and belief.

DRILLING FIRM	SIGNATURE OF QUALIFYING PARTY	DATE
Aero Drilling & Pumps, Inc.	[signature]	6/7/11

Well Driller Report and Well Log

WELL REGISTRATION NUMBER
55- 220514

SECTION 4. WELL CONSTRUCTION DESIGN (AS BUILT) (attach additional page if needed)

DEPTH OF BORING	DEPTH OF COMPLETED WELL
400 Feet Below Land Surface	400 Feet Below Land Surface

Water Level Information

STATIC WATER LEVEL	DATE MEASURED	TIME MEASURED	IF FLOWING WELL, METHOD OF FLOW REGULATION
230 Feet Below Land Surface	6/7/11		☐ Valve ☐ Other:

Borehole			Installed Casing													
DEPTH FROM SURFACE			DEPTH FROM SURFACE			MATERIAL TYPE (X)				PERFORATION TYPE (X)						
FROM (feet)	TO (feet)	BOREHOLE DIAMETER (inches)	FROM (feet)	TO (feet)	OUTER DIAMETER (inches)	STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	SLOT SIZE IF ANY (inches)
0	20	10	0	20	6	X				X						
20	400	6	0	360	4.5		X			X						
			360	400	4.5		X								Drilled	¼ X 16

Installed Annular Material

DEPTH FROM SURFACE		ANNULAR MATERIAL TYPE (X)								FILTER PACK		
						BENTONITE						
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	CHIPS	PELLETS	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	SAND	GRAVEL	SIZE
0	20			X								

Pg. 1/3

Arizona Department of Water Resources
Information Management Unit
P.O. Box 36020 • Phoenix, Arizona 85067-3589
(602) 771-8627 • (800) 352-8488
www.water.az.gov

Well Driller Report and Well Log

FILE NUMBER
A(11-10)24 BCB
WELL REGISTRATION NUMBER
55 - 913123
PERMIT NUMBER (IF ISSUED)

THIS REPORT MUST BE FILED WITHIN **30 DAYS** OF COMPLETING THE WELL.

PLEASE PRINT CLEARLY USING BLACK OR BLUE INK

RECEIVED JUL 26 2011

SECTION 1. DRILLING AUTHORIZATION

Drilling Firm

Mail To:	
NAME: CENTRAL ARIZONA PUMP, L. L. C.	DWR LICENSE NUMBER: 776
ADDRESS: 141 S. OLDHAM RD	TELEPHONE NUMBER: 928-476-5440
CITY / STATE / ZIP: PAYSON, AZ, 85541	FAX:

SECTION 1. REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL: MUELLER, KANDIS

MAILING ADDRESS: 8022 W STALLION RD

CITY / STATE / ZIP: PAYSON, AZ, 85541

CONTACT PERSON NAME AND TITLE:

TELEPHONE NUMBER: 928 478-6887

FAX:

WELL NAME (e.g., MW-1, PZ-3, lot 25 Well, Smith Well, etc.):

Location of Well

WELL LOCATION ADDRESS (IF ANY):

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
11N	10E	24	N/W 1/4	S/W 1/4	N/W 1/4

LATITUDE			LONGITUDE		
°	'	"N	°	'	"W

METHOD OF LATITUDE/LONGITUDE (CHECK ONE): USGS Quad Map; Conventional Survey; *GPS: Hand-Held; *GPS: Survey-Grade

LAND SURFACE ELEVATION AT WELL: Feet Above Sea Level

METHOD OF ELEVATION (CHECK ONE): USGS Quad Map; Conventional Survey; *GPS: Hand-Held; *GPS: Survey-Grade

*IF GPS WAS USED, GEOGRAPHIC COORDINATE DATUM (CHECK ONE): NAD-83; Other (please specify)

COUNTY:

ASSESSOR'S PARCEL ID NUMBER (MOST RECENT): BOOK 302; MAP 34; PARCEL 014H

SECTION 1. WELL CONSTRUCTION DETAILS

Drilling Method (CHECK ONE)

- (Air Rotary) X
- Bored or Augered
- Cable Tool
- Dual Rotary
- Mud Rotary
- Reverse Circulation
- Driven
- Jetted
- Air Percussion / Odex Tubing
- Other (please specify)

Method of Well Development (CHECK ONE)

- (Airlift) X
- Bail
- Surge Block
- Surge Pump
- Other (please specify)

Method of Sealing at Reduction Points (CHECK ONE)

- (None)
- Packed
- Swedged
- Welded
- Other (please specify)

Condition of Well (CHECK ONE)

- Capped
- (Pump Installed)

Construction Dates

DATE WELL CONSTRUCTION STARTED: 5-15-11

DATE WELL CONSTRUCTION COMPLETED: 6-18-11

I state that this notice is filed in compliance with A.R.S. § 45-596 and is complete and correct to the best of my knowledge and belief.

SIGNATURE OF QUALIFYING PARTY: Brandon J Moore

DATE: 6-6-11 SYM

Pg. 18/69

WELL REGISTRATION NUMBER
55 - 913123

Well Driller Report and Well Log

SECTION 4. WELL CONSTRUCTION DESIGN (AS BUILT) (attach additional page if needed)

Depth

DEPTH OF BORING 405 Feet Below Land Surface | DEPTH OF COMPLETED WELL 405 Feet Below Land Surface

Water Level Information

STATIC WATER LEVEL 120 Feet Below Land Surface | DATE MEASURED 6/25 | TIME MEASURED 8:00 | IF FLOWING WELL, METHOD OF FLOW REGULATION Valve Other:

Borehole			Installed Casing													
DEPTH FROM SURFACE			DEPTH FROM SURFACE			MATERIAL TYPE (T)				PERFORATION TYPE (T)						
FROM (feet)	TO (feet)	BOREHOLE DIAMETER (inches)	FROM (feet)	TO (feet)	OUTER (inches)	STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	SLOT SIZE (inches)
0	20	10	0	19	7	X				X						
20	400	6 1/2	0	280	4 1/2		X			X						
			200	400	4 1/2		X							X		

Installed Annular Material

DEPTH FROM SURFACE		ANNULAR MATERIAL TYPE (T)								FILTER PACK		
						BENTONITE						
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	CHIPS	PELLETS	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	SAND	GRAVEL	SIZE
0	20		X									

Well Driller Report and Well Log

WELL REGISTRATION NUMBER
55 - 913123

SECTION 5. GEOLOGIC LOG OF WELL

DEPTH FROM SURFACE FROM (feet)	TO (feet)	Description Describe material, grain size, color, etc.	Check (T) every interval where water was encountered (if known)
0	20	Fill	
20	400	Brown Granite Blue Granite	
		Water 340 15GPM	

ARIZONA DEPARTMENT OF WATER RESOURCES
Records Management Section
500 N. 3rd Street * Phoenix, Arizona 85004
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RECEIVED AUG 13 2002 RECORDS MGT

Well Driller Report and Well Log

Pg. 1/2

FILE NUMBER: A(11-10) 24 BDB
WELL REGISTRATION NUMBER: 55- 592209
PERMIT NUMBER (IF ISSUED):

- Review instructions prior to completing form
- This report should be prepared by the driller in detail and filed with the Department within 30 days following completion of the well.

** PLEASE PRINT CLEARLY **

SECTION 1. REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION OR INDIVIDUAL: JOHN STRAIT
MAILING ADDRESS: HC8 BOX 700-S
CITY / STATE / ZIP: PAYSON, AZ 85541
CONTACT PERSON NAME AND TITLE:
TELEPHONE NUMBER: 928-474-1713
FAX:

Location of Well

WELL LOCATION ADDRESS (IF KNOWN):
TOWNSHIP (N/S): 11 RANGE (E/W): 10 SECTION: 24 160 ACRE: NW 1/4 40 ACRE: SE 1/4 10 ACRE: NW 1/4
LATITUDE: ° . "N LONGITUDE: ° . "W
LAND SURFACE ELEVATION AT WELL: Feet Above Sea Level
METHOD OF LATITUDE / LONGITUDE (CHECK ONE): ☐ USGS Quad Map ☐ Conventional Survey ☐ GPS : ☐ Hand-Held ☐ Survey-Grade
COUNTY ASSESSOR'S PARCEL ID NUMBER: BOOK 301 MAP 16 PARCEL 071B
COUNTY WHERE WELL IS LOCATED: GILA

SECTION 2. DRILLING AUTHORIZATION

Drilling Firm

NAME: CENTRAL ARIZONA DRILLING COMPANY
DWR LICENSE NUMBER: 495
TELEPHONE NUMBER: 520-476-2920
FAX:

SECTION 3. WELL CONSTRUCTION DETAILS

DATE WELL CONSTRUCTION STARTED: 7 19 02
DATE WELL CONSTRUCTION COMPLETED: 7 21 02
IF FLOWING WELL, METHOD OF FLOW REGULATION: ☐ Valve ☐ Other

Drill Method

CHECK ONE
- [x] Air Rotary
- ☐ Bored or Augered
- ☐ Cable Tool
- ☐ Dual Rotary
- ☐ Mud Rotary
- ☐ Reverse Circulation
- ☐ Driven
- ☐ Jetted
- ☐ Air Percussion / Odex Tubing
- ☐ Other (please specify)

Method of Well Development

CHECK ONE
- [x] Airlift
- ☐ Bail
- ☐ Surge Back
- ☐ Surge Pump
- ☐ Other (please specify)

Water Level Information

STATIC WATER LEVEL: 80 Feet Below Land Surface
DATE MEASURED: 7 21 02

Method of Sealing at Reduction Points

CHECK ONE
- ☐ None
- ☐ Packed
- ☐ Swedged
- ☐ Welded
- ☐ Other (please specify)

GROUT

ANSWERED SEP 2 6 2002

DWR-55-55-10/01 (Rev.)

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Well Driller Report and Well Log

WELL REGISTRATION NUMBER: 55- 592209

SECTION 4. WELL CONSTRUCTION DESIGN (AS BUILT) (attach additional page if needed)

Borehole			Installed Casing													
DEPTH FROM SURFACE		BOREHOLE DIAMETER (inches)	DEPTH FROM SURFACE		OUTER DIAMETER (inches)	MATERIAL TYPE (X)				PERFORATION TYPE (X)						SLOT SIZE IF ANY (inches)
FROM (feet)	TO (feet)		FROM (feet)	TO (feet)		STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	
0	20	10"	-	-	-	X										
			20	205	6"		X									
			100	205										X		1/8 x 4"

Installed Annular Material											
DEPTH FROM SURFACE		ANNULAR MATERIAL TYPE (X)								FILTER PACK		
						BENTONITE						
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	CHIPS	PELLETS	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	SAND	GRAVEL	SIZE
0	20					X						

DEPTH OF BORING		DEPTH OF COMPLETED WELL	
205	Feet Below Land Surface	205	Feet Below Land Surface

DWR-55-55B-10/01 (Rev.)

ANSWERED SEP 2 6 2002

Pg. 1/2

Arizona Department of Water Resources
Records Management Section
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(602) 417-2405 ✦ (800) 352-8488
www.water.az.gov

Pump Installation Completion Report

RECEIVED JUL 29 2002 RECORDS MGT

- Review instructions prior to completing form.
- The registered well owner should file this report with the Department within 30 days following installation of pump equipment.

FILE NUMBER

WELL REGISTRATION NUMBER 55-592680

** PLEASE PRINT CLEARLY **

SECTION 1. REGISTRY INFORMATION

Well Owner

FULL NAME OF COMPANY, ORGANIZATION, OR INDIVIDUAL: BENT AND RITA ANDERSEN

MAILING ADDRESS: P.O. BOX 2147

CITY / STATE / ZIP CODE: PAYSON, AZ 85547

CONTACT PERSON NAME AND TITLE: BENT OR RITA

TELEPHONE NUMBER: 928-474-1709

FAX:

Location of Well

WELL LOCATION ADDRESS (IF ANY): HALLWAY 6 F

TOWNSHIP (N/S)	RANGE (E/W)	SECTION	160 ACRE	40 ACRE	10 ACRE
11 N	R 10 E	23	NE ¼	SE ¼	SE ¼

COUNTY ASSESSOR'S PARCEL ID NUMBER (MOST RECENT)

BOOK	MAP	PARCEL
302	34	NOW F 006BE

COUNTY WHERE WELL IS LOCATED:

SECTION 2. EQUIPMENT INSTALLED

DATE PUMP INSTALLED:

Pump Type
CHECK ONE

- [ ] Air Lift
- [ ] Bucket
- [ ] Centrifugal
- [ ] Jet
- [ ] Piston
- [ ] Rotary
- [x] Submersible
- [ ] Turbine
- [ ] Other (*please specify*):

Power Type
CHECK ONE

- [ ] Diesel Engine
- [x] Electric Motor
- [ ] Gasoline Engine
- [ ] Hand
- [ ] Natural Gas
- [ ] Windmill
- [ ] Other (*please specify*):

RATED PUMP CAPACITY: 5 Gallons Per Minute

HORSE POWER RATING OF MOTOR: 3/4

SECTION 3. WELL TEST

Pump Test Data

DATE WELL TESTED: 7-1-02

STATIC WATER LEVEL (A): 189 Feet Below Land Surface

PUMPING WATER LEVEL (B): 314 Feet Below Land Surface

DRAWDOWN [(B) – (A)]: 125 Feet Below Land Surface

TEST PUMPING RATE: 5 Gallons Per Minute

DURATION OF PUMP TEST (Minimum 4 Hours): 4 Hours

TOTAL PUMPING LIFT: 315 Feet

FOR FLOWING WELL, MEASURED SHUT IN HEAD: [ ] FT [ ] PSI

Method of Discharge Measurement
CHECK ONE

- [ ] Bailer
- [x] Bucket – Barrel – Stopwatch
- [ ] Current
- [ ] Estimated – Air Lift
- [ ] Gauge
- [ ] Meter
- [ ] Orifice
- [ ] Volume
- [ ] Weir – Flume
- [ ] Other (*please specify*):

Method of Measuring Water Level
CHECK ONE

- [ ] Air Line
- [x] Electric Measuring Line (Sounder)
- [ ] Steel Tape
- [ ] Other (*please specify*):

ANSWERED AUG 22 2002

I HEREBY CERTIFY that the above statements are true to the best of my knowledge and belief according to A.R.S. § 45-600(B).

SIGNATURE OF WELL OWNER: Bent Anderson

DATE: 07-24-02

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Well Driller Report and Well Log

WELL REGISTRATION NUMBER
55- 592680

SECTION 4. WELL CONSTRUCTION DESIGN (AS BUILT) (attach additional page if needed)

Borehole			Installed Casing														
DEPTH FROM SURFACE		BOREHOLE DIAMETER (inches)	DEPTH FROM SURFACE		OUTER DIAMETER (inches)	MATERIAL TYPE (X)				PERFORATION TYPE (X)						SLOT SIZE IF ANY (inches)
FROM (feet)	TO (feet)		FROM (feet)	TO (feet)		STEEL	PVC	ABS	IF OTHER TYPE, DESCRIBE	BLANK OR NONE	WIRE WRAP	SHUTTER SCREEN	MILLS KNIFE	SLOTTED	IF OTHER TYPE, DESCRIBE	
0	20	10	0	20	6	X				X						
0	360	6	0	320	4.5		X			X						
			320	360	4.5		X								Drilled	1/4 X 20

Installed Annular Material											
DEPTH FROM SURFACE		ANNULAR MATERIAL TYPE (X)								FILTER PACK		
						BENTONITE						
FROM (feet)	TO (feet)	NONE	CONCRETE	NEAT CEMENT OR CEMENT GROUT	CEMENT-BENTONITE GROUT	GROUT	CHIPS	PELLETS	IF OTHER TYPE OF ANNULAR MATERIAL, DESCRIBE	SAND	GRAVEL	SIZE
0	20			X								

DEPTH OF BORING		DEPTH OF COMPLETED WELL	
360	Feet Below Land Surface	360	Feet Below Land Surface

DWR-55-55B-10/01 (Rev.)

ARIZONA DEPARTMENT OF WATER RESOURCES
500 North 3rd Street
Phoenix, Arizona 85004

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

RECEIVED OCT 23 2001 RECORDS MGT

1. AERO DRILLING AND PUMPS, INC.
P.O. BOX 499
PAYSON, AZ 85547-0499

2. Owner Name: Brooke Utilities
Address: 1011 S. Stover Rd., Payson, AZ 85541
City State Zip

3. Location: 11N N/S 10E E/W 23 ¼ NW ¼ SE ¼ NE
Township Range Section 10-acre 40-acre 160-acre

4. Well Registration No. 55-585747 (Required)

5. Permit No. N/A (If Issued)

DESCRIPTION OF WELL

6. Total depth of hole 400 ft.
7. Type of casing Steel & PVC
8. Diameter and length of casing 6"stl in. from 0 to 23, 4.5"PVC in from 0 to 400
9. Method of sealing at reduction points Adapter
10. Perforated from 360 to 400, from ____ to ____ from ____ to ____
11. Size of cuts ¼" holes Number of cuts per foot 20
12. If screen was installed: Length N/A ft. Diam ____ in. Type ____
13. Method of construction Drilled
(drilled, dug, driven, bored, jetted, etc)
14. Date started 9/25/01
Month Day Year
15. Date completed 9/25/01
Month Day Year
16. Depth to water 155 ft. (If flowing well, so state)
17. Describe point from which depth measurements were made, and give sea_level elevation if availabl
Surface
18. If flowing well, state method of flow regulation: N/A
19. Remarks: ____

DO NOT WRITE IN THIS SPACE
OFFICE RECORD
Registration No. 55- 585747
File No. A(11-10) 23 ADB
Received ____ By ____
Entered ____ By ____

DWR-55-55-7/95 (Rev.)

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Pg. 2/2
Well #55-585747

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encountered, and depth to which it rose in well.

From (feet)	To (feet)	Description of formation material
0	7	Topsoil & clay
7	175	Weathered granite w/clay
175	400	Gniessic granite
		Water at 137, 225, 297ft.

I hereby certify that this well was drilled by me (or under by supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: AERO DRILLING AND PUMPS, INC.

P.O. BOX 499
Street

PAYSON, AZ 85547-0499
City State Zip Phone No.

Alvin Miller 9/25/01
Signature of Driller Date

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ARIZONA DEPARTMENT OF WATER RESOURCES
500 North Third Street
Phoenix, Arizona 85004

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

RECEIVED NOV - 3 1997 RECORDS MGT

1. AERO DRILL & PUMPS, INC.
P.O. BOX 499
PAYSON, AZ 85547

2. Owner Name: Patti Caldwell
Address: _____
City State Zip

3. Location: 11N N/S 10E E/W 23 ¼ SW ¼ NW ¼ NE
Township Range Section 10-acre 40-acre 160-acre

4. Well Registration No. 55- 560398 (Required)

5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 440 ft.
7. Type of casing Steel & PVC
8. Diameter and length of casing 6"stl in. from 0 to 21, 4.5"PVC from 0 to 440
9. Method of sealing at reduction points Adapter
10. Perforated from 260 to 300, from 400 to 440 from _____ to _____
11. Size of cuts ¼"holes Number of cuts per foot 20
12. If screen was installed: Length N/A ft. Diam _____ in. Type _____
13. Method of construction Drilled
(drilled, dug, driven, bored, jetted, etc)
14. Date started 9/28/97
Month Day Year
15. Date completed 9/30/97
Month Day Year
16. Depth to water 198 ft. (If flowing well, so state)

17. Describe point from which depth measurements were made, and give sea-level elevation if available
Surface

18. If flowing well, state method of flow regulation: N/A

19. Remarks: _____

DO NOT WRITE IN THIS SPACE
OFFICE RECORD

Registration No. 55-560398
File No. A(11-10)23 ABC
Received _____ By _____
Entered _____ By _____
ENTERED NOV 04 1997

DWR-55-55-7/95 (Rev.)

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Pg. 2/2
Well #55-560398

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encountered, and depth to which it rose in well.

From (feet)	To (feet)	Description of formation material
0	7	Topsoil & clay
7	90	Tapeat sandstone
90	155	Decomposed granite
155	275	Granodiorite
275	282	Pink granite
282	400	Granodiorite
400	425	Pink granite, coarse
425	440	Granodiorite
		Water at 260, 337ft.

I hereby certify that this well was drilled by me(or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: Chris Miller

P.O. Box 499

Street

Payson, AZ 85547

City State Zip Phone No.

Chris Miller 9/30/97

Signature of Driller Date

Pg. 28/69

Pg. 1/2

STATE OF ARIZONA
DEPARTMENT OF WATER RESOURCES
GROUNDWATER MANAGEMENT SUPPORT SECTION
500 North Third Street - Phoenix, Arizona 85004-3903
Phone (602) 417-2470

RECEIVED JAN 14 1997 RECORDS MGT

WELL DRILLER REPORT

This report should be prepared by the Driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner's Name: Richard & Darla Lohr
   Address: HCR Box 588A, Payson, AZ 85541
   Street City State Zip Telephone Number
2. Drilling Firm: Aero Drilling & Pumps, Inc.
   Address: P.O. Box 499, Payson, AZ 85547
   Street City State Zip Telephone Number
3. Location: SW ¼ (10 Acre) NE ¼ (40 Acre) NE ¼ (160 Acre) of Section 23 Township 11N Range 10E
4. Well Registration No. 55-558959 (Required)
5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total Depth of Hole 300 ft.
7. Type of Casing Steel & PVC
8. Diameter and length of casing 6"stl inches from 0 to 21 ,4.5"PVC inches from 0 to 300
9. Method of sealing at reduction points Adapter
10. Perforated from 260 to 300 from ____ to ____ from ____ to ____
11. Size of cuts ¼"holes Number of cuts per foot 20
12. If screen was installed: Length N/A feet. Diameter ____ inches. Type ____
13. Method of construction Drilled
    (drilled, dug, driven, bored, jetted, etc.)
14. Date started 12/13/96
    Month Day Year
15. Date completed 12/14/96
    Month Day Year
16. Depth to water 265 ft. (If flowing well, so state).
17. Describe point from which depth measurements were made, and give sea-level elevation if available surface
18. If flowing well, state method of flow regulation: N/A
19. Remarks:

FOR DEPARTMENT USE ONLY
Registration No. ____
File No. ____
Received ____ By ____
Entered ENTERED JAN 16 1997 By ____

DWR-55-55 (Rev 5/96)

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Pg. 2/2
Well # 55-558959

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encountered, and depth to which it rose in well.

From (feet)	To (feet)	
0	4	Topsoil & clay
4	95	Tapeat sandstone
95	300	Granodiorite
		Water at 268, 285ft.

I hereby certify that this well was drilled by me (or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller's Name (Qualifying Party): Chris Miller

Street: P.O. Box 499

City: Payson, AZ 85547

State / Zip

Phone Number

Date: 12/14/96

DWR 55-55 (Rev 5/96)

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ARIZONA DEPARTMENT OF WATER RESOURCES
500 North Third Street
Phoenix, Arizona 85004
WELL DRILLER REPORT

RECEIVED JAN 22 1997 RECORDS MGT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. AERO DRILLING & PUMPS
PO BOX 499
PAYSON AZ 85547

2. Owner Name: R.J. Marsh
Address: HC3 Box 519-M, Payson, AZ 85541
Street City State Zip

3. Location: 11N N/S 10E E/W 23 ¼ SE ¼ NW ¼ SE
Township Range Section 10-acre 40-acre 160-acre

4. Well Registration No. 55- 556430 (Required)

5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 300 ft.
7. Type of casing Steel & PVC
8. Diameter and length of casing 6"stl in. from 0 to 24 ,4.5"PVC in from 0 to 300
9. Method of sealing at reduction points Adapter
10. Perforated from 260 to 300 ,from ____ to ____ from ____ to ____
11. Size of cuts ¼" holes Number of cuts per foot 20
12. If screen was installed: Length N/A ft. Diam ____ in. Type ____
13. Method of construction Drilled
(drilled, dug, driven, bored, jetted, etc)
14. Date started 12/27/96
Month Day Year
15. Date completed 12/28/96
Month Day Year
16. Depth to water 185 ft. (If flowing well, so state)

17. Describe point from which depth measurements were made, and give sea-level elevation if available
Surface
18. If flowing well, state method of flow regulation: N/A

19. Remarks: ____

DO NOT WRITE IN THIS SPACE
OFFICE RECORD

Registration No. 55-556430
File No. A(11-10)23 DBD
Received ____ By ____
Entered ____ By ____
ENTERED JAN 23 1997

DWR-55-55-7/95 (Rev.)

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Pg. 2/2
Well #55-556430

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encountered, and depth to which it rose in well.

From (feet)	To (feet)	Description of formation material
0	3	Topsoil
3	35	Tapeat sandstone
35	300	Granodiorite
		Water at 250, 278ft.

I hereby certify that this well was drilled by me(or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: Aero Drilling

P.O. Box 499
Street

Payson, AZ 85547
City State Zip Phone No.

12/28/96
Signature of Driller Date

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Pg. 1/2

ARIZONA DEPARTMENT OF WATER RESOURCES
500 North Third Street
Phoenix, Arizona 85004

RECEIVED
MAY 15 1996
RECORDS MGT

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. AERO DRILLING & PUMPS, INC.
P. O. BOX 499
PAYSON, AZ 85547

2. Owner Name: Lisa Harmon
Address: HC3 Box 593-I, Payson, AZ 85541
Street City State Zip

3. Location: 11N N/S 10E E/W 23 ¼ NE ¼ NW ¼ NE
Township Range Section 10-acre 40-acre 160-acre

4. Well Registration No. 55- 553798 (Required)

5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 360 ft.
7. Type of casing Steel & PVC
8. Diameter and length of casing 6"stl in. from 0 to 21 , 4.5"PVC in from 0 to 360
9. Method of sealing at reduction points Adapter
10. Perforated from 320 to 360 ,from to from to
11. Size of cuts ¼"holes Number of cuts per foot 20
12. If screen was installed: Length N/A ft. Diam in. Type
13. Method of construction Drilled
(drilled, dug, driven, bored, jetted, etc)
14. Date started 4/17/96
Month Day Year
15. Date completed 4/18/96
Month Day Year
16. Depth to water 177 ft. (If flowing well, so state)
17. Describe point from which depth measurements were made, and give sea-level elevation if available
Surface
18. If flowing well, state method of flow regulation: N/A
19. Remarks:

DO NOT WRITE IN THIS SPACE
OFFICE RECORD

Registration No. 55-553798
File No. A(11-10)23ABA
Received By
Entered ENTERED MAY 20 1996 By

DWR-55-55-7/95 (Rev.)

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Pg. 2/2
Well # 55-553798

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encountered, and depth to which it rose in well.

From (feet)	To (feet)	Description of formation material
0	2	Topsoil
2	78	Tapeat sandstone
78	360	Granodiorite
		Water at 177, 338ft.

I hereby certify that this well was drilled by me(or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: _____

P.O. Box 499
Street

Payson, AZ 85547
City State Zip Phone No.

4/18/96
Signature of Driller Date

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Pg. 1/2

*

STATE OF ARIZONA
DEPARTMENT OF WATER RESOURCES
GROUNDWATER MANAGEMENT SUPPORT SECTION
500 North Third Street, Phoenix, Arizona 85004-3903
Phone (602) 417-2470 Fax (602) 417-2422

RECEIVED JAN 30 1996 RECORDS

WELL DRILLER REPORT

This report should be prepared by the Driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner's Name: M. & G. Welsh
   Address: HC 3 Box 519 H, Payson, AZ 85541
   Street City State Zip

2. Driller's Name: Aero Drilling & Pumps, Inc.
   Address: P.O. Box 499, Payson, AZ 85547
   Street City State Zip

3. Location: NE ¼ (10 ACRE) SW ¼ (40 ACRE) NE ¼ (160 ACRE) of Section 23 Township 11N Range 10E

4. Well Registratiin No. 55- 553768 (Required)

5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total Depth of Hole 320 ft.
7. Type of Casing Steel & PVC
8. Diameter and length of casing 6"stl inches from 0 to 21, 4.5"PVC inches from 0 to 320
9. Method of sealing at reduction points Adapter
10. Perforated from 280 to 320 from ____ to ____ from ____ to ____
11. Size of cuts ¼"holes Number of cuts per foot 20
12. If screen was installed: Length N/A feet. Diameter ____ inches. Type ____
13. Method of construction Drilled
    (drilled, dug, driven, bored, jetted, etc)
14. Date started 1/24/96
    Month Day Year
15. Date Completed 1/26/96
    Month Day Year
16. Depth to water 177 ft. (If flowing well, so state)
17. Describe point from which depth measurements were made, and give sea-level elevation if available Surface
18. If flowing well, state method of flow regulation: N/A
19. Remarks:

DO NOT WRITE IN THIS SPACE
OFFICE RECORD
Registration No. 55-553768
File No. A(11-10)23aca
Received ____ By ____
Entered ENTERED JAN 30 1996 By ____

DWR-55-55 (Rev 10/95)

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Pg. 2/2
Well # 55-553768

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encountered, and depth to which it rose in well.

From (feet)	To (feet)	Description of Formation Material
0	4	Topsoil
4	19	Tapeat sandstone
19	230	Fine grained pink granite
230	320	Granodiorite
		Water at 181, 205, 255, 272ft.

I hereby certify that this well was drilled by me(or under my supervison), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: Chris Miller

P.O. Box 499, Payson, AZ 85547

Street

City State Zip

1/26/96

Phone Number Date

DWR-55-55 (Rev 10/95)

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ARIZONA DEPARTMENT OF WATER RESOURCES
Operations Division
500 North 3rd Street
Phoenix, Arizona 85004

RECEIVED JAN 30 1996

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner Name: Rick Harwood
   Address: 1620 N. McLane, Payson, AZ 85541
   Street City State Zip

2. Driller Name: Aero Drilling & Pumps, Inc.
   Address: P.O. Box 499, Payson, AZ 85547
   Street City State Zip

3. Location: 11N N/S 10E E/W 23 ¼ NE ¼ NE ¼ SE
   Township Range Section 10-acre 40-acre 160-acre

4. Well Registration No. 55- ~~550603~~ 550693 (Required)

5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 320 ft.
7. Type of casing Steel & PVC
8. Diameter and length of casing 6"stl in. from 0 to 21 , 4.5"PVC in from 0 to 320
9. Method of sealing at reduction points Adapter
10. Perforated from 300 to 320 ,from to from to
11. Size of cuts ¼"holes Number of cuts per foot 20
12. If screen was installed: Length N/A ft. Diam in. Type
13. Method of construction Drilled
    (drilled, dug, driven, bored, jetted, etc)
14. Date started 1/20/96
    Month Day Year
15. Date completed 1/23/96
    Month Day Year
16. Depth to water 168 ft. (If flowing well, so state)

17. Describe point from which depth measurements were made, and give sea-level elevation if available
    Surface

18. If flowing well, state method of flow regulation: N/A

19. Remarks:

DO NOT WRITE IN THIS SPACE
OFFICE RECORD
Registration No. 55- ~~550603~~ 550693
File No. A(11-10)23daa
Received By
Entered ENTERED JAN 30 1996 By

DWR-55-55-10/94 (Rev.)

Pg. 37/69

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encountered, and depth to which it rose in well.

From (feet)	To (feet)	Description of formation material
0	7	Topsoil & clay
7	12	Tapeat sandstone
12	220	Fine grained pink granite
220	320 ~~280~~	Granodiorite
		Encountered water at 168, 298, 312ft.

I hereby certify that this well was drilled by me(or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: Chris Miller *Chris Miller*

Street: P.O. Box 499

City: Payson, State: AZ Zip: 85547 Phone No.:

Date: 1/23/96

Pg. 1/2

ARIZONA DEPARTMENT OF WATER RESOURCES
15 South 15th Avenue
Phoenix, Arizona 85007

RECEIVED JUL 19 1995 RECORDS MGT

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner Name: Lester Stevens
   Address: HCR Box 588, Payson, AZ 85541
   Street City State Zip
2. Driller Name: Aero Drilling & Pumps, Inc.
   Address: P.O. Box 499, Payson, AZ 85547
   Street City State Zip
3. Location: 11N N/S (Township) 10E E/W (Range) 22 (Section) SE 1/4 (10-acre) NE 1/4 (40-acre) NE 1/4 (160-acre)
4. Well Registration No. 55- 544697 (Required)
5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 420 ft.
7. Type of casing Steel
8. Diameter and length of casing 6 in. from 0 to 21, _____ in from _____ to _____.
9. Method of sealing at reduction points N/A
10. Perforated from None to _____, from _____ to _____, from _____ to _____.
11. Size of cuts N/A Number of cuts per foot _____
12. If screen was installed: Length N/A ft. Diam _____ in. Type _____
13. Method of construction Drilled
    (drilled, dug, driven, bored, jetted, etc)
14. Date started 7/12/95
    Month Day Year
15. Date completed 7/13/95
    Month Day Year
16. Depth to water 225 ft. (If flowing well, so state)
17. Describe point from which depth measurements were made, and give sea-level elevation if available
    Surface
18. If flowing well, state method of flow regulation: N/A
19. Remarks:

DO NOT WRITE IN THIS SPACE
55-544697
A(11-10)22AAD
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Fi ENTERED JUL 20 1995
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En

DWR-55-55-7/91 (Rev.)

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ARIZONA DEPARTMENT OF WATER RESOURCES

500 North Third Street
Phoenix, Arizona 85004

Registration No. 55-544697
FileNo. A 11-10 22AAD

RECEIVED
AUG 31 1995
RECORDS MGT

COMPLETION REPORT

1. Per A.R.S. § 45-600, the Completion Report is to be filed with the Department within 30 days after installation of pump equipment by the registered well owner.

2. Drawdown of the water level for a non-flowing well should be measured in feet after not less than 4 hours of continuous operation and while still in operation and for a flowing well the shut-in pressure should be measured in feet above the land or in pounds per square inch at the land surface.

3. The static groundwater level should be measured in feet from the land surface immediately prior to the well capacity test.

4. The tested pumping capacity of the well in gallons per minute for a non-flowing well should be determined by measuring the discharge of the pump after continuous operation for at least 4 hours and for a flowing well by measuring the natural flow at the land surface.

LOCATION OF THE WELL:

11N N/S (Township) 10E E/W (Range) 22 (Section) ¼ SE ¼ (10-acre) ¼ (40-acre) ¼ (160-acre)

EQUIPMENT INSTALLED:

Kind of pump: Centrifugal (Turbine, centrifugal, etc.)

Kind of power: Electric (Electric, natural gas, gasoline, etc.) H.P. Rating of Motor: 1½ HP

Pumping Capacity: 9.1 Gal Date Pump Installed: 08-18-1995

WELL TEST:

Test pumping capacity: 5 Gal Per Minute (Gallons per minute) Date Well Tested: 08-25-1995

Method of Discharge Measurement: Orifice (Weir, orifice, current meter, etc.)

Static Groundwater Level: 197 FT ft. Drawdown: 350 ft.

Total Pumping Lift: 360 ft. Drawdown: _____ lbs. (Flowing Well)

I HEREBY CERTIFY that the above statements are true to the best of my knowledge and belief.

08-28-, 1995
Date

Lester G. Stevens
Print Well Owner's Name

Lester G. Stevens
Signature of Well Owner or Agent

HCR Box 588
Address

Payson Arizona 85541
City State Zip

ENTERED SEP 7 1995

DWR-55-56-10/94 (Rev.)

Pg. 40/69

Pg. 1/2

ARIZONA DEPARTMENT OF WATER RESOURCES
Operations Division
500 North 3rd Street
Phoenix, Arizona 85004

RECEIVED SEP 13 1995 RECORDS

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner Name: Lewis S. Robinett
   Address: HCR Box 562-E, Payson, AZ 85541
   Street City State Zip

2. Driller Name: Aero Drilling & Pumps, Inc.
   Address: P.O. Box 499, Payson, AZ 85547
   Street City State Zip

3. Location: 11N N/S 10E E/W 24 ¼ SW ¼ SW ¼ NW
   Township Range Section 10-acre 40-acre 160-acre

4. Well Registration No. 55-548768 (Required)

5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 380 ft.
7. Type of casing Steel & PVC
8. Diameter and length of casing 6"stl in. from 0 to 21 . 4.5"PVC in from 0 to 380
9. Method of sealing at reduction points Adapter
10. Perforated from 340 to 380 from ____ to ____ from ____ to ____
11. Size of cuts ¼"holes Number of cuts per foot 20
12. If screen was installed: Length N/A ft. Diam ____ in. Type ____
13. Method of construction Drilled
    (drilled, dug, driven, bored, jetted, etc)
14. Date started 8/31/95
    Month Day Year
15. Date completed 9/4/95
    Month Day Year
16. Depth to water 174 ft. (If flowing well, so state)

17. Describe point from which depth measurements were made, and give sea-level elevation if available
    Surface

18. If flowing well, state method of flow regulation: N/A

19. Remarks:

55-548768
A(11-10)24 BCC
ENTERED SEP 13 1995
By
Entered By

DWR-55-55-10/94 (Rev.)

Pg. 41/69

Pg. 2/2
Well # 55-548768

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encountered, and depth to which it rose in well.

From (feet)	To (feet)	Description of formation material
0	7	Topsoil & clay
7	35	Tapeat sandstone
35	380	Granodiorite
		Water at 175, 318, 345-352.

I hereby certify that this well was drilled by me(or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: [illegible]

P.O. Box 499
Street

Payson, AZ 85547
City State Zip Phone No:

9/4/95
Date

Pg. 42/69

Pg. 1/2

ARIZONA DEPARTMENT OF WATER RESOURCES
Operations Division
500 North 3rd Street
Phoenix, Arizona 85004

RECEIVED SEP 11 1995 RECORDS MGT

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner Name: James & Betty Kucera
   Address: HC 3 Box 518-K, Payson, AZ 85541
   Street City State Zip

2. Driller Name: Aero Drilling & Pumps, Inc.
   Address: P.O. Box 499, Payson, AZ 85547
   Street City State Zip

3. Location: 11N N/S (Township) 10E E/W (Range) 23 (Section) ¼ SE (10-acre) ¼ NE (40-acre) ¼ SE (160-acre)

4. Well Registration No. 55- 549961 (Required)

5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 280 ft.
7. Type of casing Steel & PVC
8. Diameter and length of casing 6"stl in. from 0 to 21 ,4.5"PVC in from 0 to 280
9. Method of sealing at reduction points Adapter
10. Perforated from 240 to 280 ,from ____ to ____ from ____ to ____
11. Size of cuts ¼"holes Number of cuts per foot 20
12. If screen was installed: Length N/A ft. Diam ____ in. Type ____
13. Method of construction Drilled
    (drilled, dug, driven, bored, jetted, etc)
14. Date started 8/13/95
    Month Day Year
15. Date completed 8/13/95
    Month Day Year
16. Depth to water 184 ft. (If flowing well, so state)

17. Describe point from which depth measurements were made, and give sea-level elevation if available
    Surface

18. If flowing well, state method of flow regulation: N/A

19. Remarks:

55-549961
A(11-10)23 DAD
Re
Fil
Re
ENTERED SEP 13 1995
Entered ____ By ____

DWR-55-55-10/94 (Rev.)

Pg. 43/69

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encountered, and depth to which it rose in well.

Well #55-549961

From (feet)	To (feet)	Description of formation material
0	7	Topsoil & clay
7	18	Tapeat sandstone
18	280	Granodiorite
		Water at 218, 235, 255.

I hereby certify that this well was drilled by me(or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: [illegible]

P.O. Box 499
Street

Payson, AZ 85547
City State Zip Phone No.

8/13/95
Date

Pg. 1/2

ARIZONA DEPARTMENT OF WATER RESOURCES
Operations Division
500 North 3rd Street
Phoenix, Arizona 85004

RECEIVED SEP 11 1995 RECORDS MGT.

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner Name: Leo Wasiak
   Address: _____
   Street City State Zip

2. Driller Name: Aero Drilling & Pumps, Inc.
   Address: P.O. Box 499, Payson, AZ 85547
   Street City State Zip

3. Location: 11N N/S (Township) 10E E/W (Range) 23 (Section) ¼ NE (10-acre) ¼ SE (40-acre) ¼ SE (160-acre)

4. Well Registration No. 55- 550467 (Required)

5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 340 ft.
7. Type of casing Steel
8. Diameter and length of casing 6 in. from 0 to 21, _____ in from _____ to _____
9. Method of sealing at reduction points N/A
10. Perforated from None to _____, from _____ to _____ from _____ to _____
11. Size of cuts N/A Number of cuts per foot _____
12. If screen was installed: Length N/A ft. Diam _____ in. Type _____
13. Method of construction Drilled
    (drilled, dug, driven, bored, jetted, etc)
14. Date started 8/14/95
    Month Day Year
15. Date completed 8/14/95
    Month Day Year
16. Depth to water 185 ft. (If flowing well, so state)

17. Describe point from which depth measurements were made, and give sea-level elevation if available
    Surface

18. If flowing well, state method of flow regulation: N/A

19. Remarks: _____

DO NOT WRITE IN THIS SPACE
OFFICE RECORD
Reg 55-550467
File A(11-10)23DDA
Rec ENTERED SEP 13 1995
Ent.

DWR-55-55-10/94 (Rev.)

Pg 45/69

Pg. 2/2

Well #55-550467

RECEIVED JUL 15 1996 RECORDS MGT

STATE OF ARIZONA
DEPARTMENT OF WATER RESOURCES
GROUNDWATER MANAGEMENT SUPPORT SECTION

500 North Third Street, Phoenix, Arizona 85004-3903
Phone (602) 417-2470 Fax: (602) 417-2422

COMPLETION REPORT
(Pump Installation Report)

1. Per A.R.S. § 45-600, The completion report is to be filed with the Department within 30 days after installation of pump equipment by the registered well owner.
2. Drawdown of the water level for a non-flowing well should be measured in feet after not less than 4 hours of continuous operation. For a flowing well the shut-in presssure should be measured in feet above the land or in pounds per square inch at the land surface.
3. The static groundwater level should be measured in feet from the land surface immediately prior to the well capacity test.
4. The tested pumping capacity of the well in gallons per minute for a non-flowing well should be determined by measuring the discharge of the pump after continuous operation for at least 4 hours and for a flowing well by measuring the natural flow at the land surface.

REGISTRATION NO: 55-550467 FILE NO: A(11-10)23 dda

LOCATION OF THE WELL:

11N	10E	23	¼ NE	¼ SE	¼ SE
Township	Range	Section	10-acre	40-acre	160-acre

EQUIPMENT INSTALLED:

Kind of Pump SUBMERSIBLE (Turbine, Submersible, Centrifugal, etc.) Kind of Power ELECTRIC (Electric, Natural Gas, Gasoline, etc.)

H.P. Rating of Motor 3/4 Pumping Capacity 5 GPM Date Pump Installed 6-15-96

WELL TEST:

Test Pumping Capacity 5 (Gallons per minute) Date Well Tested 6-15-96

Method of Discharge Measurement BUCKET & STOP WATCH (Weir, orifice, current meter, bucket, etc.)

Static Groundwater Level 185 ft. Drawdown 115 ft.

Total Pumping Lift 300 ft. Drawdown N/A (Flowing Well) lbs.

I HEREBY CERTIFY that the above statements are true to the best of my knowledge and belief.

Leopold Wasiak	HC3 Box 518-C	Payson	AZ.	85541-9410
Print Well Owner's Name	Address	City	State	Zip

Leopold Wasiak	520-474 5256	7-9-96
Signature of Well Owner	Phone Number	Date

DWR 55-56 (Rev 10/95)

ENTERED JUL 19 1996

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ARIZONA DEPARTMENT OF WATER RESOURCES
15 South 15th Avenue
Phoenix, Arizona 85007

RECEIVED SEP - 8 1995 RECORDS MGT

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner Name: Richard Falkenberg
   Address: P.O. Box 58, Payson, AZ 85547
   Street City State Zip
2. Driller Name: Aero Drilling & Pumps, Inc.
   Address: P.O. Box 499, Payson, AZ 85547
   Street City State Zip
3. Location: 11N N/S (Township) 10E E/W (Range) 23 (Section) SW 1/4 (10-acre) SE 1/4 (40-acre) NE 1/4 (160-acre)
4. Well Registration No. 55-545800 (Required)
5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 340 ft.
7. Type of casing Steel & PVC
8. Diameter and length of casing 6"stl in. from 0 to 21, 4.5"PVC in from 0 to 340.
9. Method of sealing at reduction points Adapter
10. Perforated from 300 to 340, from ____ to ____, from ____ to ____.
11. Size of cuts ½"holes Number of cuts per foot 20
12. If screen was installed: Length N/A ft. Diam ____ in. Type ____
13. Method of construction Drilled
    (drilled, dug, driven, bored, jetted, etc)
14. Date started 8/9/95
    Month Day Year
15. Date completed 8/10/95
    Month Day Year
16. Depth to water 177 ft. (If flowing well, so state)
17. Describe point from which depth measurements were made, and give sea-level elevation if available
    Surface
18. If flowing well, state method of flow regulation: N/A
19. Remarks:

DO NOT WRITE IN THIS SPACE
55-545800
A(11-10)23ADC
Regis
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ENTERED SEP 11 1995

DWR-55-55-7/91 (Rev.)

Richard Falkenberg
Well # 55-545800

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encounterd, and depth to which it rose in well.

From (feet)	To (feet)	Description of formation material
0	14	Topsoil & clay
14	18	Tapeat sandstone
18	340	Granodiorite
		Water at 177, 250, 288.

I hereby certify that this well was drilled by me (or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: [illegible]

P.O. Box 499
Street

Payson, AZ 85547
City State Zip

Date 8/10/95

Run Date: 10/08/2013

AZ DEPARTMENT OF WATER RESOURCES

WELL REGISTRY REPORT - WELLS55

Location A 11.0 10.0 23 D B D

Well Reg.No 55 - 550467

AMA NOT WITHIN ANY AMA OR INA

Registered Name DONALD & CATHERINE A. ROBERTS
P. O BOX 2357
PAYSON AZ 85547

File Type NEW WELLS (INTENTS OR APPLICATIONS)
Application/Issue Date 06/23/1995

Owner OWNER
Driller No. 108
Driller Name AERO DRILLING AND PUMPS, INC.
Driller Phone 928-474-2376
County GILA
Parcel No. 302-34-001N
Intended Capacity GPM 15.00

Well Type EXEMPT
SubBasin TONTO CREEK
Watershed SALT RIVER
Registered Water Uses DOMESTIC
Registered Well Uses WATER PRODUCTION
Discharge Method BUCKET - BARREL - STOPWATCH
Power ELECTRIC MOTOR < 1 HP

Well Depth	340.00	**Case Diam**	6.00	**Tested Cap**	5.00
Pump Cap.	5.00	**Case Depth**	0.00	**CRT**	X
Draw Down	115.00	**Water Level**	185.00	**Log**	X
		Acres Irrig	0.00	**Finish**	STEEL - PERFORATED OR SLOTTED CASING

Contamination Site: NO - NOT IN ANY WQARF SITE

Tribe: Not in a tribal zone

Comments 3543 N. Houston Mesa Rd., Payson, AZ 85541
Revised legal per ADWR GIS pacel map, 10/4/13 - bew

Places Of Use

A 11 0 10 0 23 D B D

Current Action

10/8/2013 555 DRILLER & OWNER PACKETS MAILED
Action Comment: bew

Action History

10/4/2013 855 CHANGE OF WELL LEGAL DESCRIPTION
Action Comment: OLD LEGAL DESC: A(11.0-10.0) 23 DDB

10/4/2013 550 DRILLING AUTHORITY ISSUED
Action Comment: bew

10/2/2013 160 NOI RECEIVED FOR DEEPENING A WELL
Action Comment: bew

10/1/2013 210 COUNTY HEALTH AUTHORITY ENDORSED
Action Comment: bew

9/4/2013 860 CHANGE OF WELL OWNERSHIP
Action Comment: gt

3/24/2011 860 CHANGE OF WELL OWNERSHIP
Action Comment: bew

8/14/1995 805 PUMP INSTALLATION COMPLETION REPORT RECEIVED
Action Comment:

8/14/1995 755 WELL CONSTRUCTION COMPLETED
Action Comment:

8/14/1995 750 WELL DRILLER REPORT AND WELL LOG RECEIVED
Action Comment:

Pg. 2/2
Well #55-550467

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encountered, and depth to which it rose in well.

From (feet)	To (feet)	Description of formation material
0	7	Topsoil & clay
7	14	Tapeat sandstone
14	340	Granodiorite
		Water at 275.

I hereby certify that this well was drilled by me(or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: [illegible]

P.O. Box 499
Street

Payson, AZ 85547
City State Zip Phone No.

8/14/95
Date

DEPARTMENT OF WR
JUN 2 - 1994
OPERATIONS DIV.

ARIZONA DEPARTMENT OF WATER RESOURCES
15 South 15th Avenue
Phoenix, Arizona 85007

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner Name: Dennis Jackson
   Address: HCR 579-A, Payson, AZ 85541
   Street City State Zip
2. Driller Name: Aero Drilling & Pumps, Inc.
   Address: P.O. Box 499, Payson, AZ 85547
   Street City State Zip
3. Location: 11N N/S (Township) 10E E/W (Range) 23 (Section) NW 1/4 (10-acre) NE 1/4 (40-acre) NE 1/4 (160-acre)
4. Well Registration No. 55- 540604 (Required)
5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 240 ft.
7. Type of casing Steel & PVC
8. Diameter and length of casing 6"stl in. from 0 to 20, 4.5"PVC in from 0 to 240.
9. Method of sealing at reduction points Adapter
10. Perforated from 200 to 240, from ____ to ____, from ____ to ____.
11. Size of cuts ¼" holes Number of cuts per foot 20
12. If screen was installed: Length N/A ft. Diam ____ in. Type ____
13. Method of construction Drilled
    (drilled, dug, driven, bored, jetted, etc)
14. Date started 5/11/94
    Month Day Year
15. Date completed 5/13/94
    Month Day Year
16. Depth to water 180 ft. (If flowing well, so state)
17. Describe point from which depth measurements were made, and give sea-level elevation if available
    Surface
18. If flowing well, state method of flow regulation: N/A
19. Remarks:

ENTERED JUN 3 1994

DO NOT WRITE IN THIS SPACE

55-540604
A(11-10)23AAB

Re
Fil
Re
Em

DWR-55-55-7/91 (Rev.)

Well #55-540604

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encounterd, and depth to which it rose in well.

From (feet)	To (feet)	Description of formation material
0	10	Topsoil & clay
10	75	Tapeat sandstone
75	205	Granite
		Encountered water at 205ft.
205	218	Granite
		Encountered add. water at 218ft.
218	240	Granite

I hereby certify that this well was drilled by me (or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: Ossie Miller

P.O. Box 499
Street

Payson, AZ 85547
City State Zip

Date 5/13/94

ARIZONA DEPARTMENT OF WATER RESOURCES
15 South 15th Avenue
Phoenix, Arizona 85007

DEPARTMENT OF WR
MAR 4 - 1994
OPERATIONS DIV.

Pg. 1/2

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner Name: Carol Antonides
   Address: 1537 W. North Lane, Phoenix, AZ 85021
   Street City State Zip
2. Driller Name: Aero Drilling & Pumps, Inc.
   Address: P.O. Box 499, Payson, AZ 85547
   Street City State Zip
3. Location: 11N N/S (Township) 10E E/W (Range) 23 (Section) SE 1/4 (10-acre) NE 1/4 (40-acre) NE 1/4 (160-acre)
4. Well Registration No. 55- 542028 (Required)
5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 300 ft.
7. Type of casing Steel & PVC
8. Diameter and length of casing 6"stl in. from 0 to 21, 4.5"PVC in from 0 to 300.
9. Method of sealing at reduction points Adapter
10. Perforated from 260 to 300, from ____ to ____, from ____ to ____.
11. Size of cuts ¼"holes Number of cuts per foot 20
12. If screen was installed: Length N/A ft. Diam ____ in. Type ____
13. Method of construction Drilled
    (drilled, dug, driven, bored, jetted, etc)
14. Date started 2/3/94
    Month Day Year
15. Date completed 2/4/94
    Month Day Year
16. Depth to water 220 ft. (If flowing well, so state)
17. Describe point from which depth measurements were made, and give sea-level elevation if available
    Surface
18. If flowing well, state method of flow regulation: N/A
19. Remarks:

ENTERED MAR 0 7 1994

DO NOT WRITE IN THIS SPACE

Re 55-542028
Fi A(11-10)23AAD
Re
El.

DWR-55-55-7/91 (Rev.)

Pg. 53/69

Pg. 2/2
Well #55-542028

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encounterd, and depth to which it rose in well.

From (feet)	To (feet)	Description of formation material
0	5	Clay
5	48	Tapeat sandstone
48	220	Granite
		Enc. water at 220ft.
220	265	Granite
		Enc. additional water at 265ft.
265	300	Granite

I hereby certify that this well was drilled by me (or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: Alvin Miller

P.O. Box 499
Street

Payson, AZ 85547
City State Zip

Date 2/4/94

Pg. 54/69

Pg. 1/3

ARIZONA DEPARTMENT OF WATER RESOURCES

15 South 15th Avenue
Phoenix, Arizona 85007

DEPARTMENT OF WR
MAR 9 - 1994
OPERATIONS DIV.

Registration No. 55-540136

File No. A(11-10)23 ADB

COMPLETION REPORT

1. Per **A.R.S. § 45-600**, the Completion Report is to be filed with the Department within 30 days after installation of pump equipment by the registered well owner.
2. Drawdown of the water level for a non-flowing well should be measured in feet after not less than 4 hours of continuous operation and while still in operation and for a flowing well the shut-in pressure should be measured in feet above the land or in pounds per square inch at the land surface.
3. The static groundwater level should be measured in feet from the land surface immediately prior to the well capacity test.
4. The tested pumping capacity of the well in gallons per minute for a non-flowing well should be determined by measuring the discharge of the pump after continuous operation for at least 4 hours and for a flowing well by measuring the natural flow at the land surface.

LOCATION OF THE WELL:

11N N/S	10E E/W	23	NW 1/4	SE 1/4	NE 1/4
Township	Range	Section	10-acre	40-acre	160-acre

EQUIPMENT INSTALLED:

Kind of pump SUBMERSIBLE
Turbine, centrifugal, etc.

Kind of power ELECTRIC H.P. Rating of Motor 1/2
Electric, natural gas, gasoline, etc.

Pumping Capacity 5 Date pump installed: 2-15-94
Gallons per minute

WELL TEST:

Test pumping capacity 5 Date Well Tested: 2-15-94
Gallons per minute

Method of Discharge Measurement BUCKET & STOPWATCH
Weir, orifice, current meter, etc.

Static Groundwater Level 185 ft. Drawdown 35 ft.

Total Pumping Lift 220 ft. Drawdown N/A lbs.
(Flowing Well)

I HEREBY CERTIFY that the above statements are true to the best of my knowledge and belief.

3-7-, 1994
Date

GEORGE W. DAWSON
Print Well Owner's Name

George W. Dawson
Signature of Well Owner or Agent

1029 E. MARIPOSA
Address

PHX AZ 85014
City State Zip

ENTERED MAR 09 1994

DWR-55-56-7/91 (Rev.)

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Pg. 2/3

Well #55-540136

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encounterd, and depth to which it rose in well.

From (feet)	To (feet)	Description of formation material
0	5	Topsoil
5	15	Tapeat sandstone
15	184	Granite
		Enc. water at 184ft
184	238	Granite
		Enc. water at 238ft.
238	260	Granite

I hereby certify that this well was drilled by me (or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: [illegible]

P.O. Box 499
Street

Payson, AZ 85547
City State Zip

Date 9/27/93

Pg. 56/69

Run Date: 01/25/2012

AZ DEPARTMENT OF WATER RESOURCES

WELL REGISTRY REPORT - WELLS55

Location A 11.0 10.0 23 A D B

Well Reg.No
55 - 540136

AMA NOT WITHIN ANY AMA OR INA

Registered Name SVANHILDUR JAFETSDOTTIR
206 S. KODZ

PAYSON AZ 85541

File Type NEW WELLS (INTENTS OR APPLICATIONS)
Application/Issue Date 08/03/1993

Owner OWNER
Driller No. 108
Driller Name AERO DRILLING AND PUMPS, INC.
Driller Phone 928-474-2376
County GILA
Parcel No. 302-34-497A
Intended Capacity GPM 12.00

Well Type EXEMPT
SubBasin VERDE CANYON
Watershed VERDE RIVER
Registered Water Uses DOMESTIC
Registered Well Uses WATER PRODUCTION
Discharge Method BUCKET - BARREL - STOPWATCH
Power ELECTRIC MOTOR < 1 HP

Well Depth	260.00	Case Diam	6.00	Tested Cap	5.00
Pump Cap.	5.00	Case Depth	260.00	CRT	X
Draw Down	35.00	Water Level	170.00	Log	X
		Acres Irrig	0.00	Finish	STEEL - PERFORATED OR SLOTTED CASING

Contamination Site: NO - NOT IN ANY WQARF SITE

Tribe: Not in a tribal zone

Comments Well located at 8166 W. Sepia, Payson

Places Of Use
A 11 0 10 0 23 A D B

Current Action
1/23/2012 860 CHANGE OF WELL OWNERSHIP
Action Comment: pwc

Action History
9/27/1993 750 WELL LOG RECEIVED
Action Comment:
9/27/1993 805 COMPLETION REPORT RECEIVED
Action Comment:
9/27/1993 755 WELL CONSTRUCTION COMPLETED
Action Comment:

Pg. 1/3

ARIZONA DEPARTMENT OF WATER RESOURCES
15 South 15th Avenue
Phoenix, Arizona 85007

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner Name: Adelbert Fallers
   Address: HCR Box 573-G, Payson, AZ 85541
   Street City State Zip
2. Driller Name: Aero Drilling & Pumps, Inc.
   Address: P.O. Box 499, Payson, AZ 85547
   Street City State Zip
3. Location: 11N N/S (Township) 10E E/W (Range) 23 (Section) NW 1/4 (10-acre) NE 1/4 (40-acre) NE 1/4 (160-acre)
4. Well Registration No. 55- 539625 (Required)
5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 300 ft.
7. Type of casing Steel & PVC
8. Diameter and length of casing 6"stl in. from 0 to 21, 4½"PVC in from 0 to 300.
9. Method of sealing at reduction points Adapter
10. Perforated from 260 to 300, from _____ to _____, from _____ to _____.
11. Size of cuts ¼"holes Number of cuts per foot 20CPF
12. If screen was installed: Length N/A ft. Diam _____ in. Type _____
13. Method of construction Drilled
    (drilled, dug, driven, bored, jetted, etc)
14. Date started 7/17/93
    Month Day Year
15. Date completed 7/20/93
    Month Day Year
16. Depth to water 155 ft. (If flowing well, so state)
17. Describe point from which depth measurements were made, and give sea-level elevation if available
    Surface
18. If flowing well, state method of flow regulation: N/A
19. Remarks:

DO NOT WRITE IN THIS SPACE
OFFICE RECORD
Registration No. 55-539625
File No. A(11-10)23aab
Received _____ By _____
Entered _____ By _____
ENTERED AUG 13 1993

DWR-55-55-7/91 (Rev.)

Pg. 58/69

Well # 55-539625

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encounterd, and depth to which it rose in well.

From (feet)	To (feet)	Description of formation material
0	8	Clay
8	55	Tapeat sandstone
55	177	Granite
		Enc. water at 177'
177	265	Granite
		Enc. water at 265'
265	300	Granite

I hereby certify that this well was drilled by me (or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: [illegible]

P.O. Box 499
Street

Payson, AZ 85547
City State Zip

Date 7/20/93

ARIZONA DEPARTMENT OF WATER RESOURCES
15 South 15th Avenue
Phoenix, Arizona 85007

Registration No. 55-539625

File No. A(11-10) 23 aab

COMPLETION REPORT

1. Per A.R.S. § 45-600, the Completion Report is to be filed with the Department within 30 days after installation of pump equipment by the registered well owner.
2. Drawdown of the water level for a non-flowing well should be measured in feet after not less than 4 hours of continuous operation and while still in operation and for a flowing well the shut-in pressure should be measured in feet above the land or in pounds per square inch at the land surface.
3. The static groundwater level should be measured in feet from the land surface immediately prior to the well capacity test.
4. The tested pumping capacity of the well in gallons per minute for a non-flowing well should be determined by measuring the discharge of the pump after continuous operation for at least 4 hours and for a flowing well by measuring the natural flow at the land surface.

LOCATION OF THE WELL:

11N N/S	10E E/W	23	NW 1/4	NE 1/4	NE 1/4
Township	Range	Section	10-acre	40-acre	160-acre

EQUIPMENT INSTALLED:

Kind of pump: 4" Submergible (Turbine, centrifugal, etc.)

Kind of power: Electric (Electric, natural gas, gasoline, etc.) H.P. Rating of Motor: 1 HP

Pumping Capacity: 8 Gal. Per. Min. (Gallons per minute) Date pump installed: 8-26-93

WELL TEST:

Test pumping capacity: 3½ Gal. P/M (Gallons per minute) Date Well Tested: 9-23-93

Method of Discharge Measurement: Bucket & Stop Watch (Weir, orifice, current meter, etc.)

Static Groundwater Level: 155' ft. Drawdown: 118 ft. ft.

Total Pumping Lift: 273 ft. ft. Drawdown: ~~118 ft~~ N/A lbs. (Flowing Well)

I HEREBY CERTIFY that the above statements are true to the best of my knowledge and belief.

10-1-, 1993
Date

A.K. or Norma Fallers
~~A.K. Fallers Pumps, Inc.~~
Print Well Owner's Name Norma Fallers

A.K. Fallers
Signature of Well Owner or Agent

WCR 573-G
Address

Payson Az. 85541
City State Zip

ENTERED OCT 5 1993
MICROFILMED

DWR-55-56-7/91 (Rev.)

Pg. 1/3

ARIZONA DEPARTMENT OF WATER RESOURCES
15 South 15th Avenue
Phoenix, Arizona 85007

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner Name: Gordon Cotta
   Address: HC 3 Box 573, Payson, AZ 85541
   Street City State Zip
2. Driller Name: Aero Drilling & Pumps, Inc.
   Address: P.O. Box 499, Payson, AZ 85547
   Street City State Zip
3. Location: 11N N/S (Township) 10E E/W (Range) 23 (Section) NW 1/4 (10-acre) NE 1/4 (40-acre) NE 1/4 (160-acre)
4. Well Registration No. 55- 539488 (Required)
5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 240 ft.
7. Type of casing Steel & PVC
8. Diameter and length of casing 6"stl. in. from 0 to 21, 4.5"PVC in from 0 to 240.
9. Method of sealing at reduction points Adapter
10. Perforated from 200 to 240, from _____ to _____, from _____ to _____.
11. Size of cuts ¼"holes Number of cuts per foot 20
12. If screen was installed: Length N/A ft. Diam _____ in. Type _____
13. Method of construction Drilled
    (drilled, dug, driven, bored, jetted, etc)
14. Date started 6/17/93
    Month Day Year
15. Date completed 6/18/93
    Month Day Year
16. Depth to water 165 ft. (If flowing well, so state)
17. Describe point from which depth measurements were made, and give sea-level elevation if available
    Surface
18. If flowing well, state method of flow regulation: N/A
19. Remarks:

DO NOT WRITE IN THIS SPACE
OFFICE RECORD
Registration No. 55-539488
File No. A(11-10)23aab
Received _____ By _____
Entered ENTERED JUL 01 1993

DWR-55-55-7/91 (Rev.)

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Pg. 2/3
Well # 55-539488

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encounterd, and depth to which it rose in well.

From (feet)	To (feet)	Description of formation material
0	7	Clay
7	52	Topeat sandstone
52	165	Granite
		Enc. water at 165'
165	197	Granite
		Enc. additional water at 197'
197	225	Granite
		Enc. additional water at 225'
225	240	Granite

I hereby certify that this well was drilled by me (or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: [illegible]

P.O. Box 499
Street

Payson, AZ 85547
City State Zip

Date 6/18/93

ARIZONA DEPARTMENT OF WATER RESOURCES
15 South 15th Avenue
Phoenix, Arizona 85007

Registration No. 55-539488

File No. A(11-10)23 AAB

COMPLETION REPORT

1. Per A.R.S. § 45-600, the Completion Report is to be filed with the Department within 30 days after installation of pump equipment by the registered well owner.
2. Drawdown of the water level for a non-flowing well should be measured in feet after not less than 4 hours of continuous operation and while still in operation and for a flowing well the shut-in pressure should be measured in feet above the land or in pounds per square inch at the land surface.
3. The static groundwater level should be measured in feet from the land surface immediately prior to the well capacity test.
4. The tested pumping capacity of the well in gallons per minute for a non-flowing well should be determined by measuring the discharge of the pump after continuous operation for at least 4 hours and for a flowing well by measuring the natural flow at the land surface.

LOCATION OF THE WELL:

11 N N/S	10E E/W	23	NW 1/4	NE 1/4	NE 1/4
Township	Range	Section	10-acre	40-acre	160-acre

EQUIPMENT INSTALLED:

Kind of pump: SUBMERSIBLE
Turbine, centrifugal, etc.

Kind of power: ELECTRIC — H.P. Rating of Motor: 1
Electric, natural gas, gasoline, etc.

Pumping Capacity: 12 GPM — Date pump installed: 6-23-93
Gallons per minute

WELL TEST:

Test pumping capacity: 12 — Date Well Tested: 6-23-93
Gallons per minute

Method of Discharge Measurement: BUCKET & STOPWATCH
Weir, orifice, current meter, etc.

Static Groundwater Level: 156' ft. Drawdown: 22' ft.

Total Pumping Lift: 178' ft. Drawdown: N/A lbs.
(Flowing Well)

I HEREBY CERTIFY that the above statements are true to the best of my knowledge and belief.

6-23, 1993
Date

GORDON L. COTTA
Print Well Owner's Name

Gordon L. Cotta
Signature of Well Owner or Agent

HCR Box 575
Address

Payson, Az. 85541
City State Zip

ENTERED JUN 28 1993

DWR-55-56-7/91 (Rev.)

ARIZONA DEPARTMENT OF WATER RESOURCES
15 South 15th Avenue
Phoenix, Arizona 85007

Pg. 1/2

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner Name: Graham & Jean Hill
   Address: HC 3 Box 573-E, Payson, AZ 85541
   Street City State Zip
2. Driller Name: Aero Drilling & Pumps, Inc.
   Address: P.O. Box 499, Payson, AZ 85547
   Street City State Zip
3. Location: 11N N/S (Township) 10E E/W (Range) 23 (Section) SW 1/4 (10-acre) NE 1/4 (40-acre) NE 1/4 (160-acre)
4. Well Registration No. 55- 539490 (Required)
5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 260 ft.
7. Type of casing Steel
8. Diameter and length of casing 6 in. from 0 to 21, _____ in from _____ to _____.
9. Method of sealing at reduction points N/A
10. Perforated from None to _____, from _____ to _____, from _____ to _____.
11. Size of cuts N/A Number of cuts per foot _____
12. If screen was installed: Length N/A ft. Diam _____ in. Type _____
13. Method of construction Drilled
    (drilled, dug, driven, bored, jetted, etc)
14. Date started 6/22/93
    Month Day Year
15. Date completed 6/23/93
    Month Day Year
16. Depth to water 167 ft. (If flowing well, so state)
17. Describe point from which depth measurements were made, and give sea-level elevation if available
    Surface
18. If flowing well, state method of flow regulation: N/A
19. Remarks: _____

DO NOT WRITE IN THIS SPACE
OFFICE RECORD

Registration No. 55-539490
File No. A(11-10)23aac
Received _____ By _____
Entered ENTERED JUL 2 6 1993

DWR-55-55-7/91 (Rev.)

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Well # 55-539490

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encounterd, and depth to which it rose in well.

From (feet)	To (feet)	Description of formation material
0	10	Clay
10	50	Tapeat sandstone
50	166	Granite
		Encountered water at 166'
166	195	Granite
		Enc. water at 195'
195	260	Granite

I hereby certify that this well was drilled by me (or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: [illegible]

P.O. Box 499
Street

Payson, AZ 85547
City State Zip

Date 6/23/93

Pg. 1/2

ARIZONA DEPARTMENT OF WATER RESOURCES
15 South 15th Avenue
Phoenix, Arizona 85007

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner Name: Harry Robertson
   Address: P.O. Box 564, Payson, AZ 85547
   Street City State Zip
2. Driller Name: Aero Drilling & Pumps, Inc.
   Address: P.O. Box 499, Payson, AZ 85547
   Street City State Zip
3. Location: 11N N/S (Township) 10E E/W (Range) 23 (Section) SW 1/4 (10-acre) NE 1/4 (40-acre) NE 1/4 (160-acre)
4. Well Registration No. 55- 539229 (Required)
5. Permit No. N/A (If issued)

DESCRIPTION OF WELL

6. Total depth of hole 220 ft.
7. Type of casing Steel & PVC
8. Diameter and length of casing 6"stl in. from 0 to 21, 4.5"PVC in from 0 to 220.
9. Method of sealing at reduction points Adapter
10. Perforated from 180 to 220, from _____ to _____, from _____ to _____.
11. Size of cuts ¼"holes Number of cuts per foot 20
12. If screen was installed: Length N/A ft. Diam _____ in. Type _____
13. Method of construction Drilled
    (drilled, dug, driven, bored, jetted, etc)
14. Date started 5/24/93
    Month Day Year
15. Date completed 5/26/93
    Month Day Year
16. Depth to water 166 ft. (If flowing well, so state)
17. Describe point from which depth measurements were made, and give sea-level elevation if available
    Surface
18. If flowing well, state method of flow regulation: N/A
19. Remarks:

DO NOT WRITE IN THIS SPACE
OFFICE RECORD

Reg 55-539229
File A(11-10)23AAC
Rec
Ent ENTERED JUN 04 1993

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Well #55-539229

LOG OF WELL

Indicate depth at which water was first encountered, and the depth and thickness of water bearing beds. If water is artesian, indicate depth at which encounterd, and depth to which it rose in well.

From (feet)	To (feet)	Description of formation material
0	4	Topsoil & clay
4	75	Topeat sandstone
75	166	Granite
		Enc. water at 166ft.
166	195	Granite
		Enc. add. water at 195ft.
195	220	Granite

I hereby certify that this well was drilled by me (or under my supervision), and that each and all statements herein contained are true to the best of my knowledge and belief.

Driller Name: [illegible]

P.O. Box 499
Street

Payson, AZ 85547
City State Zip

Date 5/26/93

Pg. 1/2

ARIZONA DEPARTMENT OF WATER RESOURCES
15 South 15th Avenue
Phoenix, Arizona 85007

Registration No. 55-531101

File No. A (11-10)23AdC

7 1991

COMPLETION REPORT

1. Per A.R.S. § 45-600, the Completion Report is to be filed with the Department within 30 days after installation of pump equipment by the registered well owner.
2. Drawdown of the water level for a non-flowing well should be measured in feet after not less than 4 hours of continuous operation and while still in operation and for a flowing well the shut-in pressure should be measured in feet above the land or in pounds per square inch at the land surface.
3. The static groundwater level should be measured in feet from the land surface immediately prior to the well capacity test.
4. The tested pumping capacity of the well in gallons per minute for a non-flowing well should be determined by measuring the discharge of the pump after continuous operation for at least 4 hours and for a flowing well by measuring the natural flow at the land surface.

LOCATION OF THE WELL:

11 N/~~S~~	10 E/~~W~~	23	SW 1/4	SE 1/4	NE 1/4
Township	Range	Section	10-acre	40-acre	160-acre

EQUIPMENT INSTALLED:

Kind of pump: Submersible
Turbine, centrifugal, etc.

Kind of power: Electric
Electric, natural gas, gasoline, etc.

H.P. Rating of Motor: 3hp

Pumping Capacity: 18
Gallons per minute

Date pump installed: May 23, 1991

WELL TEST:

Test pumping capacity: 18
Gallons per minute

Date Well Tested: May 24 to May 28

Method of Discharge Measurement: Rockwell meter 1"
Weir, orifice, current meter, etc.

Static Groundwater Level: 154' ft. Drawdown: 380' ft.

Total Pumping Lift: 0 ft. Drawdown: _____ lbs.
(Flowing Well)

I HEREBY CERTIFY that the above statements are true to the best of my knowledge and belief.

September 16, 1991
Date

United Utilities
Print Well Owner's Name

Dean Shaffer Superintendent
Signature of Well Owner or Agent

PO Box 2890
Address

Payson Az. 85547
City State Zip

MICROFILMED

ENTERED SEP 19 1991

DWR-55-56-7/91 (Rev.)

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Pg. 2/2

STATE OF ARIZONA
DEPARTMENT OF WATER RESOURCES
15 South 15th Avenue
Phoenix, Arizona 85007

JUN 19 1991

WELL DRILLER REPORT

This report should be prepared by the driller in all detail and filed with the Department within 30 days following completion of the well.

1. Owner United Utilities
   Name
   P.O. Box 1586, Payson, AZ 85547
   Mailing Address

2. Driller Aero Drilling & Pumps, Inc.
   Name
   P.O. Box 499, Payson, AZ 85547
   Mailing Address

3. Location of well: T11N, R10E, Sec.23, SW¼, SE¼, NE¼.

4. Permit No. N/A
   (If issued)

DESCRIPTION OF WELL

5. Total depth of hole 400 ft.

6. Type of casing Steel & PVC

7. Diameter and length of casing 6"stl in. from 0 to 42, 4½"PVC in from 0 to 400.

8. Method of sealing at reduction points Adapter

9. Perforated from 200 to 220, from 360 to 400, from ____ to ____.

10. Size of cuts ¼" holes Number of cuts per foot 20

11. If screen was installed: Length N/A ft. Diam ____ in. Type ____

12. Method of construction Drilled
    drilled, dug, driven, bored, jetted, etc

13. Date started 5/16/91
    Month Day Year

14. Date completed 5/18/91
    Month Day Year

15. Depth to water 177 ft. (If flowing well, so state)

16. Describe point from which depth measurements were made, and give sea-level elevation if available Surface

17. If flowing well, state method of flow regulation: N/A

18. Remarks: Installed pump.

DO NOT WRITE IN THIS SPACE
OFFICE RECORD

REG. No. 55-531101

File No. A(11-10)23 ADC

Entered ENTERED JUN 20 1991 By

MICROFILMED

DWR-55-55-2/89

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Exhibit KMR-H

Brooke Utilities, Inc.
P. O. Box 82218 • Bakersfield, California 93380-2218
Customer Call Center - P.O. Box 9005 • San Dimas, California 91773-9016 • (800) 270-6084

RECEIVED
APR 2008
Town of Payson
Water Dept.

ROBERT T. HARDCASTLE
(661) 633-7526
Fax (781) 823-3070
RTH@brookeutilities.com

April 7, 2008

VIA ELECTRONIC MAIL
AND REGULAR U.S. MAIL

Buzz Walker
Town of Payson
303 North Beeline Highway
Payson, AZ 85541

2 copies @ 50¢ = $1.00

Re: ***Supplemental water Supplies from C.C. Cragin Reservoir***

Dear Buzz,

Thank you for your meeting time recently with myself and Ms. Brogdon on April 2 to discuss participating in supplemental water supplies for our various Payson Water Co. water systems from the Town of Payson's planned pipeline from the C.C. Cragin Reservoir.

Without reservation I can assure you that Brooke Utilities, Inc. and our various water company subsidiaries are interested in discussing our participation in the pipeline water supply project at an appropriate future date. Please keep us advised of your progress in this matter including any exploratory meetings that may be scheduled.

Thanks, as always, for your cooperation.

Sincerely,

Robert T. Hardcastle
President

cc: RTH correspondence file
Jay Shapiro, Esq.
MB

P4

EXHIBIT
KMR-5

Document # 151008

1/27/14

Kathleen M. Reidhead
14406 S. Cholla Canyon Dr.
Phoenix, AZ 85044
Telephone: 480-704-0261

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO: W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR AUTHORITY TO: (1) ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM; AND (2) ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	DOCKET NO: W-03514A-13-0142 **INTERVERNOR RESPONSE TO SUPPLEMENTAL REJOINDER TESTIMONY - PHASE 2**

Kathleen M. Reidhead, "KMR", is an Intervenor in the above-captioned matter. She resides part-time in the Community of Deer Creek Village, "DCV".

Payson Water Company, "PWC", has not filed a rate application in 13 years. It's ratepayers finally got their first glimpse at its books and management practices after the inaccurate public notice announcing the rate case was delivered late and in a mysteriously nondescript envelope[1]. KMR received her notice on September 20, 2013 and attended the Phase 1 Hearing on September 25, 2013, gave a Public Comment and the next day filed her Motion to Intervene. Seven people in total, from 6 of the 8 separate communities served by PWC filed a Motion to Intervene and were granted Intervenor status in the case. What they saw in that public notice and in the Company's numerous and lengthy filings was appalling. Amongst the filings, there was a 279 page original rate application, along with a 23 page financing application, plus a 19 page Motion/Request to consolidate the 2 cases, plus a 36 page Rebuttal

[1] See the Surrebuttal Testimony of Suzanne Nee, Document #151202, Page 1, lines 39-45 and Page 2, lines 1-27.

Testimony (Phase 1), a 60 page Miscellaneous Notice of Filing (Phase 1), a 173 page Rebuttal Testimony (Phase 2), a 147 page Rejoinder Testimony (Phase 2) and finally a 75 page Supplemental Rejoinder Testimony (Phase 2) filed by the Company. It seemed the goal of the Company's filings was to confuse and disarrange the ratepayers at every turn, as the ratemaking design changed 3 times over the course of this case, from Original Filing, at Phase 2 Rebuttal and again at Phase 2 Rejoinder Testimony, delivered only one week before the Phase 2 Hearing was initially scheduled to begin.

These ratepayers had already been disillusioned by many years of poor service from the Company, as attested to via some of their Public Comments, so they were not easily dissuaded from the challenge of sorting through the volume of filings. KMR undertook an exhaustive study of the filings in an effort to untangle the facts from the fiction. One thing that remained consistent throughout KMR's examination of the details is that the evidence did not support the story that PWC has told. Attached as Exhibit KMR-J is a listing of some of the imprudent, unreasonable, false and misleading actions that PWC has taken throughout the course of this rate case that caused a high level of suspicion and distrust by its ratepayers.

The 147-page Rejoinder Testimony was filed with significant changes to PWC's proposals thus far. It altered the ratemaking design in the 11th hour, showing that PWC was taking actions to "move the goalpost" at a very late stage of the case. It seemed the Company was determined to disturb and disarrange the Intervenors yet again. This shows a callous disregard for the people PWC serves, who have already suffered greatly with poor service over many years, as stated throughout the record.

A large payment the Company received from the condemnation sale of the Star Valley plant was adjusted off the books during the Test Year which altered the value of the Company's property and would certainly impact the setting of rates, and someone is responsible for that. The human being that formerly ran the Company was Mr. Robert Hardcastle. The human being that currently runs the Company is Mr. Jason Williamson. We do not know if there is any collusion between the two men, as KMR was not answered on her Discovery Questions relating to their relationship. She filed a Motion to Compel Discovery, yet answers were still not forthcoming. At any rate, Mr. Jason Williamson has adopted and is supporting the application that was originally submitted under Mr. Robert Hardcastle's testimony, which contains the evidence of that transaction.

In Supplemental Rejoinder Testimony, PWC states that KMR claims the Star Valley/Quail Valley system is an asset that is "missing"[2], but KMR clearly stated that the removal of the monetary asset gained as a result of the sale of the Star Valley/Quail Valley plant was the asset she was concerned about[3]. PWC adjusted their Income Statement to claim a monetary gain from the sale of the Star Valley plant as an increase and a decrease to the assets[4]. Manipulation of the books of PWC allowed the Company to paint a misleadingly dire picture of PWC's finances during the Test Year, showing PWC in a

[2] Per the Supplemental Rejoinder Testimony of Jason Williamson, Document #150824, at Page 2.

[3] Per the Surrebuttal Testimony of Kathleen M. Reidhead, Document #149903, Page 3, lines 38-41 and Page 4, lines 1-24.

[4] Per the Exhibit Schedule C-1 of Thomas Bourassa Testimony, Document #145511, Page 144/279 of the original rate application.

loss position, which would impact the setting of rates, as PWC would claim a desperate financial picture, justifying a large rate increase (to restore the Company to financial health) and necessitating expedited handling of the rate case. Expedited handling of the case might hinder scrutiny on the details contained within the lengthy filings. As stated in her Surrebuttal Testimony, KMR believes these actions are illegal, a violation of A.R.S. §40-426. KMR is not an attorney, however, and recognizes that other statutes may apply. Perhaps A.R.S. §44-1522, A.R.S. §44-1211, A.R.S. §44-1212, A.R.S. §44-1376.03 or others. It is certainly a violation of business and moral ethics, however, and even if no law was broken (theoretically), by taking the gain of $755,709 and distributing any portion of it to shareholders instead of using it to aid the renovation of some of the other aging and deteriorating water systems it serves, it denied the health of the Company and now asks the ratepayers to pay exorbitantly higher rates so that it can "regain" a sound financial condition. This, combined with other accounting irregularities[5] and misleading statements made, seems to show a pattern to deceive, which may rise to the level of predatory business practices and may be unlawful, as per A.R.S. §44-1522 or other statutes.

In the Company's latest filing, Supplemental Rejoinder Testimony, PWC provides ***SQV - Detail for Disposition Journal - Accounts & Balances Mapping***[6] that shows a recap of the journal entries, posting a credit of $755,708.53 to the account labeled "Gain on sale of disposition". A credit is a decrease to an asset account, so a debit (an increase) of $771,755.47 was posted to the Cash account, while a credit (a decrease) of $755,708.53 is shown labeled as "Gain on sale of disposition". Even the label is misleading, as a credit to an asset account is a decrease, not a "gain". But the important detail is that the monetary gain of $755,708.53 was removed from the Company's books. At the bottom right corner of this exhibit, Journal Entry 3321 is referenced, changing the original accounting entry and stating it as a "temporary posting". This adjustment is confusing, as it shows a posting of $515,055.39 as a credit to the account number 05.05.9030.01, which is shown on the bottom left side of the exhibit as "Gain on sale of disposition". This differs from the "Recap of the journal entries" shown on the left side of the page. This adjustment is being made at Supplemental Rejoinder Testimony, only after scrutiny has come to bear on the disposition of that monetary asset which resulted from the sale of the Star Valley/Quail Valley system. The original entry clearly shows the money going on and off the books[7]. The new JE 3321 entry appears to be an effort to confuse the matter.

Mr. Williamson claims the $755,709 was "used primarily to pay bills as well as to provide a dividend to the previous shareholder before we bought the stock".[8] Mr. Bourassa expands on this testimony to say, "Ultimately, the proceeds were used by PWC to pay its bills and provide a dividend to its previous shareholder. For example, the Company owed approximately $285,000 to BUI at the end of 2011. The proceeds also helped to pay 2012 operating expenses."[9] What they both fail to acknowledge is that the entire proceeds belonged to the Company and would have shown the Company's financial condition in a much better position if that money had remained. In private enterprise, a Company

[5] Per the Supplement to Pre-Filed Testimony of Suzanne Nee, Document #150692, at Page 1, lines 33-44 and Page 2, lines 1-23.
[6] Per Supplemental Rejoinder Testimony, Document #150824, at Page 74/75, Exhibit TJB-SRJ1 by Thomas Bourassa.
[7] Per Original Rate Application, Document #145511, Thomas Bourassa Schedule C-1 Page 1, line 39 (Page 144/279).
[8] Per the Supplemental Rejoinder Testimony of Jason Williamson, Document #150824 at Page 2, lines 17-18.
[9] Per the Supplemental Rejoinder Testimony of Thomas Bourassa, Document #150824 at Page 3, lines 11-14.

usually only pays dividends to shareholders if they have an operating profit or if the owner's equity is substantial. It is highly unusual that PWC paid a dividend to the former shareholder during a Test Year for rates, which substantially altered the Company's financial picture.

In her research of the case, KMR often wondered why the Company would engage in such an elaborate web of deceptions, until she found a study called ***Mogollon Rim Water Resources Management Study*** conducted by the U.S. Department of the Interior - Bureau of Reclamation at this link: usbr.gov/lc/phoenix/reports/mogollonrim/mrwrfr.html . The ***Report of Findings*** was published in April 2008, coincidentally the same month that Robert Hardcastle wrote a letter to Town of Payson asking to participate in discussions about obtaining water supplies from the Cragin Reservoir[10]. The study is related to the future demands of water for Payson and the surrounding area and how those needs can be served by the Cragin Reservoir, which is under the supervision of the Federal Government. KMR has put only a portion of this Study into evidence (58 pages) due to the size, attached as Exhibit KMR-K - the Report of Findings is 171 pages and the 12 appendices are several hundred additional pages. The included pages detail Brooke Utilities participation in this study. Brooke Utilities was the parent Company to PWC at the time. On page 17 of this Exhibit KMR-K is a map of the Study area. Six of the eight communities currently served by PWC are located within the Study area. The communities of Geronimo Estates, Whispering Pines and Mead Ranch are located within Sub-Region 1. The communities of East Verde Park, "EVP", Flowing Springs and Mesa del Caballo, "MdC", are located within Sub-Region 3. The communities of Gisela and DCV were not included in the study, as they are located approximately 15 miles south of the Payson area, in a different water basin (the Tonto Creek Water Basin, with abundant water resources, as previously established via Exhibit KMR-1)[11]. Pages 43-58 of the ***Report of Findings*** details the communities' existing conditions and current water use. MdC's conditions are detailed on page 56. The summary states, "The 7 wells yield a total of 45 to 50 gpm, enough capacity to supply 70 to 80 af/yr. The wells have apparently been operationally stable over the past 6 to 8 years, with only periodic water supply shortages." This data is considerably different than what PWC claims in their rate application, which shows a combined total yield of only 17.7 gpm from these 7 wells.[12]

3,500 acre feet per year of Cragin water is part of a water plan to serve the Upper Gila County area's growth through the year 2040. Town of Payson has agreed to use 3,000 acre feet per year, which leaves 500 acre feet of water available to other communities in the surrounding area. It seems clear that Robert Hardcastle had an interest in bringing some of that 500 acre feet of available Cragin water to a number of communities served by Brooke Utilities/Payson Water Company, possibly MdC, EVP and others. The problem is that he didn't state that interest to his ratepayers. MdC was not experiencing a chronic water deficiency problem, as far as the evidentiary record shows, at the time Robert Hardcastle wrote a letter to the Town of Payson in April 2008[13] expressing an interest in working with them to

[10] Per Exhibit KMR-H attached to Supplement to Pre-Filed Testimony submitted by Kathleen M. Reidhead on January 7, 2014, Document #150679.
[11] Per Surrebuttal Testimony of Kathleen M. Reidhead, Document #149903.
[12] Per Rate Application, Document #145511, Exhibit A, pages 41-45/279.
[13] Per Exhibit KMR-H attached to Supplement to Pre-Filed Testimony submitted by Kathleen M. Reidhead on January 7, 2014, Document #150679.

obtain supplemental water supplies from the Town of Payson's Cragin pipeline. That is backed up by Exhibit KMR-K, the ***Mogollon Rim Water Resources Management Study***, published in April 2008 that reports MdC had "stable wells with only periodic supply shortages" . Only 13 months later did water hauling exercises commence in MdC. Water hauling has continued for the last 5 summers in MdC , with great hardship caused to the people of MdC, as evidenced by Public Comment given. To date, PWC has entered no evidence in this rate case to support their claim that water hauling exercises were necessary or prudent. KMR has produced evidence of PWC's claims of low performance wells in MdC, which is contrary to those wells' tested capabilities[14]. No evidence is presented by PWC to explain why their wells are performing so poorly or what efforts PWC has made to investigate and correct that situation. Other wells have been drilled in MdC, 9 private wells in the last 3 years[15], and all of those successfully obtained water at depths ranging from 120 to 276 feet. The evidence shows Robert Hardcastle commenced water hauling exercises in MdC in Summer 2009[16]. On March 31, 2010 the Company filed an application for the emergency implementation of a water augmentation surcharge for it's MdC system. Robert Hardcastle met with customers in MdC on April 8 and 10, 2010[17] to inform the customers of what it would cost to haul water. 95 Residents of MdC signed a petition to support the Company's efforts to develop additional water supplies, but it should be noted that nowhere on that petition is Cragin water mentioned as a source of additional water supplies[18]. A water augmentation tariff for MdC went into effect on September 28, 2010 via ACC Decision 71902. By August of 2011, residents of MdC were desperately seeking a solution to alleviate their high summer water bills due to the high cost of water hauling. Robert Hardcastle met with MdC residents on August 25, 2011 to discuss various options[19] for alleviating their frustrations, amongst those options - the Cragin water option. An article from the Payson Roundup published on August 30, 2011[20] indicates that residents were being offered an opportunity to vote on which option they wanted. If a vote was taken, it has not been entered into evidence by PWC in this rate case. At the present time, the public opposition to the expensive Cragin pipeline project proposed by PWC has been loudly voiced by ratepayers from all of the 8 systems after receiving public notice of the Company's proposal in late September 2013.

It is reasonable to conclude that a small water Company, like PWC, would face obstacles gaining support from its ratepayers for a large rate increase tied to the high cost of Cragin water unless growth demanded it or a water shortage crisis existed.

The actual costs PWC has spent in the past for drilling wells in MdC was put into evidence by the Company[21], showing costs ranging from $6,505.83 to $8,309.66 each. It is objectionable, therefore, that

[14] Per Supplement to Pre-Filed Testimony submitted by Kathleen M. Reidhead on January 6, 2014, Document #150656 at Page 2, lines 12-15.
[15] Per Exhibit KMR-G attached to Supplement to Pre-Filed Testimony submitted by Kathleen M. Reidhead on January 7, 2014, Document #150656.
[16] Per ACC Decision 71902, Page 6, Document #118338 on Docket No. W-03514A-10-0116 & -0117
[17] Per ACC Decision 71902, Page 5, lines 20-22.
[18] Per Document #113908 filed on July 8, 2010 on Docket No. W-03514A-10-0116 & -0117.
[19] Per the Direct Testimony of Kathleen M. Reidhead, Document #149527, pages 9-12 of Exhibit A.
[20] Per the Direct Testimony of Kathleen M. Reidhead, Document #149527, pages 9-12 of Exhibit A.
[21] Per the Rebuttal Testimony of Jason Williamson, Document #150385, Exhibit JW-RB1.

PWC has spent between $52,000[22] to $88,000[23] per summer to haul water over these last 5 years to MdC and EVP when they could have drilled 6-10 new wells each year for a similar amount of money and/or added larger storage tanks. Any responsible Company would have done this simple cost/benefit analysis and acted prudently.

Steve Prihan stated in his public comments at the January 13, 2014 Hearing[24], "Gila County put up $4 Million to make sure the pipeline was adequate size in order to bring the water to outlying communities." Per attached Exhibit KMR-L found at this link: http://www.gilacountyaz.gov/government/clerk_of_the_board/Resolutions2008.php, the Gila County Board of Supervisors passed Resolution No. 08-09-01 on September 9, 2008, allocating up to $4 Million dollars for construction of a single pipeline to deliver Cragin Reservoir water to Payson and northern Gila County communities. This evidence shows that Gila County officials were supportive of the long term water plan and eager to assist. However, the Resolution clearly states that "Gila County wishes to ultimately recover costs of the upsized pipeline from the communities and water purveyors that will use the pipeline." This makes it clear that PWC would be obligated to pay back a share of this $4 Million dollar commitment from the County if/when they obtained legal authority to participate in the Cragin water. It is clear now that the Cragin water plan has been developing since 2008 and that the State of Arizona, SRP, Town of Payson and Gila County are supporting a longterm water plan for northern Gila County's future water needs, using Cragin Reservoir water. This long term water plan has not been clearly and forthrightly disclosed to the ratepayers by PWC, however. No effort has been made to inform the ratepayers of the benefits of the long term plan. Nowhere has PWC disclosed that their participation in the Cragin pipeline would obligate PWC to pay Gila County back for a portion of the $4 Million they put forward. Nor has there been any disclosure of the specific costs PWC would incur for that. Instead, it appears a complicated and devious effort has been made to conceal these and other details from the ratepayers. Only through the diligence of the Intervenors has this information been found and brought forth. Once again, this concealment of key information seems to show a pattern to deceive, which may rise to the level of predatory business practices and may be unlawful, as per A.R.S. §44-1522 or other statutes.

It's difficult to know exactly what the Company's devious plan entails, but it is clear that a devious plan exists. PWC should be investigated and held accountable for their actions. Mr. Shapiro misrepresented the facts of the matter to the Commissioners at the October 16, 2013 Open Meeting when he said (referring to PWC), "They're going to do everything they can to get water sooner and cheaper to the people of MdC"[25] "Cheaper" has been refuted in KMR's Surrebuttal Testimony, specifically Exhibit KMR-5, and the premise that MdC needs to "get water" is in question based on Exhibit KMR-G[26] and Exhibit KMR-K (attached). It seems clear now that the Company's goal was to

[22] Per the Rejoinder Testimony of Jason Williamson, Document #150671, page 14, lines 22-23.
[23] Per Rebuttal Testimony of Jason Williamson, Document #150385, Page 9, lines 17 & 18.
[24] Public Comment given by Steve Prihan of Elusive Acres on January 13, 2014 @ 29:37 - 32:51 of the video archive.
[25] Per the testimony of Jay Shapiro at the October 16, 2013 Open Meeting, 03:29:30 - 03:31:29 of the video archive.
[26] See the Supplement to Pre-Filed Testimony submitted by Kathleen M. Reidhead on January 7, 2014, Document #150679.

obtain access to Cragin water resources without being straightforward and honest with their ratepayers about the reasons and the costs.

PWC is now attempting to spread the cost of the TOP/MdC pipeline project onto all of its ratepayers[27], despite their claims to the contrary[28], even those ratepayers who will never benefit from one drop of water from the TOP/MdC pipeline or the Cragin Reservoir, like those in Deer Creek Village and Gisela. This goes against the assurances given by PWC to the Commissioners at the October 16, 2013 Open Meeting[29]. The Rejoinder Testimony of Thomas Bourassa shows the $275,000 added into the rate base[30] as the Net Utility Plant in Service (for Test Year ending December 31, 2012) is increased via an adjustment. This seems to be retroactive ratemaking, which KMR believes is a violation of the law. How can PWC place a pipeline in service in 2012 before it has yet been constructed in 2014? KMR believes this is a violation of A.R.S. §40-203. The Rejoinder Testimony rate design (H Schedules) shows conflicting information to this data, however, so it is difficult to state with any degree of certainty exactly what the Company is proposing, as the irregularities in the data supplied by PWC gives very little confidence in the integrity of their claims. These actions seem to show a pattern to deceive, which may rise to the level of predatory business practices and may be unlawful, as per A.R.S. §44-1522 or other statutes.

Whether the actions by PWC were intended to deceive or defraud the ratepayers remains uncertain, but KMR believes it warrants a criminal investigation. She asks the ACC to contact the Attorney General and to aid in an investigation, as per A.R.S. §40-421.

In the meanwhile, it seems reasonable to request the ACC order an inspection by an outside, independent, 3rd party entity of all the PWC-owned and Brooke Utilities-owned wells in MdC and EVP for pump test capacity verifications. Upon determination of the results of that examination, routine maintenance and repair be performed on any wells determined to be underperforming in order to bring them to peak operational condition. Likewise, the ACC could order a system monitoring exercise, similar to the one ordered for Geronimo Estates in 2005, referenced in ACC Decision #67747 and ACC Decision #68696. After one of those exercises, a final assessment of the well performance capabilities can be stated with certainty. Perhaps adding additional wells or additional storage tanks would alleviate the problems at a cost less than the $275,000 cost for the temporary TOP/MdC interconnect pipeline. Proactive and responsible action can, and should be taken as soon as possible to address the MdC and EVP system deficiencies.

The ratepayers and the ACC have ample reason to doubt the integrity of claims made by PWC, based on evidence of their conduct as established throughout this rate case. Therefore, KMR urges the ACC to order cost of service studies be conducted and approve a just and reasonable rate for each of the water systems served by PWC that is rooted in actual cost of service and actual hydro-geological data

[27] Per Rejoinder Testimony of Jason Williamson, Document #150671, at Page 3, lines 7-10.
[28] Per Rejoinder Testimony of Jason Williamson, Document #150671 , at Page 14, lines 6-8.
[29] Per Comments by Jay Shapiro at the October 16, 2013 Open Meeting, 03:39:40 - 03:40:02 of the video archive.
[30] Per Rejoinder Testimony of Thomas Bourassa, Document #150671, at Rate Base Schedules: Schedule B-2, Page 1 (Page 62/147).

relevant to their system(s). DCV and Gisela should be on a separate rate structure than the other 6 systems, as it has been shown that different hydro-geological conditions exist in the Tonto Creek Water Basin than in the Verde River Basin. The costs of the TOP-MdC Interconnect pipeline and/or any costs associated with Cragin Reservoir water should not be imposed on any of these rural communities until it can be shown to be necessary and prudent or the Company obtains genuine public support for it via transparent disclosure of the details. KMR also requests the ACC amend the Curtailment Tariff issued by Decision #67821 and remove DCV from that order.

For many years, Payson Water Company and its parent Company, Brooke Utilities, have hurt the people they serve. They planned to harm them further during the present rate case. While they state, "The approvals sought herein are compatible with the public interest and with the proper performance of PWC's duties as a public service Corporation"[31], their actions have been shown to be far from proper, as shown by Exhibit KMR-J. Their consolidation of rates proposal went so far as to attempt to hurt the people in the Tonto Creek Basin, where water resources are known to be abundant[32]. It appears that PWC has gone to great lengths to acquire access to Cragin water resources, for reasons that are still unclear. But whatever those reasons, the ratepayers of PWC deserve more ethical treatment from this Company in the future. This is a grave reminder that the societal and economic dangers of monopolies are very real, which is why it is necessary to regulate and monitor monopolistic businesses closely.

Respectfully submitted this 27th day of January, 2014.

By Kathleen M. Reidhead

Kathleen M. Reidhead, Intervenor
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ORIGINAL and thirteen (13) copies
of the foregoing were filed this 27th
day of January, 2014 with:

Docket Control
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

[31] Per the Direct Testimony of Robert Hardcastle, Document #145599, Page 4, lines 17-18.
[32] Per Surrebuttal Testimony of Kathleen M. Reidhead, Document #149903, at Page 2, lines 10-39 and Page 3, lines 1-16.

COPY of the foregoing was mailed
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EXHIBIT KMR-J

IMPRUDENT, UNREASONABLE, FALSE & MISLEADING PWC ACTIONS

1. **IMPRUDENT:** Consolidating, bifurcating and expediting the rate case, causing high levels of confusion and distrust amongst the ratepayers.[1]
2. **IMPRUDENT & MISLEADING:** Publishing a late and inaccurate public notice for the rate case.[2]
3. **IMPRUDENT:** Not informing the ratepayers from the other 7 systems outside of MdC about the MdC/Cragin project or of any other efforts taken to resolve claimed water deficiency issues in MdC prior to the public notice being delivered.
4. **IMPRUDENT:** $275,000 TOP/MdC pipeline project. The cost of this project will encumber MdC ratepayers with debt over 20 years and cost far more than the cost of water hauling likely would have cost each individual ratepayer, as shown on Exhibit KMR-5[3]. Later in the rate case, PWC placed the responsibility for this project onto all ratepayers (after repeated statements that only MdC ratepayers would pay for this project) by placing the $275,000 TOP/MdC Interconnect pipeline into the rate base as a Net Utility Plant in Service (for Test Year ending December 31, 2012)[4] even though the pipeline has not yet been constructed.
5. **FALSE:** Mr. Williamson states, "It is clear in the record that we are requesting that MDC pay any extra costs associated with financing, building and operating the TOP-MDC line"[5]. [The Phase 1 Decision #74175 called for a DSC of 1.2 or greater, which would have imposed higher rates for all ratepayers, since there was only one rate proposal for consolidation of all systems[6]. The ratemaking design was later changed (for the third time) during Rejoinder Testimony to eliminate the Phase 2 financing costs and now puts the Phase 1 TOP-MDC pipeline costs into rate base, meaning all ratepayers will indeed share those costs, if approved. Mr. Williamson contradicts his own statement in Rejoinder Testimony when he proposes including the cost of the TOP/MdC interconnection in the rate base and terminate the Phase 1 Surcharge.[7] This change is also reflected in Bourassa Rejoinder Schedule B-2, Page 1: Net Utility Plant in Service (for Test Year ending December 31, 2012) is increased from $826,561 to $1,100,886 via an adjustment, an increase of $274,325.[8]]
6. **MISLEADING:** Mr. Williamson states that "The majority has concluded that, as far as the *long term* solutions, the best means is build the TOP-MDC line and then, when completed, to connect to the Cragin pipeline."[9] [What he fails to acknowledge is that only the ratepayers in MdC were involved in the process and only 95 of them were in support of developing additional water supplies[10]. No mention of Cragin water was on that petition. None of the ratepayers from any of the other 7 systems outside of MdC were informed or offered any opportunity to weigh in on this Decision prior to the Public Notice issued, which they have clearly shown a strong opposition to since becoming aware of it. Hence, the group he cites does not qualify as a "majority".]

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[1] Per the Motion to Consolidate Proceedings and Request for Expedited Procedural Schedule, Document #147357, posted on August 15, 2013.
[2] Per the Notice of Filing, Document #149206, posted on October 30, 2013.
[3] Per the Surrebuttal Testimony of Kathleen M. Reidhead, Document #149903.
[4] Per Rejoinder Testimony of Thomas Bourassa, Document #150671 at Rate Base Schedules: Schedule B-2, Page 1 (Page 62/147).
[5] Per the Rejoinder Testimony of Jason Williamson, Document #150671 at page 14, lines 6-8.
[6] Per the Surrebuttal Testimony of Kathleen M. Reidhead, Document #149903 at page 7, lines 16-40 and page 8, lines 1-5.
[7] Per the Rejoinder Testimony of Jason Williamson, Document #150671 at page 3, lines 7-11.
[8] Per the Rejoinder Testimony of Thomas Bourassa, Document #150671 at Exhibit Rejoinder Schedule B-2, Page 1 (Page 62/147).
[9] Per the Rejoinder Testimony of Jason Williamson, Document #150671 at page 17, lines 8-10.
[10] Per ACC Decision No. 71902, Document #118338 on Docket #W-03514A-10-0116 & -0117, Petition is Document #113908 submitted on July 10, 2010.

7. **MISLEADING:** Stating that "Building the TOP/MdC Interconnection Pipeline as soon as possible is the best thing for the Company and its customers."[11] [This has been refuted by Exhibit KMR-5[12]]
8. **UNREASONABLE & MISLEADING:** Claiming that the TOP/MdC interconnect pipeline is still necessary to avoid water hauling charges[13] **after** PWC well performance data has been entered into evidence showing PWC wells underperforming, while no evidence has been presented to show any efforts to evaluate and/or improve the PWC wells in MdC has yet been attempted.
9. **MISLEADING**: PWC is now attempting to spread the cost of the TOP-MdC interconnect pipeline onto all of its ratepayers[14] despite their claims to the contrary[15], even those ratepayers who will never benefit from one drop of water from the TOP-MdC pipeline or Cragin Reservoir water, like those in Deer Creek Village and Gisela. These communities are approximately 20 miles away from the location of the pipeline and have abundant water resources underground.
10. **IMPRUDENT:** Spending "tens of thousands of extra dollars in expedited Commission proceedings"[16] to pursue an expensive solution ($1.2 M Cragin pipeline project) to a problem that has not been proven.
11. **IMPRUDENT:** Adjusting the Income Statement to claim a monetary gain from the sale of the Star Valley plant as an increase and a decrease to assets.[17] The removal of this asset from the Company altered the Test Year data, which significantly impacts the rate case. Later changing that accounting entry in the Supplemental Rejoinder Testimony to reflect different handling of that asset.[18]
12. **MISLEADING:** Stating that the Company is in very poor financial condition.[19] [The Company would not be in poor financial condition if a monetary asset of $755,709 from the sale of the Star Valley plant had not been removed during the Test Year and a large portion of it distributed to a Shareholder of Brooke Utilities.[20]]
13. **IMPRUDENT & MISLEADING:** Recording the accounting for all systems using only one accounting system and one chart of accounts. [This caused complicated adjustments to be made during the rate case, especially so due to the condemnation sale of the Star Valley/Quail Valley system. Further, late adjustments to accounting postings[21] and questionable reporting of Miscellaneous Expenses is noted.[22]]
14. **IMPRUDENT:** Not complying with ADEQ & ADWR regulations and reporting requirements.[23]
15. **UNREASONABLE:** Changing the rate design at Phase 2 Rebuttal Testimony via a 173 page document.
16. **UNREASONABLE:** Changing the rate design at Phase 2 Rejoinder Testimony via a 147 page document, at a very late stage of the rate case, presented one week before initially scheduled Hearing.
17. **MISLEADING & UNREASONABLE:** Mr. Williamson states that he does not agree that Deer Creek Village should be released from the Curtailment Tariff issued in 2005, Decision 67821, even though "it seems they have an

[11] Per the Responsive Testimony of Jason Williamson, Document #148449, Page 4, lines 22-25.
[12] Per the Surrebuttal Testimony of Kathleen M. Reidhead, Document #149903, Page 6, lines 4-16.
[13] Per Jay Shapiro at the Pre-Hearing Conference on 01/08/14, from 06:00-6:35 of the video archive.
[14] Per Rejoinder Testimony of Jason Williamson, Document #150671 at page 3, lines 7-10.
[15] Per Rejoinder Testimony of Jason Williamson, Document #150671 at page 14, lines 6-8.
[16] Per the Responsive Testimony of Jason Williamson, Document #148449, Page 4 lines 22-25.
[17] Per the Exhibit Schedule C-1 of Thomas Bourassa, Document #145511, Page 144/279 of original rate application.
[18] Per the Exhibit TJB-SRJ1 of Thomas Bourassa Supplemental Rejoinder Testimony, Document #150824, page 74/75.
[19] Per the Rejoinder Testimony of Jason Williamson, Document #150671 at page 5, lines 3-4.
[20] Per the Exhibit Schedule C-1 of Thomas Bourassa, Document #145511, Page 144/279 of original rate application
[21] See Supplemental Rejoinder Testimony, Document #150824 at Page 74/75, Exhibit TJB-SRJ1 by Thomas Bourassa.
[22] Per the Surrebuttal Testimony of Suzanne Nee, Document #151202, Page 1, lines 39-45 and Page 2, lines 1-27.
[23] Per the Direct Testimony of Jian Liu, Document #149555, Page 13.

ample water supply".[24] Abundant water resources are available in the underground aquifer that supplies DCV wells[25]. [He cites reasons that the Commission wanted all of PWC's systems subject to curtailment tariffs, showing no willingness to assist in correcting this injustice during the current proceedings.]

18. **UNREASONABLE:** Proposing conservation rates (a tiered commodity structure) on any of these rural communities. Each of these systems is an independent well system, not connected to any of the others. There is no evidence that water supply is deficient in any or all of these 8 systems and therefore, it cannot be shown that conservation is necessary or beneficial to anyone in these systems and therefore, conservation rates should not be imposed.
19. **UNREASONABLE:** Proposing consolidation of rates. Consolidation is discriminatory to ratepayers in Gisela and DCV due to the fact that these two communities have abundant and stable water resources, unlike some of the other communities served by PWC[26].
20. **FALSE:** Stating that the pipeline and any associated costs do not affect KMR "as she, herself, has recognized"[27] [The footnote points to Page 7 of KMR Surrebuttal Testimony, which in no way indicates that she has made any such statement.]
21. **MISLEADING:** Mr. Williamson states, "All of the systems are owned and operated by PWC and they are all located in the same general geographical area."[28] [This statement is made **after** it has been shown that Deer Creek Village and Gisela are physically located in the Tonto Creek Basin, with abundant water resources in underground storage, while the other 6 communities are physically located in the Verde River Basin, where different conditions may exist.[29] Furthermore, the great distance between some of these systems has been noted for the record. For example, Deer Creek Village is approximately 20 miles away from Mesa del Caballo.[30]]
22. **MISLEADING**: Mr. Bourassa states, "As far as I am aware, the missing plant invoices and the Star Valley/Quail Valley related CIAC are the only record keeping issues in the case."[31] [This statement is made after it has been shown that PWC's Miscellaneous Expenses are exceedingly high, per Sue Nee[32].]
23. **MISLEADING**: The ***SQV-Detail for Disposition Journal - Accounts and Balances Mapping***[33] shows misleading labels for the accounting entries detailing the disposition of the monetary asset received from the condemnation sale of the Star Valley/Quail Valley plant. This document also shows a change to the original Journal Entry 3321, stating the previous entry as a "temporary posting".
24. **MISLEADING**: Per Exhibit KMR-L and as stated by Steve Prihan in his public comments at the January 13, 2014 Hearing[34], "Gila County put up $4 Million to make sure the Cragin pipeline was adequate size in order to bring water to outlying communities." This evidence shows that Gila County officials were supportive of the long term water plan. Though it has been developing since 2008, nowhere has this long term water plan been

[24] Per the Rejoinder Testimony of Jason Williamson, Document #150671 at page 16, lines 5-6.
[25] Per the Surrebuttal Testimony of Kathleen M. Reidhead, Document #149903, Exhibit KMR-1.
[26] Per Surrebuttal Testimony of Kathleen M. Reidhead, Document #149903, Page 2-3 & Exhibit KMR-1.
[27] Per the Rejoinder Testimony of Jason Williamson, Document #150671 at page 15, lines 14-15.
[28] Per the Rejoinder Testimony of Jason Williamson, Document #150671 at page 13, lines 13-15.
[29] Per the Surrebuttal Testimony of Kathleen M. Reidhead, Document #149903 at pages 2-3.
[30] Per the Direct Testimony of Kathleen M. Reidhead, Document #149527 at page 2, lines 6-8.
[31] Per the Supplemental Rejoinder Testimony of Thomas Bourassa at page 4, lines 22-23 (Pg. 69/75) and page 5, lines 1-7 (Pg. 70/75).
[32] Per the Supplement to Pre-Filed Testimony of Suzanne Nee, Document #150692, at Page 1, lines 33-44 and Page 2, lines 1-23.
[33] Per the Supplemental Rejoinder Testimony by Thomas Bourassa, Document #150824 at page 74/75, Exhibit TJB-SRJ1.
[34] Public Comment given by Steve Prahin of Elusive Acres on January 13, 2014 @ 29:37 - 32:51 of the video archive.

clearly and forthrightly disclosed to the ratepayers by PWC. No effort has been made to inform the ratepayers of the benefits of the long term plan. Nowhere has it been disclosed that PWC's participation in the Cragin pipeline would obligate PWC to pay Gila County back for a portion of the $4 Million they put forward. Nor is there any disclosure of what the costs would be for that. Instead, a complicated and devious effort to hide those details has been made.

25. **IMPRUDENT**: PWC has shown costs spent for drilling wells in the past in MdC[35] ranging from $6,505.83 to $8,309.66 each. It is objectionable, therefore, that PWC has spent between $52,000[36] to $88,000[37] per summer to haul water over these last 5 years to MdC and EVP. PWC could have drilled 6-10 new wells each year for that amount of money and/or added additional larger storage tanks. Any responsible Company would have done this simple cost/benefit analysis and acted prudently.

[35] Per the Rebuttal Testimony of Jason Williamson, Document #150385, Exhibit JW-RB1.
[36] Per the Rejoinder Testimony of Jason Williamson, Document #150671, page 14, lines 22-23.
[37] Per Rebuttal Testimony of Jason Williamson, Document #150385, Page 9, lines 17 & 18.

EXHIBIT KMR-K

Mogollon Rim Water Resources

Management Study - Report of Findings

(58 pages of 171 pages)

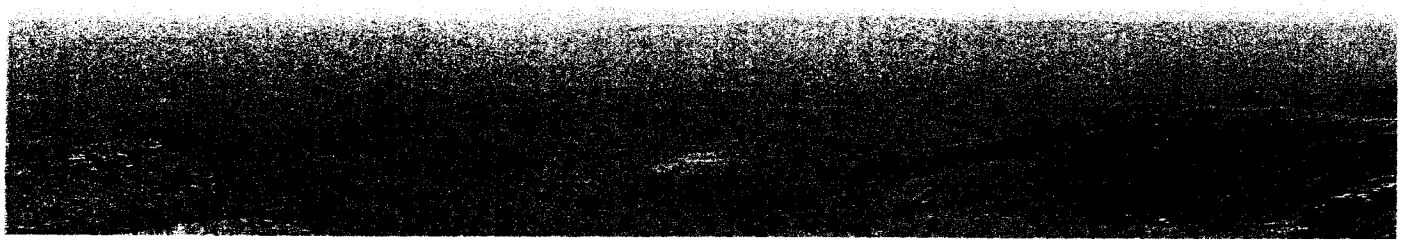
NOTE: Pages 30-37 and 59-171 are intentionally removed due to size considerations. This is a portion of the complete report, which can be found at: usbr.gov/lc/phoenix/reports/mogollonrim/mrwrfr.html

RECLAMATION

Managing Water in the West

Mogollon Rim Water Resources

Management Study Report of Findings



U.S. Department of the Interior
Bureau of Reclamation
Phoenix Area Office

April 2008

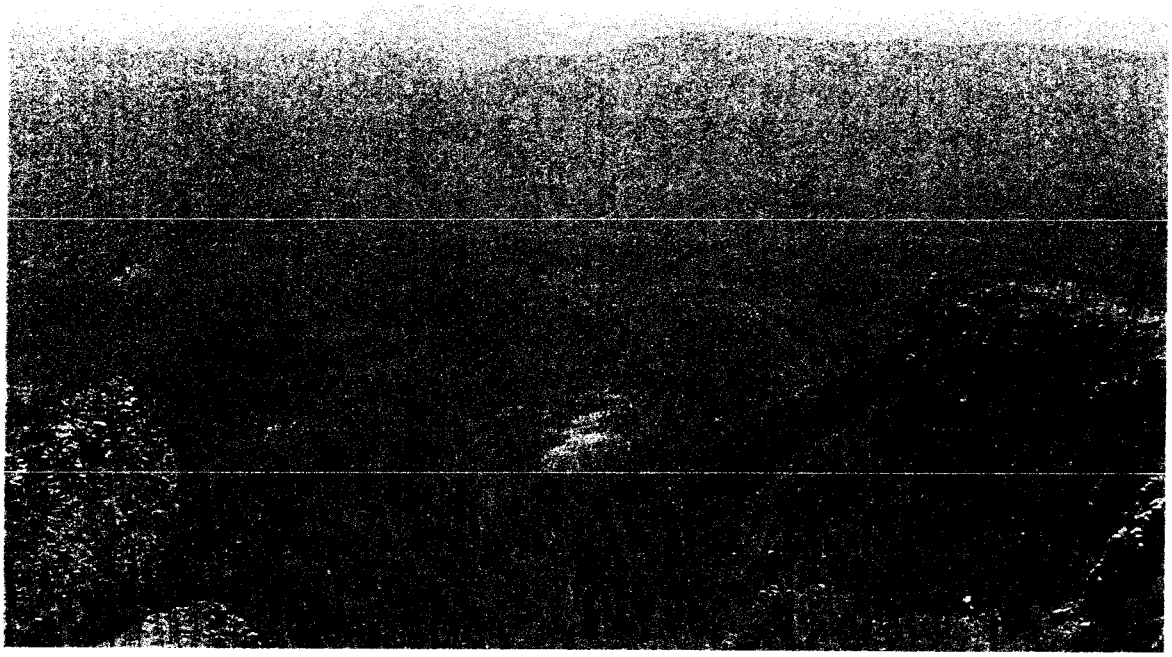
Mission Statements

The U.S. Department of the Interior protects America's natural resources and heritage, honors our cultures and tribal communities, and supplies the energy to power our future.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Mogollon Rim Water Resources

Management Study
Report of Findings



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April 2008

Mogollon Rim Water Resources Management Study Report of Findings

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Mogollon Rim Water Resources Management Study Report of Findings

Executive Summary

There are 44 communities located within the Mogollon Rim Water Resources Management Study (Study) area. The communities are comprised of Towns and unincorporated communities with water services from municipal systems, private water companies, domestic water improvement districts, cooperatives and homeowners associations. The population projected for build out in the Study area of Northern Gila County, AZ is more than triple the present population. Most communities are already experiencing chronic water shortages due to increased seasonal water use, drought conditions, and reliability issues. The primary goal of this study is develop regional alternatives with the potential of resolving the urgent and compelling need throughout the Study area for long term reliable water supplies.

Study Purpose

The Study is a regional effort intended to:

- Identify present population and water use within the Study area.
- Project future population and water demands to the year 2040.
- Determine if there is a need to supplement existing water resources to meet future needs.
- If additional water is needed, develop a comprehensive range of alternatives that will take full advantage of opportunities, as well as take into consideration any constraints, that are identified in the course of the Study.
- Evaluate the alternatives based on criteria developed by the Study stakeholders to determine if there is at least one alternative that can meet the identified water demands.
- If there is at least one alternative capable of meeting the identified water demands, determine whether there is a Federal interest in carrying that alternative forward to a feasibility study.

Study Team

The Study partners are the town of Payson, Gila County, and the Bureau of Reclamation. Gila County represents the unincorporated communities within the Study area. Other participating agencies include the Arizona Department of Water Resources, the U.S. Forest Service, the Salt River Project, the Tonto Apache Tribe, and Brooke Utilities (a private water company in the Study area).

Tasks Performed

A Demand Analysis was performed to establish present and future population and present and future water supply needs.

	Present (2002) Population	Present (2002) Demand (af/yr)	Future (2040) Population	Future (2040) Demand (af/yr)
Town of Payson	14,500	1,805	40,000	5,350
Pine and Strawberry	3,043	298	14,487	1,947
Town of Star Valley	1,774	105	3,785	509
Other Gila County Communities	3,062	401	11,320	1,524
Total	22,379	2,609	69,592	9,330

Projected demands were compared to available resources to estimate projected unmet demands. Because of the volatility of available supplies due to persistent drought conditions, extreme seasonal water use, and unreliability of developed groundwater sources, alternatives were developed to meet all of the projected future water supply needs. The two main sources of supply for the alternatives are groundwater and surface water.

Groundwater is the most relied up source of water in the Study area. And due to the unreliability of the fractured granite shallow aquifer currently used for water supply, the study partners recognized the need to collect more refined data pertaining to the location and movement of water throughout both the shallow and deep aquifer systems in the Study area. Therefore, a Hydrogeologic Framework was developed for the study. The Hydrogeologic Framework provides a conceptual groundwater model aimed at identifying areas of high potential development of reliable groundwater sources.

The passage of the 2004 Arizona Water Rights Settlement Act resulted in allocation of 3,500 ac/ft of annual surface water supply from C.C. Cragin reservoir to northern Gila County. The Act designates 3,000 ac/ft annually for the Town of Payson and 500 ac/ft annually for other northern Gila County communities. Additional C.C. Cragin water supply may be available to the Tonto Apache Tribe and the Pine Water Company by exchange with the Salt River Project for valid CAP allocations. The availability of this renewable surface water source to the communities within the Study area is a key component to solving the long term supply and reliability issues in the region.

Six groundwater alternatives, nine surface water alternatives, one effluent alternative, and three water resource and operational management alternatives were formulated, analyzed and evaluated in the study process. There is either one alternative or a combination of alternatives that can meet the water supply needs of each of the communities in the Study area.

There are many issues with respect to a Federal interest for any of the alternatives. These would include, but not be limited to the following:

- Recognition and respect for Federal landownership and management programs.
- Honoring of existing National Forest's plans.
- Existing Federal environmental programs.
- Contractual and other administrative relationships between Reclamation, and the two Arizona Federal water projects (CAP and SRP).
- Arizona Water Settlement Act of 2004 – Implementation of Indian water settlements
- Anticipated environmental disturbance to Federal lands caused by construction.
- Potential opportunities to improve public use of Federal lands for recreation and other reasonable public access purposes.
- Archeological and ecological locations to identify, protect, and mitigate on Federal lands.
- Potential for entry into Tonto National Forest for purposes of groundwater development.

Conclusions

- There is a need for up to 9,330 af/yr to supplement existing water resources in the Study area.
- There are groundwater (local and regional), surface water (regional, including CAP exchange options) and combinations of both alternatives that will meet the water demands for all of the communities in the Study area.
- Of the nineteen alternatives developed for this study two groundwater and four surface water alternatives were deemed to be viable and are, therefore, recommended for futher feasibility level study.

- Implementing a project which would beneficial use the 3,500 acre-feet of water from the C.C. Cragin Reservoir which was allocated to the Town of Payson and Northern Gila County by the 2004 Arizona Water Rights Settlement Act would be the most effective method of meeting the future water demands of the majority of the citizens living in the Study area.

- There are Federal interests that are vital to a regional plan that justify Reclamation's future involvement in a feasibility study of the viable alternatives.

I. Introduction

I.A Background

The Mogollon Rim Water Resources Management Study (Study) has been conducted to provide a regional assessment of current water supplies and identify potential alternatives for providing adequate water to Arizona communities located in the northwesterly corner of Gila County (see Figure I-1).

The geographic area of focus for this Study is located entirely within northern Gila County, about 100 miles north of the Phoenix metropolitan area, Arizona (see Figure I-2). Gila County is a relatively small county in terms of population (53,000) but quite large in terms of land mass (4,796 square miles). Approximately 96 percent of the County consists of national forests, state, Federal, and tribal lands, leaving only 3.7 percent private lands. One-half of the private land consists of mining properties. The historical county seat (Globe), a major copper producing area, was at one time the Capital of the Arizona Territory, prior to statehood. The Study area (see Figure I-1) is bordered to the west by the Gila County boundary and to the north again by the Gila County boundary along the Mogollon Rim, about 15 miles north of Payson, Arizona. The Mogollon Rim, an escarpment, extends over 100 miles and defines the southern edge of the Colorado Plateau. The eastern boundary of the Study area is Christopher Creek and Tonto Creek; and the southern boundary is about 4 miles south of Payson, at or near Latitude N 34°09. The Study area encompasses approximately 632 square miles, all of which are located within the Tonto National Forest. The main sources of surface water in the Study area are the East Verde River, a tributary to the Verde River, and Tonto Creek, a tributary to the Salt River.

The Study partners include the Bureau of Reclamation (Reclamation), Gila County (County), and the Town of Payson (Payson). The County represents the unincorporated communities within the Study area, including water improvement districts. Payson represents its citizens, which make up about 68 percent of the total population within the Study area; its town limits occupy about 1 percent of the land mass of the Study area.

Other agencies participating in the Study include: United States Forest Service (FS), both Coconino National Forest (CNF) and Tonto National Forest (TNF); Arizona Department of Water Resources (ADWR); Salt River Project (SRP) - a major supplier of water to the Phoenix metropolitan area; and regulated water utilities in the Study area (mainly Brooke Utilities, Inc.). The Tonto Apache Tribe, the only Native American community within the Study area, has formally requested not to be included as a participant in the Study.

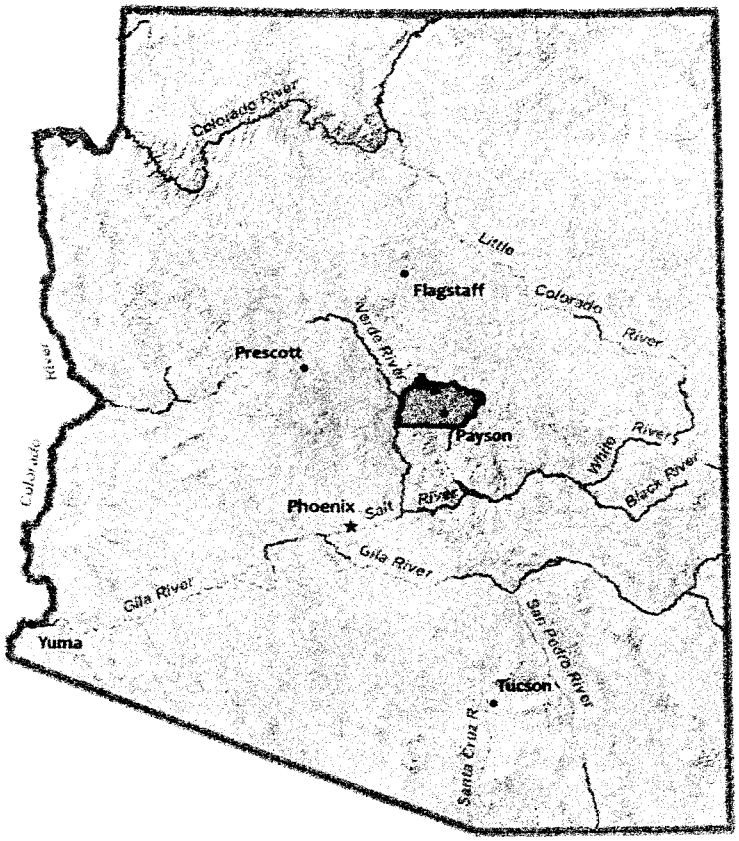

Figure I-1. – General Vicinity Map

I.B Need for and Purpose of the Study

I.B.1 Need for the Study

In the past, water providers and users within the Study area have sought to develop their own water supplies. While most area water resources have been managed with diligence within the Study area, especially in Payson, the ability to meet existing water demands with the available water supply has been seriously compromised by the current drought, in its 10th year as of 2007. The existing developed water resources are inadequate to reliably support future water supply needs of the Study partners.

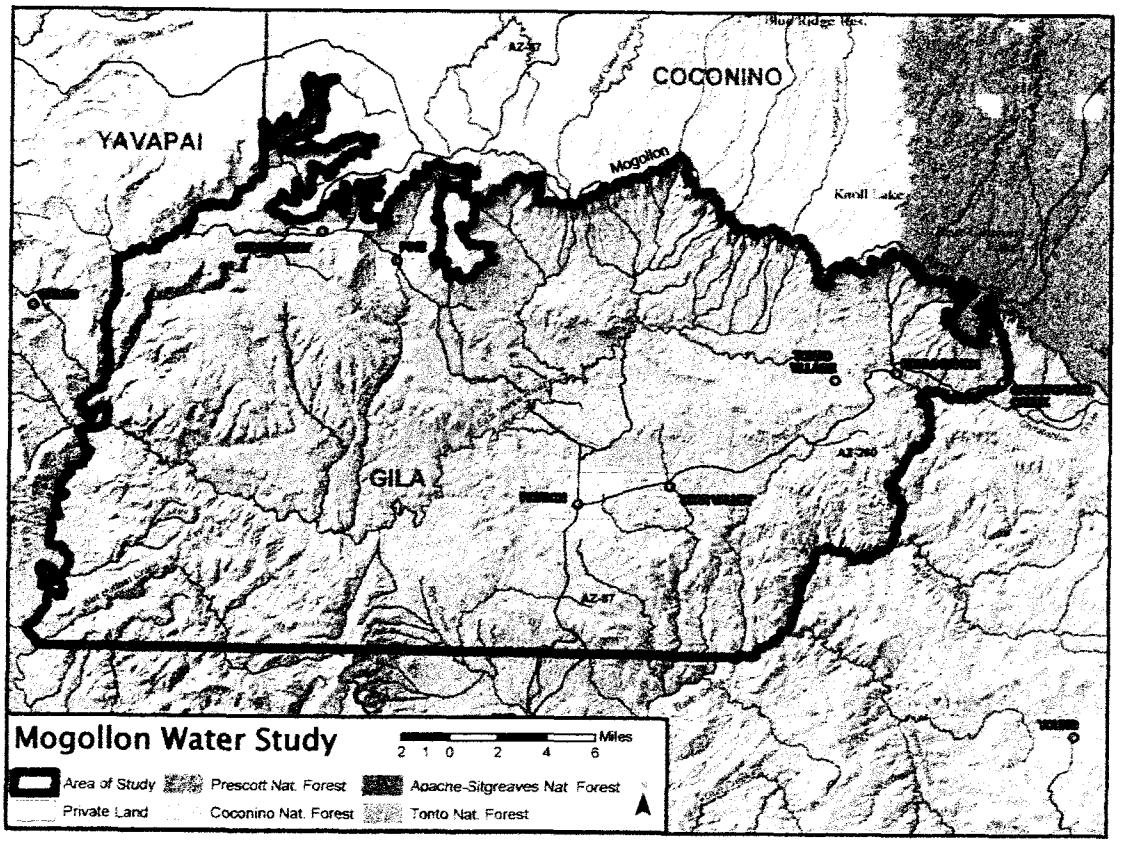

Figure I-2. – Map of the Study area

The Study area's conflict between its growing population and diminishing water supply availability and/or poor reliability has posed significant water resource management problems for the water service providers within the Study area. Almost all of the communities in the Study area are experiencing one or more of the following:

- Water shortages for daily needs;
- Exhausting existing supplies during periods of drought;
- Placing residents under severe water use restrictions; and
- Experiencing inadequate water supplies to sustain the increased growth in the area.

Over the last few years, the Study partners have found it neither possible nor practicable to develop water supply projects independent of each other, and they are concerned about developing and/or maintaining sustainable and renewable water supplies for their communities over the next 35 years. The Study partners are seeking to develop suitable regional alternatives that will allow each partner to contribute both its energies and resources in developing a regional solution to solve their individual water supply needs.

In addition to entities that are a formal part of the Study, there are numerous other water providers and users which could either be directly or indirectly impacted by any proposed regional solution. These entities are located throughout the Study area and include private water companies, rural subdivisions, home owner associations (HOAs), domestic water improvement districts (DWIDs), and private well owners (see section III.A, Types of Water Supply Providers).

As discussed in more detail later in this Study, the projected water demand for the growing population in the Study area is estimated to exceed 10,000 acre-feet per year (af/yr) by 2040, compared to an existing supply and conservation-driven demand of 2,600 af/yr. Nearly all the water currently provided in the Study area comes from shallow well fields that are either fully developed or annually exhausted, many of which may be at risk of contamination due to proximity to local septic systems.

I.B.2 Purpose of the Study

The purpose of the Study is to identify and describe the long-term water supply and demand issues for the communities within the Study area.

The Study expects to accomplish the following:

- Identify present population and water use within the Study area.
- Project future population and water demands to the year 2040.
- Determine if there is a need to supplement existing water resources to meet future needs.
- If additional water is needed, develop a comprehensive range of alternatives that will take full advantage of opportunities, as well as take into consideration any constraints, that are identified in the course of the Study.
- Evaluate the alternatives based on criteria developed by the Study stakeholders to determine if there is at least one alternative that can meet the identified water demands.
- If there is at least one alternative capable of meeting the identified water demands, determine whether there is a Federal interest in carrying that alternative forward to a feasibility study.

An overall objective of the Study is to supply sound technical information (including regional groundwater mapping) that can be used by all of the Study

participants and other Study area communities to assist in locating and developing water supplies.

The planning period for the Study is 2005 to 2040. The base data were collected as of the 2002 calendar period. For purposes of this Study it is assumed that "build-out" of all Study area communities will occur by the year 2040. Such build-out projections are anticipated because of the tremendous growth trends expected to occur in the Phoenix area, with many of its residents seeking summer or second homes in the Study area, and in-migration of retirees moving full-time to the Rim County from many states.

I.C Roles of the Study Participants

The Partners, participating agencies, and other water providers in the Study area (not represented by the County) each share a common goal in the development and use of adequate, reliable, renewable, and sustainable water resources for the Mogollon Rim area, and in the preservation and protection of historic water rights. Following is a brief description of the roles and responsibilities of each participant.

I.C.1 Study Partners

Bureau of Reclamation
Reclamation is a Federal agency within the United States Department of the Interior, and is charged with developing and assisting in the development of water resources in the western United States. Besides Reclamation's ownership of dams, canals, and other water resource assets, such as C.C. Cragin Dam and Reservoir (formerly known as Blue Ridge Dam and Reservoir), Reclamation's responsibilities in the Study include funding and coordinating the Study, supplying and analyzing data, and ensuring Federal interests in the Study area are protected and/or addressed.

Gila Country
Gila County represents the interests of the unincorporated communities in the Study area, including facilitating and coordinating their involvement in the Study. The County assisted in the collection of population and water use data from all communities outside of Payson. Additionally, it assisted in the development and analysis of alternative solutions that would help give unincorporated areas access to adequate, sustainable, and renewable supplies of water through the year of 2040 and beyond.

Town of Payson
Payson represents the interest of the town of Payson. Payson provided leadership and political support to locate new water resources for the region. It also provided extensive direction to the Study's Technical Committee; supplied contacts and vendors to assist with consulting and engineering support required

during the Study; and shared existing data and information related to prior regional groundwater mapping and modeling efforts.

I.C.2 Other Participating Agencies

FS, Tonto National Forest
All communities within the Study area are entirely surrounded by the TNF. The TNF has management responsibility over all lands within the TNF, and must ensure any proposed activity that would require a FS permit is consistent with the Forest Plan.

FS, Coconino National Forest
The CNF lies in north-central Arizona. The existing facilities associated with C. C. Cragin Dam[1] are located within the CNF, with the exception of the pipeline on the downslope face of the Mogollon Rim that pumps water from the reservoir to the Verde River, and the hydroelectric generation plant that supplies the primary energy to operate the C.C. Cragin pumping plant. Similar to the TNF, the CNF has management responsibility over all lands within the CNF, and must ensure any proposed activity that would require a FS permit is consistent with the Forest Plan.

Salt River Project
SRP holds most of the water rights to flows of the East Verde River and Tonto Creek, which are stored in reservoirs on both the Verde and Salt rivers. This includes nearly all of the surface water runoff from the Study area.[2] This water is ultimately delivered to and used in the Phoenix metropolitan area. SRP participated in data collection and alternatives development related to this Study.

Arizona Department of Water Resources
ADWR provided guidance to all parties involved in the Study related to Arizona water law, which basically provides for title to all natural groundwater to be vested in the state of Arizona, but makes it available to landowners under which the water lies, for reasonable use at no charge. ADWR also coordinated and shared statistics and technical data related to water development efforts and uses

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[1] Note: C.C. Cragin Dam and Reservoir, and much of its associated transmission system, are located outside the Study area, within the boundaries of the CNF. In addition, a portion of the large regional groundwater aquifer, C aquifer, underlies and is adjacent to the Reservoir. Typically, most of the water captured by the Reservoir is pumped south, over the Mogollon Rim into the East Verde River. In the future it is anticipated that a portion of the diversion may be diverted into a proposed water transmission pipeline to Payson and possibly to other communities. A majority of the water is expected to continue its flow down the river and enter the Salt River Project's reservoir system (subject to SRP requirements and operational needs). While the CNF was not created to protect the watershed for the SRP, it still is required to protect the watershed on behalf of all citizens of the United States.

[2] A limited amount of surface water is used by smaller communities in the Study area that have established water claims pursuant to Arizona's Surface Water Code (see Table II.6, Surface Water Claims on the East Verde River (1984)).

within the Study area. It also provided input related to alternative solutions that may solve water resource problems within the Mogollon Rim area of Arizona.

Water Service Providers and Domestic Water Improvement Districts
Many of the water service providers and domestic water improvement districts within the Study area provided statistical and technical data, as well as considerations and feedback regarding alternatives that may provide solutions to water supply issues they face on a day-to-day basis.

I.D. Development and Use of Technical Data

Hydrologic and geologic data and information are exceptionally lacking for the Study area. Conducting an appraisal-level study using only currently available data would have resulted in a report that provided little more than what is already known about the Study area. Therefore, several key investigations were identified and undertaken as preliminary steps in conducting this Study. These were considered to be essential to identify viable alternatives for meeting the Study area's future water supply needs. These investigations included the following:

- "Hydrogeologic Framework and Review of Alternative Water Solutions for the Mogollon Rim Water Resources Management Study area" by HydroSystems, Inc., April 2008 (Attachment 1);
- "Geology and Structural Controls of Groundwater, Mogollon Rim Water Resources Management Study" by Gaeaorama, Inc., July 2006 (Attachment 1A);
- "Evaluation of the Source Water Chemistry from the Major Springs and Select Wells in the Mogollon Rim Water Resources Management Study area" by HydroSystems, Inc., February 2006 (Attachment 1B); and
- "Report on an Isotope Study of Groundwater from the Mogollon Highlands Area and Adjacent Mogollon Rim, Gila County, Arizona" by Chris Eastoe, Ph.D., University of Arizona, October 2007 (Attachment 1C).

The results of these studies were extremely helpful in substantiating previously held assumptions and hypotheses regarding groundwater conditions within the Study area.

The Study does not evaluate (in depth) issues of local distribution system infrastructure, wastewater treatment systems, sewerage collection systems, or other operational management tools available to system operators, that are not part of the transmission system bringing water from water supply sources to the water service provider's service area. While these issues are mentioned in the discussion of alternatives, each of these elements require additional study, both technically and economically, so that each interested entity or group can evaluate

and assess the total cost of acquiring and using any water source described in this Study.

II. Current Conditions of the Study area

This section includes a brief discussion about the climate, topography, geology, surface water hydrology, and hydrogeology of the Study area, as background information for the discussion concerning the communities within the Study area, their current water supplies, projected water needs, and potential future water resources. Other areas such as environmental, socioeconomic, legal, and institutional considerations and constraints also are briefly addressed, as appropriate.

II.A Climate

Precipitation in the Study area is seasonal; during the winter, storms associated with frontal systems bringing moisture from the Pacific Ocean travel from west to east, generally from late October through April. Precipitation often occurs as rain at the lower elevations near Payson and as snow at higher elevations along the Mogollon Rim, and on the Plateau. Winter storms have been the cause of many of the major floods in this area, particularly when warm rain falls on snow. The highest runoff during the year commonly occurs in March and April as a result of snowmelt. High flows are less common in May and early June, between the winter and summer storm seasons, than during any other part of the year. The second precipitation season is during the summer when moist tropical air sweeps in from the south. Precipitation at this time of year often occurs as short-duration, locally intense thunderstorms that are common from late June through early October and often cause local flash flooding.

Annual precipitation ranges from 18 to 26 inches near the Rim and in the Plateau uplands, with the highest values occurring along the Rim. National Weather Service records indicate Payson receives approximately 22 inches of precipitation a year, at an elevation of 4,900 feet above mean sea level (amsl).

II.B Topography

The Study area is located within both the Verde River and Salt River watersheds, and contains mid-elevation mountain ranges and valleys. Areas of higher elevation exist along the north-central boundary of the Study area. Vegetation includes semi-desert grasslands, Sonoran desert scrub, chaparral, highland, and woodland conifer forests (ADWR 2007). Most of the Study area is comprised of scrub oak, juniper, and conifer forest-type cover.

The elevation within the Study area ranges from more than 7,500 feet amsl at the top of the Mogollon Rim, to about 4,500 feet amsl at Fossil Springs, and 3,400 feet amsl at the Study boundary intersecting Tonto Creek. In most portions of the Study area, the cliffs and hills are thickly forested. The most prominent topographic feature in the Study area is the Mogollon Rim, which forms the

boundary between the Colorado Plateau uplands province to the north and the Central Highlands province to the south. It is a steeply sloping cliff that rises from 1,000 to 2,000 feet above Payson to altitudes of 5,500 to 7,500 feet amsl at its upper edge. Topography along the Rim area is notably rugged, with steep cliffs and hills. The topography south of the Mogollon Rim also is rugged, but with less topographic relief. Slopes are generally north-to-south from the Rim, and range from flat in valley sections to nearly vertical at the Rim.

II.C Geology

The Study area is geologically and structurally complex, with a full range of sedimentary, igneous, and metamorphic rock formations, coupled with a high degree of structural discontinuity. Geological formations exposed at the surface range from Precambrian crystalline and metamorphic basement rocks in the south, to a suite of Paleozoic limestone, shale, and siltstones toward the north. The cross-section in Figure II-1, below, represents a generalized view of the geology and associated aquifers across the Study area, from top to bottom and north to south (as left to right).

Geologic structures, mainly faults, of three distinct ages are present in the Study area: Proterozoic, Laramide, and Tertiary structures. There are numerous Proterozoic and Tertiary faults; however, very few Laramide faults and monoclines are evident and are mentioned only incidentally in this Report.

The Proterozoic faults are about 1.65 million years old. They trend north to northeast, and tend to be located in the southerly parts of the Study area. Hydrothermal solutions moving along the faults in both Proterozoic and Tertiary times extensively cemented these faults, largely with silica; thus, to a large extent they are sealed. They have little porosity and permeability and generally do not provide much passageway for groundwater movement. There has been, however, re-activation on several Proterozoic faults, likely of the Tertiary age. This can result in creation of open space in fault breccia, which result in formation of fractured bedrock aquifers.

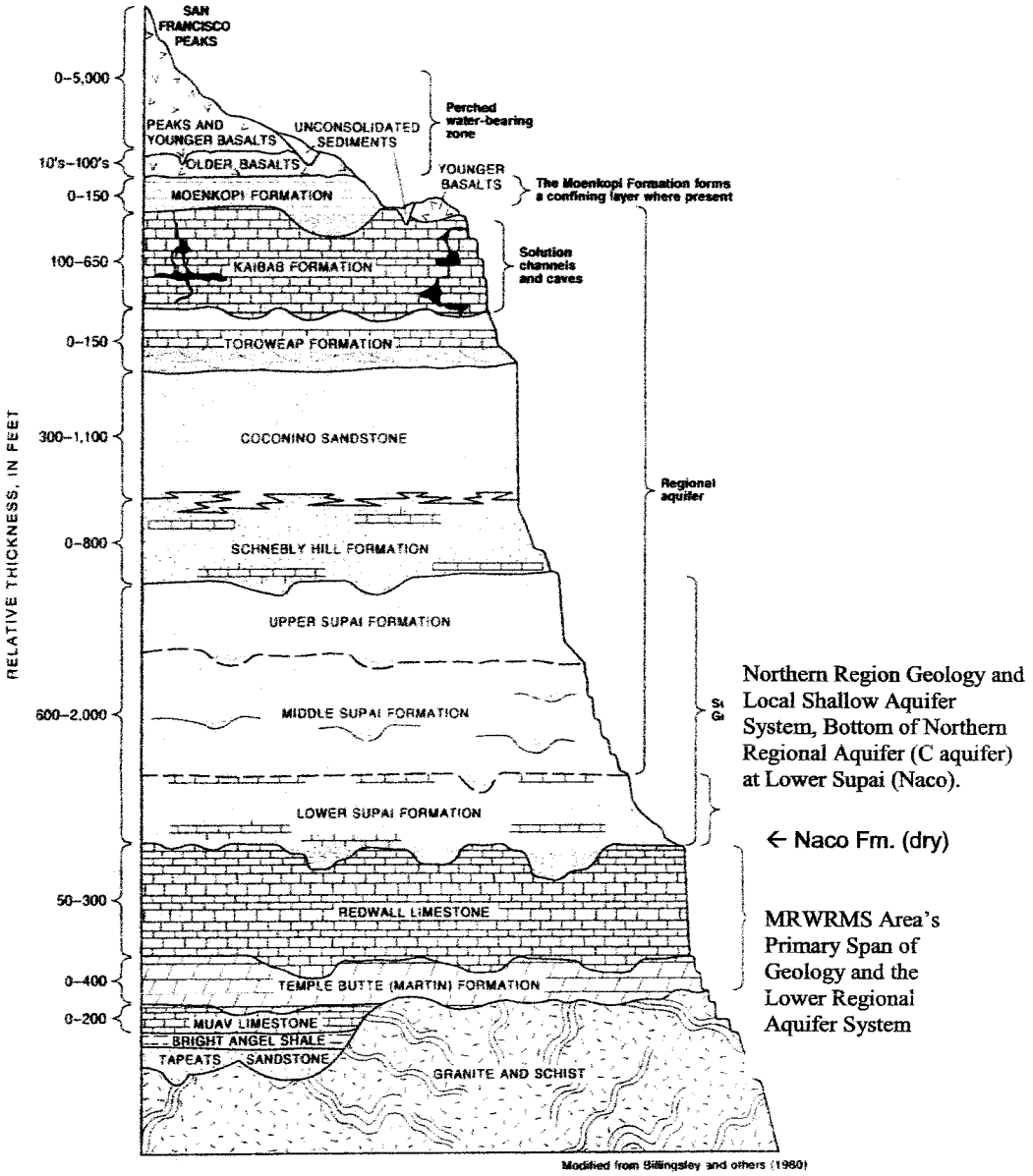

Figure 11. Generalized stratigraphic section of rock units, Flagstaff, Arizona.

24 Hydrogeology of the Regional Aquifer near Flagstaff, Arizona, 1994–97

Figure II-1. – Composite, Generalized Stratigraphic Section for the Study area.

Note: Modified from Figure 11 of USGS Doc. 00-4122, Bills and Others

There are three fundamental Tertiary fault systems: an east- to northeast-trending system; a north-trending system; and one that is generally northwest-trending but has locally north-trending faults. These systems likely developed under tensional tectonic conditions ("pull-apart faults") resulting, at least locally, in areas of broken ground and open spaces. Pull-apart faults are ideal for secondary porosity and secondary permeability, which means there is enhanced porosity and permeability beyond what is provided in normal pore space between grains in sandstones and between crystals in limestones. This is important for development of high production wells.

Not all Tertiary faults result in enhanced permeability and porosity, however. Some may have little or no permeability and porosity due to veins that have filled the fault, or the presence of soft rocks such as shales, shaly and silty sandstones. Some faults can have compressional characteristics that yield minimal open space, while chemical decomposition of fault wallrock may also result in impermeable fault zones. For example, basalt, which is common in the Study area, would readily form clay and calcite.

Overall, areas where younger fault systems intersect older faults systems are found to exhibit higher degrees of both weathering and fracturing, which relates to correspondingly higher well yields.

The Study area, being at the northern boundary of the basin and range province, is commonly referred to as the "Central Arizona Geologic Transition Zone." With minor exceptions, there is a noticeable lack of major young alluvial filled basins that form traditional aquifers in other locations within the basin and range province, such as Phoenix and Tucson. Because of the "broken" nature of the geology immediately south of the Mogollon Rim, there are no regionally extensive and hydrologically confining units present in the Study area. However, the complex relationship of faults and fracture systems and localized presence of isolated confining units do occasionally result in confined to semi-confined aquifer conditions. In addition, a wide range of fractured bedrock geologies in the region host both locally relevant and regionally extensive fractured aquifer systems.

Because of the diversity and complexity of the region's hydrogeology, the "Hydrogeologic Framework and Review of Alternative Water Solutions for the Mogollon Rim Water Resources Management Study area" (Attachment 1; HydroSystems 2008) divided the Study area into four Sub-Regions, based upon hydrogeologic characteristics and complexities. This Study has adopted this approach and utilizes the same sub-basin geographic boundaries in discussing the various communities and water providers within the Study area (Figure II-2).

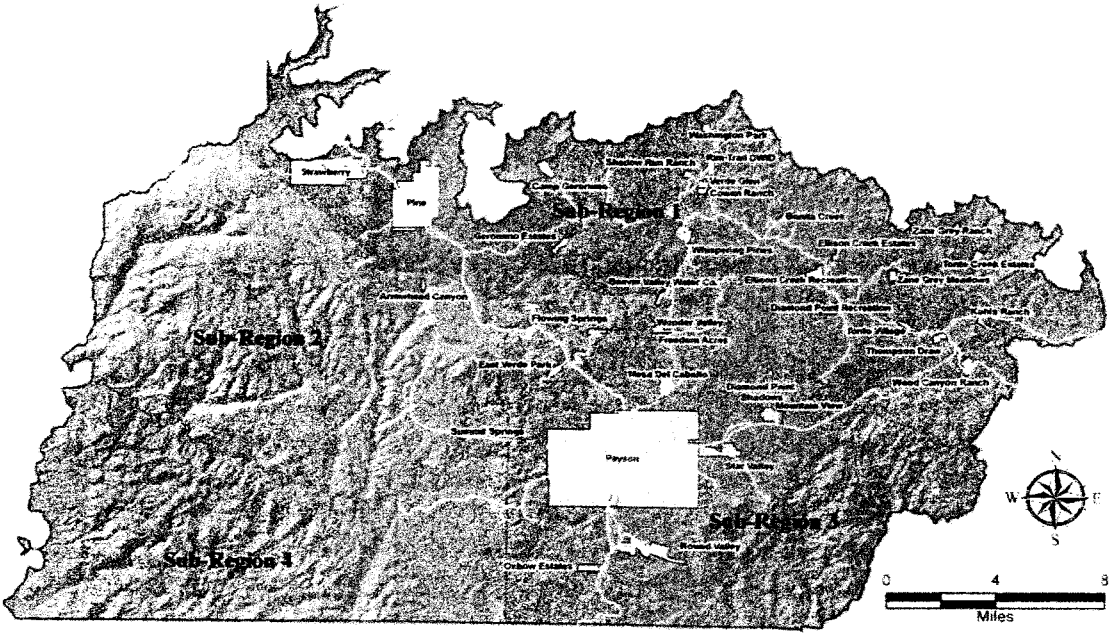

Figure II-2. – Four Sub-Regions within the Study area (HydroSystems 2008)

II.C.1 Geologic Sub-Region 1

- Geronimo Estates
- Whispering Pines
- Mead Ranch

Sub-Region 1 encompasses the area south of the Mogollon Rim (along the southern perimeter of the Colorado Plateau) and north of the Diamond Rim Fault. North of the Diamond Rim fault, the Study area consists of increasingly thicker deposits of Paleozoic strata, and it is ultimately dominated in the north by the Permian formations of the Upper Supai and Coconino Sandstone, which cap the Mogollon Rim. At the base of the Supai group, the Naco Formation is considered to be a locally confining sequence of alternating shale and limestone layers, which eventually pinches out a number of miles north of the Study area, beneath the Colorado Plateau. Faults in this Sub-Region are small but numerous enough to locally create aquifers. They ultimately circumvent the confining ability of the Naco Formation, and result in groundwater draining from the C aquifer down into the limestone, dolomite, sandstone, and eventually the Precambrian basement aquifer below.

Characteristic of this Sub-Region is the exposure of substantial portions of Paleozoic sedimentary rock units of the Colorado Plateau. Although not in the Study area, the Colorado Plateau is very influential because it is the primary recharge zone for the regional groundwater systems that exist both north and south of the Mogollon Rim. The gradient of groundwater moving south of the Mogollon Rim's crest is steep and groundwater flow is generally southward from the Rim. This groundwater makes up the primary groundwater inflow into the Study area, coming from precipitation events that infiltrate along the southern

fringe of the C aquifer system through the Coconino Sandstone and layers of the Upper Supai Formation down to the Lower Supai Formation. The fractures and faults through these units appear to act as sub-vertical drains for local recharge. This facilitates leakage from the C aquifer, transmitting groundwater from along and beneath the Colorado Plateau into the lower section of Paleozoic strata through this Sub-Region, and ultimately into the Precambrian rocks below.

II.C.2 Geologic Sub-Region 2

Sub-Region 2, which is sparsely population, is located south of the Diamond Rim fault, and north/west of the East Verde River. Much of this Sub-Region is covered by Tertiary basalt units which can have a thickness of more than 1,500 feet. The basalt and other Tertiary units overlay some of the same Paleozoic units exposed along the Mogollon Rim, which have been vertically offset by the Diamond Rim Fault.

The Diamond Rim fault represents the physical break that defines the structural edge of the Colorado Plateau, resulting in the "Little Diamond Rim," a prominent ridge just a few miles south of the edge of the much larger Mogollon Rim. The Diamond Rim fault system has resulted in the displacement of large blocks of Paleozoic strata down towards the south in the areas of Fossil Springs, Hardscrabble Mesa, Tonto Natural Bridge, and south of Beaver Valley. This regionally extensive fault system literally cuts across most of central Arizona with normal (southerly side down) displacements locally greater than 1,000 feet. This regionally significant structural feature has a major influence on the region's hydrogeology, particularly with regard to Fossil Springs at the extreme northwest boundary of the Study area. The offset along the Diamond Rim fault in the vicinity of Fossil Springs is estimated to be 2,000 feet down to the south. The fault is likely acting locally as a boundary to groundwater flow across it, but acting as a conduit along the northern side of its strike. Interaction of the Diamond Rim fault with the Fossil Springs fault likely resulted in the formation and evolution of Fossil Springs.

There are only 53 registered wells within Sub-Region 2, most of which are located along its periphery. The direction and magnitude of groundwater flow through the Sub-Region is uncertain. Springs discharging along the outside edge of the basalt indicate groundwater recharge in the area; however, the basalt may conceal faults and fractures in the underlying sedimentary units that could be transmitting unknown quantities of groundwater elsewhere in the Study area.

II.C.3 Geologic Sub-Region 3

- East Verde Park
- Flowing Springs
- Mesa del Caballo

Sub-Region 3 falls within the southeast portion of the Study area, within which the majority of the Study area's population is located, including the communities of Payson and Star Valley. Most of the studies to date, which have been

conducted related to geology and hydrogeology of the region, cover this portion of the Study area.

The geology of this Sub-Region consists predominately of Proterozoic rock units, which are exposed at the surface in most populated areas; however, in the northwestern portion, the Proterozoic rocks are covered by remnants of the lower Paleozoic sedimentary units. Around Payson, a thin veneer of Cambrian Tapeats sandstone commonly caps some of the granite hills around Payson. The contact between the Tapeats and the Precambrian basement is commonly referred to as "The Great Unconformity" where there is a gap in the geologic record of about 1.2 billion years between the time the granites were weathered at the surface, and the deposition of the sandstone approximately 530 million years ago. Because the Precambrian basement has been exposed to surface weathering and faulting repeatedly in its geologic history, the result is a deeply chemically weathered surface, rather than physical erosion. This chemically weathered surface can, however, vary greatly in thickness. The uppermost sections of the Payson granite, in particular, can have as much as 200 feet or more of this weathered-in-place rock or "decomposed granite" immediately adjacent to "hard ribs" of solid granite. The presence of this decomposed horizon is one reason for the Precambrian basement's unexpected performance as a reliable aquifer in the area and points to the likelihood of such aquifers being present in Precambrian host rocks to the north both beneath and adjacent to the Mogollon Rim. The remnants of Tapeats sandstone and their obvious displacements across the south-central portion of the Study area indicate the high degree of faulting in the region, as well as the role the faults played to fracture and further weather the Precambrian basement rocks, thereby forming the fractured bedrock aquifers which support many community water needs.

The nature of the fracturing in the crystalline basement rocks was found to be variable both laterally and with depth, and in concert with the host rocks' mineralogy, the age and interaction of the faults, and degree of weathering in a given area of consideration. Storage is inherently low thus making the aquifers vulnerable to over-pumping and drought. Wells installed within tens of feet of each other can have highly different yields, as is typical for fracture aquifer systems. Overall, where younger fault systems intersect older fault systems, these areas are found to exhibit higher degrees of both weathering and fracturing and relate to correspondingly higher well yields. Within the context of fractured crystalline bedrock, high groundwater yields (200 to 1,000 gpm) in the Payson area have been identified at depths approaching 1,000 feet into Precambrian basement rocks where faults intersect and deep weathering is present. This lower canvas of broken and displaced basement rock geology, with its localized high yield groundwater potential and both regionally and locally sourced aquifers, continues towards the north and constitutes the base of the regional aquifer system of the entire Study area.

Because the Paleozoic sequence was not deposited and/or was previously eroded in areas further south and east of Payson and Star Valley (due in part to a Precambrian - Cambrian bedrock high in this area), there are few if any locations in eastern portions of the Study area with Paleozoic strata preserved south of the Diamond Rim fault. This major fault is entirely within Precambrian basement rocks as it bifurcates and exits the east side of the Study area into the Hells Gate Wilderness.

Aquifers within this region constitute potential "mixing zones" of groundwater flowing southerly through the deep Precambrian fractured aquifer and locally recharged or perched aquifers within structurally bound blocks of dropped down Paleozoic and Tertiary strata. A few communities that lie within this extremely complicated hydrogeologic region are Mesa Dell, Wonder Valley, Freedom Acres, Beaver Valley, and northern Diamond Point Shadows.

II.C.4 Geologic Sub-Region 4

Sub-Region 4 is located in the southwest corner of the Study area, south of the East Verde River. It includes a portion of the Mazatzal Wilderness in the western portion of the Sub-Region, and a portion of Rye Creek Valley along Cypress Thicket. The portion of the Mazatzal Wilderness within the Study area comprises the northernmost end of the Mazatzal Mountains, for which there is very limited hydrogeologic information. The rugged terrain and its classification as a Wilderness Area greatly restrict efforts to obtain any data for this area. Only two registered wells exist in the Mazatzal Wilderness, one of which is abandoned. Both wells were drilled into Proterozoic rock units; groundwater movement is likely restricted to fractures and faults. Due to the area's higher elevation, it likely is a source of recharge to surrounding alluvial valleys. There also may be some groundwater contribution to streamflow of the East Verde River to the north.

Groundwater from Sub-Region 3 flows west into the eastern portion of this Sub-Region, separating near the Verde River and Tonto Creek watershed divide. A portion of the flow continues moving west along the East Verde River, while the other portion moves southward through the Rye Creek Valley, primarily through the Tertiary sedimentary deposits of the Valley. Springs discharging along the eastern edge of Sub-Region 4 all appear to be associated with mapped faults; their discharge is likely derived from recharge occurring in Sub-Region 3 as well as more distant sources.

II.D Water Resources

II.D.1 Surface Water Hydrology

The hydrologic system of the Study area is characterized by a surface network of short, steep stream channels that drain the upland regions and flow southerly into

the Salt and Verde River watersheds. The Study area encompasses about 632 square miles, all of which is located within the TNF; only 2.4 percent of the land within the Study area is privately owned. The primary rivers or creeks flowing from the area include Fossil Creek, East Verde River, and Tonto Creek. All of these originate on the face of the Mogollon Rim and then flow southwestward in the Verde River into Horseshoe and Bartlett Reservoirs, or southeastward in Tonto Creek and into Theodore Roosevelt Lake and the remaining Salt River reservoirs.

Records for major streams that flow out of the Mogollon Rim indicate that base flow discharge increases downstream under most conditions although that flow may not continue without loss all the way to the mouth of the stream. During most flow conditions, the East Verde River and Tonto Creek are gaining in their downstream reaches. In the uppermost reaches above major springs, flow typically occurs only during periods of runoff; flashy runoff in the generally bedrock stream channels is typical. Below these springs, base flow may be maintained year-round for variable stretches. Of the streams originating in the Study area, the U.S. Geological Survey (USGS) has operated continuous-recording streamflow gaging stations on Tonto Creek, Fossil Creek, and the lowermost segment of the East Verde River. Peak flows within the largest perennial streams occur most often in winter or spring as a result of regional frontal storms. Runoff during such storms is augmented by snowmelt. Winter storms account for most of the annual floods above the median peak discharge on all gaged perennial streams draining the Mogollon Rim.

Fossil Creek

Fossil Creek is a major perennial tributary of the Verde River, draining southwest off the Mogollon Rim between the major sub-basins of East Verde River to the south and West Clear Creek to the north. Virtually the entire Fossil Creek drainage area is on land administered by the FS. Rainfall and snowmelt contribute to intermittent streamflow between the upper basin and Fossil Springs. Average annual precipitation is approximately 18 to 20 inches as recorded by Arizona Public Service (APS) at the Childs and Irving hydroelectric power plants, respectively. Precipitation varies considerably on a monthly and yearly basis. Generally, precipitation is distributed bi-modally over the year, occurring during the winter months as a result of storms originating in the north Pacific Ocean, and during the summer monsoon season as a result of convective thunderstorms which form from moisture drawn into the region from the Gulf of Mexico and Gulf of California.

Perennial flow occurs from Fossil Springs at an elevation of 4,280 feet amsl, approximately 14.3 miles upstream from the Verde River. There are several small springs above and below the Irving hydroelectric plant that produce minor additional flows. Fossil Springs represents the largest concentration of spring water discharge in the Mogollon Rim region. Spring flows emerge over an estimated 1,000-foot reach of Fossil Creek and are relatively constant at nearly 46 cubic feet per second (cfs). The Springs provide approximately 74 percent of the

average annual basin yield above the Fossil Springs Diversion Dam. Various flow measurements taken during the past 50 years indicate that these springs maintain a flow of about 20,000 gallons per minute (gpm) that has varied little with respect to time.

In general the only flow measurements on Fossil Creek have been taken at the point of diversion for power plant use at the APS hydroelectric plant near Childs, Arizona. Since there is a general lack of data for Fossil Creek, it has been modeled to estimate its annual flows. Based upon a 2-year recurrence interval, the flow has been estimated to be about 32,230 af/yr. Years in which a 5-year flood occurred would result in flows of about 68,510 af/yr.

Generally, Fossil Creek is gaining flow in its downstream reaches. In the uppermost reaches, above major springs, flow typically occurs only during periods of runoff, but below Fossil Springs a base-flow is maintained year round.

Storm runoff and snowmelt from surrounding mountains contribute to flows in excess of base flow. Intense but brief and localized monsoonal storms produce large volumes of runoff within the watershed that generates flashy flows and flooding. Significant flows that overflow the low flow channel and transport substantial quantities of sediment occur about every other year. Floods in excess of a 5-year recurrence interval have high peak flow velocities capable of transporting cobbles, small boulders, and considerable debris. Under current watershed conditions, the estimated peak flow of the 100-year flood event is approximately 13,530 cfs.

For over 100 years, the surface water in Fossil Creek had been subject to power generation permits (issued by the Federal Energy Regulation Commission [FERC] to APS), which allowed for diversion from the Creek for power generation at Childs and Irving power generation facilities. No water consumption was allowed. In 1992, APS filed an application for a new license for the powerplants. APS then entered into discussions with the FS, U.S. Fish and Wildlife Service (FWS), environmental interveners (American Rivers, Arizona Riparian Council, Center for Biological Diversity, Northern Arizona Audubon Society, Arizona Chapter of the Nature Conservancy, and Yavapai-Apache Tribe). In 2000, APS and the other parties filed an Offer of Settlement (Settlement Agreement) requesting that FERC approve the surrender of the license to operate the hydroelectric facility and proposed to remove facilities and restore the area. The Settlement Agreement stated that APS would cease power generation and restore full flows to Fossil Creek no later than December 31, 2004, and complete site restoration by December 31, 2009.

As part of the agreement, APS submitted a surrender application to FERC in April 2003. FERC permits were surrendered in October 2004, and on June 18, 2005, APS restored full flow to 14 miles of the Fossil Creek wetland ecosystem, returning the area to a "natural and scenic" waterway.

II.D.1.1 Tonto Creek

Long-term records of flow from Tonto Spring show little fluctuation in base flow over a 20-year period. Stability of flow in Tonto Spring results from its location about 300 feet below the crest of the groundwater mound. A two-year record of flow in Pine Creek below Tonto Natural Bridge Spring shows little change in base flow, most of which is supplied by the spring.

The FS has measured the flow of Tonto Creek below the Mogollon Rim, and the amount of base flow was nearly equivalent to the combined discharge of springs in upper Tonto Creek and its tributaries, indicating there is no significant groundwater contribution to the channel from either the C or limestone aquifer other than spring flow. This base flow is approximately 24 percent of the Creek's total flow volume. Stream base flow, spring discharge, evapotranspiration, and runoff account for the greatest components of outflow

II.D.1.2 East Verde River

The base flow for the East Verde River is approximately 36 percent of the River's total flow volume. There are no data to determine the extent to which flow of the East Verde River is maintained by the C aquifer beyond spring discharge, and all base flow in excess of spring discharge is assumed to come from the limestone aquifer. Based upon data developed by USGS, the C aquifer is considered to be the source of most flow that discharges from the underlying limestone aquifer.

Since 1964, a significant additional source of flow into the headwaters of the East Verde River has been water diverted by pipeline from C.C. Cragin Reservoir. This is explained in more detail below.

II.D.1.3 C.C. Cragin Dam and Reservoir

Although they are not located within the Study area, C.C. Cragin Dam and Reservoir have historically impounded water that flowed in the upper portions of Clear Creek, a tributary to the Little Colorado River, which was then diverted into the East Verde River headwaters within the Study area through an exchange agreement between Phelps Dodge Corporation (Phelps Dodge) and SRP. Under this agreement, Phelps Dodge, former owner and operator of C.C. Cragin Dam and Reservoir, stored water from the Little Colorado River watershed at the reservoir and transferred it by diverting the water into the East Verde River for delivery by SRP to the metropolitan Phoenix area. In return, SRP water from the Salt River watershed was used at Phelps Dodge's Morenci mine facility. C.C. Cragin Reservoir has a storage capacity of 15,000 af. From 1964 until January 2002, Phelps Dodge diverted an average of 9,680 af/yr to the East Verde River, to satisfy the requirements of the exchange agreement.

With implementation of the Black River/Central Arizona Project Exchange Agreement in 2002 and passage of the Arizona Water Settlements Act in 2004, Phelps Dodge gave up ownership and ceased its operations of the C. C. Cragin

Dam and Reservoir system. The facilities were transferred to the U.S. Government with Reclamation as the primary Federal agency having direct oversight. SRP became responsible for the operation and maintenance of this system. At the time of this report, SRP, in collaboration with Reclamation, is performing studies and other efforts to determine operational plans for the newly acquired facilities. Pursuant to agreements with Reclamation, SRP may divert up to an average of 11,000 af/yr into the East Verde River, a portion of which may be acquired for use by entities in northern Gila County.

The drainage area above the C.C. Cragin Dam is 71.1 square miles. The watershed is divided into two sub-areas. The longer less steeply sloping sub-area is drained by East Clear Creek. The shorter more steeply sloping sub-area is drained by Miller and Bear Canyons. The major drainages into the reservoir are East Clear Creek, Miller Canyon, and Bear Canyon. Elevations in the watershed range from about 6,720 feet amsl at the Dam to about 7,800 feet amsl along the north ridge of the watershed, to 8,077 feet amsl at Baker Butte. The average elevation of the watershed is about 7,200 feet amsl. The watershed consists almost entirely of dense conifer and pine forest. Soils in the watershed are described as deep cobbly and gravelly fines, sandy loam, and deep cobbly loam.

C.C. Cragin Reservoir has experienced many cycles of deep drawdown (up to 80 feet) and refilling during its 40-year history. The reservoir normally fills during spring run-off and typically is at the full supply level (El. 6,720 feet amsl) in late spring. Withdrawals have typically been made in the summer and fall with the reservoir reaching minimum pool level (El. 6,640 feet amsl) in late fall. Since January 2002, withdrawals by Phelps Dodge are no longer being made and, as a result, reservoir drawdown is limited and occurs as a result of spillway discharges, seepage, and evaporation. Annual losses due to seepage and evaporation at C.C. Cragin Reservoir have been estimated to be 843 af/yr.

The system has eight pumps that are available to lift water from the Reservoir to a 2-million gallon priming reservoir. The water then drains by gravity through a pipeline south over the Mogollon Rim (and into the TNF, Gila County) to a hydropower plant. Up to 6 of the pumps can operate simultaneously to produce a maximum flow of about 33 cfs. The power generated at the plant adjacent to the East Verde River is only used to pump water associated with the project.

II.D.1.4 Other Springs

Other springs in the Study area that produce annual volumes of discharge are detailed below, and are summarized in Table II.1. They include the following:

- Tonto Natural Bridge Spring
- Webber Springs
- Cold Springs
- Tonto Spring
- Horton Spring

- R-C Spring

Table II.1. – Springs Producing Annual Volumes of Discharge Greater than 1,000 af/yr

East Verde River Drainage System (> 1,000 af/yr)	Discharge (gpm)	Annual Volumetric Discharge (af/yr)
Tonto Natural Bridge Spring	841	1,357
Webber Springs	996	1,608
Cold Springs	1,060	1,711
Total	**11,797**	**19,025**
Tonto Creek Drainage System (> 1,000 af/yr)		
Tonto Spring	1,291	2,084
Horton Spring	1,100	1,776
R-C Spring	800	1,291
See Springs	1,088	1,757
Total	**4,279**	**6,908**

These springs, as well as the lesser springs (those under 1,000 af/yr flow volume), contribute to the streamflow (base flow) of their respective drainage system. [***Note: many springs are subject to a high degree of seasonal flow variability and may not be adequately gaged.***]

II.D.2 Hydrogeology

Groundwater flow in the Study area is generally from northeast to southwest. Although recharge to groundwater occurs throughout the Study area, it occurs predominantly along the Colorado Plateau and Mogollon Rim. Recharge contributions are from both regional precipitation and snow melt during the winter, and more localized precipitation events in the summer, which is typical throughout most of Arizona. As precipitation is a function of elevation, so also is recharge. The higher elevations in the Study area along the Mogollon Rim and northward along the Colorado Plateau tend to have greater rainfall and snow totals. This, in turn, provides greater volumes of recharge to the regional groundwater systems both north and south of the Mogollon Rim.

As recharge water moves through the more permeable sedimentary units of the C aquifer and reaches saturated portions, it begins to move with the groundwater gradient. The groundwater gradient north of the Mogollon Rim tends to be shallow through the more conductive Coconino Sandstone and upper Supai Sandstone units. Moving south of the Mogollon Rim, the groundwater encounters the fine-grained units of the Lower Supai and Naco Formations. The gradient becomes very steep as a result of the typically low hydraulic conductivities associated with fine-grained shale and limestone and the nature of topographic relief near the Rim. Near vertical flow through these less permeable units is facilitated by abundant faults and fractures, which provide conduits for groundwater flow.

The locations and discharge rates of springs are affected by both lithologic and structural controls. Faults and fractures intercepting the groundwater provide conduits to the land surface and result in the formation of seeps and springs along the Mogollon Rim. Also, as permeable layers (typically coarse grained intervals bounded by shale rich layers) intercept the land surface, these too may result in the formation of springs and seeps. Many of the monitored and sampled springs in the area indicate highly variable discharge rates individually, and reflect contributions from both local and far removed sources (based on the water's isotopic and ionic composition; see Attachments 1A and 1C). In some locations, spring discharge increases substantially after precipitation events, while in other locations, springs show a more tempered response depending upon local hydrogeologic constraints. The increase in discharge may be the result of recharging precipitation increasing head pressures. As recharge occurs from an even greater distance, newly recharged groundwater will "push" older groundwater out of the system ahead of the recharge front.

As groundwater moves down through the Naco Formation (where breached) and into the limestone units of the Redwall and Martin Formation, fractures and solution channels become the dominant mechanism for flow. The surface exposures of these units north of the Diamond Rim Fault are recharged by precipitation events as well as by the capture of stream flow, which is often fed from above by spring discharge along the Mogollon Rim.

The Diamond Rim Fault zone potentially represents the most influential structural feature with regard to groundwater flow in the Study area; however, due to the limited amount of data available for this area, the true relationship between the fault and groundwater flow is uncertain. Nevertheless, some reasonable inferences can be made. The location and discharge rate of Fossil Springs appear to be controlled to a great degree by the Diamond Rim Fault. Other springs in the Study area appear to be both directly and indirectly related to the presence of this fault. Locally, this fault may act as a barrier or a conduit to groundwater flow--likely both as a conduit along its strike and barrier across it in the case of Fossil Springs.

South of the Diamond Rim Fault zone, groundwater exits the Paleozoic sedimentary units and flows down into the Proterozoic igneous and metamorphic units below. The area beneath Hardscrabble Mesa may be an exception to this general statement in that there may be a saturated sequence of Paleozoic sedimentary units (primarily the Redwall Limestone and Martin Formation) preserved below the Tertiary basalt and conglomerate cover.

Groundwater flow through the Proterozoic units (like much of the Paleozoic units) relies primarily upon the secondary porosity and permeability of faults and fractures. As mentioned above, the faults and fractures provide avenues for localized precipitation to recharge the aquifer in addition to providing pathways

for regional groundwater through flow. The uppermost portions of the Proterozoic units tend to have greater hydraulic connections relative to deeper fractured areas. Water levels observed in wells penetrating these units exhibit strong variability associated with localized recharge events. The presence of springs and gaining reaches in the East Verde River and Tonto Creek along the periphery of the Sub-Region 3 appears indicative of groundwater discharging from the regional aquifer system.

II.D.3 Groundwater Budget Estimates

Understanding the groundwater systems within the Study area is complicated by significant variability in the host aquifers, which makes consideration of aquifer storage extremely difficult. In addition, variables such as highly variable slope, vegetation, and soil types make surface water calculations an approximation at best. Nevertheless, in a simplified way, a regional water budget can be roughly estimated by assuming the aquifer systems are collectively recharged by both local and regional sources and adjusting for generally accepted surface water runoff and evapotranspiration rates. In the case of groundwater (a primary focus of the investigation), utilizing two primary assumptions and a suite of other simplifying assumptions (see Attachment 1), it is possible to estimate the flow of groundwater through the system. First, it is conservatively estimated that 31,800 af/yr enters the system by direct leakage through the Mogollon Rim from the C aquifer into the lower regional aquifer strata (USGS 2005). Additionally it is considered that direct recharge from local precipitation can be estimated at 4 to 5 percent overall (although locally it can be as much as 10 to 16 percent). This low range of values is utilized to account for highly variable slopes, soil types, and vegetative cover observed throughout the region. The annual groundwater recharge from precipitation is then estimated to be 30,700 to 38,300 af/yr. In combining these estimates, the total regional groundwater in-flow to the system is assumed to be 62,500 to 70,100 af/yr.

Groundwater inflow manifests itself as outflow in the form of spring discharges, stream base-flow, and groundwater underflow. As a matter of balance, it is then assumed that approximately 42,700 af/yr discharges as spring flow (the majority of C aquifer input discharges at Fossil Springs) and 18,000 af/yr discharges in the form of stream base-flow. The remaining 1,800 to 9,400 af/yr is groundwater underflow or "flux" through the system. The above values are rough estimates.

Ultimately, the groundwater within the Study area is an interconnected aquifer system flowing through several different geologic units. Locally, a groundwater system may behave as an isolated component to the regional system, but ultimately plays a role in a much larger long-term regional perspective. Continuity of groundwater flow is disrupted by recharge zones, faults, fractures, and by the lithologic variability of the sedimentary units in the area. However, connection between and through these various units is facilitated by the broken and fractured nature of the Study area's geology. Viewing the Study area as a

regional groundwater system appears to be supported by water levels observed in wells, spring elevations, and by water chemistry data. This regional aquifer system provides a large canvas that communities and water resource managers can draw upon to plan and develop water resources for the area.

II.D.4 Water Quality

Water quality within the Study area is variable. A limited sampling of water quality data is represented in Table II.2, which provides values for selected water chemistry properties in the Mogollon Highlands. (Source - USGS). A number of springs and wells throughout the Study area also were sampled in support of this Study, to develop basic data for water chemistry and isotope analyses. Theses data generally indicate comparable water chemistry throughout the Study area to that shown in Table II.2; however some differences are observed in key constituents that relate to source waters, recharge mechanism, and age. These concepts were considered in depth for the development of the conceptual hydrogeologic framework of the region. Please see Attachments 1, 1B, and 1C for full details.

Table II.2. – Selected Water Chemistry Property Values of Surface Water Sources Located in the Mogollon Highlands, Arizona

Water Source	pH		Dissolved Solids (mg/L)	
	Range	Mean/Median	Range	Mean/Median
Stream-flow - Tonto Creek above Gun Creek	7.2-8.9	8.2/8.2	0.23--620	58/19
Stream-flow - East Verde River near Childs	7.8-8.6	8.4/8.4	.05--250	23/11
Spring Flow - East Verde River Drainage	6.9-7.5	7.3/7.4	158 – 350	253/267
Spring Flow - Tonto Creek Drainage	7.1-7.7	7.3/7.3	90 – 319	185/169
Groundwater*	6.5-7.5	6.5	170 – 400	250

*Representative of Payson groundwater sources only.[3]

ADEQ, in compliance with the Clean Water Act of 1977 and supplements thereto, established designated uses for various surface waters within the state of Arizona, including those within the Study area. ADEQ also has performed assessments to determine whether or not the designated uses are being met. Table II.3 presents a

[3] Payson performs an annual Water Quality Survey of it drinking water sources – groundwater, as required by ADEQ. Payson's drinking water is in full compliance with all drinking water standards established by EPA and ADEQ, i.e., primary and secondary drinking water quality standards. Similarly, other water service providers in the Study area are required to provide their customers with an annual Consumer Confidence Report that provides similar water quality information as found in Payson's Annual Water Quality Survey. It is assumed the water quality of Payson's groundwater is similar to the groundwater quality throughout the Study area since most groundwater sources are taken from the same geologic formations. (See also Attachments 1, 1B, and 1C.)

summarization of ADEQ's determinations regarding its assessment of the Designated Uses for the listed rivers and creeks within the Study area.

Table II.3. – Designated Uses for Surface Water Quality Standards at Specific Locations - the East Verde River and Tonto Creek

Location	A&Ww	FBC	DWS	FC	AgI	AgL
East Verde River–Below confluence with Ellison Creek	Y	Y	Y	Y	Y	Y
Fossil Springs	Y	Y	Y	Y	N	N
Tonto Creek—Headwaters below confluence with an unnamed tributary	Y	Y	N	Y	Y	Y

Note: Numeric water quality criteria to maintain and protect water quality for designated uses are prescribed in Arizona Administrative Code: Appendix A, R18-11-109, R18-11-110, and R18-11-112. Narrative water quality standards to protect all surface waters is prescribed in R18-11-108. The terms used in this table are as follows: "AgI" -- agricultural irrigation; "AgL" – agricultural & livestock watering; "A&Ww" -- aquatic & wildlife (warm water); "DWS" – domestic water source; "FBC" – full-body contact; and "FC" – fish consumption.

Additionally, ADEQ, acting on the behalf of EPA, has prepared a Source Water Assessment for all public and private water service providers within the Study area. ADEQ has determined that, in general, all groundwater supplies are at a high to moderate risk for being impaired by another water source of unacceptable water quality with respect to the Safe Drinking Water Act of 1974 due to source aquifer types (fractured bedrock formations). The Tonto Village, Christopher Creek, and Kohl's Ranch communities are under evaluation by ADEQ to determine the extent of mitigation effort that should occur.

A potential water quality issue may exist for smaller communities whose wastewater is processed by septic systems, or which use a similar type of wastewater treatment and disposal system. This is especially true for communities that utilized wastewater treatment system specifications under pre-1974 ADEQ rules (Bulletin 12). These rules related to small lot subdivisions that were not required to reserve space for adequate septic/water system separation. There also could be a potential for water supply impairment from human waste entering the local water supply as a result of installation procedure requirements in place prior to 1990. These procedures were replaced by more rigorous requirements in 2001 when the aquifer protection permit rules were adopted as part of the Arizona Administrative code.

Additionally, there is some concern about arsenic contamination (20 to 30 times the maximum contaminant limit) on the lower portions of the East Verde River from its American Gulch confluence to its confluence with the Verde River.

Table II.7. – Surface Water Claims on the East Verde River (1984)

Owner's Name/Location	Claim Priority Date	Diversion Claim (af/y)	Cumulative Claims to Water (af/y)
Ewbank Rim Trail	1885	1.5	1.5
Gray Rim Trail	1885	3.0	4.5
Tanner Rim Trail	1875	5.0	9.5
Mueller Rim Trail	1885	1.0	10.5
Carroll Rim Trail	1875	15.0	25.5
Johns Rim Trail	1875	15.0	40.5
Buchanan Rim Trail	1885	2.0	42.5
Barker Trail	1875	50.0	92.5
Johns Rim Trail	1885	1.5	94.0
Knoell, Jr. RimTrail	1909	0.2	94.2
Knoell, Jr. RimTrail	1909	0.1	94.3
Eldean	1900	6.0	100.3
Brintlinger	1909	1.4	101.7
Copen	1909	3.0	104.7
Roper Verde Glen	1909	0.5	105.2
Roper Verde Glen	1909	1.8	107.0
Mayberry Verde Glen	1909	0.9	107.9
Jasper	1909	0.8	108.7
Kerr Verde Glen	1909	3.0	111.7
West Verde Glen	1909	0.6	112.3
Beaver Valley Water	1890	0.0	112.3
Bellows	1906	10.0	122.3
Goodwin	1880	1.5	123.8
Roush Flowing Springs	1915	10.0	133.8
Hudson Flowing Springs	1917	15.0	148.8
Randall Flowing Springs	1890	0.61	149.4
Jones	1880	0.2	149.6
Doll Baby Ranch	1870	310.0	459.6
Jones	1880	0.2	459.8
Tonto National Forest	1879	22.8	482.6
Tonto National Forest	1879	58.0	540.6
Tonto National Forest	1879	7.9	548.5
Tonto National Forest	1879	31.6	580.1

Note: This table is thought to be complete but is subject to as yet unidentified claims and/or water rights adjudication.

C.C. Cragin Dam and Reservoir

A major consideration related to surface water in the Study area involves the rights to surface water impounded behind C.C Cragin Dam, located in Coconino County north of the Study area. Pursuant to the AWSA, Reclamation was given ownership of, and SRP now operates, C.C. Cragin Dam and Reservoir. Also pursuant to the AWSA, the communities in northern Gila County, including the town of Payson, were provided the opportunity to access up to 3,500 af/yr of surface water from the C.C. Cragin Reservoir per calendar year on average, upon agreement with SRP and transfer of water rights in accordance with state law. In May 2008, Payson reached agreement with SRP for the delivery of up to 3,000

acre feet (af) of water from the CC Cragin Reservoir, and subsequently filed for the severance and transfer of water rights on February 17, 2009.

II.F.2.3 Groundwater Laws, Rights, and Policies

ADWR administers the groundwater program throughout Arizona. Generally, within Arizona, groundwater is owned by the public and regulated by ADWR, but is available to property owners who can extract water under their property and put it to a reasonable and beneficial use. There are special rules for AMAs (where overdraft of groundwater has been most severe) and for Irrigation Non-Expansion Areas (INAs). The Study area is located outside any AMA or INA, and groundwater may be withdrawn and used for reasonable and beneficial use. ADWR requires a permit be obtained for a "Notice of Intent" to drill a well. Additionally, well drillers must report initial results of drillings.

Entities other than the FS cannot construct and/or test wells on National Forest lands without FS authorization. The FS must issue a special use permit before water resources exploration or research on Forest land is allowed. Issuance of a special use permit is considered to be a Federal action, for which an assessment of project impacts to the natural and human environment is required under National Environmental Policy Act (NEPA). The FS groundwater policy states that finding groundwater does not ensure its availability for use. If an exploration project is approved, a second, separate NEPA analysis and special use permit would be necessary to address future water production. In the past, TNF has been reluctant to issue special use permits for exploratory drilling and other land-disturbing activities associated with research of groundwater sub-flows. In 2008, the town of Payson and SRP reached an agreement which restricts Payson from installing wells on public lands.

II.F.2.4 Institutional Considerations

Various powers and authorities that affect water in northern Gila County are vested in various Federal and state agencies, county divisions, town departments, and Native American tribes. These are described in more detail in Attachment 4, Legal and Institutional Considerations.

Federal Institutions:

- The Department of Agriculture, Tonto National Forest, Payson Ranger District
- Department of Interior, U.S. Fish and Wildlife Service
- Department of the Interior, Bureau of Indian Affairs
- Department of the Interior, Bureau of Reclamation
- Environmental Protection Agency

State Institutions:

- Arizona Department of Water Resources
- Arizona Department of Environmental Quality
- Arizona Corporation Commission
- Arizona Department of Real Estate
- Arizona Game and Fish Department

County, Municipality, Improvement Districts:

- Gila County Health Department
- Gila County Planning and Zoning
- Northern Gila County Sanitary District
- Payson - Water Department
- Star Valley
- Salt River Project
- Domestic Water Improvement Districts

III. Study Participants' Current Conditions

III.A Types of Water Supply Providers

Within the Study area, potable water is supplied to water users by any of the following five basic provider types: Municipal water system; regulated private water utility or company; DWID; Cooperative/HOA, or private well.

Municipal Water System
Payson is the only community with a municipal water system. The Town of Payson Water Department supplies potable water to the town of Payson. It also delivers potable water to the Tonto Apache Tribe pursuant to a Municipal Services Agreement between the Tribe and Payson. The population served by the Town of Payson Water Department makes up about 68 percent of the Study area's total population.

Domestic Water Improvement Districts
DWIDs are formed by petition at the request of local property owners or developers that receive formal approval from the Gila County Board of Supervisors. The Board of Supervisors has no authority under state law to deny formation of districts because of a lack of adequate water resources. The purposes of DWIDs are to secure long-term water supplies and provide water service directly to consumers within their respective communities. All DWIDs within the Study area have been formed by real estate developers or district residents.

Regulated Private Water Utilities
Eight regulated private water utilities operate within the Study area. Three of these utility companies--Payson Water Company, Pine Water Company, and Strawberry Water Company--are subsidiaries of Brooke Utilities. Brooke Utilities is a California-based unregulated utility holding company. These three regulated subsidiaries together serve nine of the communities within the Study area.

All eight private water utilities fall under jurisdiction of and are regulated by the Utilities Division of the Arizona Corporation Commission (ACC). The ACC's role regarding water utilities is to regulate the pricing and service performance of the private companies that have exclusive rights to distribute water in a given "certificated" geographical service area, designated by a Certificate of Convenience and Necessity (CC&N). The ACC has no authority over municipal water systems (incorporated towns and cities) or over water improvement districts that are formed by property owners and approved by county governments (e.g. DWIDs).

Cooperatives/Home Owners Associations

Approximately half of the communities in the Study area obtain water resources from cooperatives, HOAs, old ranches, community wells, and other loose-knit entities. While these entities are not considered to be towns, DWIDs, or private water companies, they do qualify as water service providers as defined under Arizona State law. In most cases, these smaller, more remote, communities are located on parcels homesteaded in the late 1800s that were ranch or small agricultural properties or land exchange parcels traded with the FS.

Populations for these smaller communities range from none to 300 people, for a total of about 1,300 residents (6 percent of the Study area total population). Thus, while individual community populations are not significant, the total population served is relevant when considering current and potential future water use in the Study area.

Private Wells
Numerous private wells serve many homes and a few commercial businesses in the smaller communities, and even within Payson. Due to incomplete ADWR well records and reluctance of well owners to discuss specifics of their wells, the actual number of wells and exact volumes of water produced cannot be verified. The water produced from the private wells is estimated based upon the calculated number of gallons per capita per day (gpcd). The gcpd rate is derived by actual water system records, discussions with operators, observance of life styles in the community (amount of landscape, horse privileges, etc.), and from ACC annual reports. The total water usage for the population is then estimated by multiplying the number of full-time residents by the gpcd water usage rate.

It is commonly understood that most private wells installed in the hard rock aquifer of the Study area are typically less than 200 feet deep and have low yields, from less than 1 gallon per minute (gpm) to as much as 25 gpm. Only in the areas of Star Valley and Diamond Point are there consistently higher yields from relatively shallow private wells (less than 200 feet deep), with yields observed to range from 35 gpm to over 100 gpm. Correspondingly, these areas consume more groundwater due to the size of properties and higher demand land uses including equestrian, lawns, orchards, and gardens. Private wells in the region have reportedly been subject to loss and/or gains in yield relative to precipitation and variable use. In addition, some loss of well productivity may result from over-pumping of wells and/or from a general lack of conservation during dry spells.

III.B Communities' Existing Conditions and Current Water Use

For each community or entity included in this Study, the existing conditions related to its water supply and use are described (as of 2002), including the estimated 2002 population, current source(s) of water, and estimated water use. The current water use rates for the communities in this Study are quite variable, ranging between 68 and 657 gpcd, with an average water use rate of 168 gpcd for the 41 communities that delivered water in 2002. Any known past and/or present water supply problems associated with each water provider also are noted.

The communities are organized according to the Sub-Regions used in evaluating the hydrologic framework (see Section II.C and Attachment 1).

III.B.1 Sub-Region 1

III.B.1.1 Sub-Region 1, Cluster 1

Cluster 1 includes the water providers for the unincorporated communities of Pine and Strawberry. The area surrounding both Pine and Strawberry has four seasons, but none are severe. Although snow falls in the winter, it usually melts quickly producing little or no runoff and results in limited groundwater recharge. Wells in the area typically are shallow wells that do not have adequate production in early summer months prior to the monsoon rains, which typically arrive in July and August. In addition to limited groundwater recharge, water shortages occur as a result of demand spikes associated with the influx of summer time residents, and visitors on summer holiday weekends, when daily maximum water demand may be two to four times greater than that of a typical summer day. The increase in water demand appears to be exacerbated by a tendency for these same weekenders to engage in discretionary water use activities while visiting, such as washing decks and irrigating lawns, landscaping, and native vegetation. This added demand exhausts the minimum standard water storage and production capabilities within a 2-day period.

A study commissioned by Pine/Strawberry Water Improvement District (PSWID) in 2003 concluded production of groundwater from the relatively shallow Schnebly Hill and Supai Strata is inherently limited by the hydraulic characteristics of groundwater flow through fractures to the pumped wells in the area. The fractures highly constrain the flow to pumped wells such that initial good yields progressively decrease as pumping duration increases and associated non-pumping time for recovery of groundwater levels decreases. Moreover, the potential for competition and hydraulic interference between wells completed in this type of aquifer is high; suggesting that the ability to overcome the problem of constrained well yields by simply drilling more wells into the system is limited due to the potential for interference between wells (Morrison Maierle, Inc. 2003).

To further evaluate the effect of climate on Pine and Strawberry's groundwater supply, Morrison Maierle performed a comparative study of groundwater level hydrograph data and long-term precipitation trends. The study indicated seasonal declines in well yields, caused by inherent hydraulic properties of the aquifer system, are amplified by below-average precipitation conditions; however, historic shortages of water have occurred during extended periods of above-average precipitation trends. The historic water shortages were not the product of drought conditions but, instead, resulted from the demand for water exceeding the production capacity of the wells, as limited by the aquifer hydraulic characteristics. This is particularly true in the Pine area, which offers less favorable aquifer characteristics than the Strawberry area.

Pine
Pine is located about 16 miles northwest of Payson along State Route 260. The community is located at an altitude of 5,448 feet amsl, and in 2002 had approximately 2,000 full-time residents. The community is served by five water providers.

Pine Water Company, Inc., (Brooke Utilities)
The Pine Water Company was established when Brooke Utilities acquired and consolidated several water operations in the late 1990s. It delivers about 87 percent of the potable water used in the community of Pine. The service area is nearly built out; 2,111 out of 2,798 parcels have been developed. Population in the service area in 2002 was 1,889 and the associated water demand supplied by Pine Water Company (Brooke) was estimated to be 159 af/yr. The water use rate is estimated to be 75 gpcd. Pine Water Company's (Brooke) water system consists of 21 production wells that tap into shallow aquifers. There are also 105 private wells which provide water to community residents that are not tied into the system. Currently, existing capacity (all from the shallow aquifers) is estimated to be equal to the current demand of 159 af/yr.

Over many years, Pine Water Company (Brooke) has suffered numerous water outages, water use restrictions, and service complaints. The company has utilized numerous methods to attempt to improve service, including:

- Upgrading the infrastructure of the production and delivery systems;
- Developing water sharing agreements with private well owners;
- Drilling five new wells in Pine and deepening two existing wells where increased water supplies were available;
- Developing a 1.8-mile pipeline from Strawberry Water Company (Brooke) well facilities to deliver water to Pine;[4]
- Adding 100,000 gallons of storage in Pine; and
- Hauling water by truck.

Pine Creek Canyon/Portals IV Domestic Water Improvement District
This District, formed in about 1995, is the newest DWID in the Study area and currently serves about 83 homes in a subdivision of 173 lots. Population in 2002

[4] Until 2007, the water supply for the community of Strawberry consistently provided adequate water to its residents during the same periods of seasonal stressing that occurs in Pine. Brooke Utility determined it could relieve a portion of the water shortages in the Pine community by connecting the Strawberry water supply into Pine's distribution system. To connect the systems between Pine and Strawberry, Brooke Utilities built the Magnolia pipeline that carries water either from Strawberry to Pine or Pine to Strawberry. In 2007, Strawberry suffered shortages and the pipeline was used to take water from Pine up to Strawberry.

was estimated at 20; the associated water demand was estimated to be 8 af/yr. The current water use rate is estimated to be 342 gpcd. Water is supplied by a single 48-gpm production well. The capacity of this well was estimated in a recent study to be about 39 af/yr. The developers of this District were the developers of Portals I, II, and III, all in the Pine Canyon area and all having successful wells that were ultimately developed and later acquired by Pine Water Company (Brooke), or its predecessor firms.

Pine Water Association DWID

Pine Water Association DWID serves 47 out of an estimated 55 parcels in central Pine that have existed over the past 100 years. The population served in 2002 was estimated to be 50; the associated water demand is estimated to be 11 af/yr. The water use rate is estimated to be 192 gpcd. This DWID holds claims to most of the normal surface water in Pine Creek, and has not had conservation restrictions or meter moratoriums in recent years. The DWID has a concern for the viability of long term surface water supply during extended drought periods. Total production capacity from the surface water and well is unknown.

Solitude Trails DWID

This District, formed about 1994, developed two wells in Pine to supply its 78-lot subdivision, of which 34 parcels are developed. The 2002 estimated population was 22 and water demand supplied by this provider was about 4 af/yr. The water use rate is 149 gpcd. The two wells that serve this District are actually located in the Pine Water Company (Brooke) certificated area (CC&N); water is wheeled to the subdivision by water mains belonging to Pine Water Company (Brooke). Today, Solitude Trails DWID sells its excess water, normally about 25 to 37 af/yr, to Pine Water Company (Brooke). This annual volume is generally equal to 14 to 23 percent of the total water served by Pine Water Company.

The subdivision operates its own wastewater treatment plant (WWTP) to help protect the water quality in the relatively shallow aquifers that generally exist in Pine. Long term, this DWID's existing capacity will probably meet future water demand at full build-out; however, establishing back-up alternative water sources would be desirable.

Strawberry Hollow DWID

This District formed in 2000, and has two wells in northwest Pine to supply its 72-lot subdivision, of which 12 parcels have been developed. In 2002 the population was zero but by 2005, this DWID was serving 14 constructed homes with less than 400,000 gallons of water per year. The DWID has completed development of its second well and has been issued a 100-year adequacy certificate by ADWR. The new well is publicly documented to be 1,320 feet deep (three to six times the depth of typical wells in Pine) and penetrates into a different aquifer than the one currently being utilized by many other wells in Pine. Strawberry Hollow DWID has a high quality "alternative" WWTP in operation to

help avoid groundwater quality problems in future years. Water production potential available from this provider is estimated to be 25 af/yr.

Strawberry
The unincorporated community of Strawberry is located approximately 2 miles northwest of Pine along State Route 260. The 2002 population of Strawberry was 1,062. Until 2007, the water supply for the community of Strawberry consistently provided adequate water to its residents during the same periods of seasonal stressing experienced in Pine. Strawberry currently has two water providers: Strawberry Water Company, Inc. (Brooke) and the similarly named but separate private water company, Strawberry Water Co. (Hunt Water).

Strawberry Water Company, Inc. (Brooke)
Strawberry Water Company, Inc. (Brooke) was formed around 1996 after acquisition of several water operations within Strawberry. In 2002, it served 1,002 customers, with an associated water demand of about 100 af/yr. The water use rate is 90 gpcd. Strawberry Water Company, Inc. (Brooke) operates nine wells. About 25 private wells that are not tied into this system also provide water to residents. Production capacity is estimated to equal the annual demand, about 100 af/yr.

As noted above in the discussion for Pine Water Company, a 1.8-mile-pipeline (known as the Magnolia pipeline) was constructed to connect the distribution systems of the Pine Water Company (Brooke) and Strawberry Water Company, Inc. (Brooke), initially to relieve water shortages in the Pine community; however, more recently this same pipeline has been used to deliver water from the Pine Water Company (Brooke) to Strawberry Water Company (Brooke) during water shortages in the Strawberry CC&N.

Strawberry Water Company (Hunt Water)
The Strawberry Water Company (Hunt Water) is located in north-central Strawberry. In 2002, the population served was 60, supplying about 14 af/yr using a single well. The water use rate is 200 gpcd. Estimated production capacity of this system is approximately equal to the projected demand of 14 af/yr. This water company has adequate water resources and, while the groundwater quality is good, the quality of the delivered water is reported to have deteriorated due to distribution system problems.

Pine/Strawberry Water Improvement District
The Pine/Strawberry Water Improvement District (PSWID) was formed by property owners of the Pine and Strawberry communities that are not represented by the four existing DWIDs in Pine, or served by the regulated private utility companies in the middle of the Strawberry service area. Under state law, the PSWID is authorized to "wholesale" to water suppliers within the two communities (assuming it can develop water resources to market) and raise capital for asset purchases, or to even condemn the existing water operations if

desired (currently underway). The by-laws of PSWID state its purpose is to represent the interests of the communities in securing long-term and reliable sources of water by:

- investigating current and potential sources of water;
- investigating the costs associated with maintaining or expanding present and potential sources of water;
- formulating plans and possible funding for improving present water sources; and
- consulting with county, state, and Federal agencies concerning development of water sources for the communities.

The PSWID commissioned a 2003 study by Morrison and Maierle, which concluded that the groundwater resource in the shallow Schnebly Hill and upper Supai aquifer system has been demonstrably inadequate to support the historic and existing residential water supply demands. This same study further noted the shallow aquifer system does not offer any reasonable potential to support continued population growth in the Pine and Strawberry area. Over the last 5 years, newly developed deep wells in the area have yielded substantial volumes of "new" water that could become available to the communities should agreement on the water's use be reached.

This water provider did not deliver water to any customers in 2002; data on water use since that time have not been included in this Study.

III.B.1.2 Sub-Region 1, Cluster 2

The six communities in this cluster of Sub-Region 1 are located in the central northernmost portion of the Study area, just south of the Mogollon Rim escarpment roughly from the headwaters of the East Verde River southward.

The East Verde River originates from several natural springs about a mile above the northern end of Rim Trail Estates. The water supplies for these six communities consist of both surface water and groundwater; several landowners and/or water suppliers hold surface water claims (see Table II.6 above).

Generally, water supply and quality have not been concerns for these communities; however, a couple entities have experienced some periodic shortage and pressure issues related to the fluctuating number of summer visitors. In addition, the recent extended drought and depletion of East Verde River flows have led to some concerns regarding the adequacy of water supplies in the future. The majority of the six communities are located along Houston Mesa Road (Forest Road (FR) 199), extending from Washington Park south to Whispering Pines. The communities are discussed going south from the Rim.

Washington Park
Washington Park is the northernmost community within the Study area. It is located approximately 11 miles north of Payson and about ½ mile west of where the C. C. Cragin pipeline discharges into the East Verde River. The community consists of 14 small privately-owned cabins on previously leased FS land; these lots were recently removed from the FS' land inventory. All parcels have been developed, but virtually no residence is occupied full time. The 2002 population of Washington Park was estimated to be the equivalent of one full-time resident; the water demand was less than 0.5 af/yr. The water use rate is 100 gpcd.

Washington Park's water source is a capped natural spring that has a volume of about 2-4 gpm. The water is piped into a small storage tank. The spring is estimated to be able to supply about 3 to 4 af/yr.

Rim Trail Estates
Rim Trail Estates is located approximately 10 miles north of Payson, just below Washington Park, and about 150 yards downstream from where the C. C. Cragin pipeline discharges into the East Verde River. This subdivision, which is about 55 years old, is located on the Bulluzzi homestead (old Rim Trail Ranch). The community has 108 parcels developed out of a total of 140. The community extends about a mile downstream along the East Verde River. The population in 2002 was about 44, with an associated water demand of about 11 af/yr. Current water use rate is 218 gpcd.

The Rim Trail DWID is the Estates' water provider. The DWID operates one well; there is another private well which also is used within the Estates that is not connected to the system. The DWID also uses about 7 af/yr of surface water, drawing it from the East Verde River through a pickup station (for potable water). In addition, District residents draw irrigation water from an 1880s-era ditch that was originally established for both domestic use and irrigation of apple and grain crops. The DWID system has an estimated well-water supply of 15 af/yr and a surface water claim by the District of 52 af/yr. The East Verde River has flowed year-round through the neighborhood over Rim Trail Estates' 120+ year history; however, during recent drought years, the river flow appears to be gradually declining. This has created anxiety among the residents. The area also relies on two somewhat adequate wells in the winter months; however, the wells' production is intermittent during summer months.

Shadow Rim Ranch Girl Scout Camp
The Shadow Rim Ranch Girl Scout Camp is located approximately 10 miles north of Payson and a mile west of Houston Mesa Road (FR 199). The camp is operated seasonally and has a population of 300 during the summer months. This is the equivalent of an average full-time population of 48, based upon 300 people occupying the camp for 8 weeks per year, and 2 people occupying the camp for an additional 44 weeks per year. The associated water demand is about 5 af/yr. The water use rate is 96 gpcd. Water is supplied from one well, which is estimated to

be able to produce 8 af/yr. In addition, it is estimated about 7 af/yr of surface water is diverted from Chase Creek; however, surface water flow is intermittent. There are no known major water source or quality problems, but inadequate storage may become a problem.

Whispering Pines
Whispering Pines is located approximately 7 miles north of Payson. Out of a total 228 parcels, 171 have been developed. In 2002, the community had a population of 80, with an estimated water demand of 17 af/yr. The water use rate is 195 gpcd. Water is supplied to the community by the Payson Water Company (Brooke) through two wells. The two system wells yield a total of about 26 gpm for an estimated water supply of 32 af/yr. Numerous residents also have their own wells. Storage capacity seems to be an issue during high demand periods. There have been periodic water shortage and pressure issues in Whispering Pines, and water hauling was required in the summers of 2005 and 2006.

Cowan Ranch
Cowan Ranch is an unincorporated community located approximately 9 miles north of Payson off FR 199. Cowan Ranch is essentially built out, with 19 out of 21 parcels having been developed. The estimated population in 2002 for Cowan Ranch was 5; the associated water demand was about 1 af/yr. The water use rate for Cowan Ranch is 164 gpcd. It has a two-well system that is operated by an HOA; the estimated water supply available from this system is 12 af/yr.

Verde Glen
Verde Glen is located adjacent to Cowan Ranch and also is unincorporated. For Verde Glen, the estimated population in 2002 was 16. Water demand met by the Verde Glen Property Owners Association (POA) is about 2 af/yr. The water use rate for Verde Glen is 137 gpcd. Out of 108 total parcels, 66 have been developed. Part of Verde Glen has been adequately served by one well for over 50 years; Verde Glen I-III POA operates a distribution system from the well. The remainder of Verde Glen area is served by five private wells; water demand supplied by the private wells is estimated to be less than 1 af/yr. Total supply for Verde Glen is estimated to be 12 af/yr.

There presently are no problems meeting current demand in this community. Although the Verde Glen POA well has been reliable in the past, it may not be dependable in the future if drought conditions continue. Within Verde Glen, surface water claims between certain land owners and the POA are currently being litigated. Having an alternative water supply would enhance the reliability and sustainability of each community's systems.

III.B.1.3 Sub-Region 1, Cluster 3
Three small communities are included in this cluster; they are located adjacent to each other about 9 miles northeast of Payson. The cluster falls along the dividing line between the Verde River and Salt River watersheds. Secondary

permeability may be encountered in faults and fractures within this portion of the Sub-Region. The communities are discussed from their location, west to east.

Zane Grey Meadows
This small community is located approximately 11 miles northeast of Payson, north of FR 64 and just south of Roberts Mesa Road. Five of 20 parcels have been developed. The 2002 population was 4, and the current water demand is about 1 af/yr. The water use rate is 180 gpcd. Water is supplied by five private wells. The existing production capacities of the wells have not been determined.

Collins Ranch
Collins Ranch is located about 11 to 12 miles northeast of Payson, adjacent to and immediately southeast of Zane Grey Meadows. Most lots within this community have been developed (35 out of 38 parcels); however, very few are occupied full time. In 2002, the population of the community was estimated to be 11, with an associated water demand of about 2 af/yr. The water use rate is 199 gpcd. This community is supplied by two system-owned wells, and about six additional wells that are not tied into the system. The available capacity is unknown. The community currently has no major water supply issues.

Mead Ranch
This small community is located adjacent to and directly east of Collins Ranch. Out of 126 parcels, 85 have been developed. In 2002, the population of Mead Ranch was estimated to be 25; the associated water demand was about 3 af/yr. The water use rate of Mead Ranch is 99 gpcd. Payson Water Company (Brooke) supplies potable water to Mead Ranch from a single well yielding 4.1 gpm. Current production capacity of the well has not been verified.

III.B.1.4 Sub-Region 1, Cluster 4

The two small communities that are included in this cluster are located about 10.5 to 11.5 miles northeast of Payson, about a mile apart from each other along Ellison Creek.

Ellison Creek Recreation
This community is located approximately 10.5 miles northeast of Payson, in the northwest corner of the intersection of FR 64 and Ellison Creek. It is so named because it used to be FS leased property that could only be occupied during the summer months; however, about 10 years ago it was sold to the residents for full-time residential use. The area is fully built-out, with 60 developed parcels. In 2002, it had an estimated population of 10, with an associated water demand of about 2 af/yr. The water use rate is 137 gpcd. Two community-owned wells supply potable water. One of these wells is a high yield source, which was the first of its kind to be completely installed through the regional aquifer system. It is 760 feet deep and penetrates into the Precambrian basement aquifer. Together, the total capacity of the wells is greater than 100 gpm (over 160 af/yr). No major

issues in terms of water availability or quality were identified during the Study period.

Ellison Creek Estates
Ellison Creek Estates is located about a mile north of Ellison Creek Recreation on FR 430, which runs along Ellison Creek. This community consists of several large parcels on an old homestead off Ellison Creek. Fifty parcels have been developed out of 80 total parcels. Potable water is provided by an unknown number of private wells. In 2002, the estimated population was 30, with an estimated water demand of 4 af/yr. The water use rate is 130 gpcd. Output of the wells is not known.

III.B.1.5 Sub-Region 1, Cluster 5

Cluster 5 in Sub-Region 1 includes four small communities. They are located generally along State Route (SR) 260, about 13 to 15 miles east of Payson.

Thompson Draw I and II
Thompson Draw I and II are two separate areas which make up this one community. One area is located on the east side of SR 260 about 13 miles east of Payson. The other is located about 1 mile north of the first area, on the west side of SR 260. The land was originally leased from the FS, but is now in private ownership. Altogether, the community has 85 parcels and is totally built out. In 2002, the full-time equivalent population of the community was estimated to be 5 people, with an associated water demand of about 4 af/yr. The water use rate is 657 gpcd. Substantial volumes of water apparently are being used by non-permanent residents. Thompson Draw has two community-owned wells that are assumed to meet current needs. Water production capacity is unknown.

Tonto Village
Tonto Village is located approximately ten miles northeast of Payson, about a mile west of the western section of Thompson Draw along FR 64. The Village is almost built out, with 303 developed parcels out of a total of 353. In 2002, the population of Tonto Village was estimated to be 350, with a water demand of about 27 af/yr. The water use rate is 68 gpcd. Tonto Village Water Company, a private regulated water supply utility, provides water to the community using one well. Water production capacity is likely about equal to the demand of 27 af/yr.

Quite a few small lots with septic systems are located near the well within this community. It is surmised that leaky distribution lines have created what may be a long-term water quality issue. Complete nighttime shutdowns of the water system have occurred in recent years due to a reported lack of available resources. The ACC has ordered a new well be drilled every year since 2005. These quantity and quality issues are suspected to be due to the shallow, drought-sensitive wells within the community that have been, on occasion, impacted by septic systems installed in a non-compatible geologic environment (fractured limestone and shales).

Wood Canyon Ranch (previously known as Pine Meadows)
Wood Canyon Ranch is located approximately 13 miles east of Payson, immediately south of the eastern section of Thompson Draw I and II. It is located just north of Little Green Valley Road. Wood Canyon Ranch is completely undeveloped at this time, but 260 subdivision lots are approved. The Ranch reportedly has five adequate wells owned by the developer. Water production capacity is unknown.

III.B.1.6 Sub-Region 1, Cluster 6

There are 10 communities within Cluster 6. These communities are scattered across the entire northeastern quadrant of the Study area, and are interspersed among or adjacent to other communities from Clusters 2, 3, 4, and 5.

Camp Geronimo Boy Scout Camp
This camp is located about 11.5 miles north and just west of Payson, along Webber Creek. The camp is a major facility that serves the Boy Scouts of America Roosevelt Council troops in the greater Phoenix area. It is located on an old ranch site. The camp houses between 600 to 1,000 scouts, leaders, and staff during the summer months but is used year-round for leadership retreats (averaging 5 to 8 people). The water use rate is 96 gpcd. Water is currently supplied by two contained natural springs located on the TNF at the base of the Mogollon Rim (Poison Springs at 80 gpm and Herron Springs at 50 gpm, which together produce about 210 af/yr). The water is piped to storage tanks; substantial overflow goes underground into Webber Creek at the south end of the camp. The camp has a new wastewater treatment facility to help protect the groundwater.

Geronimo Estates
Geronimo Estates is located about 8.5 miles north and just west of Payson. It is about 3 miles downstream of Camp Geronimo along Webber Creek. The 2002 estimated population was 35, with a corresponding water demand of about 6 af/yr. The water use rate is 141 gpcd. There are 109 developed parcels out of a total of 252.

Water is supplied by Payson Water Company (Brooke); the system consists of two wells. There also are 13 private wells that are not connected to the Payson Water Company's (Brooke) system. Because of the apparent low volume of groundwater available and ongoing system operational problems, a full moratorium on new meters and line extensions within the Payson Water Company CC&N has been in effect for 28 years. In 2007, much of the community was completely out of water numerous times, with claims of dry holes, non-working pumps, etc. The lack of adequate storage capacity adds to the water supply problems; only 15,000 gallons of storage capacity are available. The problem of continued inadequate service by Payson Water Company (Brooke) has been brought before the ACC Hearing Division (as of mid-2008).

Bonita Creek
Bonita Creek is in an isolated portion of the Study area approximately 11 miles north and east of Payson. The community is less than a mile north of FR 64. Bonita Creek itself is a perennial stream (reportedly producing a constant 500 gpm for decades); the community straddles the creek for about 1 mile. The community originally consisted of apple orchards and a ranch. In 1990, 55 of 59 homes in this area were burned during the Dude fire, but since then about 30 homes out of a total of 84 lots available have been built within this community. In 2002, the population of the community was estimated at 30, with an associated water demand of just under 4 af/yr. The water use rate is 110 gpcd. Water is supplied from the creek (based on claims dating from 1880s) and groundwater which is distributed by the Bonita Creek Land and HOA Water Company. The number of wells and capacities of both the wells and surface water diversion are unknown. There is some concern related to water claims and availability of surface water diversions. The creek disappears underground about half way through the community.

Diamond Point Recreation
This community is approximately 10 miles northeast of Payson, located just southwest of FR 64. It is so named because it formerly was FS leased property that could only be occupied during the summer months; over the past 10 years or more, the land has been sold for full time residential use. All 45 lots have been developed. In 2002 the population of the community was estimated at 4, with a corresponding water demand estimated to be just under 1 af/yr. The water use rate is 137 gpcd. The capacity of the one well is not known.

Bear Flat
This community is located almost 15 miles east of Payson, about 4 miles south of SR 260 via a relatively rough unpaved road. The 2002 estimated population was 12 full-time residents. The current water demand is estimated to be 3 af/yr. The water use rate is 250 gpcd. There are 61 parcels developed out of a total of 144 parcels in this community. Water is supplied by 20 private wells. Existing total water capacity is unknown.

Kohl's Ranch
Kohl's Ranch is located approximately 12 miles northeast of Payson just south of SR 260 along Tonto Creek. In 2002, the population of Kohl's Ranch was estimated to be 270, with a corresponding water demand of about 22 af/yr. The water use rate is 70 gpcd. The primary development in the community is a time-share residential property, although there are many small weekend cabins on relatively small lots on both sides of Tonto Creek. There are 134 developed parcels out of a total of 192 designated parcels within this community.

Tonto Creek Estates
This community is located just over 2 miles north of Kohl's Ranch, upstream along the Tonto Creek. In 2002, the community had an estimated population of

30, with an estimated water demand of 5 af/yr. The water use rate is 137 gpcd. All 65 lots of the Estates have been developed. Water is supplied to the community by the Tonto Creek Estates Water Company, a private regulated water utility which operates three wells. They apparently have adequate long-term water resources and good water quality. Production capacity information has not been shared.

Christopher Creek
The community of Christopher Creek is approximately 18 miles northeast of Payson and is located just north of SR 260, along Christopher Creek. In 2002, the population of the community was estimated to be 150, with an associated water demand of about 12 af/yr. The water use rate is 73 gpcd. Out of a total of 528 parcels, 342 have been developed. Water is supplied by Christopher Creek Haven Water Company, a private regulated utility, which operates a water system consisting of 4 wells. Total production capacity of the four wells is unknown. No major water production issues are known to exist. Currently this community has a surface water remediation plan in place to mitigate water quality issues within its community and possibly downstream at the R Bar C Boy Scout Camp.

Hunter Creek
Hunter Creek is located approximately 1.5 miles downstream and south of the community of Christopher Creek. Out of a total of 166 lots in this community, 75 have been developed. In 2002, the population of the community was estimated to be 35, with an associated water demand of 22 af/yr. The water use rate is 571 gpcd, which is the second highest water use rate per person in the Study area. A possible reason for this high usage rate is heavy water use for landscaping by part-time residents who are not counted in the population totals. There are two community-owned wells; output capacities of the wells are unknown. The community also operates a wastewater treatment facility. Both the wells and the wastewater treatment facility are located near the edge of the creek.

R-Bar-C Boy Scout Camp
This Boy Scout camp is a smaller seasonal camp than Camp Geronimo. It is located about 16 miles east of Payson, just south of SR 260 along Christopher Creek. The equivalent full-time population in 2002 was estimated to be 20, with a water demand of 2 af/yr. The water use rate is 96 gpcd. There are two wells that serve the camp. Assuming the camp continues to be operated like it has been in the past, the water supply is assumed to be sufficient into the future. Current production capacity of the wells is unknown. County wastewater management personnel and others have expressed a major concern regarding water quality problems in the creek, apparently resulting from upstream septic systems.

III.B.2 Sub-Region 2, Arrowhead Canyon

There is only one community located within this Sub-Region—Arrowhead Canyon. It is a small, unincorporated community located at the northern edge of Sub-Region 2, just below the Diamond Rim fault, approximately 2.5 miles south

of Pine. The 2002 population of the community was about 10, with a corresponding water demand of about 1 af/yr. The water use rate is 100 gpcd. There are five private wells that are used; their existing capacities are unknown.

III.B.3 Sub-Region 3

This Sub-Region is located in the southeastern quadrant of the Study area. Twelve communities, mostly located in the western portion, are included within this Sub-Region. This area also approximates the central portion of the entire Study area. It is the most populated of all Sub-Regions, as well as having the single-most populated community in the Study area—the town of Payson, with a 2002 population of 14,500.

Beaver Valley
The Beaver Valley community is the northernmost community within this Sub-Region. It is almost 7 miles north of Payson, along Houston Mesa Road (FR 199). The community is about 66 percent built out, with 231 lots developed out of 351 total available lots. In 2002, an estimated 240 people lived in Beaver Valley, with an associated water demand of 22 af/yr. The water use rate is 82 gpcd. Water is supplied by a one-well system operated by the Beaver Valley Water Company, an ACC regulated private utility. There also are two private wells that are not part of the system. The utility also claims a water right of about 23.75 af/yr on the East Verde River, of which about 22 af/yr are used. Total water supplies available are currently estimated to be 23 af/yr.

Over the last few years, the water system operator has had to move the system's point of diversion intake several hundred yards upstream on the East Verde River. This is because an insufficient volume of water flows down the East Verde River past the community during periods of drought or when the C. C. Cragin pumps are not operating. In the past, water quality has been a concern in this community due to high density septic systems in the service area, and a heavily used FS campground located less than a mile upstream (Water Wheel) which has no sanitation facilities. An old low volume shallow well is now in operation, but without increased flow in the river, the community is in jeopardy of having insufficient potable water during drought periods or if the streamflow is polluted by the upstream campground. These situations all contribute to reliability issues with the existing water delivery system.

Freedom Acres and Wonder Valley
Freedom Acres is about 5.5 miles north of Payson, located along and just west of Houston Mesa Road (FR 199). Freedom Acres is completely built out, with all 21 lots developed. In 2002, Freedom Acres had an estimated population of 29, with an associated water demand of 9 af/yr; the water use rate is 283 gpcd. This community consists mostly of full-time residents living on fully developed large lots; many have horses. Wonder Valley is located just east of Freedom Acres, and is almost completely built out, with 20 lots out of 23 lots developed. In 2002,

Wonder Valley had an estimated population of 40, with an associated water demand of about 3 af/yr; the water use rate is 69 gpcd. Similar to Freedom Acres, this community consists mostly of full-time residents.

Freedom Acres owns one well, and Wonder Valley owns two well, which together are operated as one system. In addition, there are 10 privately-owned wells in Freedom Acres and 12 privately-owned wells in Wonder Valley that appear to be meeting current demands; however, these wells are located in shallow aquifers and are subject to reduced output under severe drought conditions. The groundwater supply currently available to Freedom Acres appears to be limited, particularly in extended dry periods. The Wonder Valley community had a well collapse in 2002 during which time Gila County had to haul water to the community. An initial replacement well did not yield significant water; a second replacement well producing nearly 30 gpm was developed to meet current demands. The current water supply in Wonder Valley is estimated to be just under 17 af/yr.

Mesa del Caballo

This community is just over 3 miles north of Payson, and has one of the highest densities within the Study area. It is almost completely built-out, with 409 lots developed out of 455. In 2002 the estimated population of Mesa del Caballo was 640, with an associated water demand of 66 af/yr. The water use rate is 92 gpcd. Water to the community is supplied by Payson Water Company (Brooke). The utility operates a system that consists of seven low volume wells. The 7 wells yield a total of 45to 50 gpm, enough capacity to supply 70 to 80 af/yr. The wells have apparently been operationally stable over the past 6 to 8 years, with only periodic water supply shortages. During 2006-2007, there were short periods of time during which there were inadequate supplies.

Flowing Springs

Flowing Springs is about 5 miles north of Payson, along both sides of the East Verde River. In 2002, the population of Flowing Springs was estimated to be 40, with an associated water demand of about 6 af/yr. The water use rate is 137 gpcd. The community is almost 60 percent built-out, with 42 lots developed out of 73.

Water is provided to Flowing Springs by Payson Water Company (Brooke) using a single low volume well. Some members of this community have surface water claims and they apparently use surface water from the East Verde River for irrigation purposes. Total potable supply available to the community is currently estimated to be 7 af/yr.

East Verde Estates (also known as East Verde Park)

This community is about 4.5 miles north of Payson, just west off SR 87 along the East Verde River. It is about 2 miles downstream of Flowing Springs. In the past it was also referred to as East Verde Park. Out of 246 total lots, 164 have been developed. In 2002 the population of East Verde Estates was estimated to be 180,

with a corresponding water demand of 16 af/yr. The water use rate is 79 gpcd. Payson Water Company (Brooke), the water provider, has three low volume wells that make up the water supply system. There are also 11 private wells within the community that are not connected to Payson Water Company's system. This community has experienced significant outages over the years. Large demand spikes sometimes exceed short-term storage capacity, indicating a need for additional storage capacity. Without a new water supply (and likely new storage), the community would be expected to continue to experience significant water shortages.

The three low volume wells total 13 gpm. The system is estimated to have a current supply of 16 af/yr.

Summit Springs

This is a new community that has 27 approved lots, but does not yet have any residences. It is located approximately 3 or 4 miles west of Payson. Summit Springs may have adequate water for full build-out through the use of an existing well; however no information is known about the well's capacity.

Town of Payson

Payson is centrally located in the Study area. It is the largest community in the Study area with an estimated population of 14,500 in 2002. This represents approximately 68 percent of the total Study area population. It also has the highest proportion of full-time residents compared to the rest of the Study area. Out of a total possible 9,747 parcels, 7,254 parcels have been developed, which is about 74 percent of Payson's total planned build-out. The estimated water demand in 2002 was 1,805 af/yr; this represents about 70 percent of the total water used within the Study area. The water use rate is 111 gpcd.

Payson's water supply has historically been produced entirely from groundwater wells within the town limits. From early settlement of Payson in 1882 to the advent of a privately-owned water company in 1950, residents of Payson depended on shallow hand dug wells and cable tool wells. Public water mains were installed in the early 1950s and water was distributed to the original town site area and subsequent subdivisions in central Payson. Water, supplied from several drilled shallow wells, was pressurized in hydro-pneumatic tanks for delivery to area homes. The 1950s and 1960s saw the development of three additional wells within the current Payson town limits, and creation of separate public service water systems to serve new Payson subdivisions. Payson's first large mountaintop water storage tank (500,000-gallon capacity) was constructed in 1967. The four separate water systems serving the Payson community were interconnected in 1976. The town of Payson incorporated in 1980 and founded the Payson Water Department which acquired the four private water companies. The Payson Water Department currently operates 37 water production wells, 11 water storage tanks, and over 200 miles of pipeline to supply water to 7,800 public water system connections. Most of Payson's wells are relatively shallow

(300 to 500 feet below land surface) with some deeper wells approaching 1,000 feet. There also are about 300 private wells that are operated within the town but are not connected to the Payson Water Department system.

Payson originally was allocated 4,995 af/yr of Central Arizona Project (CAP) water. Payson commissioned multiple studies to determine if and how it could receive its CAP allocation; however, the use of a CAP exchange mechanism for local surface water supply could not be developed due to insufficient quantities of local water rights available for exchange, and FWS concerns regarding federally protected species, as well as a general lack of interest by local surface water rights holders. The allocation was sold and the funds from the sale were subsequently used by Payson to help maximize its groundwater resources through exploration programs, safe yield studies, conservation, and also partially fund studies for the construction of a wastewater reclamation and recycling project now known as the Green Valley Park recharge/reuse water reclamation project (1996). In addition to this recharge/reuse project, Payson has created multiple programs to enhance water efficiency and conservation.

Payson manages its groundwater resources, voluntarily by the concept of Safe Yield (Payson is not in a state AMA). Payson's safe yield is currently estimated (2008) at 2,681acre-ft/yr of groundwater, based upon an available water supply of this same amount from a combination of in- and out-of-Town well fields. Water demand is expected to remain below safe yield until a new surface water source comes on line. C.C. Cragin water was made available through the 2004 Arizona Water Settlements Act (AWSA) and the 2008 SRP/Payson water rights agreement. It is anticipated that between 2015 and 2020, facilities may be in place to deliver surface water. At that time Payson intends to manage both surface and groundwater sources conjunctively with a preference for surface water, thereby allowing the groundwater aquifers to recover.

Tonto Apache Tribe

The Tonto Apache Tribe is the only Native American community within the Study area. The Tonto Apache Reservation is located on Arizona SR 87, just south of Payson. The Tonto Apaches were recognized by a Congressional act in October 1972 giving them 85 acres. The Tribe had a population of 132 in 2002; however some members live off the reservation. For Study purposes, the Tribal population living on the reservation is included in the Payson population estimate above.

Tribal membership is increasing and the Tribe recently succeeded at expanding its reservation by acquiring 278 acres from TNF in February 2008. At present, housing on the Reservation can accommodate only about half the residential needs of current tribal members due to the Reservation's limited size. Many houses on the Reservation contain two families and some contain three. The Tribal Chairperson estimates a need for 25 additional houses to accommodate the present need.

EXHIBIT KMR-L

When recorded,
return to:
Marian Shepard, BOS
(9/9/08 #4)

2008-012380 RESL Page: 1 of 2
09/19/2008 04:49:39 PM Receipt #: 08-5691
Rec Fee: $0 Gila Co Board Of Supervisors
Gila County, Az, Sadie Tomerlin Dalton, Recorder

RESOLUTION NO. 08-09-01

A RESOLUTION OF THE BOARD OF SUPERVISORS OF GILA COUNTY, ARIZONA, SUPPORTING THE TOWN OF PAYSON'S AND NORTHERN GILA COUNTY COMMUNITIES' ACCESS TO AND USE OF THE WATER ALLOCATION IDENTIFIED IN THE ARIZONA WATER SETTLEMENT ACT OF 2004, P.L. 108-451 AND PROPOSING A FINANCIAL PARTNERSHIP WITH THE TOWN OF PAYSON TO CONSTRUCT A PIPELINE FOR THAT PURPOSE

WHEREAS, the Arizona Congressional delegation expended considerable effort on the Arizona Water Settlement Act of 2004, P.L. 108-451; and

WHEREAS, a key component of the Act is the availability of 3500 acre feet (Town of Payson 3,000 and northern Gila County communities 500 acre feet) annually of surface water from C.C. Cragin Reservoir (formerly Blue Ridge Reservoir) for use in northern Gila County; and

WHEREAS, the Town of Payson expects to construct and operate a 14.5 mile long pipeline along E. Houston Mesa Road to deliver C.C. Cragin Reservoir water to Payson and northern Gila County; and

WHEREAS, the Town of Payson has indicated an interest in assisting northern Gila County communities with the joint use of the Town of Payson's pipeline for the benefit of communities where it is economically feasible and prudent to distribute C.C. Cragin water; and

WHEREAS, it is desirable to construct only one pipeline for the benefit of all final participating Payson area communities in order to lessen the costs of construction and the environmental impacts of construction on the Tonto National Forest; and

WHEREAS, potential participating rural communities or water purveyors are not yet legally organized to make commitments for use of the water or for sharing costs of the engineering, design, permit, or construction costs to upsize the pipeline, and the Town of Payson must immediately move forward with its Special Use Permit and engineering processes; and

WHEREAS, Gila County wishes to insure the availability of an adequate main-line distribution system for the 500 acre feet of available water to rural northern Gila County communities by forming a financial partnership with the Town of Payson to upsize the pipeline and to provide the proportionate costs incurred to upsize the pipeline to adequately distribute Gila County's allocation of water; such costs not to exceed 4 million dollars; and

WHEREAS, Gila County wishes to ultimately recover costs of the upsized pipeline from the communities and water purveyors that will use the pipeline.

NOW, THEREFORE, BE IT RESOLVED that the Gila County Board of Supervisors supports the Town of Payson's Tonto National Forest Special Use Permit application and the associated plans to construct one pipeline in the Tonto National Forest to provide C.C. Cragin Reservoir water to the Town of Payson and northern Gila County communities, as intended in the Arizona Water Settlement Act of 2004, P.L. 108-451.

PASSED AND ADOPTED this 9th day of September 2008, at Globe, Gila County, Arizona.

Attest:

Steven L. Besich, Clerk of the Board

GILA COUNTY BOARD OF SUPERVISORS

José M. Sanchez, Chairman

Tommie Martin, Vice-Chairman

Shirley Dawson, Member

Approved As to Form:

Gila County Attorney
Bryan Chambers, Chief Deputy

EXHIBIT
KMR-6
ADMITTED

Document #152519

Kathleen M. Reidhead
14406 S. Cholla Canyon Dr.
Phoenix, AZ 85044
Telephone: 480-704-0261

RECEIVED
2014 FEB -3 A 8:15
AZ CORP COMMISSION
DOCKET CONTROL

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO: W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR AUTHORITY TO: (1) ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM; AND (2) ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	DOCKET NO: W-03514A-13-0142

2/3/14

SUPPLEMENT TO PRE-FILED TESTIMONY
PHASE 2

Kathleen M. Reidhead, "KMR", is an Intervener in the above-captioned matter. KMR submits the attached REVISED Exhibit KMR-2 and REVISED Exhibit KMR-3 showing current estimated water bills for Deer Creek Village, "DCV" and Gisela, based on the most recent rate proposals recommended by the Arizona Corporation Commission, "Staff", and Payson Water Company, "PWC". These Exhibits show that the current Staff rate proposal will result in higher estimated water bills than the earlier rate proposal as reflected on the original Exhibit KMR-2 and Exhibit KMR-3 submitted with Surrebuttal Testimony on 12/20/13 (Document #149903).

Also attached as Exhibit KMR-M is a document submitted by Mr. Robert Hardcastle on Docket #W-03514A-12-0008, Document #136568 posted on 6/21/12, showing the results of a vote taken by Mesa del Caballo ratepayers in 2011 that was referenced in KMR's 1/27/14 Intervenor Response to Supplemental Rejoinder Testimony, page 5, lines 20-24. Please note that this Exhibit shows 167 ballots out of 200 ballots collected voted in favor of the CC Cragin Pipeline. 167 is not a majority of the

households in service in Mesa del Caballo in 2011. This evidence shows that there was not a consensus of support for the CC Cragin Pipeline option by the people of MdC in September 2011.

Respectfully submitted this 3rd day of February, 2014.

By Kathleen M. Reidhead

Kathleen M. Reidhead, Intervener
14406 S. Cholla Canyon Dr.
Phoenix, AZ 85044

ORIGINAL and thirteen (13) copies of the foregoing were filed this 3rd day of February, 2014 with:

Docket Control
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

COPY of the foregoing was mailed this 3rd day of February, 2014 to:

Jay Shapiro (Attorney for Payson Water Co., Inc.)
Fennemore Craig P.C.
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Scottsdale, AZ 85253

J. Stephen Gehring & Richard M. Burt
8157 W. Deadeye Rd.
Payson, AZ 85541

Kathleen M. Reidhead

Revised
EXHIBIT KMR-2

Summary of Company Proposal **REVISED** as of January 6, 2014

Estimated water bills for **Deer Creek Village** Customers

(Deer Creek Village is part of the former United Utilities System)

Example #1 - Water Use for June (reported as High Water Usage Month)[4]	Monthly Cost
Company Recommended Base Rate (5/8 x 3/4-inch meter)[5]	$ 25.42
Company Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ 41.39
*Based upon high water use of 215 gallons per day per connection[6] = 6,450 gallons/month	
TOTAL	**$ 66.81****

**Current cost for this same level of usage is $31.05
(This is a 115% increase)

Example #2 - Water Use for January (reported as Low Water Usage Month)[1]	Monthly Cost
Company Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 25.42
Company Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ 14.10
*Based upon low water use of 94 gallons per day per connection[3] = 2,820 gallons/month	
TOTAL	**$ 39.52****

**Current cost for this same level of usage is $21.44
(This is a 84% increase)

Example #3 - Water Use Average (reported as Average Water Usage Month)[1]	Monthly Cost
Company Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 25.42
Company Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ 25.33
*Based upon average water use of 145 gallons per day per connection[3] = 4,350 gallons/month	
TOTAL	**$ 50.75****

**Current cost for this same level of usage is $24.77
(This is a 105% increase)

[4] Per Direct Testimony of Jian W. Liu, Document #0000149555, Page 11
[5] Per Rejoinder Testimony of Thomas Bourassa, Document #150671, Rejoinder Schedule H-3, Page 1.
[6] Per Direct Testimony of Jian W. Liu, Document #0000149555, Page 11

Revised

EXHIBIT KMR-2

Summary of Staff Proposal **REVISED** as of January 24, 2014

Estimated water bills for **Deer Creek Village** Customers

(Deer Creek Village is part of the former United Utilities System)

Example #1 - Water Use for June (reported as High Water Usage Month)[1]	Monthly Cost
Staff Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 23.00
Staff Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ 38.44
*Based upon high water use of 215 gallons per day per connection[3] = 6,450 gallons/month	
TOTAL	**$ 61.44****

**Current cost for this same level of usage is $31.05

(This is a 98% increase)

Example #2 - Water Use for January (reported as Low Water Usage Month)[1]	Monthly Cost
Staff Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 23.00
Staff Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ 21.61
*Based upon low water use of 94 gallons per day per connection[3] = 2,820 gallons/month	
TOTAL	**$ 44.61****

**Current cost for this same level of usage is $21.44

(This is a 108% increase)

Example #3 - Water Use Average (reported as Average Water Usage Month)[1]	Monthly Cost
Staff Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 23.00
Staff Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ 22.35
*Based upon average water use of 145 gallons per day per connection[3] = 4,350 gallons/month	
TOTAL	**$ 45.35****

**Current cost for this same level of usage is $24.77

(This is a 83% increase)

[1] Per Direct Testimony of Jian W. Liu, Document #149555, Page 11

[2] Per Supplemental Surrebuttal Testimony of Crystal S. Brown, Document #151005, Supplemental Surrebuttal Schedule CSB-17, Pg. 1

[3] Per Direct Testimony of Jian W. Liu, Document #149555, Page 11

Revised

EXHIBIT KMR-3

Summary of Staff Proposal **REVISED** as of January 24, 2014

Estimated water bills for **Gisela/Tonto Creek Shores** Customers

(Gisela is part of the former C & S System)

Example #1 - Water Use for June (reported as High Water Usage Month)[1]	Monthly Cost
Staff Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 23.00
Staff Recommended Commodity Rate (5/8 x 3/4-inch meter)*	$ 75.65
*Based upon high water use of 368 gallons per day per connection[3] = 11,040 gallons/month	
TOTAL	**$ 98.65****

**Current cost for this same level of usage is $33.34

(This is a 196% increase)

Example #2 - Water Use for March (reported as Low Water Usage Month)[1]	Monthly Cost
Staff Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 23.00
Staff Recommended Commodity Rate (5/8 x 3/4-inch meter)*	$ 17.98
*Based upon low water use of 126 gallons per day per connection[3] = 3,780 gallons/month	
TOTAL	**$ 40.98****

**Current cost for this same level of usage is $22.59

(This is a 81% increase)

Example #3 - Water Use Average (reported as Average Water Usage Month)[1]	Monthly Cost
Staff Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 23.00
Staff Recommended Commodity Rate (5/8 x 3/4-inch meter)*	$ 40.97
*Based upon average water use of 226 gallons per day per connection[3] = 6,780 gallons/month	
TOTAL	**$ 63.97****

**Current cost for this same level of usage is $27.03

(This is a 137% increase)

[1] Per Direct Testimony of Jian W. Liu, Document #149555, Page 11

[2] Per Supplemental Surrebuttal Testimony of Crystal S. Brown, Document #151005, Supplemental Surrebuttal Schedule CSB-17, Pg 1

[3] Per Direct Testimony of Jian W. Liu, Document #149555, Page 11

Revised

EXHIBIT KMR-3

Summary of Company Proposal **REVISED** as of January 6, 2014

Estimated water bills for **Gisela/Tonto Creek Shores** Customers

(Gisela is part of the former C & S System)

Example #1 - Water Use for June (reported as High Water Usage Month)[4]	Monthly Cost
Company Recommended Base Rate (5/8 x 3/4-inch meter)[5]	$ 25.42
Company Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ ~~78.06~~ 80.76
*Based upon high water use of 368 gallons per day per connection[6] = 11,040 gallons/month	
TOTAL	$ ~~103.48~~ 106.18**

**Current cost for this same level of usage is $33.34

(This is a ~~210%~~ 218% increase)

Example #2 - Water Use for January (reported as Low Water Usage Month)[1]	Monthly Cost
Company Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 25.42
Company Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ ~~20.97~~ 23.67
*Based upon low water use of 126 gallons per day per connection[3] = 3,780 gallons/month	
TOTAL	$ ~~46.39~~ 49.09**

**Current cost for this same level of usage is $22.59

(This is a ~~105%~~ 117% increase)

Example #3 - Water Use Average (reported as Average Water Usage Month)[1]	Monthly Cost
Company Recommended Base Rate (5/8 x 3/4-inch meter)[2]	$ 25.42
Company Recommended Commodity Rate (5/8 x 3/4-inch meter)[2]*	$ ~~43.92~~ 46.62
*Based upon average water use of 226 gallons per day per connection[3] = 6,780 gallons/month	
TOTAL	$ ~~68.34~~ 72.04**

**Current cost for this same level of usage is $27.03

(This is a ~~156%~~ 167% increase)

[4] Per Direct Testimony of Jian W. Liu, Document #149555, Page 11

[5] Per Rejoinder Testimony of Thomas Bourassa, Document #150671, Rejoinder Schedule H-3, Page 1.

[6] Per Direct Testimony of Jian W. Liu, Document #149555, Page 11

EXHIBIT KMR-M

RECEIVED
OCT 10 2011
BROOKE UTILITIES

BOURQUE LAW FIRM, PC

A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW

ARTHUR J. BOURQUE

1747 EAST MORTEN AVENUE
SUITE 105
PHOENIX, ARIZONA 85020

TELEPHONE: (602) 466-2661
TELECOPIER: (602) 266-7744
www.bourquelaw.com

WRITER'S DIRECT LINE: 466-2056
art@bourquelaw.com

October 6, 2011

VIA EMAIL AND U.S. MAIL

Mr. Robert Hardcastle
Brooke Utilities, Inc.
P.O. Box 82218
Bakersfield, California 93380

Re: Mesa del Caballo Water Alternatives Preference

Dear Mr. Hardcastle:

We received 200 ballots as of October 3, 2011. 16 of those ballots could not be counted because no selection or multiple selections were made. Here are the results of all ballots received as of October 3, 2011:

CC Cragin Pipeline	167
Conservation	5
Deep Wells	8
Long-term Hauling	1
US Forest Service Pipeline	3
Could not be counted	16
	200

Sincerely,

Arthur J. Bourque

0000019284

BEFORE THE ARIZONA CORPORATION COMMISSION

21T
CO

JEFF HATCH-MILLER
Chairman
WILLIAM A. MUNDELL
Commissioner
MARC SPITZER
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner

Arizona Corporation Commission
DOCKETED
MAY 0 5 2005
DOCKETED BY nr

EXHIBIT
S-4
ADMITTED

IN THE MATTER OF PAYSON WATER COMPANY, INC. FILING OF A CURTAILMENT PLAN TARIFF

DOCKET NO. W-03514A-04-0906

DECISION NO. 67821

ORDER

Open Meeting
May 3 and 4, 2005
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Payson Water Company, Inc. ("Payson" or "the Company") is certificated to provide water as a public service corporation in the State of Arizona.

2. On December 17, 2004, the Company filed a curtailment plan tariff.

3. The Company's proposed tariff differs from Staff's general curtailment tariff template that is posted on the Commission's website in that the Company is proposing a "reconnection fee for violation" during the mandatory Stage 3, 4 and 5 conditions, when outdoor watering is prohibited.

4. On January 20, 2005, in Decision No. 67511, the Commission suspended the tariff filing for a period of ninety days, through and including April 16, 2005. This request was granted so that Staff would have more time to review the application.

. . .

. . .

5. On April 11, 2005, in Decision No. 67755, the Commission suspended the tariff filing for an additional 30 days. This request was granted so that the Company could docket a Water Augmentation Surcharge Tariff.

6. The Company is located in the Payson area in Gila County and consists of nine independent water systems; Mead's Ranch, East Verde Estates, Flowing Springs, Geronimo, Mesa del Caballo, Star Valley/Quail Valley, Whispering Pines, Star Valley and Deer Creek Systems. These systems serve a total of approximately 4,100 customers.

7. The Company's proposed curtailment tariff was developed based on the tariff approved for Pine Water Company, Inc. ("Pine Water ") in Decision No. 62846 (August 24, 2000) and revised in Decision No. 65914 (May 16, 2003) which includes a "reconnection fee for violation". Pine Water and Payson are subsidiaries of Brooke Utilities, Inc. The Company would like its tariff to be consistent with the tariff approved for Pine Water.

8. The Company seeks approval for a provision for a "reconnection fee for violation" during mandatory Stage 3, 4 and 5 conditions. Once notice of mandatory conservation has been provided, customers can be disconnected if they fail to comply and continue to use water for purposes that are prohibited. These reconnection fee ("fine") amounts are less than Pine Water's fine. The Company proposed its fines be lower than Pine Water's because the water supply shortage in Payson's service area is not as severe as it is in Pine Water's service area. The proposed fines being requested are summarized as follows:

Stage 3 – Enforcement

1st offense	$150.00
2nd offence	$300.00
3rd offence (and thereafter)	$600.00

Stage 4 – Enforcement

1st offense	$300.00
2nd offence	$600.00
3rd offence (and thereafter)	$1,200.00

. . .

. . .

Stage 5 – Enforcement

1st offense	$600.00
2nd offence	$1,200.00
3rd offence (and thereafter)	$2,400.00

9. Under these mandatory restrictions in Stages 3, 4 and 5, the Company is required to notify customers by delivering written notice door to door at each service address, or by changing local sign postings, or via electronic mail, or by any other reasonable means of notifying customers in the affected water system(s).

10. It is the Company's position that water conservation will only be achieved if the parties responsible for wasting water face the consequences for such actions, including appropriate economic penalties. Otherwise, the impact of one individual wasting water is unfairly placed on all of the water system's customers.

11. Staff proposed several modifications to the tariff, one of which would potentially require the Company to haul water under certain conditions.

12. Staff finds the amended tariff to be reasonable.

13. Staff recommends approval of the Company's Curtailment Plan Tariff as modified by Staff and reflected in Staff's Exhibit A.

14. Staff further recommends:

a. That the monies collected under this tariff shall be deposited into a separate interest bearing trust account and used solely for the purposes of paying for importing of water to the Company (such as hauling water or connecting to and buying water from another water system).

b. That the Company submit a report to the Utilities Division Compliance Section, beginning October 15, 2005, and on May 15 and October 15 of each year thereafter, that includes a running account of (up to the last day of the previous month) the following information;

. . .

1) The name of each customer that has paid the fine,
2) The amount of the fine paid by each customer,
3) The amount of money used from the account to pay for importing water, and
4) The balance in the account.

. . .

CONCLUSIONS OF LAW

1. The Company is an Arizona public service corporation within the meaning of Article XV, Section 2, of the Arizona Constitution.

2. The Commission has jurisdiction over the Company and of the subject matter in this Application.

3. The Commission, having reviewed the request for approval of the tariff and Staff's Memorandum, dated April 19, 2005, concludes that it is in the public interest to approve the curtailment plan tariff, as amended in accordance with the recommendations in Staff's Exhibit A.

ORDER

IT IS THEREFORE ORDERED that Payson Water Company, Inc. is hereby authorized to implement the curtailment plan tariff, a copy of which is attached as Exhibit A.

IT IS THEREFORE ORDERED that Payson Water Company, Inc. shall comply with the recommendations and conditions as set forth in Findings of Fact No. 14 hereinabove.

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IT IS FURTHER ORDERED that Payson Water Company, Inc. shall docket the curtailment plan tariff with 30 days of the effective date of this Decision.

IT IS FURTHER ORDERED that this Order shall become effective immediately.

BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION

CHAIRMAN COMMISSIONER COMMISSIONER

COMMISSIONER COMMISSIONER

IN WITNESS WHEREOF, I BRIAN C. McNEIL, Executive Secretary of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, this 5th day of May, 2005.

BRIAN C. McNEIL
Executive Secretary

DISSENT: _____

DISSENT: _____

EGJ:MSJ:lhm\DR

SERVICE LIST FOR: Payson Water Company, Inc.

DOCKET NO. W-03514A-04-0906

Mr. Jay Shapiro
Fennemore Craig
3003 North Central Avenue, Suite 2600
Phoenix, Arizona 85012-2913

Ms. Mistie S. Jared
Payson Water Company, Inc.
Post Office Box 82218
Bakersfield, California 93380-2218

Mr. Ernest G. Johnson
Director, Utilities Division
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007

Mr. Christopher C. Kempley
Chief Counsel
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007

Utility: Payson Water Company, Inc.
Docket No.: W-03514A-04-0906
Phone No.: 1-800-270-6084

Tariff Sheet No.: 1 of 6
Decision No.:_____
Effective: _____

CURTAILMENT PLAN FOR PAYSON WATER COMPANY, INC.

ADEQ Public Water Systems: Mead's Ranch (#04-015), East Verde Estates (#04-026), Flowing Springs (#04-027), Geronimo (#04-028), Mesa del Caballo (#04-030), Star Valley/Quail Valley (#04-037), Whispering Pines (#04-039), Star Valley (#04-346) and Deer Creek (#04-064)

APPLICABILITY

Payson Water Company, Inc. ("Company") is authorized by the Arizona Corporation Commission to curtail water service to all customers within its certificated area under the terms and conditions listed in this tariff. As needed, this tariff will be implemented by the Company on a system-by-system basis, or on a company-wide basis, as circumstances warrant.

This curtailment plan shall become a part of the Arizona Department of Environmental Quality Emergency Operations Plan for the Company.

The Company shall notify its customers of this new tariff as part of its next regularly scheduled billing after the effective date of the tariff or no later than sixty (60) days after the effective date of the tariff.

The Company shall provide a copy of the curtailment tariff to any customer, upon request.

STAGES

Stage 1 Exists When:

Company's water storage level or well production is at least 80% of total capacity and there are no known problems with its water production or storage facilities.

Restrictions: Under Stage 1, the public water system is deemed to be operating normally and no curtailment is necessary.

Notice: Under Stage 1, no notice is necessary.

Stage 2 Exists When:

Company's water storage or well production is less than 80% but at least 70% of capacity for at least (48) consecutive hours.

Company has identified issues such as a steadily declining water table, increased draw down threatening pump operations, and/or poor water production, creating a reasonable belief that the Company will be unable to meet anticipated water demand on a sustained basis.

Restrictions: Under Stage 2, voluntary conservation measures should be employed by customers to reduce water consumption by ten percent (10%). Outside watering on weekends and holidays should be curtailed. Outside vegetation watering may occur during weekday periods on even days of the month for even numbered lots, and odd numbered days of the month for odd numbered lots.

Notice: Under Stage 2, the Company is required to notify customers by delivering written notice door to door at each service address, or by changing local sign postings, or via electronic mail, or by any other reasonable means of notifying customers in the affected water system(s) of the imposition of the Curtailment Tariff, the Curtailment Stage, the general nature of the problem and the need to conserve water.

Stage 3 Exists When:

Company's water storage level or well production is less than 70% but at least 60% of capacity for at least twenty-four (24) consecutive hours.

Company has identified issues such as a steadily declining water table increased draw down threatening pump operations, and/or poor water production, creating a reasonable belief that the Company will be unable to meet anticipated water demand on a sustained basis. The Company will undertake reasonable measures to supplement its water supply until such time that Stage 3 is reached for 48 consecutive hours.

Restrictions: Under Stage 3, Company shall inform the customers of a **mandatory** restriction to employ water conservation measures to reduce daily consumption. Failure to comply will result in customer disconnection. The following uses of water shall be prohibited:

- Irrigation of outdoor lawns, trees, shrubs, or any plant life is prohibited
- Washing of any vehicle is prohibited
- The use of water for dust control or any outdoor cleaning uses is prohibited
- The use of drip or misting systems of any kind is prohibited
- The filling of any swimming pool, spas, fountains or ornamental pools is prohibited
- The use of construction water is prohibited.
- Restaurant patrons shall be served water only upon request

- Any other water intensive activity is prohibited.

The Company's operation of its standpipe service is prohibited. The addition of new service lines and meter installations is prohibited.

Notice: Under Stage 3, the Company is required to notify customers by delivering written notice door to door at each service address, or by changing local sign postings, or via electronic mail, or by any other reasonable means of notifying customers in the affected water system(s) of the imposition of the Curtailment Tariff, the Curtailment Stage, the general nature of the problem and the need to conserve water.

Enforcement: Once notice of mandatory conservation has been provided, the failure of a customer to comply within one (1) business day or two (2) calendars of receipt of such notice will result in an immediate disconnection of water service pursuant to Arizona Administrative Code R14-2-410(B)(1)(d). The reconnection fee for violation of a Stage 3 curtailment notice shall be:

1st offense:	$150.00
2nd offense:	$300.00
3rd offense (and thereafter):	$600.00

If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

Stage 4 Exists When:

Company's water storage level or well production is less then 60% but at least 50% capacity for twenty-four (24) consecutive hours.

Company has identified issues such as a steadily declining water table increased draw down threatening pump operations, and/or poor water production, creating a reasonable belief that the Company will be unable to meet anticipated water demand on a sustained basis. The Company will undertake reasonable measures to supplement its water supply until such time that Stage 3 is reached for 48 consecutive hours.

Restrictions: Under Stage 4, Company shall inform the customers of a **mandatory** restriction to employ water conservation measures to reduce daily consumption. Failure to comply will result in customer disconnection. The following uses of water shall be prohibited:

- Irrigation of outdoor lawns, trees, shrubs, or any plant life is prohibited

- Washing of any vehicle is prohibited
- The use of water for dust control or any outdoor cleaning uses is prohibited
- The use of drip or misting systems of any kind is prohibited
- The filling of any swimming pool, spas, fountains or ornamental pools is prohibited
- The use of construction water is prohibited.
- Restaurant patrons shall be served water only upon request
- Any other water intensive activity is prohibited.

The Company's operation of its standpipe service is prohibited. The addition of new service lines and meter installations is prohibited.

Notice: Under Stage 4, the Company is required to notify customers by delivering written notice door to door at each service address, or by changing local sign postings, or via electronic mail, or by any other reasonable means of notifying customers in the affected water system(s) of the imposition of the Curtailment Tariff, the Curtailment Stage, the general nature of the problem and the need to conserve water.

Enforcement: Once notice of mandatory conservation has been provided, the failure of a customer to comply within one (1) business day or two (2) calendar days of receipt of such notice will result in an immediate disconnection of water service pursuant to Arizona Administrative Code R14-2-410(B)(1)(d). The reconnection fee for violation of a Stage 4 curtailment notice shall be:

1st offense:	$ 300.00
2nd offense:	$ 600.00
3rd offense (and thereafter):	$1,200.00

If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

Stage 5 Exists When:

Company's water storage level or well production is less then 50% of total storage capacity for twelve (12) consecutive hours.

Company has identified issues such as a steadily declining water table increased draw down threatening pump operations, and/or poor water production, creating a reasonable belief that the Company will be unable to meet anticipated water demand on a sustained basis. The Company will undertake reasonable measures to supplement its water supply until such time that Stage 3 is reached for 48 consecutive hours.

Restrictions: Under Stage 5, Company shall inform the customers of a **mandatory** restriction to employ water conservation measures to reduce daily consumption. Failure to comply will result in customer disconnection. The following uses of water shall be prohibited:

- Irrigation of outdoor lawns, trees, shrubs, or any plant life is prohibited
- Washing of any vehicle is prohibited
- The use of water for dust control or any outdoor cleaning uses is prohibited
- The use of drip or misting systems of any kind is prohibited
- The filling of any swimming pool, spas, fountains or ornamental pools is prohibited
- The use of construction water is prohibited.
- Restaurant patrons shall be served water only upon request
- Any other water intensive activity is prohibited.

The Company's operation of its standpipe service is prohibited. The addition of new service lines and meter installations is prohibited.

Notice: Under Stage 5, the Company is required to notify customers by delivering written notice door to door at each service address, or by changing local sign postings, or via electronic mail, or by any other reasonable means of notifying customers in the affected water system(s) of the imposition of the Curtailment Tariff, the Curtailment Stage, the general nature of the problem and the need to conserve water.

Enforcement: Once notice of mandatory conservation has been provided, the failure of a customer to comply within one (1) business day or two (2) calendar days of receipt of such notice will result in an immediate disconnection of water service pursuant to Arizona Administrative Code R14-2-410(B)(1)(d). The reconnection fee for violation of a Stage 5 curtailment notice shall be:

1st offense:	$ 600.00
2nd offense:	$1,200.00
3rd offense (and thereafter)	$2,400.00

If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

Utility: Payson Water Company, Inc.
Docket No.: W-03514A-04-0906
Phone No.: 1-800-270-6084

Tariff Sheet No.: 6 of 6
Decision No.:_____
Effective: _____

NOTICE

If the Company elects to provide notice by use of local sign postings, Company shall post and maintain at least **two (2) signs per water system,** in noticeable locations that include the entrances to major subdivisions, showing if the Company is operating under its curtailment tariff, beginning with Stage 1. Each sign shall be at least four feet by four feet, and color-coded to denote the current stage:

1. Stage 1 – Green
2. Stage 2 – Blue
3. Stage 3 – Yellow
4. Stage 4 – Orange
5. Stage 5 – Red

Company shall notify the Consumer Services Division of the Utilities Division at least twelve (12) hours prior to entering either Stage 3 or Stage 4. Company shall notify the Consumer Services Section of the Utilities Division at least six (6) hours prior to entering Stage 5 of this curtailment tariff.

RECONNECTION FEE

All reconnection fees shall be cumulative for a calendar year regardless of the Stage that an offense occurs. For example, if a customer fails to meet the requirements of a particular stage, conserve the required amount of water under Stage 3 after notice that a curtailment is in effect, the reconnection fee shall be $150.00 dollars. If that same customer, in the same calendar year, commits an offense under Stage 5, the reconnection fee shall be $1,200. By May 15 and October 15 of each year, the Company will provide the Director of the Utilities Division with a list of customers who paid reconnection fees for failure to comply with the mandatory provisions of this curtailment tariff.

Any customer who has service terminated per this tariff more than once during a calendar year shall have those terminations count against him/her in the next calendar year for purposes of establishing the reconnection fee, should another termination occur.

0000148385

BEFORE THE ARIZONA CORPORATION COMMISSION

Arizona Corporation Commission
DOCKETED
OCT 25 2013
DOCKETED BY

COMMISSIONERS

BOB STUMP - Chairman
GARY PIERCE
BRENDA BURNS
BOB BURNS
SUSAN BITTER SMITH

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO. W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., FOR AUTHORITY TO ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM; AND ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	DOCKET NO. W-03514A-13-0142

EXHIBIT
S-5
ADMITTED

DECISION NO. 74175

OPINION AND ORDER
(Phase 1)

DATE OF HEARING: September 25, 2013

PLACE OF HEARING: Phoenix, Arizona

ADMINISTRATIVE LAW JUDGE: Dwight D. Nodes

APPEARANCES: Mr. Jay Shapiro, FENNEMORE CRAIG, P.C., on behalf of Payson Water Co., Inc.; and

Ms. Robin Mitchell, Staff Attorney, Legal Division, on behalf of the Utilities Division of the Arizona Corporation Commission.

BY THE COMMISSION:

Procedural History

On April 22, 2013, Payson Water Co., Inc. ("PWC" or "Company") filed with the Arizona Corporation Commission ("Commission") an application in Docket No. W-03514A-13-0111 for a determination of the fair value of its utility plant and property and for increases in its water rates and charges for utility service ("Rate Application").

On May 17, 2013, the Commission's Utilities Division ("Staff") issued a Deficiency Letter

finding the Rate Application to be deficient in several respects, and requesting certain additional information be provided by the Company.

On May 22, 2013, PWC filed revised schedules and other information requested by Staff.

On May 27, 2013, PWC filed with the Commission an application in Docket No. W-03514A-13-0142 for authority to (1) issue evidence of indebtedness in an amount not to exceed $1,238,000 on the terms and conditions set forth by the Water Infrastructure and Finance Authority ("WIFA"), and (2) encumber its real property and utility plant as security for such indebtedness ("Finance Application").

On June 3, 2013, Staff issued a Sufficiency Letter finding the Rate Application to be sufficient, and PWC was classified as a Class C utility.

On July 2, 2013, a Procedural Order was issued setting the Rate Application for hearing beginning December 9, 2013, establishing other procedural filing dates, and ordering notice by mail and publication.[1]

On August 15, 2013, PWC filed a Motion to Consolidate Proceedings and Request for Expedited Procedural Schedule. PWC requested that the Rate and Finance Application dockets be consolidated and that a new, expedited procedural schedule be established to enable the Company to pursue an opportunity recently presented by the Town of Payson ("Town" or "Payson") to build the first phase of PWC's planned interconnection between PWC's Mesa del Caballo system and the C.C. Cragin Pipeline ("Cragin Pipeline"). As requested by the Company, if approved, the Phase 1 project would enable PWC's Mesa del Caballo customers to avoid water hauling surcharges as soon as next summer.

On August 20, 2013, Staff filed its Response to Motion to Expedite. Staff stated that it did not oppose the consolidation request, but opposed PWC's request to expedite the entire proceeding. Staff proposed that a procedural conference be convened to discuss scheduling.

On August 22, 2013, PWC filed a Reply in Support of Motion to Consolidate Proceedings and Request for Expedited Procedural Schedule. The Company stated that the entire consolidated

[1] The notice was not mailed or published at that time due to subsequent motions by the Company regarding consolidation with the Finance Application.

proceeding should be expedited to afford rate relief in conjunction with commencement of the pipeline project, or that the matter should be bifurcated with expedited consideration of the Finance Application and interim rate relief.

By Procedural Order issued August 26, 2013, Docket Nos. W-03514A-13-0111 and W-03514A-13-0142 were consolidated, and a procedural conference was scheduled for September 4, 2013.

On September 4, 2013, the procedural conference was conducted as scheduled, at which time the parties discussed procedures for processing the consolidated cases.

On September 5, 2013, PWC filed a Stipulation for Procedural Order Bifurcating Proceeding and Establishing Case Schedule. In the stipulation, PWC and Staff proposed to proceed in two phases, with a Phase 1 hearing regarding a portion of the Finance Application commencing on September 25, 2013, and a Phase 2 hearing on the Rate Application and the balance of the Finance Application beginning on January 13, 2014. Other procedural dates were also listed and a proposed customer notice was attached to the filing.

On September 10, 2013, a Procedural Order was issued setting a revised procedural schedule for consideration of the Rate and Finance Applications. An expedited hearing on "Phase 1" was scheduled for September 25, 2013, to consider the Company's request for approval of a $275,000 WIFA loan to finance a portion of the planned interconnection to the Cragin Pipeline that would enable the Company to interconnect the Mesa del Caballo system to the Town of Payson, so that water could be obtained directly from the Town rather than having to haul water by truck during periods of water shortages. The hearing on the Rate Application and remainder of the proposed WIFA loan ("Phase 2") was scheduled to commence on January 13, 2014, and other testimony filing deadlines were established. The Company was also directed to mail and publish notice of the proceedings to customers.

On September 18, 2013, Staff filed a Staff Report in Phase 1, recommending approval of the $275,000 expedited WIFA loan, subject to certain conditions.

On September 23, 2013, PWC filed the responsive testimony of Jason Williamson and Thomas Bourassa.

On September 25, 2013, the Phase 1 hearing was held as scheduled. At the beginning of the hearing, public comment was received from various customers of PWC expressing opposition to the requested rate increases.[2] The hearing concluded on September 25, 2013, subject to the Company being required to submit certain late-filed exhibits.

On October 1, 2013, PWC late-filed: a 2009 report on Water Supply Alternatives for the Mesa del Caballo system; a 2010 audio-frequency magnetotelluric survey performed by Zonge Engineering and Research Organization, Inc. ("Zonge") for Mesa del Caballo; and a 2010 report by Southwest Groundwater Consultants regarding the implications of the Zonge study.

* * * * * * * * * *

Having considered the entire record herein and being fully advised in the premises, the Commission finds, concludes, and orders that:

FINDINGS OF FACT

Phase 1 Finance Request

1. PWC is an Arizona public service corporation that currently provides water utility service to approximately 1,114 customers in Gila County, Arizona. According to its Rate Application, during the 2012 test year the Company served 83 customers in its Geronimo Estates system; 121 customers in the Deer Creek system; 69 customers in the Meads Ranch system; 146 customers in the Whispering Pines system; 29 customers in the Flowing Springs system; 162 customers in the Gisela/TCS system; 385 customers in the Star Valley/Quail Valley system;[3] 140

[2] During public comment at the beginning of the hearing, as well as through subsequent written comments, several customers expressed concern with the timing of the notice and hearing for the expedited Phase 1 proceeding and suggested that the Commission's procedural rules were violated, pursuant to Arizona Administrative Code ("A.A.C.") R14-3-208, which they assert requires 30 days notice prior to the Commission holding a hearing. However, the rule cited by these customers applies to hearings conducted by the Arizona Power Plant and Transmission Line Siting Committee, not the Arizona Corporation Commission. The applicable rule for Commission proceedings is A.A.C. R14-3-109, which states that 10 days notice is to be given prior to a hearing "unless otherwise provided by law or as ordered by the Commission." In this case, as is discussed below, the WIFA deadline for financing approval by the Commission necessitated the scheduling of an expedited hearing in this matter in order for the first phase of the pipeline project to be completed by the summer of 2014 – to enable PWC to deliver water directly from the Town of Payson and avoid the expensive water hauling charges that have been assessed to Mesa del Caballo customers in prior years. Further, contrary to the concerns expressed by certain customers located in other systems outside Mesa del Caballo, PWC's financing request for the Cragin pipeline, including the expedited Phase 1 request for the Payson interconnection, will affect only customers in the Mesa del Caballo system and not customers in other PWC systems.

[3] In May 2012, the Town of Star Valley acquired all of the infrastructure and customers of the Star Valley/Quail Valley system through condemnation. Therefore, PWC no longer owns or operates that system.

customers in the East Verde Park Estates system; and 364 customers in the Mesa del Caballo system.

2. The Company's current rates and charges were established in Decision Nos. 62320 (February 17, 2000) and 62401 (March 30, 2000), based on a 1998 test year. The only subsequent rate change was approved in Decision No. 71902 (September 28, 2010) for a water augmentation surcharge to recover water hauling costs incurred for the Mesa del Caballo system.

3. According to the Company's testimony in this case, on May 31, 2013, JW Water Holdings, LLC ("JW Water") acquired PWC, Tonto Basin Water, and Navajo Water from Brooke Utilities, Inc. As of June 1, 2013, PWC is owned and operated by JW Water. Jason Williamson is the manager of PWC. (Ex. A-1, at 1.)[4]

4. As described above, PWC's Rate Application and Finance Application have been consolidated and are scheduled for hearing beginning January 13, 2014. (*See* September 10, 2013 Procedural Order.) In its Finance Application, the Company is requesting authority to obtain a WIFA loan in the amount of $1,238,000 to fund an interconnection of the Mesa del Caballo system to the planned Cragin Pipeline that will be constructed to bring water to the Town of Payson from a Salt River Project ("SRP") reservoir. The Cragin Pipeline is expected to be completed by 2016.

5. On August 15, 2013, PWC filed a Motion to Consolidate Proceedings and Request for Expedited Procedural Schedule. In testimony attached to PWC's Motion, Mr. Williamson claimed that the Mesa del Caballo subdivision and system are located on a solid rock outcropping that makes drilling wells there "a very risky (and expensive) proposition." (Ex. A-1, at 4.) He stated that many wells in the area are unpredictable, especially during summer months, and therefore the Company has been forced to use trucks to haul water from the Town of Payson during the summer to keep up with demand. Mesa del Caballo customers are assessed a surcharge to recover the hauling costs incurred by PWC, pursuant to a Water Augmentation Surcharge tariff. (*Id.*)

6. As described by Mr. Williamson, the Cragin Pipeline project is being spearheaded by Payson to bring water to the Town from SRP's Cragin Reservoir, which is located approximately 25 miles northeast of Payson. (*Id.*) He stated that the pipeline route, as well as the Town's new water

[4] Mr. Williamson is also affiliated with Pivotal Utility Management, LLC ("Pivotal"), which operates ten water and wastewater utilities, eight of which are located in Arizona. (*Id.*)

treatment system, are located "literally across the street from Mesa del Caballo." (*Id.* at 5.) Mr. Williamson indicated that PWC's agreement with the Town and SRP would allow the Company to interconnect to the Cragin Pipeline and give PWC up to 72 acre-feet of renewable water per year. (*Id.*)

7. According to Mr. Williamson, he met with representatives of Payson shortly after he purchased PWC to discuss the Cragin Pipeline. He testified that although the full pipeline is not expected to be completed until September 2016, PWC was informed that the Town had changed its plans and "decided to build the section of the pipeline that runs from the current Town water distribution system to Mesa del Caballo (about 3.5 miles) now." (*Id.*) Mr. Williamson stated that, according to the Town's engineers, although the Cragin Pipeline is designed to bring water from the reservoir to Payson when it is completed, in the meantime the pipeline could function in the opposite direction to deliver water from Payson's storage facilities to Mesa del Caballo. He indicated that the Town is hoping that PWC will build this first phase of the interconnection to bring water from the Town to Mesa del Caballo by May 2014. (*Id.*) Mr. Williamson indicated that such an interconnection would enable PWC to avoid the hauling surcharges over the next two summers in advance of completion of the full pipeline project, and thereby save Mesa del Caballo customers from the substantial costs associated with hauling water by trucks. (*Id.*)

8. Mr. Williamson further explained that there are two segments to construction of this initial "TOP-MDC" (*i.e.,* Town of Payson - Mesa del Caballo) line. The first section is being constructed by the Town to connect its distribution system to its treatment plant, located adjacent to Mesa del Caballo; and the second section, which would be built by PWC, would be comprised of a pipeline crossing Houston Mesa Road from the termination of the Town's line to the Mesa del Caballo system's main storage facilities. (*Id.* at 6.) Mr. Williamson claimed that construction of the Company's portion of the line would take between 8 and 12 weeks. (*Id.*)

9. Mr. Williamson stated that the Company has a pre-authorization from WIFA for the financing of PWC's portion of the Cragin Pipeline project ($1,238,000), but that an initial $275,000 of the financing would be drawn down in a first phase so that PWC could take advantage of the opportunity offered by the Town to avoid water hauling as early as next summer. (*Id.* at 7.) He

indicated that JW Water purchased PWC with the expectation that the Cragin Pipeline project would be financed through a WIFA loan, and the Company does not currently have adequate earnings to finance the pipeline without such a loan. (*Id.* at 8.)

10. In its Staff Report filed on September 18, 2013, Staff recommended approval of PWC's expedited request to borrow up to $275,000 from WIFA for the purpose of financing the TOP-MDC pipeline, subject to certain conditions.

11. In the Staff Report, Staff discussed the history of the Mesa del Caballo system and the frustration experienced by customers with the water augmentation surcharges during the summer months. (Ex. S-2, at 2.) Staff attached redacted customer bills showing, for example, that one customer's bill was $131.86 for usage of 4,460 gallons in June 2013, of which approximately 75 percent was attributable to the augmentation surcharge. (*Id.* at 1.) Staff pointed out that it has processed several informal complaints from MDC customers related to the surcharge, and Staff believes that expedited approval of the Phase 1 financing request is justified because it will mitigate much of the burden experienced by Mesa del Caballo customers during the summer months. (*Id.* at 1-2.)

12. Staff's Engineering Report found the estimated Phase 1 costs of building the TOP-MDC pipeline (approximately $275,000) to be "reasonable and appropriate," although Staff stated that no "used and useful" determination of the proposed plant items was made, and no inference should be drawn regarding future ratemaking treatment of the pipeline facilities. (Ex. S-2, Eng. Rep. at 2.) Staff stated that in order to enable PWC to demonstrate the necessary financial capability to support the $275,000 WIFA loan, a new WIFA loan surcharge should be approved for the Company. Staff's analysis of the Phase 1 portion of the financing request resulted in a recommendation that the Phase 1 surcharge should be set at a level that would enable the Company to recover the monthly payments of principal, interest and fees, and the debt service reserve required by WIFA (20 percent of the loan). (Ex. S-2, at 2.) Staff further recommended that PWC be required to keep the loan surcharge proceeds in a segregated account to be used solely for making payments on the WIFA loan. (*Id.*)

13. Addressing the need for expedited consideration of the Phase 1 request, Staff stated

that in order for PWC to receive financing from WIFA by the end of the year, the Company must submit its loan application by October 25, 2013. According to Staff, WIFA has advised that PWC's financial capability would be enhanced if the Commission would commit to completing the Company's permanent rate case by the end of 2014, and provide rates sufficient to achieve a DSC of 1.2 or greater. (*Id.* at 3.) Staff also recommends approval of a purchased water adjustor for PWC, on an interim basis in Phase 1, to enable the Company to recover the cost of water purchased from the Town of Payson through the proposed pipeline. (*Id.*) Staff's proposed purchased water adjustor is attached to the Staff Report.

14. Because the Commission is being asked in Phase 1 to approve a WIFA loan surcharge and purchased water adjustor surcharge mechanism prior to a decision in PWC's permanent rate case, the parties were directed in the September 10, 2013, Procedural Order to "address [in Phase 1] the requirements for granting interim rate relief under Arizona law." (September 10, 2013, Procedural Order, at 3.) Citing *Scates v. Arizona Corporation Comm'n*, 118 Ariz. 531, 578 P.2d 612 (App. 1978), Staff defined interim rates as "rates charged by a utility for services or products pending the establishment of a permanent rate, in emergency situations or where a bond is posted that guarantees a refund to consumers for any excess paid [by] them prior to the Commission's final determination." (Ex. S-2, at 3.) Staff stated that the conditions generally necessary for the imposition of interim, emergency rates include: a sudden change that causes hardship to a company; company insolvency; and where a company's ability to maintain service (pending a determination of permanent rates) is in serious doubt. (*Id., citing* Arizona Attorney General Opinion No. 71-17 (1971).)

15. Staff asserts that approval of interim rates, through the WIFA loan surcharge and purchased water adjustor, is justified in this case given the substantial rate increases experienced by Mesa del Caballo customers over the last two summers associated with water hauling. (Ex. S-2, at 3.) The Commission approved the water augmentation surcharge in Decision No. 71902 because of

chronic summer shortages in the MDC system and demand that exceeds the Company's well capacity. (Decision No. 71902 (September 28, 2010), at 10.) Therefore, according to Staff, the opportunity to mitigate the burden on ratepayers prior to next summer "is an exigent circumstance that warrants the extraordinary relief requested by the Company and supported by Staff." (Ex. S-2, at 3.) Staff points out that the interim rate safeguards will be observed in this Phase 1 proceeding because, if Staff's recommendations are adopted: PWC currently has a permanent rate case pending; the proposed surcharge will be reviewed in the permanent rate case proceeding; and the Company will be required to post a $10,000 bond, which Staff claims represents approximately 6 months of PWC's revenues. (*Id.* at 4.)

16. With respect to the proposed Phase 1 WIFA loan surcharge, Staff indicated that it should be applied only to Mesa del Caballo customers because the TOP-MDC pipeline, and elimination of the Water Augmentation Surcharge, would primarily benefit those customers. (*Id.*) According to Staff, the proposed Phase 1 $275,000 WIFA loan will have a 20-year term, with a 4.99 percent interest rate. The monthly payments are estimated to be $1,815, or $21,779 annually, which includes a provision for income taxes and a debt reserve deposit, as required by WIFA. (*Id.*) As shown in Schedule CSB-1 of the Staff Report, the Phase 1 WIFA loan surcharge would be approximately $7.44 per month for customers in the Mesa del Caballo system. Staff recommends that PWC be authorized to begin collecting the surcharge in the first month following Commission approval of the Phase 1 WIFA loan. (*Id.*) The full list of Staff's recommendations is as follows:

- Approval of the Company's request to borrow up to $275,000 from WIFA for the purpose of financing the construction of a new water transmission line to connect its MDC system to the Town of Payson's water system.

- Approval of a WIFA Loan Surcharge mechanism that may result in a surcharge of $7.44 per month per MDC customer.

- The immediate elimination of the Emergency Interim Water Augmentation Surcharge Tariff ("Augmentation Tariff") that is currently in effect for PWC's MDC system.

- That the WIFA Loan Surcharge apply only to customers of the MDC system.

- That the amount of the WIFA Loan Surcharge be calculated based upon the actual amount of the WIFA loan and actual number of customers in the MDC system.

- That the Company file with the Commission a WIFA loan surcharge tariff that would enable the Company to meet its principal, interest, debt reserve, and tax obligations on the proposed WIFA loan.

- That the Company follow the same methodology presented on Schedule CSB-1 of the Staff Report to calculate the additional revenue needed to meet its principal, interest, debt reserve, and tax obligations on the proposed WIFA loan using actual loan amounts and customer counts.

- That the Company make a WIFA loan surcharge filing within 15 days of the loan closing.

- That the Company record the WIFA loan surcharge proceeds as Contributions in Aid of Construction ("CIAC").[5]

- That the Company place the WIFA loan surcharge proceeds in a segregated account, to be used only for making payments on the WIFA loan.

- That the Commission affirm in the Phase 1 Order its intent to process PWC's pending rate case prior to the end of 2014, with a final Decision resulting in a debt service coverage ("DSC") ratio of 1.2 or greater for the resulting WIFA loan approval.

- That the Commission approve a new Purchased Water Adjustor, which was included as an attachment to the Staff Report, to allow for the purchase of water from the Town of Payson.

- That the Company be required to post a bond or irrevocable letter of credit in the amount of $10,000 prior to the implementation of the WIFA Loan Surcharge and Purchased Water Adjustor Surcharge authorized in Phase 1.

[5] At the hearing, Staff witness Crystal Brown modified this condition to require that the Company be required to record only the debt reserve component of the loan proceeds as CIAC. (Tr. 113-114.)

- That the Company notify the MDC customers of the elimination of the Water Augmentation Surcharge and the creation of the WIFA Loan Surcharge and Purchased Water Adjustor by means of a bill insert in the next regularly scheduled billing after the Commission's Decision in Phase 1 of this proceeding. (Ex. S-2, at 4-5.)

17. In its responsive testimony, PWC agreed with most of the conditions recommended by Staff, with two exceptions. Mr. Williamson expressed concern with Staff's recommendation to eliminate immediately the current Water Augmentation Surcharge tariff, and with Staff's recommendation that the Company be required to record the WIFA loan surcharge proceeds as contributions in aid of construction ("CIAC"). (Ex. A-2, at 3-5.) Instead of eliminating the augmentation tariff immediately, the Company suggested amending Staff's proposed purchased water tariff to allow water hauling surcharges to resume if water from the Cragin Pipeline became unavailable. (*Id.* at 5.)[6] With the Company's agreement to eliminate the augmentation tariff, and for deferral of the purchased water tariff to Phase 2, PWC's only remaining dispute is with Staff's recommended accounting treatment of the loan proceeds.

18. Although Staff modified its recommendation at the hearing to require that only the debt reserve portion of the WIFA loan be treated as CIAC, Company witness Bourassa testified that no part of the loan surcharge proceeds should be treated as CIAC. He stated that Staff's recommendation would "have the unintended consequence of depriving the Company of the ability to fully recover its investment and its cost of capital on that investment in the future." (Ex. A-3, at 3-4.) According to Mr. Bourassa, under Staff's recommendation, PWC's rate base would be reduced by the amount recorded as CIAC, which would lead to lower earnings than are necessary to cover capital costs and to lower depreciation recovery. (Id. at 4.)

. . .

[6] During the hearing, PWC agreed with Staff's recommendation to eliminate immediately the Water Augmentation Surcharge tariff, subject to having the ability to request relief from the Commission in the event of an emergency that arises prior to completion of the TOP-MDC pipeline. The Company also agreed that a decision regarding Staff's purchased water surcharge tariff could be delayed until the permanent rate case proceeding (Phase 2). (Tr. 145-146.)

Discussion and Resolution

19. We have undertaken an expedited consideration of Phase 1 of PWC's Finance Application at the request of both the Company and Staff, due to the unique opportunity that was presented to PWC by the Town of Payson regarding the availability of an interconnection with the Town's system that could reduce substantially the summer water bills for customers located in Mesa del Caballo. In undertaking this Phase 1 review, we wish to make clear that we are not making any determination as to the future used and usefulness or ratemaking treatment for the proposed TOP-MDC pipeline. Rather, as is the case in all financing applications, we are considering only the reasonableness of the loan request in the context of whether it: is for lawful purposes, within the Company's corporate powers, and is able to be repaid under reasonable terms and conditions.

20. In its Staff Report, Staff calculated the cost of the $275,000 Phase 1 loan request, including interest, taxes, and WIFA's debt reserve requirement, and determined that Mesa del Caballo customers would be required to pay a monthly surcharge of approximately $7.44 for the Phase 1 interconnection with Payson's system. Since this initial interconnection would need to be built as part of the overall Cragin Pipeline project, the Phase 1 interconnection represents an expedited partial element of the planned construction costs. The remainder of PWC's Finance Application will be considered as part of the consolidated rate/financing proceeding that is scheduled for hearing in January 2014, and we make no conclusions regarding those matters at this time.

21. The following statutes provide guidance regarding the Commission's review of financing applications:

A.R.S §40-285(A) provides, in relevant part:

> A public service corporation shall not sell, lease, assign, mortgage or otherwise dispose of or encumber the whole or any part of its railroad, line, plant, or system necessary or useful in the performance of its duties to the public, or any franchise or permit or any right thereunder, nor shall such corporation merge such system or any part thereof with any other public service corporation without first having secured from the

commission an order authorizing it to do so.

A.R.S. §40-302(A) provides, in part, that:

> Before a public service corporation issues stocks and stock certificates, bonds, notes and other evidences of indebtedness, it shall first secure from the commission an order authorizing such issue and stating the amount thereof, the purposes to which the issue or proceeds thereof are to be applied, and that, in the opinion of the commission, the issue is reasonably necessary or appropriate for the purposes specified in the order...and that, except as otherwise permitted in the order, such purposes are not, wholly or in part, reasonably chargeable to operative expenses or to income.

22. Based on our review of the facts and circumstances presented in this limited Phase 1 financing request, we find that that the application satisfies these standards because: PWC reasonably needs approval of the financing to pursue the project; the TOP-MDC interconnection is for a lawful purpose, is within the Company's corporate powers, and is a proper function of a public water utility; financing of the Phase 1 project is within PWC's proper performance as a public service corporation, especially given the Commission's prior admonishments to the Company to seek additional water sources and the current imposition of augmentation surcharges imposed on MDC customers; and the project will not impair PWC's ability to serve its customers. Given these factors, we conclude that the proposed Phase 1 financing arrangement is in the public interest and should be approved.

23. In reaching this conclusion we agree with the Company and Staff that the issues presented for our review are relatively narrow. Consistent with a long line of decisions addressing financing applications, our review of such requests is generally limited to a determination of whether the requested financing is for a lawful purpose, consistent with sound financial practices, compatible with the public interest and the applicant's proper performance as a public service corporation, and is within the applicant's corporate powers; whether the applicant's revenues are adequate to support its repayment obligations; and whether the financing will impair its ability to provide service to its customers.

24. Because the Phase 1 finance request includes a recommendation for a loan surcharge, we must also consider whether the request satisfies the requirements for approval of interim rates. Based on the facts and circumstances presented, we find that the proposed Phase 1 WIFA loan surcharge is in the public interest, and satisfies the interim rate requirements because: PWC has a

permanent rate case pending, as well as a financing application for the remainder of the Cragin Pipeline project; PWC will be required to post a $10,000 bond as a condition of surcharge approval, which would provide a guarantee for a refund to customers of any excess amounts paid by them prior to a final determination in the permanent rate case; and the financing and surcharge are essential to the Company's ability to pursue, on an expedited basis, an immediate resolution to the substantial rate burdens experienced by Mesa del Caballo customers in recent years when, on an emergency basis, PWC has needed to haul water. We also note that the existing Water Augmentation Surcharge tariff will be replaced by a much less expensive WIFA loan surcharge tariff. Taken in their totality, we believe Staff's recommended conditions (subject to the modification discussed below) satisfy the necessary elements for the Phase 1 financing approval and associated WIFA loan surcharge.

25. The only remaining disputed issue between PWC and Staff involves the accounting treatment to be accorded the Phase 1 loan surcharge proceeds. As described above, Staff recommends that the debt reserve portion of the WIFA loan proceeds be recorded as CIAC, while PWC contends that no part of those surcharge proceeds should be treated as CIAC. We believe that a different accounting treatment is appropriate in this instance that will still give recognition to the customer contribution aspect of the debt reserve funds.

26. The normal components of a company's cost of service are capital investment costs, operating and maintenance expenses, depreciation expense, and taxes. However, because the debt service reserve funds that will be paid by customers through the surcharge (due to WIFA's requirement) are not an element of PWC's cost of service, those monies are not revenues available for the benefit of the Company. Rather, the monies paid by customers that are attributable to the debt reserve portion of the WIFA loan surcharge represent advances by customers to which they are entitled to receive recognition through a refund, amortization against expenses, or other compensation, as may be determined by the Commission in the future. We will therefore, in accordance with the National Association of Regulatory Utility Commissioners Uniform System of Accounts ("NARUC USoA") Account No. 253, direct PWC to track and separately record as a regulatory liability, the surcharge proceeds associated with the debt service reserve fund. PWC should maintain an accurate balance of the regulatory liability until its obligation to ratepayers is

completely satisfied.

CONCLUSIONS OF LAW

1. PWC is a public service corporation within the meaning of Article XV of the Arizona Constitution and A.R.S. §§ 40-250, 40-285, 40-301, 40-302, and 40-303.

2. The Commission has jurisdiction over PWC and of the subject matter of the Rate and Finance Applications.

3. Notice of the Rate and Finance Applications was given in accordance with the September 10, 2013 Procedural Order, the Commission's rules, and Arizona law.

4. The authorizations granted herein are for lawful purposes which are within the corporate powers of PWC, are compatible with the public interest, with sound financial practices, and with the proper performance by PWC of service as a public service corporation, and will not impair PWC's ability to perform that service.

5. The authorizations granted herein are reasonably necessary or appropriate for the purposes.

6. The interim rates represented by the Phase 1 WIFA loan surcharge are reasonable and in the public interest because PWC has a pending permanent rate case pending, as well as a financing application for the remainder of the Cragin Pipeline project; PWC will be required to post a $10,000 bond as a condition of surcharge approval, which would provide a guarantee for a refund to customers of any excess amounts paid by them prior to a final determination in the permanent rate case; and the financing and surcharge are essential to the Company's ability to pursue, on an expedited basis, an immediate resolution to the substantial rate burdens experienced by Mesa del Caballo customers in recent years when PWC has needed to haul water.

ORDER

IT IS THEREFORE ORDERED that Payson Water Co., Inc. is hereby authorized to borrow up to $275,000 from WIFA, under the terms and conditions set forth in the Staff Report, as modified, for the purpose of financing the construction of a new water transmission line to connect its Mesa del Caballo system to the Town of Payson's water system.

IT IS FURTHER ORDERED that such finance authority shall be expressly contingent upon

Payson Water Co., Inc.'s use of the proceeds for the purposes stated in its Phase 1 financing request and approved herein.

IT IS FURTHER ORDERED that Payson Water Co., Inc. may engage in any transaction and to execute any documents necessary to effectuate the authorizations granted herein.

IT IS FURTHER ORDERED that approval of the financing set forth herein does not constitute or imply approval or disapproval by the Commission of any particular expenditure of the proceeds derived thereby for purposes of establishing just and reasonable rates.

IT IS FURTHER ORDERED that Payson Water Co., Inc. shall provide the Utilities Division Compliance Section a copy of any loan documents executed pursuant to the authorizations granted herein, within 30 days of the execution of the loan, and shall file with Docket Control, as a compliance item in this Docket, a letter verifying that such documents have been provided to the Utilities Division.

IT IS FURTHER ORDERED that Payson Water Co., Inc. shall be authorized to implement a WIFA loan surcharge mechanism for its Mesa del Caballo system based on the same methodology presented on Schedule CSB-1 of the Staff Report to calculate the additional revenue needed to meet its principal, interest, debt reserve, and tax obligations on the proposed WIFA loan using actual loan amounts and customer counts.

IT IS FURTHER ORDERED that Payson Water Co., Inc. shall make the WIFA loan surcharge filing within 15 days of the Phase 1 loan closing. The surcharge shall apply only to customers of the Mesa del Caballo system and shall be calculated based upon the actual amount of the WIFA loan and actual number of customers in the Mesa del Caballo system.

IT IS FURTHER ORDERED that Payson Water Co., Inc. shall file within 15 days of closing of the Phase 1 WIFA loan authorized herein, an application for elimination of the Emergency Interim Water Augmentation Surcharge Tariff that is currently in effect for PWC's Mesa del Caballo system.

IT IS FURTHER ORDERED that Payson Water Co., Inc. shall notify the Mesa del Caballo customers of the elimination of the Water Augmentation Surcharge and the creation of the WIFA loan surcharge by means of a bill insert in the next regularly scheduled billing after the effective date of this Decision, in a form and manner acceptable to Staff.

IT IS FURTHER ORDERED that Payson Water Co., Inc. shall, pursuant to NARUC USoA Account No. 253, track and separately record as a regulatory liability the surcharge proceeds associated with the debt service reserve fund. PWC should maintain an accurate balance of the regulatory liability until its obligation to ratepayers is completely satisfied.

IT IS FURTHER ORDERED that Payson Water Co., Inc. shall place the WIFA loan surcharge proceeds in a segregated account, to be used only for making payments on the WIFA loan.

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IT IS FURTHER ORDERED that Payson Water Co., Inc. shall be required to post a bond or irrevocable sight draft letter of credit in the amount of $10,000 prior to the implementation of the Phase 1 WIFA loan surcharge, in a form acceptable to Staff. The original Performance Bond or Letter of Credit shall be submitted to the Commission's Business Office, with copies of the Bond or Letter filed with Docket Control, as a compliance item in this docket, within 30 days of the effective date of this Decision. The Commission may use the Performance Bond or Letter of Credit funds, as appropriate, to protect the Company's customers and the public interest and take any and all actions the Commission deems necessary, in its discretion. The Performance Bonds or Letters of Credit shall be maintained and copies of the same filed annually on the anniversary date of the initial filing until further Order of the Commission or ten years have passed, whichever is sooner, at which time the Performance Bond or Letter of Credit requirement may be terminated upon approval of the Company's application for termination.

IT IS FURTHER ORDERED that this Decision shall become effective immediately.

BY ORDER OF THE ARIZONA CORPORATION COMMISSION.

CHAIRMAN COMMISSIONER

COMMISSIONER COMMISSIONER COMMISSIONER

IN WITNESS WHEREOF, I, JODI JERICH, Executive Director of the Arizona Corporation Commission, have hereunto set my hand and caused the official seal of the Commission to be affixed at the Capitol, in the City of Phoenix, this 25th day of October 2013.

JODI JERICH
EXECUTIVE DIRECTOR

DISSENT _____

DISSENT _____
DDN:dp

SERVICE LIST FOR: PAYSON WATER CO., INC.

DOCKET NOS.: W-03514A-13-0111 and W-03514A-13-0142

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BEFORE THE ARIZONA CORPORATION CO...

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COMMISSIONERS

KRISTIN K. MAYES, Chairman
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

Arizona Corporation Commission
DOCKETED
SEP 28 2010
DOCKETED BY nR

EXHIBIT S-6 ADMITTED

IN THE MATTER OF THE APPLICATION OF PAYSON WATER COMPANY ON BEHALF OF ITS MESA DEL CABALLO SYSTEM FOR APPROVAL OF A WATER AUGMENTATION SURCHARGE/EMERGENCY RATE TARIFF.	DOCKET NO. W-03514A-10-0116
IN THE MATTER OF THE NOTICE OF FILING OF PAYSON WATER COMPANY'S PROPOSED CHANGES TO ITS CURTAILMENT TARIFF (MESA DEL CABALLO SYSTEM).	DOCKET NO. W-03514A-10-0117 **DECISION NO.: 71902** **OPINION AND ORDER**

DATE OF PRE-HEARING CONFERENCE: May 17, 2010

DATE OF HEARING: May 18, 2010

PLACE OF HEARING: Phoenix, Arizona

ADMINISTRATIVE LAW JUDGE: Marc E. Stern

APPEARANCES: Mr. Patrick J. Black, FENNEMORE CRAIG, on behalf of Payson Water Company;

Mr. Randy Norman, Co-chairman, Mesa Del Caballo Water Committee, Intervenor; and

Ms. Kimberly Ruht, Staff Attorney, Legal Division, on behalf of the Utilities Division of the Arizona Corporation Commission.

BY THE COMMISSION:

On March 31, 2010, Payson Water Company ("PWC," "Applicant," or "Company") on behalf of its Mesa Del Caballo System ("MDC") filed with the Arizona Corporation Commission ("Commission") an application for the emergency implementation of a water augmentation surcharge or emergency rate tariff due to water shortages on its MDC System. The Company claims that it can no longer augment the water supply for its MDC System and asserts that, in 2009, the Company absorbed $59,137 in water hauling costs for the MDC System. The Company seeks a monthly water

augmentation surcharge/emergency rate tariff to be charged per 1,000 gallons of water for customers on the MDC System in order to offset the Company's costs for hauling water. The Company is investigating two options to solve its water shortages on the MDC System by either drilling a new deep well to serve the MDC System or by connecting the MDC System to the future C.C. Cragin Reservoir water pipeline that will serve the Town of Payson ("Town") water system in the future.

The Company, concurrently with the aforementioned application, also filed a request for Commission approval of proposed revisions to its Curtailment Tariff solely for its MDC System. The Company indicated that the proposed revisions to its Curtailment Tariff are not to go into effect unless the Commission approves the implementation of the emergency water augmentation surcharge requested herein.

On April 5, 2010, the Company filed a Motion to Consolidate ("Motion") the above-captioned applications because the two matters are interrelated and could best be addressed by the Commission in one proceeding. There were no objections filed to the Company's Motion.

On April 22, 2010, by Procedural Order, the proceedings were consolidated and a hearing scheduled for May 18, 2010, to determine if an emergency existed pursuant to Attorney General Opinion No. 71-17 and whether a water augmentation surcharge/emergency rate should be approved. It was also ordered that public notice be given of the pending application, the hearing, the right to intervene and the proposed amount of the surcharge.

On April 28, 2010, the Mesa Del Water Committee ("MDWC") filed a Motion to Intervene.

On April 30, 2010, by Procedural Order, MDWC was granted intervention.

On May 14, 2010, the Company filed certification that it had provided public notice pursuant to the Commission's April 22, 2010, Procedural Order.

On May 18, 2010, a full public hearing was held at the Commission's offices in Phoenix, Arizona. The Company and Staff appeared with counsel. MDWC appeared and was represented by its co-chairman. A customer of the Company appeared and gave public comment. Subsequently, it was determined that although public notice had been given of the proceeding by the Company, the proposed level of the surcharge was not disclosed to its customers. The presiding Administrative Law Judge ("ALJ") indicated that the record would remain open and directed Applicant to re-notice

customers on the MDC system of the proceeding, their right to intervene, the level of the proposed surcharge and that the hearing could be re-opened for the taking of additional evidence, if sufficient reason existed.

On May 28, 2010, the Company, after meeting with Staff, filed a proposed form of notice to be approved by the presiding ALJ prior to its publication and mailing to re-notice customers of the proceeding.

On June 2, 2010, by Procedural Order, the Company was ordered to provide additional notice to its customers on the MDC System by both publication and by mailing notice to each customer of the system on or before June 11, 2010, in accordance with the approved form of notice set forth in the June 2, 2010, Procedural Order. Pursuant to the Procedural Order, persons or entities affected by the proceeding had until June 25, 2010, to file for intervention.

Additionally, on June 2, 2010, the Company filed notice of the filing of a late-filed exhibit which consisted of revisions to the proposed changes to the Curtailment Tariff for the Company's MDC System in a form agreed upon between the parties who were in attendance at the hearing on May 18, 2010. The revisions address Staff's concerns with respect to indoor usage and conservation by customers.

On June 4, 2010, Staff filed what was captioned "Staff's Notice of No Objection" to the revised Curtailment Tariff which had been late-filed by the Company. Therein, Staff indicated that it had no objections to the revised Curtailment Tariff filed subsequent to the hearing.

On June 18, 2010, the Company filed certification that it had provided public notice by both publication and by mailing to its customers on the MDC System of the approved form of notice as set forth in the Commission's June 2, 2010, Procedural Order. Subsequent to the supplemental notice by the Company, the Commission has received a number of comments from customers of the MDC System voicing their concerns. The Commission has not received any further requests for intervention or to re-open the hearing in the proceeding.

On July 9, 2010, by Procedural Order, the record in the proceeding was closed and the matter taken under advisement pending submission of a Recommended Opinion and Order to the Commission.

* * * * * * * * * *

Having considered the entire record herein and being fully advised in the premises, the Commission finds, concludes, and orders that:

FINDINGS OF FACT

1. Pursuant to authority granted by the Commission, the Company provides water service to an area in the vicinity of Payson, Arizona.

2. The Company's present rates and charges were approved by the Commission in Decision No. 62401 (March 28, 2000).

3. MDC is one of nine independent water systems operated by PWC in Gila County and has approximately 370 service connections on the MDC System.

4. On May 5, 2005, the Commission issued Decision No. 67819 and denied a previous application by PWC for a water augmentation surcharge tariff for all of its systems. However, in Decision No. 67821, the Commission approved a Curtailment Plan Tariff for all of Applicant's systems. Decision No. 67821 further authorized the Company under Stages 3, 4 and 5 of its Curtailment Tariff to disconnect customers who did not conserve water and to impose financial penalties for reconnection to enforce mandatory conservation of water when more stringent measures were in effect.

5. The Commission denied the previous application by PWC for approval of a water augmentation surcharge tariff because it concluded that the requested surcharge was not revenue neutral and could only be considered in the context of a rate case filing.

6. On March 31, 2010, the Company filed on behalf of its MCD System an application for the emergency implementation of a water augmentation surcharge/emergency rate tariff due to water shortages on its MDC System. Additionally, the Company filed a request for the Commission's approval of proposed changes to its Curtailment Tariff solely for its MDC System and increased enforcement penalties for Stages 3, 4 and 5 during a curtailment.

7. In its application for the emergency implementation of a water augmentation surcharge, the Company alleged that it could no longer afford to pay for bulk water purchases and water hauling for its MDC System and stated that, in 2009, the Company absorbed $59,137 in water

hauling costs for this system.

8. The Company is seeking a monthly surcharge which would recover the water hauling costs based on a customer's water usage in the previous month per 1,000 gallons. The period that the surcharge could be imposed is to run during the peak summer months from May 1st through September 30th.

9. On May 10, 2010, Staff, after conducting an investigation of the Company's proposed water augmentation surcharge and the proposed changes to its Curtailment Tariff, recommended approval of the water augmentation surcharge tariff on an interim basis until permanent rate relief is granted by the Commission. Staff further recommended that the Company's proposed changes to its MDC System Curtailment Tariff be approved subject to Staff's amendments.

10. On May 14 and June 18, 2010, the Company filed certification that it had provided notice of the above-captioned proceedings consistent with the Commission's Procedural Orders.

11. According to Myndi Brogdon, the Company's Customer Relations Representative, MDWC was established by members of the El Caballo Club, which is a club for residents of the Mesa Del Caballo subdivision, and is located in the MDC service area. The MDWC actively sought out Ms. Brogdon and Mr. Robert Hardcastle, the Company's president, in the fall of 2009 to address the problems related to water shortages on the MDC System.

12. The MDWC played an active part in the preparation of the changes proposed for the Curtailment Plan Tariff for the MDC System.

13. In order to inform customers on the MDC System of the proposed emergency augmentation surcharge and the changes to the Company's Curtailment Tariff for the MDC System, the Company held four meetings with customers on April 8 and 10, 2010.

14. During these meetings, discussions were held to inform the customers of what it would cost the Company to haul water in the event of water shortages.

15. According to Ms. Brogdon, the Company will be able to augment its water supply with water purchased from the Town for approximately seven dollars per 1,000 gallons and the Town

has agreed to supply up to 86,400 gallons of water per day, if needed on a temporary basis.[1]

16. Ms. Brogdon termed the augmentation surcharge to be a revenue neutral/pass-through cost.

17. In support of its request herein, the Company submitted a petition signed by 96 residents who are customers of the MDC System and who support the Company's efforts to develop additional water supplies.[2]

18. The co-chairman of the MDWC, Mr. Randy Norman, testified in support of the Company's requests in this proceeding. He believes that the customers of the MDC System overwhelmingly support the idea of water being available at a higher price if it has to be hauled.

19. Mr. Robert Hardcastle, the President of the Company and its parent, Brooke Utilities, testified that the Company experienced difficulties during the summer of 2009 and water hauling became necessary costing the Company $59,137.

20. According to Mr. Hardcastle, the Company cannot continue to absorb excessive expenses due to the cost of water hauling for the MDC System.

21. Mr. Hardcastle related that the Company's best long-term option is to construct an interconnection in the vicinity of the Mesa Del Caballo subdivision with the pipeline from the C.C. Cragin Reservoir which it is anticipated will be constructed sometime between 2013 and 2015 to provide water to the Town.

22. In terms of a short-term solution, the MDWC and the Company resolved that hauling water funded by the augmentation surcharge and educating the Company's customers to conserve their water usage were the best short-term solutions.

23. Mr. Hardcastle is requesting that the surcharge coincide with the summer season from the beginning of May through September. He further requested that the implementation of the surcharge be made retroactive to May 1, 2010.

24. Mr. Hardcastle further related that the Company did not file its application for the

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[1] Due to the MDC System's proximity to the Town, the Company anticipates that water hauling costs will be reduced this year over the costs previously incurred primarily due to the short distance and time required for hauling water.

[2] After the re-notification of the proceeding to customers on the MDC System, two residents' names were removed by the Company at their request.

surcharge until March 31, 2010, because the Company wished to work with the MDWC and this required a number of meetings and discussions in order to come up with a plan upon which the parties agreed.

25. According to Mr. Hardcastle, MDWC was actively involved in the preparation, review and drafting of the Company's proposed revisions to its Curtailment Tariff.

26. Although the Company had proposed changes to the original Curtailment Tariff approved in Decision No. 67821 which were more stringent than those originally approved by the Commission, after meeting and working with Staff and MDWC after the hearing on June 2, 2010, the Company filed a late-filed exhibit which contains revisions to its proposed Curtailment Tariff for its MDC System, and which addresses the concerns raised by Staff in its report and discussed during the hearing. A copy of the amended Curtailment Tariff is marked Exhibit "A," attached hereto, and incorporated herein by reference.

27. The amended Curtailment Tariff for the MDC System that was filed by the Company incorporates modifications and addresses the parties' concerns as follows:

- Customers who use 4,000 gallons per month or less based on a 12-month rolling average are exempt from the mandatory reduction in daily use requirements triggered in Stages 3, 4 or 5 of any curtailment. The purpose of this exemption is that customers using 4,000 gallons per month or less are more likely to have already utilized water conservation measures, and a further reduction in water use is likely to impact basic water needs.
- Specific prohibitions against indoor water use have been eliminated. This addresses Staff's concerns about mandatory reductions in basic water use needs for the continued health and safety of customers.
- The requirement that a customer must face automatic fines and penalties for violation of the Curtailment Tariff has been changed to provide the Company flexibility in determining whether such fines and penalties are warranted. This addresses Staff's concerns that a violation of the Curtailment Tariff might be the result of a water leak, or something else beyond the customer's control, making an automatic assessment of fines and penalties unwarranted in certain circumstances.
- The definition of 'daily use' has been modified. Under the newly proposed language, percentage reductions (based on the applicable Stage) are taken from the higher of: (a) the immediately preceding month's actual water consumption, or (b) water consumption for the same month in any one of the two previous years for the same service location. This language was inserted to address Staff's concern over the possible confusion a customer might have over the 'daily use' calculation, as well as the potential inequity if applied to seasonal use customers. The example provided has also been clarified.

28. On June 4, 2010, Staff filed notice that it did not have any objections with the amended Curtailment Tariff as set forth in Exhibit "A" and filed by the Company on June 2, 2010.

29. The Company will monitor customers who are identified as high water users and will contact them to encourage them to conserve water in light of its proposed curtailment plan, since the Company understands that high water usage creates the need for water hauling and increases the cost for all customers, not just excessive water users.

30. According to Mr. Hardcastle, MDWC was instrumental in fashioning the proposed Curtailment Tariff for the MDC System and in determining the reconnection penalty fees in order to discourage customers from wasting water.

31. Aside from the utilization of the Curtailment Tariff which will be used to encourage water conservation, the Company also has explored another short-term plan which entails running an above-ground pipeline from a water source provided under agreement with the Town approximately 1.5 miles away to interconnect with the MDC water system. However, there are numerous problems with this proposal because the pipeline would have to be routed across lands which are controlled by the U.S. Forest Service, and this will require a number of studies to be completed taking one to two years to complete before construction could take place.

32. If the above-ground pipeline is utilized in the future, the Company will rent the pipeline from a California company, Rain 4 Rent, at a cost of $9,000 per month for the five month water augmentation period for a total of $45,000.

33. Additionally, the Company has looked into the drilling of a well, but it does not yet have an understanding of the costs involved and what it would require from the Company in the form of an investment and what it would ultimately cost customers.

34. As of the date of the hearing in this proceeding, May 18, 2010, the Company had not yet been required to purchase and haul water from the Town.

35. In the past, the Company has collected a few fines from customers who have violated the Curtailment Tariff and deposited those monies into a segregated impound account for use in water conservation and water development costs. Additionally, the Company does not oppose any funds collected from the MDC System's customers as a penalty being deposited and applied to offset any

water augmentation costs incurred by the Company in order to reduce the amount of the monthly surcharge for all MDC System customers.

36. According to the Staff Report filed on May 10, 2010, the Company's proposed revisions to its existing Curtailment Tariff that will be used for the MDC System will not go into effect unless the Commission approves the water augmentation surcharge/emergency tariff for the Company.

37. With the adoption of Staff's recommended changes to the Company's original proposal with respect to the revisions to its Curtailment Tariff for the MDC System, Staff is recommending approval of the revised Curtailment Tariff described in Exhibit "A."

38. Staff specifically recommended that the water consumption calculation of "daily use" in the Company's initial proposal be excluded because Staff found it to be confusing and not easily understood.

39. In the event that the Commission does not approve the revised Curtailment Tariff which was filed on June 2, 2010, Staff is recommending that the Company's existing Curtailment Tariff be continued.

40. Mr. Marlin Scott, a Staff engineer, testified that one of the short-term solutions for the MDC System, the 1.5 mile long above-ground interconnection with the Town's water system, is similar to a situation which previously existed between Arizona Water Company and the Golden Corridor Water Company near Casa Grande.

41. Mr. Scott is familiar with the possible solution posed by the interconnection with the Town's system once the C.C. Cragin pipeline is completed in several years, and the other proposed long-term project for the Company to drill a new deep well. However, Staff lacks sufficient information to form an opinion as to whether the drilling project is feasible.

42. The primary reason Staff opposed the "daily use" calculation in the proposed Curtailment Tariff for the MDC System was because it could involve an implementation of a curtailment both outside the house, which is usually the case, and in this instance inside the house where a curtailment is not usually applied.

43. According to Mr. Scott, the MDC System's 105,000 gallons of storage capacity is

sufficient to serve only 305 connections, and this factor, coupled with the poor water production of the nine wells on the system, create the Company's water shortages on the MDC System.

44. The primary problem which the Company's MDC System faces is its well capacities since the water production of the Company's nine wells total 59 gallons a minute at peak capacity and fluctuate down to 19 gallons a minute when production slows. However, even when the wells are producing at maximum capacity, there is insufficient water available for the customers during the peak summer months and that is what causes the Company to have to haul water, as was the case last year.

45. Mr. Darak Eaddy, Staff's accounting witness, believes that the Company's proposal to make the water augmentation surcharge effective retroactively to May 1, 2010, would constitute retroactive rate making in violation of Arizona law.

46. According to Mr. Eaddy, if the Company is required to haul all of its water for customer usage, a median user who used 3,621 gallons of water would see a 501.2 percent increase in his bill from $22.95 to $137.97. However, Mr. Eaddy pointed out that this is a worst case scenario and the amount of the proposed surcharge would depend on the availability of the Company's own water pumped from its wells.

47. As described in the Staff Report, if the proposed water augmentation surcharge had been in effect during the peak months of 2009, a typical customer would have experienced an increase of $16.50 for hauled water on their monthly bill.

48. It is not possible for Staff to determine the financial impact of the proposed water augmentation surcharge on the Company's customers because it will be based on a customer's actual water usage and the amount of water which the Company is required to haul in any given month.

49. The Company's present rates for its MDC System were approved by the Commission in Decision No. 62401 (March 28, 2000), which established a base rate of $16 a month for 5/8-inch x 3/4-inch meter customers and an excess gallonage charge of $1.93 per 1,000 gallons for up to the first 4,000 gallons of water usage, and $2.09 per 1,000 gallons in excess of 4,000 gallons.

50. The Company is in compliance with prior Commission orders and has no outstanding compliance issues with the Commission's Corporations Division.

51. Staff believes that the Company meets the requirements of Attorney General Opinion No. 71-17 to establish an interim emergency rate pending a formal rate determination. Based on the record, Staff is recommending that the Commission approve the Company's application for a water augmentation surcharge tariff for its MDC System and amended Curtailment Tariff as set forth in Exhibit "A" which was filed by the Company on June 2, 2010. Staff is additionally recommending the following:

- that the water augmentation surcharge tariff not be applied retroactively;
- that the water augmentation surcharge tariff be interim, subject to refund, and only effective until permanent rate relief is granted by the Commission;
- that the water augmentation surcharge tariff rate be effective for a five-month period, from May 1 through September 30 of any calendar year;
- that the water augmentation surcharge tariff rate only be effective for the Company's MDC System;
- that the water augmentation surcharge tariff rate solely cover documented expenses for hauling water to the Company's MDC System;
- that the Company be ordered to file, within 30 days of the effective date of this Decision, a revised rate schedule reflecting the water augmentation surcharge tariff with the Commission's Docket Control, as a compliance item in this docket;
- that the Company provide its customers a copy of the revised water augmentation surcharge tariff and its effective date, in a form acceptable to Staff, by means of an insert in the Company's next regularly scheduled billing;
- that the Company file a full rate case within 12 months of the effective date of this Decision;
- that if the Company believes that it will need to incur debt in order to solve its water shortage problem, that it file a financing application concurrently with its rate application as ordered hereinabove; and
- that the Company be required to post a bond or irrevocable sight draft letter of credit in the amount of $60,000 to ensure that there is sufficient money available to refund to customers if the Commission determines in the permanent rate case that the emergency surcharge was not needed or too large. However, should the Commission choose a minimal bond as it has in some recent emergency applications, Staff recommends an additional option of posting a cashier's check with the Commission for a lower amount, e.g. $100. This option is recommended as the Company may be unable to obtain a bond or sight draft letter of credit.

52. Following public notice of the proceeding for a second time, with respect to the water augmentation surcharge tariff and the proposed Curtailment Tariff, the Commission received a number of comments from customers of MDC expressing their concerns about the system, but none

requested intervention or requested that the proceeding be reconvened for the taking of additional evidence. As a result, the record was closed and the matter taken under advisement.

53. Under the circumstances, we believe that the Company's application for approval of an emergency water augmentation surcharge tariff and a revised Curtailment Tariff as set forth in Exhibit "A" should be approved in order to insure that the Company's customers are able to be provided with an adequate source of water in the event shortages occur on the system prior to the Company developing a long-term solution to its water shortage problem. Additionally, we believe that the Company should be permitted to file a minimal bond in the form of a $100 cashier's check.

54. Because an allowance for the property tax expense of the Company is included in the Company's rates and will be collected from its customers, the Commission seeks assurances from the Company that any taxes collected from rate payers have been remitted to the appropriate taxing authority. It has come to the Commission's attention that a number of Company's have been unwilling or unable to fulfill their obligation to pay the taxes that were collected from rate payers, some for as many as 20 years. It is reasonable, therefore, that as a preventive measure the Company annually file, as part of its Annual Report, an affidavit with the Utilities Division attesting that the Company is current in paying its property taxes in Arizona.

55. Since Mesa Del Caballo is outside of an Active Management Area, it will not be required to comply with the conservation goals and management practices of the Arizona Department of Water Resources ("ADWR"). In light of the need to conserve groundwater in Arizona, we believe it is reasonable to require Mesa Del Caballo to address conservation and submit for Commission approval within 120 days of the effective date of this Decision, at least five Best Management Practices ("BMPs") (as outlined in ADWR's Modified Non-Per Capita Conservation Program). The BMPs shall generally follow the template contained on the Commission's website. A maximum of two of these BMPs may come from the "Public awareness/PR or Education and Training" categories of the BMPs. The Company may request cost recovery of actual costs associated with the BMPs implemented in its next rate case.

. . .

CONCLUSIONS OF LAW

1. Applicant is a public service corporation within the meaning of Article XV of the Arizona Constitution and A.R.S. §§ 40-250 and 40-251.

2. The Commission has jurisdiction over the Company and of the subject matter of the application for approval of a water augmentation surcharge tariff and for approval of the Company's proposed revisions to its Curtailment Tariff for its MDC System.

3. Notice of the application and revisions to the Company's Curtailment Tariff was provided in the manner prescribed by law.

4. Applicant is facing an "emergency" within the definition set forth in Attorney General Opinion No. 71-17 as discussed herein.

5. The standards for approval of a request for interim rate relief require an existence of an emergency; the posting of a bond or a sight draft letter of credit by the Company; and subsequent filing of a permanent rate application.

6. Approval of the Company's application for interim rate relief, as described herein, is consistent with the Commission's authority under the Arizona Constitution, rate making statutes, and applicable case law.

7. The request for approval of an emergency water augmentation surcharge tariff for the five month period commencing May 1 and ending September 30 of each following year from the effective date of this Order is just and reasonable, under the specific facts presented in this case, and should be collected by means of a pass through of the cost of hauling water in the prior month for the Company based on a customer's water usage during that month, subject to the Applicant complying with Findings of Fact Nos. 51 and 53 hereinabove.

8. The Commission, having reviewed the request for approval of the revisions to the Company's Curtailment Tariff, concludes that it is in the public interest to approve the revised Curtailment Plan Tariff as set forth in Exhibit "A" attached hereto.

ORDER

IT IS THEREFORE ORDERED that the application of Payson Water Company, Inc., for

approval of an emergency water augmentation surcharge tariff for its Mesa Del Caballo System, be, and is hereby, approved to the extent described herein.

IT IS FURTHER ORDERED that the application of Payson Water Company, Inc., on behalf of its Mesa Del Caballo System, shall recover its water hauling expenses as discussed hereinabove by means of a water augmentation surcharge based on the prior month's cost of hauling water and based on a customer's water usage during that month, but said authorization shall be conditioned upon Payson Water Company, Inc. complying with the requirements of Findings of Fact No. 51.

IT IS FURTHER ORDERED that Payson Water Company, Inc. shall file an application for permanent rate relief no later than one year from the effective date of this Decision.

IT IS FURTHER ORDERED that the emergency water augmentation surcharge approved herein shall be interim and subject to refund pending the review by Staff of the permanent rate application.

IT IS FURTHER ORDERED that Payson Water Company, Inc., on behalf of its Mesa Del Caballo System shall, in a form approved by Staff, notify its customers by mail of the emergency interim water augmentation surcharge authorized herein and the prospective effective date of same at least 15 days before the expected date of its imposition.

IT IS FURTHER ORDERED that Payson Water Company, Inc. shall post a bond in the form of a cashier's check in the amount of $100.

IT IS FURTHER ORDERED that the emergency interim water augmentation surcharge shall end when a Commission Decision is issued regarding the Company's permanent rate application.

IT IS FURTHER ORDERED that Payson Water Company, Inc. shall annually file as part of its Annual Report an affidavit with the Utilities Division attesting that the Company is current in paying its property taxes.

IT IS FURTHER ORDERED that Payson Water Company, Inc., on behalf of its Mesa Del Caballo System, is hereby authorized to implement the revised Curtailment Plan Tariff, a copy which is attached hereto as Exhibit "A."

IT IS FURTHER ORDERED that Payson Water Company, Inc., on behalf of its Mesa Del Caballo System, shall docket as a compliance item the revised Curtailment Plan Tariff as set forth in

Exhibit "A" attached hereto within 30 days of the effective date of this Decision.

IT IS FURTHER ORDERED that Payson Water Company, Inc. on behalf of its Mesa Del Caballo System, submit for Commission consideration within 120 days of the effective date of this Decision, at least five Best Management Practices (as outlined in Arizona Department of Water Resources' Modified Non-Per Capita Conservation Program). The Best Management Practices shall generally follow the template contained on the Commission's website. A maximum of two of these Best Management Practices may come from the "Public awareness/PR" or "Education and Training" categories of the Best Management Practices. Payson Water Company, Inc. on behalf of its Mesa Del Caballo System may request cost recovery of actual costs associated with the Best Management Practices implemented in its next rate case.

IT IS FURTHER ORDERED that this Decision shall become effective immediately.

BY ORDER OF THE ARIZONA CORPORATION COMMISSION.

CHAIRMAN COMMISSIONER

COMMISSIONER COMMISSIONER COMMISSIONER

IN WITNESS WHEREOF, I, ERNEST G. JOHNSON, Executive Director of the Arizona Corporation Commission, have hereunto set my hand and caused the official seal of the Commission to be affixed at the Capitol, in the City of Phoenix, this 28th day of Sept., 2010.

ERNEST G. JOHNSON
EXECUTIVE DIRECTOR

DISSENT _____

DISSENT _____

MES:db

SERVICE LIST FOR: PAYSON WATER COMPANY, INC. – MESA DEL CABALLO SYSTEM

DOCKET NOS.: W-03514A-10-0116 AND W-03514A-10-0117

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Utility: Payson Water Company, Inc.
Docket No. W-03514A-10-0117
Phone No.: _____

Tariff Sheet No.: 1 of 8
Decision No.: _____
Effective: _____

CURTAILMENT PLAN FOR: PAYSON WATER CO., INC.

ADEQ Public Water System: Mesa Del Caballo (#04-030)

APPLICABILITY

Payson Water Company, Inc. (the "Company") is authorized by the Arizona Corporation Commission to curtail water service to all customers within its certificated area under the terms and conditions listed in this tariff. As needed, this tariff will be implemented by the Company for customers of the Mesa del Caballo water system ("Water System").

The curtailment plan shall become part of the Arizona Department of Environmental Quality Emergency Operations Plan for the Company.

The Company shall notify its customers of this new tariff as part of its next regularly scheduled billing after the effective date of the tariff or no later than sixty (60) days after the effective date of this tariff.

For the purposes of this curtailment plan the term "Peak Season" shall be defined as the period from May 1 through September 30 annually. The term "Off-Peak Season" shall be defined as all other periods not defined as Peak Season.

The Company shall provide a copy of the curtailment tariff to any customer, upon request.

EXEMPTIONS: Customers who use 4,000 gallons or less per month based on a twelve (12) month rolling average are exempt from the mandatory reduction in daily use requirements as outlined in Stage 3, Stage 4 and Stage 5 of this Tariff. This is because these customers are already leading a conservative water lifestyle, and mandatory percentage reductions will likely require the loss of use of water essential to health and safety. However, all other restrictions during mandatory conservation periods will still apply.

STAGES

Stage 1 Exists When:

Water System's storage level is 85% or more of capacity and there are no known problems with production or storage.

TARIFF SCHEDULE

Utility: Payson Water Company, Inc.
Docket No. W-03514A-10-0117
Phone No.: _____

Tariff Sheet No.: 2 of 8
Decision No.: _____
Effective: _____

Restrictions: Under Stage 1 conditions the water system is deemed to be operating normally and no curtailment is necessary, except as follows: (a) no outside watering is permitted on Mondays; (b) outside water is permitted on Tuesdays, Thursdays, and Saturdays for customers with street addresses ending with an odd number; (c) outside water is permitted on Wednesdays, Fridays, and Sundays for customers with street addresses ending with an even number; (d) during the Peak Season outdoor watering using spray or any form of irrigation shall be conducted only during the hours of 8:00 p.m. and 12:00 Midnight, or during the hours of 3:00 a.m. and 7:00 a.m.

Water Augmentation: Under Stage 1 conditions, no water augmentation is required.

Notice: Under Stage 1 conditions, no notice is required.

Stage 2 Exists When:

Water System's storage level is less than 85% of capacity but more than 70% of capacity for at least forty-eight (48) consecutive hours. Further, the Company has identified operational circumstances such as a steadily declining water table, increasing draw down threatening pump operations, or decreasing well production creating a reasonable belief that the Water System will be unable to meet anticipated sustained water demand.

Restrictions: Under Stage 2 conditions **voluntary** conservation measures should be employed by customers to reduce water consumption by at least 20% as measured on a daily use basis. Further water use restrictions shall include: (a) no outside watering is permitted on Monday's, Thursdays, and Fridays; (b) outside water is permitted on Tuesdays and Saturdays for customers with street addresses ending with an odd number; (c) outside water is permitted on Wednesdays and Sundays for customers with street addresses ending with an even number; (d) during the Peak Season outdoor watering using spray or airborne irrigation shall be conducted only during the hours of 8:00 p.m. and 12:00 Midnight, or during the hours of 3:00 a.m. and 7:00 a.m.

Water Augmentation: Under Stage 2 conditions no water augmentation is required.

Notice: Under Stage 2 conditions the Company is required to notify customers by (a) door-to-door delivery of written notices at each service address; or, (b) by changing local water conservation staging signs; or, (c) by means of electronic mail; or, (d) by means of any other reasonable means of notification of customers of the Water System; of the imposition of the Curtailment Tariff, the applicable Curtailment Stage, a general description of conditions leading to Stage 2 conditions, and a need to conserve water.

TARIFF SCHEDULE

Utility: Payson Water Company, Inc.
Docket No. W-03514A-10-0117
Phone No.: _____

Tariff Sheet No.: 3 of 8
Decision No.: _____
Effective: _____

Stage 3 Exists When:

Water System's storage level is less than 70% of capacity but more than 60% of capacity for at least twenty-four (24) consecutive hours. Further, the Company has identified operational circumstances such as a steadily declining water table, increasing draw down threatening pump operations, or decreasing well production creating a reasonable belief that the Water System will be unable to meet anticipated sustained water demand.

Restrictions: Under Stage 3 conditions **mandatory** conservation measures should be employed by customers to reduce water consumption; by at least 30% as measured on a daily use basis. Further water use restrictions shall include: (a) no outside watering is permitted on Mondays, Thursdays, and Fridays.; (b) outside water is permitted on Tuesdays and Saturdays for customers with street addresses ending with an odd number; (c) outside water is permitted on Wednesdays and Sundays for customers with street addresses ending with an even number; (d) during the Peak Season outdoor watering using spray or airborne irrigation shall be conducted only during the hours of 8:00 p.m. and 12:00 Midnight, or during the hours of 3:00 a.m. and 7:00 a.m. Under Stage 3 conditions the Company shall inform customers of the Water System of the **mandatory** restriction to employ water conservation measures to reduce daily consumption by 30%. Failure of customers to comply with this requirement may result in service disconnection as described by this Curtailment Plan. Under Stage 3 conditions, the following uses of water are strictly prohibited: (1) outdoor irrigation of lawns, trees, shrubs, or any plant life, except as otherwise provided herein; (2) washing of any vehicle; (3) use of water for dust control or outdoor cleaning uses; (4) use of outdoor drip irrigation or misting systems of any kind, except as otherwise provided herein; (5) use of water to fill swimming pools, spas, fountain, fish ponds, or ornamental water features; (6) all construction water; (7) restaurant or convenience store patrons shall be served water only on request; and, (8) any other water intensive activity. Under Stage 3 conditions the Water System is prohibited from supplying water to any standpipe and the installation of new water meters and new service lines is prohibited.

Water Augmentation: Under Stage 3 conditions the Company will undertake reasonable measures to augment its well production until such time that Stage 2 conditions are achieved for forty-eight (48) consecutive hours. In all cases where the Company employs water augmentation the Water System's Water Augmentation Surcharge shall become applicable.

Notice: Under Stage 3 conditions the Company is required to notify customers by (a) door-to-door delivery of written notices at each service address; or, (b) by changing local water conservation staging signs; or, (c) by means of electronic mail; or, (d) by means of any other reasonable means of notification of customers of the Water System; of the imposition of the Curtailment Tariff, the applicable Curtailment Stage, a general description of conditions leading to Stage 3 conditions, and a need to conserve water.

TARIFF SCHEDULE

Utility: Payson Water Company, Inc.
Docket No. W-03514A-10-0117
Phone No.: _____

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Enforcement: Once the Company has properly provided notice of Stage 3 conditions, the failure of a customer to comply with this Curtailment Plan within twenty-four (24) hours of receiving notice of its violation of this Curtailment Plan may result in the immediate disconnection of service, without further notice, in accordance with Arizona Administrative Code R14-2-410 (B)(1)(d). The reconnection fee for a violation of a Stage 3 curtailment notice shall be:

First offense:	$200
Second offense: (see also Reconnection Fees Section)	$350
Third offense:	$750

If a customer believes their water service has been disconnected in error, the customer may contact the Commission's Consumer Services Section at (800) 222-7000 to initiate further investigation.

Stage 4 Exists When:

Water System's storage level is less than 60% of capacity but more than 50% of capacity for at least twenty-four (24) consecutive hours. Further, the Company has identified operational circumstances such as a steadily declining water table, increasing draw down threatening pump operations, or decreasing well production creating a reasonable belief that the Water System will be unable to meet anticipated sustained water demand.

Restrictions: Under Stage 4 conditions **mandatory** conservation measures should be employed by customers to reduce water consumption; by at least 40% as measured on a daily use basis. Further water use restrictions shall include: (a) no outside watering is permitted on Mondays, Thursdays, Fridays, and Sundays; (b) outside watering is permitted on Tuesdays for customers with street addresses ending with an odd number; (c) outside water is permitted on Wednesdays for customers with street addresses ending with an even number; (d) during the Peak Season outdoor watering using spray or airborne irrigation shall be conducted only during the hours of 8:00 p.m. and 12:00 Midnight, or during the hours of 3:00 a.m. and 7:00 a.m. Under Stage 4 conditions the Company shall inform customers of the Water System's **mandatory** restriction to employ water conservation measures to reduce daily water consumption by 40%. Failure of customers to comply with this requirement may result in service disconnection as described by this Curtailment Plan. Under Stage 4 conditions the following uses of water are strictly prohibited: (1) outdoor irrigation of lawns, trees, shrubs, or any plant life, except as otherwise provided herein; (2) washing of any vehicle; (3) use of water for dust control or outdoor cleaning uses; (4) use of outdoor drip irrigation or misting systems of any kind, except as otherwise provided herein; (5) use of water to fill swimming pools, spas, fountain, fish ponds, or ornamental water features; (6) all construction water; (7) restaurant or convenience store patrons shall be served water only on request; and, (8) any other water intensive activity. Under Stage 4

TARIFF SCHEDULE

conditions the Water System is prohibited from supplying water to any standpipe and the installation of new water meters and new service lines is prohibited.

Water Augmentation: Under Stage 4 conditions the Company will undertake reasonable measures to augment its well production until such time that Stage 3 conditions are achieved for forty-eight (48) consecutive hours. In all cases where the Company employs water augmentation the Water System's Water Augmentation Surcharge shall become applicable.

Notice: Under Stage 4 conditions the Company is required to notify customers by (a) door-to-door delivery of written notices at each service address; or, (b) by changing local water conservation staging signs; or, (c) by means of electronic mail; or, (d) by means of any other reasonable means of notification of customers of the Water System; of the imposition of the Curtailment Tariff, the applicable Curtailment Stage, a general description of conditions leading to Stage 4 conditions, and a need to conserve water.

Enforcement: Once the Company has properly provided notice of Stage 4 conditions, the failure of a customer to comply with this Curtailment Plan within twenty-four (24) hours of receiving notice of its violation of this Curtailment Plan may result in the immediate disconnection of service, without further notice, in accordance with Arizona Administrative Code R14-2-410 (B)(1)(d). The reconnection fee for a violation of a Stage 4 curtailment notice shall be:

First offense:	$400
Second offense: (see also Reconnection Fees Section)	$750
Third offense:	$1,500

If a customer believes their water service has been disconnected in error the customer may contact the Commission's Consumer Services Section at (800) 222-7000 to initiate further investigation.

Stage 5 Exists When:

Water System's storage level is less than 50% of capacity for at least twelve (12) consecutive hours. Further, the Company has identified operational circumstances such as a steadily declining water table, increasing draw down threatening pump operations, or decreasing well production creating a reasonable belief that the Water System will be unable to meet anticipated sustained water demand.

Restrictions: Under Stage 5 conditions, **mandatory** conservation measures should be employed by customers to reduce water consumption; by at least 50% as measured on a daily use basis. Under Stage 5 conditions no outside watering is permitted. Under Stage 5 conditions the Company shall inform customers of the Water System's **mandatory** restriction to employ water

TARIFF SCHEDULE

Utility: Payson Water Company, Inc.
Docket No. W-03514A-10-0117
Phone No.: _____

Tariff Sheet No.: 6 of 8
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conservation measures to reduce daily consumption by 50%. Failure of customers to comply with this requirement may result in service disconnection as described by this Curtailment Plan. Under Stage 5 conditions the following uses of water are strictly prohibited: (1) all outdoor watering; (2) washing of any vehicle; (3) use of water for dust control or outdoor cleaning uses; (4) use of outdoor drip irrigation or misting systems of any kind; (5) use of water to fill swimming pools, spas, fountain, fish ponds, or ornamental water features; (6) all construction water; (7) restaurant or convenience store patrons shall be served water only on request; and, (8) any other water intensive activity. Under Stage 5 conditions the Water System is prohibited from supplying water to any standpipe and the installation of new water meters and new service lines is prohibited.

Water Augmentation: Under Stage 5 conditions the Company will undertake reasonable measures to augment its well production until such time that Stage 4 conditions are achieved for forty-eight (48) consecutive hours. In all cases where the Company employs water augmentation the Water System's Water Augmentation Surcharge shall become applicable.

Notice: Under Stage 5 conditions, the Company is required to notify customers by (a) door-to-door delivery of written notices at each service address; or, (b) by changing local water conservation staging signs; or, (c) by means of electronic mail; or, (d) by means of any other reasonable means of notification of customers of the Water System; of the imposition of the Curtailment Tariff, the applicable Curtailment Stage, a general description of conditions leading to Stage 5 conditions, and a need to conserve water.

Enforcement: Once the Company has properly provided notice of Stage 5 conditions, the failure of a customer to comply with this Curtailment Plan within twelve (12) hours of receiving notice of its violation of this Curtailment Plan may result in the immediate disconnection of service, without further notice, in accordance with Arizona Administrative Code R14-2-410(B)(1)(d). The reconnection fee for a violation of a Stage 5 curtailment notice shall be:

First offense:	$800
Second offense: (see also Reconnection Fees Section)	$1,500
Third offense:	$3,000

If a customer believes their water service has been disconnected in error the customer may contact the Commission's Consumer Services Section at (800) 222-7000 to initiate further investigation.

TARIFF SCHEDULE

Utility: Payson Water Company, Inc.
Docket No. W-03514A-10-0117
Phone No.: _____

Tariff Sheet No.: 7 of 8
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NOTICE

If the Company elects to provide customer water conservation stage notice by use of local sign postings the Company shall post and maintain at least two (2) signs per water system in noticeable locations that include the entrance to major subdivisions indicating the Company is operating under its Curtailment Plan Tariff, beginning with Stage 1. Each signs shall be at least four feet by four feet and color-coded to denote the current stage, as follows:

Stage 1 – Green
Stage 2 – Blue
Stage 3 – Yellow
Stage 4 – Orange
Stage 5 – Red

The Company shall notify the Consumer Services Division of the Utilities Division at least;

- Twelve (12) hours prior to entering Stage 2.
- Six (6) hours prior to entering Stage 3.
- Six (6) hours prior to entering Stage 4.
- Four (4) hours prior to entering Stage 5.

RECONNECTION FEES

All reconnection fees shall be cumulative for a calendar year regardless of the Stage that an offense occurs. For example, if a customer fails to meet the requirements of a water conservation stage, observe required water conservation measures under a Stage 3 condition, and after receiving notice that a water conservation stage is in effect, the reconnection fee will be $200. If the same customer in the same calendar year commits an offense under Stage 5 conditions, the reconnection fee shall be $1,500. By May 15 and October 15 annually, the Company shall provide the Director of the Utilities Division with a list of customers who paid reconnection fees for failure to comply with the mandatory provisions of the Curtailment Plan Tariff.

Any customer who has service disconnected according to this Curtailment Plan Tariff more than once during a calendar year shall have those terminations count against them in the next calendar year for purposes of establishing the reconnection fee, should another disconnection occur.

TARIFF SCHEDULE

Utility: Payson Water Company, Inc.
Docket No. W-03514A-10-0117
Phone No.: _____

Tariff Sheet No.: 8 of 8
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WATER CONSUMPTION CALCULATION OF "DAILY USE"

For the purpose of calculating "daily use" under the Restriction section of Stage 2, Stage 3, Stage 4, and Stage 5 water conservation conditions, the following definition shall apply:

Daily use is determined by taking the customer water meter reading today and substracting from the customer's meter reading yesterday. This daily use amount is multiplied by 30 days to obtain a calculated monthly use. This monthly use is then compared to the higher of; (a) the immediately preceding month's actual water consumption, or (b) water consumption for the same month in any one of the two previous years for the same service location, to determine if the customer reduced his/her water consumption by at least the required Stage's percentage. The water customer should reduce their daily water consumption from the higher monthly water consumption of either (a) or (b).

Example: Customer meter reads 986654 today. Customer meter read 986354 yesterday. The difference in meter reads is 300 gallons for one day or 9000 gallons for 30 days. Customer actual use in the immediately preceding month was 7,000 (a) gallons. Customer's actual use in the same month in any one of the two previous years was 6,000 (b) gallons. Customer is in violation of Stage 3 mandatory water conservation conditions because his/her current "daily use" calculation is greater than his/her higher monthly use of (a) 7,000 gallons. Under Stage 3, the customer is required to reduce consumption by 30% of the 7000 gallons or 2,100 gallons, 7,000 – 2,100 is 4,900. So the customers daily use needs to be about 165 gallons per day.

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	)	DOCKET NO. W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., FOR AUTHORITY TO ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM AND ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	)	DOCKET NO. W-03514A-13-0142

DIRECT

TESTIMONY

OF

JIAN W. LIU

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

NOVEMBER 15, 2013

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INTRODUCTION

Q. Please state your name and business address.

A. My name is Jian W. Liu. My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. By whom and in what position are you employed?

A. I am employed by the Arizona Corporation Commission ("Commission" or "ACC") as a Utilities Engineer - Water/Wastewater in the Utilities Division ("Staff").

Q. How long have you been employed by the Commission?

A. I have been employed by the Commission since October 2005.

Q. What are your responsibilities as a Utilities Engineer - Water/Wastewater?

A. My main responsibilities are to inspect, investigate and evaluate water and wastewater systems. This includes obtaining data, preparing reconstruction cost new and/or original cost studies, investigative reports, interpreting rules and regulations, and to suggest corrective action and provide technical recommendations on water and wastewater system deficiencies. I also provide written and oral testimony in rate cases and other cases before the Commission.

Q. How many companies have you analyzed for the Utilities Division?

A. I have analyzed more than 40 companies fulfilling these various responsibilities for Staff.

Q. Have you previously testified before this Commission?

A. Yes, I have testified on numerous occasions before this Commission.

Q. What is your educational background?

A. I am a Ph.D. Candidate in Geotechnical Engineering from Arizona State University ("ASU"). I have a Master of Science Degree in Natural Science from ASU and a Master of Science Degree in Civil Engineering from the Institute of Rock & Soil Mechanics ("IRSM"), Academy of Sciences, China.

Q. Briefly describe your pertinent work experience.

A. From 1982 to 2000, I was employed by IRSM, SCS Engineers, and URS Corporation as a Civil and Environmental Engineer. In 2000, I joined the Arizona Department of Environmental Quality ("ADEQ"). My responsibilities with ADEQ included review and approval of water distribution systems, sewer distribution systems, and on-site wastewater treatment facilities. I remained with ADEQ until transferring to the Commission in October 2005.

Q. Please state your professional membership, registrations, and licenses.

A. I am a licensed professional civil engineer in the State of Arizona.

PURPOSE OF TESTIMONY

Q. What was your assignment in this rate proceeding?

A. My assignment was to provide Staff's engineering evaluation in this case. I reviewed Payson Water Co., Inc.'s ("PWC" or "Company") application and responses to data requests, and I inspected the water system. This testimony and its attachments present Staff's engineering evaluation. The findings of my engineering evaluation are contained in the Engineering Report that I have prepared for this proceeding. The report is included as Exhibit JWL in this pre-filed testimony.

ENGINEERING REPORTS

Q. Please describe the information contained in your Engineering Reports.

A. The Report is divided into three general sections: 1) *Executive Summary*; 2) *Engineering Report Discussion*, and 3) *Engineering Report Exhibits.* The *Discussion* section can be further divided into ten subsections: A) Location of Company; B) Description of the Water Systems; C) Water Usage; D) Growth; E) ADEQ Compliance; F) Arizona Department of Water Resources ("ADWR") compliance; G) ACC Compliance; H) Depreciation Rates; I) Financing Application; and J) Other Issues.

RECOMMENDATIONS AND CONCLUSIONS

Q. What are Staff's conclusions and recommendations regarding the Company's operations?

A. Staff's conclusions and recommendations regarding the Company's operations are listed below.

CONCLUSIONS

1. The ADEQ reported that all PWC drinking water systems, except Mesa del Caballo, are currently delivering water that meets water quality standards required by 40 C.F.R. 141 (Title 40 Code of Federal Regulations Part 141 National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4. (ADEQ report dated October 20, 2013).

ADEQ reported that the Mesa del Caballo system had significant violations resulting in a Notice of Violation ("NOV") issued August 12, 2013 for: Source (well does not have a well vent), Operator Compliance (no Approval to Construct ("ATC")/Approval of Construction ("AOC") prior to using well), O&M (need

ADWR and ADEQ numbers posted at system locations), and Distribution (wells without ATC/AOC are connected to the distribution system). (ADEQ report dated October 20, 2013).

2. The Company is not located in any Active Management Area ("AMA") and is not subject to ADWR AMA reporting and conservation requirements. ADWR reported that PWC is not in compliance with departmental requirements governing water providers and/or community water systems. (ADWR compliance status report dated October 21, 2013).

3. A check with the ACC's Utilities Division Compliance Section showed no delinquent compliance items for PWC. (October 30, 2013).

4. The Company has approved Curtailment Plan and Backflow Prevention Tariffs on file with the Commission.

5. PWC has very fragile water systems in which the majority of the wells have very low production capacity and are more than 40 years old. Mesa del Caballo and East Verde Park Estates hauled water during the test year 2012 because of water supply shortages.

6. Mesa del Caballo water system should not have water supply issues in the future once the proposed connection to the Town of Payson water system is completed.

7. Staff has reviewed PWC's Phase II financing application with project cost estimates totaling $904,650 and found the proposal reasonable and appropriate.

However, no "used and useful" determination of the proposed plant items was made, and no conclusions should be inferred for rate making or rate base purposes in the future.

RECOMMENDATIONS

1. Staff recommends that PWC monitor the Flowing Springs water system and submit the gallons pumped and sold to determine the non-account water for one full year. The Company should coordinate when it reads the well meters each month with customer billing so that an accurate accounting is determined. The results of this monitoring and reporting shall be docketed as a compliance item in this case within 13 months of the effective date of the order issued in this proceeding. If the reported water loss is greater than 10 percent the Company shall prepare a report containing a detailed analysis and plan to reduce water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted, shall be docketed as a compliance item within 13 months of the effective date of the order issued in this proceeding.

2. Staff recommends that PWC prepare a report containing a detailed analysis and plan to reduce water loss to 10 percent or less for its Geronimo Estates, Meads Ranch, Whispering Pines, and Gisela water systems. The water loss reduction report shall be docketed as a compliance item within 90 days of the effective date of the order issued in this proceeding. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a

detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent.

3. Staff recommends annual water testing expense of $11,000 be used for purposes of this application.

4. Staff recommends that any increase in rates and charges approved in this proceeding not become effective until the first day of the month following the Company's filing of an updated ADEQ Drinking Water Compliance Status Report indicating that the Company is in compliance with ADEQ requirements for all its water systems.

5. Staff recommends that any increase in rates and charges approved in this proceeding not become effective until the first day of the month following the Company's filing of an updated ADWR Compliance Status Report indicating that the Company is in compliance with ADWR requirements.

6. It is recommended that the Company use the depreciation rates presented in Table B by individual National Association of Regulatory Utility Commissioners category.

7. PWC and Staff have agreed upon five BMP tariffs the Company will implement in its Mesa Del Caballo water system. Staff recommends that PWC adopt these same five BMP tariffs for implementation in its remaining water systems. The BMP tariffs recommended by Staff for implementation in the Company's remaining water systems are attached to Exhibit JWL. Staff further recommends that PWC

notify its customers, in a form acceptable to Staff, of the BMP tariffs authorized in this proceeding and their effective date by means of either an insert in the next regularly scheduled billing or by a separate mailing and shall provide copies of the BMP tariffs to any customer, upon request.

8. Staff recommends that the Company file documentation showing the Company's long-term plan to address its water supply problem in the East Verde Park Estates water system. This documentation should be filed as a compliance item with Docket Control within six months of the effective date of the Commission Decision in this matter. Staff further recommends that a moratorium on new connections be implemented in the East Verde Park Estates water system until the Company can solve the water supply shortages.

9. Staff recommends that the meter and service line charges listed under "Company Proposed and Staff recommended" in Table C be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

Q. Does this conclude your Direct Testimony?

A. Yes, it does.

EXHIBIT JWL

ENGINEERING REPORT FOR

Payson Water Company

DOCKET NOs. W-03514A-13-0111 (Rates) AND

W-03514A-13-0142 (Financing)

JIAN W LIU

November 15, 2013

Engineering Report for Payson Water Company

Docket Nos. W-03514A-13-0111 (Rates) AND W-03514A-13-0142 (Financing)

By: Jian Liu
Utilities Engineer

November 15, 2013

CONCLUSIONS

1. The Arizona Department of Environmental Quality ("ADEQ") reported that all Payson Water Company, Inc. ("PWC" or "Company") drinking water systems, except Mesa del Caballo, are currently delivering water that meets water quality standards required by 40 C.F.R. 141 (Title 40 Code of Federal Regulations Part 141 National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4. (ADEQ report dated October 20, 2013).

   ADEQ reported that the Mesa del Caballo system had significant violations resulting in a Notice of Violation ("NOV") issued August 12, 2013 for Source (well does not have a well vent), Operator Compliance (no Approval to Construct ("ATC")/Approval of Construction ("AOC") prior to using well), O&M (need ADWR and ADEQ numbers posted at system locations), Distribution (wells without ATC/AOC are connected to the distribution system). (ADEQ report dated October 20, 2013).

2. The Company is not located in any Active Management Area ("AMA") and is not subject to Arizona Department of Water Resources ("ADWR") AMA reporting and conservation requirements. ADWR reported that PWC is not in compliance with departmental requirements governing water providers and/or community water systems. (ADWR compliance status report dated October 21, 2013).

3. A check with the Arizona Corporation Commission ("ACC" or "Commission") Utilities Division Compliance Section showed no delinquent compliance items for PWC. (ACC Compliance Section Email dated October 30, 2013).

4. The Company has approved Curtailment Plan and Backflow Prevention Tariffs on file with the Commission.

5. PWC has very fragile water systems in which the majority of the wells have very low production capacity and are more than 40 years old. Mesa del Caballo and

East Verde Park Estates hauled water during the test year 2012 because of water supply shortages.

6. Mesa del Caballo water system should not have water supply issues in the future once the proposed connection to the Town of Payson water system is completed.

7. Staff has reviewed PWC's Phase II financing application with project cost estimates totaling $904,650 and found the proposal reasonable and appropriate. However, no "used and useful" determination of the proposed plant items was made, and no conclusions should be inferred for rate making or rate base purposes in the future.

RECOMMENDATIONS

1. Staff recommends that PWC monitor the Flowing Springs water system and submit the gallons pumped and sold to determine the non-account water for one full year. The Company should coordinate when it reads the well meters each month with customer billing so that an accurate accounting is determined. The results of this monitoring and reporting shall be docketed as a compliance item in this case within 13 months of the effective date of the order issued in this proceeding. If the reported water loss is greater than 10 percent the Company shall prepare a report containing a detailed analysis and plan to reduce water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted, shall be docketed as a compliance item within 13 months of the effective date of the order issued in this proceeding.

2. Staff recommends that PWC prepare a report containing a detailed analysis and plan to reduce water loss to 10 percent or less for its Geronimo Estates, Meads Ranch, Whispering Pines, and Gisela water systems. The water loss reduction report shall be docketed as a compliance item within 90 days of the effective date of the order issued in this proceeding. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent.

3. Staff recommends annual water testing expense of $11,000 be used for purposes of this application.

4. Staff recommends that any increase in rates and charges approved in this proceeding not become effective until the first day of the month following the Company's filing of an updated ADEQ Drinking Water Compliance Status Report

indicating that the Company is in compliance with ADEQ requirements for all its water systems.

5. Staff recommends that any increase in rates and charges approved in this proceeding not become effective until the first day of the month following the Company's filing of an updated ADWR Compliance Status Report indicating that the Company is in compliance with ADWR requirements.

6. It is recommended that the Company use the depreciation rates presented in Table B by individual National Association of Regulatory Utility Commissioners category.

7. PWC and Staff have agreed upon five BMP tariffs the Company will implement in its Mesa Del Caballo water system. Staff recommends that PWC adopt these same five BMP tariffs for implementation in its remaining water systems. The BMP tariffs recommended by Staff for implementation in the Company's remaining water systems are attached to Exhibit JWL. Staff further recommends that PWC notify its customers, in a form acceptable to Staff, of the BMP tariffs authorized in this proceeding and their effective date by means of either an insert in the next regularly scheduled billing or by a separate mailing and shall provide copies of the BMP tariffs to any customer, upon request.

8. Staff recommends that the Company file documentation showing the Company's long-term plan to address its water supply problem in the East Verde Park Estates water system. This documentation should be filed as a compliance item with Docket Control within six months of the effective date of the Commission Decision in this matter. Staff further recommends that a moratorium on new connections be implemented in the East Verde Park Estates water system until the Company can solve the water supply shortages.

9. Staff recommends that the meter and service line charges listed under "Company Proposed and Staff recommended" in Table C be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

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A. LOCATION OF COMPANY AND INTRODUCTION

Payson Water Company, Inc. ("PWC" or "Company") is located in Gila County, Arizona. Figure 1 shows the location of PWC within Gila County and Figure 2 shows the certificated area.

On April 22, 2013, Payson Water Company, Inc. ("PWC" or "Company") filed a request for a permanent rate increase with the Arizona Corporation Commission ("ACC" or "Commission"). On May 17, 2013, PWC filed a financing request with the Commission for approval to borrow funds in the amount of $1,238,000. On June 3, 2013, Staff deemed the rate application sufficient. On August 15, 2013, the Company filed a motion to consolidate the rate case and financing applications and to expedite the processing of those applications. PWC seeks expedited approval to borrow up to $275,000 of the total financing so it can build a line to connect the Town of Payson water system to PWC's Mesa del Caballo water system before next summer. On August 26, 2013 the PWC rate and financing applications were consolidated.

On September 5, 2013, PWC and the Utilities Division ("Staff") of the Commission filed a Stipulation for Procedural Order Bifurcating Proceeding and Establishing Case Schedule. According to the Stipulation, the first phase of the proceeding ("Phase I") would involve consideration of PWC's request for expedited financing approval along with approval of certain interim rate relief in the form of rate surcharges and/or adjustors in order to construct a new water transmission line to connect its Mesa del Caballo water system to the Town of Payson water system. Staff agreed with the expedited treatment of this portion of the financing because of the dire need for water in the Mesa del Caballo area coupled with the opportunity to end water hauling by next summer. The second phase ("Phase II") would involve (1) the remainder of the Company's request for financing approval; and (2) establishing the fair value of PWC's plant and property used for providing water utility service and setting permanent rates thereon. Staff's report for the Phase I proceeding was docketed on September 18, 2013 a hearing was held on September 25, 2013 and the Commission approved PWC's Phase I financing request in Decision No. 74175 on October 25, 2013.

B. DESCRIPTION OF THE WATER SYSTEMS

The plant facilities were visited on August 8, 2013, by Jian Liu, Staff Utilities Engineer, in the accompaniment of David Allred, Operations Superintendent of the Company. The Company operates eight independent water systems a brief description of each system follows:

1. Geronimo Estates system, Public Water System ("PWS") 04-028: This system consists of three wells that pump water into two storage tanks, four booster pumps then pump the water to four pressure tanks before delivery to customers through the distribution system. This system serves 83 active connections.

2. Deer Creek system, PWS 04-064: This system consists of two wells that pump water into a storage tank, three booster pumps then pump the water to two

pressure tanks before delivery to customers through the distribution system. This system serves 121 active connections.

3. Meads Ranch system, PWS 04-015: This system consists of a well that pumps water into two storage tanks, two booster pumps then pump the water to a pressure tank before delivery to customers through the distribution system. This system serves 69 active connections.

4. Whispering Pines system, PWS 04-039: This system consists of two wells that pump water into two storage tanks, four booster pumps then pump the water to four pressure tanks before delivery to customers through the distribution system. This system serves 146 active connections.

5. Flowing Springs system, PWS 04-027: This system consists of a well that pumps water into a storage tank, a booster pump then pumps the water to a pressure tank before delivery to customers through the distribution system. This system serves 29 active connections.

6. Gisela system, PWS 04-346: This system consists of a well that pumps water into two storage tanks, four booster pumps that pump the water to three pressure tanks before delivery to customers through the distribution system. This system serves 162 active connections.

7. East Verde Park Estates system, PWS 04-026: This system consists of three wells that pump water into a storage tank, a booster pump then pumps the water to two pressure tanks before delivery to customers through the distribution system. This system serves 140 active connections.

8. Mesa del Caballo system PWS 04-030: This system consists of four wells that pump water into five storage tanks, four booster pumps then pump the water to six pressure tanks before delivery to customers through the distribution system. This system serves 364 active connections.

Detailed plant facility listings are as follows:

Table 1. Detailed Plant Facility Listings

Geronimo Estates system, PWS 04-028

Well Data for Geronimo Estates

ADWR ID No.	Pump Hp	Pump Yield (GPM)	Casing Size (inches)	Casing Depth (Feet)	Meter Size (inches)	Year Drilled
55-621336	1	5.5	6	160	5/8X3/4	1965
55-515318	2	15	6	150	5/8X3/4	1986
55-631114	1	6	6	160	1	1965
Total Pump Yield		26.5				

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
15,000	2	500	1	5	3
		120	3	3	1
Total 30,000					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
2	1,631	5/8x3/4	83	None
3	2,268	1		
4	6,794	1.5		
		Total Metered Connections	83	

Deer Creek system, PWS 04-064

Well Data for Deer Creek

ADWR ID No.	Pump Hp	Pump Yield (GPM)	Casing Size (inches)	Casing Depth (Feet)	Meter Size (inches)	Year Drilled
55-086809	5	24	6	260	1	1981
55-512278	1	8	6	260	5/8X3/4	1985
Total Pump Yield		32				

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
125,000	1	5000	1	7.5	2
		120	1	3	1
Total 125,000					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
2	385	5/8x3/4	115	None
4	18,368	3/4	2	
6	645	1	1	
		Turbo 3	3	
		Total Metered Connections	121	

Meads Ranch system, PWS 04-015

Well Data for Meads Ranch

ADWR ID No.	Pump Hp	Pump Yield (GPM)	Casing Size (inches)	Casing Depth (Feet)	Meter Size (inches)	Year Drilled
55-644405	5	5	20	160	5/8X3/4	1965
Total Pump Yield		5				

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
10,000	2	80	1	5	1
				3	1
Total 20,000					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
2	4,480	5/8x3/4	69	None
3	2,519	1		
		1.5		
		Total Metered Connections	69	

Whispering Pines system, PWS 04-039

Well Data for Whispering Pines

ADWR ID No.	Pump Hp	Pump Yield (GPM)	Casing Size (inches)	Casing Depth (Feet)	Meter Size (inches)	Year Drilled
55-621333	1	17	6	86	1	1965
55-621334	2	28	6/7.5	50	1	1960
Total Pump Yield		45				

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
20,000	2	2000	3	7.5	4
		1000	1		
Total 40,000					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
2	9,113	5/8x3/4	145	None
3	5,262	1	1	
4	18,908	1.5		
		Total Metered Connections	146	

Flowing Springs system, PWS 04-027

Well Data for Flowing Springs

ADWR ID No.	Pump Hp	Pump Yield (GPM)	Casing Size (inches)	Casing Depth (Feet)	Meter Size (inches)	Year Drilled
55-631115	1	10	6	150	5/8X3/4	1950
Total Pump Yield		10				

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
15,000	1			5	1
		1000	1		
Total 15,000					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
2	11,638	5/8x3/4	29	None
3		1		
4	4,010	1.5		
		Total Metered Connections	29	

Gisela system, PWS 04-346

Well Data for Gisela

ADWR ID No.	Pump Hp	Pump Yield (GPM)	Casing Size (inches)	Casing Depth (Feet)	Meter Size (inches)	Year Drilled
55-646162	5	92	12	50	2	1971
Total Pump Yield		92				

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
30,000	1	500	1	7.5	4
50,000	1	1000	1		
		2000	1		
Total 80,000					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
2		5/8x3/4	159	None
3	366	1	3	
4	9,611	1.5		
6	7,855			
		Total Metered Connections	162	

East Verde Park Estates system, PWS 04-026

Well Data for East Verde Park Estates

ADWR ID No.	Pump Hp	Pump Yield (GPM)	Casing Size (inches)	Casing Depth (Feet)	Meter Size (inches)	Year Drilled
55-621332	1	7	8	80	5/8X3/4	1958
55-661335	1	1.2	8	40	5/8X3/4	1955
55-518599	8	8	8	100	1	1957
Total Pump Yield		16.2				

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
40,000	1	2000	2	7.5	1
Total 40,000					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
2	5,992	5/8x3/4	139	None
3		3/4	1	
4	27,311			
		Total Metered Connections	140	

Mesa del Caballo system PWS 04-030

Well Data (active wells only) for Mesa del Caballo

ADWR ID No.	Pump Hp	Pump Yield (GPM)	Casing Size (inches)	Casing Depth (Feet)	Meter Size (inches)	Year Drilled
55-631113	5	4	6	104	5/8X3/4	1977
55-500270	3	2.2	6	450	5/8X3/4	1981
55-513409	1	3	6	395	5/8X3/4	1986
55-556148	2	8.5	6	400	1	1996
Total Pump Yield		17.7				

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
40,000	1	80	2	5	1
20,000	1	2000	4	7.5	1
15,000	3			10	1
Total 105,000				20	1

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
2	738	5/8x3/4	363	None
3	1,422	1	1	
4	22,455	1.5		
		Total Metered Connections	364	

C. WATER USE

Water Sold

Based on the information provided by the Company on its Water Use Data Sheets submitted with the application, water use for the year 2012 is presented below for each system.

Water Use, gallons per day ("GPD") per connection

Water System Name	High	Low	Average
Geronimo Estates	85 in June	17 in Jan.	49
Deer Creek	215 in June	94 in Jan.	145
Meads Ranch	57 in June	10 in Feb.	28
Whispering Pines	203 in July	39 in Mar.	87
Flowing Springs	215 in June	49 in Feb.	105
Gisela	368 in June	126 in Mar.	226
East Verde Park Estates	116 in June	40 in Jan.	72
Mesa del Caballo	118 in June	83 in Mar.	98

Non-Account Water

For each water system, the Company reported the following gallons pumped and gallons sold in 2012, which Staff used to determine the water loss per system:

Table 2. Water Loss

Water System	Gallons Pumped	Gallons Sold	Water loss (%)
Geronimo Estates	1,665,000	1,495,000	10.21
Deer Creek	6,967,000	6,400,000	8.14
Meads Ranch	848,000	732,000	13.68
Whispering Pines	5,476,000	4,744,000	13.37
Flowing Springs	1,145,000	13,352,000	na*
Gisela	11,997,000	8,718,000	16.43
East Verde Park Estates	3,801,000	3,730,000	1.87
Mesa del Caballo	13,635,000	12,943,000	5.08

*The quantity of water sold cannot exceed the quantity of water pumped for the same period of time, which suggests that the water use data reported is invalid.

Non-account water should be 10 percent or less and never more than 15 percent. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, theft, and flushing.

Staff recommends that PWC monitor the Flowing Springs water system and submit the gallons pumped and sold to determine the non-account water for one full year. The Company should coordinate when it reads the well meters each month with customer billing so that an accurate accounting is determined. The results of this monitoring and reporting shall be docketed as a compliance item in this case within 13 months of the effective date of the order issued in this proceeding. If the reported water loss is greater than 10 percent the Company shall prepare a report containing a detailed analysis and plan to reduce water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted, shall be docketed as a compliance item within 13 months of the effective date of the order issued in this proceeding.

Staff recommends that PWC prepare a report containing a detailed analysis and plan to reduce water loss to 10 percent or less for its Geronimo Estates, Meads Ranch, Whispering Pines, and Gisela water systems. The water loss reduction report shall be docketed as a compliance item within 90 days of the effective date of the order issued in this proceeding. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent.

D. GROWTH

In December 2007, PWC had 1,270 customers, and in December 2012, the Company had 1,114 customers. The customer base has decreased from 2007 to 2012. The Company estimates that the customer base will be flat for the next 5 years.

Staff concludes that the PWC has very fragile water systems. The majority of the wells have very low production capacity and are more than 40 years old. Mesa del Caballo and East Verde Park Estates hauled water during the test year 2012 because of water supply shortages.

Mesa del Caballo water system should not have water supply issues in the future once the proposed connection to the Town of Payson water system is completed.

According to the Company's well data for the East Verde Park Estates water system during test year 2012, the production of the wells vary throughout the year, from 19.5 to 7.6 GPM due to production depletions, resulting in a water supply problem. For June 2012, East Verde Park Estates water system produced 9.5 GPM from its three wells which could only serve 96 connections based on this production (East Verde Park Estates had 142 connections in June 2012).

Staff recommends that the Company file documentation showing the Company's long-term plan to address its water supply problem in the East Verde Park Estates water system. This

documentation should be filed as a compliance item with Docket Control within six months of the effective date of the Commission Decision in this matter. Staff further recommends that a moratorium on new connections be implemented in the East Verde Park Estates water system until the Company can solve the water supply shortages.

E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY COMPLIANCE ("ADEQ")

Compliance

ADEQ reported that all PWC drinking water systems, except Mesa del Caballo, are currently delivering water that meets water quality standards required by 40 C.F.R. 141 (Title 40 Code of Federal Regulations Part 141 National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4. (ADEQ report dated October 20, 2013).

ADEQ reported that the Mesa del Caballo system had significant violations resulting in a Notice of Violation ("NOV") issued August 12, 2013 for Source (well does not have a well vent), Operator Compliance (no Approval to Construct ("ATC")/Approval of Construction ("AOC") prior to using well), O&M (need ADWR and ADEQ numbers posted at system locations), Distribution (wells without ATC/AOC are connected to the distribution system). (ADEQ report dated October 20, 2013).

Staff recommends that any increase in rates and charges approved in this proceeding not become effective until the first day of the month following the Company's filing of an updated ADEQ Drinking Water Compliance Status Report indicating that the Company is in compliance with ADEQ requirements for all its water systems.

Water Testing Expense

The Company reported water testing expense of $10,999.61 during the test year 2012. PWC provided invoices and other documents to support this amount. Staff has reviewed the information provided and concludes that the water testing expense of $10,999.61 is reasonable. Therefore, Staff recommends annual water testing expense of $11,000 (rounded) be used for purposes of this application.

F. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

The Company is not located in any Active Management Area ("AMA") and is not subject to ADWR AMA reporting and conservation requirements. ADWR reported that PWC is not in compliance with departmental requirements governing water providers and/or community water systems. (ADWR compliance status report dated October 21, 2013).

Staff recommends that any increase in rates and charges approved in this proceeding not become effective until the first day of the month following the Company's filing of an updated ADWR Compliance Status Report indicating that the Company is in compliance with ADWR requirements.

G. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check with the Utilities Division Compliance Section showed no delinquent compliance items for PWC. (October 30, 2013)

H. DEPRECIATION RATES

Staff has developed typical and customary depreciation rates within a range of anticipated equipment life. These rates are presented in Table B and it is recommended that the Company use these depreciation rates by individual National Association of Regulatory Utility Commissioners category.

Table B. Depreciation Rates

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	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	3	33.33
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	----	----

NOTES:

1. These depreciation rates represent average expected rates. Water companies may experience different rates due to variations in construction, environment, or the physical and chemical characteristics of the water.

2. Acct. 348, Other Tangible Plant may vary from 5% to 50%. The depreciation rate would be set in accordance with the specific capital items in this account.

I. PHASE II FINANCING

The Town of Payson is planning to construct its new Cragin Water Treatment Plant ("WTP") adjacent to the Mesa Del Caballo community served by PWC. The plant will treat surface water that is piped from the Blue Ridge reservoir approximately 12 miles to the new WTP. The facility was planned with capacity to supply water to the Town and the Mesa del Caballo community for nine months out of the year. Therefore, a new inter-connection (transmission main) is required between the treatment plant and the Mesa Del Caballo water system. The Commission approved funding for this interconnection in its Phase I financing Decision.

During the three months of the year when the reservoir does not supply water, the PWC will continue to use their groundwater wells for drinking water. Once the Cragin water supplies become available to Mesa Del Caballo (in approximately year 2017), the system will operate much differently than it does now, since there should be no groundwater needed for nine months out of the year.

On October 28, 2013, PWC submitted a design memo that outlines the plan for the Cragin Pipeline-related construction that will be required at Mesa Del Caballo. PWC is proposing the following capital improvement projects for the Mesa Del Caballo water system:

(1) Site work for grading and placing two new tanks,
(2) Install two 50,000 tanks,
(3) Install a booster pump station, and
(4) Painting the existing tanks.

Updated Cost Estimates for Phase II Financing

On October 28, 2013, PWC updated its cost estimates for the Phase II financing application for the Mesa del Caballo water system.

ITEM DESCRIPTION	TOTAL COST
1. Town of Payson Contract Payment	$ 565,000*
2. Salt River Project Contract Payment.	$ 85,000*
3. Storage & Pumping Improvements	$ 192,000
4. Engineering Services	$ 22,600
5. Fees, Legal, Permits, Testing, Admin, Etc.	$ 6,850
6. Contingency	$ 33,200
TOTAL (Phase II)	$ 904,650

*The shared costs for the Cragin Pipeline Project which is being built by Salt River Project ("SRP") and the Town of Payson.

On October 25, 2013, the Commission approved PWC's Phase I financing application of $275,000 in Decision No. 74175. The total updated financing application (combined Phase I & Phase II) is $1,179,650, which is less than the Company's original request of $1,238,000.

Staff has reviewed PWC's Phase II financing application with project cost estimates totaling $904,650 and found the proposal reasonable and appropriate. However, no "used and useful" determination of the proposed plant items was made, and no conclusions should be inferred for rate making or rate base purposes in the future.

J. OTHER ISSUES

1. Curtailment, Backflow Prevention and Best Management Practice ("BMP") Tariffs

PWC has approved Curtailment and Backflow Prevention tariffs on file with the ACC.

PWC and Staff have agreed upon five BMP tariffs the Company will implement in its Mesa Del Caballo water system[1]. Staff recommends that PWC adopt these same five BMP tariffs for implementation in its remaining water systems. The BMPs tariffs recommended by Staff for implementation in the Company's remaining water systems are attached to Exhibit JWL. Staff further recommends that PWC notify its customers, in a form acceptable to Staff, of the BMP tariffs authorized in this proceeding and their effective date by means of either an insert in the next regularly scheduled billing or by a separate mailing and shall provide copies of the BMP tariffs to any customer, upon request.

2. Service Line and Meter Installation Charges

The Company requested permission to change its service line and meter installation charges. PWC proposed to use Staff's recommended service line and meter charges. Staff recommends that the charges listed under "Company Proposed and Staff recommended" in Table C be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

[1] In Decision No. 71902, the Commission ordered PWC to implement five BMPs in its Mesa Del Caballo water system.

Table C. Service Line and Meter Installation Charges

Meter Size	Current Charges	Company Proposed and Staff recommended Service Line Charges	Company Proposed and Staff recommended *Meter Charges	Company Proposed and Staff recommended Total Charges
5/8 x3/4-inch	430	$445	$155	$600
3/4-inch	480	$445	$255	$700
1-inch	550	$495	$315	$810
1-1/2-inch	775	$550	$525	$1075
2-inch Turbine	NA	$830	$1045	$1,875
2-inch Compound	NA	$830	$1,890	$2,720
3-inch Turbine	NA	$1045	$1,670	$2,715
3-inch Compound	NA	$1165	$2,545	$3,710
4-inch Turbine	NA	$1,490	$2,670	$4,160
4-inch Compound	NA	$1,670	$3,645	$5,315
6-inch Turbine	NA	$2,210	$5,025	$7,235
6-inch Compound	NA	$2,330	$6,920	$9,250
8-inch & Larger	NA	At Cost	At Cost	At Cost

*Note: 1. Meter charge includes meter box or vault.

Payson Water Company
Docket Nos. W-03514A-13-0111 (Rates) &
W-03514A-13-0142 (Financing)

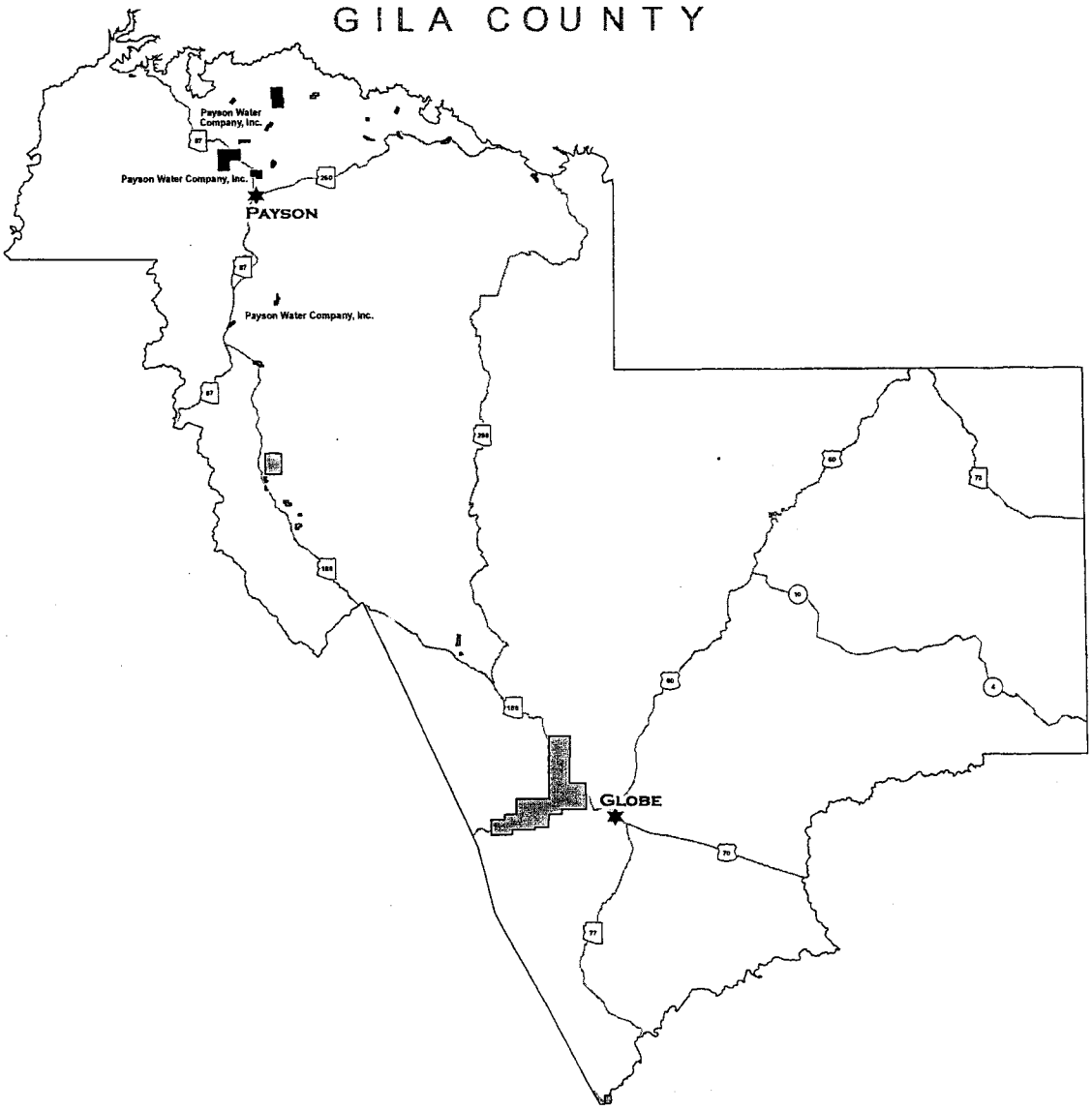

Figure 1. Gila County Map

Payson Water Company
Docket Nos. W-03514A-13-0111 (Rates) &
W-03514A-13-0142 (Financing)

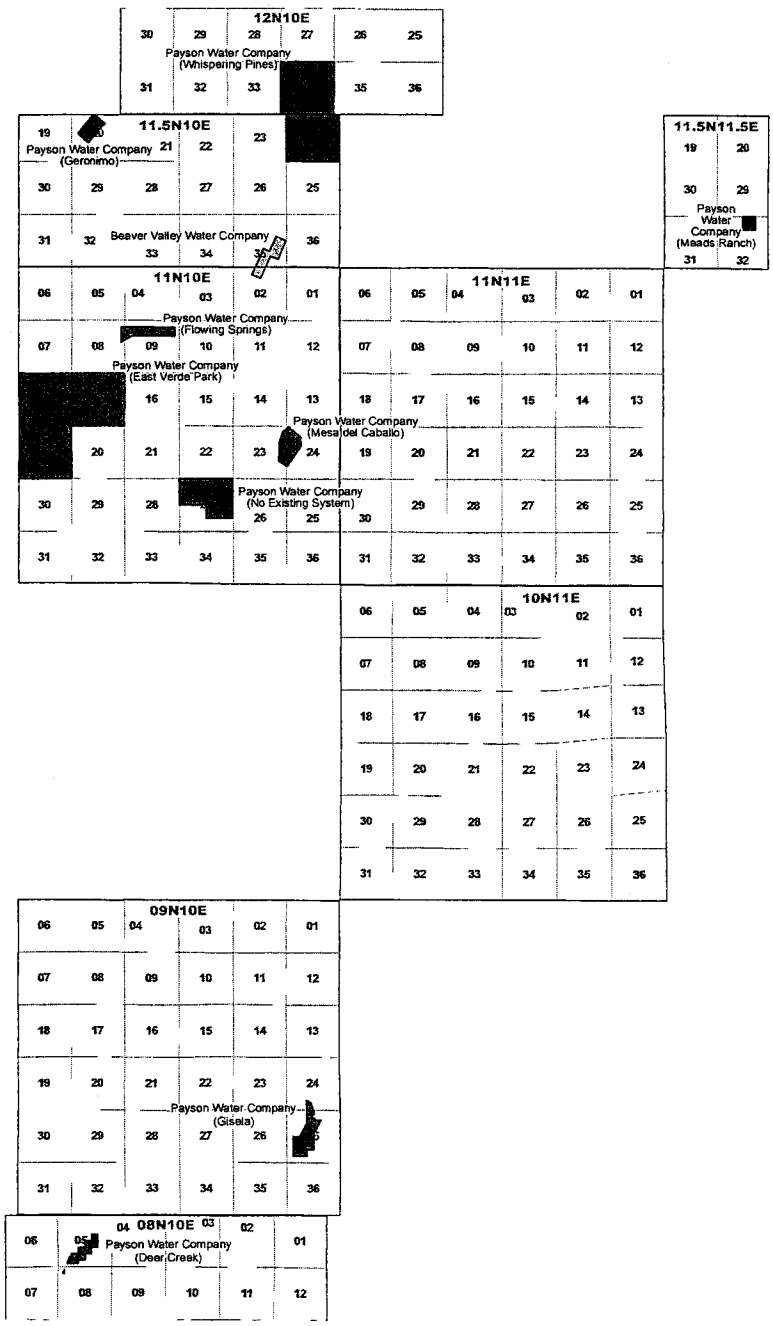

Figure 2. Certificated Areas

ATTACHMENT JWL

BEST MANAGEMENT PRACTICE TARIFFS

FOR

Payson Water Company

DOCKET NOS. W-03514A-13-0111 (Rates) AND

W-03514A-13-0142 (Financing)

Public Education Program Tariff

PURPOSE

A program for the Company to provide free written information on water conservation measures to its customers and to remind them of the importance of conserving water (Required Public Education Program).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall provide two newsletters to each customer; one to be provided in the spring, the other in the fall. The goal of the letters is to provide timely information to customers in preparation of the hot summer months, and the cold winter months, in regards to their water uses. The Company shall remind customers of the importance of water conservation measures and inform them of the information available from the Company.
2. Information in the newsletters shall include water saving tips, home preparation recommendations for water systems/pipes, landscape maintenance issues for summer and winter, water cistern maintenance reminders and additional pertinent topics. Where practical, the Company shall make this information available in digital format which can be e-mailed to customers upon request or posted on the Company's website.
3. Communication channels shall include one or more of the following: water bill inserts, messages on water bills, Company web page, post cards, e-mails and special mailings of print pieces, whichever is the most cost-effective and appropriate for the subject at hand.
4. Free written water conservation materials shall be available in the Company's business office and the Company shall send information to customers on request.
5. The Company may distribute water conservation information at other locations such as libraries, chambers of commerce, community events, etc., as well.
6. The Company shall keep a record of the following information and make it available to the Commission upon request.
    a. A description of each communication channel (i.e., the way messages will be provided) and the number of times it has been used.
    b. The number of customers reached (or an estimate).
    c. A description of the written water conservation material provided free to customers.

New Homeowner Landscape Information Tariff – BMP 2.3

PURPOSE

A program for the Company to promote the conservation of water by providing a landscape information package for the purpose of educating its new customers about low water use landscaping (Modified Non-Per Capita Conservation Program BMP Category 2: Conservation Education and Training 2.3: New Homeowner Landscape Information).

REQUIREMENTS:

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. Upon establishment of water service the Company shall provide a free "Homeowner Landscape Packet" to each new customer in the Company's service area. The packet will include at a minimum: a cover letter describing the water conservation expectations for all customers in the Company's service area, all applicable tariffs, a basic interior-exterior water saving pamphlet, xeriscape landscape information, and information on where to find low water use plant lists, watering guidelines, and a rain water harvesting pamphlet.

2. Upon customer request, the Company shall provide:
   a. On-site consultations on low water use landscaping and efficient watering practices.
   b. A summary of water saving options.

3. The number of packets provided to new customers will be recorded and made available to the Commission upon request.

Water Waste Investigations and Information Tariff – BMP 3.8

PURPOSE

A program for the Company to assist customers with water waste complaints and provide customers with information designed to improve water use efficiency (Modified Non-Per Capita Conservation Program BMP Category 3: Outreach Services 3.8: Water Waste Investigations and Information).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission specifically R14-2-403 and R14-2-410 and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall handle water waste complaints as calls are received.
2. Calls shall be taken by a customer service representative who has been trained to determine the type of water waste and to determine if it may be attributed to a leak or broken water line.
3. The Company shall follow up on every water waste complaint.
4. Upon request by the customer or when the Company determines it is warranted, a trained Field Technician shall be sent to investigate further and notify the responsible party of the waste and offer assistance and information to prevent waste in the future.
5. A letter of enforcement will be issued to customers with water running beyond the curb and/or off the customers property due to such things as, but not limited to, backwashing of pools, broken sprinkler heads, and over watering of lawns beyond the saturation point.
6. The same procedures outlined above in item #4 will be followed in the event of a second violation. Termination of service may result in the event of the third violation within a 12 month period. In the event of a third violation the customer's service may be terminated per Arizona Administrative Code R14-2-410C, R14-2-410D and R14-2-410E (applicable service reconnection fees shall apply).
7. The Company shall record each account and each instance noted for water waste, the action taken and any follow-up activities.
8. Subject to the provisions of this tariff, compliance with the water waste restriction will be a condition of service.
9. The Company shall provide to its customers a complete copy of this tariff and all attachments upon request and to each new customer. The customer shall abide by the water waste restriction.
10. If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

Meter Repair and/or Replacement Tariff – BMP 4.2

PURPOSE

A program for the Company to systematically assess all in-service water meters (including Company production meters) in its water service area to identify under-registering meters for repair or replacement (Modified Non-Per Capita Conservation Program Best Management Practice Category 4: Physical System Evaluation and Improvement 4.2 Meter Repair and/or Replacement Program).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. On a systematic basis, the Company will inspect 100 percent of its 1-inch and smaller in-service water meters at least once every ten years for one of the following reasons (whichever occurs first):
    a. A meter reading complaint is filed with the Company by a customer or Arizona Corporation Commission Staff,
    b. A meter has registered 1,000,000 gallons of usage,
    c. A meter has been in service for ten years.

2. Meters larger than 1-inch shall be inspected for one of the following reasons:
    a. A meter reading complaint is filed with the Company by a customer or Arizona Corporation Commission Staff,
    b. A meter has been in service for five years.

3. The inspection will be accomplished by having the meter pulled and having a Company Technician physically inspect each meter and its fittings for leaks, registers which may have become loose or are not properly attached to the meter and could be under-registering or other broken parts which need repair. In addition, meters shall be randomly selected for flow testing to identify potentially under-registering meters.

4. The Company shall also replace or reprogram any water meters that do not register in gallons. Upon the effective date of this tariff, the Company shall install all replacement meters with new:
    a. 1-inch and smaller meters that register in 1 gallon increments,
    b. 1-1/2-inch through 4-inch meters that register in 10 gallon increments, and
    c. 6-inch and larger meters that register in 100 gallon increments.

5.The Company shall keep records of all inspected and replacement meters and make this information available to the Commission upon request.

WATER SYSTEM TAMPERING TARIFF – BMP 5.2

PURPOSE

The purpose of this tariff is to promote the conservation of groundwater by enabling the Company to bring an action for damages or to enjoin any activity against a person who tampers with the water system.

REQUIREMENTS:

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission, specifically Arizona Administrative Code ("AAC") R14-2-410 and the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. In support of the Company's water conservation goals, the Company may bring an action for damages or to enjoin any activity against a person who: (1) makes a connection or reconnection with property owned or used by the Company to provide utility service without the Company's authorization or consent; (2) prevents a Company meter or other device used to determine the charge for utility services from accurately performing its measuring function; (3) tampers with property owned or used by the Company; or (4) uses or receives the Company's services without the authorization or consent of the Company and knows or has reason to know of the unlawful diversion, tampering or connection. If the Company's action is successful, the Company may recover as damages three times the amount of actual damages.

2. Compliance with the provisions of this tariff will be a condition of service.

3. The Company shall provide to all its customers, upon request, a complete copy of this tariff and AAC R14-2-410. The customers shall follow and abide by this tariff.

4. If a customer is connected to the Company water system and the Company discovers that the customer has taken any of the actions listed in No. 1 above, the Company may terminate service per AAC R14-2-410.

5. If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	)	DOCKET NO. W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., FOR AUTHORITY TO ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM AND ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	)	DOCKET NO. W-03514A-13-0142

SURREBUTTAL

TESTIMONY

OF

JIAN W. LIU

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

DECEMBER 20, 2013

EXECUTIVE SUMMARY
PAYSON WATER COMPANY
DOCKET NOS. W-03514A-13-0111 AND W-03514A-13-0142

Staff continues to recommend that any increase in rates and charges approved in this proceeding not become effective until the first day of the month following the Company's filing of an updated Arizona Department of Environmental Quality ("ADEQ") Drinking Water Compliance Status Report indicating that the Company is in compliance with ADEQ requirements for all its water systems.

The following two recommendations replace recommendations 1 and 2 in my direct testimony:

1. Staff recommends that Payson Water Company, Inc. ("PWC" or "Company") monitor the Gisela water system and submit the gallons pumped and sold to determine the non-account water for one full year. The Company should coordinate when it reads the well meters each month with customer billing so that an accurate accounting is determined. The results of this monitoring and reporting shall be docketed as a compliance item in this case within 13 months of the effective date of the order issued in this proceeding. If the reported water loss is greater than 10 percent the Company shall prepare a report containing a detailed analysis and plan to reduce water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted, shall be docketed as a compliance item within 13 months of the effective date of the order issued in this proceeding.

2. Staff recommends that PWC prepare a report containing a detailed analysis and plan to reduce water loss to 10 percent or less for its Geronimo Estates, Meads Ranch, and Whispering Pines water systems. The water loss reduction report shall be docketed as a compliance item within 90 days of the effective date of the order issued in this proceeding. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent.

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Jian W. Liu. My job title is Water/Wastewater Engineer. My place of employment is the Arizona Corporation Commission ("ACC" or "Commission"), Utilities Division ("Staff"), 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same Jian W. Liu who filed Direct Testimony in this case?

A. Yes, I am.

Q. What is the purpose of your Surrebuttal Testimony in this proceeding?

A. The purpose of my Surrebuttal Testimony in this proceeding is to discuss, on behalf of Staff, Arizona Department of Environmental Quality ("ADEQ") compliance, water loss and water supply in the East Verde Park Estates issues regarding Payson Water Company, Inc. ("PWC" or "Company").

Q. What is The PWC's position regarding ADEQ compliance?

A. Mr. Jason Williamson, in his rebuttal testimony, states that "Any delay in an increase in rates will have a dramatic impact on the Company".

Q. What is the Staff's opinion regarding the ADEQ compliance issue?

A. PWC is responsible for ensuring its system complies with ADEQ requirements and the water delivered to customers meets water quality standards. This issues to be resolved are:

1. Well does not have a well vent.

2. No Approval to Construct ("ATC")/Approval of Construction ("AOC") prior to using well.
3. Need ADWR and ADEQ numbers posted at system locations.
4. Wells without ATC/AOC are connected to the distribution system.

The Company should be able to resolve all the ADEQ compliance issues before the open meeting date for this rate case so there is no delay for its increase in rates.

Therefore, Staff recommends that any increase in rates and charges approved in this proceeding not become effective until the first day of the month following the Company's filing of an updated ADEQ Drinking Water Compliance Status Report indicating that the Company has resolved the four issues listed above.

Q. Do you have any correction for the Table 2 in your direct testimony?

A. Yes, an updated Table 2 is shown below:

Table 2. Water Loss

Water System	Gallons Pumped	Gallons Sold	Water loss (%)
Geronimo Estates	1,665,000	1,495,000	10.21
Deer Creek	6,967,000	6,400,000	8.14
Meads Ranch	848,000	732,000	13.68
Whispering Pines	5,476,000	4,744,000	13.37
Gisela	**11,997,000**	13,352,000	na*
Flowing Springs	**1,145,000**	**1,084,000**	**5.33**
East Verde Park Estates	3,801,000	3,730,000	1.87
Mesa del Caballo	13,635,000	12,943,000	5.08

*The quantity of water sold cannot exceed the quantity of water pumped for the same period of time, which suggests that the water use data reported is invalid.

Note: The bolded fonts indicate a correction made from the direct testimony.

Q. Do you have any other corrections to your direct testimony?

A. Yes, the following two recommendations should supersede my recommendations 1 and 2 in my direct testimony because of the corrections in above Table 2:

1. Staff recommends that PWC monitor the Gisela water system and submit the gallons pumped and sold to determine the non-account water for one full year. The Company should coordinate when it reads the well meters each month with customer billing so that an accurate accounting is determined. The results of this monitoring and reporting shall be docketed as a compliance item in this case within 13 months of the effective date of the order issued in this proceeding. If the reported water loss is greater than 10 percent the Company shall prepare a report containing a detailed analysis and plan to reduce water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted, shall be docketed as a compliance item within 13 months of the effective date of the order issued in this proceeding.

2. Staff recommends that PWC prepare a report containing a detailed analysis and plan to reduce water loss to 10 percent or less for its Geronimo Estates, Meads Ranch, and Whispering Pines water systems. The water loss reduction report shall be docketed as a compliance item within 90 days of the effective date of the order issued in this proceeding. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit

analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent.

Q. Does the Company agree with Staff's water loss calculation for the Geronimo Estates water system?

A. No. The PWC shows 10 percent water loss versus 10.21 percent by Staff. Staff agrees with the Company that the Geronimo Estates water loss is near the threshold of 10 percent. Staff continues to recommend the above recommendation #2 for the Geronimo Estates water system.

Q. Is the Company opposed to Staff's recommendation that the Company conduct a study regarding the East Verde Park Estates water system water supply situation?

A. No. The Company does request that the time frame for completing this study should be at least one year from a decision in this case. PWC's request is reasonable. Therefore, Staff recommends that the Company file documentation showing the Company's long-term plan to address its water supply problem in the East Verde Park Estates water system. This documentation should be filed as a compliance item with Docket Control within twelve months of the effective date of the Commission Decision in this matter. Staff further recommends that a moratorium on new connections be implemented in the East Verde Park Estates water system until the Company can solve the water supply shortages.

Q. Did you attempt to address every issue the Company raised in its Rebuttal Testimony?

A. No. Staff limited its discussion to the specific issue as outlined above. Staff's lack of response to any issue in this proceeding should not be construed as agreement with the

Company's position in its Rebuttal Testimony; rather where there is no response, Staff relies on its original Direct Testimony.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes, it does.

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

EXHIBIT
S-9
ADMITTED

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	)	DOCKET NO. W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., FOR AUTHORITY TO ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM AND ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	)	DOCKET NO. W-03514A-13-0142

SUPPLEMENTAL

TESTIMONY

OF

JIAN W. LIU

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

JANUARY 24, 2014

EXECUTIVE SUMMARY
PAYSON WATER COMPANY
DOCKET NOS. W-03514A-13-0111 AND W-03514A-13-0142

Staff recommends that any increase in rates and charges approved in this proceeding not become effective until the first day of the month following the Payson Water Company, Inc. ("PWC" or "Company") filing of either an updated Arizona Department of Environmental Quality ("ADEQ") Drinking Water Compliance Status Report indicating that the Company is in compliance with ADEQ requirements for all of its water systems or the Company enters into a Consent Agreement with ADEQ to address its Notice of Violation.

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Jian W. Liu. My job title is Water/Wastewater Engineer. My place of employment is the Arizona Corporation Commission ("ACC" or "Commission"), Utilities Division ("Staff"), 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same Jian W. Liu who filed Direct Testimony in this case?

A. Yes, I am.

Q. What is the purpose of your Supplemental Testimony in this proceeding?

A. The purpose of my Supplemental Testimony in this proceeding is to make following recommendation which is a modification to Staff's original recommendation regarding when rates should become effective in relation to compliance with the Arizona Department of Environmental Quality ("ADEQ").

Staff recommends that any increase in rates and charges approved in this proceeding not become effective until the first day of the month following the Payson Water Company, Inc. ("PWC" or "Company") filing of either an updated ADEQ Drinking Water Compliance Status Report indicating that the Company is in compliance with ADEQ requirements for all of its water systems or the Company enters into a Consent Agreement with ADEQ to address its Notice of Violation.

Q. Does this conclude your Supplemental Testimony?

A. Yes, it does.

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner
BOB BURNS
Commissioner

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO. INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	)	DOCKET NO. W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO. INC., FOR AUTHORITY TO ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM; AND ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	)	DOCKET NO. W-03514A-13-0142

DIRECT

TESTIMONY

OF

JOHN A. CASSIDY

PUBLIC UTILITIES ANALYST

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

NOVEMBER 19, 2013

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EXECUTIVE SUMMARY
PAYSON WATER COMPANY
DOCKET NO. W-03514A-13-0111, ET AL

The direct testimony of Staff witness John A. Cassidy addresses the following issues:

Capital Structure – Staff recommends that the Commission adopt a capital structure for Payson Water Company ("Company") for this proceeding consisting of 52.8 percent debt and 47.2 percent equity.

Cost of Equity – Staff recommends that the Commission adopt a 9.0 percent return on equity ("ROE") for the Company. Staff's estimated ROE for the Company is based on the 8.4 percent average of its discounted cash flow method ("DCF") and capital asset pricing model ("CAPM") cost of equity methodology estimates for the sample companies of 8.8 percent for the DCF and 8.0 percent for the CAPM. Staff's recommended ROE includes an upward economic assessment adjustment of 60 basis points (0.6 percent).

Cost of Debt – Staff recommends that the Commission adopt a 4.2 percent cost of debt for the Company.

Overall Rate of Return – Staff recommends that the Commission adopt a 6.4 percent overall rate of return.

Mr. Bourassa's Testimony – The Commission should reject the Company's proposed 11.0 percent ROE for the following reasons:

> Mr. Bourassa's primary Future Growth DCF estimates rely exclusively on analysts' forecasts of earnings per share growth. Effectively, Mr. Bourassa's overall DCF estimate is weighted 75 percent by his Future Growth DCF estimates. Mr. Bourassa's CAPM estimates are inflated due to use of a forecasted risk-free rate. Mr. Bourassa's proposed ROE includes an upward 200 basis point small company risk premium adjustment.

I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is John A. Cassidy. I am a Public Utilities Analyst employed by the Arizona Corporation Commission ("Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Briefly describe your responsibilities as a Public Utilities Analyst.

A. I am responsible for the examination of financial and statistical information included in utility rate applications and other financial matters, including studies to estimate the cost of capital component in rate filings used to determine the overall revenue requirement, and for preparing written reports, testimonies and schedules to present Staff's recommendations to the Commission on these matters.

Q. Please describe your educational background and professional experience.

A. I hold a Bachelor of Arts degree in History from Arizona State University, a Master of Library Science degree from the University of Arizona, and a Master of Business Administration degree with an emphasis in Finance from Arizona State University. While pursuing my MBA degree, I was inducted into Beta Gamma Sigma, the National Business Honor Society. I have passed the CPA exam, but opted not to pursue certification. I have worked professionally as a librarian, financial consultant and tax auditor and served as Staff's cost of capital witness in rate case evidentiary proceedings in my current as well as in a past tenure as a Commission employee.

Q. What is the scope of your testimony in this case?

A. My testimony provides Staff's recommended capital structure, return on equity ("ROE") and overall rate of return ("ROR") for establishing the revenue requirements for Payson

Water Company ("Payson Water" or "Company") in the Company's pending water rate application.

Q. Please provide a brief description of Payson Water.

A. Payson Water is an Arizona public service corporation engaged in providing water utility services in portions of Gila County, Arizona, pursuant to certificates of convenience and necessity granted by the Arizona Corporation Commission ("Commission"). During the test year ending December 31, 2012, the Company served approximately 1,114 water connections.

Summary of Testimony and Recommendations

Q. Briefly summarize how Staff's cost of capital testimony is organized.

A. Staff's cost of capital testimony is presented in eleven sections. Section I is this introduction. Section II discusses the concept of weighted average cost of capital ("WACC"). Section III presents the concept of capital structure and presents Staff's recommended capital structure for Payson Water in this proceeding. Section IV presents Staff's cost of debt for Payson Water. Section V discusses the concepts of ROE and risk. Section VI presents the methods employed by Staff to estimate Payson Water's ROE. Section VII presents the findings of Staff's ROE analysis. Section VIII presents Staff's final cost of equity estimates for Payson Water. Section IX presents Staff's ROR recommendation. Finally, Section X presents Staff's comments on the direct testimony of the Company's witness, Mr. Thomas J. Bourassa.

Q. Have you prepared any exhibits to accompany your testimony?

A. Yes. I prepared nine schedules (JAC-1 to JAC-9) which support Staff's cost of capital analysis. Additionally, Staff has prepared one exhibit (JAC-A).

Q. What is Staff's recommended rate of return for Payson Water?

A. Staff recommends a 6.4 percent overall ROR, as shown in Schedule JAC-1. Staff's ROR recommendation is based on the following: (1) a pro forma capital structure composed of 52.8 percent debt and 47.2 percent equity, (2) the simple averaging of the cost of equity estimate for the sample companies of 8.8 percent from the discounted cash flow ("DCF") method and 8.0 percent from the capital asset pricing model ("CAPM"), plus the adoption of a 60 basis point upward economic assessment adjustment, and (3) a cost of debt of 4.2 percent.

Payson Water's Proposed Overall Rate of Return

Q. Briefly summarize Payson Water's proposed capital structure, cost of debt, ROE and overall ROR for this proceeding.

A. Table 1 summarizes the Company's proposed capital structure, cost of debt, ROE and overall ROR in this proceeding:

Table 1

	Weight	Cost	Weighted Cost
Long-term Debt	0.00%	0.00%	0.00%
Common Equity	100.00%	11.00%	11.00%
Cost of Capital/ROR			**11.00%**

Payson Water is proposing an overall rate of return of 11.00 percent.

Q. As reflected in the above Company proposed capital structure, does Payson Water's proposed weighted cost of capital/ROR give consideration to the pending WIFA loan?

A. No, it does not.

II. THE WEIGHTED AVERAGE COST OF CAPITAL

Q. Briefly explain the cost of capital concept.

A. The cost of capital is the opportunity cost of choosing one investment over others with equivalent risk. In other words, the cost of capital is the return that stakeholders expect for investing their financial resources in a determined business venture over another business venture.

Q. What is the overall cost of capital?

A. The cost of capital to a company issuing a variety of securities (i.e., stock and indebtedness) is an average of the cost rates on all issued securities adjusted to reflect the relative amounts for each security in the company's entire capital structure. Thus, the overall cost of capital is the WACC.

Q. How is the WACC calculated?

A. The WACC is calculated by adding the weighted expected returns of a firm's securities. The WACC formula is:

Equation 1.

$$WACC = \sum_{i=1}^{n} W_i * r_i$$

In this equation, W_i is the weight given to the ith security (the proportion of the ith security relative to the portfolio) and r_i is the expected return on the ith security.

Q. Can you provide an example demonstrating application of Equation 1?

A. Yes. For this example, assume that an entity has a capital structure composed of 60 percent debt and 40 percent equity. Also, assume that the embedded cost of debt is 6.0

percent and the expected return on equity, i.e., the cost of equity, is 10.5 percent. Calculation of the WACC is as follows:

WACC = (60% * 6.0%) + (40% * 10.5%)

WACC = 3.60% + 4.20%

WACC = 7.80%

The weighted average cost of capital in this example is 7.80 percent. The entity in this example would need to earn an overall rate of return of 7.80 percent to cover its cost of capital.

III. CAPITAL STRUCTURE

Background

Q. Please explain the capital structure concept.

A. The capital structure of a firm is the relative proportions of each type of security–short-term debt, long-term debt (including capital leases), preferred stock and common stock–that are used to finance the firm's assets.

Q. How is the capital structure expressed?

A. The capital structure of a company is expressed as the percentage of each component of the capital structure (capital leases, short-term debt, long-term debt, preferred stock and common stock) relative to the entire capital structure.

As an example, the capital structure for an entity that is financed by $20,000 of short-term debt, $85,000 of long-term debt (including capital leases), $15,000 of preferred stock and $80,000 of common stock is shown in Table 2.

Table 2

Component			%
Short-Term Debt	$20,000	($20,000/$200,000)	10.0%
Long-Term Debt	$85,000	($85,000/$200,000)	42.5%
Preferred Stock	$15,000	($15,000/$200,000)	7.5%
Common Stock	$80,000	($80,000/$200,000)	40.0%
Total	$200,000		100%

The capital structure in this example is composed of 10.0 percent short-term debt, 42.5 percent long-term debt, 7.5 percent preferred stock and 40.0 percent common stock.

Payson Water's Capital Structure

Q. What capital structure does Payson Water propose?

A. The Company proposes a capital structure composed of 0.00 percent debt and 100.00 percent common equity. Payson Water's proposed capital structure reflects the Company's actual capital structure as of the test year ending December 31, 2012.

Q. How does Payson Water's proposed capital structure compare to the capital structures of publicly-traded water utilities?

A. Schedule JAC-4 shows the capital structures of seven publicly-traded water companies ("sample water companies" or "sample water utilities") as of December 2012. The average capital structure for the sample water utilities is comprised of approximately 50.3 percent debt and 49.7 percent equity.

Staff's Capital Structure

Q. What is Staff's recommended capital structure for Payson Water?

A. Staff recommends a pro forma capital structure composed of 52.8 percent debt and 47.2 percent equity. Staff's recommended pro forma capital structure reflects the Company's

actual capital structure as of the December 31, 2012, test-year end, adjusted to reflect inclusion of the combined $1,179,650 WIFA loan debt requested by the Company in Phase I and Phase II of the financing portion of this consolidated rate/financing docket.[1]

IV. COST OF DEBT

Q. What is the cost of debt proposed by the Company in this proceeding?

A. Payson Water proposes a cost of debt of 0.0 percent. This is due to the Company having a test year ending December 31, 2012 capital structure comprised of 100.0 percent equity.

Q. What cost of debt does Staff recommend for Payson Water in this proceeding?

A. Staff recommends a cost of debt of 4.2 percent.

V. RETURN ON EQUITY

Background

Q. Please define the term "cost of equity capital."

A. The cost of equity is the rate of return that investors expect to earn on their investment in a business entity given its risk. In other words, the cost of equity to the entity is the investors' expected rate of return on other investments of similar risk. As investors have a wide selection of stocks to choose from, they will choose stocks with similar risks but higher returns. Therefore, the market determines the entity's cost of equity.

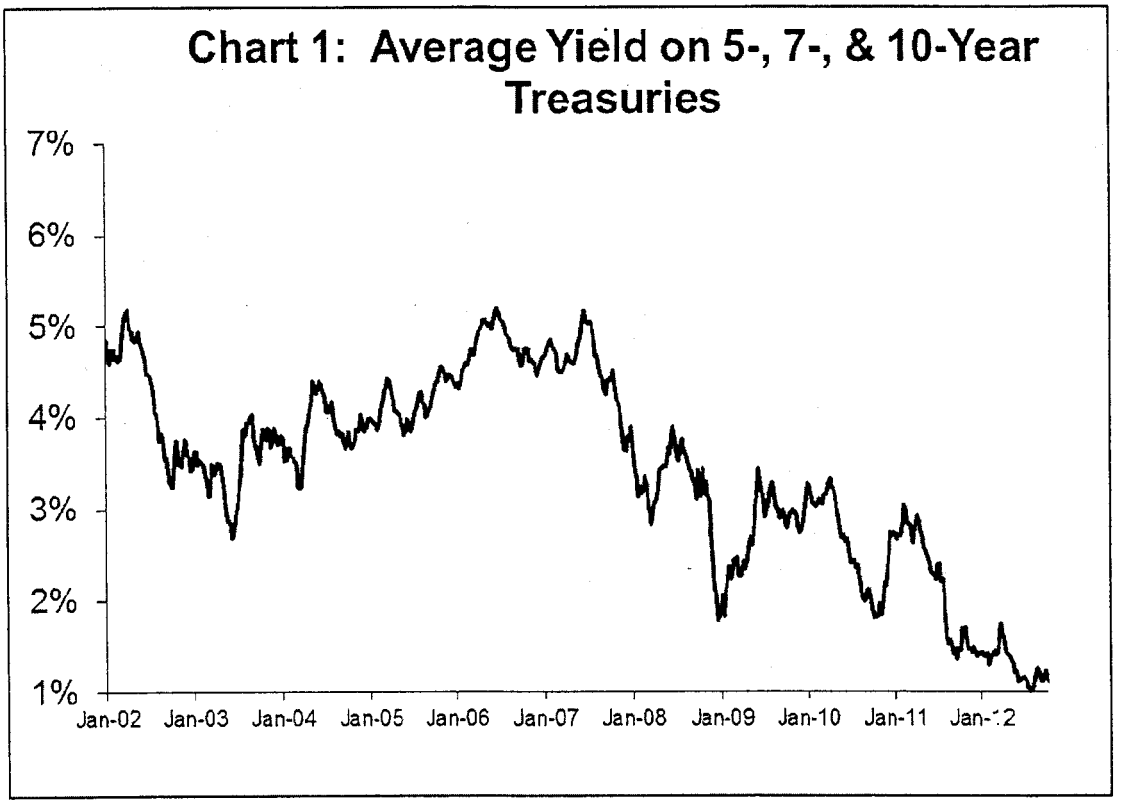
[1] The Company's financing application initially requested Commission authorization for $1,238,000 in WIFA loan debt. Pursuant to a Procedural Order, dated August 26, 2013, the financing and rate dockets were consolidated, and pursuant to a Stipulation for Procedural Order Bifurcating Proceeding and Establishing Case Schedule, the financing portion was divided into two parts. In Phase I, the Company requested authorization for $275,000 in WIFA loan debt. In a Staff Report dated September 18, 2013, Staff recommended approval of the requested Phase I financing, and the debt was authorized by the Commission in Decision No. 74175, dated September 25, 2013. Payson Water subsequently revised its request for the Phase II portion, seeking authorization for $904,650 in additional WIFA debt. In separate testimony to be filed jointly with this testimony, Staff recommends approval the Company's requested Phase II debt. Thus the $1,179,650 WIFA debt included in Staff's recommended pro forma capital structure consists of the authorized Phase I debt ($275,000) and the Staff recommended Phase II debt ($904,650).

Q. Is there a correlation between interest rates and the cost of equity?

A. Yes, there is a positive correlation between interest rates and the cost of equity, as the two tend to move in the same direction. This relationship is reflected in the CAPM formula. The CAPM is a market-based model employed by Staff for estimating the cost of equity. The CAPM is further discussed in Section VI of this testimony.

Q. What has been the general trend of interest rates in recent years?

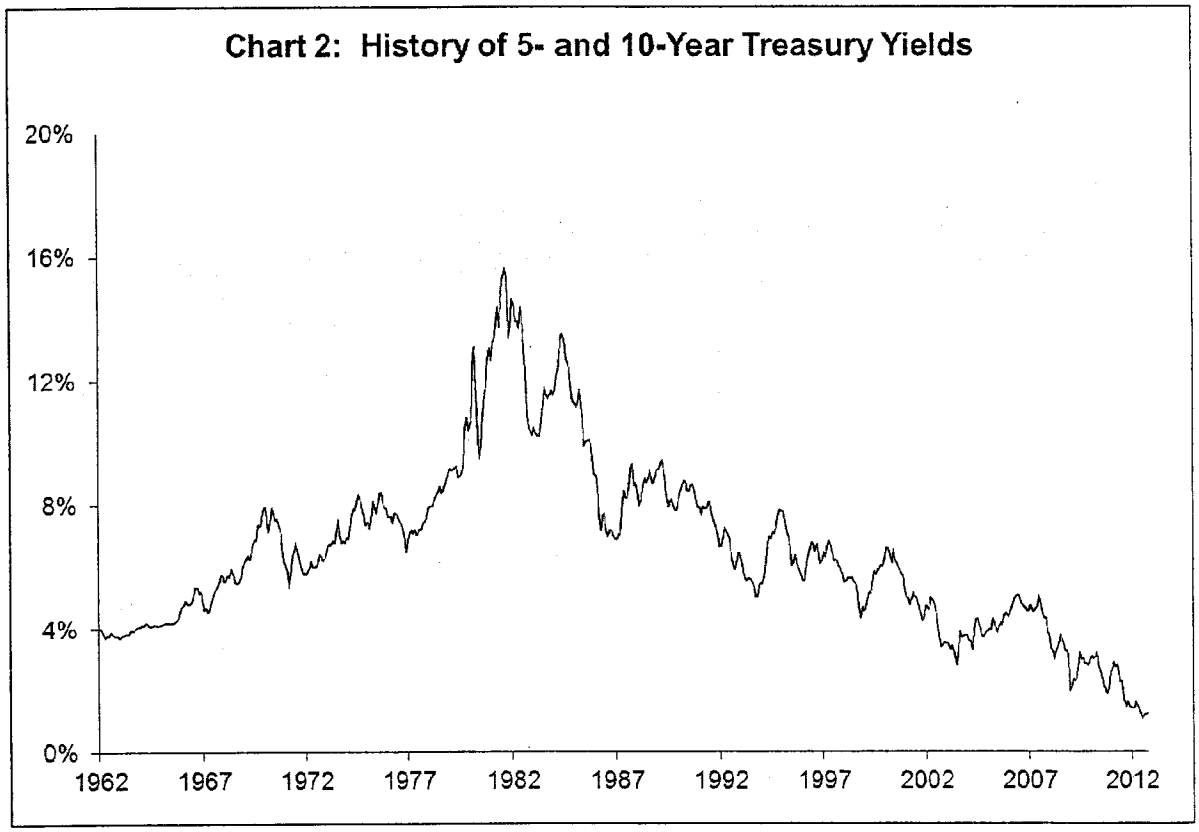
A. A chronological chart of interest rates is a good tool to show interest rate history and identify trends. Chart 1 graphs intermediate U.S. treasury rates from January 4, 2002 to May 31, 2013.



As shown in Chart 1, intermediate-term interest rates trended downward from 2002 to mid-2003, trended upward through mid-2007, and have generally trended downward since that time.

Q. What has been the general trend in interest rates longer term?

A. U.S. Treasury rates from January 1962- May 2013 are shown in Chart 2. The chart shows that interest rates trended upward through the mid-1980s and have trended downward since that time.



Source: Federal Reserve

Q. Do these trends suggest anything in terms of cost of equity?

A. Yes. As previously noted, interest rates and the cost of equity tend to move in the same direction. Therefore, the cost of equity has declined over the past 25 years.

Q. Do actual returns represent the cost of equity?

A. No. The cost of equity represents investors' *expected* returns and not realized returns.

Q. Is there any information available that leads to an understanding of the relationship between the equity returns required for a regulated water utility and those required in the market as a whole?

A. Yes. A comparison of betas, a component of the CAPM discussed in Section VI, for the water utility industry and the market provide insight into this relationship. In theory, the market has a beta value of 1.0, with stocks bearing greater risk (less risk) than the market having beta values higher than (lower than) 1.0, respectively. Furthermore, in accordance with the CAPM, the cost of equity capital moves in the same direction as beta. Therefore, because the average beta value (0.71)[2] for a water utility is less than 1.0, the required return on equity for a regulated water utility is below that of the market as a whole.

Risk

Q. Please define risk in relation to cost of capital.

A. Risk, as it relates to an investment, is the variability or uncertainty of the returns on a particular security. Investors are risk averse and require a greater potential return to invest in relatively greater risk opportunities, i.e., investors require compensation for taking on additional risk. Risk is generally separated into two components. Those components are market risk (systematic risk) and non-market risk (diversifiable risk or firm-specific risk).

[2] See Schedule JAC-7.

Q. What is market risk?

A. Market risk, or systematic risk, is the risk of an investment that cannot be reduced through diversification. Market risk stems from factors that affect all securities, such as recessions, war, inflation and high interest rates. Since these factors affect the entire market they cannot be eliminated through diversification. Market risk does not impact each security to the same degree. The degree to which a given security's return is affected by market fluctuations can be measured using Beta. Beta reflects the business risk and the financial risk of a security.

Q. Please define business risk.

A. Business risk is the fluctuation of earnings inherent in a firm's operations and environment, such as competition and adverse economic conditions that may impair its ability to provide returns on investment. Companies in the same or similar line of business tend to experience the same fluctuations in business cycles.

Q. Please define financial risk.

A. Financial risk is the fluctuation of earnings inherent in the use of debt financing that may impair a firm's ability to provide adequate returns; the higher the percentage of debt in a company's capital structure, the greater its exposure to financial risk.

Q. Do business risk and financial risk affect the cost of equity?

A. Yes.

Q. Is a firm subject to any other risk?

A. Yes. Firms are also subject to unsystematic or firm-specific risk. Examples of unsystematic risk include losses caused by labor problems, nationalization of assets, loss

of a big client or weather conditions. Investors can eliminate firm-specific risk by holding a diverse portfolio. Thus, it is not of concern to diversified investors.

Q. How does Payson Water's financial risk exposure compare to that of Staff's sample group of water companies?

A. JAC-4 shows the capital structures of the seven sample water companies as of December 2012, and Payson Water's pro forma adjusted capital structure as of the test year ending December 31, 2012. As shown, the sample water utilities were capitalized with approximately 50.3 percent debt and 49.7 percent equity, while Payson Water's pro forma capital structure consists of 52.8 percent debt and 47.2 percent equity. Thus, compared to Staff's sample companies, Payson Water has slightly more exposure to financial risk.

Q. Is firm-specific risk measured by beta?

A. No. Firm-specific risk is not measured by beta.

Q. Is the cost of equity affected by firm-specific risk?

A. No. Since firm-specific risk can be eliminated through diversification, it does not affect the cost of equity.

Q. Can investors expect additional returns for firm-specific risk?

A. No. Investors who hold diversified portfolios can eliminate firm-specific risk and, consequently, do not require any additional return. Since investors who choose to be less than fully-diversified must compete in the market with fully-diversified investors, the former cannot expect to be compensated for unique risk.

VI. ESTIMATING THE COST OF EQUITY

Introduction

Q. Did Staff directly estimate the cost of equity for Payson Water?

A. No. Since Payson Water is not a publicly-traded company, Staff is unable to directly estimate its cost of equity due to the lack of firm-specific market data. Instead, Staff estimated the Company's cost of equity indirectly, using a representative sample group of publicly-traded water utilities as a proxy, taking the average of the sample group to reduce the sample error resulting from random fluctuations in the market at the time the information is gathered.

Q. What sample companies did Staff select as proxies for Payson Water?

A. Staff's sample consists of the following seven publicly-traded water utilities: American States Water, California Water, Aqua America, Connecticut Water Service, Middlesex Water, SJW Corporation and York Water. Staff selected these companies because they are publicly-traded and receive the majority of their earnings from regulated operations.

Q. What models did Staff implement to estimate Payson Water's cost of equity?

A. Staff used two market-based models to estimate the cost of equity for Payson Water: the DCF model and the CAPM.

Q. Please explain why Staff chose the DCF and CAPM models.

A. Staff chose to use the DCF and CAPM models because they are widely-recognized market-based models and have been used extensively to estimate the cost of equity. An explanation of the DCF and CAPM models follows.

Discounted Cash Flow Model Analysis

Q. Please provide a brief summary of the theory upon which the DCF method of estimating the cost of equity is based.

A. The DCF method of stock valuation is based on the theory that the value of an investment is equal to the sum of the future cash flows generated from the aforementioned investment discounted to the present time. This method uses expected dividends, market price and dividend growth rate to calculate the cost of capital. Professor Myron Gordon pioneered the DCF method in the 1960s. The DCF method has become widely used to estimate the cost of equity for public utilities due to its theoretical merit and its simplicity. Staff used the financial information for the relevant seven sample companies in the DCF model and averaged the results to determine an estimated cost of equity for the sample companies.

Q. Does Staff use more than one version of the DCF?

A. Yes. Staff uses two versions of the DCF model: the constant-growth DCF and the multi-stage or non-constant growth DCF. The constant-growth DCF assumes that an entity's dividends will grow indefinitely at the same rate. The multi-stage growth DCF model assumes the dividend growth rate will change at some point in the future.

The Constant-Growth DCF

Q. What is the mathematical formula used in Staff's constant-growth DCF analysis?

A. The constant-growth DCF formula used in Staff's analysis is:

Equation 2:

$$K = \frac{D_1}{P_0} + g$$

where:

K	=	the cost of equity
D_1	=	the expected annual dividend
P_0	=	the current stock price
g	=	the expected infinite annual growth rate of dividends

Equation 2 assumes that the entity has a constant earnings retention rate and that its earnings are expected to grow at a constant rate. According to Equation 2, a stock with a current market price of $10 per share, an expected annual dividend of $0.45 per share and an expected dividend growth rate of 3.0 percent per year has a cost of equity to the entity of 7.5 percent reflected by the sum of the dividend yield ($0.45/ $10 = 4.5 percent) and the 3.0 percent annual dividend growth rate.

Q. How did Staff calculate the expected dividend yield (D_1/P_0) component of the constant-growth DCF formula?

A. Staff calculated the expected yield component of the DCF formula by dividing the expected annual dividend (D_1) by the spot stock price (P_0) after the close of market on October 16, 2013, as reported by *MSN Money*.

Q. Why did Staff use the October 16, 2013 spot price rather than a historical average stock price to calculate the dividend yield component of the DCF formula?

A. The current, rather than historic, market price is used in order to be consistent with financial theory. In accordance with the Efficient Market Hypothesis, the current stock price is reflective of all available information on a stock, and as such reveals investors' expectations of future returns.

Q. How did Staff estimate the dividend growth (g) component of the constant-growth DCF model represented by Equation 2?

A. The dividend growth component used by Staff is determined by the average of six different estimation methods, as shown in Schedule JAC-8. Staff calculated historical and projected growth estimates on dividend-per-share ("DPS"),[3] earnings-per-share ("EPS")[4] and sustainable growth bases.

Q. Why did Staff examine EPS growth to estimate the dividend growth component of the constant-growth DCF model?

A. Historic and projected EPS growth are used because dividends are related to earnings. Dividend distributions may exceed earnings in the short run, but cannot continue indefinitely. In the long term, dividend distributions are dependent on earnings.

Q. How did Staff estimate historical DPS growth?

A. Staff estimated historical DPS growth by calculating a compound annual DPS growth rate for each of its sample companies over the 10-year period, 2002-2012. As shown in Schedule JAC-5, the average historical DPS growth rate for the sample was 3.6 percent.

Q. How did Staff estimate projected DPS growth?

A. Staff calculated an average of the projected DPS growth rates for the sample water utilities from *Value Line* through the period 2016-2018. The average projected DPS growth rate is 5.5 percent, as shown in Schedule JAC-5.

[3] Derived from information provided by *Value Line.*
[4] Derived from information provided by *Value Line.*

Q. How did Staff estimate historical EPS growth rate?

A. Staff estimated historical EPS growth by calculating a compound annual EPS growth rate for each of its sample companies over the 10-year period 2002-2012. As shown in Schedule JAC-5, the average historical EPS growth rate for the sample was 5.1 percent.

Q. How did Staff estimate projected EPS growth?

A. Staff calculated an average of the projected EPS growth rates for the sample water utilities from *Value Line* through the period 2016-2018. The average projected EPS growth rate is 5.6 percent, as shown in Schedule JAC-5.

Q. How does Staff calculate its historical and projected sustainable growth rates?

A. Historical and projected sustainable growth rates are calculated by adding their respective retention growth rate terms (br) to their respective stock financing growth rate terms (vs), as shown in Schedule JAC-6.

Q. What is retention growth?

A. Retention growth is the growth in dividends due to the retention of earnings. The retention growth concept is based on the theory that dividend growth cannot be achieved unless the company retains and reinvests some of its earnings. The retention growth is used in Staff's calculation of sustainable growth shown in Schedule JAC-6.

Q. What is the formula for the retention growth rate?

A. The retention growth rate is the product of the retention ratio and the book/accounting return on equity. The retention growth rate formula is:

Equation 3:

$$\text{Retention Growth Rate} = br$$

where: b = the retention ratio (1 – dividend payout ratio)
r = the accounting/book return on common equity

Q. How did Staff calculate the average historical retention growth rate (br) for the sample water utilities?

A. Staff calculated the mean of the 10-year average historical retention rate for each sample company over the period 2002-2012. As shown in Schedule JAC-6, the historical average retention (br) growth rate for the sample is 2.7 percent.

Q. How did Staff estimate its projected retention growth rate (br) for the sample water utilities?

A. Staff used the *Value Line* retention growth projections for the sample water utilities for the period 2016-2018. As shown in Schedule JAC-6, the projected average retention growth rate for the sample companies is 3.8 percent.

Q. When can retention growth provide a reasonable estimate of future dividend growth?

A. The retention growth rate is a reasonable estimate of future dividend growth when the retention ratio is reasonably constant and the entity's market price to book value ("market-to-book ratio") is expected to be 1.0. The average retention ratio has been reasonably constant in recent years. However, the market-to-book ratio for the sample water utilities is 2.2, notably higher than 1.0, as shown in Schedule JAC-7.

Q. Is there any financial implication of a market-to-book ratio greater than 1.0?

A. Yes. A market-to-book ratio greater than 1.0 implies that investors expect an entity to earn an accounting/book return on its equity that exceeds its cost of equity. The relationship between required returns and expected cash flows is readily observed in the fixed securities market. For example, assume an entity contemplating issuance of bonds with a face value of $10 million at either 6 percent or 8 percent and, thus, paying annual interest of $600,000 or $800,000, respectively. Regardless of investors' required return on similar bonds, investors will be willing to pay more for the bonds if issued at 8 percent than if the bonds are issued at 6 percent. For example, if the current interest rate required by investors is 6 percent, then they would bid $10 million for the 6 percent bonds and more than $10 million for the 8 percent bonds. Similarly, if equity investors require a 9 percent return and expect an entity to earn accounting/book returns of 13 percent, the market will bid up the price of the entity's stock to provide the required return of 9 percent.

Q. How has Staff generally recognized a market-to-book ratio exceeding 1.0 in its cost of equity analyses in recent years?

A. Staff has assumed that investors expect the market-to-book ratio to remain greater than 1.0. Given that assumption, Staff has added a stock financing growth rate (vs) term to the retention ratio (br) term to calculate its historical and projected sustainable growth rates.

Q. Do the historical and projected sustainable growth rates Staff uses to develop its DCF cost of equity in this case continue to include a stock financing growth rate term?

A. Yes.

Q. What is stock financing growth?

A. Stock financing growth is the growth in an entity's dividends due to the sale of stock by that entity. Stock financing growth is a concept derived by Myron Gordon and discussed in his book *The Cost of Capital to a Public Utility.*[5] Stock financing growth is the product of the fraction of the funds raised from the sale of stock that accrues to existing shareholders (v) and the fraction resulting from dividing the funds raised from the sale of stock by the existing common equity (s).

Q. What is the mathematical formula for the stock financing growth rate?

A. The mathematical formula for stock financing growth is:

Equation 4:

$$\text{Stock Financing Growth} = vs$$

where: v = Fraction of the funds raised from the sale of stock that accrues to existing shareholders

s = Funds raised from the sale of stock as a fraction of the existing common equity

Q. How is the variable *v* presented above calculated?

A. Variable v is calculated as follows:

Equation 5:

$$v = 1 - \left(\frac{book\ value}{market\ value} \right)$$

For example, assume that a share of stock has a $30 book value and is selling for $45. Then, to find the value of v, the formula is applied:

[5] Gordon, Myron J. *The Cost of Capital to a Public Utility*. MSU Public Utilities Studies, Michigan, 1974. pp 31-35.

$$v = 1 - \left(\frac{30}{45}\right)$$

In this example, v is equal to 0.33.

Q. How is the variable *s* presented above calculated?

A. Variable s is calculated as follows:

Equation 6:

$$s = \frac{\text{Funds raised from the issuance of stock}}{\text{Total existing common equity before the issuance}}$$

For example, assume that an entity has $150 in existing equity, and it sells $30 of stock. Then, to find the value of s, the formula is applied:

$$s = \left(\frac{30}{150}\right)$$

In this example, s is equal to 20.0 percent.

Q. What is the *vs* term when the market-to-book ratio is equal to 1.0?

A. A market-to-book ratio of 1.0 reflects that investors expect an entity to earn a book/accounting return on their equity investment equal to the cost of equity. When the market-to-book ratio is equal to 1.0, none of the funds raised from the sale of stock by the entity accrues to the benefit of existing shareholders, i.e., the term v is equal to zero (0.0). Consequently, the vs term is also equal to zero (0.0). When stock financing growth is zero, dividend growth depends solely on the br term.

Q. What is the effect of the *vs* term when the market-to-book ratio is greater than 1.0?

A. A market-to-book ratio greater than 1.0 reflects that investors expect an entity to earn a book/accounting return on their equity investment greater than the cost of equity. Equation 5 shows that, when the market-to-book ratio is greater than 1.0, the *v* term is also greater than zero. The excess by which new shares are issued and sold over book value per share of outstanding stock is a contribution that accrues to existing stockholders in the form of a higher book value. The resulting higher book value leads to higher expected earnings and dividends. Continued growth from the *vs* term is dependent upon the continued issuance and sale of additional shares at a price that exceeds book value per share.

Q. What *vs* estimate did Staff calculate from its analysis of the sample water utilities?

A. Staff estimated an average stock financing growth of 2.4 percent for the sample water utilities, as shown in Schedule JAC-6.

Q. What would occur if an entity had a market-to-book ratio greater than 1.0 as a result of investors expecting earnings to exceed its cost of equity, and subsequently experienced newly-authorized rates equal only to its cost of equity?

A. Holding all other factors constant, one would expect market forces to move the company's stock price lower, closer to a market-to-book ratio of 1.0, to reflect investor expectations of reduced expected future cash flows.

Q. If the average market-to-book ratio of Staff's sample water utilities were to fall to 1.0 due to authorized ROEs equaling their cost of equity, would inclusion of the vs term be necessary to Staff's constant-growth DCF analysis?

A. No. As discussed above, when the market-to-book ratio is equal to 1.0, none of the funds raised from the sale of stock by the entity accrues to the benefit of existing shareholders because the *v* term equals to zero and, consequently, the *vs* term also equals zero. When the market-to-book ratio equals 1.0, dividend growth depends solely on the *br* term. Staff's inclusion of the *vs* term assumes that the market-to-book ratio continues to exceed 1.0 and that the water utilities will continue to issue and sell stock at prices above book value with the effect of benefitting existing shareholders.

Q. What are Staff's historical and projected sustainable growth rates?

A. Staff's estimated historical sustainable growth rate is 5.1 percent based on an analysis of earnings retention for the sample water companies. Staff's projected sustainable growth rate is 6.2 percent based on retention growth projected by *Value Line*. Schedule JAC-6 presents Staff's estimates of the sustainable growth rate.

Q. What is Staff's expected infinite annual growth rate in dividends?

A. Staff's expected dividend growth rate (g) is 5.2 percent, which is the average of historical and projected DPS, EPS, and sustainable growth estimates. Staff's calculation of the expected infinite annual growth rate in dividends is shown in Schedule JAC-8.

Q. What is Staff's constant-growth DCF estimate for the sample utilities?

A. Staff's constant-growth DCF estimate is 8.2 percent, as shown in Schedule JAC-3.

The Multi-Stage DCF

Q. Why did Staff implement the multi-stage DCF model to estimate Payson Water's cost of equity?

A. Staff generally uses the multi-stage DCF model to consider the assumption that dividends may not grow at a constant rate. The multi-stage DCF uses two stages of growth; the first stage (near-term) having a duration of four years, followed by a second stage (long-term) of constant growth.

Q. What is the mathematical formula for the multi-stage DCF?

A. The multi-stage DCF formula is shown in the following equation:

Equation 7 :

$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n}\left[\frac{1}{(1+K)}\right]^n$$

Where :
P_0 = current stock price
D_t = dividends expected during stage 1
K = cost of equity
n = years of non – constant growth
D_n = dividend expected in year n
g_n = constant rate of growth expected after year n

Q. What steps did Staff take to implement its multi-stage DCF cost of equity model?

A. First, Staff projected future dividends for each of the sample water utilities using near-term and long-term growth rates. Second, Staff calculated the rate (cost of equity) which equates the present value of the forecasted dividends to the current stock price for each of the sample water utilities. Lastly, Staff calculated an overall sample average cost of equity estimate.

Q. How did Staff calculate near-term (stage-1) growth?

A. The stage-1 growth rate is based on *Value Line*'s projected dividends for the next twelve months, when available, and on the average dividend growth (g) rate of 5.2 percent, calculated in Staff's constant DCF analysis for the remainder of the stage.

Q. How did Staff estimate long-term (stage-2) growth?

A. Staff calculated the stage-2 growth rate using the arithmetic mean rate of growth in Gross Domestic Product ("GDP") from 1929 to 2012.[6] Using the GDP growth rate assumes that the water utility industry is expected to grow at the same rate as the overall economy.

Q. What is the historical GDP growth rate that Staff used to estimate stage-2 growth?

A. Staff used 6.5 percent to estimate the stage-2 growth rate.

Q. What is Staff's multi-stage DCF estimate for the sample utilities?

A. Staff's multi-stage DCF estimate is 9.4 percent, as shown in Schedule JAC-3.

Q. What is Staff's overall DCF estimate for the sample utilities?

A. Staff's overall DCF estimate is 8.8 percent. Staff calculated the overall DCF estimate by averaging the constant growth DCF (8.2%) and multi-stage DCF (9.4%) estimates, as shown in Schedule JAC-3.

Capital Asset Pricing Model

Q. Please describe the CAPM.

A. The CAPM is used to determine the prices of securities in a competitive market. The CAPM model describes the relationship between a security's investment risk and its

[6] www.bea.doc.gov.

market rate of return. Under the CAPM, an investor requires the expected return of a security to equal the rate on a risk-free security plus a risk premium. If the investor's expected return does not meet or beat the required return, the investment is not economically justified. The model also assumes that investors will sufficiently diversify their investments to eliminate any non-systematic or unique risk.[7] In 1990, Professors Harry Markowitz, William Sharpe, and Merton Miller earned the Nobel Prize in Economic Sciences for their contribution to the development of the CAPM.

Q. Did Staff use the same sample water utilities in its CAPM and DCF cost of equity estimation analyses?

A. Yes. Staff's CAPM cost of equity estimation analysis uses the same sample water companies as its DCF cost of equity estimation analysis.

Q. What is the mathematical formula for the CAPM?

A. The mathematical formula for the CAPM is:

Equation 8:

$$K = R_f + \beta (R_m - R_f)$$

where:

R_f = risk free rate
R_m = return on market
β = beta
$R_m - R_f$ = market risk premium
K = expected return

[7] The CAPM makes the following assumptions: 1) single holding period; 2) perfect and competitive securities market; 3) no transaction costs; 4) no restrictions on short selling or borrowing; 5) the existence of a risk-free rate; and 6) homogeneous expectations.

The equation shows that the expected return (K) on a risky asset is equal to the risk-free interest rate (R_f) plus the product of the market risk premium ($R_m - R_f$) multiplied by beta (β) where beta represents the riskiness of the investment relative to the market.

Q. What is the risk-free rate?

A. The risk-free rate is the rate of return of an investment free of default risk.

Q. What does Staff use as surrogates to represent estimations of the risk-free rates of interest in its historical and current market risk premium CAPM methods?

A. Staff uses separate parameters as surrogates for the estimations of the risk-free rates of interest for the historical market risk premium CAPM cost of equity estimation and the current market risk premium CAPM cost of equity estimation. Staff uses the average of three (5-, 7-, and 10-year) intermediate-term U.S. Treasury securities' spot rates in its historical market risk premium CAPM cost of equity estimation, and the 30-year U.S. Treasury bond spot rate in its current market risk premium CAPM cost of equity estimation. Rates on U.S. Treasuries are largely verifiable and readily available.

Q. What does beta measure?

A. Beta is a measure of a security's price volatility, or systematic risk, relative to the market as a whole. Since systematic risk cannot be diversified away, it is the only risk that is relevant when estimating a security's required return. Using a baseline market beta coefficient of 1.0, a security having a beta value less than 1.0 will be less volatile (i.e., less risky) than the market. A security with a beta value greater than 1.0 will be more volatile (i.e., more risky) than the market.

Q. How did Staff estimate Payson Water's beta?

A. Staff used the average of the *Value Line* betas for the sample water utilities as a proxy for the Company's beta. Schedule JAC-7 shows the *Value Line* betas for each of the sample water utilities. The 0.71 average beta coefficient for the sample water utilities is Staff's estimated beta value for Payson Water. A security with a beta value of 0.71 has less volatility than the market.

Q. What is the market risk premium ($R_m - R_f$)?

A. The market risk premium is the expected return on the market, minus the risk-free rate. Simplified, it is the return an investor expects as compensation for market risk.

Q. What did Staff use for the market risk premium?

A. Staff uses separate calculations for the market risk premium in its historical and current market risk premium CAPM methods.

Q. How did Staff calculate an estimate for the market risk premium in its historical market risk premium CAPM method?

A. Staff uses the intermediate-term government bond income returns published in the Ibbotson Associates' *Stocks, Bonds, Bills, and Inflation 2013 Classic Yearbook* to calculate the historical market risk premium. Ibbotson Associates calculates the historical risk premium by averaging the historical arithmetic differences between the S&P 500 and the intermediate-term government bond income returns for the period 1926-2012. Staff's historical market risk premium estimate is 7.2 percent, as shown in Schedule JAC-3.

Q. How did Staff calculate an estimate for the market risk premium in its current market risk premium CAPM method?

A. Staff solves equation 8 above to arrive at a market risk premium using a DCF-derived expected return (K) of 10.88 (2.1 + 8.78[8]) percent using the expected dividend yield (2.1 percent over the next twelve months) and the annual per share growth rate (8.78 percent) that *Value Line* projects over the next three to five years for all dividend-paying stocks under its review[9] along with the current long-term risk-free rate (30-year Treasury note at 3.72 percent) and the market's average beta of 1.0. Staff calculated the current market risk premium as 7.16 percent,[10] as shown in Schedule JAC-3.

Q. What is the result of Staff's historical market risk premium CAPM and current market risk premium CAPM cost of equity estimations for the sample utilities?

A. Staff's cost of equity estimates are 7.2 percent using the historical market risk premium CAPM and 8.8 percent using the current market risk premium CAPM.

Q. What is Staff's overall CAPM estimate for the sample utilities?

A. Staff's overall CAPM cost of equity estimate is 8.0 percent which is the average of the historical market risk premium CAPM (7.2 percent) and the current market risk premium CAPM (8.8 percent) estimates, as shown in Schedule JAC-3.

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[8] The three to five year price appreciation is 40%. $1.40^{0.25} - 1 = 8.78\%$.
[9] October 18, 2013 issue date.
[10] 10.88% = 3.72% + (1) (7.16%).

VII. SUMMARY OF STAFF'S COST OF EQUITY ANALYSIS

Q. What is the result of Staff's constant-growth DCF analysis to estimate the cost of equity for the sample water utilities?

A. Schedule JAC-3 shows the result of Staff's constant-growth DCF analysis. The result of Staff's constant-growth DCF analysis is as follows:

k = 3.0% + 5.2%

k = **8.2%**

Staff's constant-growth DCF estimate of the cost of equity for the sample water utilities is 8.2 percent.

Q. What is the result of Staff's multi-stage DCF analysis to estimate of the cost of equity for the sample utilities?

A. Schedule JAC-9 shows the result of Staff's multi-stage DCF analysis. The result of Staff's multi-stage DCF analysis is:

Company	**Equity Cost Estimate (k)**
American States Water	9.2%
California Water	9.6%
Aqua America	8.8%
Connecticut Water	9.6%
Middlesex Water	10.1%
SJW Corp	9.0%
York Water	9.2%
Average	**9.4%**

Staff's multi-stage DCF estimate of the cost of equity for the sample water utilities is 9.4 percent.

Q. What is Staff's overall DCF estimate of the cost of equity for the sample utilities?

A. Staff's overall DCF estimate of the cost of equity for the sample utilities is 8.8 percent. Staff calculated an overall DCF cost of equity estimate by averaging Staff's constant growth DCF (8.2 percent) and Staff's multi-stage DCF (9.4 percent) estimates, as shown in Schedule JAC-3.

Q. What is the result of Staff's historical market risk premium CAPM analysis to estimate of the cost of equity for the sample utilities?

A. Schedule JAC-3 shows the result of Staff's CAPM analysis using the historical risk premium estimate. The result is as follows:

$$k = 2.1\% + 0.71 * 7.2\%$$

$$k = 7.2\%$$

Staff's CAPM estimate (using the historical market risk premium) of the cost of equity to the sample water utilities is 7.2 percent.

Q. What is the result of Staff's current market risk premium CAPM analysis to estimate the cost of equity for the sample utilities?

A. Schedule JAC-3 shows the result of Staff's CAPM analysis using the current market risk premium estimate. The result is:

$$k = 3.7\% + 0.71 * 7.2\%$$

$$k = 8.8\%$$

Staff's CAPM estimate (using the current market risk premium) of the cost of equity to the sample water utilities is 8.8 percent.

Q. What is Staff's overall CAPM estimate of the cost of equity for the sample utilities?

A. Staff's overall CAPM estimate for the sample utilities is 8.0 percent. Staff's overall CAPM estimate is the average of the historical market risk premium CAPM (7.2 percent) and the current market risk premium CAPM (8.8 percent) estimates, as shown in Schedule JAC-3.

Q. Please summarize the results of Staff's cost of equity analysis for the sample utilities.

A. The following table shows the results of Staff's cost of equity analysis:

Table 2

Method	Estimate
Average DCF Estimate	8.8%
Average CAPM Estimate	8.0%
Overall Average	**8.4%**

Staff's average estimate of the cost of equity to the sample water utilities is 8.4 percent.

VIII. FINAL COST OF EQUITY ESTIMATES FOR PAYSON WATER

Q. Please compare Payson Water's capital structure to that of Staff's seven sample companies.

A. The average capital structure for the sample water utilities is composed of 50.3 percent debt and 49.7 percent equity, as shown in Schedule JAC-4. In contrast, Payson Water's

Staff recommended pro forma capital structure is composed of 52.8 percent debt and 47.2 percent equity. Since this pro forma capital structure is more highly leveraged than that of the average sample water utility, Payson Water's stockholders bear incrementally greater financial risk than do equity shareholders of the sample utilities.

Q. In view of Payson Water's additional exposure to financial risk, does Staff recommend that an upward financial risk adjustment be made to the Company's cost of equity in this proceeding?

A. No. Staff considers a capital structure comprised of between 60 percent debt and 40 percent equity to be reasonably balanced and economical, and recommends an upward financial risk adjustment only when the subject utility's debt component exceeds 60 percent. Because the debt component of Staff's recommended pro forma capital structure for the Company does not meet this condition, Staff does not recommend that an upward financial risk adjustment be made to the cost of equity.

Q. Did Staff consider factors other than the results of its technical models in its cost of equity analysis?

A. Yes. In consideration of the relatively uncertain status of the economy and the market that currently exists, Staff is proposing an upward economic assessment adjustment to the cost of equity. In this case, Staff recommends a 60 basis point (0.6 percent) upward economic assessment adjustment, as shown in Schedule JAC-3.

Q. What is Staff's ROE estimate for Payson Water?

A. Staff determined an ROE estimate of 8.4 percent for Payson Water based on cost of equity estimates for the sample companies of 8.8 percent for the DCF and 8.0 percent for the CAPM. Staff recommends adoption of a 60 basis point upward economic assessment

adjustment, resulting in a 9.0 percent Staff-recommended cost of equity, as shown in Schedule JAC-3.

IX. RATE OF RETURN RECOMMENDATION

Q. What overall rate of return did Staff determine for Payson Water?

A. Staff determined a 6.4 percent ROR for the Company, as shown in Schedule JAC-1 and the following table:

Table 3

	Weight	Cost	Weighted Cost
Long-term Debt	52.8%	4.2%	2.2%
Common Equity	47.2%	9.0%	4.2%
Overall ROR			**6.4%**

X. STAFF RESPONSE TO COMPANY'S COST OF CAPITAL WITNESS MR. THOMAS J. BOURASSA

Q. Please summarize Mr. Bourassa's analyses and recommendations.

A. Mr. Bourassa recommends an 11.00 percent ROE based on estimates derived from two constant growth DCF analyses, two CAPM analyses, and two Build-up risk premium models designed as a check for reasonableness to his DCF and CAPM results, using a proxy sample of six publicly-traded water companies. He proposes a capital structure consisting of 0.00 percent debt and 100.00 percent equity; his proposed cost of debt is 0.00 percent. Mr. Bourassa's recommended ROE includes a downward 90 basis point (0.9 percent) financial risk adjustment and an upward 200 basis point (2.0 percent) small company risk premium. His overall recommended rate of return for the Company is 11.00 percent.

For purposes of his constant growth DCF analyses, Mr. Bourassa gives a 50 percent weight to the estimates derived from his Future Growth DCF model and a 50 percent weight to the estimates derived from his Past and Future Growth DCF Model. In his primary Future Growth DCF model, Mr. Bourassa relies exclusively on analysts' forecasts of EPS growth to estimate the dividend growth (g) component (See TJB Schedule D-4.6). In his Past and Future Growth DCF model, Mr. Bourassa estimates his dividend growth (g) rate by giving 50 percent weight to historical measures of growth in annual share price, BVPS, EPS and DPS over a five-year period, and 50 percent weight to the dividend growth rate obtained from his primary Future Growth DCF model (See TJB Schedule D-4.4). Thus, for purposes of the overall dividend growth (g) rate used in his constant growth DCF analyses, Mr. Bourassa effectively gives a 75 percent weight to the results obtained from analysts forecasts' for EPS growth and only a 25 percent weight to the results obtained from historical measures of dividend growth (See TJB Schedule D-4.8).

For purposes of his CAPM analyses, Mr. Bourassa presents estimates based upon both historical and current market risk premia. In both, however, he uses a 3.9 percent forecasted risk free (R_f) rate based, in part, upon estimates from Value Line and Blue Chip Consensus Forecasts for the 30-year long-term Treasury yield covering the period, 2013-2015 (See TJB Schedule D-4.10).

Q. Does Staff have any comments on Mr. Bourassa's sole reliance on analysts' forecasts of EPS growth rates to estimate dividend growth rate (g) in his Future Growth DCF analysis?

A. Yes. Exclusive reliance on analysts' forecasts of earnings growth to forecast DPS is inappropriate because it assumes that investors do not look at other relevant information such as historical dividend and earnings growth. Generally, analysts' forecasts are known

to be overly optimistic. Sole use of analysts' forecasts to calculate the expected dividend growth rate, (g), serves to inflate that component of the DCF model and, consequently, the estimated cost of equity. The appropriate growth rate to use in the DCF model is the dividend growth rate expected by *investors*, not by analysts. Investors are assumed to be rational, and as such will want to take into consideration all relevant available information prior to making an investment decision. Therefore, it is reasonable to assume that investors would consider both historical measures of past growth, as well as analysts' forecasts of future growth.

Q. In the narrative of his direct testimony, does Mr. Bourassa state that he relies exclusively on analysts' forecasts of EPS growth to estimate the expected dividend growth rate (g) in his Future Growth DCF model?

A. No. Mr. Bourassa appears reluctant to acknowledge doing so, stating only that "I have used analyst growth forecasts, where available,"[11] and that "I use analysts' forecasts of growth as a primary estimate of growth."[12] Analysts make forecasts of a variety of different financial/investment growth parameters, but it is only when referring to TJB Schedule D-4.6 that one learns Mr. Bourassa has relied exclusively on analysts' forecasts of EPS growth to estimate the dividend growth (g) rate in his Future Growth DCF model.

[11] Direct testimony of Mr. Thomas J. Bourassa, page 33, lines 16-17.
[12] Direct testimony of Mr. Thomas J. Bourassa, page 34, lines 4-5.

Q. Does Staff have evidence to support its assertion that exclusive reliance on analysts' forecasts of earnings growth in the DCF model would result in inflated cost of equity estimates?

A. Yes. Experts in the financial community have commented on the optimism in analysts' forecasts of future earnings.[13] A study cited by David Dreman in his book *Contrarian Investment Strategies: The Next Generation* found that *Value Line* analysts were optimistic in their forecasts by 9 percent annually, on average for the 1987 – 1989 period. Another study conducted by David Dreman found that between 1982 and 1997, analysts overestimated the growth of earnings of companies in the S&P 500 by 188 percent.

Burton Malkiel, of Princeton University, conducted a study of the 1- and 5-year earnings forecasts made by some of the most respected names in the investment business. His results showed that when compared with actual earnings growth rates, the 5-year forecasts made by professional analysts were far less accurate than estimates derived from several naïve forecasting models, such as the long-run growth rate in national income. In the following excerpt from his book, A Random Walk Down Wall Street, Professor Malkiel discusses the results of his study:

> When confronted with the poor record of their five-year growth estimates, *the security analysts honestly, if sheepishly, admitted that five years ahead is really too far in advance to make reliable projections*. They protested that although long-term projections are admittedly important, they really ought to be judged on their ability to project earnings changes one year ahead. Believe it or not, it turned out that their one-year forecasts were even worse than their five-year projections.

[13] See Seigel, Jeremy J. Stocks for the Long Run. 2002. McGraw-Hill. New York. p. 100. Dreman, David. Contrarian Investment Strategies: The Next Generation. 1998. Simon & Schuster. New York. pp. 97-98. Malkiel, Burton G. A Random Walk Down Wall Street. 2003. W.W. Norton & Co. New York. p. 175.
Testimony of Professors Myron J. Gordon and Lawrence I. Gould, consultant to the Trial Staff (Common Carrier Bureau), FCC Docket 79-63, p. 95.

> The analysts fought back gamely. They complained that it was unfair to judge their performance on a wide cross section of industries, because earnings for high-tech firms and various "cyclical" companies are notoriously hard to forecast. *"Try us on utilities," one analyst confidently asserted. At the time they were considered among the most stable group of companies because of government regulation. So we tried it and they didn't like it. Even the forecasts for the stable utilities were far off the mark.*[14] (Emphasis added)

Q. Are investors aware of the problems related to analysts' forecasts?

A. Yes. In addition to books, there are numerous published articles appearing in *The Wall Street Journal* and other financial publications that cast doubt on the accuracy of research analysts' forecasts.[15] Investors, being keenly aware of these inherent biases in forecasts, will use other methods to assess future growth.

Q. Should DPS growth be considered in a DCF analysis?

A. Yes. As previously stated in section VI of this testimony, the current market price of a stock is equal to the present value of all expected future dividends, not future earnings. Professor Jeremy Siegel from the Wharton School of Finance stated:

> Note that the price of the stock is always equal to the present value of all future *dividends* and not the present value of future earnings. Earnings not paid to investors can have value only if they are paid as dividends or other cash disbursements at a later date. Valuing stock as the present discounted value of future earnings is manifestly wrong and greatly overstates the value of the firm.[16]

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[14] Malkiel, Burton G. A Random Walk Down Wall Street. 2003. W.W. Norton & Co. New York. p. 175

[15] See Smith, Randall & Craig, Suzanne. "Big Firms Had Research Ploy: Quiet Payments Among Rivals." *The Wall Street Journal*. April 30, 2003. Brown, Ken. "Analysts: Still Coming Up Rosy." *The Wall Street Journal*. January 27, 2003. p. C1. Karmin, Craig. "Profit Forecasts Become Anybody's Guess." *The Wall Street Journal*. January 21, 2003. p. C1. Gasparino, Charles. "Merrill Lynch Investigation Widens." *The Wall Street Journal*. April 11, 2002. p. C4. Elstein, Aaron. "Earnings Estimates Are All Over the Map." *The Wall Street Journal*. August 2, 2001. p. C1. Dreman, David. "Don't Count on those Earnings Forecasts." *Forbes*. January 26, 1998. p. 110.

[16] Seigel, Jeremy J. Stocks for the Long Run. 2002. McGraw-Hill. New York. P. 93.

For valuation purposes, therefore, earnings paid out in the form of a dividend have paramount relevancy to investors. Additionally, unlike earnings, dividends cannot be manipulated or overstated. Thus, historical DPS growth should receive appropriate consideration when estimating the market cost of equity in the DCF model.

Q. How does Mr. Bourassa calculate the expected dividend growth (g) rate used in his Past and Future Growth DCF model?

A. As shown in TJB Schedule D-4.4, Mr. Bourassa estimates the expected dividend growth (g) rate in his Past and Future Growth DCF model[17] by providing a 50 percent weight[18] to historical measures of growth in average annual share price, book value per share, earnings per share and dividends per share for his sample companies over a five-year period[19] and a 50 percent weight[20] to the average of analysts' forecasts for EPS growth derived from his Future Growth DCF model.

Q. For purposes of his overall DCF estimate, what percentage weight does Mr. Bourassa allocate to the dividend growth (g) component derived from analysts' forecasts of EPS growth in his Future Growth DCF model?

A. Effectively, for purposes of his overall DCF estimate Mr. Bourassa allocates a 75 percent weight to the results derived from analysts' forecasts of EPS growth in his Future Growth DCF Model. As noted above, TJB Schedule D-4.4 presents the results of Mr. Bourassa's Past and Future Growth DCF model, which provides for an equal weighting (i.e., 50 percent) between historical and projected measures of dividend growth. However, as shown in TJB Schedule D-4.8, for purposes of his overall dividend growth (g) estimate,[21]

[17] TJB Schedule D-4.4, Column 7.
[18] TJB Schedule D-4.4, Column 5.
[19] In TJB Schedule D-4.5, Mr. Bourassa presents this same dividend growth information over a ten-year period, but elects not to use it for purposes of calculating his DCF estimated cost of equity.
[20] TJB Schedule D-4.4, Column 6.
[21] TJB Schedule D-4.8, Column 3.

Mr. Bourassa combines the average of his Past and Future Growth DCF estimate[22] with his average Future Growth DCF estimate.[23] In so doing, Mr. Bourassa effectively gives a 75 percent weight to the dividend growth (g) estimate derived from analysts' forecasts of EPS growth in his Future Growth DCF model and only a 25 percent weight to the dividend growth estimate derived from historical measures of growth in his Past and Future Growth DCF model.

Q. Does Staff have any comment on Mr. Bourassa's use of growth in average annual share price to estimate the expected dividend growth (g) component in his Past and Future Growth DCF model?

A. Yes. In and of itself, share price appreciation is not a determinant of dividend growth, and for this reason Staff considers its use as a growth parameter to be inappropriate. However, as Mr. Bourassa has utilized it as a growth parameter by which to estimate dividend growth, Staff would point out that in both his five- and ten-year historical growth DCF analyses, share price growth has exceeded that of dividend growth. Specifically, in his five-year historical growth analysis (See TJB Schedule D-4.4), average share price growth (5.80%) exceeds average DPS growth (3.33%) by 77 percent (((.0580/.0333) – 1) = 77%), and in his ten-year historical growth analysis (See TJB Schedule D-4.5), average share price growth (6.88%) exceeds average DPS growth (3.08%) by 123 percent (((.0688/.0308) – 1) = 123%).

[22] TJB Schedule D-4.8, Line 8.
[23] TJB Schedule D-4.8, Line 10.

Q. As it relates to the cost of equity, what is the significance of Mr. Bourassa's sample water companies having experienced share price growth in excess of DPS growth over both the last five- and ten-year periods?

A. Simply stated, it is an indication that the cost of equity for publicly-traded water utilities has fallen over each of the last 5- and 10-year periods. When the market price per share of common stock for a given firm rises faster than does the dividend paid on a per share basis, the dividend yield falls. As dividend yields fall, investors pay more for an equivalent unit of return on their investment, resulting in a lower cost of equity. Markets are efficient, and because prices for publicly traded stocks can rise only if investors are willing to bid up the share price, when share price growth exceeds DPS growth over a five- or ten-year period, the willingness of investors to continue to bid up share prices is reflective of investor expectations that market returns have fallen. Thus, Mr. Bourassa's use of share price growth increases his cost of equity estimate at a time when share price growth actually reflects a decrease in cost of equity. This incongruous outcome is the result of choosing an inappropriate parameter for dividend growth in the DCF model.

Q. Turning to Mr. Bourassa's CAPM analyses, does Staff agree with his use of a forecasted risk-free interest rate?

A. No. The appropriate risk-free interest rate to be used is the current rate borne by investors in the market. Use of a forecasted risk-free rate serves to overstate the estimated market cost of equity.

Q. What risk-free rate does Mr. Bourassa use in his CAPM analyses?

A. In both his historical- and current market risk premia CAPM analyses, Mr. Bourassa uses a forecasted risk-free rate (R_f) based, in part, upon estimates from Value Line and Blue Chip Consensus Forecasts for the 30-year long-term Treasury yield covering the period

2013-2015. The forecasted rate used by Mr. Bourassa in his CAPM analyses is 3.9 percent. At present, the current 30-year long-term Treasury yield is 3.72 percent, which suggests that he has overstated the risk-free rate in his CAPM analysis by 18 basis points.

Q. Does Staff have any comment regarding Mr. Bourassa's proposed 200 basis point upward small company risk premium adjustment?

A. Yes. While Staff would agree with the general proposition that smaller companies are riskier than larger companies, empirical research has demonstrated that a small company risk premium adjustment to the cost of equity is unwarranted for regulated utilities. Annie Wong, of Western Connecticut State University, conducted a study on utility stocks to determine if the so-called size effect exists in the utility industry, and she writes as follows:

> The fact that the two samples show different, though weak, results indicates that utility and industrial stocks do not share the same characteristics. First, given firm size, utility stocks are consistently less risky than industrial stocks. Second, industrial betas tend to decrease with firm size but utility betas do not. These findings may be attributed to the fact that all public utilities operate in an environment with regional monopolistic power and regulated financial structure. As a result, the business and financial risks are very similar among the utilities regardless of their size. Therefore, utility betas would not necessarily be expected to be related to firm size.
>
> The object of this study is to examine if the size effect exists in the utility industry. After controlling for equity values, there is some weak evidence that firm size is a missing factor from the CAPM for the industrial but not for the utility stocks. *This implies that although the size phenomenon has been strongly documented for industrials, the findings suggest that there is no need to adjust for the firm size in utility regulations.* [emphasis added].[24]

To underscore this point, Paschall and Hawkins write as follows:

[24] Annie Wong, "Utility Stock and the Size Effect: An Empirical Analysis," *Journal of the Midwest Finance Association*, (1993), p.98.

> A size premium does not automatically apply in every case. Each privately held company should be analyzed to determine if a size premium is appropriate in its particular case. There can be unusual circumstances where a small company has risk characteristics that make it far less risky than the average company, warranting the use of a very low equity risk premium. One possible example of this is a private water utility (monopoly situation, very low risk, near-guarantee of payments).[25]

Q. Does Staff have additional evidence to demonstrate that Mr. Bourassa's proposed small company risk premium adjustment is without merit?

A. Yes, and from a source which Mr. Bourassa, himself, relies upon for purposes of his Risk Premium Build-Up cost of equity estimation methodology.[26] The 2012 *Duff & Phelps* Risk Premium Study includes a discussion of the size effect and the possible explanations for small companies having achieved historically higher returns than larger companies, and reads as follows:

> Traditionally, small companies are believed to have greater required rates of return than large companies because small companies are inherently riskier. It is not clear, however, whether this is due to size itself, or another factor closely related to size. The qualification that Banz noted in 1981 remains pertinent today:
>
> "*It is not known whether size [as measured by market capitalization-ed.] per se is responsible for the effect or whether size is just a proxy for one or more true unknown factors correlated with size.*"
>
> Practitioners know that small firms measured in terms of fundamental size measures such as assets or net income have risk characteristics that differ from those of large firms. For example, *potential competitors* (emphasis added) can more easily enter the "real" market (market for the goods and/or services offered to customers) of the small firm and "take" the value that the small firm has built. Large companies have more resources to better *adjust to competition* (emphasis added) and avoid distress in economic slowdowns. Small firms undertake less research and development and spend less on advertising than large firms, giving them

[25] Michael A. Paschall and George B. Hawkins, "Do Smaller Companies Warrant a Higher Discount Rate for Risk?: The 'Size Effect' Debate," *CCH Business Valuation Alert*, Vol. 1, Issue No. 2, December 1999.
[26] *See* Bourassa Direct, p.42, footnote 22. (In his testimony, Mr. Bourassa cites the *Duff & Phelps* 2013 Risk Premium Study)

> less control over product demand and *potential competition* (emphasis added). Small firms have fewer resources to *fend off competition* (emphasis added) and redirect themselves after changes in the market occur. Smaller firms may have fewer analysts following them, and less information available about them. Smaller firms may have lesser access to capital, thinner management depth, greater dependency on a few large customers, and may be less liquid than their counterparts. Each of these characteristics would tend to increase the rate of return that an investor might demand for investing in stocks of small companies rather than investing in stocks of large companies."[27]

Q. What is the significance of the above as it relates to Mr. Bourassa's proposed 200 basis point small company risk premium adjustment for Payson Water?

A. It is clear evidence that there is no justification for such an adjustment, as the Company is not subject to competition from other water service providers. Upon being issued a Certificate of Convenience and Necessity ("CC&N") by this Commission to provide potable water service to metered customers within its certificated service territory, Payson Water was granted natural monopoly status to be the exclusive provider within its service territory, thus immunizing the Company from market competition.

Q. Has the Commission previously ruled on the issue of firm size and whether it warrants a risk premium adjustment to the cost of equity?

A. Yes. The Commission previously ruled in Decision No. 64282[28] for Arizona Water that firm size does not warrant recognition of a risk premium stating, "We do not agree with the Company's proposal to assign a risk premium to Arizona Water based on its size relative to other publicly traded water utilities…." The Commission confirmed its previous ruling in Decision No. 64727[29] for Black Mountain Gas agreeing with Staff that "the 'firm size phenomenon' does not exist for regulated utilities, and that therefore there

[27] *Duff & Phelps* 2012 Risk Premium Study, p. 28.
[28] Dated December 28, 2001.
[29] Dated April 17, 2002.

is no need to adjust for risk for small firm size in utility regulation." All companies have firm-specific risks. Therefore, the existence of unique risks for a company does not lead to the conclusion that its total risk is greater than other entities. Moreover, as previously discussed, investors cannot expect compensation for firm-specific risk since it can be eliminated through diversification.

Q. If the 200 basis point adjustment is removed, what would Mr. Bourassa's ROE become?

A. It would be 9.0 percent, the same as Staff recommends.

Q. Does this conclude your direct testimony?

A. Yes, it does.

Payson Water Company Cost of Capital Calculation
Capital Structure
And Weighted Average Cost of Capital
Staff Recommended and Company Proposed

[A]	[B]	[C]	[D]
Description	Weight (%)	Cost	Weighted Cost
Staff Recommended Structure			
Debt	52.8%	4.2%	2.2%
Common Equity	47.2%	9.0%	4.2%
Weighted Average Cost of Capital			6.4%
Company Proposed Structure			
Debt	0.00%	0.00%	0.00%
Common Equity	100.00%	11.00%	11.00%
Weighted Average Cost of Capital			11.00%

[D] : [B] x [C]

Supporting Schedules: JAC-2, JAC-3 and JAC-4.

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Payson Water Company Cost of Capital Calculation
Final Cost of Equity Estimates
Sample Water Utilities

[A]	[B]		[C]		[D]		[E]
DCF Method			D_1/P_0 [1]	+	g [2]	=	k
Constant Growth DCF Estimate			3.0%	+	5.2%	=	8.2%
Multi-Stage DCF Estimate						=	9.4%
Average DCF Estimate							**8.8%**
CAPM Method	Rf	+	β [5]	x	(Rp)	=	k
Historical Market Risk Premium [3]	2.1%	+	0.71	x	7.2% [6]	=	7.2%
Current Market Risk Premium [4]	3.7%	+	0.71	x	7.2% [7]	=	8.8%
Average CAPM Estimate							**8.0%**
					Average of Overall Estimates		**8.4%**
					Economic Assessment Adjustment		0.6%
					Sub-Total		**9.0%**
					Financial Risk Adjustment		0.0%
					Total		**9.0%**

1 MSN Money and Value Line

2 Schedule JAC-8

3 Risk-free rate (Rf) for 5, 7, and 10 year Treasury rates from the U.S. Treasury Department at www.ustreas.gov

4 Risk-free rate (Rf) for 30 Year Treasury bond rate from the U.S. Treasury Department at www.ustreas.gov

5 Value Line

6 Historical Market Risk Premium (Rp) calculated from 2013 Ibbotson SBBI Classic Yearbook data

7 Testimony

Payson Water Company Cost of Capital Calculation
Average Capital Structure of Sample Water Utilities

[A]	[B]	[C]	[D]
Company	Debt	Common Equity	Total
American States Water	43.3%	56.7%	100.0%
California Water	54.2%	45.8%	100.0%
Aqua America	55.2%	44.8%	100.0%
Connecticut Water	55.3%	44.7%	100.0%
Middlesex Water	43.1%	56.9%	100.0%
SJW Corp	56.2%	43.8%	100.0%
York Water	45.0%	55.0%	100.0%
Average Sample Water Utilities	**50.3%**	**49.7%**	**100.0%**
Payson Water - Pro Forma Capital Structure	**52.8%**	**47.2%**	**100.0%**

Source:
Sample Water Companies from Value Line

Payson Water Company Cost of Capital Calculation
Growth in Earnings and Dividends
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]
Company	Dividends Per Share 2002 to 2012 DPS[1]	Dividends Per Share Projected DPS[1]	Earnings Per Share 2002 to 2012 EPS[1]	Earnings Per Share Projected EPS[1]
American States Water	3.9%	8.4%	7.7%	3.8%
California Water	1.2%	7.4%	5.0%	5.8%
Aqua America	7.7%	9.7%	7.3%	10.7%
Connecticut Water	1.7%	2.9%	3.2%	3.3%
Middlesex Water	1.6%	1.6%	2.1%	5.0%
SJW Corp	4.4%	4.9%	4.2%	6.3%
York Water	4.4%	3.8%	6.1%	4.6%
Average Sample Water Utilities	**3.6%**	**5.5%**	**5.1%**	**5.6%**

1 Value Line

Payson Water Company Cost of Capital Calculation
Sustainable Growth
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]
Company	Retention Growth 2002 to 2012 br	Retention Growth Projected br	Stock Financing Growth vs	Sustainable Growth 2002 to 2012 br + vs	Sustainable Growth Projected br + vs
American States Water	3.8%	5.2%	1.5%	5.4%	6.7%
California Water	2.4%	3.2%	1.5%	3.9%	4.7%
Aqua America	3.9%	5.3%	1.9%	5.8%	7.2%
Connecticut Water	2.0%	3.3%	3.9%	5.9%	7.2%
Middlesex Water	1.2%	2.8%	3.1%	4.3%	5.9%
SJW Corp	3.5%	3.8%	0.1%	3.6%	3.9%
York Water	2.2%	2.8%	4.7%	6.8%	7.5%
Average Sample Water Utilities	**2.7%**	**3.8%**	**2.4%**	**5.1%**	**6.2%**

[B]: Value Line
[C]: Value Line
[D]: Value Line, MSN Money, and Form 10-Ks filed with the Securities and Exchange Commission (http://www.sec.gov/)
[E]: [B]+[D]
[F]: [C]+[D]

Payson Water Company Cost of Capital Calculation
Selected Financial Data of Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[G]
Company	Symbol	Spot Price 10/16/2013	Book Value	Mkt To Book	*Value Line* Beta β	Raw Beta βraw
American States Water	AWR	**27.22**	11.85	2.3	**0.70**	0.52
California Water	CWT	**20.00**	11.68	1.7	**0.65**	0.45
Aqua America	WTR	**24.49**	7.99	3.1	**0.60**	0.37
Connecticut Water	CTWS	**31.35**	14.00	2.2	**0.75**	0.60
Middlesex Water	MSEX	**21.01**	12.04	1.7	**0.70**	0.52
SJW Corp	SJW	**28.44**	15.27	1.9	**0.85**	0.75
York Water	YORW	**21.12**	8.18	2.6	0.70	0.52
Average				**2.2**	**0.71**	**0.53**

[C]: Msn Money
[D]: Value Line
[E]: [C] / [D]
[F]: Value Line
[G]: (-0.35 + [F]) / 0.67

Payson Water Company Cost of Capital Calculation
Calculation of Expected Infinite Annual Growth in Dividends
Sample Water Utilities

[A]	[B]
Description	g
DPS Growth - Historical[1]	3.6%
DPS Growth - Projected[1]	5.5%
EPS Growth - Historical[1]	5.1%
EPS Growth - Projected[1]	5.6%
Sustainable Growth - Historical[2]	5.1%
Sustainable Growth - Projected[2]	6.2%
Average	**5.2%**

1 Schedule JAC-5

2 Schedule JAC-6

Payson Water Company Cost of Capital Calculation
Multi-Stage DCF Estimates
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]
Company	Current Mkt. Price (P_o)[1] 10/16/2013	Projected Dividends[2] (Stage 1 growth) (D_t) d_1	d_2	d_3	d_4	Stage 2 growth[3] (g_n)	Equity Cost Estimate (K)[4]
American States Water	27.2	0.76	0.80	0.84	0.89	6.5%	9.2%
California Water	20.0	0.65	0.68	0.71	0.75	6.5%	9.6%
Aqua America	24.5	0.59	0.62	0.66	0.69	6.5%	8.8%
Connecticut Water	31.4	1.01	1.07	1.12	1.18	6.5%	9.6%
Middlesex Water	21.0	0.79	0.83	0.87	0.92	6.5%	10.1%
SJW Corp	28.4	0.73	0.77	0.81	0.85	6.5%	9.0%
York Water	21.1	0.58	0.61	0.64	0.68	6.5%	9.2%
						Average	9.4%

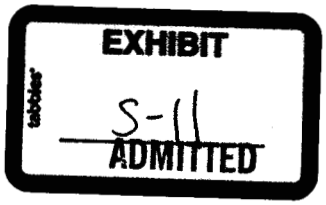
$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n}\left[\frac{1}{(1+K)}\right]^n$$

Where : P_0 = current stock price
D_t = dividends expected during stage 1
K = cost of equity
n = years of non – constant growth
D_n = dividend expected in year n
g_n = constant rate of growth expected after year n

1 [B] see Schedule JAC-7
2 Derived from Value Line information
3 Average annual growth in GDP 1929 - 2012 in current dollars.
4 Internal Rate of Return of Projected Dividends

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner
BOB BURNS
Commissioner



IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO. INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	)	DOCKET NO. W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO. INC., FOR AUTHORITY TO ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM; AND ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	)	DOCKET NO. W-03514A-13-0142

DIRECT

TESTIMONY

OF

JOHN A. CASSIDY

PUBLIC UTILITIES ANALYST

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

NOVEMBER 19, 2013

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SCHEDULES

Financial Analysis JAC-1

WIFA Loan Surcharge Calculation - Example JAC-2

EXECUTIVE SUMMARY
PAYSON WATER COMPANY
DOCKET NO. W-03514A-13-0111, ET AL.

On April 22, 2013, Payson Water Company, Inc. ("Payson Water" or "Company") filed an application with the Arizona Corporation Commission ("Commission") seeking a permanent rate increase. On May 17, 2013, Payson Water filed a financing application requesting authority to borrow up to $1,238,000 from the Water Infrastructure and Finance Authority ("WIFA") of Arizona to fund improvements to the Company's Mesa del Caballo ("MDC") water system. On June 3, 2013, Staff deemed the rate application sufficient. On August 15, 2013, the Company filed a motion to consolidate the rate case and financing applications and to expedite the processing of those applications.

On September 5, 2013, the Company filed a "Stipulation for Procedural Order Bifurcating Proceeding and Establishing Case Schedule." This filing set forth an agreement between the Company and Staff wherein the processing of Payson Water's rate and financing applications in the proceeding would be bifurcated into two phases, with Phase I addressing only that portion of the Company's financing application related to the planned interconnection of the MDC system to the Town of Payson's water system via the Cragin Pipeline, and Phase II addressing both the Company's application for a rate increase and the remainder of the debt financing requested in the financing application. On September 18, 2013, a Staff Report was filed recommending conditional approval of the Company's proposed $275,000 Phase I financing, and in Decision No. 74175 (dated October 25, 2013), the Commission approved the Company's proposed $275,000 Phase I financing. Thus, Staff's recommendations contained herein will address only the Phase II portion of the requested financing of this consolidated proceeding.

On October 28, 2013, the Company revised its cost estimates for the proposed Phase II financing to a level of $904,650. This revised Phase II figure, when combined with the $275,000 debt authorized in Phase I, effectively lowers the Company's aggregate financing request to a level of $1,179,650 ($904,650 + $275,000), an amount less than the $1,238,000 initially requested in PWC's financing application. The Utilities Division's Engineering Section has reviewed the Company's updated Phase II cost estimates and found them to be reasonable and appropriate.

Staff concludes that the Company's proposed Phase II capital improvement projects are appropriate and that the related $904,650 cost estimate is reasonable.

Staff further concludes that issuance of the proposed debt financing for the purposes stated in the application is within the Company's corporate powers, is compatible with the public interest, is consistent with sound financial practices, and will not impair its ability to provide services.

Staff recommends:

1. Approval of the Company's request to borrow up to $904,650 from WIFA for the purpose of making infrastructure improvements to the Company's MDC water system.

2. Authorizing Payson Water to encumber its real property and utility plant and system to secure such indebtedness for the purposes described in the application.

3. Authorizing Payson Water to engage in any transaction and to execute any documents necessary to effectuate the authorizations granted herein as may be appropriate.

4. Approval of a WIFA loan surcharge mechanism that may result in a surcharge of $22.87 per month per MDC customer.

5. That the WIFA loan surcharge apply only to customers of the Company's MDC water system.

6. That the actual amount of the WIFA loan surcharge be calculated based upon the actual amount of the WIFA loan and the actual number of metered customers in the MDC system. That the Company file with the Commission a WIFA loan surcharge tariff application that would enable the Company to meet its principal, interest, debt reserve, and tax obligations on the proposed WIFA loan. That the Company make a WIFA loan surcharge filing within 60 days of the loan closing.

7. That the Company follow the same methodology presented in Schedule JAC-2 to calculate the additional revenue needed to meet its principal, interest, debt reserve, and tax obligations on the proposed WIFA loan using actual loan amounts and customer counts.

8. That approval of the loan and surcharge be rescinded if the Company has not drawn funds from the loan within one year of the date of the Decision issued in this proceeding.

9. That the Company file with Docket Control, as a compliance item in this Docket, a Schedule of its approved rates and charges within 30 days after the Decision in this matter is issued.

10. That the Company track and separately record, as a regulatory liability, the surcharge proceeds associated with the debt service reserve fund, that the regulatory liability be amortized over the 20-year life of the loan, and that the unamortized balance of the regulatory liability account be recognized as a reduction from rate base in future rate cases consistent with the treatment of the debt reserve fund in Decision No. 74175, dated October 25, 2013.

11. That the name of the regulatory liability account identify the source of the funds, for example, "WIFA Debt Reserve Funded By Customers" or similar name.

12. That the Company file a rate case no later than May 31, 2018 with a December 31, 2017 test year.

13. That the debt reserve portion of the surcharge and the related income taxes cease after five years.

I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is John A. Cassidy. I am a Public Utilities Analyst employed by the Arizona Corporation Commission ("Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Briefly describe your responsibilities as a Public Utilities Analyst.

A. I am responsible for the examination of financial and statistical information included in utility rate applications and other financial matters, including studies to estimate the cost of capital component in rate filings used to determine the overall revenue requirement, and for preparing written reports, testimonies and schedules to present Staff's recommendations to the Commission on these matters.

Q. Please describe your educational background and professional experience.

A. I hold a Bachelor of Arts degree in History from Arizona State University, a Master of Library Science degree from the University of Arizona, and a Master of Business Administration degree with an emphasis in Finance from Arizona State University. While pursuing my MBA degree, I was inducted into Beta Gamma Sigma, the National Business Honor Society. I have passed the CPA exam, but opted not to pursue certification. I have worked professionally as a librarian, financial consultant and tax auditor and served as Staff's cost of capital witness in rate case evidentiary proceedings in my current as well as in a past tenure as a Commission employee.

Q. What is the scope of your testimony in this case?

A. My testimony will address Staff's financial analysis of Payson Water Company's ("Payson Water" or "Company") proposed Phase II financing and the formal recommendations based thereon.

Q. Have you prepared any exhibits to accompany your testimony?

A. Yes. I have prepared two schedules (JAC-1 to JAC-2) which support Staff's financial analysis and recommendations.

Q. Please provide a brief description of Payson Water.

A. Payson Water is an Arizona public service corporation engaged in providing water utility services in portions of Gila County, Arizona, pursuant to certificates of convenience and necessity granted by the Commission. During the December 31, 2012 test-year, the Company served approximately 1,114 water connections.

II. PROPOSED PHASE II FINANCING

Q. Did the Company file a financing application?

A. Yes. On May 17, 2013, Payson Water filed a financing application requesting authority to borrow up to $1,238,000 from the Water Infrastructure and Finance Authority ("WIFA") of Arizona.

Q. Was the financing application consolidated with the rate application?

A. Yes, the financing application was consolidated with the rate application by Procedural Order, dated August 26, 2013.

Q. What is the stated purpose of this $1,238,000 loan?

A. The purpose of the loan is to fund an interconnection of the Mesa del Caballo ("MDC") system to the C.C. Cragin Pipeline and associated Town of Payson water treatment plant.

Q. What current amount is the Phase II portion of the loan?

A. The Phase II portion of the loan is now $904,650. On October 28, 2013, the Company revised its cost estimates for the proposed Phase II financing to a level of $904,650. In Decision No. 74175, dated October 25, 2013, the Commission approved the Company proposed $275,000 Phase I financing. This revised Phase II figure, when combined with the $275,000 debt authorized in Phase I, effectively lowers the Company's aggregate financing request to a level of $1,179,650 ($904,650 + $275,000).

Q. Has Staff Engineering reviewed the Company's proposed Phase II construction plans and costs?

A. Yes. Staff Engineering has reviewed the Company's updated Phase II cost estimates and found them to be reasonable and appropriate.

Q. Are the final details of the WIFA loan known at this time?

A. No, the final details of the WIFA loan will not be known until after the Company has closed on the loan.[1] Therefore, Staff is recommending the approval of a surcharge mechanism which will assure that ratepayers only pay the funding associated with the actual loan draw.

[1] In the application, the Company states that WIFA has represented the subject financing will be made available at an interest rate not to exceed 4.2 percent for a term of 20 years.

III. FINANCIAL ANALYSIS

Q. What is a debt service coverage ("DSC") ratio?

A. The DSC ratio is a commonly used financial metric employed to determine the number of times internally generated cash will cover required principal and interest payments on short-term and long-term debt. A DSC greater than 1.0 indicates that cash flow from operations is sufficient to cover debt obligations. A DSC less than 1.0 means that cash generated from operations is insufficient to meet ongoing debt service obligations, thus requiring another source of funds in order to avoid default.

Q. What minimum DSC ratio does WIFA require an Arizona water utility to maintain?

A. WIFA requires a minimum DSC ratio of 1.2.

Q. What DSC ratio did Staff calculate for Payson Water?

A. As shown in Schedule JAC-1, Column [C], Staff calculated a pro forma DSC of 1.29 for the Company. Staff's pro forma DSC calculation reflects operational performance based upon Staff's recommended rates in the rate portion of the consolidated docket. Staff's pro forma DSC indicates that the rate increase recommended by Staff will provide sufficient cash flow from operations to cover all debt service obligations associated with the proposed financing and meet the 1.2 DSC required by WIFA.

Q. Does the pro forma DSC calculation made in Schedule JAC-1, Column [C], reflect debt service coverage on the combined Phase I ($275,000) and Phase II ($904,650) debt?

A. Yes. The 1.29 DSC calculated in Column [C] assumes total WIFA debt outstanding of $1,179,650 ($275,000 + $904,650). However, as discussed below, the funding required to service these two loan draws will be billed as separate surcharge.

IV. SURCHARGE MECHANISM

Q. What is the surcharge mechanism and how is it implemented?

A. The surcharge mechanism establishes the methodology for calculating the monthly surcharge amount to be assessed MDC customers. To collect the surcharge, the Company would submit a surcharge application to the Commission under this Docket, using the methodology Staff has defined in Schedule JAC-2, once Payson Water has closed on the loan and has drawn funds to begin construction of the plant.

Q. Why does Staff recommend that the Phase II WIFA loan surcharge apply only to customers of the MDC water system?

A. Staff recommends that the Phase II WIFA loan surcharge apply only to MDC customers because the infrastructure improvements made possible by the proceeds from the Phase II WIFA loan will benefit customers served by the MDC system. Staff's recommendation in this regard conforms to that previously made by Staff in the Phase I portion of the financing docket.

Q. What costs does Staff recommend recovery of through the WIFA loan surcharge to be authorized?

A. Staff recommends that the WIFA loan surcharge provide recovery of the debt principal, interest, income taxes, and debt reserve fund.

Q. Does Staff recommend that the debt reserve portion of the surcharge be recorded as a regulatory liability?

A. Yes. Staff recommends that the Company track and separately record as a regulatory liability, the surcharge proceeds associated with the debt service reserve fund. Typically, Staff recommends that the Company's owners fund the debt service reserve fund because

the fund acts as a savings account for the owners and is not actually a fee, principal or interest. In this case, Staff is recommending that the debt service reserve fund be included in the surcharge to help the Company's cash flow. Since the Company's rate payers will be funding the debt reserve account through the surcharge, Staff believes that an offset to rate base through a regulatory liability is appropriate. This recommendation is consistent with the treatment of the debt reserve fund in Decision No. 74175, dated October 25, 2013. Staff further recommends that the name of the regulatory liability account identify the source of the funds, for example, "WIFA Debt Reserve Funded By Customers" or similar name.

Q. Since Staff recommends this regulatory liability, what treatment does Staff recommend for it in the future?

A. Staff recommends that the regulatory liability be amortized over the 20-year associated life of the loan. In the interim, however, Staff recommends that the unamortized portion of this regulatory liability account be recognized as a reduction from rate base in future rate cases.

Calculation of WIFA Loan Surcharge

Q. How is the WIFA loan surcharge calculated?

A. To illustrate how the surcharge calculation is made, Schedule JAC-2 presents the calculation of an estimated surcharge for the proposed Phase II WIFA debt based upon preliminary loan details and customer counts. As shown in Schedule JAC-2, Staff calculated a Phase II surcharge of $22.87[2] for a 5/8 x 3/4-Inch meter customer, based upon a WIFA loan principal of $904,650. Staff recommends that the Company utilize the same methodology as that presented in Schedule JAC-2 to calculate the additional revenue

[2] This figure is based upon preliminary loan details and customer counts.

needed to meet its principal, interest, debt reserve, and tax obligations on the proposed Phase II debt once the WIFA loan proceeds have been drawn down.

Q. Is there a separate WIFA loan surcharge associated with the $275,000 Phase I debt previously authorized in this docket?

A. Yes. Details of Staff's estimated Phase I WIFA loan surcharge calculation were presented in Schedule CSB-1 of the Staff Report filed by Ms. Crystal Brown, dated September 18, 2013. As shown in Schedule CSB-1, Staff's estimated surcharge for the Phase I WIFA debt was calculated to be $7.44 for a 5/8 x 3/4-inch meter customer, based upon a loan principal amount of $275,000.

Q. Is Staff specifically recommending that Payson Water continue to utilize two separate financing surcharges, with the first surcharge addressing the funding of the initial $275,000 Phase I loan and the second surcharge addressing the funding of the $904,650 Phase II loan?

A Staff is indifferent as to whether the Company bills one or two financing surcharges. However, since these two loan draws will have different initial repayment patterns, it may be easier to wait until Payson Water's next rate case before combining them into one surcharge.

V. CONCLUSIONS AND RECOMMENDATIONS

Q. What are Staff's conclusions regarding the Company's proposed $904,650 Phase II financing?

A. Staffs conclusions regarding Payson Water's proposed $904,650 Phase II financing are as follows:

1. Staff concludes that the Company's proposed Phase II capital improvement projects are appropriate and that the related $904,650 cost estimate is reasonable.

2. Staff further concludes that issuance of the proposed debt financing for the purposes stated in the application is within the Company's corporate powers, is compatible with the public interest, is consistent with sound financial practices and will not impair its ability to provide services.

Q. What are Staff's recommendations concerning the Phase II financing and surcharge mechanism?

A. Staff's recommendations are as follows:

1. Approval of the Company's request to borrow up to $904,650 from WIFA for the purpose of making infrastructure improvements to the Company's MDC water system.

2. Authorizing Payson Water to encumber its real property and utility plant and system to secure such indebtedness for the purposes described in the application.

3. Authorizing Payson Water to engage in any transaction and to execute any documents necessary to effectuate the authorizations granted herein as may be appropriate.

4. Approval of a WIFA loan surcharge mechanism that may result in a surcharge of approximately $22.87 per month per MDC customer.

5. That the WIFA loan surcharge apply only to customers of the Company's MDC water system.

6. That the actual amount of the WIFA loan surcharge be calculated based upon the actual amount of the WIFA loan and the actual number of metered customers in the MDC system. That the Company file with the Commission a WIFA loan surcharge tariff application that would enable the Company to meet its principal, interest, debt reserve, and tax obligations on the proposed WIFA loan. That the Company make a WIFA loan surcharge filing within 60 days of the loan closing.

7. That the Company follow the same methodology presented in Schedule JAC-2 to calculate the additional revenue needed to meet its principal, interest, debt reserve, and tax obligations on the proposed WIFA loan using actual loan amounts and customer counts.

8. That approval of the loan and surcharge be rescinded if the Company has not drawn funds from the loan within one year of the date of the Decision issued in this proceeding.

9. That the Company file with Docket Control, as a compliance item in this Docket, a Schedule of its approved rates and charges within 30 days after the Decision in this matter is issued.

10. That the Company track and separately record, as a regulatory liability, the surcharge proceeds associated with the debt service reserve fund, that the regulatory liability be amortized over the 20-year life of the loan, and that the

unamortized balance of the regulatory liability account be recognized as a reduction from rate base in future rate cases consistent with the treatment of the debt reserve fund in Decision No. 74175, dated October 25, 2013.

11. That the name of the regulatory liability account identify the source of the funds, for example, "WIFA Debt Reserve Funded By Customers" or similar name.

12. That the Company file a rate case no later than May 31, 2018 with a December 31, 2017 test year.

13. That the debt reserve portion of the surcharge and the related income taxes cease after five years.

Q. Does this conclude your Direct Testimony?

A. Yes, it does.

Payson Water Company
Docket No. W-03514A-13-0142
Application For Financing

Schedule JAC-1

FINANCIAL ANALYSIS

Selected Financial Information

		[A][1] 12/31/2012		[B][2] Pro Forma		Under Staff Recommended Ra For combined $1,179,650 loar [C][3] Pro Forma	
1	Operating Income	$ (196,401)		$ (182,479)		$ 27,209	
2	Depreciation & Amort.	68,142		85,632		59,434	
3	Income Tax Expense	0		0		26,292	
4							
5	Interest Expense	0		48,810		48,810	
6	Repayment of Principal	0		38,470		38,470	
7							
8							
9							
10							
11	**DSC**						
12	[1+2+3] ÷ [5+6]	#DIV/0!		-1.11		1.29	
13							
14							
15							
16							
17	**Capital Structure**						
18							
19	Short-term Debt	0	0.0%	38,470	1.8% [4]	38,470	2.4% [4]
20							
21	Long-term Debt	0	0.0%	1,141,180	53.2%	1,141,180	72.1%
22							
23	Common Equity	963,559	100.0%	963,559	45.0%	403,655	25.5%
24							
25	Total Capital	$ 963,559	100.0%	$ 2,143,209	100.0%	$ 1,583,305	100.0%
26							
27							
28	**Capital Structure (inclusive of AIAC and Net CIAC)**						
29							
30	Short-term Debt	0	0.0%	38,470	1.7%	38,470	1.7%
31							
32	Long-term Debt	0	0.0%	1,141,180	49.9%	1,141,180	49.9%
33							
34	Common Equity	963,559	89.3%	963,559	42.1%	403,655	17.7%
35							
36	Advances in Aid of Construction ("AIAC")	0	0.0%	0	0.0%	0	0.0%
37							
38	Contributions in Aid of Construction ("CIAC")[5]	114,937	10.7%	143,766	6.3%	378,094	16.5%
39							
40	Total Capital (Inclusive of AIAC and CIAC)	$ 1,078,496	100.0%	$ 2,286,975	100.0%	$ 1,961,399	85.8%
41							
42							
43	**AIAC and CIAC Funding Ratio**[6]	10.7%		6.3%		19.3%	
44	(36+38)/(40)						
45							

46 [1] Column [A] is based on figures as reported in the financial statements accompanying the Company's financing application for the year ended December 31, 2012.
47 [2] Column [B] is based on figures as reported in the financial statements accompanying the Company's rate application, for the year ended December 31, 2012, modified to reflect
48 issuance of the proposed Phase I ($275,000) and Phase II ($904,650) debt financings, amortized for 20 years at an interest rate of 4.2 percent per annum.
49 [3] Column [C] is based on figures as reported in the financial statements accompanying the Company's rate application, for the year ended December 31, 2012, as adjusted by Staff
50 witness Crystal Brown, modified to reflect Staff's proposed rates and issuance of the proposed Phase I ($275,000) and Phase II ($904,650) debt financings, amortized for 20 years
51 at an interest rate of 4.2 percent per annum.
52 [4] Pro Forma Short-term Debt represents the first year principal repayment on the proposed loans.
53 [5] Net CIAC balance (i.e. less: accumulated amortization of contributions).
54 [6] Staff typically recommends that combined AIAC and Net CIAC funding not exceed 30 percent of total capital, inclusive of AIAC and Net CIAC, for private and investor owned utilities.

WIFA LOAN SURCHARGE CALCULATION - EXAMPLE

Loan Amount:	**$904,650**	
Term:	**20 Years**	
Interest Rate Before Subsidy	**5.25%**	
WIFA Subsidy Rate:	**95%**	
WIFA Interest rate :	**4.99%**	If interest rate is not found on TABLE A, use the next highest percentage

Step 1 - Find the Annual Payment on Loan

$904,650	Total Amount of Loan
0.0792	TABLE A, Conversion Factor Table, Column B
$71,643.48	Annual Principle and Interest Payment

Step 2 - Find the Annual Interest Payment on Loan

$904,650	Total Amount of Loan
0.0493	TABLE A, Conversion Factor Table, Column C
$44,618.76	Annual Interest Payment on Debt

Step 3 - Find the Annual Principal Payment on Loan

$904,650	Total Amount of Loan
0.0299	TABLE A, Conversion Factor Table, Column D
$27,024.71	Annual Principal and Interest Payment

Step 4 - Find the Gross Revenue Conversion Factor

1.510416894 From Brown Direct, Schedule CSB-1, Col. B, Line 7

Step 5 - Find the Incremental Income Tax Factor

1.51042 minus 1 = 0.51042

Step 6 - Find the Annual Income Tax Component of Surcharge Revenue

0.51042	Incremental Income Tax Factor (from Step 5)
$27,024.71	Multiplied by: Annual Principal Payment on Loan (from Step 3)
$13,793.87	Annual Income Tax Component of the Annual Surcharge Revenue

Step 7 - Find the Debt Service Component of the Annual Surcharge Revenue

$44,618.76	Annual Interest Payment on Debt (from Step 2)
$27,024.71	Plus: Annual Principal Payment (from Step 3)
$71,643.48	Debt Service Component of the Annual Surcharge Revenue

Step 8 - Find the Annual Surcharge Revenue Requirement Needed for the Loan Including Reserve Fund

$13,793.87	Annual Income Tax Component of the Annual Surcharge Revenue (from Step 6)
$71,643.48	Plus: Debt Service Component of the Annual Surcharge Revenue (from Step 7)
$14,328.70	Plus: Annual Reserve Fund Deposit [20% x Principal & Interest (From Step1)]
$99,766.04	Total Annual Surcharge Revenue Requirement for the Loan

Step 9 - Find the Equivalent Bills

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	362	12	4,344
3/4" Meter	1.5	1	12	18
1" Meter	2.5	0	12	-
1½" Meter	5	0	12	-
2" Meter	8	0	12	-
3" Meter	15	0	12	-
4" Meter	25	0	12	-
6" Meter	50	0	12	-
		363		4,362

Step 10 - Find the Monthly Surcharge for the 5/8" x 3/4" Meter Size Customers

$99,766.04	Total Annual Surcharge Revenue Requirement for the Loan (from Step 8)
4,362	Divided by: Total Number of Equivalent Bills
$ 22.87	Monthly Surcharge for 3/4" Customers

Step 11 - Find the Monthly Surcharge for the Remaining Meter Size Customers

Equivalent Bills

Col A	Col B	Col C	Col D
Meter Size	NARUC Multiplier	5/8" x 3/4" Customers' Surcharge	**Surcharge by Meter Size** Col B x C
5/8"x 3/4" Meter	1	$ 22.87	$ 22.87
3/4" Meter	1.5	$ 22.87	$ 34.31
1" Meter	2.5	$ 22.87	$ 57.18
1½" Meter	5	$ 22.87	$ 114.36
2" Meter	8	$ 22.87	$ 182.97
3" Meter	15	$ 22.87	$ 343.07
4" Meter	25	$ 22.87	$ 571.79
6" Meter	50	$ 22.87	$ 1,143.58

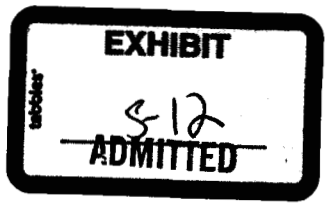
TABLE A
Conversion Factor Table (Based on a 20-year Loan)[1]

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

Notes:
[1] The above interest rate conversion factors are to be used in Steps 1,2 and 3, as presented in Schedule JAC-2 (Page 1 of 2), to calculate the total combined interest and principal payment on the loan, the annual interest payment, and the annual principal payment. If the actual interest rate on the loan is not found in TABLE A, use the next highest interest rate shown in Column A.

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner
BOB BURNS
Commissioner



IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO. INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO. W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO. INC., FOR AUTHORITY TO ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM; AND ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	DOCKET NO. W-03514A-13-0142

SURREBUTTAL

TESTIMONY

OF

JOHN A. CASSIDY

PUBLIC UTILITIES ANALYST

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

DECEMBER 20, 2013

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EXECUTIVE SUMMARY
PAYSON WATER COMPANY
DOCKET NO. W-03514A-13-0111, ET AL.

Staff continues to recommend a capital structure for Payson Water Company ("Company") of 52.8 percent debt and 47.2 percent equity, a 9.0 percent return on equity ("ROE"), a 4.2 percent cost of debt for the Company, and a 6.4 percent overall rate of return.

The Commission should reject the Company's proposed 11.0 percent ROE for the following reasons:

> Mr. Bourassa's primary Future Growth DCF model relies exclusively on analysts' forecasts of earnings per share growth, and the estimates derived from his Future Growth DCF model are effectively assigned a 75 percent weight to his overall DCF estimate. Mr. Bourassa's historical dividend growth estimate in his Past and Future Growth DCF model is inflated through the use of growth in average annual share price as a proxy to estimate dividend growth. Mr. Bourassa's CAPM estimates are inflated due to use of a forecasted risk-free rate. Mr. Bourassa's proposed ROE has been inflated by an upward adjustment for financial risk and a small company risk premium.

I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is John A. Cassidy. I am a Public Utilities Analyst employed by the Arizona Corporation Commission ("Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same John A. Cassidy who filed direct testimony in this case?

A. Yes, I am.

Q. What is the purpose of your surrebuttal testimony in this rate proceeding?

A. The purpose of my surrebuttal testimony is to respond to the cost of capital rebuttal testimony of Payson Water Company ("Payson Water" or "Company") witness, Mr. Thomas J. Bourassa ("Mr. Bourassa's Rebuttal").

Q. Please explain how Staff's surrebuttal testimony is organized.

A. Staff's surrebuttal testimony is presented in four sections. Section I is this introduction. Section II presents Staff's comments on the rebuttal testimony of the Company's cost of capital witness, Mr. Bourassa. Finally, Section III presents Staff's cost of capital recommendations.

II. STAFF RESPONSE TO COMPANY'S COST OF CAPITAL WITNESS MR. THOMAS J. BOURASSA

Q. Please summarize the capital structure, cost of debt, cost of equity, and overall rate of return proposed in Mr. Bourassa's rebuttal.

A. Mr. Bourassa's rebuttal continues to propose a capital structure consisting of 0.0 percent debt and 100.0 percent equity, a 0.0 percent cost of debt, and an 11.0 percent cost of

equity. As a consequence, Mr. Bourassa continues to propose a weighted average cost of capital for Payson Water of 11.0 percent.

Q. Has Staff changed its recommendation from its direct testimony?

A. No.

Q. How does Staff respond to Mr. Bourassa's assertion that Staff's recommended pro forma capital structure for the Company consisting of 52.8 percent dent and 47.2 percent equity creates a mismatch between rate base and invested equity capital?

A. Pursuant to a request made by the Company, Payson Water's rate and financing applications were consolidated, and Staff's recommended pro forma capital structure mix is reflective of the Company's desire to consolidate its rate and financing filings. Furthermore, Staff's recommendations in these consolidated dockets give consideration to the following factors which have been identified within the various filing support documents proffered by the Company: (1) that the rate and financing dockets are linked by an underlying asset encumbrance; (2) that on frequent occasions, the Company has acknowledged that it is making an extraordinary request of Staff and the Commission in seeking expedited relief by the end of 2013 (a goal which the Company's acknowledges can only be achieved through an extraordinary and "cooperative effort"); (3) that positioning the Company to be able to meet WIFA's 1.2 minimum DSC requirement was decisively important; and (4) that the new capital structure resulting from the approval of the Company's financing application "is more balanced and favors ratepayers as the cost of debt is less than the cost of equity." Staff believes that its collective recommendations in the Company's two consolidated filings are very reasonable when viewed within the unique and extraordinary rate request processing environment dictated and delineated by Payson Water's petition.

Furthermore, as clearly expressed in Staff recommendation item No. 11 contained in the Phase I financing Staff Report (dated September 18, 2103) filed in the pending consolidated dockets, it has always been Staff's intent to have rate case recommendations that would be focused on providing the Company with a reasonable opportunity to achieve the 1.2 DSC required under the WIFA loan covenants. Staff's rate case recommendations using the Staff recommended capital structure mix, coupled with its WIFA surcharge recommendations, meet this clearly communicated goal. Thus, Mr. Bourassa's assertion that Staff's recommended capital structure results in a "mismatch" is without merit, as Staff's recommended capital structure in this consolidated docket was driven by the Company's unique and extraordinary petition.

III. STAFF RECOMMENDATIONS

Q. Based on Staff's review of Mr. Bourassa's rebuttal testimony, is Staff proposing a different ROE and ROR for the Company in this testimony than in Staff's direct testimony?

A. No.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner
BOB BURNS
Commissioner

EXHIBIT
S-13
ADMITTED

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO. INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO. W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO. INC., FOR AUTHORITY TO ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM; AND ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	DOCKET NO. W-03514A-13-0142

SUPPLEMENTAL

TESTIMONY OF

JOHN A. CASSIDY

PUBLIC UTILITIES ANALYST

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

JANUARY 24, 2014

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SUPPLEMENTAL SCHEDULES

Capital Structure and Weighted Cost of Capital JAC-1

EXECUTIVE SUMMARY
PAYSON WATER COMPANY
DOCKET NO. W-03514A-13-0111, ET AL.

The supplemental testimony of Staff witness John A. Cassidy addresses the following issues:

Capital Structure – Staff recommends that the Commission adopt a capital structure for Payson Water Company ("Company") for this proceeding consisting of 0.0 percent debt and 100.0 percent equity.

Cost of Equity – Staff recommends that the Commission adopt a 9.0 percent return on equity ("ROE") for the Company. Staff's estimated ROE for the Company is based on the 8.4 percent average of its discounted cash flow method ("DCF") and capital asset pricing model ("CAPM") cost of equity methodology estimates for Staff's sample companies of 8.8 percent for the DCF and 8.02 percent for the CAPM. Staff's recommended ROE includes an upward economic assessment adjustment of 60 basis points (0.6 percent).

Cost of Debt – The Company's cost of debt is 5.6 percent; however, Staff has reflected a zero cost of debt in order to isolate the effects of the debt, and its associated future plant addition, to the Company's Mesa Del Caballo customers pursuant to a previous Commission approved WIFA debt surcharge.

Overall Rate of Return – Staff recommends that the Commission adopt a 9.0 percent overall rate of return.

Mr. Bourassa's Testimony – The Commission should continue to reject the Company's proposed 11.0 percent ROE.

I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is John A. Cassidy. I am a Public Utilities Analyst employed by the Arizona Corporation Commission ("Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same John A. Cassidy who filed direct and surrebuttal testimony in this consolidated docket?

A. Yes, I am.

Q. Mr. Cassidy, what is the purpose of your supplemental testimony in this rate proceeding?

A. The purpose of my supplemental testimony is to respond to the rejoinder testimony of Payson Water Company ("Payson Water" or "Company") witness, Mr. Jason Williamson, concerning Payson Water's requested Phase II financing/surcharge, and to the cost of capital rejoinder testimony of Company witness, Mr. Thomas J. Bourassa. In the rejoinder testimony filed by these two Company witnesses, Payson Water has fundamentally altered its prior position as it relates to the requested Phase II financing and Phase II financing surcharge, which in turn has led to modifications to both the Company's proposed capital structure and overall rate of return ("ROR") in the rate portion of this consolidated docket. In view of changes made to the Company's position in rejoinder testimony, Staff has likewise determined the need to modify certain of its prior recommendations in this docket. Accordingly, my supplemental testimony will briefly discuss the changes made to the Company's position in rejoinder, and why they necessitate a modification to Staff's recommended capital structure and overall ROR for the Company in this proceeding.

Q. Please explain how Staff's supplemental testimony is organized.

A. Staff's supplemental testimony is presented in four sections. Section I is this introduction. Section II presents Staff's comments on the rejoinder testimony of Company witness, Mr. Williamson. Section III presents Staff's comments on the rejoinder testimony of the Company's cost of capital witness, Mr. Bourassa. Finally, Section IV presents Staff's newly modified cost of capital recommendations.

II. STAFF RESPONSE TO COMPANY WITNESS MR. JASON WILLIAMSON

Q. In what way has the rejoinder testimony filed by Mr. Williamson altered the Company's position as it relates to Payson Water's request for the Phase II financing and Phase II surcharge?

A. In his rejoinder testimony, Mr. Williamson has withdrawn the Company's request for approval of both the Phase II financing and the Phase II financing surcharge.[1]

Q. Why does the above change to the Company's position necessitate a change to Staff's recommended capital structure and overall ROR in this proceeding?

A. In its pre-filed direct and surrebuttal testimony, Staff recommended approval of the Company's request for both the Phase II financing and the Phase II financing surcharge. As a consequence, Staff included the Phase II debt in its recommended pro forma capital structure for the Company. However, in view of the Company withdrawing its request for the Phase II financing, the pro forma capital structure originally recommended by Staff no longer has immediate relevance for purposes of setting rates in this docket. Accordingly, a change to Staff's recommended capital structure is needed to give recognition to this development, which in turn will result in a change to Staff's recommended overall ROR for the Company.

[1] *See* Williamson Rejoinder, Table on p. 3, and discussion on pp. 4-5.

Q. What is Staff's current recommended pro forma capital structure for Payson Water?

A. In both its pre-filed direct and surrebuttal testimony, Staff recommended a pro forma capital structure composed of 52.8 percent debt and 47.2 percent equity. The debt component of Staff's recommended pro forma capital structure is comprised of the $275,000 Phase I debt authorized by the Commission in Decision No. 74175, and the Staff recommended $904,650 Phase II debt requested by the Company.[2]

Q. What capital structure does Staff now recommend for the Company?

A. Staff now recommends a capital structure comprised of 0.0 percent debt and 100.0 percent equity. Staff's recommended capital structure is reflective of the Company's actual capital structure as of the December 31, 2012 test-year end.

Q. Why does Staff exclude the $275,000 Phase I debt authorized by the Commission in Decision No. 74175 from its recommended capital structure for Payson Water?

A. Proceeds from the Phase I debt financing approved by the Commission are to be used to fund the planned interconnection of the Company's Mesa del Caballo ("MDC") system to the Town of Payson's water system via the Cragin pipeline. Because only MDC customers are to benefit from the planned interconnection, Staff recommended approval of a WIFA loan surcharge which would apply only to customers of the MDC system. In Decision No. 74175, the Commission authorized the Company's requested Phase I financing and approved the WIFA loan surcharge as recommended by Staff. Thus, given the ordering language contained in Decision No. 74175[3] expressive of the Commission's desire that MDC customers be responsible for repayment of the Phase I debt by means of a monthly surcharge, Staff's recommended capital structure excludes the Phase I debt in

[2] *See* Cassidy Direct, p. 7, footnote 1.
[3] Decision No. 74175, p. 16, lines 13-21.

order to isolate/separate that component from the capital structure to be used for purposes of setting rates for all Payson Water customers, regardless of system.

III. STAFF RESPONSE TO COMPANY'S COST OF CAPITAL WITNESS MR. THOMAS J. BOURASSA

Q. In his rejoinder testimony, does Mr. Bourassa propose a different capital structure for Payson Water than that proposed in his pre-filed direct and rebuttal testimony?

A. Yes. In rejoinder testimony, Mr. Bourassa now proposes a capital structure consisting of 20.71 percent debt and 79.29 percent equity,[4] and is reflective of an anticipated drawdown of $274,325 of Commission authorized Phase I Water Infrastructure Finance Authority of Arizona ("WIFA") debt. Previously, Mr. Bourassa had proposed a capital structure for the Company consisting of 0.0 percent debt and 100.0 percent equity. Effectively, the Company is now proposing that its previously approved WIFA loan surcharge be voided in favor of including the funding of this loan in the base rates and charges billed to all system customers.

Q. In rejoinder testimony, what cost of debt does Mr. Bourassa propose for the Company?

A. He proposes a cost of debt for the Company of 5.6 percent.[5] Mr. Bourassa states that this is the cost rate for the Commission authorized WIFA loan, which is expected to close this month.[6]

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[4] *See* Bourassa Rejoinder, p. 2, lines 5-7, and Rejoinder Schedule D-1.
[5] *See* Bourassa Rejoinder, p. 2, line 8.
[6] *See* Bourassa Rejoinder, p. 3, lines 7-8.

Q. For purposes of his rejoinder testimony, has Mr. Bourassa updated his cost of equity analysis for Payson Water?

A. No. He continues to propose a ROE of 11.00 percent for the Company.

Q. Given the changes noted above to Mr. Bourassa's proposed capital structure and cost of debt, what overall ROR does he now propose for the Company?

A. In rejoinder, Mr. Bourassa now proposes an overall ROR for the Company of 9.88 percent. Previously, due to his recommended 100.0 percent equity capital structure, his proposed ROR was equal to his proposed 11.00 percent ROE.

Q. Does Staff believe that the capital structure and overall ROR proposed by Mr. Bourassa in his rejoinder testimony should be adopted in this proceeding?

A. No. For the reasons noted earlier, Staff now recommends a 100.0 percent equity capital structure for the Company, and an overall ROR of 9.0 percent based upon Staff's recommended 9.0 percent ROE. Staff's supplemental position continues to support the Commission's previous decision to have the Company's currently approved WIFA loan funding requirement paid exclusively by the Payson Water MDC-system customers.

IV. STAFF RECOMMENDATIONS

Q. Please summarize Staff's cost of capital recommendations for the Company.

A. Staff recommends the following for Payson Water's cost of capital:

1. A capital structure of 0.0 percent debt and 100.0 percent equity.
2. A 9.0 percent return on equity (a figure which includes an upward 60 basis point (0.6 percent) economic assessment adjustment).
3. A 9.0 percent overall rate of return.

Payson Water Company Cost of Capital Calculation
Capital Structure
And Weighted Average Cost of Capital
Staff Recommended and Company Proposed

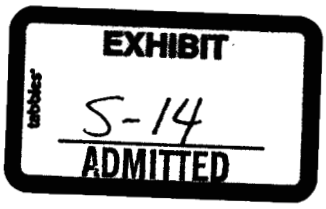
[A]	[B]	[C]	[D]
Description	Weight (%)	Cost	Weighted Cost
Staff Recommended Structure			
Debt	0.0%	0.0%	0.0%
Common Equity	100.0%	9.0%	9.0%
Weighted Average Cost of Capital			9.0%
Company Proposed Structure			
Debt	20.71%	5.60%	1.16%
Common Equity	79.29%	11.00%	8.72%
Weighted Average Cost of Capital			9.88%

[D] : [B] x [C]

Supporting Schedules: JAC-2, JAC-3 and JAC-4.

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner



IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	)	DOCKET NO. W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., FOR AUTHORITY TO ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM AND ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	)	DOCKET NO. W-03514A-13-0142

DIRECT

TESTIMONY

OF

CRYSTAL S. BROWN

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

NOVEMBER 15, 2013

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EXECUTIVE SUMMARY
PAYSON WATER CO., INC.
DOCKET NOS.
W-03514A-13-0111 and W-03514A-13-0142

Rate Application

Payson Water Company, Inc. ("Payson" or "Company") is an Arizona Class C utility engaged in the business of providing potable water service in portions of Gila County, Arizona. Payson serves over 1,100 customers.

The Company proposes a $399,785, or 124.73 percent revenue increase from $320,525 to $720,310. The proposed revenue increase would produce an operating income of $72,540 for an 11.00 percent rate of return on an original cost rate base ("OCRB") of $659,457. For the United System, the Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 1,434 gallons from $18.77 to $43.18, for an increase of $24.42 or 130.10 percent.

Staff recommends a $240,721 or 75.10 percent revenue increase from $320,525 to $561,246. Staff's recommended revenue increase would produce an operating income of $38,262 for a 6.40 percent rate of return on a Staff adjusted OCRB of $425,129 as shown on Schedule CSB-1. For the United System, Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 1,434 gallons from $18.77 to $25.74, for an increase of $6.97 or 37.13 percent.

Staff recommends denial of the Company proposed O&M Surcharge at this time.

Financing Application

On May 17, 2013, Payson filed a financing application requesting authority to borrow up to $1,238,000 from the Water Infrastructure and Finance Authority of Arizona ("WIFA") to fund improvements to the Company's Mesa del Caballo water system. In Decision No. 74175, dated October 25, 2013, the Commission approved the Company proposed $275,000 Phase I financing. On October 28, 2013, the Company revised its cost estimates for the proposed Phase II financing to a level of $904,650. Staff recommends approval of the $904,650 Phase II amount as discussed in the direct testimony of Staff witness, John Cassidy.

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Crystal S. Brown. I am a Public Utilities Analyst V employed by the Arizona Corporation Commission ("Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Briefly describe your responsibilities as a Public Utilities Analyst V.

A. I am responsible for the examination and verification of financial and statistical information included in utility rate applications. In addition, I develop revenue requirements, prepare written reports, testimonies, and schedules that include Staff recommendations to the Commission. I am also responsible for testifying at formal hearings on these matters.

Q. Please describe your educational background and professional experience.

A. I received a Bachelor of Science Degree in Business Administration from the University of Arizona and a Bachelor of Science Degree in Accounting from Arizona State University.

Since joining the Commission in August 1996, I have participated in numerous rate cases and other regulatory proceedings involving electric, gas, water, and wastewater utilities. I have testified on matters involving regulatory accounting and auditing. Additionally, I have attended utility-related seminars sponsored by the National Association of Regulatory Utility Commissioners ("NARUC") on ratemaking and accounting designed to provide continuing and updated education in these areas.

Q. What is the scope of your testimony in this case?

A. I am presenting Staff's analysis and recommendations in the areas of rate base and operating revenues, expenses, and rate design regarding the Payson Water Company, Inc. ("Payson" or "Company") application for a permanent rate increase. I also address Staff's recommendations regarding the Company's request for approval of an O&M surcharge. Staff witness, John Cassidy, is presenting Staff's cost of capital and financing recommendations. Staff witness, Jian Liu, is presenting Staff's engineering analysis and recommendations.

Q. What is the basis of your recommendations?

A. I performed a regulatory audit of the Company's application to determine whether sufficient, relevant, and reliable evidence exists to support the Company's requested rate increase. The regulatory audit consisted of examining and testing the financial information, accounting records, and other supporting documentation and verifying that the accounting principles applied were in accordance with the Commission-adopted NARUC Uniform System of Accounts ("USoA").

BACKGROUND

Q. Please provide a brief description of Payson and the service it provides.

A. Payson is an Arizona Class C utility engaged in the business of providing potable water service in portions of Gila County, Arizona. Payson serves over 1,100 customers. Payson's current rates were approved in Decision No. 62320, dated February 17, 2000 and Decision No. 62401, dated March 30, 2000.

Q. What is the primary reason for Payson's requested permanent rate increase?

A. Payson was ordered to file a rate case in Decision No. 73774, dated March 21, 2013.

CONSUMER SERVICE

Q. Please provide a brief history of customer complaints received by the Commission regarding Payson.

A. Staff reviewed the Commission's records and found the following, for the years 2010 to 2013:

- **2013** – 24 complaints (13 billing, 4 quality of service; 7 disconnect/termination);
- **2012** – 61 complaints (16 billing, 2 new service; 1 service; 31 quality of service; 9 disconnect/termination; 1 rates and tariffs; and 1other ACC Admin question);
- **2011** – 81 complaints (33 billing, 3 new service; 1 service; 30 quality of service; 13 disconnect/termination; and 1 other company policy); and
- **2010** – 12 complaints (6 billing; 1 deposit; 4 quality of service; 1 disconnect/termination)

All complaints have been resolved and closed.

COMPLIANCE

Q. Please provide a summary of the compliance status of Payson.

A. A check of the Compliance database indicates that there are currently no delinquencies for Payson.

SUMMARY OF PROPOSED REVENUES

Q. Please summarize the Company's filing.

A. The Company proposes a $399,785, or 124.73 percent revenue increase from $320,525 to $720,310. The proposed revenue increase would produce an operating income of $72,540 for an 11.00 percent rate of return on an original cost rate base ("OCRB") of $659,457. For the United System, the Company's proposed rates would increase the typical

residential 5/8 x 3/4-inch meter bill with a median usage of 1,434 gallons from $18.77 to $43.18, for an increase of $24.42 or 130.10 percent.

Q. Please summarize Staff's recommended revenue.

A. Staff recommends a $240,721 or 75.10 percent revenue increase from $320,525 to $561,246. Staff's recommended revenue increase would produce an operating income of $38,262 for a 6.40 percent rate of return on a Staff adjusted OCRB of $425,129 as shown on Schedule CSB-1. For the United System, Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 1,434 gallons from $18.77 to $25.74, for an increase of $6.97 or 37.13 percent.

Q. What test year did Payson utilize in this filing?

A. Payson's test year is based on the twelve months ended December 31, 2012.

Q. Please summarize Staff's rate base and operating income adjustments for Payson.

A. Staff's testimony discusses the following adjustments:

Rate Base Adjustments

Unsupported Plant Treated As Contributions In Aid of Construction "CIAC" – This adjustment decreases rate base by a net $58,665 to reflect the unsupported cost of plant additions placed in service prior to 2009 while the Company was under different ownership. The adjustment is composed of the net of a $70,120 increase to CIAC and an $11,455 increase to amortization of CIAC.

Unsupported Removal of CIAC Related to the Condemnation Sale of Star/Quail Valley System – This adjustment decreases rate base by a net $175,663 to reflect the removal of

CIAC that was shown to be related to the plant that was sold. The adjustment adds back $470,913 in CIAC and $295,250 in amortization of CIAC which the Company claims was solely for the system that was sold but had no documentation to support its claim.

Operating Income Adjustments

Salaries and Wages – This adjustment decreases salaries and wages expense by $2,507 to remove the direct labor expenses related to the Star/Quail Valley system that was sold.

Contractual Services Expense – This adjustment decreases contractual services expense by $1,683 to reflect updated legal expenses related to the sale of the Star/Quail Valley system.

Corporate Office Allocation – The adjustment decreases miscellaneous expense by $43,260 to remove bonuses and reflects corporate allocation costs that should be reduced due to the loss of customers and plant from the sale of the Star/Quail Valley System.

Miscellaneous Expense, Beaver Valley Write Off – This adjustment decreases miscellaneous expense by $7,857 to remove costs incurred by the prior owner in exploring the possibility of purchasing Beaver Valley Water Company.

Miscellaneous Expense, Other – This adjustment decreases miscellaneous expense by $7,007 to remove expenses that should be treated as pass-throughs such sales taxes and the Commission annual assessment. The adjustment also removes costs related to the sale of the Star/Quail Valley system and the water augmentation revenue.

Depreciation Expense – This adjustment decreases depreciation expense by $26,198 to reflect Staff's calculation of depreciation expense using Staff's recommended depreciation rates and Staff's recommended plant and CIAC balances.

Income Tax Expense – This adjustment increases income tax expenses by $34,236 to reflect the income tax calculation on Staff's adjusted test year operating loss.

RATE BASE

Fair Value Rate Base

Q. Did the Company prepare schedules showing the elements of Reconstruction Cost New Rate Base?

A. No, the Company did not. The Company's filing treats the OCRB the same as the fair value rate base.

Gain On Condemnation Sale of Star/Quail Valley System

Q. During the test year was the Company's Star/Quail Valley water system condemned by and sold to the Town of Star Valley??

A. Yes. According to the Company's response to data request CSB 1.17, "The Town of Star Valley paid Brooke Utilities $780,000 for condemnation of the Star Valley/Quail Valley water system. This amount was determined through settlement negotiations between the parties and then approved and ordered by the court."

Q. What amount of gain did the Company record as a result of the condemnation sale?

A. The Company recorded a gain in the amount of $755,709.

Q. How is a gain on the sale of an asset calculated

A. In general, a gain on the sale of an asset is calculated by comparing the amount of cash or other compensation received for an asset to the asset's book value at the time of the sale. If the value received is greater than the asset's book value, the difference is recorded as a gain.

Q. What portion of the Star/Quail Valley plant was depreciated?

A. According to the Company's response to CSB 1.18, $488,308 of the $745,008 original cost was depreciated.

Q. Does depreciated plant reflect the cost of the plant that had been recovered through rates?

A. Yes. The Company had recovered $488,308 of the Star/Quail Valley plant cost from its customers through rates at the time the system was sold.

Q. Did Payson's customers also fund the repair and maintenance expense on the Star/Quail Valley system for the years it was in service?

A. Yes.

Q. In Staff's opinion, does the $755,709 gain belong to the Company or the owner of the Company?

A. The gain belongs to the Company since the Company and the owner of the Company are separate legal entities and the Company, rather than the owner, faced condemnation of the plant.

Q. Does Staff typically recommend a sharing of the gain on plant that customers have paid for, and for which they have funded repairs and maintenance on the plant?

A. In general, yes. For example, in Decision No. 66849 (page 34, line 19), the Commission authorized a 50/50 sharing of a $1.4 million settlement that Arizona Water Company received.

Q. To the best of Staff's knowledge, does the Company currently have the $755,709?

A. No, it does not. The new owner of the Company indicated that the money had been removed from the Company before he purchased it from the prior owner.

Q. What is Staff's recommendation concerning the gain?

A. Staff does not recommend a sharing of the gain because of the change in ownership. However, Staff would like to bring to the Commission's attention that it appears the previous owner received the benefit of the entire gain.

Rate Base Summary

Q. Please summarize Staff's adjustments to Payson's rate base shown on Schedules CSB-3 and CSB-4.

A. Staff's adjustments to Payson's rate base resulted in a net decrease of $234,328, from $659,457 to $425,129 due to various adjustments as discussed in Staff's testimony.

Rate Base Adjustment No. 1 – Unsupported Plant Treated as CIAC

Q. What type of documentation does Staff review in its audit?

A. Staff reviews source documentation in its audit.

Q. What is the definition of "source documentation"?

A. Source documentation is an original record containing the details to substantiate a transaction entered in an accounting system. For example, the source document for the purchase of a pump would be the supplier's invoice.

Q. As a part of the audit of the Company's plant, did Staff select a sample of plant items and request that the Company provide source documentation (i.e. invoices) to support the cost?

A. Yes. Staff selected a sample of plant additions from the years 2000 to 2012 and requested invoices to support the plant cost.

Q. Did the Company provide invoices for all of the plant selected in the sample?

A. No, the Company provided invoices for the years 2009 to 2012, but did not provide invoices for plant added prior to 2009.

Q. What reason did the Company give for not providing the invoices?

A. The Company indicated that it was unable to obtain them from the prior owner.

Q. Are plant costs required to be supported?

A. Yes. The Arizona Administrative Code R14-2-610 D.1 states, "Each utility shall keep general and auxiliary accounting records reflecting the cost of its properties . . . and all other accounting and statistical data necessary to give complete and authentic information as to its properties . . ." (emphasis added).

Q. Why are invoices needed?

A. Invoices are needed to determine who paid for the plant and to determine if the amount reported on the invoice is the same amount that was added to the plant account total.

Q. Does Staff typically recommend that inadequately supported plant costs be treated as CIAC?

A. Yes. It is the Company's responsibility to support its claimed costs. If unsupported costs are not removed, ratepayers are at risk of paying for overstated costs.

Q. Did Staff recommend that 100 percent of the unsupported plant be treated as CIAC in this case?

A. No, Staff recommends that only 30 percent of the unsupported plant be treated as CIAC.

Q. Has Staff conditioned its continued treatment of the unsupported plant on any action by the Company?

A. Yes, Staff has conditioned its treatment of this unsupported plant on the requirement that the Company file a signed affidavit stating that it believes that the Company actually paid for the unsupported plant. This affidavit should be filed with Docket Control by December 6, 2013.

Q. What is Staff's recommendation?

A. Staff recommends increasing CIAC by $70,120 and increasing amortization of CIAC by $11,455 resulting in a net decrease to rate base of $58,665 as shown in column B on Schedules CSB-4 and CSB-5.

Rate Base Adjustment No. 2 – Unsupported Removal of CIAC Related to Condemnation Sale of the Star/Quail Valley System

Q. At the beginning of the test year, how many separate water systems was Payson composed of?

A. At the beginning of the test year, Payson was composed of eight water systems: Geronimo Estates, Deer Creek, Meads Ranch, Whispering Pines, Flowing Springs, Gisela/TCS, Star/Quail Valley, and East Verde Park Estates.

Q. Was the accounting for these eight systems recorded using eight separate charts of accounts and accounting systems?

A. No, the accounting for the eight water systems was recorded using one accounting system and one chart of accounts.

Q. Was the CIAC for all eight water systems also recorded in one CIAC account?

A. Yes.

Q. How does the Company's 2011 CIAC balance compare to the test year (i.e. 2012)?

A. The Company's CIAC balance decreased by $502,246, from $877,282 in 2011 to $375,036 in 2012 (i.e., test year).

Q. Why did the CIAC balance decrease by $502,246?

A. According to the Company's response to data request CSB 1.22, the $502,246 decrease was caused primarily by the condemnation sale of the Star/Quail Valley system.

Q. What amount of CIAC and amortization of CIAC did the Company remove from its books as a result of the sale of the Star/Quail Valley system?

A. According to the Company's response to data request CSB 2.17, the Company removed $548,628 from CIAC and $343,975 from amortization of CIAC.

Q. Did Staff request documentation to support the Company's claim?

A. Yes.

Q. Why did Staff request the documentation?

A. Since the Company recorded CIAC for all eight of its water systems in one CIAC account, the CIAC could relate to any one of the eight systems. Removing CIAC that was not related to the Star/Quail Valley system would over-state rate base and, in turn, inflate rates paid by Payson's customers.

Q. What amount of the $548,628 in CIAC could the Company support as being used to construct the Star/Quail Valley system?

A. The Company could support only $77,715; therefore, Staff disallowed the remaining $470,913 in CIAC that was unsupported as shown on Schedule CSB-6.

Q. Did Staff make a corresponding adjustment to the Company proposed removal of $343,975 in amortization of CIAC related to the Star/Quail Valley system?

A. Yes. Staff allowed $48,725 of the Company proposed $343,975 in amortization of CIAC and disallowed the remaining $295,250 as shown on Schedule CSB-6.

Q. What is Staff's recommendation?

A. Staff recommends increasing CIAC by $470,913 and increasing amortization of CIAC by $295,250, for a net $175,663 decrease in rate base as shown on Schedules CSB-4 and CSB-6.

OPERATING INCOME

Operating Income Summary

Q. What are the results of Staff's analysis of test year revenues, expenses and operating income?

A. As shown on Schedules CSB-7 and CSB-8, Staff's analysis resulted in test year revenues of $320,525, expenses of $448,728 and an operating loss of $128,203.

Operating Income Adjustment No. 1 – Salaries and Wages

Q. What expenses did the Company propose to remove due to the condemnation sale of the Star/Quail Valley System?

A. As shown on Schedule C-2, page 6 of Mr. Bourassa's direct testimony, the Company is proposing to remove $5,949 for purchased power expense, $257 for chemicals, $47 for repairs and maintenance, $606 for bad debt expense, $130 for travel and lodging, and $12,198 for contractual services professional fees.

Q. Did the Company remove any direct labor incurred for maintaining and operating the Star/Quail Valley system?

A. No, it did not.

Q. Did Staff request information related to maintenance of the Star/Quail Valley system?

A. Yes, Staff requested this information in data request CSB 2.20.

Q. Did the Company provide the information?

A. No, it did not.

Q. Did Staff utilize information that the Company provided to other data requests to calculate an amount for salaries and wages?

A. Yes, Staff calculated a $2,507 salary and wage expense for Star/Quail Valley from other information provided by the Company as shown on Schedule CSB-9. Staff determined from the Company's response to CSB 2.11 that four employees spent 165 actual direct labor hours working on the Star/Quail Valley system. Staff then multiplied the actual hours by the employees' hourly rates identified in data request CSB 1.24.

Q. What is Staff's recommendation?

A. Staff recommends decreasing salaries and wage expense by $2,507 as shown on Schedules CSB-8 and CSB-9.

Operating Income Adjustment No. 2 – Contractual Services

Q. What amount in contractual services is the Company proposing to remove due to the condemnation sale of the Star/Quail Valley system?

A. The Company is proposing to remove $12,198 in professional fees as shown on Schedules C-1, page 1 and C-2 page 6 of Mr. Bourassa's testimony.

Q. What are the professional fees?

A. The professional fees relate to the legal costs incurred due to the condemnation sale of the Star/Quail Valley system. These costs are non-recurring and should be removed for ratemaking purposes.

Q. Did the Company provide updated costs on the legal fees incurred for the condemnation sale of the Star/Quail Valley system.

A. Yes, in response to data request CSB 1.31, the legal expenses had increased by $1,683, from $12,198 to $13,881.

Q. What is Staff's recommendation?

A. Staff recommends decreasing contractual services expense by $1,683 as shown on Schedules CSB-8 and CSB-10.

Operating Income Adjustment No. 3 – $197,722 Corporate Office Allocation

Q. Who was the parent company of Payson during the test year?

A. Brooke Utility, Inc. ("Brooke") was Payson's parent company during the test year.

Q. How many utilities did Brooke own?

A. According to the application, Brooke owned three utility companies: Payson, Tonto Basin Water Company, Inc., and Navajo Water Company, Inc.

Q. Did Brooke use shared services to manage and operate Brooke and the three regulated utilities during the test year?

A. Yes, Brooke used a shared service arrangement to manage and operate Brooke and the three regulated utilities during the test year. The shared services included, but were not

limited to, employees, transportation, office building space, office supplies, utilities, computers, computer software, telephone, insurance, and other miscellaneous equipment, plant, and professional services.

Q. Out of what location were the shared services provided?

A. The shared services were provided out of the corporate office located in Bakersfield, California.

Q. What was the actual test year amount incurred for the shared services?

A. The actual test year amount was $197,722.

Q. Subsequent to the test year, was Payson sold to a new owner?

A. Yes, Payson was sold to Mr. Jason Williamson. Mr. Williamson is owner and President of Pivotal Utility Management, Inc. Pivotal owns or manages the following: Verde Santa Fe Wastewater, Inc., Pine Meadows Utilities, LLC, Bensch Ranch Utilities, LLC, Coronado Utilities, Tonto Basin Water Company, Inc., Navajo Water Company, Inc., and Bison Ranch Estates. Pivotal's corporate office is located in Denver, Colorado.

Q. Did the new owner propose a different corporate office allocation?

A. Yes, in response to data request CSB 2.8, Mr. Williamson proposed $173,903.

Q. Did Staff ask for documentation to support the Company proposed $173,903?

A. Yes in data request CSB 2.8 (c).

Q. What was the Company's response?

A. The Company stated that "The management fees are an estimate because at this time there is very little ownership experience with the utilities acquired from Brook Utilities."

Q. Is the Company's proposed $173,903 corporate office allocation known and measurable?

A. No, it is not because the Company's estimate was not determined based on actual operating data adjusted for known and measurable changes.

Q. Did Staff use the $173,000 estimate or the $197,722 actual test year amount as the basis for its analysis?

A. Staff used the $197,722 actual test year amount as the basis of its analysis.

Q. What adjustment did Staff make to the $197,722 corporate office allocation?

A. As shown on schedule CSB-11, Staff removed $33,545 for bonuses, $138 for advertising and promotion, and $12 for fines and penalties as these costs are not needed in the provision of service. Also, Staff removed $949 for tools and equipment and Staff removed $850 related to a gain on the sale of an asset as these amounts are not operating expenses.

Q. Did Staff also remove costs related to the loss of Star/Quail Valley customers and plant?

A. Yes.

Q. What was Payson's customer count by water system prior to the sale of the Star/Quail Valley water system?

A. The customer count by system prior to the sale was as follows:

Payson Water Company Customer Count By Water System		
Name	Customers	Percentage
Geronimo Estates	83	5.54%
Deer Creek	121	8.07%
Meads Ranch	69	4.60%
Whispering Pines	146	9.74%
Flowing Springs	29	1.93%
Gisela/TCS	162	10.81%
Star/Quail Valley	**385**	**25.68%**
East Verde Park Estates	140	9.34%
Mesa Del Caballo	364	24.28%
Total	**1,499**	100.00%

Q. What corporate office allocation expenses did Staff adjust due to the loss of Star/Quail Valley customers and plant?

A. Staff decreased costs that would vary based on customer count and plant. Staff removed $4,308 for shared service salary and wage expense, $635 for payroll taxes, and $489 for benefits expense related to billing, customer service, accounting, payroll, human resources, and other similar expenses. Further, Staff removed $1,881 for office supplies and expense, $320 for bank charges and fees, $128 for property and casualty insurance and $1,706 for management fees that will no longer be needed to provide service to the Star/Quail Valley system.

Q. What is Staff's recommendation?

A. Staff recommends decreasing miscellaneous expense by $43,260 as shown on Schedules CSB-8 and CSB-11.

Operating Income Adjustment No. 4 – Miscellaneous Expense, Beaver Valley Write Off

Q. Did the Company propose to recover $7,857 in costs associated with Beaver Valley Water Company?

A. Yes.

Q. Why was the expense incurred?

A. According to the Company's response to data request CSB 2.3 (a) the "Expenses related to research and due diligence by PWC for the possible acquisition of Beaver Valley Water Co."

Q. Was the cost needed in the provision of service for Payson's customers?

A. No, the cost was not needed in the provision of service to Payson's customers. The cost was incurred by the previous parent company, Brooke, to explore the possibility of purchasing Beaver Valley Water Company. As such, the expense is properly allocated to the parent company.

Q. What is Staff's recommendation?

A. Staff recommends decreasing miscellaneous expense by $7,857 as shown on Schedules CSB-8 and CSB-12.

Operating Income Adjustment No. 5 – Miscellaneous Expense Other

Q. What did the Company propose for miscellaneous expense?

A. The Company proposed $232,253 for miscellaneous expense.

Q. What adjustment did Staff make?

A. As shown on Schedule CSB-13, Staff removed $2,438 for a consumption report regarding water augmentation costs. This cost will be non-recurring due to Staff's recommendation to eliminate the water augmentation surcharge in Phase I of this proceeding. Staff removed $2,438 in chemical costs which the Company stated in response to CSB 2.6 was duplicative. Staff also removed $825 for costs related to a "Star Valley deposit sort" as the Company no longer owns the Star/Quail Valley System.

Q. Did Staff remove any other costs?

A. Yes, Staff removed $1,076 in sales taxes paid to the Arizona Department of Revenue. Staff also removed $1,018 for the Company's annual assessment from the Commission. Staff recommends that, in addition to the collection of the Company's regular rates and charges that the Company be authorized to collect a proportionate share of sales taxes and the ACC annual assessment.

Q. What is Staff's recommendation?

A. Staff recommends decreasing miscellaneous expense by $7,007, as shown on Schedules CSB-8 and CSB-13.

Operating Income Adjustment No. 6 – Depreciation Expense

Q. What is Payson proposing for depreciation expense?

A. Payson is proposing depreciation expense of $85,632.

Q. What adjustment did Staff make to depreciation expense?

A. Staff adjusted depreciation expense to reflect Staff's calculation of depreciation expense using Staff's recommended depreciation rates, plant balances, and CIAC balances. Staff's calculation is shown on Schedule CSB-14.

Q. What is Staff's recommendation?

A. Staff recommends decreasing depreciation expense by $26,198, as shown on Schedules CSB-8 and CSB-14.

Operating Income Adjustment No. 7 – Income Taxes

Q. What is Payson proposing for test year income tax expense?

A. Payson is proposing a negative $109,557 for income tax expense.

Q. Did Staff make any adjustments to test year income tax expense?

A. Yes. Staff's adjustment reflects Staff's calculation of the income tax expense based upon Staff's adjusted test year taxable income.

Q. What is Staff's recommendation?

A. Staff recommends increasing income tax expense by $34,236 as shown on Schedules CSB-8 and CSB-15.

O&M Expense Recovery Surcharge

Q. Has the Company requested an O&M Expense Recovery Surcharge?

A. Yes, as discussed on page 18 of Mr. Bourassa's testimony. This surcharge would address recovery of the operation and maintenance expense expected to be incurred when the Cragin Pipeline becomes fully operational.

Q. When will the Cragin Pipeline be completed?

A. The Cragin Pipeline will not be completed for another two or three years. Therefore, the operational costs related to the operation and maintenance of the pipeline are not known and measurable at the present time.

Q. Would Staff consider an O&M surcharge once the plant has been built and the Company has sufficient operational experience?

A. Yes, but addressing approval of such a surcharge now is premature.

Q. What is Staff's recommendation?

A. Staff recommends denial of the Company proposed O&M Surcharge at this time.

RATE DESIGN

Q. Has Staff prepared a schedule summarizing the present, Company proposed, and Staff recommended rates and service charges?

A. Yes. Schedule CSB-17 provides a summary of the Company's present, Company's proposed, and Staff's recommended rates.

Q. Please summarize the present rate design for Payson's United System.

A. Customer class is distinguished by meter size. The monthly minimum charges vary by meter size and include no gallons. The commodity rates are based on an inverted two- tier rate design.

Q. Please summarize the present rate design for Payson's C&S Systems.

A. Customer class is distinguished by meter size. The monthly minimum charges vary by meter size and include no gallons. One commodity rate applies to all usage.

Q. Has Payson proposed to consolidate the rates for the United System and the C&S system?

A. Yes. Payson has proposed one set of rates for the United and C&S systems and Staff concurrs.

Q. Please summarize the Company's proposed consolidated rate design.

A. Customer class is distinguished by meter size. The monthly minimum charges vary by meter size and include no gallons. The commodity rates are based on an inverted three-tier rate design. For the United System, the Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 1,434 gallons from $18.77 to $43.18, for an increase of $24.42 or 130.10 percent as shown on Schedule CSB-18.

Q. Please summarize Staff's recommended consolidated rate design.

A. Customer class is distinguished by meter size. The monthly minimum charges vary by meter size and include no gallons. The commodity rates are based on an inverted three-tier rate design. For the United System, Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 1,434 gallons from $18.77 to $25.74, for an increase of $6.97 or 37.13 percent as shown on Schedule CSB-18.

Q. Did the Company propose any changes to its Meter and Service Line Charges?

A. Yes, and Staff recommends approval. Both the Company-proposed and the Staff-recommended changes are shown on Schedule CSB-18 and are discussed in greater detail in the testimony of Staff witness, Jian Liu.

Service Charges

Q. Did the Company propose any changes to the service charges for the C&S Systems as a result of consolidating rates and charges for the United and C&S systems?

A. Yes. The Company proposes to increase the Meter Test charge from $20 to $25, increase the insufficient fund ("NSF") Check charge from $10 to $17.50, and to increase the Meter Re-Read from $10 to $15.

Q. Does Staff agree with the Company-proposed Meter Test (If Correct) charge, Meter Re-Read (If Correct) charge, and the NSF charge?

A. Yes. The proposed charges are reasonable and customary.

Q. Does Staff recommend the elimination of the $35 Establishment (After Hours) Charge, the $30 Reconnection (Delinquent and After Hours) Charge and to add a $35 After Hours Charge?

A. Yes, Staff recommends that the Establishment (After-Hours) Charge should be eliminated and that an After-Hours charge should be added. Staff agrees that an additional fee for service provided after normal business hours is appropriate when such service is at the customer's request. Such a tariff compensates the utility for additional expenses incurred from providing after-hours service.

Moreover, Staff concludes that it is appropriate to apply an after-hours service charge in addition to the charge for any utility service provided after hours at the customer's request. For example, under Staff's proposal, a customer would be subject to a $25.00 Establishment fee if it is done during normal business hours, but would pay an additional $35 after-hours fee if the customer requested that the establishment be done after normal business hours.

FINANCING APPLICATION

Q. Did the Company file a financing application?

A. Yes. On May 17, 2013, Payson filed a financing application requesting authority to borrow up to $1,238,000 from the Water Infrastructure and Finance Authority of Arizona ("WIFA") to fund improvements to the Company's Mesa del Caballo water system. In Decision No. 74175, dated October 25, 2013, the Commission approved the Company proposed $275,000 Phase I financing. On October 28, 2013, the Company revised its cost estimates for Staff for the proposed Phase II financing to a level of $904,650.

Q. Does Staff recommend approval of the $904,650 amount?

A. Yes, Staff recommends approval of the $904,650 Phase II amount and that the related debt service be the responsibility of the Mesa Del Caballo customers as discussed in greater detail in the direct testimony of Staff witness, John Cassidy.

Q. Does this conclude Staff's Direct Testimony?

A. Yes, it does.

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Schedule CSB-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	[A] COMPANY ORIGINAL COST	[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	$ 659,457	$ 425,129
2	Adjusted Operating Income (Loss)	$ (182,479)	$ (128,203)
3	Current Rate of Return (L2 / L1)	-27.67%	-30.16%
4	Required Rate of Return	11.00%	6.40%
5	Required Operating Income (L4 * L1)	$ 72,540	$ 27,208
6	Operating Income Deficiency (L5 - L2)	$ 255,020	$ 155,412
7	Gross Revenue Conversion Factor	1.56766	1.54892
8	Increase (Decrease) In Gross Revenue (L7 * L6)	$ 399,785	$ 240,721
9	Adjusted Test Year Revenue	$ 320,525	$ 320,525
10	Proposed Annual Revenue (L8 + L9)	$ 720,310	$ 561,246
11	Required Increase/(Decrease in Revenue) (%) (L8/L9)	124.73%	75.10%

References:
Column [A]: Company Schedules A-1
Column [B]: Staff Schedules CSB-2, CSB-3, & CSB-15

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Schedule CSB-2

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
	Calculation of Gross Revenue Conversion Factor:				
1	Revenue	100.0000%			
2	Uncollecible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	35.4391%			
5	Subtotal (L3 - L4)	64.5609%			
6	**Revenue Conversion Factor (L1 / L5)**	1.548925			
	Calculation of Uncollecttible Factor:				
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	33.9956%			
9	One Minus Combined Income Tax Rate (L7 - L8)	66.0044%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0.0000%			
	Calculation of Effective Tax Rate:				
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	6.9680%			
14	Federal Taxable Income (L12 - L13)	93.0320%			
15	Applicable Federal Income Tax Rate (Line 53)	29.0519%			
16	Effective Federal Income Tax Rate (L14 x L15)	27.0276%			
17	Combined Federal and State Income Tax Rate (L13 +L16)		33.9956%		
	Calculation of Effective Property Tax Factor				
18	Unity	100.0000%			
19	Combined Federal and State Income Tax Rate (L17)	33.9956%			
20	One Minus Combined Income Tax Rate (L18-L19)	66.0044%			
21	Property Tax Factor	2.1870%			
22	Effective Property Tax Factor (L20*L21)		1.4435%		
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			35.4391%	
24	Required Operating Income	$ 27,208			
25	AdjustedTest Year Operating Income (Loss)	(128,203)			
26	Required Increase in Operating Income (L24 - L25)		$ 155,412		
27	Income Taxes on Recommended Revenue (Col. [C], L52)	$ 4,724			
28	Income Taxes on Test Year Revenue (Col. [A], L52)	(75,321)			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		80,045		
30	Recommended Revenue Requirement	$ 561,246			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncollectible Expense on Recommended Revenue (L30*L31)	$ -			
33	Adjusted Test Year Uncollectible Expense	$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)		-		
35	Property Tax with Recommended Revenue	$ 26,294			
36	Property Tax on Test Year Revenue	21,030			
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		5,265		
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)		$ 240,721		

		Test Year		Staff Recommended
	Calculation of Income Tax:			
39	Revenue	$ 320,525	$ 240,721	$ 561,246
40	Operating Expenses Excluding Income Taxes	$ 524,050	$ 5,264	$ 529,314
41	Synchronized Interest (L56)	$ 9,353		$ 9,353
42	Arizona Taxable Income (L39 - L40 - L41)	$ (212,878)		$ 22,579
43	Arizona State Income Tax Rate	6.9680%		6.9680%
44	Arizona Income Tax (L42 x L43)	$ (14,833)		$ 1,573
45	Federal Taxable Income (L42 - L44)	$ (198,045)		$ 21,005
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ (7,500)		$ 3,151
47	Federal Tax on Second Income Bracket ($51,001 - $75,000) @ 25%	$ (6,250)		$ -
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ (8,500)		$ -
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ (38,237)		$ -
50	Federal Tax on Fifth Income Bracket ($335,001 - $10,000,000) @ 34%	$ -		$ -
51	Total Federal Income Tax	$ (60,487)		$ 3,151
52	Combined Federal and State Income Tax (L44 + L51)	$ (75,321)		$ 4,724

53	Applicable Federal Income Tax Rate [Col. [C], L51 - Col. [A], L51] / [Col. [C], L45 - Col. [A], L45]	29.0519%

	Calculation of Interest Synchronization:	
54	Rate Base	$ 425,129
55	Weighted Average Cost of Debt	2.2000%
56	Synchronized Interest (L45 X L46)	$ 9,353

Payson Water Company, Inc.
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Schedule CSB-3

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	ADJ NO.	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 2,159,387	$ -		$ 2,159,387
2	Less: Accumulated Depreciation	1,332,825	-		1,332,825
3	Net Plant in Service	$ 826,562	$ -		$ 826,562
	LESS:				
4	Advances in Aid of Construction (AIAC)	$ -	$ -		$ -
5	Service Line and Meter Advances	$ -	$ -		$ -
6	Contributions in Aid of Construction (CIAC)	$ 375,036	$ 541,033	1	$ 916,069
7	Less: Accumulated Amortization	231,270	306,705	2	537,975
8	Net CIAC	$ 143,766	234,328		$ 378,094
9	Total Advances and Contributions	$ 143,766	$ 234,328		$ 378,094
10	Customer Deposits	$ -	$ -		$ -
11	Accumulated Deferred Income Taxes	$ 23,339	$ -		$ 23,339
	ADD: Working Capital				
12	Prepayments	$ -	$ -		$ -
13	Inventory	$ -	$ -		$ -
14	**Total Rate Base**	$ 659,457	$ (234,328)		$ 425,129

References:
Column [A], Company Schedule B-1, Page 1
Column [B]: Schedule CSB-4
Column [C]: Column [A] + Column [B]

Payson Water Company, Inc.
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Schedule CSB-4

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	PLANT IN SERVICE Acct. No.	Plant Description	[A] COMPANY AS FILED	[B] Adj No.1 Unsupported Plant Treated as CIAC Ref: Sch CSB-5	[C] ADJ No. 2 Unsupported Removal of CIAC Related to Sale of Star/Quail Valley System Ref: Sch CSB-6	[D] STAFF AS ADJUSTED
1						
2	301	Organization Cost	$ 221	$ -	$ -	$ 221
3	302	Franchises	-	-	-	-
4	303	Land and Land Rights	16,500	-	-	16,500
5	304	Structures and Improvements	300,078	-	-	300,078
	305	Collecting and Impounding Reserviors	2,531	-	-	2,531
6	307	Wells and Springs	273,013	-	-	273,013
7	309	Supply Mains	3,681	-	-	3,681
8	310	Power Generation Equipment	8,310	-	-	8,310
9	311	Pumping Equipment	217,608	-	-	217,608
10	320	Water Treatment Equipment	10,567	-	-	10,567
11	330	Distribution Reservoirs and Standpipes	273,800	-	-	273,800
12	330.2	Pressure Tanks	-	-	-	-
13	331	Transmission and Distribution Mains	439,972	-	-	439,972
14	333	Services	81,823	-	-	81,823
15	334	Meters and Meter Installations	199,952	-	-	199,952
16	335	Hydrants	1,171	-	-	1,171
17	336	Backflow Prevention Devices	-	-	-	-
18	339	Other Plant and Miscellaneous Equipment	320,820	-	-	320,820
19	340	Office Furniture and Equipment	-	-	-	-
20	340.1	Computers and Software	-	-	-	-
21	341	Transportation Equipment	-	-	-	-
22	343	Tools, Shop, and Garage Equipment	72	-	-	72
23	344	Laboratory Equipment	-	-	-	-
24	345	Power Operated Equipment	-	-	-	-
25	346	Communication Equipment	9,267	-	-	9,267
26	347	Miscellaneous Equipment	-	-	-	-
27	348	Other Tangible Equipment	-	-	-	-
28		Rounding	1	-	-	1
29	Total Plant in Service		$ 2,159,387	$ -	$ -	$ 2,159,387
30		Less: Accumulated Depreciation	$ 1,332,825	$ -	$ -	1,332,825
31	Net Plant in Service		$ 826,562	$ -	$ -	$ 826,562
32						
33	*LESS:*					
34	Advances in Aid of Construction (AIAC)		$ -	$ -	$ -	$ -
35	Meter Deposits - Service Line & Meter Advances		$ -	-	-	-
36						
37	Contributions in Aid of Construction (CIAC)		$ 375,036	70,120	470,913	916,069
38	Less: Accumulated Amortization of CIAC		$ 231,270	11,455	295,250	537,975
39	Net CIAC		$ 143,766	$ 58,665	$ 175,663	$ 378,094
40						
41	Total Advances and Net Contributions		$ 143,766	$ 58,665	$ 175,663	$ 378,094
42						
43	Customer Deposits		$ -	-	-	$ -
44	Accumulated Deferred Taxes		$ 23,339	-	-	$ 23,339
45						
46	*ADD: Working Capital*					-
47	Prepayments		$ -	-	-	$ -
48			$ -	-	-	$ -
49	**Total Rate Base**		$ 659,457	$ (58,665)	$ (175,663)	$ 425,129

Payson Water Company, Inc.
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Schedule CSB-5

RATE BASE ADJUSTMENT NO. 1 - UNSUPPORTED PLANT TREATED AS CIAC

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED	
1	CIAC, Unsupported Plant Treated as CIAC	$ -	$ 70,120	$ 70,120	Line 33
2	Amort of CIAC, Unsupported Plant Treated as CIAC	$ -	$ 11,455	$ 11,455	Line 50
3	Net CIAC, Unsupported Plant Treated as CIAC	$ -	$ 58,665	$ 58,665	
4					
5					
6					
7					
8					
9	**UNSUPPORTED PLANT TREATED AS CIAC**				
10					
11		**Plant Selected In Sample**	**Unsupported Plant Costs**	**Staff as Adjusted**	
12	**Description**				
13	2006 Plant Addition, Acct No. 307-Wells & Springs	**$ 11,646**	**$ -**	**$ 11,646**	
14					
15	2007 Plant Addition, Acct No. 310-Power Generation Equip.	**$ 20,059**	**$ -**	**$ 20,059**	
16					
17	2002 Plant Addition, Acct No. 311 - Pumping Equipment	$ 12,580	$ -	$ 12,580	
18	2005 Plant Addition, Acct No. 311 - Pumping Equipment	$ 12,467	$ -	$ 12,467	
19	2008 Plant Addition, Acct No. 311 - Pumping Equipment	19,722	-	19,722	
20	**Acct No. 311- Pumping Equipment Subtotal**	**$ 44,769**	**$ -**	**$ 44,769**	
21					
22	2001 Plant Addition, Acct No. 330-Distr Reserv & Standpipes	$ 24,296	$ -	$ 24,296	
23	2002 Plant Addition, Acct No. 330-Distr Reserv & Standpipes	31,220	-	31,220	
24	2003 Plant Addition, Acct No. 330-Distr Reserv & Standpipes	42,968	-	42,968	
25	**Acct No. 331- Transp. & Distrib. Mains Subtotal**	**$ 98,484**	**$ -**	**$ 98,484**	
26					
27	2003 Plant Addition, Acct No. 331-Services	**$ 23,284**	**$ -**	**$ 23,284**	
28					
29	2000 Plant Addition, Acct No. 334-Meters	**$ 35,491**	**$ -**	**$ 35,491**	
30					
31	**Total**	**$ 233,733**	**$ -**	**$ 233,733**	
32			**x**	**30%**	
33				**$ 70,119.90**	
34					
35					
36	**CALCULATION OF AMORTIZATION OF CIAC ON UNSUPPORTED PLANT**				
37					
38	Year Added / Plant Additions	Unsupported Plant	Year Transferred To CIAC	Number of Interim Years	Depreciation Rate / Amortization of CIAC
39	2000 Meters	$ 35,491	2000	12.5	8.33% $36,955.00
40	2001 Distrib Reserviors	$ 24,296	2001	11.5	2.22% $6,202.77
41	2002 Pumping Equip	$ 12,580	2002	10.5	12.50% $16,511.25
42	2002 Distrib Reserviors	$ 31,220	2002	10.5	2.22% $7,277.38
43	2003 Distrib Reserviors	$ 42,968	2003	9.5	2.22% $9,061.95
44	2003 Services	$ 23,284	2003	9.5	3.33% $7,365.89
45	2005 Pumping Equip	$ 12,467	2005	7.5	12.50% $11,687.81
46	2006 Wells and Springs	$ 11,646	2006	6.5	3.33% $2,520.78
47	2007 Pwr Gen Equip	$ 20,059	2007	5.5	5.00% $5,516.23
48	2008 Pumping Equip	$ 19,722	2008	4.5	12.50% $11,093.63
49		**$ 233,733**			$38,184.33
50					x 30%
					$ 11,455.30

References:

Column A: Company Schedule B-2
Column B: Testimony, CSB, Company Data Request Responses CSB 1.3
Column C: Column [A] + Column [B]

Payson Water Company, Inc.
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Schedule CSB-6

RATE BASE ADJUSTMENT NO. 2 -UNSUPPORTED REMOVAL OF CIAC RELATED TO SALE OF STAR/QUAIL VALLEY SYSTEM

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED	
1	Company Proposed Removal of CIAC Related to Sale	$ -	$ 548,628	$ 548,628	
2	Amount of Supported CIAC Related to Sale	$ -	$ (77,715)	$ (77,715)	
3	Unsupported Removal of CIAC Related to Sale	$ -	$ 470,913	$ 470,913	
4					
5	Company Proposed Removal of Amort of CIAC Related to Sale	$ -	$ 343,975	$ 343,975	
6	Amort. Of CIAC on $77,715 Supported CIAC	$ -	$ (48,725)	$ (48,725)	Line 26
7	Total Unsupported Removal of Amortization of CIAC	$ -	$ 295,250	$ 295,250	
8					
9	Net CIAC	$ -	$ 175,663	$ 175,663	
10					
11					
12					

13		Star/Quail Valley System		
14		CIAC	% of CIAC	
15		&	That Is Fully	
16		Amort of CIAC	Amortized	
17	CIAC for Star Valley Plant (CSB 2.17)	$ 548,628		
18	Amortization of CIAC for Star Valley Plant (CSB 2.17)	$ 343,975	63%	Line 18 / Line 17
19				
20				

21		Amortization
22		of CIAC on
23		$77,715 Amount
24		$ 77,715 From Line 2
25	Multiplied by	63% From Line 18
26		$ 48,725

References:
Column A: Company Schedule B-2
Column B: Testimony, CSB, Company Data Request Responses CSB 2.16 & CSB 2.17
Column C: Column [A] + Column [B]

Payson Water Company, Inc.
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Schedule CSB-7

OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	ADJ NO.	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
	REVENUES:						
1	Metered Water Sales	$ 313,559			$ 313,559	$ 236,971	$ 550,530
2	Water Sales - Unmetered	-	-		-		-
3	Other Operating Revenues	6,966	-		6,966	3,750	10,716
4	**Total Revenues**	$ 320,525	$ -		$ 320,525	$ 240,721	$ 561,246
5							
6	*EXPENSES:*						
7	Salaries and Wages	$ 55,097	$ (2,507)	1	$ 52,591	$ -	$ 52,591
8	Employee Pensions & Benefits	-	-		-	-	-
9	Purchased Power	50,533	-		50,533	-	50,533
10	Fuel for Power Production	-	-		-	-	-
11	Chemicals	2,181	-		2,181	-	2,181
12	Repairs and Maintenance	28,089	-		28,089	-	28,089
13	Office Supplies & Expense	-	-		-	-	-
14	Contractual Services	58,481	(1,683)	2	56,798	-	56,798
15	Water Testing	11,000	-		11,000	-	11,000
16	Rents	-	-		-	-	-
17	Transportation Expenses	-	-		-	-	-
18	Insurance - General Liability	-	-		-	-	-
19	Insurance - Health and Life	266	-		266	-	266
20	Reg. Comm. Exp.	-	-		-	-	-
21	Reg. Comm. Exp. - Rate Case	65,000	-		65,000	-	65,000
22	Miscellaneous Expense	235,253	(58,124)	3,4,5	177,129	-	177,129
23	Bad Debt Expense	-	-		-	-	-
24	Depreciation Expense	85,632	(26,198)	6	59,434	-	59,434
25	Taxes Other Than Income	-	-		-	-	-
26	Property Taxes	21,030	-		21,030	5,264	26,294
27	Income Taxes	(109,557)	34,236	7	(75,321)	80,045	4,724
28	Rounding	(1)	-		(1)	-	(1)
29		-					
30	**Total Operating Expenses**	$ 503,004	$ (54,276)		$ 448,728	$ 85,309	$ 534,038
31							
32	**Operating Income (Loss)**	$ (182,479)	$ 54,276		$ (128,203)	$ 151,662	$ 27,209

References:
Column (A): Company Schedule C-1
Column (B): Schedule CSB-16
Column (C): Column (A) + Column (B)
Column (D): Schedules CSB-1 and CSB-2
Column (E): Column (C) + Column (D)

Payson Water Company, Inc.
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Schedule CSB-8

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1 Salaries and Wages Ref: Sch CSB-9	[C] ADJ #2 Contractual Services Ref: Sch CSB-10	[D] ADJ #3 $197,722 Corporate Office Allocation Ref: Sch CSB-11	[E] ADJ #4 Misc. Expense, Beaver Valley Write Off Ref: Sch CSB-12	[F] ADJ #5 Misc. Expense, Other Ref: Sch CSB-13	[G] ADJ #6 Depreciation Expense Ref: Sch CSB-14	[H] ADJ #7 Taxes Income Tax Expense Ref: Sch CSB-15	[I] STAFF ADJUSTED
	REVENUES:									
1	Metered Water Sales	$ 313,559	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 313,559
2	Water Sales - Unmetered	-	-	-	-	-	-	-	-	-
3	Other Operating Revenues	6,966	-	-	-	-	-	-	-	6,966
4	**Total Revenues**	$ 320,525	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 320,525
5										
6	*OPERATING EXPENSES:*									
7	Salaries and Wages	$ 55,097	(2,507)	-	-	-	-	-	-	52,591
8	Employee Pensions & Benefits	-	-	-	-	-	-	-	-	-
9	Purchased Power	50,533	-	-	-	-	-	-	-	50,533
10	Fuel for Power Production	-	-	-	-	-	-	-	-	-
11	Chemicals	2,181	-	-	-	-	-	-	-	2,181
12	Repairs and Maintenance	28,089	-	-	-	-	-	-	-	28,089
13	Office Supplies & Expense	-	-	-	-	-	-	-	-	-
14	Contractual Services	58,481	-	(1,683)	-	-	-	-	-	56,798
15	Water Testing	11,000	-	-	-	-	-	-	-	11,000
16	Rents	-	-	-	-	-	-	-	-	-
17	Transportation Expenses	-	-	-	-	-	-	-	-	-
18	Insurance - General Liability	-	-	-	-	-	-	-	-	-
19	Insurance - Health and Life	266	-	-	-	-	-	-	-	266
20	Reg. Comm. Exp.	-	-	-	-	-	-	-	-	-
21	Reg. Comm. Exp. - Rate Case	65,000	-	-	-	-	-	-	-	65,000
22	Miscellaneous Expense	235,253	-	-	(43,260)	(7,857)	(7,007)	-	-	177,129
23	Bad Debt Expense	-	-	-	-	-	-	-	-	-
24	Depreciation Expense	85,632	-	-	-	-	-	(26,198)	-	59,434
25	Taxes Other Than Income	-	-	-	-	-	-	-	-	-
26	Property Taxes	21,030	-	-	-	-	-	-	-	21,030
27	Income Taxes	(109,557)	-	-	-	-	-	-	34,236	(75,321)
28	Rounding	(1)	-	-	-	-	-	-	-	(1)
29		-	-	-	-	-	-			
30	**Total Operating Expenses**	$ 503,004	$ (2,507)	$ (1,683)	$ (43,260)	$ (7,857)	$ (7,007)	$ (26,198)	$ 34,236	$ 448,728
31										
32	**Operating Income (Loss)**	$ (182,479)	$ 2,507	$ 1,683	$ 43,260	$ 7,857	$ 7,007	$ 26,198	$ (34,236)	$ (128,203)

Payson Water Company, Inc.
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Test Year Ended December 31, 2012

Schedule CSB-9

OPERATING INCOME ADJUSTMENT NO. 1 - SALARIES & WAGES

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS (Col C - Col A)	[C] STAFF AS ADJUSTED
1	Salaries & Wages	$ 55,097	$ (2,507)	$ 52,591
2				
3				
4				

5	Employee	Salary CSB 1.15 & CSB 1.24	Hourly Rate (Salary divided by 2,080 Hrs)	Total Hrs Worked Star/Quail Valley (CSB 2.11)	Total Cost for Star/Quail Valley
8	Allred	$ 34,320	$ 16.50	59.50	$ 981.75
9	Bartlet	$ 26,000	$ 12.50	46.00	$ 575.00
10	Stouder	$ 34,320	$ 16.50	51.50	$ 849.75
11	Williams	$ 26,000	$ 12.50	8.00	$ 100.00
12				165.00	$ 2,507

References:

Column A: Company Schedule C-2

Column B: Testimony, CSB; Data Request Responses CSB 1.15, 1.24, and 2.11

Column C: Column [A] + Column [B]

Payson Water Company, Inc.
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Schedule CSB-10

OPERATING INCOME ADJUSTMENT NO. 2 - CONTRACTUAL SERVICES

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS (Col C - Col A)	[C] STAFF AS ADJUSTED
1	Contractual Services	$ 70,679	$ -	$ 70,679
2	Legal Expenses Related to Condemnation	$ (12,198)	$ (1,683)	$ (13,881)
3	Total Contractual Services	$ 58,481	$ (1,683)	$ 56,798

References:

Column A: Company Schedule C-2
Column B: Testimony, CSB, Data Request Response CSB 1.31
Column C: Column [A] + Column [B]

Payson Water Company, Inc.
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Schedule CSB-11

OPERATING INCOME ADJUSTMENT NO. 3 - $197,722 Corporate Office Allocation

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS (Col C - Col A)	[C] STAFF AS ADJUSTED
1	Miscellaneous Expense	$ 37,531	$ -	$ 37,531
2				
3	**Central Office Overhead Allocation**	$ 197,722	$ -	$ 197,722
4	Bonuses	$ -	$ (33,545)	$ (33,545)
5	Star/Quail Valley Costs	$ -	$ (9,466)	$ (9,466)
6	Other (Advertising, Fines, Utility Plant, Gain on Sale)	$ -	$ (249)	$ (249)
7	**Subtotal - Central Office Overhead Allocation**	**$ 197,722**	**$ (43,260)**	**$ 154,462**
8				
9	Total Miscellaneous Expense (L1 + L7)	$ 235,253	$ (43,260)	$ 191,993
10				
11				

12	$197,722 Central Office Overhead Allocation (CSB 1.13, 2.8, 2.10, 2.11, & 2.12)			
13	Description	Per Company	Difference	Per Staff
14	Salaries & Wages	$ 47,998.99	$ (4,307.76)	$ 43,691.23
15	Salaries & Wages, Bonuses	$ 33,544.62	$ (33,544.62)	$ -
16	Payroll Taxes	$ 4,939.37	$ (634.31)	$ 4,305.06
17	Benefits	$ 3,810.35	$ (489.32)	$ 3,321.03
18	Building Occupancy Expenses	$ 81.43	$ -	$ 81.43
19	Utilities	$ 3,182.87	$ -	$ 3,182.87
20	Communications	$ 7,679.43	$ -	$ 7,679.43
21	Travel	$ 13,911.85	$ -	$ 7,679.43
22	Meals & Entertainment	$ 577.95	$ -	$ 577.95
23	Lodging	$ 2,135.89	$ -	$ 2,135.89
24	Supplies (Office Expenses)	$ 14,640.49	$ (1,881.40)	$ 12,759.09
25	Repairs and Maintenance	$ 5,181.27	$ -	$ 5,181.27
26	Bank Charges & Fees	$ 2,488.32	$ (319.55)	$ 2,488.32
27	Professional Fees	$ 31,210.70	$ -	$ 31,210.70
28	Training & Education	$ 466.18	$ -	$ 466.18
29	Advertising & Promotion	$ 137.87	$ (137.87)	$ -
30	Dues & Subscriptions	$ 1,338.34	$ -	$ 1,338.34
31	Licenses & Permits	$ 2,685.24	$ -	$ 2,685.24
32	Fines & Penalties	$ 12.36	$ (12.36)	$ -
33	Write Off	$ 15.75	$ -	$ 15.75
34	Utility Plant In Service	$ 948.87	$ (948.87)	$ -
35	Other General Business	$ 197.25	$ -	$ 197.25
36	Property & Casualty Insurance	$ 997.07	$ (128.04)	$ 997.07
37	Management Fees	$ 13,281.62	$ (1,705.61)	$ 11,576.01
38	Depreciation/Utility Plant In Service (Office Space)	$ 7,107.99	$ -	$ 7,107.99
39	(Gain) Loss on Sale of Assets	$ (849.66)	$ 849.66	$ -
40		$ 197,722.41	$ (43,260.06)	$ 148,678
41				

42	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(G)
43–48	No. of Payson Customers Excluding Star/Quail Valley (CSB 2.8)	Number of Star/Quail Valley Customers (From Water Co. Plant Descrip Included in Applica)	Total Number of Payson Customers Including Star/Quail Valley Col A + Col B	Description	Amount	Annual Amount Per Customer Col E / Col C	Monthly Amount Per Customer Col F / 12	Monthly Amount Per Customer For Six Months Col G x 6 Months
49	1114	385	1499	Salaries & Wages	$ 33,544.62	$ 22	$ 1.86	$ 4,307.76
50	1114	385	1499	Payroll Taxes	$ 4,939.37	$ 3	$ 0.27	$ 634.31
51	1114	385	1499	Benefits	$ 3,810.35	$ 3	$ 0.21	$ 489.32
52	1114	385	1499	Suppl. (Office Expenses)	$ 14,650.49	$ 10	$ 0.81	$ 1,881.40
53	1114	385	1499	Bank Charges & Fees	$ 2,488.32	$ 2	$ 0.14	$ 319.55
54	1114	385	1499	Prop & Casualty Ins	$ 997.07	$ 1	$ 0.06	$ 128.04
55	1114	385	1499	Management Fees	$ 13,281.62	$ 9	$ 0.74	$ 1,705.61
56								$ 9,466.00

References:
Column A: Company Schedule C-1
Column B: Testimony, CSB; CSB 1.13, CSB 2.8
Column C: Column [A] + Column [B]

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Schedule CSB-12

OPERATING INCOME ADJUSTMENT NO. 5 - MISCELLANEOUS EXPENSE, BEAVER DAM WRITE OFF

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Miscellaneous Expense	$ 227,396	$ -	$ 227,396
2	Beaver Dam Write Off (CSB 2.3)	$ 7,857	$ (7,857)	$ -
3	Total Miscellaneous Expense	$ 235,253	$ (7,857)	$ 227,396

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Schedule CSB-13

OPERATING INCOME ADJUSTMENT NO. 4 - MISCELLANEOUS EXPENSE, OTHER

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Miscellaneous Expense	$ 232,815	$ -	$ 232,815
2	Chemicals (CSB 2.6)	$ 2,438	$ (2,438)	$ -
3	Consumption Report Regarding Water Augmentation Costs	$ 1,650	$ (1,650)	$ -
4	Cogsdale - Star Valley Deposit Sort	$ 825	$ (825)	$ -
5	Arizona Department of Revenue	$ 1,076	$ (1,076)	$ -
6	ACC Annual Assessment	$ 1,018	$ (1,018)	$ -
7	Total Miscellaneous Expense	$ 239,822	$ (7,007)	$ 232,815

References:
Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Schedule CSB-14

OPERATING INCOME ADJUSTMENT NO. 6 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

LINE NO.		DESCRIPTION	[A] PLANT In SERVICE Per Staff	[B] NonDepreciable or Fully Depreciated PLANT	[C] DEPRECIABLE PLANT (Col A - Col B)	[D] DEPRECIATION RATE	[E] DEPRECIATION EXPENSE (Col C x Col D)
1	301	Organization Cost	$ 221	$ (221)	$ -	0.00%	$ -
2	302	Franchises	-	-	$ -	0.00%	$ -
3	303	Land and Land Rights	16,500	(16,500)	$ -	0.00%	
4	304	Structures and Improvements	300,078	-	300,078	3.33%	9,993
5	305	Collecting and Impounding Reserviors	2,531	-	2,531	3.33%	84
6	306	Lake, River, and Other Intakes	-	-	-	2.50%	-
7	307	Wells and Springs	273,013	-	273,013	3.33%	9,091
8	309	Supply Mains	3,681	-	3,681	2.00%	74
9	310	Power Generation Equipment	8,310	-	8,310	5.00%	416
10	311	Pumping Equipment	217,608	-	217,608	12.50%	27,201
11	320	Water Treatment Equipment	10,567	-	10,567	3.33%	352
12	330	Distribution Reservoirs and Standpipes	273,800	-	273,800	2.22%	6,078
13	330.2	Pressure Tanks	-	-	-	5.00%	-
14	331	Transmission and Distribution Mains	439,972	-	439,972	2.00%	8,799
15	333	Services	81,823	-	81,823	3.33%	2,725
16	334	Meters and Meter Installations	199,952	-	199,952	8.33%	16,656
17	335	Hydrants	1,171	-	1,171	2.00%	23
18	336	Backflow Prevention Devices	-	-	-	6.67%	-
19	339	Other Plant and Miscellaneous Equipment	320,820	-	320,820	6.67%	21,399
20	340	Office Furniture and Equipment	-	-	-	6.67%	-
21	341	Transportation Equipment	-	-	-	20.00%	-
22	340.1	Computers and Software	-	-	-	20.00%	-
23	343	Tools, Shop, and Garage Equipment	72	-	72	5.00%	4
24	344	Laboratory Equipment	-	-	-	10.00%	-
25	345	Power Operated Equipment	-	-	-	5.00%	-
26	346	Communication Equipment	9,267	-	9,267	10.00%	927
27	347	Miscellaneous Equipment	-	-	-	10.00%	-
28	348	Other Tangible Equipment	-	-	-	10.00%	-
29		Total Plant	$ 2,159,386	$ (16,721)	$ 2,142,665		$ 103,821
30							
31							
32							
33		Composite Depreciation Rate (Depr Exp / Depreciable Plant):	4.85%				
34		CIAC:	$ 916,069				
35		Amortization of CIAC (Line 33 x Line 34):	$ 44,387				
36							
37		Depreciation Expense Before Amortization of CIAC:	$ 103,821				
38		Less Amortization of CIAC:	$ 44,387				
39		Test Year Depreciation Expense - Staff:	$ 59,434				
40		Depreciation Expense - Company:	85,632				
41		**Staff's Total Adjustment:**	**$ (26,198)**				

References:
Column [A]: Schedule CSB-4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Schedule CSB-15

OPERATING INCOME ADJUSTMENT NO. 7 - TEST YEAR INCOME TAXES

LINE NO.	DESCRIPTION	(A)	(B)
	Calculation of Income Tax:	Test Year	
1	Revenue	$ 320,525	
2	Less: Operating Expenses - Excluding Income Taxes	$ 524,050	
3	Less: Synchronized Interest (L17)	$ 9,353	
4	Arizona Taxable Income (L1- L2 - L3)	$ (212,878)	
5	Arizona State Income Tax Rate	6.968%	
6	Arizona Income Tax (L4 x L5)		$ (14,833)
7	Federal Taxable Income (L4 - L6)	$ (198,045)	
8	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ (7,500)	
9	Federal Tax on Second Income Bracket ($51,001 - $75,000) @ 25%	$ (6,250)	
10	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ (8,500)	
11	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ (38,237)	
12	Federal Tax on Fifth Income Bracket ($335,001 - $10,000,000) @ 34%	$ -	
13	Total Federal Income Tax		$ (60,487)
14	Combined Federal and State Income Tax (L6 + L13)		$ (75,321)
	Calculation of Interest Synchronization:		
15	Rate Base	$ 425,129	
16	Weighted Average Cost of Debt	2.20%	
17	Synchronized Interest (L16 x L17)	$ 9,353	
18	Income Tax - Per Staff	$ (75,321)	
19	Income Tax - Per Company	$ (109,557)	
20	**Staff Adjustment**	**$ 34,236**	

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Schedule CSB-16

OPERATING INCOME - PROPERTY TAX EXPENSE

LINE NO.	Property Tax Calculation	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	$ 320,525	$ 320,525
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	641,050	$ 641,050
4	Staff Recommended Revenue, Per Schedule CSB-1	320,525	$ 561,246
5	Subtotal (Line 4 + Line 5)	961,575	1,202,296
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	320,525	$ 400,765
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	641,050	$ 801,531
10	Plus: 10% of CWIP -	-	-
11	Less: Net Book Value of Licensed Vehicles	-	$ -
12	Full Cash Value (Line 9 + Line 10 - Line 11)	641,050	$ 801,531
13	Assessment Ratio	20.0%	20.0%
14	Assessment Value (Line 12 * Line 13)	128,210	$ 160,306
15	Composite Property Tax Rate	16.4025%	16.4025%
			$ -
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	$ 21,030	
17	Company Proposed Property Tax	21,030	
18	Staff Test Year Adjustment (Line 16-Line 17)	$ (0)	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		$ 26,294
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 21,030
21	Increase in Property Tax Expense Due to Increase in Revenue Requirement		$ 5,265
22	Increase to Property Tax Expense		$ 5,265
23	Increase in Revenue Requirement		240,721
24	Increase to Property Tax per Dollar Increase in Revenue (Line19/Line 20)		2.187000%

Monthly Usage Charge	United System Present	C&S Systems Present	Company Proposed Rates Consolidated	Staff Recommended Rates Consolidated
Meter Size (All Classes):				
5/8 x 3/4 Inch	$ 16.00	$ 17.00	$ 39.24	$ 20.00
3/4 Inch	18.40	25.50	58.85	33.00
1 Inch	21.28	42.50	98.09	55.00
1 1/2 Inch	32.00	85.00	196.18	110.00
2 Inch	56.00	136.00	313.89	176.00
3 Inch	80.00	255.00	627.78	352.00
4 Inch	128.00	425.00	980.90	550.00
6 Inch	No Tariff	850.00	1,961.80	1,200.00
8 Inch	No Tariff	No Tariff	3,138.88	1,760.00
Commodity Charge - Per 1,000 Gallons				
C&S System (All Meter Sizes)				
Per 1,000 gallons, for all gallons	N/A	$ 1.4800	N/A	N/A
United Systems (All Meter Sizes)				
First 4,000 gallons	$ 1.9300	N/A	N/A	N/A
Over 4,000 gallons	2.9900	N/A	N/A	N/A
5/8"x3/4" and 3/4 "Meters (Consolidated)				
First 4,000 gallons	N/A	N/A	$ 2.7500	N/A
4,001 to 10,000 gallons	N/A	N/A	4.7500	N/A
Over 10,000 gallons	N/A	N/A	6.7500	N/A
First 3,000 gallons	N/A	N/A	N/A	$ 4.0000
3,001 to 10,000 gallons	N/A	N/A	N/A	7.2000
Over 10,000 gallons	N/A	N/A	N/A	9.0090
1" Meter (Consolidated)				
First 25,000 gallons	N/A	N/A	4.0000	N/A
Over 25,000 gallons	N/A	N/A	4.2500	N/A
First 18,000 gallons	N/A	N/A	N/A	7.2000
Over 18,000 gallons	N/A	N/A	N/A	9.0090
1 1/2" Meter (Consolidated)				
First 50,000 gallons	N/A	N/A	4.0000	N/A
Over 50,000 gallons	N/A	N/A	4.2500	N/A
First 40,000 gallons	N/A	N/A	N/A	7.2000
Over 40,000 gallons	N/A	N/A	N/A	9.0090
2" Meter (Consolidated)				
First 80,000 gallons	N/A	N/A	4.0000	N/A
Over 80,000 gallons	N/A	N/A	4.2500	N/A
First 60,000 gallons	N/A	N/A	N/A	7.2000
Over 60,000 gallons	N/A	N/A	N/A	9.0090
3" Meter (Consolidated)				
First 160,000 gallons	N/A	N/A	4.0000	N/A
Over 160,000 gallons	N/A	N/A	4.2500	N/A
First 120,000 gallons	N/A	N/A	N/A	7.2000
Over 120,000 gallons	N/A	N/A	N/A	9.0090
4" Meter (Consolidated)				
First 250,000 gallons	N/A	N/A	4.0000	N/A
Over 250,000 gallons	N/A	N/A	4.2500	N/A
First 200,000 gallons	N/A	N/A	N/A	7.2000
Over 200,000 gallons	N/A	N/A	N/A	9.0090

6" Meter (Consolidated)				
First 500,000 gallons	N/A	N/A	4.0000	N/A
Over 500,000 gallons	N/A	N/A	4.2500	N/A
First 450,000 gallons	N/A	N/A	N/A	7.2000
Over 450,000 gallons	N/A	N/A	N/A	9.0090
8" Meter (Consolidated)				
First 800,000 gallons	N/A	N/A	4.0000	N/A
Over 800,000 gallons	N/A	N/A	4.2500	N/A
First 750,000 gallons	N/A	N/A	N/A	7.2000
Over 750,000 gallons	N/A	N/A	N/A	9.0090
Reestablishment (within 12 months)				

Other Service Charges

	United System	C&S Systems	Consolidated Company Proposed	Consolidated Staff Recommended
Establishment	$ 25.00	$ 25.00	$ 25.00	$ 25.00
Establishment (After Hours)	$ 35.00	$ 35.00	$ 35.00	Remove from Tariff
Reconnection (Delinquent)	$ 20.00	$ 20.00	$ 20.00	$ 20.00
Reconnection (Delinquent and After Hours)	$ 30.00	$ 30.00	$ 30.00	Remove from Tariff
Meter Test (If Correct)	$ 25.00	$ 20.00	$ 25.00	$ 25.00
Deposit	*	*	*	*
Deposit Interest*	6.00%	6.00%	6.00%	6.00%
Reestablishment (within 12 months)	**	**	**	**
NSF Check	$ 17.50	$ 10.00	$ 17.50	$ 17.50
Deferred Payment (per month)	1.50%	1.50%	1.50%	1.5% per month
Meter Re-Read (if correct and not error)	$ 15.00	$ 10.00	$ 15.00	$ 15.00
Late Charge per month (per R-14-2-409 G (6)	1.50%	1.50%	1.50%	1.5% per month
After Hour Service Charge (at cust. request)	N/A	N/A	N/A	$ 35.00

* Per Commission Rule R14-2-403(B).
** Number of months off the system times the monthly minimum per A.A.C. R14-2-403(D).

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).

All advances and/or contributions are to include labor, materials, overheads, and all applicable taxes.

Service and Meter Installation Charges

Service Size	United Systems and C&S System Total Present	Consolidated Proposed Service Line Charge	Consolidated Proposed Meter Insallation Charge	Consolidated Total Proposed Charge	Consolidated Recommended Service Line Charge	Consolidated Recommended Meter Insallation Charge	Consolidated Total Recommended Charge
5/8 x 3/4 Inch	$ 430.00	$ 445.00	$ 155.00	$ 600.00	$ 445.00	$ 155.00	$ 600.00
3/4 Inch	$ 480.00	$ 445.00	$ 255.00	$ 700.00	$ 445.00	$ 255.00	$ 700.00
1 Inch	$ 550.00	$ 495.00	$ 315.00	$ 810.00	$ 495.00	$ 315.00	$ 810.00
1 1/2 Inch	$ 775.00	$ 550.00	$ 525.00	$ 1,075.00	$ 550.00	$ 525.00	$ 1,075.00
2 Inch	$ 1,305.00	N/A	N/A	N/A	N/A	N/A	N/A
2 Inch Turbine	N/A	$ 830.00	$ 1,045.00	$ 1,875.00	$ 830.00	$ 1,045.00	$ 1,875.00
2 Inch Compound	N/A	$ 830.00	$ 1,890.00	$ 2,720.00	$ 830.00	$ 1,890.00	$ 2,720.00
3 Inch	$ 1,815.00	N/A	N/A	N/A	N/A	N/A	N/A
3 Inch Turbine	N/A	$ 1,045.00	$ 1,670.00	$ 2,715.00	$ 1,045.00	$ 1,670.00	$ 2,715.00
3 Inch Compound	N/A	$ 1,165.00	$ 2,545.00	$ 3,710.00	$ 1,165.00	$ 2,545.00	$ 3,710.00
4 Inch	$ 2,860.00	N/A	N/A	N/A	N/A	N/A	N/A
4 Inch Turbine	N/A	$ 1,490.00	$ 2,670.00	$ 4,160.00	$ 1,490.00	$ 2,670.00	$ 4,160.00
4 Inch Compound	N/A	$ 1,670.00	$ 3,645.00	$ 5,315.00	$ 1,670.00	$ 3,645.00	$ 5,315.00
6 Inch - United Systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 Inch - C&S Systems	$ 5,275.00	N/A	N/A	N/A	N/A	N/A	N/A
6 Inch Turbine	N/A	$ 2,210.00	$ 5,025.00	$ 7,235.00	$ 2,210.00	$ 5,025.00	$ 7,235.00
6 Inch Compound	N/A	$ 2,330.00	$ 6,920.00	$ 9,250.00	$ 2,330.00	$ 6,920.00	$ 9,250.00
8 Inch	N/A	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost

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

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	2,903	$ 21.60	$ 47.22	$ 25.62	118.60%
Median Usage	1,434	18.77	43.18	$ 24.42	130.10%
Staff Recommended					
Average Usage	2,903	$ 21.60	$ 31.61	$ 10.01	46.33%
Median Usage	1,434	18.77	25.74	$ 6.97	37.13%

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

Gallons	Present	Company Proposed	%	Staff Recommended	%
	5/8"	5/8"		5/8"	
Consumption	Rates	Rates	Increase	Rates	Increase
-	$ 16.00	$ 39.24	145.25%	$ 20.00	25.00%
1,000	17.93	41.99	134.19%	24.00	33.85%
2,000	19.86	44.74	125.28%	28.00	40.99%
3,000	21.79	47.49	117.94%	32.00	46.86%
4,000	23.72	50.24	111.80%	39.20	65.26%
5,000	26.71	54.99	105.88%	46.40	73.72%
6,000	29.70	59.74	101.14%	53.60	80.47%
7,000	32.69	64.49	97.28%	60.80	85.99%
8,000	35.68	69.24	94.06%	68.00	90.58%
9,000	38.67	73.99	91.34%	75.20	94.47%
10,000	41.66	78.74	89.01%	82.40	97.79%
11,000	44.65	85.49	91.47%	91.41	104.72%
12,000	47.64	92.24	93.62%	100.42	110.79%
13,000	50.63	98.99	95.52%	109.43	116.13%
14,000	53.62	105.74	97.20%	118.44	120.88%
15,000	56.61	112.49	98.71%	127.45	125.13%
16,000	59.60	119.24	100.07%	136.45	128.95%
17,000	62.59	125.99	101.29%	145.46	132.41%
18,000	65.58	132.74	102.41%	154.47	135.55%
19,000	68.57	139.49	103.43%	163.48	138.41%
20,000	71.56	146.24	104.36%	172.49	141.04%
25,000	86.51	179.99	108.06%	217.54	151.46%
30,000	101.46	213.74	110.66%	262.58	158.80%
35,000	116.41	247.49	112.60%	307.63	164.26%
40,000	131.36	281.24	114.10%	352.67	168.48%
45,000	146.31	314.99	115.29%	397.72	171.83%
50,000	161.26	348.74	116.26%	442.76	174.56%
75,000	236.01	517.49	119.27%	667.99	183.03%
100,000	310.76	686.24	120.83%	893.21	187.43%

Typical Bill Analysis for C&S System
General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	6,961	$ 27.30	$ 64.30	$ 37.00	135.53%
Median Usage	4,500	23.66	52.62	$ 28.96	122.38%
Staff Recommended					
Average Usage	6,961	$ 27.30	$ 60.52	$ 33.22	121.66%
Median Usage	4,500	23.66	42.80	$ 19.14	80.90%

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

Gallons	Present	Company Proposed	%	Staff Recommended	%
	5/8"	5/8"		5/8"	
Consumption	Rates	Rates	Increase	Rates	Increase
-	$ 17.00	$ 39.24	130.82%	$ 20.00	17.65%
1,000	18.48	41.99	127.22%	24.00	29.87%
2,000	19.96	44.74	124.15%	28.00	40.28%
3,000	21.44	47.49	121.50%	32.00	49.25%
4,000	22.92	50.24	119.20%	39.20	71.03%
5,000	24.40	54.99	125.37%	46.40	90.16%
6,000	25.88	59.74	130.83%	53.60	107.11%
7,000	27.36	64.49	135.71%	60.80	122.22%
8,000	28.84	69.24	140.08%	68.00	135.78%
9,000	30.32	73.99	144.03%	75.20	148.02%
10,000	31.80	78.74	147.61%	82.40	159.12%
11,000	33.28	85.49	156.88%	91.41	174.67%
12,000	34.76	92.24	165.36%	100.42	188.89%
13,000	36.24	98.99	173.15%	109.43	201.95%
14,000	37.72	105.74	180.33%	118.44	213.99%
15,000	39.20	112.49	186.96%	127.45	225.11%
16,000	40.68	119.24	193.12%	136.45	235.43%
17,000	42.16	125.99	198.84%	145.46	245.03%
18,000	43.64	132.74	204.17%	154.47	253.97%
19,000	45.12	139.49	209.15%	163.48	262.32%
20,000	46.60	146.24	213.82%	172.49	270.15%
25,000	54.00	179.99	233.31%	217.54	302.84%
30,000	61.40	213.74	248.11%	262.58	327.65%
35,000	68.80	247.49	259.72%	307.63	347.13%
40,000	76.20	281.24	269.08%	352.67	362.82%
45,000	83.60	314.99	276.78%	397.72	375.74%
50,000	91.00	348.74	283.23%	442.76	386.55%
75,000	128.00	517.49	304.29%	667.99	421.86%
100,000	165.00	686.24	315.90%	893.21	441.34%

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

EXHIBIT
S-15
ADMITTED

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	)	DOCKET NO. W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., FOR AUTHORITY TO ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM AND ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	)	DOCKET NO. W-03514A-13-0142

SURREBUTTAL

TESTIMONY

OF

CRYSTAL S. BROWN

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

DECEMBER 20, 2013

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EXECUTIVE SUMMARY
PAYSON WATER CO., INC.
DOCKET NOS.
W-03514A-13-0111 and W-03514A-13-0142

Staff's surrebuttal testimony responds to Payson Water Company, Inc. ("Payson" or "Company") rebuttal testimony on the following issues:

1. Rate Base
    a. Unsupported Plant Treated As Contributions In of Construction ("CIAC")
    b. Unsupported Removal of CIAC Related to Condemnation Sale of Star/Quail Valley System

2. Operating Income
    a. Salaries and Wages Related to Star/Quail Valley System
    b. $197,722 Corporate Office Allocation
    c. Miscellaneous Expense
    d. Depreciation Expense
    e. Property Tax Expense

Staff recommends a revenue increase of $241,822 or 75.45 percent increase over test year revenue of $320,525. The total annual revenue of $562,347 produces an operating income of $27,208 or a 6.40 percent rate of return on an original cost rate base of $425,129.

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Crystal S. Brown. I am a Public Utilities Analyst V employed by the Arizona Corporation Commission ("Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same Crystal S. Brown who filed direct testimony in this case?

A. Yes.

PURPOSE OF SURREBUTTAL TESTIMONY

Q. What is the purpose of your surrebuttal testimony in this proceeding?

A. The purpose of my surrebuttal testimony in this proceeding is to respond, on behalf of Staff, to the rebuttal testimony of Mr. Jason Williamson and Mr. Thomas Bourrassa, witnesses for Payson Water Company, Inc. ("Payson" or "Company").

Q. What issues will you address?

A. I will address the issues listed below that are discussed in the rebuttal testimony of Mr. Bourrassa and Mr. Williamson.

1. Rate Base
    a. Unsupported Plant Treated As Contributions In of Construction ("CIAC")
    b. Unsupported Removal of CIAC Related to Condemnation Sale of Star/Quail Valley System
2. Operating Income
    a. Salaries and Wages Related to Star/Quail Valley System
    b. $197,722 Corporate Office Allocation
    c. Miscellaneous Expense

d. Depreciation Expense

e. Property Tax Expense

Q. Does your silence on any particular issue raised in the Company's rebuttal testimony indicate that Staff agrees with the Company's stated rebuttal position?

A. No. Rather, where I do not respond, I am continuing to rely on my direct testimony.

SUMMARY OF PROPOSED REVENUES

Q. Please summarize Staff's recommended revenue.

A. Staff recommends a revenue increase of $241,822 or 75.45 percent increase over test year revenue of $320,525. The total annual revenue of $562,347 produces an operating income of $27,208 or a 6.40 percent rate of return on an original cost rate base of $425,129.

Q. How does Staff's recommended revenue compare to the recommended revenue in Staff's direct testimony?

A. Staff's recommended revenue has increased by $1,101, from $561,246 in its direct testimony to $562,347 in this testimony.

RATE BASE

Q. Please summarize Staff's adjustments to Payson's rate base shown on Surrebuttal Schedule CSB-3.

A. A summary of the Company's proposed and Staff's recommended rate base follows:

TEST YEAR RATE BASE

Per Company - Direct	Difference	Per Staff - Surrebuttal
$659,457	($234,328)	$425,129

Q. How does Staff's recommended rate base compare to the recommended rate base in Staff's direct testimony?

A. Staff's recommended rate base rate is the same as the recommendation made in its direct testimony.

RATE BASE

Rate Base Adjustment No. 1 – Unsupported Plant Treated as CIAC

Q. What percentage of the $233,733 in unsupported plant costs did Staff recommend to be treated as CIAC?

A. Of the $233,733 in plant costs for which the Company had no supporting source documentation, Staff recommended that 30 percent (i.e. $70,120) be treated as CIAC and the remaining 70 percent (i.e. $163,613) be treated as if the Company had paid for the plant (i.e. equity plant). Staff made this recommendation due to the Company's change in ownership and the Company's inability to obtain plant invoices for years prior to 2009 from the former owner.

Q. Did Staff review Payson's rebuttal testimony concerning Staff's treatment of the 30 percent of unsupported plant treated as CIAC?

A. Yes.

Q. What is the Company's concern?

A. The Company is concerned that Staff did not accept the annual reports and tax depreciation schedules as evidence that the Company paid for the plant.

Q. What are key objectives in the audit of plant for a regulated water utility?

A. Key objectives in the audit of plant for a regulated water utility are to verify the cost of the plant with source documentation, to verify the existence and ownership of plant, and to verify that the amount of plant funded with CIAC is properly reported as CIAC (i.e. a verification of who paid for the plant).

Q. Were the annual reports and tax depreciation schedules provided by the Company audited by an independent CPA firm or government auditors?

A. No, the annual reports and tax depreciation schedules provided by the Company were not audited by an independent CPA firm or government auditors. Therefore, no independent examination was performed to determine whether or not Payson's plant and CIAC balances were accurately reported.

Q. What do the unaudited annual reports and tax depreciation schedules show?

A. The unaudited annual reports and tax depreciation schedules show that the financial information used in the Company's general ledger was *consistent* with the financial information reported in the Company's annual reports and tax depreciation schedules. However, because the information shown on these documents is not audited, they do not provide adequate evidence that the amounts reported in the general ledger are correct. Further, these schedules do not provide evidence of who paid for the plant.

Q. Is Staff's adjustment consistent with the NARUC and the Arizona Administrative Code?

A. Yes, making this adjustment is consistent with the recommended audit evidence considerations outlined in the NARUC Rate Case and Audit Manual which lists invoices as one of the records to be reviewed during the audit. Staff's adjustment is also consistent

with the record keeping requirements of Arizona Administrative Code R14-2-610 D.1 which states, "Each utility shall keep general and auxiliary accounting records reflecting the cost of its properties . . . and all other accounting and statistical data necessary to give complete and authentic information as to its properties . . ." (emphasis added).

Q. What is the risk to customers when inadequately supported plant costs are included in plant in service?

A. As Staff stated in its direct testimony, if unsupported costs are not removed, ratepayers are at risk of paying for non-existent costs. Further, customers are at risk of paying a return on and a return of plant for which the owner has no investment (i.e. plant which was not paid for by the owner, such as CIAC).

Q. What are Staff's recommendations?

A. Staff recommends increasing CIAC by $70,120 and increasing amortization of CIAC by $11,455 resulting in a net decrease to rate base of $58,665 as shown in column B on Surrebuttal Schedules CSB-4 and CSB-5.

Q. How does Staff's recommendation for unsupported plant compare to the recommendation for unsupported plant in Staff's direct testimony?

A. Staff's recommendation for unsupported plant is the same as the recommendation made in its direct testimony.

Rate Base Adjustment No. 2 – Unsupported Removal of CIAC Related to Sale of the Star/Quail Valley System

Q. Did Staff review Payson's rebuttal testimony concerning Staff's adjustment to CIAC Related to Sale of the Star/Quail Valley System?

A. Yes.

Q. Is the Company's understanding of what Staff was questioning regarding the CIAC correct?

A. No, the Company's understanding is not correct. Mr. Bourassa's states on page 5, line 15 of his rebuttal testimony, "Ms. Brown questions whether the CIAC removed from the CIAC balance was really CIAC." This statement is incorrect. Staff was not questioning whether or not the $502,246 that the Company proposed to remove from CIAC due to the condemnation sale of the Star/Quail Valley system was actually CIAC. Staff recommended that all of the $502,246 except the $77,715 proven to be related to the condemnation sale *be added back to the CIAC account.*

Rather, Staff was seeking adequate evidence to support the Company's claim that the $502,246 in CIAC (which represents over half of the Company's total $916,069 CIAC balance) related solely to the Star/Quail Valley system and thus should be removed from the Company's rate base because the Star/Quail Valley system was condemned and sold.

Q. When did the Company acquire the Star/Quail Valley system?

A. According to the direct testimony of Mr. Robert Hardcastle (p.2, beginning at line 3), the Star/Quail Valley system was part of the United Systems which was purchased in 1996.

> In August 1996, BUI acquired C&S Water Company, Inc. ("C&S") and United Utilities, Inc. ("United"). C&S and United together comprised numerous water systems nine of which eventually

> became PWC: Deer Creek (owned by C&S), and Mead's Ranch, East Verde Estates, Flowing Springs, Geronimo EstatesElusive Acres, Mesa del Caballo, Whispering Pines, GiseldTonto Creek Shores, and Star Valley/Quail Valley (all owned by United). PWC currently owns and operates eight of the systems.

Q. When were the current rates for the United Systems approved?

A. According to the direct testimony of Mr. Robert Hardcastle (p.2, beginning at line 19), the United Systems rates were approved in Decision No. 62401, dated March 30, 2000.

> The Company's current rates were approved in C&S Decision No. 62320 (February 17, 2000) and United Decision No. 62401 (March 30, 2000). C&S's rates went into effect on or about March 1, 2000. United's rates went into effect on or about May 1, 2000.

Q. What was the CIAC balance reported for the United Systems in Decision No. 62401?

A. The CIAC balance reported for the United Systems, which is composed of eight water systems and includes the Star/Quail Valley system, was $960,903.

Q. Was the CIAC balance broken out by system?

A. No, it was not. Therefore, the amount of CIAC related to the Star/Quail Valley system could not be identified.

Q. Has the Company provided any additional information to support its claim that the entire $502,246 in CIAC related solely to Star/Quail Valley system?

A. No, it has not.

Q. What is Staff's recommendation?

A. Staff recommends increasing CIAC by $470,913 and increasing amortization of CIAC by $295,250, for a net $175,663 decrease in rate base as shown on Surrebuttal Schedules CSB-4 and CSB-6.

Q. How does Staff's recommendation for CIAC compare to the recommendation for CIAC in Staff's direct testimony?

A. Staff's recommendation for CIAC is the same as the recommendation made in its direct testimony.

Rate Base - Accumulated Deferred Income Taxes

Q. What are accumulated deferred income taxes ("ADITs")?

A. Accumulated deferred income taxes ("ADITs") are the accumulated computed tax differences between income taxes calculated for rate-making purposes and the actual income taxes that a company pays to the United States Treasury and the State of Arizona.

Q. What is the primary cause of the income tax difference?

A. The primary cause of the income tax difference is that a different amount of depreciation expense is used to calculate income taxes for ratemaking purposes than is used to calculate income taxes for federal and state purposes.

Q. Has Staff reviewed the Company's rebuttal testimony concerning the ADIT balance?

A. Yes.

Q. What is the Company's concern?

A. The Company alleges that Staff's adjustment to increase the CIAC balance should also result in an adjustment to the ADIT balance which, in turn, would increase rate base.

Q. Does Staff agree?

A. No, Staff does not agree. As shown in the table below, there are no tax differences caused by CIAC. Amortization/depreciation expense associated with CIAC is not recognized in the calculation of income taxes for ratemaking purposes because only depreciation net of CIAC amortization is used. Moreover, CIAC amortization is not used in the calculation of income taxes for federal and state purposes because the Company has no tax basis in the plant.

For Illustrative Purposes Only Company's Filing	**Ratemaking** Income Tax Calculation	Difference	**IRS** Income Tax Calculation
Company Proposed Revenue (From Direct Test.)	$720,310	$0	$720,310
Less: All Expenses Except Depreciation Expense and Income Taxes	<$526,929>	$0	<$526,929>
Less: Depreciation Expense on Investor Funded Plant ($2,159,387 - $375,036)	<$85,632>	$0	<$85,632>
Less: **Depreciation Expense allowed on CIAC** Funded Plant ($375,036 x 0%)	**$0**	**$0**	**$0**
Taxable Income	$107,749	$0	$107,749
Multiplied by Tax Rate	40%	40%	40%
Income Taxes Paid	$43,100	**$0**	$43,100
Income Tax Timing Difference (i.e., ADIT)		**$0**	

Q. Ms. Brown, is there any additional information that you would like to bring to the Commission's attention regarding Mr. Bourassa's ADIT discussion??

A. Yes. Mr. Bourassa's statement that changes in CIAC balances result in changes to ADIT balances is not supported by the CIAC and ADIT information contained in the Balance Sheet of the Company's 2012 Annual Report, where Staff noted changes in level of CIAC between the beginning and the end of the year, but the Company failed to show any

change to the reported ADIT balance. In fact, a zero ADIT balance is shown for both the beginning and the end of the year while the net CIAC balance drops by $178,341. (See the lines displaying USoA account 271 and USoA account 272 information.)

Operating Income Adjustment No. 1 – Salaries and Wages

Q. Did Staff review the Company's rebuttal testimony concerning salaries and wages?

A. Yes.

Q. Does Staff agree?

A. Yes and Staff has changed its schedules accordingly.

Q. What is Staff's recommendation?

A. Staff recommends salaries and wage expense of $55,097 which is the same amount proposed by the Company as shown on Schedules CSB-8 and CSB-9.

Q. How does Staff's recommendation for salaries and wages compare to the recommendation for salaries and wages in Staff's direct testimony?

A. Staff's recommendation for salaries and wages has increased by $2,507, from $52,591 in Staff's direct testimony to $55,097 in its surrebuttal testimony.

Operating Income Adjustment No. 3 – $197,722 Corporate Office Allocation

Q. Has Staff reviewed the Company's rebuttal testimony concerning the $197,722 Corporate Office Allocation?

A. Yes.

Q. What are the Company's concerns?

A. The Company has three concerns. First, the Company believes that the BUI allocation is no longer a recurring expense. Second, the Company believes that it is appropriate to use an estimate of $173,903 that is not based upon actual test year operating experience that is adjusted for known and measurable changes. Third, the Company claims that the $33,545 in bonuses are not actually bonuses, and therefore, should continue to be included in operating expenses.

Q. Does Staff agree?

A. No, Staff will discuss each separately.

The BUI Overhead Allocation

Q. The Company states on page 10, line 1 of Mr. Bourassa's testimony that, "Since BUI is no longer the owner of PWC, its overhead allocation is no longer recurring expense going forward." Does Staff agree?

A. No, Staff does not agree as changing who provides a service (i.e. vendor) does not result in the expense becoming non-recurring. A "non-recurring" expense is defined by whether or not a cost will continue to be needed in the provision of service. It is not defined by whether or not the vendor who provides the services (i.e. BUI) changes to a different vendor (i.e. Pivotal). The cost of administrative and other services provided by the BUI overhead allocation will continue through a different vendor (i.e. Pivotal).

The Company's $173,903 Estimate

Q. What does the Rate Case and Audit Manual Prepared by NARUC Staff Subcommittee on Accounting and Finance (2003) ("NARUC Rate Case and Audit Manual") state concerning adjustments to test year data?

A. On page 15 of the NARUC Rate Case and Audit Manual, it states:

> A utility's rate filing commonly *begins with test year booked numbers, which are then adjusted to represent anticipated, normalized operations for the period*, that the rates will take effect. . . . Several types of adjustments may be included, and these adjustments may be referenced by different names in different jurisdictions. Commonly, these adjustments will include correcting adjustments (e.g., the removal of prior period items from the test year), normalizing adjustments (e.g., adjusting . . . for a normalized level of expenses), and pro forma adjustments (e.g., the reflection of authorized salary increases into the test year figures). In general, the pro forma adjustments can be viewed as a ratemaking attempt to transform the relationship that exists between the elements of cost of service (revenues, expenses, taxes, and investment) during the test year to one that would take place during the period that the rates resulting from the rate proceeding take effect. (Emphasis added).

Q. Is the use of an estimate appropriate when actual test year data is available?

A. No, the use of an estimate is not appropriate when actual test year data is available. The NARUC Rate Case and Audit Manual indicates that actual test year data should be adjusted for known and measurable changes.

Q. Does an estimate that is not based upon actual data lend itself to auditing?

A. No, it does not. The Company puts forth estimates but cannot provide the underlying basis for the estimates as it admits that there are none.

The Company's $33,545 in Bonuses

Q. The Company states on page 11, line 16 of Mr. Bourassa's testimony that, ". . . Ms. Brown recommends removing $33,545 for so-called bonuses as part of its $43,260 downward adjustment to the BUI overhead allocation. However, this was base compensation, which was not optional – it had to be paid." Does Staff agree?

A. No, Staff does not. The Company provided documentation to show the detail of the $197,722 overhead allocation. This documentation explicitly identified the $33,545 as "**bonuses**" as shown on page 1 of Attachment B.

Q. What is Staff's recommendation?

A. Staff recommends decreasing miscellaneous expense by $43,260 as shown on Schedules CSB-8 and CSB-11.

Q. How does Staff's recommendation for miscellaneous expense compare to the recommendation for miscellaneous expense in Staff's direct testimony?

A. Staff's recommendation for miscellaneous expense is the same as the recommendation made in its direct testimony.

Operating Income Adjustment No. 5 – Miscellaneous Expense Other

Q. Did the Company disagree with Staff's removal of $2,438 related to chemicals expense and $1,650 for costs related to a consumption report for augmentation costs?

A. Yes.

Q. Why did Staff remove the $2,438 related to chemicals expense and $1,650 for costs related to a consumption report for augmentation costs?

A. Staff removed $2,438 for a consumption report regarding water augmentation costs to be consistent with Staff's recommendation to eliminate the water augmentation surcharge in Phase I of this proceeding. Staff removed $2,438 in chemical costs which the Company stated in response to CSB 2.6 was duplicative as shown in Attachment C.

Q. What is Staff's recommendation?

A. Staff recommends decreasing miscellaneous expense by $7,007 as shown on Surrebuttal Schedules CSB-8 and CSB-13.

Q. How does Staff's recommendation for miscellaneous expense compare to the recommendation for miscellaneous expense in Staff's direct testimony?

A. Staff's recommendation for miscellaneous expense is the same as the recommendation made in its direct testimony.

Operating Income Adjustment No. 7 – Income Taxes

Q. Did Staff review the Company's rebuttal testimony concerning income tax expense?

A. Yes. The Company indicated that the correct state income tax rate to be used in the calculation of income taxes is 6.5 percent. The Company has reflected this updated tax rate in its rebuttal testimony.

Q. Does Staff agree with the Company?

A. Yes, and Staff has revised its income tax calculation accordingly.

Q. What is Staff's recommendation?

A. Staff recommends increasing income tax expense by $34,219, from a negative $109,557 to a negative $75,338 as shown on Surrebuttal Schedules CSB-8 and CSB-15.

Q. How does Staff's recommendation for income tax expense compare to the recommendation for income tax expense in Staff's direct testimony?

A. Staff's recommendation for income tax expense has decreased by $17, from a negative $75,321 in Staff's direct testimony to negative $75,338 to in Staff's surrebuttal testimony.

Operating Income Adjustment No. 8 – Property Taxes

Q. Did Staff review the Company's rebuttal testimony concerning property taxes?

A. Yes. The Company indicated that the correct assessment ratio to be used in the calculation of property taxes is 19%. The Company has reflected this updated ratio in its rebuttal testimony.

Q. Does Staff agree with the Company?

A. Yes, and Staff has revised its property tax calculation accordingly.

Q. What is Staff's recommendation?

A. Staff recommends decreasing property tax expense by $1,052 as shown on Surrebuttal Schedules CSB-8 and CSB-16.

Q. How does Staff's recommendation for property tax expense compare to the recommendation for property tax expense in Staff's direct testimony?

A. Staff's recommendation for property tax expense has decreased by $1,052, from $21,030 in Staff's direct testimony to $19,978 in Staff's surrebuttal testimony.

Revenue Requirement

Q. Has Staff made a correction to the amount of increase recommended for Other Operating Revenues?

A. Yes. In its direct testimony, Staff had captured a $3,750 recommended increase to other operating revenues. However, Staff did not intend to recommend this change. Staff has removed this amount in its surrebuttal testimony.

Q. How does Staff's recommendation for other operating revenues compare to the recommendation for other operating revenues in Staff's direct testimony?

A. Staff's recommendation for other operating revenues has decreased by $3,750, from $10,716 in Staff's direct testimony to $6,966 in Staff's surrebuttal testimony.

Q. Does this conclude Staff's surrebuttal testimony?

A. Yes, it does.

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Surrebuttal Schedule CSB-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	[A] COMPANY ORIGINAL COST	[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	$ 659,457	$ 425,129
2	Adjusted Operating Income (Loss)	$ (182,479)	$ (129,641)
3	Current Rate of Return (L2 / L1)	-27.67%	-30.49%
4	Required Rate of Return	11.00%	6.40%
5	Required Operating Income (L4 * L1)	$ 72,540	$ 27,208
6	Operating Income Deficiency (L5 - L2)	$ 255,020	$ 156,849
7	Gross Revenue Conversion Factor	1.56766	1.54175
8	Increase (Decrease) In Gross Revenue (L7 * L6)	$ 399,785	$ 241,822
9	Adjusted Test Year Revenue	$ 320,525	$ 320,525
10	Proposed Annual Revenue (L8 + L9)	$ 720,310	$ 562,347
11	Required Increase/(Decrease in Revenue) (%) (L8/L9)	124.73%	75.45%

References:
Column [A]: Company Schedules A-1
Column [B]: Staff Schedules CSB-2, CSB-3, & CSB-15

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Surrebuttal Schedule CSB-2

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
	Calculation of Gross Revenue Conversion Factor:				
1	Revenue	100.0000%			
2	Uncollecible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	35.1387%			
5	Subtotal (L3 - L4)	64.8613%			
6	**Revenue Conversion Factor (L1 / L5)**	1.541752			
	Calculation of Uncollecttible Factor:				
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	33.7626%			
9	One Minus Combined Income Tax Rate (L7 - L8)	66.2374%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0.0000%			
	Calculation of Effective Tax Rate:				
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	6.5000%			
14	Federal Taxable Income (L12 - L13)	93.5000%			
15	Applicable Federal Income Tax Rate (Line 53)	29.1578%			
16	Effective Federal Income Tax Rate (L14 x L15)	27.2626%			
17	Combined Federal and State Income Tax Rate (L13 +L16)		33.7626%		
	Calculation of Effective Property Tax Factor				
18	Unity	100.0000%			
19	Combined Federal and State Income Tax Rate (L17)	33.7626%			
20	One Minus Combined Income Tax Rate (L18-L19)	66.2374%			
21	Property Tax Factor	2.0777%			
22	Effective Property Tax Factor (L20*L21)		1.3762%		
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			35.1387%	
24	Required Operating Income	$ 27,208			
25	AdjustedTest Year Operating Income (Loss)	(129,641)			
26	Required Increase in Operating Income (L24 - L25)		$ 156,849		
27	Income Taxes on Recommended Revenue (Col. [C], L52)	$ 4,611			
28	Income Taxes on Test Year Revenue (Col. [A], L52)	(75,338)			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		79,949		
30	Recommended Revenue Requirement	$ 562,347			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncolllectible Expense on Recommended Revenue (L30*L31)	$ -			
33	Adjusted Test Year Uncollectible Expense	$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)		-		
35	Property Tax with Recommended Revenue	$ 25,002			
36	Property Tax on Test Year Revenue	19,978			
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		5,024		
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)		$ 241,822		

		Test Year		Staff Recommended
	Calculation of Income Tax:			
39	Revenue	$ 320,525	$ 241,822	$ 562,347
40	Operating Expenses Excluding Income Taxes	$ 525,505	$ 5,024	$ 530,529
41	Synchronized Interest (L56)	$ 9,353		$ 9,353
42	Arizona Taxable Income (L39 - L40 - L41)	$ (214,333)		$ 22,465
43	Arizona State Income Tax Rate	6.5000%		6.5000%
44	Arizona Income Tax (L42 x L43)	$ (13,932)		$ 1,460
45	Federal Taxable Income (L42 - L44)	$ (200,401)		$ 21,005
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ (7,500)		$ 3,151
47	Federal Tax on Second Income Bracket ($51,001 - $75,000) @ 25%	$ (6,250)		$ -
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ (8,500)		$ -
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ (39,156)		$ -
50	Federal Tax on Fifth Income Bracket ($335,001 - $10,000,000) @ 34%	$ -		$ -
51	Total Federal Income Tax	$ (61,406)		$ 3,151
52	Combined Federal and State Income Tax (L44 + L51)	$ (75,338)		$ 4,611
53	Applicable Federal Income Tax Rate [Col. [C], L51 - Col. [A], L51] / [Col. [C], L45 - Col. [A], L45]			29.1578%
	Calculation of Interest Synchronization:			
54	Rate Base	$ 425,129		
55	Weighted Average Cost of Debt	2.2000%		
56	Synchronized Interest (L45 X L46)	$ 9,353		

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Surrebuttal Schedule CSB-3

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	ADJ NO.	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 2,159,387	$ -		$ 2,159,387
2	Less: Accumulated Depreciation	1,332,825	-		1,332,825
3	Net Plant in Service	$ 826,562	$ -		$ 826,562
	LESS:				
4	Advances in Aid of Construction (AIAC)	$ -	$ -		$ -
5	Service Line and Meter Advances	$ -	$ -		$ -
6	Contributions in Aid of Construction (CIAC)	$ 375,036	$ 541,033	1	$ 916,069
7	Less: Accumulated Amortization	231,270	306,705	2	537,975
8	Net CIAC	$ 143,766	234,328		$ 378,094
9	Total Advances and Contributions	$ 143,766	$ 234,328		$ 378,094
10	Customer Deposits	$ -	$ -		$ -
11	Accumulated Deferred Income Taxes	$ 23,339	$ -		$ 23,339
	ADD: Working Capital				
12	Prepayments	$ -	$ -		$ -
13	Inventory	$ -	$ -		$ -
14	**Total Rate Base**	$ 659,457	$ (234,328)		$ 425,129

References:
Column [A], Company Schedule B-1, Page 1
Column [B]: Schedule CSB-4
Column [C]: Column [A] + Column [B]

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Surrebuttal Schedule CSB-4

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	Acct. No.	PLANT IN SERVICE Plant Description	[A] COMPANY AS FILED	[B] Adj No.1 Unsupported Plant Treated as CIAC Ref: Sch CSB-5	[C] ADJ No. 2 Unsupported Removal of CIAC Related to Sale of Star/Quail Valley System Ref: Sch CSB-6	[D] STAFF AS ADJUSTED
1						
2	301	Organization Cost	$ 221	$ -	$ -	$ 221
3	302	Franchises	-	-	-	-
4	303	Land and Land Rights	16,500	-	-	16,500
5	304	Structures and Improvements	300,078	-	-	300,078
	305	Collecting and Impounding Reserviors	2,531	-	-	2,531
6	307	Wells and Springs	273,013	-	-	273,013
7	309	Supply Mains	3,681	-	-	3,681
8	310	Power Generation Equipment	8,310	-	-	8,310
9	311	Pumping Equipment	217,608	-	-	217,608
10	320	Water Treatment Equipment	10,567	-	-	10,567
11	330	Distribution Reservoirs and Standpipes	273,800	-	-	273,800
12	330.2	Pressure Tanks	-	-	-	-
13	331	Transmission and Distribution Mains	439,972	-	-	439,972
14	333	Services	81,823	-	-	81,823
15	334	Meters and Meter Installations	199,952	-	-	199,952
16	335	Hydrants	1,171	-	-	1,171
17	336	Backflow Prevention Devices	-	-	-	-
18	339	Other Plant and Miscellaneous Equipment	320,820	-	-	320,820
19	340	Office Furniture and Equipment	-	-	-	-
20	340.1	Computers and Software	-	-	-	-
21	341	Transportation Equipment	-	-	-	-
22	343	Tools, Shop, and Garage Equipment	72	-	-	72
23	344	Laboratory Equipment	-	-	-	-
24	345	Power Operated Equipment	-	-	-	-
25	346	Communication Equipment	9,267	-	-	9,267
26	347	Miscellaneous Equipment	-	-	-	-
27	348	Other Tangible Equipment	-	-	-	-
28		Rounding	1	-	-	1
29		Total Plant in Service	$ 2,159,387	$ -	$ -	$ 2,159,387
30		Less: Accumulated Depreciation	$ 1,332,825	$ -	$ -	1,332,825
31		Net Plant in Service	$ 826,562	$ -	$ -	$ 826,562
32						
33		*LESS:*				
34		Advances in Aid of Construction (AIAC)	$ -	$ -	$ -	$ -
35		Meter Deposits - Service Line & Meter Advances	$ -	-	-	-
36						
37		Contributions in Aid of Construction (CIAC)	$ 375,036	70,120	470,913	916,069
38		Less: Accumulated Amortization of CIAC	$ 231,270	11,455	295,250	537,975
39		Net CIAC	$ 143,766	$ 58,665	$ 175,663	$ 378,094
40						
41		Total Advances and Net Contributions	$ 143,766	$ 58,665	$ 175,663	$ 378,094
42						
43		Customer Deposits	$ -	-	-	$ -
44		Accumulated Deferred Taxes	$ 23,339	-	-	$ 23,339
45						
46		*ADD: Working Capital*				-
47		Prepayments	$ -	-	-	$ -
48			$ -	-	-	$ -
49		**Total Rate Base**	$ 659,457	$ (58,665)	$ (175,663)	$ 425,129

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Surrebuttal Schedule CSB-5

RATE BASE ADJUSTMENT NO. 1 - UNSUPPORTED PLANT TREATED AS CIAC

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED	
1	CIAC, Unsupported Plant Treated as CIAC	$ -	$ 70,120	$ 70,120	Line 33
2	Amort of CIAC, Unsupported Plant Treated as CIAC	$ -	$ 11,455	$ 11,455	Line 50
3	Net CIAC, Unsupported Plant Treated as CIAC	$ -	$ 58,665	$ 58,665	
4					
5					
6					
7					
8					

UNSUPPORTED PLANT TREATED AS CIAC

9–12	Description	Plant Selected In Sample	Unsupported Plant Costs	Staff as Adjusted
13	2006 Plant Addition, Acct No. 307-Wells & Springs	**$ 11,646**	**$ -**	**$ 11,646**
14				
15	2007 Plant Addition, Acct No. 310-Power Generation Equip.	**$ 20,059**	**$ -**	**$ 20,059**
16				
17	2002 Plant Addition, Acct No. 311 - Pumping Equipment	$ 12,580	$ -	$ 12,580
18	2005 Plant Addition, Acct No. 311 - Pumping Equipment	$ 12,467	$ -	$ 12,467
19	2008 Plant Addition, Acct No. 311 - Pumping Equipment	19,722	-	19,722
20	**Acct No. 311- Pumping Equipment Subtotal**	**$ 44,769**	**$ -**	**$ 44,769**
21				
22	2001 Plant Addition, Acct No. 330-Distr Reserv & Standpipes	$ 24,296	$ -	$ 24,296
23	2002 Plant Addition, Acct No. 330-Distr Reserv & Standpipes	31,220	-	31,220
24	2003 Plant Addition, Acct No. 330-Distr Reserv & Standpipes	42,968	-	42,968
25	**Acct No. 331- Transp. & Distrib. Mains Subtotal**	**$ 98,484**	**$ -**	**$ 98,484**
26				
27	2003 Plant Addition, Acct No. 331-Services	**$ 23,284**	**$ -**	**$ 23,284**
28				
29	2000 Plant Addition, Acct No. 334-Meters	**$ 35,491**	**$ -**	**$ 35,491**
30				
31	**Total**	**$ 233,733**	**$ -**	**$ 233,733**
32			**x**	**30%**
33				**$ 70,119.90**
34				
35				

CALCULATION OF AMORTIZATION OF CIAC ON UNSUPPORTED PLANT

36–38	Year Added	Plant Additions	Unsupported Plant	Year Transferred To CIAC	Number of Interim Years	Depreciation Rate	Amortization of CIAC
39	2000	Meters	$ 35,491	2000	12.5	8.33%	$36,955.00
40	2001	Distrib Reserviors	$ 24,296	2001	11.5	2.22%	$6,202.77
41	2002	Pumping Equip	$ 12,580	2002	10.5	12.50%	$16,511.25
42	2002	Distrib Reserviors	$ 31,220	2002	10.5	2.22%	$7,277.38
43	2003	Distrib Reserviors	$ 42,968	2003	9.5	2.22%	$9,061.95
44	2003	Services	$ 23,284	2003	9.5	3.33%	$7,365.89
45	2005	Pumping Equip	$ 12,467	2005	7.5	12.50%	$11,687.81
46	2006	Wells and Springs	$ 11,646	2006	6.5	3.33%	$2,520.78
47	2007	Pwr Gen Equip	$ 20,059	2007	5.5	5.00%	$5,516.23
48	2008	Pumping Equip	$ 19,722	2008	4.5	12.50%	$11,093.63
49			**$ 233,733**				$38,184.33
50						x	30%
							$ 11,455.30

References:

Column A: Company Schedule B-2
Column B: Testimony, CSB, Company Data Request Responses CSB 1.3
Column C: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 2 -UNSUPPORTED REMOVAL OF CIAC RELATED TO SALE OF STAR/QUAIL VALLEY SYSTEM

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED	
1	Company Proposed Removal of CIAC Related to Sale	$ -	$ 548,628	$ 548,628	
2	Amount of Supported CIAC Related to Sale	$ -	$ (77,715)	$ (77,715)	
3	Unsupported Removal of CIAC Related to Sale	$ -	$ 470,913	$ 470,913	
4					
5	Company Proposed Removal of Amort of CIAC Related to Sale	$ -	$ 343,975	$ 343,975	
6	Amort. Of CIAC on $77,715 Supported CIAC	$ -	$ (48,725)	$ (48,725)	Line 26
7	Total Unsupported Removal of Amortization of CIAC	$ -	$ 295,250	$ 295,250	
8					
9	Net CIAC	$ -	$ 175,663	$ 175,663	
10					
11					
12					
13		Star/Quail Valley System			
14		CIAC	% of CIAC		
15		&	That Is Fully		
16		Amort of CIAC	Amortized		
17	CIAC for Star Valley Plant (CSB 2.17)	$ 548,628			
18	Amortization of CIAC for Star Valley Plant (CSB 2.17)	$ 343,975	63%		Line 18 / Line 17
19					
20					
21			Amortization		
22			of CIAC on		
23			$77,715 Amount		
24			$ 77,715		From Line 2
25		Multiplied by	63%		From Line 18
26			$ 48,725		

References:
Column A: Company Schedule B-2
Column B: Testimony, CSB, Company Data Request Responses CSB 2.16 & CSB 2.17
Column C: Column [A] + Column [B]

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Surrebuttal Schedule CSB-7

OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	ADJ NO.	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
	REVENUES:						
1	Metered Water Sales	$ 313,559			$ 313,559	$ 241,822	$ 555,381
2	Water Sales - Unmetered	-	-		-		-
3	Other Operating Revenues	6,966	-		6,966	-	6,966
4	**Total Revenues**	$ 320,525	$ -		$ 320,525	$ 241,822	$ 562,347
5							
6	*EXPENSES:*						
7	Salaries and Wages	$ 55,097	$ -	1	$ 55,097	$ -	$ 55,097
8	Employee Pensions & Benefits	-	-		-	-	-
9	Purchased Power	50,533	-		50,533	-	50,533
10	Fuel for Power Production	-	-		-	-	-
11	Chemicals	2,181	-		2,181	-	2,181
12	Repairs and Maintenance	28,089	-		28,089	-	28,089
13	Office Supplies & Expense	-	-		-	-	-
14	Contractual Services	58,481	(1,683)	2	56,798	-	56,798
15	Water Testing	11,000	-		11,000	-	11,000
16	Rents	-	-		-	-	-
17	Transportation Expenses	-	-		-	-	-
18	Insurance - General Liability	-	-		-	-	-
19	Insurance - Health and Life	266	-		266	-	266
20	Reg. Comm. Exp.	-	-		-	-	-
21	Reg. Comm. Exp. - Rate Case	65,000	-		65,000	-	65,000
22	Miscellaneous Expense	235,253	(58,124)	3,4,5	177,129	-	177,129
23	Bad Debt Expense	-	-		-	-	-
24	Depreciation Expense	85,632	(26,198)	6	59,434	-	59,434
25	Taxes Other Than Income	-	-		-	-	-
26	Property Taxes	21,030	(1,052)		19,978	5,024	25,002
27	Income Taxes	(109,557)	34,219	7	(75,338)	79,949	4,611
28	Rounding	(1)	-		(1)	-	(1)
29		-					
30	**Total Operating Expenses**	$ 503,004	$ (52,838)		$ 450,166	$ 84,973	$ 535,139
31							
32	**Operating Income (Loss)**	$ (182,479)	$ 52,838		$ (129,641)	$ 156,849	$ 27,208

References:
Column (A): Company Schedule C-1
Column (B): Schedule CSB-16
Column (C): Column (A) + Column (B)
Column (D): Schedules CSB-1 and CSB-2
Column (E): Column (C) + Column (D)

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SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1 Salaries and Wages Ref: Sch CSB-9	[C] ADJ #2 Contractual Services Ref: Sch CSB-10	[D] ADJ #3 $197,722 Corporate Office Allocation Ref: Sch CSB-11	[E] ADJ #4 Misc. Expense, Beaver Valley Write Off Ref: Sch CSB-12	[F] ADJ #5 Misc. Expense, Other Ref: Sch CSB-13	[G] ADJ #6 Depreciation Expense Ref: Sch CSB-14	[H] ADJ #7 Income Tax Expense Ref: Sch CSB-15	[I] ADJ #8 Property Tax Expense Ref: Sch CSB-16	[J] STAFF ADJUSTED
	REVENUES:										
1	Metered Water Sales	$ 313,559	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 313,559
2	Water Sales - Unmetered	-	-	-	-	-	-	-	-	-	-
3	Other Operating Revenues	6,966	-	-	-	-	-	-	-	-	6,966
4	**Total Revenues**	$ 320,525	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 320,525
5											
6	*OPERATING EXPENSES:*										
7	Salaries and Wages	$ 55,097	-	-	-	-	-	-	-	-	$ 55,097
8	Employee Pensions & Benefits	-	-	-	-	-	-	-	-	-	-
9	Purchased Power	50,533	-	-	-	-	-	-	-	-	50,533
10	Fuel for Power Production	-	-	-	-	-	-	-	-	-	-
11	Chemicals	2,181	-	-	-	-	-	-	-	-	2,181
12	Repairs and Maintenance	28,089	-	-	-	-	-	-	-	-	28,089
13	Office Supplies & Expense	-	-	-	-	-	-	-	-	-	-
14	Contractual Services	58,481	-	(1,683)	-	-	-	-	-	-	56,798
15	Water Testing	11,000	-	-	-	-	-	-	-	-	11,000
16	Rents	-	-	-	-	-	-	-	-	-	-
17	Transportation Expenses	-	-	-	-	-	-	-	-	-	-
18	Insurance - General Liability	-	-	-	-	-	-	-	-	-	-
19	Insurance - Health and Life	266	-	-	-	-	-	-	-	-	266
20	Reg. Comm. Exp.	-	-	-	-	-	-	-	-	-	-
21	Reg. Comm. Exp. - Rate Case	65,000	-	-	-	-	-	-	-	-	65,000
22	Miscellaneous Expense	235,253	-	-	(43,260)	(7,857)	(7,007)	-	-	-	177,129
23	Bad Debt Expense	-	-	-	-	-	-	-	-	-	-
24	Depreciation Expense	85,632	-	-	-	-	-	(26,198)	-	-	59,434
25	Taxes Other Than Income	-	-	-	-	-	-	-	-	-	-
26	Property Taxes	21,030	-	-	-	-	-	-	-	(1,052)	19,978
27	Income Taxes	(109,557)	-	-	-	-	-	-	34,219	-	(75,338)
28	Rounding	(1)	-	-	-	-	-	-	-	-	(1)
29		-	-	-	-	-	-	-	-	-	-
30	**Total Operating Expenses**	$ 503,004	$ -	$ (1,683)	$ (43,260)	$ (7,857)	$ (7,007)	$ (26,198)	$ 34,219	$ (1,052)	$ 450,166
31											
32	**Operating Income (Loss)**	$ (182,479)	$ -	$ 1,683	$ 43,260	$ 7,857	$ 7,007	$ 26,198	$ (34,219)	$ 1,052	$ (129,641)

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Surrebuttal Schedule CSB-9

OPERATING INCOME ADJUSTMENT NO. 1 - SALARIES & WAGES

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS (Col C - Col A)	[C] STAFF AS ADJUSTED	
1	Salaries & Wages	$ 55,097	$ -	$ 55,097	Removed $2,507 Adj.
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

References:

Column A: Company Schedule C-2
Column B: Testimony, CSB; Data Request Responses CSB 1.15, 1.24, and 2.11
Column C: Column [A] + Column [B]

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Surrebuttal Schedule CSB-10

OPERATING INCOME ADJUSTMENT NO. 2 - CONTRACTUAL SERVICES

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS (Col C - Col A)	[C] STAFF AS ADJUSTED
1	Contractual Services	$ 70,679	$ -	$ 70,679
2	Legal Expenses Related to Condemnation	$ (12,198)	$ (1,683)	$ (13,881)
3	Total Contractual Services	$ 58,481	$ (1,683)	$ 56,798

References:

Column A: Company Schedule C-2
Column B: Testimony, CSB, Data Request Response CSB 1.31
Column C: Column [A] + Column [B]

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Surrebuttal Schedule CSB-11

OPERATING INCOME ADJUSTMENT NO. 3 - $197,722 Corporate Office Allocation

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS (Col C - Col A)	[C] STAFF AS ADJUSTED
1	Miscellaneous Expense	$ 37,531	$ -	$ 37,531
2				
3	**Central Office Overhead Allocation**	$ 197,722	$ -	$ 197,722
4	Bonuses	$ -	$ (33,545)	$ (33,545)
5	Star/Quail Valley Costs	$ -	$ (9,466)	$ (9,466)
6	Other (Advertising, Fines, Utility Plant, Gain on Sale)	$ -	$ (249)	$ (249)
7	**Subtotal - Central Office Overhead Allocation**	**$ 197,722**	**$ (43,260)**	**$ 154,462**
8				
9	Total Miscellaneous Expense (L1 + L7)	$ 235,253	$ (43,260)	$ 191,993
10				
11				
12	$197,722 Central Office Overhead Allocation (CSB 1.13, 2.8, 2.10, 2.11, & 2.12)			
13	Description	Per Company	Difference	Per Staff
14	Salaries & Wages	$ 47,998.99	$ (4,307.76)	$ 43,691.23
15	Salaries & Wages, Bonuses	$ 33,544.62	$ (33,544.62)	$ -
16	Payroll Taxes	$ 4,939.37	$ (634.31)	$ 4,305.06
17	Benefits	$ 3,810.35	$ (489.32)	$ 3,321.03
18	Building Occupancy Expenses	$ 81.43	$ -	$ 81.43
19	Utilities	$ 3,182.87	$ -	$ 3,182.87
20	Communications	$ 7,679.43	$ -	$ 7,679.43
21	Travel	$ 13,911.85	$ -	$ 7,679.43
22	Meals & Entertainment	$ 577.95	$ -	$ 577.95
23	Lodging	$ 2,135.89	$ -	$ 2,135.89
24	Supplies (Office Expenses)	$ 14,640.49	$ (1,881.40)	$ 12,759.09
25	Repairs and Maintenance	$ 5,181.27	$ -	$ 5,181.27
26	Bank Charges & Fees	$ 2,488.32	$ (319.55)	$ 2,488.32
27	Professional Fees	$ 31,210.70	$ -	$ 31,210.70
28	Training & Education	$ 466.18	$ -	$ 466.18
29	Advertising & Promotion	$ 137.87	$ (137.87)	$ -
30	Dues & Subscriptions	$ 1,338.34	$ -	$ 1,338.34
31	Licenses & Permits	$ 2,685.24	$ -	$ 2,685.24
32	Fines & Penalties	$ 12.36	$ (12.36)	$ -
33	Write Off	$ 15.75	$ -	$ 15.75
34	Utility Plant In Service	$ 948.87	$ (948.87)	$ -
35	Other General Business	$ 197.25	$ -	$ 197.25
36	Property & Casualty Insurance	$ 997.07	$ (128.04)	$ 997.07
37	Management Fees	$ 13,281.62	$ (1,705.61)	$ 11,576.01
38	Depreciation/Utility Plant In Service (Office Space)	$ 7,107.99	$ -	$ 7,107.99
39	(Gain) Loss on Sale of Assets	$ (849.66)	$ 849.66	$ -
40		$ 197,722.41	$ (43,260.06)	$ 148,678
41				

42	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(G)
43–48	No. of Payson Customers Excluding Star/Quail Valley (CSB 2.8)	Number of Star/Quail Valley Customers (From Water Co. Plant Descrip Included in Applica)	Total Number of Payson Customers Including Star/Quail Valley Col A + Col B	Description	Amount	Annual Amount Per Customer Col E / Col C	Monthly Amount Per Customer Col F / 12	Monthly Amount Per Customer For Six Months Col G x 6 Months
49	1114	385	1499	Salaries & Wages	$ 33,544.62	$ 22	$ 1.86	$ 4,307.76
50	1114	385	1499	Payroll Taxes	$ 4,939.37	$ 3	$ 0.27	$ 634.31
51	1114	385	1499	Benefits	$ 3,810.35	$ 3	$ 0.21	$ 489.32
52	1114	385	1499	Suppl. (Office Expenses)	$ 14,650.49	$ 10	$ 0.81	$ 1,881.40
53	1114	385	1499	Bank Charges & Fees	$ 2,488.32	$ 2	$ 0.14	$ 319.55
54	1114	385	1499	Prop & Casualty Ins	$ 997.07	$ 1	$ 0.06	$ 128.04
55	1114	385	1499	Management Fees	$ 13,281.62	$ 9	$ 0.74	$ 1,705.61
56								$ 9,466.00

References:
Column A: Company Schedule C-1
Column B: Testimony, CSB; CSB 1.13, CSB 2.8
Column C: Column [A] + Column [B]

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Surrebuttal Schedule CSB-12

OPERATING INCOME ADJUSTMENT NO. 5 - MISCELLANEOUS EXPENSE, BEAVER DAM WRITE OFF

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Miscellaneous Expense	$ 227,396	$ -	$ 227,396
2	Beaver Dam Write Off (CSB 2.3)	$ 7,857	$ (7,857)	$ -
3	Total Miscellaneous Expense	$ 235,253	$ (7,857)	$ 227,396

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

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Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Surrebuttal Schedule CSB-13

OPERATING INCOME ADJUSTMENT NO. 4 - MISCELLANEOUS EXPENSE, OTHER

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Miscellaneous Expense	$ 232,815	$ -	$ 232,815
2	Chemicals (CSB 2.6)	$ 2,438	$ (2,438)	$ -
3	Consumption Report Regarding Water Augmentation Costs	$ 1,650	$ (1,650)	$ -
4	Cogsdale - Star Valley Deposit Sort	$ 825	$ (825)	$ -
5	Arizona Department of Revenue	$ 1,076	$ (1,076)	$ -
6	ACC Annual Assessment	$ 1,018	$ (1,018)	$ -
7	Total Miscellaneous Expense	$ 239,822	$ (7,007)	$ 232,815

References:
Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Surrebuttal Schedule CSB-14

OPERATING INCOME ADJUSTMENT NO. 6 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

LINE NO.		DESCRIPTION	[A] PLANT In SERVICE Per Staff	[B] NonDepreciable or Fully Depreciated PLANT	[C] DEPRECIABLE PLANT (Col A - Col B)	[D] DEPRECIATION RATE	[E] DEPRECIATION EXPENSE (Col C x Col D)
1	301	Organization Cost	$ 221	$ (221)	$ -	0.00%	$ -
2	302	Franchises	-	-	$ -	0.00%	$ -
3	303	Land and Land Rights	16,500	(16,500)	$ -	0.00%	
4	304	Structures and Improvements	300,078	-	300,078	3.33%	9,993
5	305	Collecting and Impounding Reserviors	2,531	-	2,531	3.33%	84
6	306	Lake, River, and Other Intakes	-	-	-	2.50%	-
7	307	Wells and Springs	273,013	-	273,013	3.33%	9,091
8	309	Supply Mains	3,681	-	3,681	2.00%	74
9	310	Power Generation Equipment	8,310	-	8,310	5.00%	416
10	311	Pumping Equipment	217,608	-	217,608	12.50%	27,201
11	320	Water Treatment Equipment	10,567	-	10,567	3.33%	352
12	330	Distribution Reservoirs and Standpipes	273,800	-	273,800	2.22%	6,078
13	330.2	Pressure Tanks	-	-	-	5.00%	-
14	331	Transmission and Distribution Mains	439,972	-	439,972	2.00%	8,799
15	333	Services	81,823	-	81,823	3.33%	2,725
16	334	Meters and Meter Installations	199,952	-	199,952	8.33%	16,656
17	335	Hydrants	1,171	-	1,171	2.00%	23
18	336	Backflow Prevention Devices	-	-	-	6.67%	-
19	339	Other Plant and Miscellaneous Equipment	320,820	-	320,820	6.67%	21,399
20	340	Office Furniture and Equipment	-	-	-	6.67%	-
21	341	Transportation Equipment	-	-	-	20.00%	-
22	340.1	Computers and Software	-	-	-	20.00%	-
23	343	Tools, Shop, and Garage Equipment	72	-	72	5.00%	4
24	344	Laboratory Equipment	-	-	-	10.00%	-
25	345	Power Operated Equipment	-	-	-	5.00%	-
26	346	Communication Equipment	9,267	-	9,267	10.00%	927
27	347	Miscellaneous Equipment	-	-	-	10.00%	-
28	348	Other Tangible Equipment	-	-	-	10.00%	-
29		Total Plant	$ 2,159,386	$ (16,721)	$ 2,142,665		$ 103,821
30							
31							
32							
33		Composite Depreciation Rate (Depr Exp / Depreciable Plant):	4.85%				
34		CIAC:	$ 916,069				
35		Amortization of CIAC (Line 33 x Line 34):	$ 44,387				
36							
37		Depreciation Expense Before Amortization of CIAC:	$ 103,821				
38		Less Amortization of CIAC:	$ 44,387				
39		Test Year Depreciation Expense - Staff:	$ 59,434				
40		Depreciation Expense - Company:	85,632				
41		**Staff's Total Adjustment:**	**$ (26,198)**				

References:
Column [A]: Schedule CSB-4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Surrebuttal Schedule CSB-15

OPERATING INCOME ADJUSTMENT NO. 7 - TEST YEAR INCOME TAXES

LINE NO.	DESCRIPTION	(A)	(B)
	Calculation of Income Tax:	Test Year	
1	Revenue	$ 320,525	
2	Less: Operating Expenses - Excluding Income Taxes	$ 525,505	
3	Less: Synchronized Interest (L17)	$ 9,353	
4	Arizona Taxable Income (L1- L2 - L3)	$ (214,333)	
5	Arizona State Income Tax Rate	6.500%	
6	Arizona Income Tax (L4 x L5)		$ (13,932)
7	Federal Taxable Income (L4 - L6)	$ (200,401)	
8	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ (7,500)	
9	Federal Tax on Second Income Bracket ($51,001 - $75,000) @ 25%	$ (6,250)	
10	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ (8,500)	
11	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ (39,156)	
12	Federal Tax on Fifth Income Bracket ($335,001 - $10,000,000) @ 34%	$ -	
13	Total Federal Income Tax		$ (61,406)
14	Combined Federal and State Income Tax (L6 + L13)		$ (75,338)
	Calculation of Interest Synchronization:		
15	Rate Base	$ 425,129	
16	Weighted Average Cost of Debt	2.20%	
17	Synchronized Interest (L16 x L17)	$ 9,353	
18	Income Tax - Per Staff	$ (75,338)	
19	Income Tax - Per Company	$ (109,557)	
20	**Staff Adjustment**	**$ 34,219**	

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Surrebuttal Schedule CSB-16

OPERATING INCOME ADJUSTMENT NO. 8 - PROPERTY TAX EXPENSE

LINE NO.	Property Tax Calculation	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	$ 320,525	$ 320,525
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	641,050	$ 641,050
4	Staff Recommended Revenue, Per Schedule CSB-1	320,525	$ 562,347
5	Subtotal (Line 4 + Line 5)	961,575	1,203,397
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	320,525	$ 401,132
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	641,050	$ 802,265
10	Plus: 10% of CWIP -	-	-
11	Less: Net Book Value of Licensed Vehicles	-	$ -
12	Full Cash Value (Line 9 + Line 10 - Line 11)	641,050	$ 802,265
13	Assessment Ratio	19.0%	19.0%
14	Assessment Value (Line 12 * Line 13)	121,800	$ 152,430
15	Composite Property Tax Rate	16.4025%	16.4025%
			$ -
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	$ 19,978	
17	Company Proposed Property Tax	21,030	
18	Staff Test Year Adjustment (Line 16-Line 17)	$ (1,052)	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		$ 25,002
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 19,978
21	Increase in Property Tax Expense Due to Increase in Revenue Requirement		$ 5,024
22	Increase to Property Tax Expense		$ 5,024
23	Increase in Revenue Requirement		241,822
24	Increase to Property Tax per Dollar Increase in Revenue (Line19/Line 20)		2.077650%

Monthly Usage Charge	United System Present	C&S Systems Present	Company Proposed Rates Consolidated	Staff Recommended Rates Consolidated
Meter Size (All Classes):				
5/8 x 3/4 Inch	$ 16.00	$ 17.00	$ 39.24	$ 20.00
3/4 Inch	18.40	25.50	58.85	33.00
1 Inch	21.28	42.50	98.09	55.00
1 1/2 Inch	32.00	85.00	196.18	110.00
2 Inch	56.00	136.00	313.89	176.00
3 Inch	80.00	255.00	627.78	352.00
4 Inch	128.00	425.00	980.90	550.00
6 Inch	No Tariff	850.00	1,961.80	1,200.00
8 Inch	No Tariff	No Tariff	3,138.88	1,760.00
Commodity Charge - Per 1,000 Gallons				
C&S System (All Meter Sizes)				
Per 1,000 gallons, for all gallons	N/A	$ 1.4800	N/A	N/A
United Systems (All Meter Sizes)				
First 4,000 gallons	$ 1.9300	N/A	N/A	N/A
Over 4,000 gallons	2.9900	N/A	N/A	N/A
5/8"x3/4" and 3/4 "Meters (Consolidated)				
First 4,000 gallons	N/A	N/A	$ 2.7500	N/A
4,001 to 10,000 gallons	N/A	N/A	4.7500	N/A
Over 10,000 gallons	N/A	N/A	6.7500	N/A
First 3,000 gallons	N/A	N/A	N/A	$ 4.0000
3,001 to 10,000 gallons	N/A	N/A	N/A	7.2000
Over 10,000 gallons	N/A	N/A	N/A	9.6170
1" Meter (Consolidated)				
First 25,000 gallons	N/A	N/A	4.0000	N/A
Over 25,000 gallons	N/A	N/A	4.2500	N/A
First 18,000 gallons	N/A	N/A	N/A	7.2000
Over 18,000 gallons	N/A	N/A	N/A	9.6170
1 1/2" Meter (Consolidated)				
First 50,000 gallons	N/A	N/A	4.0000	N/A
Over 50,000 gallons	N/A	N/A	4.2500	N/A
First 38,000 gallons	N/A	N/A	N/A	7.2000
Over 38,000 gallons	N/A	N/A	N/A	9.6170
2" Meter (Consolidated)				
First 80,000 gallons	N/A	N/A	4.0000	N/A
Over 80,000 gallons	N/A	N/A	4.2500	N/A
First 60,000 gallons	N/A	N/A	N/A	7.2000
Over 60,000 gallons	N/A	N/A	N/A	9.6170
3" Meter (Consolidated)				
First 160,000 gallons	N/A	N/A	4.0000	N/A
Over 160,000 gallons	N/A	N/A	4.2500	N/A
First 120,000 gallons	N/A	N/A	N/A	7.2000
Over 120,000 gallons	N/A	N/A	N/A	9.6170
4" Meter (Consolidated)				
First 250,000 gallons	N/A	N/A	4.0000	N/A
Over 250,000 gallons	N/A	N/A	4.2500	N/A
First 200,000 gallons	N/A	N/A	N/A	7.2000
Over 200,000 gallons	N/A	N/A	N/A	9.6170

6" Meter (Consolidated)				
First 500,000 gallons	N/A	N/A	4.0000	N/A
Over 500,000 gallons	N/A	N/A	4.2500	N/A
First 450,000 gallons	N/A	N/A	N/A	7.2000
Over 450,000 gallons	N/A	N/A	N/A	9.6170
8" Meter (Consolidated)				
First 800,000 gallons	N/A	N/A	4.0000	N/A
Over 800,000 gallons	N/A	N/A	4.2500	N/A
First 679,000 gallons	N/A	N/A	N/A	7.2000
Over 679,000 gallons	N/A	N/A	N/A	9.6170

Other Service Charges

	United System	C&S Systems	Consolidated Company Proposed	Consolidated Staff Recommended
Establishment	$ 25.00	$ 25.00	$ 25.00	$ 25.00
Establishment (After Hours)	$ 35.00	$ 35.00	$ 35.00	Remove from Tariff
Reconnection (Delinquent)	$ 20.00	$ 20.00	$ 20.00	$ 20.00
Reconnection (Delinquent and After Hours)	$ 30.00	$ 30.00	$ 30.00	Remove from Tariff
Meter Test (If Correct)	$ 25.00	$ 20.00	$ 25.00	$ 25.00
Deposit	*	*	*	*
Deposit Interest*	6.00%	6.00%	6.00%	6.00%
Reestablishment (within 12 months)	**	**	**	**
NSF Check	$ 17.50	$ 10.00	$ 17.50	$ 17.50
Deferred Payment (per month)	1.50%	1.50%	1.50%	1.5% per month
Meter Re-Read (if correct and not error)	$ 15.00	$ 10.00	$ 15.00	$ 15.00
Late Charge per month (per R-14-2-409 G (6)	1.50%	1.50%	1.50%	1.5% per month
After Hour Service Charge (at cust. request)	N/A	N/A	N/A	$ 35.00

* Per Commission Rule R14-2-403(B).
** Number of months off the system times the monthly minimum per A.A.C. R14-2-403(D).

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).

All advances and/or contributions are to include labor, materials, overheads, and all applicable taxes.

Service and Meter Installation Charges

Service Size	United Systems and C&S System Total Present	Consolidated Proposed Service Line Charge	Consolidated Proposed Meter Insallation Charge	Consolidated Total Proposed Charge	Consolidated Recommended Service Line Charge	Consolidated Recommended Meter Insallation Charge	Consolidated Total Recommended Charge
5/8 x 3/4 Inch	$ 430.00	$ 445.00	$ 155.00	$ 600.00	$ 445.00	$ 155.00	$ 600.00
3/4 Inch	$ 480.00	$ 445.00	$ 255.00	$ 700.00	$ 445.00	$ 255.00	$ 700.00
1 Inch	$ 550.00	$ 495.00	$ 315.00	$ 810.00	$ 495.00	$ 315.00	$ 810.00
1 1/2 Inch	$ 775.00	$ 550.00	$ 525.00	$ 1,075.00	$ 550.00	$ 525.00	$ 1,075.00
2 Inch	$ 1,305.00	N/A	N/A	N/A	N/A	N/A	N/A
2 Inch Turbine	N/A	$ 830.00	$ 1,045.00	$ 1,875.00	$ 830.00	$ 1,045.00	$ 1,875.00
2 Inch Compound	N/A	$ 830.00	$ 1,890.00	$ 2,720.00	$ 830.00	$ 1,890.00	$ 2,720.00
3 Inch	$ 1,815.00	N/A	N/A	N/A	N/A	N/A	N/A
3 Inch Turbine	N/A	$ 1,045.00	$ 1,670.00	$ 2,715.00	$ 1,045.00	$ 1,670.00	$ 2,715.00
3 Inch Compound	N/A	$ 1,165.00	$ 2,545.00	$ 3,710.00	$ 1,165.00	$ 2,545.00	$ 3,710.00
4 Inch	$ 2,860.00	N/A	N/A	N/A	N/A	N/A	N/A
4 Inch Turbine	N/A	$ 1,490.00	$ 2,670.00	$ 4,160.00	$ 1,490.00	$ 2,670.00	$ 4,160.00
4 Inch Compound	N/A	$ 1,670.00	$ 3,645.00	$ 5,315.00	$ 1,670.00	$ 3,645.00	$ 5,315.00
6 Inch - United Systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 Inch - C&S Systems	$ 5,275.00	N/A	N/A	N/A	N/A	N/A	N/A
6 Inch Turbine	N/A	$ 2,210.00	$ 5,025.00	$ 7,235.00	$ 2,210.00	$ 5,025.00	$ 7,235.00
6 Inch Compound	N/A	$ 2,330.00	$ 6,920.00	$ 9,250.00	$ 2,330.00	$ 6,920.00	$ 9,250.00
8 Inch	N/A	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost

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

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	2,903	$ 21.60	$ 47.22	$ 25.62	118.60%
Median Usage	1,434	18.77	43.18	$ 24.42	130.10%
Staff Recommended					
Average Usage	2,903	$ 21.60	$ 31.61	$ 10.01	46.33%
Median Usage	1,434	18.77	25.74	$ 6.97	37.13%

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

Gallons	Present	Company Proposed	%	Staff Recommended	%
	5/8"	5/8"		5/8"	
Consumption	Rates	Rates	Increase	Rates	Increase
-	$ 16.00	$ 39.24	145.25%	$ 20.00	25.00%
1,000	17.93	41.99	134.19%	24.00	33.85%
2,000	19.86	44.74	125.28%	28.00	40.99%
3,000	21.79	47.49	117.94%	32.00	46.86%
4,000	23.72	50.24	111.80%	39.20	65.26%
5,000	26.71	54.99	105.88%	46.40	73.72%
6,000	29.70	59.74	101.14%	53.60	80.47%
7,000	32.69	64.49	97.28%	60.80	85.99%
8,000	35.68	69.24	94.06%	68.00	90.58%
9,000	38.67	73.99	91.34%	75.20	94.47%
10,000	41.66	78.74	89.01%	82.40	97.79%
11,000	44.65	85.49	91.47%	92.02	106.09%
12,000	47.64	92.24	93.62%	101.63	113.34%
13,000	50.63	98.99	95.52%	111.25	119.73%
14,000	53.62	105.74	97.20%	120.87	125.42%
15,000	56.61	112.49	98.71%	130.49	130.50%
16,000	59.60	119.24	100.07%	140.10	135.07%
17,000	62.59	125.99	101.29%	149.72	139.21%
18,000	65.58	132.74	102.41%	159.34	142.96%
19,000	68.57	139.49	103.43%	168.95	146.39%
20,000	71.56	146.24	104.36%	178.57	149.54%
25,000	86.51	179.99	108.06%	226.66	162.00%
30,000	101.46	213.74	110.66%	274.74	170.79%
35,000	116.41	247.49	112.60%	322.83	177.32%
40,000	131.36	281.24	114.10%	370.91	182.36%
45,000	146.31	314.99	115.29%	419.00	186.37%
50,000	161.26	348.74	116.26%	467.08	189.64%
75,000	236.01	517.49	119.27%	707.51	199.78%
100,000	310.76	686.24	120.83%	947.93	205.04%

Typical Bill Analysis for C&S System
General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	6,961	$ 27.30	$ 64.30	$ 37.00	135.53%
Median Usage	4,500	23.66	52.62	$ 28.96	122.38%
Staff Recommended					
Average Usage	6,961	$ 27.30	$ 60.52	$ 33.22	121.66%
Median Usage	4,500	23.66	42.80	$ 19.14	80.90%

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

Gallons	Present	Company Proposed	%	Staff Recommended	%
	5/8"	5/8"		5/8"	
Consumption	Rates	Rates	Increase	Rates	Increase
-	$ 17.00	$ 39.24	130.82%	$ 20.00	17.65%
1,000	18.48	41.99	127.22%	24.00	29.87%
2,000	19.96	44.74	124.15%	28.00	40.28%
3,000	21.44	47.49	121.50%	32.00	49.25%
4,000	22.92	50.24	119.20%	39.20	71.03%
5,000	24.40	54.99	125.37%	46.40	90.16%
6,000	25.88	59.74	130.83%	53.60	107.11%
7,000	27.36	64.49	135.71%	60.80	122.22%
8,000	28.84	69.24	140.08%	68.00	135.78%
9,000	30.32	73.99	144.03%	75.20	148.02%
10,000	31.80	78.74	147.61%	82.40	159.12%
11,000	33.28	85.49	156.88%	92.02	176.49%
12,000	34.76	92.24	165.36%	101.63	192.39%
13,000	36.24	98.99	173.15%	111.25	206.98%
14,000	37.72	105.74	180.33%	120.87	220.43%
15,000	39.20	112.49	186.96%	130.49	232.87%
16,000	40.68	119.24	193.12%	140.10	244.40%
17,000	42.16	125.99	198.84%	149.72	255.12%
18,000	43.64	132.74	204.17%	159.34	265.11%
19,000	45.12	139.49	209.15%	168.95	274.45%
20,000	46.60	146.24	213.82%	178.57	283.20%
25,000	54.00	179.99	233.31%	226.66	319.73%
30,000	61.40	213.74	248.11%	274.74	347.46%
35,000	68.80	247.49	259.72%	322.83	369.22%
40,000	76.20	281.24	269.08%	370.91	386.76%
45,000	83.60	314.99	276.78%	419.00	401.19%
50,000	91.00	348.74	283.23%	467.08	413.27%
75,000	128.00	517.49	304.29%	707.51	452.74%
100,000	165.00	686.24	315.90%	947.93	474.50%

Attachment A

SALARIES AND WAGE EXPENSE
COMPANY'S RESPONSE TO DATA REQUEST CSB 2.11

CSB 2.11

Date : 09/20/13
Time : 3:24:09 PM

Labor Summary Report
JACO Oil Company

Report from 01/01/12 to 12/31/12

GP Department : 0003 - GE/EA

Name	Emp Id	REG	OVT	DBL	HOL	BER	SIC	VAC	Other	Total
Allred, Dale	ALLE003	39.00	4.50	0.00	0.00	0.00	0.00	0.00	0.00	43.50
Bartlett, Chad	BART002	39.50	7.50	0.00	0.00	0.00	0.00	0.00	0.00	47.00
Dominick, Diego	DOMI004	44.50	2.50	0.00	0.00	0.00	0.00	0.00	0.00	47.00
Stouder, Shaun	STOU001	103.50	15.00	0.00	0.00	0.00	0.00	0.00	0.00	118.50
Williams, Roy	WILL003	3.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00
	GP Department :	229.50	33.50	0.00	0.00	0.00	0.00	0.00	0.00	263.00

GP Department : 0004 - E Verde Park

Name	Emp Id	REG	OVT	DBL	HOL	BER	SIC	VAC	Other	Total
Allred, Dale	ALLE003	72.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	102.00
Bartlett, Chad	BART002	36.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	38.00
Dominick, Diego	DOMI004	69.00	5.50	0.00	0.00	0.00	0.00	0.00	0.00	74.50
Stouder, Shaun	STOU001	205.50	7.00	0.00	0.00	0.00	0.00	0.00	0.00	212.50
Williams, Roy	WILL003	1.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00
	GP Department :	383.50	48.50	0.00	0.00	0.00	0.00	0.00	0.00	432.00

~~GP Department : 0005 - Star/Quail Valley~~

~~Name~~	~~Emp Id~~	~~REG~~	~~OVT~~	~~DBL~~	~~HOL~~	~~BER~~	~~SIC~~	~~VAC~~	~~Other~~	~~Total~~
~~Allred, Dale~~	~~ALLE003~~	~~46.50~~	~~13.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~59.50~~
~~Bartlett, Chad~~	~~BART002~~	~~40.50~~	~~5.50~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~46.00~~
~~Stouder, Shaun~~	~~STOU001~~	~~50.00~~	~~1.50~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~51.50~~
~~Williams, Roy~~	~~WILL003~~	~~8.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~8.00~~
	~~GP Department :~~	~~145.00~~	~~20.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~0.00~~	~~165.00~~

GP Department : 0006 - Deer Creek

Name	Emp Id	REG	OVT	DBL	HOL	BER	SIC	VAC	Other	Total
Allred, Dale	ALLE003	39.50	3.00	0.00	0.00	0.00	0.00	0.00	0.00	42.50
Bartlett, Chad	BART002	47.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.50
Dominick, Diego	DOMI004	34.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.00
Stouder, Shaun	STOU001	101.50	2.00	0.00	0.00	0.00	0.00	0.00	0.00	103.50
Williams, Roy	WILL003	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
	GP Department :	224.50	5.00	0.00	0.00	0.00	0.00	0.00	0.00	229.50

GP Department : 0007 - Meads Ranch

Name	Emp Id	REG	OVT	DBL	HOL	BER	SIC	VAC	Other	Total
Allred, Dale	ALLE003	41.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.50
Bartlett, Chad	BART002	12.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	16.00

Labor Summary Report
JACO Oil Company

Report from 01/01/12 to 12/31/12

GP Department : 0007 - Meads Ranch

Name	Emp Id	REG	OVT	DBL	HOL	BER	SIC	VAC	Other	Total
Dominick, Diego	DOMI004	77.50	3.00	0.00	0.00	0.00	0.00	0.00	0.00	80.50
Stouder, Shaun	STOU001	94.50	7.00	0.00	0.00	0.00	0.00	0.00	0.00	101.50
Williams, Roy	WILL003	2.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00
	GP Department :	228.00	19.50	0.00	0.00	0.00	0.00	0.00	0.00	247.50

GP Department : 0008 - Mesa del Caballo

Name	Emp Id	REG	OVT	DBL	HOL	BER	SIC	VAC	Other	Total
Allred, Dale	ALLE003	257.50	80.50	0.00	0.00	0.00	0.00	0.00	0.00	338.00
Bartlett, Chad	BART002	79.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00	91.00
Dominick, Diego	DOMI004	160.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00	176.00
Stouder, Shaun	STOU001	295.50	6.00	0.00	0.00	0.00	0.00	0.00	0.00	301.50
Williams, Roy	WILL003	19.00	3.50	0.00	0.00	0.00	0.00	0.00	0.00	22.50
	GP Department :	811.00	118.00	0.00	0.00	0.00	0.00	0.00	0.00	929.00

GP Department : 0009 - Whispering Pines

Name	Emp Id	REG	OVT	DBL	HOL	BER	SIC	VAC	Other	Total
Allred, Dale	ALLE003	103.00	31.00	0.00	0.00	0.00	0.00	0.00	0.00	134.00
Bartlett, Chad	BART002	25.00	4.50	0.00	0.00	0.00	0.00	0.00	0.00	29.50
Dominick, Diego	DOMI004	115.00	5.50	0.00	0.00	0.00	0.00	0.00	0.00	120.50
Stouder, Shaun	STOU001	119.50	6.00	0.00	0.00	0.00	0.00	0.00	0.00	125.50
Williams, Roy	WILL003	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
	GP Department :	376.00	47.00	0.00	0.00	0.00	0.00	0.00	0.00	423.00

GP Department : 0010 - Flowing Springs

Name	Emp Id	REG	OVT	DBL	HOL	BER	SIC	VAC	Other	Total
Allred, Dale	ALLE003	17.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00
Bartlett, Chad	BART002	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00
Dominick, Diego	DOMI004	28.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	33.00
Stouder, Shaun	STOU001	33.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	35.00
Williams, Roy	WILL003	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
	GP Department :	86.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00	98.00

GP Department : 0011 - Gisela (Tonto Creek Shore

Name	Emp Id	REG	OVT	DBL	HOL	BER	SIC	VAC	Other	Total
Allred, Dale	ALLE003	90.50	11.50	0.00	0.00	0.00	0.00	0.00	0.00	102.00
Bartlett, Chad	BART002	29.00	5.50	0.00	0.00	0.00	0.00	0.00	0.00	34.50
Dominick, Diego	DOMI004	75.50	7.50	0.00	0.00	0.00	0.00	0.00	0.00	83.00
Stouder, Shaun	STOU001	148.50	8.00	0.00	0.00	0.00	0.00	0.00	0.00	156.50
Williams, Roy	WILL003	6.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00
	GP Department :	349.50	33.50	0.00	0.00	0.00	0.00	0.00	0.00	383.00

Labor Summary Report
JACO Oil Company

Report from 01/01/12 to 12/31/12

Report Totals	2,833.00	337.00	0.00	0.00	0.00	0.00	0.00	0.00	3,170.00

GP Department 0005 is not part of Payson Water -165.00

Report Total 3,0005.00

Attachment B

BONUS

COMPANY'S RESPONSE TO DATA REQUEST CSB 1.13

Payson Water Co.

Overhead Allocation Criteria

Based on Locations Count 2012

CSB 1.13

Company		System	Count	% Allocation
13	GE/EA	03	**95**	**7.25%**
13	EVP	04	**161**	**12.28%**
13	SQV	05	**0**	**0.00%**
13	DC	06	**132**	**10.07%**
13	MR	07	**74**	**5.64%**
13	MDC	08	**417**	**31.81%**
13	WP	09	**176**	**13.42%**
13	FS	10	**32**	**2.44%**
13	TCS	11	**224**	**17.09%**
	TOTALS		**1311**	**100%**

Description	YEAR TOTAL	DECEMBER	NOVEMBER	OCTOBER	SEPTEMBER	AUGUST	JULY	JUNE	MAY	ABRL	MARCH	FEBRUARY	JANUARY
Salary and Wages													
Officers	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salary	**43,595.26**	3,207.47	3,396.27	3,111.80	3,283.50	3,303.14	3,396.85	3,400.14	3,305.63	4,202.31	4,321.62	4,275.08	4,391.44
Hourly	**4,403.73**	609.64	470.73	724.34	445.59	370.29	310.68	208.63	426.24	224.75	137.59	166.89	308.36
Overtime	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
* Bonus	**33,544.62**	-2,266.57	1,575.10	1,760.75	3,336.79	1,483.30	1,482.70	1,484.14	1,855.52	12,849.01	4,084.31	1,815.25	4,084.31
Contract Labor	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Payroll Taxes													
Fica	**3,523.14**	183.45	94.80	92.42	311.76	211.73	213.70	206.45	221.35	913.58	400.24	258.51	415.15
Medicare	**1,116.19**	270.19	52.34	51.78	77.25	49.53	49.99	48.52	51.76	213.66	93.62	60.46	97.10
Futa	**44.19**	0.00	0.00	0.00	0.21	0.00	0.05	0.00	-0.51	0.00	0.62	1.93	41.89
Sui	**255.85**	0.00	0.00	0.00	0.92	0.00	0.21	0.00	-2.19	0.00	4.35	11.12	241.44
Benefits													
Workers Compensation	**668.71**	152.70	0.00	57.81	34.84	33.75	34.78	35.68	91.76	40.36	68.06	40.26	78.71
Health Insurance	**2,940.74**	252.73	0.00	257.60	250.54	253.84	254.36	252.92	240.85	293.51	293.05	293.05	298.27
Life Insurance	**37.15**	3.11	0.00	3.11	3.11	3.15	3.11	3.12	3.12	3.81	3.81	3.81	3.88
401 (k) Plan Contributions	**163.75**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	163.75	0.00
Building Occupancy Expenses													
Rent	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maintenance	**81.43**	0.00	0.00	0.00	0.00	11.39	3.00	0.00	55.10	0.00	11.93	0.00	0.00
Repairs	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Utilities													
Gas / Electricity	**2,607.20**	244.45	277.56	120.87	60.82	172.46	236.52	60.15	172.85	273.19	278.86	393.64	315.84
Water / Sewer	**190.39**	13.93	19.86	37.37	6.45	25.81	0.00	6.51	48.76	0.00	7.96	23.75	0.00

Trash	**385.28**	37.26	37.41	0.00	37.26	36.80	35.60	35.52	0.00	3.59	41.15	80.49	40.20
Communications													
Telephone	**4,397.87**	418.76	255.11	416.30	103.71	205.16	614.10	0.00	638.64	778.96	304.55	280.70	381.89
Mobile	**2,432.20**	223.87	222.39	227.73	218.72	226.05	0.00	444.99	0.00	0.00	272.93	296.26	299.26
Pagers	**224.00**	0.00	0.00	0.00	0.00	0.00	0.00	224.00	0.00	0.00	0.00	0.00	0.00
Other Communications	**625.36**	0.00	148.00	0.00	148.05	148.08	0.00	0.00	0.00	0.00	181.22	0.00	0.00
Travel													
Commercial	**1,264.76**	0.00	172.84	0.00	92.34	25.71	313.39	0.00	0.00	335.66	211.42	113.40	0.00
Airplane Rental	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rental Cars	**441.73**	311.01	56.44	0.00	31.49	0.00	0.00	0.00	0.00	0.00	0.00	42.80	0.00
Mileage Reimbursement	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gasoline & Oil	**12,205.36**	1,689.02	1,084.38	958.07	1,000.40	914.40	754.19	907.47	880.26	947.61	1,979.25	50.71	1,039.60
Meal & Entertainment													
Meals	**577.95**	22.03	63.86	0.41	17.76	20.55	11.96	14.89	13.27	66.22	76.07	209.43	61.52
Entertainment	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lodging													
Lodging	**2,135.89**	113.40	276.39	209.76	113.40	207.00	113.38	136.18	272.42	110.97	83.28	222.09	277.61
Supplies													
Postage and Freight	**1,991.11**	0.00	0.00	912.93	0.00	0.00	1,078.18	0.00	0.00	0.00	0.00	0.00	0.00
Office Supllies	**1,024.24**	120.66	34.51	85.81	50.00	198.38	77.18	70.53	134.71	41.81	82.52	57.83	70.30
Computer Supplies	**313.87**	0.00	0.00	0.00	0.00	7.96	0.00	0.00	0.00	0.00	37.65	0.00	268.27
Postage and Freight	**11,311.27**	1,074.80	882.75	0.00	934.63	1,035.79	0.00	1,863.36	924.47	1,177.56	1,272.15	1,262.59	883.19
Repairs and Maintenance													
Wells & Springs	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Autos and Trucks	**4,106.98**	76.51	193.67	138.30	116.52	643.86	595.73	1,104.24	0.00	22.79	523.41	0.00	691.93
Equipment Rentals	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Equipment Maintenance	**116.16**	0.00	73.37	0.00	0.00	0.00	0.00	0.00	0.00	42.79	0.00	0.00	0.00
Repair Parts	**8.33**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.33	0.00	0.00	0.00	0.00
Small Tools and Equipment	**949.80**	10.44	50.89	123.73	6.23	0.00	92.59	406.73	73.99	0.00	92.85	0.00	92.36
Bank Charges and Fees													
Account Analysis	**1,733.89**	396.78	0.00	417.45	4.49	219.26	-8.71	202.25	270.16	175.18	279.23	-460.30	238.10
Commitment Fees	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Network Access Fees	**754.43**	58.63	60.47	58.19	64.36	62.52	43.55	62.92	54.05	69.30	66.89	74.92	78.63
Professional Fees													
Legal Fees	**21.00**	0.00	21.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consulting Fees	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tech Support Fees	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Accounting,Tax and Audit	**2,052.32**	988.69	0.00	0.00	0.00	0.00	0.00	1,063.63	0.00	0.00	0.00	0.00	0.00
Contractual Services	**29,087.94**	2,323.54	2,255.05	2,349.89	2,442.53	5,475.84	1,857.08	1,797.04	1,804.81	2,196.42	2,195.24	4,329.98	60.51
Engineering	**49.44**	0.00	0.00	0.00	0.00	49.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Regulatory Commission													

Legal Fees	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consulting Fees	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Management Fees	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Training and Education													
Seminars	**64.27**	0.00	0.00	49.42	0.00	0.00	0.00	0.00	14.84	0.00	0.00	0.00	0.00
Education and Certifications	**312.73**	0.00	0.00	21.50	21.50	0.00	0.00	0.00	21.52	52.61	169.28	26.32	0.00
Conventions and Expos	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Training Materials	**89.18**	1.73	87.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Advertising and Promotion													
Newspaper	**74.74**	0.00	0.00	0.00	0.00	0.00	0.00	74.74	0.00	0.00	0.00	0.00	0.00
Promotions and Sponsorships	**63.13**	-63.14	63.12	0.00	0.00	63.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dues and Suscriptions													
Organization & Membership Dues	**858.32**	0.00	0.00	0.00	0.00	22.37	33.08	8.28	27.82	0.00	0.00	148.25	618.53
Publications	**480.02**	35.67	8.27	8.27	41.36	8.27	0.00	0.00	0.00	140.74	20.25	141.45	75.75
Licenses and Permits													
Business License	**957.27**	0.00	0.00	0.00	12.36	0.00	194.14	194.33	194.37	277.17	0.00	7.56	77.34
Software License Fees	**1,510.95**	163.42	163.35	163.39	9.57	194.22	62.25	0.00	0.00	0.00	277.36	477.39	0.00
Vehicle Registration	**217.02**	0.00	0.00	0.00	111.38	105.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Utility Commission	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fines and Penalties													
Vehicle Citations	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Late Payments and Fines	**12.36**	0.00	0.00	0.00	12.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Write Off													
Write Off	**15.75**	-6.18	2.20	0.00	-0.01	0.01	28.12	-36.17	-20.83	5.39	-6.89	-3,270.61	3,320.73
Utility Plant in Service													
Materials Supplies	**-344.44**	-173.33	0.00	31.10	-1,195.74	121.02	1,195.48	0.00	0.00	-322.97	0.00	0.00	0.00
Chemicals	**-232.19**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.83	0.00	197.67	-445.23	4.54
Materials Supplies	**1,438.62**	41.76	6.44	0.00	1,254.99	0.00	31.32	48.22	0.00	55.89	0.00	0.00	0.00
Regulatory Water Testing	**86.88**	0.00	0.00	86.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other General Business Expense													
Other General Business Expense	**159.24**	32.37	0.00	0.00	0.00	-1.92	0.00	-21.64	0.00	0.00	158.73	-8.29	0.00
Prescreening and Drug Testing	**117.90**	0.00	0.00	0.00	0.00	25.94	0.00	0.00	44.20	0.00	31.14	9.36	7.26
Uniforms	**193.03**	0.00	0.00	0.00	15.33	35.07	0.00	0.00	0.00	0.00	142.62	0.00	0.00
Sales Tax Expense	**-272.92**	-21.30	-22.11	-23.97	-24.89	-27.51	-26.71	0.00	-23.47	-26.22	-24.85	-25.37	-26.50
Property and Casualty Insurance													
Property and Casualty Insurance	**997.07**	126.98	126.93	126.96	126.98	127.01	126.96	127.08	127.10	155.32	155.43	-329.69	0.00
Management Fess													
Managmeent Fees	**13,281.62**	1,029.88	1,029.48	1,029.68	1,029.88	1,030.07	1,029.65	1,030.65	1,030.85	1,259.71	1,260.59	1,260.59	1,260.59
Depreciation / Utility Plant in Service													

Structures and Improvements	**7,107.99**	551.24	551.02	552.50	551.36	551.47	547.94	549.99	550.09	674.36	675.76	675.86	676.41
Depreciation / Non-Utility Plant in Service													
Transportation Equipment	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amortization													
Software	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(Gain) Loss on Sale of Assets													
Property, Plant and Equipment	**-849.66**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-395.85	0.00	0.00	-453.81	0.00
	197722.43												

Attachment C

CHEMICALS EXPENSE
COMPANY'S RESPONSE TO DATA REQUEST CSB 2.6

PAYSON WATER COMPANY
DOCKET NO. W-03514A-13-0111
RESPONSE TO STAFF'S SECOND SET OF DATA REQUESTS

September 23, 2013

Response provided by: Jason Williamson

Title: President

Company: Payson Water Company

Address: 7581 E. Academy Blvd., Suite 229
Denver, CO 80230

Company Response Number: CSB – 2.6

Q. Miscellaneous Expense, Chemicals – This is a follow-up to CSB 1.30. In the list of expenses composing the $243,699.64 in miscellaneous expense, there are chemical expenses that total of $2,438. There is also $2,181 for chemicals on Schedule C-1.

a. Please state whether or not the amount is duplicative. If not, please explain and provide supporting invoices for the $2,438 amount.

b. Please provide the chemicals expense amount for the years 2010 and 2011.

RESPONSE:

a. Yes, the amount is duplicative in the $243,699 of miscellaneous expense but the $2,181 shown on Schedule C-1 is not duplicative as it is not included in the $235,989 of Miscellaneous Expense shown on the Schedule C-1.

b. Chemical expense in 2011 was $588 and was $422 in 2010.

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

EXHIBIT
5-16
ADMITTED

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., AN ARIZONA CORPORATION, FOR DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	)	DOCKET NO. W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC., FOR AUTHORITY TO ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM AND ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	)	DOCKET NO. W-03514A-13-0142

SUPPLEMENTAL SURREBUTTAL

TESTIMONY

OF

CRYSTAL S. BROWN

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

JANUARY 24, 2014

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RATE BASE 3

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EXECUTIVE SUMMARY
PAYSON WATER CO., INC.
DOCKET NOS.
W-03514A-13-0111 AND W-03514A-13-0142

Staff recommends a revenue increase of $289,731 or 90.39 percent increase over test year revenue of $320,525. The total annual revenue of $610,256 produces an operating income of $45,422 or a 9.00 percent rate of return on an original cost rate base of $504,684. Staff's supplemental surrebuttal testimony addresses and/or responds to Payson Water Company, Inc. ("Payson" or "Company") rebuttal testimony on the following issues:

1. Rate Base
    a. Accumulated Deferred Income Taxes ("ADIT")
2. Operating Income
    a. $197,722 Corporate Office Allocation
    b. Miscellaneous Expense ($1,650 Consumption Report Costs)
3. Staff's Recommended Purchased Water Surcharge Tariff for Mesa Del Caballo
4. Staff's Recommended Purchased Water Surcharge Tariff for East Verde Park

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Crystal S. Brown. I am a Public Utilities Analyst V employed by the Arizona Corporation Commission ("Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same Crystal S. Brown who filed direct testimony in this case?

A. Yes.

PURPOSE OF SUPPLEMENTAL SURREBUTTAL TESTIMONY

Q. What is the purpose of your supplemental surrebuttal testimony in this proceeding?

A. The purpose of my testimony in this proceeding is to respond, on behalf of Staff, to the rebuttal and rejoinder testimony of Mr. Jason Williamson and Mr. Thomas Bourrassa who represent Payson Water Company, Inc. ("Payson" or "Company"). Staff's supplemental surrebuttal testimony addresses issues that Staff had either omitted from its previous surrebuttal testimony or issues for which Staff has subsequently altered its recommendations.

Q. What issues will you address?

A. I will address the issues listed below.

1. Rate Base
   a. Accumulated Deferred Income Taxes ("ADIT")

2. Operating Income
   a. $197,722 Corporate Office Allocation
   b. Miscellaneous Expense ($1,650 Consumption Report Costs)

3. Staff's Recommended Purchased Water Surcharge Tariff for Mesa Del Caballo
4. Staff's Recommended Summer Purchased Water Surcharge Tariff for East Verde Park

SUMMARY OF PROPOSED REVENUES

Q. Please summarize Staff's recommended revenue.

A. Staff recommends a revenue increase of $289,731 or 90.39 percent increase over test year revenue of $320,525. The total annual revenue of $610,256 produces an operating income of $45,422 or a 9.00 percent rate of return on an original cost rate base of $504,684.

Q. How does Staff's recommended revenue compare to the recommended revenue in Staff's direct testimony?

A. Staff's recommended revenue has increased by $49,010, from $561,246 in its direct testimony to $610,256 in its supplemental surrebuttal testimony due to various adjustments discussed herein.

Q. Has the weighted average cost of capital ("WACC") used to develop the revenue requirement in Staff's direct and surrebuttal testimonies changed from the WACC in Staff's supplemental surrebuttal testimony?

A. Yes. In my surrebuttal testimony, Staff used a 6.4 percent WACC. However, as a result of the Company's recent decision to withdraw its financing approval request for Phase II of the hearing, Staff has updated the WACC to 9.0 percent. Please see the supplemental surrebuttal testimony of Staff witness, John Cassidy.

RATE BASE

Q. Please summarize Staff's adjustments to Payson's rate base shown on Supplemental Surrebuttal Schedule CSB-3.

A. A summary of the Company's proposed and Staff's recommended rate base follows:

TEST YEAR RATE BASE

Per Company - Direct	Difference	Per Staff – Supplemental Surrebuttal
$659,457	$(154,773)	$504,684

Q. How does Staff's recommended rate base compare to the recommended rate base in Staff's direct testimony?

A. Staff's recommended rate base has increased by $79,555, from $425,129 in its direct testimony to $504,684.

RATE BASE

Rate Base Adjustment No. 3 - Accumulated Deferred Income Taxes

Q. Has Staff reconsidered its recommendation for the $56,216 ADIT asset that the Company proposed in its rejoinder testimony?

A. Yes. In its rejoinder testimony, the Company provided schedules showing that the Contributions in aid of Construction ("CIAC") plant costs that created the ADIT asset were placed in service prior to the date the Internal Revenue Service ("IRS") rules (that Staff relied upon in its analysis) were in effect. The cost of CIAC plant placed in service during the years the previous IRS rules were in place, could have resulted in an ADIT asset[1].

[1] Staff notes that the Commission has not always amortized CIAC. According to FRA Staff, the Commission began amortizing CIAC in 1984.

Q. Under ordinary circumstances would Staff undertake a more in depth audit of the Company's claimed $56,216 ADIT asset?

A. Yes. Staff would typically request additional support for the $56,216 amount. However, Staff previously concluded that the level of support for prior year financial activities was not always available to the current owner so Staff's consideration of the Company's current position relative to this alleged ADIT balance warranted a different approach. Staff recognizes that Mr. Williamson, as a new owner who has recently purchased Payson Water Company, is likely to encounter difficulties obtaining all of the tax information and other documents from the prior owner necessary for Staff to audit the ADIT. Also the amount of available time to conduct additional discovery was very limited. Further, while Staff cannot specifically vouch for the accuracy of the Company proposed ADIT, the amount is not unreasonable given Staff's adjustment to CIAC. Therefore, Staff has decided not to litigate the issue by adopting the Company proposed ADIT, since the Company's ADIT recommendation appears to acknowledge that this ADIT adjustment would be needed only if Staff's corresponding CIAC adjustment is accepted.

Q. What is Staff's recommendation?

A. Staff recommends decreasing the ADIT by $79,555 to reflect the $56,216 ADIT asset as shown on Schedules CSB-4 and CSB-6.1.

Operating Income Adjustment No. 3 – $197,722 Corporate Office Allocation

Q. Has Staff reconsidered its previous recommendation related to the $197,722 Corporate Office Expense Allocation?

A. Yes. While Staff continues to maintain that adjusting the actual test year corporate office allocation for known and measurable changes is appropriate and consistent widely accepted ratemaking principles, Staff recognizes that Mr. Williamson has only recently

purchased Payson Water Company; a company that has a history of customer complaints. The Company may need a higher level of administrative oversight in order to bring the Company's financial and operational activities up to a level that will result in fewer customer complaints. Therefore, in consideration of the necessity to give consideration to positions that will improve rate case processing efficiency when it is reasonable to do so, and other considerations just noted, Staff has decided to recommend adopting the Company proposed corporate office expense allocation.

Q. Ms. Brown, is Staff now accepting the Company's proposed administrative oversight billing rates related to its agreement with JW Water Holdings?

A. Yes. However, in reviewing future rate filings docketed by the Company, Staff intends to evaluate the terms of this agreement closely in order to assure that billings under this less-than-arms-length agreement remain reasonable. Staff continues to believe that agreements that involve affiliates must be closely monitored, and that a utility's management has an ongoing responsibility to assure that the charges under such agreements are reasonable and competitive with alternative for obtaining the underlying services.

Q. What is Staff's recommendation?

A. Staff recommends decreasing the corporate office allocation by $23,819 as shown on Schedule CSB-11.

Q. How does Staff's current recommendation for the corporate office expense allocation compare to the level of corporate office expense allocation recommended in Staff's direct testimony?

A. Staff's recommendation for the corporate office allocation has increased by $19,441, from $154,462 in Staff's direct testimony to a $173,903 in its supplemental surrebuttal testimony.

Operating Income Adjustment No. 5 – Miscellaneous Expense Other

Q. Has Staff changed its recommendation regarding the $1,650 cost related to consumption report reporting for augmentation/purchased water costs?

A. Yes. Consistent with Staff's recommendation for a purchased water surcharge for the Mesa Del Caballo and East Verde Park systems, Staff recommends inclusion of this cost in operating expenses to facilitate the reporting of purchased water costs.

Q. What is Staff's recommendation?

A. Staff recommends increasing miscellaneous expense by $1,650 as shown on Supplemental Surrebuttal Schedules CSB-13.

Q. How does Staff's recommendation for Miscellaneous Expense Other compare to the recommendation for Miscellaneous Expense Other in Staff's direct testimony?

A. Staff's recommendation for Miscellaneous Expense Other has increased by $1,650, from $232,815 in Staff's direct testimony to a $234,465 in its supplemental surrebuttal testimony.

Operating Income Adjustment No. 7 – Income Taxes

Q. Did Staff make any adjustment to the income tax expense?

A. Yes. Staff's adjustment reflects Staff's calculation of the income tax expense based upon Staff's adjusted test year taxable income as modified in this supplemental surrebuttal testimony.

Operating Income Adjustment No. 8 – Property Taxes

Q. Did Staff review the Company's rebuttal testimony concerning property taxes?

A. Yes. Staff's adjustment reflects Staff's calculation of the property tax expense using Staff's recommended revenues as modified in this supplemental surrebuttal testimony.

Purchased Water Surcharge for Mesa Del Caballo

Q. Has Staff revised its calculation for the Mesa Del Caballo Purchased Water Surcharge?

A. Yes.

Q. How has Staff revised the calculation?

A. Rather than subtract the entire commodity rate (e.g. $1.93) from the purchased water cost as Staff proposed in the Phase 1 portion of this rate proceeding, Staff is now recommending that only the avoided production costs (i.e., purchased pumping power and chemicals) be subtracted from the additional cost of purchased water, since these production costs would continue to be recovered through the Company's base rates even though the Company would not actually incur these costs when alternative water supplies are purchased for this system. Using test year data, the avoided purchased water cost is estimated to be $0.60 per thousand gallons. A schedule showing Staff's recommended

calculation is shown on pages 1 and 2 of Attachment C. Staff's recommended purchased water surcharge tariff for Mesa Del Caballo is shown in Attachment A.

Q. What are Staff's recommendation?

A. Staff recommends approval of Staff's recommended purchased water surcharge for Mesa Del Caballo. Further, Staff recommends that the surcharge be calculated as shown in Attachment C. Further, Staff recommends the simultaneous cancellation of the Mesa Del Caballo Water Augmentation tariff, which will no longer be needed.

Summer Purchased Water Surcharge for East Verde Park

Q. Has the Company requested a purchased water surcharge for East Verde Park?

A. Yes and the Company has provided invoices to support its purchased water costs for East Verde Park. Staff's recommended purchased water tariff is presented in Attachment B. The methodology in which the surcharge is to be calculated is presented in Attachment C.

Q. Does Staff recommend placing a cap on the amount of purchased water cost that the Company can recover during any given year for East Verde Park?

A. Yes, Staff recommends that the total amount of purchased water cost that the Company can recover during any given year for its East Verde Park be capped at $10,000.

Q. Why has Staff recommended a $10,000 cap?

A. The purchased water surcharge is contemplated to be a temporary solution for the East Verde Park's water shortages until the Company can develop a permanent solution. Further, the complaints filed in the docket show that there is a customer perception of abuse with regards to the level of water purchased. Consequently, the cap will help to incent the Company to find a permanent solution and, at the same time, help to alleviate

customer perceptions and concerns about the proper use of the water purported to be purchased exclusively for the needs of this system.

Q. Does Staff recommend that the Company be ordered to file a new permanent rate application by a date certain?

A. Yes, Staff recommends that the Commission order the Company file a new permanent rate application using a 2016 test year, and that this application be filed no later than June 30, 2017.

Q. What are Staff's recommendations?

A. Staff recommends the following:

1. Approval of Staff's recommended summer purchased water surcharge for East Verde Park;
2. That the surcharge be calculated using the same methodology shown in Attachment C;
3. That the surcharge apply only to the customers of East Verde Park;
4. That a cap of $10,000 be placed on the amount of purchased water expense that can be recovered during any given year through the summer purchased water surcharge for the East Verde Park system;
5. That the surcharge be implemented only during the months of May through September;
6. Approval of Staff's recommended purchased water surcharge for the Mesa Del Caballo system;
7. The simultaneous cancellation of the current water augmentation tariff for the Mesa Del Caballo system.

8. That the Company file a permanent rate application using a 2016 test year no later than June 30, 2017.

Record Keeping

Q. Does Staff have any recommendations concerning the Company's record keeping?

A. Yes. Staff's audit of the Company was hampered by deficiencies in the Company's record keeping. For example, the Company lacked invoices for plant to support plant costs. Staff recommends that the Company submit a plan in the docket within 60 days following a decision in this matter detailing how it will improve its record keeping. Such plan shall include but not be limited to, implementation of policies and procedures to help ensure that source documentation such as invoices and canceled checks are maintained to support plant costs and are not destroyed or thrown away.

Q. Does this conclude Staff's supplemental surrebuttal testimony?

A. Yes, it does.

Attachment A

PURCHASED WATER SURCHARGE TARIFF
FOR
MESA DEL CABALLO

PURCHASED WATER SURCHARGE

I. Purpose and Applicability

The purpose of the this tariff is to equitably apportion the costs of water purchased through an interconnection with the Town of Payson among Payson Water Company, Inc. Customers. These charges are applicable to all connections and will be assessed based on usage, as more particularly provided below.

II. Definitions

Unless the context otherwise requires, the definitions set forth in R-14-2-401 of the Arizona Corporation Commission's ("Commission") rules and regulations governing water utilities shall apply in interpreting this tariff schedule.

"Avoided Production Costs" means the unit cost of production (cost per 1,000 gallons) avoided by the Company because of the use of water purchased from the Town of Payson rather than pumping groundwater from the Company's wells and booster stations.

"Company" means Payson Water Company, Inc.

"Purchased Water Cost" means the actual cost billed by the Town of Payson for water purchased through the interconnection between the Town of Payson's water system and the Company' s water system.

"Purchased Water Cost' means the actual quantity (in thousands of gallons) of water billed by the Town of Payson for water purchased through the interconnection between the Town of Payson's water system and the Company's water system.

"Purchased Water Surcharge" means the surcharge calculated in accordance with Section IV below.

"Surcharge Rate" means the rate per 1,000 gallons that is calculated in accordance with Section III below.

"Water Sold" means the actual quantity (in thousands of gallons) of water sold by the Company to its Customers during the month corresponding to the month in which water was purchased from the Town of Payson through the interconnection between the Town of Payson's water system and the Company's water system.

III. Surcharge Rate Calculation

For each month that the Company purchases water from the Town of Payson through the interconnection between the Town of Payson's water system and the Company's water system, the Company will calculate the Surcharge Rate per the following formula:

[Purchased Water Cost - (Purchased Water Quantity x Avoided Production Costs)] / Water Sold

IV. Terms and Conditions

(A) Assessment and Billing of Purchased Water Surcharge: For any month in which water is purchased from the Town of Payson, after completing its billing for the month and receiving the Town's billing for the month, Payson will make the surcharge calculation to determine the Surcharge Rate.

In the following month, Payson will bill the Purchased Water Surcharge to its customers. Each individual customer's billing for the Purchased Water Surcharge will be based on that customer's actual usage for the previous month (the month corresponding to the water purchase from the Town) times the Surcharge Rate.

The Purchased Water Surcharge shall be presented as a separate line item on the customer billing.

(B) Notice to Commission: For any month in which the Company intends to bill customers a Purchased Water Surcharge, the Company shall provide Commission Staff notice of the Company's intent to bill the Purchased Water Surcharge. The notice to Commission Staff shall include the following:

1. The Purchased Water Cost.
2. The Purchased Water Quantity.
3. A copy of the bill received for the purchase of water from the Town of Payson.
4. A description of the system problem necessitating purchasing of water and a description of the action being taken by the Company to resolve the problem, including the date operations did or are expected to return to normal.
5. The dates for beginning and ending purchasing water.
6. A schedule showing the calculation of the Surcharge Rate in excel format with formulas intact, including a schedule showing the determination of the Avoided Production Costs.

Attachment B

SUMMER

PURCHASED WATER SURCHARGE TARIFF

FOR

EAST VERDE PARK

PURCHASED WATER SURCHARGE

I. Purpose and Applicability

The purchased water surcharge can only be implemented during the months of May through September.

The maximum amount of purchased water cost that can be recovered during any given year is $10,000.

The purpose of the this tariff is to authorize Payson to make monthly adjustments to its rates and charges for water service to recover costs incurred for water purchases ("Purchased Water Costs") in the event that Payson experiences extreme water shortages for the East Verde Park water system. These charges are applicable to all connections and will be assessed based on usage, as more particularly provided below.

II. Definitions

Unless the context otherwise requires, the definitions set forth in R-14-2-401 of the Arizona Corporation Commission's ("Commission") rules and regulations governing water utilities shall apply in interpreting this tariff schedule.

"Avoided Production Costs" means the unit cost of production (cost per 1,000 gallons) avoided by the Company because of the use of water purchased from the ~~City of Prescott~~ Town of Payson rather than pumping groundwater from the Company's wells and booster stations.

"Company" means Payson Water Company.

"Purchased Water Cost" means the actual billed purchased water cost by and the Company' s water system. The maximum amount of purchased water cost that can be recovered during any given year is $10,000.

"Purchased Water Quantity" means the actual quantity (in thousands of gallons).

"Purchased Water Surcharge" means the surcharge calculated in accordance with Section IV below.

"Surcharge Rate" means the rate per 1,000 gallons that is calculated in accordance with Section III below.

"Water Sold" means the actual quantity (in thousands of gallons) of water sold by the Company to its Customers during the month corresponding to the month in which water was purchased.

III. Surcharge Rate Calculation

For each month that the Company purchases water, the Company will calculate the Surcharge Rate per the following formula:

[Purchased Water Cost - (Purchased Water Quantity x Avoided Production Costs)] / Water Sold

IV. Terms and Conditions

(A) Assessment and Billing of Purchased Water Surcharge: For any month in which water is purchased, after completing its billing for the month and receiving the billing for the month, Payson Water Company will make the surcharge calculation to determine the Surcharge Rate.

In the following month, Payson Water Company will bill the Summer Purchased Water Surcharge to its customers. Each individual customer's billing for the Summer Purchased Water Surcharge will be based on that customer's actual usage for the previous month (the month corresponding to the purchased water) times the Surcharge Rate.

The Purchased Water Surcharge shall be presented as a separate line item on the customer billing.

(B) Notice to Commission: For any month in which the Company intends to bill customers a Purchased Water Surcharge, the Company shall provide Commission Staff notice of the Company's intent to bill the Purchased Water Surcharge. The notice to Commission Staff shall include the following:

1. The Purchased Water Cost.
2. The Purchased Water Quantity.
3. A copy of the bill received for the purchase of water.
4. A description of the system problem necessitating purchasing of water and a description of the action being taken by the Company to resolve the problem, including the date operations did or are expected to return to normal.
5. The dates for beginning and ending purchasing water.
6. A schedule showing the calculation of the Surcharge Rate in excel format with formulas intact, including a schedule showing the determination of the Avoided Production Costs.

Attachment C

PURCHASED WATER SURCHARGE CALCULATION EXAMPLES

Payson Water Company
Docket Nos. W-03514A-13-0111 and W-03514A-13-0142
Purchasaed Water Surcharge Calculation Example - When Less Than 100% of All Water Purchased From Town of Payson

Examples assume that 25% of total water purchased from the Town of Payson

Example 1 - Median Usage Customer

This example illustrates how the surcharge would be calculated for a customer using 4,500 gallons; 75% (or 3,375) from Payson Water Company and 25% (or 1,125) from the Town of Payson.

	[A] Total Usage Assumption		[B] % of Gallons From Town of Payson		[C] Gallons In '000s From Town of Payson **Col A x Col B**	[D] Town of Payson Commodity Rate	[E] Avoided Costs (See page 2 for Calculation)	[F] Difference in Rate per 1,000 gal **Col D - Col E**	[G] **Surcharge** **Col C x Col F**
Block 1	4,000	x	25%	=	1.000	$7.48	$ 0.60	$ 6.88	$ 6.88
Block 2	500	x	25%	=	0.125	$7.48	$ 0.60	$ 6.88	$ 0.86
Total Usage Assumption	4,500				1.125				
								Total Monthly Surcharge	**$ 7.74** *

*Excludes Taxes

Example 2 - High Usage Customer

This example illustrates how the surcharge would be calculated for a customer using 25,000 gallons; 75% (or 18,750) from Payson Water Company and 25% (or 6,250) from the Town of Payson.

	[A] Total Usage Assumption		[B] % of Gallons From Town of Payson		[C] Gallons In '000s From Town of Payson **Col A x Col B**	[D] Town of Payson Commodity Rate	[E] Payson Water Company Tariff Rate	[F] Difference in Rate per 1,000 gal **Col D - Col E**	[G] **Surcharge** **Col C x Col F**
Block 1	4,000	x	25%	=	1.000	$7.48	$ 1.93	$ 5.55	$ 5.55
Block 2	21,000	x	25%	=	5.250	$7.48	$ 2.99	$ 4.49	$ 23.57
Total Usage Assumption	25,000				6.250				
								Total Monthly Surcharge	$ 29.12 *

*Excludes Taxes

Payson Water Company
Docket Nos. W-03514A-13-0111 and W-03514A-13-0142
Calculation of Avoided Costs

	Calculation of Avoided Costs			
	Current Cost	Divided by	Total Gallons Sold Per 1,000 From Sch E-7	Cost Per 1,000 Gallons
Purchased Power for Wells (See Note Below)	$ 28,241	/	51,230	$ 0.55
Depreciation Expense on Wells	$ -	/	51,230	$ -
Chemicals	$ 2,438	/	51,230	$ 0.05
Water Testing	$ -	/	51,230	$ -
				$ 0.60

Note: The $28,241 was calculated by taking the Company's actual test year purchased pumping power expense of $56,482 and dividing that number by 2. The purchased pumping power expense was divided by 2 to reflect that approximately half of the purchased pumping power was incurred for pumping water out of the wells and the other half of the purchased pumping power was incurred to transport the water from the storage tanks to the customers.

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Supplemental Surrebuttal Schedule CSB-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	[A] COMPANY ORIGINAL COST	[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	$ 659,457	$ 504,684
2	Adjusted Operating Income (Loss)	$ (182,479)	$ (145,689)
3	Current Rate of Return (L2 / L1)	-27.67%	-28.87%
4	Required Rate of Return	11.00%	9.00%
5	Required Operating Income (L4 * L1)	$ 72,540	$ 45,422
6	Operating Income Deficiency (L5 - L2)	$ 255,020	$ 191,110
7	Gross Revenue Conversion Factor	1.56766	1.51604
8	Increase (Decrease) In Gross Revenue (L7 * L6)	$ 399,785	$ 289,731
9	Adjusted Test Year Revenue	$ 320,525	$ 320,525
10	Proposed Annual Revenue (L8 + L9)	$ 720,310	$ 610,256
11	Required Increase/(Decrease in Revenue) (%) (L8/L9)	124.73%	90.39%

References:
Column [A]: Company Schedules A-1
Column [B]: Staff Schedules CSB-2, CSB-3, & CSB-15

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Supplemental Surrebuttal Schedule CSB-2

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
	Calculation of Gross Revenue Conversion Factor:				
1	Revenue	100.0000%			
2	Uncollecible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	34.0388%			
5	Subtotal (L3 - L4)	65.9612%			
6	**Revenue Conversion Factor (L1 / L5)**	1.516044			
	Calculation of Uncollecttible Factor:				
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	32.6393%			
9	One Minus Combined Income Tax Rate (L7 - L8)	67.3607%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0.0000%			
	Calculation of Effective Tax Rate:				
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	6.5000%			
14	Federal Taxable Income (L12 - L13)	93.5000%			
15	Applicable Federal Income Tax Rate (Line 53)	27.9565%			
16	Effective Federal Income Tax Rate (L14 x L15)	26.1393%			
17	Combined Federal and State Income Tax Rate (L13 +L16)		32.6393%		
	Calculation of Effective Property Tax Factor				
18	Unity	100.0000%			
19	Combined Federal and State Income Tax Rate (L17)	32.6393%			
20	One Minus Combined Income Tax Rate (L18-L19)	67.3607%			
21	Property Tax Factor	2.0777%			
22	Effective Property Tax Factor (L20*L21)		1.3995%		
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			34.0388%	
24	Required Operating Income	$ 45,422			
25	AdjustedTest Year Operating Income (Loss)	(145,689)			
26	Required Increase in Operating Income (L24 - L25)		$ 191,110		
27	Income Taxes on Recommended Revenue (Col. [C], L52)	$ 12,220			
28	Income Taxes on Test Year Revenue (Col. [A], L52)	(80,381)			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		92,601		
30	Recommended Revenue Requirement	$ 610,256			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncollectible Expense on Recommended Revenue (L30*L31)	$ -			
33	Adjusted Test Year Uncollectible Expense	$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)		-		
35	Property Tax with Recommended Revenue	$ 25,998			
36	Property Tax on Test Year Revenue	19,978			
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		6,020		
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)		$ 289,731		

		Test Year		Staff Recommended
	Calculation of Income Tax:			
39	Revenue	$ 320,525	$ 289,731	$ 610,256
40	Operating Expenses Excluding Income Taxes	$ 546,596	$ 6,020	$ 552,615
41	Synchronized Interest (L56)	$ -		$ -
42	Arizona Taxable Income (L39 - L40 - L41)	$ (226,071)		$ 57,640
43	Arizona State Income Tax Rate	6.5000%		6.5000%
44	Arizona Income Tax (L42 x L43)	$ (14,695)		$ 3,747
45	Federal Taxable Income (L42 - L44)	$ (211,376)		$ 53,894
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ (7,500)		$ 7,500
47	Federal Tax on Second Income Bracket ($51,001 - $75,000) @ 25%	$ (6,250)		$ 973
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ (8,500)		$ -
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ (43,437)		$ -
50	Federal Tax on Fifth Income Bracket ($335,001 - $10,000,000) @ 34%	$ -		$ -
51	Total Federal Income Tax	$ (65,687)		$ 8,473
52	Combined Federal and State Income Tax (L44 + L51)	$ (80,381)		$ 12,220
53	Applicable Federal Income Tax Rate [Col. [C], L51 - Col. [A], L51] / [Col. [C], L45 - Col. [A], L45]			27.9565%
	Calculation of Interest Synchronization:			
54	Rate Base	$ 504,684		
55	Weighted Average Cost of Debt	0.0000%		
56	Synchronized Interest (L45 X L46)	$ -		

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Supplemental Surrebuttal Schedule CSB-3

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	ADJ NO.	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 2,159,387	$ -		$ 2,159,387
2	Less: Accumulated Depreciation	1,332,825	-		1,332,825
3	Net Plant in Service	$ 826,562	$ -		$ 826,562
	LESS:				
4	Advances in Aid of Construction (AIAC)	$ -	$ -		$ -
5	Service Line and Meter Advances	$ -	$ -		$ -
6	Contributions in Aid of Construction (CIAC)	$ 375,036	$ 541,033	1	$ 916,069
7	Less: Accumulated Amortization	231,270	306,705	2	537,975
8	Net CIAC	$ 143,766	234,328		$ 378,094
9	Total Advances and Contributions	$ 143,766	$ 234,328		$ 378,094
10	Customer Deposits	$ -	$ -		$ -
11	Accumulated Deferred Income Taxes	$ 23,339	$ (79,555)	3	$ (56,216)
	ADD: Working Capital				
12	Prepayments	$ -	$ -		$ -
13	Inventory	$ -	$ -		$ -
14	**Total Rate Base**	$ 659,457	$ (154,773)		$ 504,684

References:
Column [A], Company Schedule B-1, Page 1
Column [B]: Schedule CSB-4
Column [C]: Column [A] + Column [B]

Payson Water Company, Inc.
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Supplemental Surrebuttal Schedule CSB-4

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	Acct. No.	PLANT IN SERVICE Plant Description	[A] COMPANY AS FILED	[B] Adj No.1 Unsupported Plant Treated as CIAC Ref: Sch CSB-5	[C] ADJ No. 2 Unsupported Removal of CIAC Related to Sale of Star/Quail Valley System Ref: Sch CSB-6	[D] ADJ No. 3 Accumulated Deferred Income Taxes ("ADIT") Ref: Sch CSB-6.1	[E] STAFF AS ADJUSTED
1							
2	301	Organization Cost	$ 221	$ -	$ -	$ -	$ 221
3	302	Franchises	-	-	-	-	-
4	303	Land and Land Rights	16,500	-	-	-	16,500
5	304	Structures and Improvements	300,078	-	-	-	300,078
	305	Collecting and Impounding Reserviors	2,531	-	-	-	2,531
6	307	Wells and Springs	273,013	-	-	-	273,013
7	309	Supply Mains	3,681	-	-	-	3,681
8	310	Power Generation Equipment	8,310	-	-	-	8,310
9	311	Pumping Equipment	217,608	-	-	-	217,608
10	320	Water Treatment Equipment	10,567	-	-	-	10,567
11	330	Distribution Reservoirs and Standpipes	273,800	-	-	-	273,800
12	330.2	Pressure Tanks	-	-	-	-	-
13	331	Transmission and Distribution Mains	439,972	-	-	-	439,972
14	333	Services	81,823	-	-	-	81,823
15	334	Meters and Meter Installations	199,952	-	-	-	199,952
16	335	Hydrants	1,171	-	-	-	1,171
17	336	Backflow Prevention Devices	-	-	-	-	-
18	339	Other Plant and Miscellaneous Equipment	320,820	-	-	-	320,820
19	340	Office Furniture and Equipment	-	-	-	-	-
20	340.1	Computers and Software	-	-	-	-	-
21	341	Transportation Equipment	-	-	-	-	-
22	343	Tools, Shop, and Garage Equipment	72	-	-	-	72
23	344	Laboratory Equipment	-	-	-	-	-
24	345	Power Operated Equipment	-	-	-	-	-
25	346	Communication Equipment	9,267	-	-	-	9,267
26	347	Miscellaneous Equipment	-	-	-	-	-
27	348	Other Tangible Equipment	-	-	-	-	-
28		Rounding	1	-	-	-	1
29		Total Plant in Service	$ 2,159,387	$ -	$ -	$ -	$ 2,159,387
30		Less: Accumulated Depreciation	$ 1,332,825	$ -	$ -	$ -	1,332,825
31		Net Plant in Service	$ 826,562	$ -	$ -	$ -	$ 826,562
32							
33		*LESS:*					
34		Advances in Aid of Construction (AIAC)	$ -	$ -	$ -	$ -	$ -
35		Meter Deposits - Service Line & Meter Advances	$ -	-	-	-	-
36							
37		Contributions in Aid of Construction (CIAC)	$ 375,036	70,120	470,913	-	916,069
38		Less: Accumulated Amortization of CIAC	$ 231,270	11,455	295,250	-	537,975
39		Net CIAC	$ 143,766	$ 58,665	$ 175,663	$ -	$ 378,094
40							
41		Total Advances and Net Contributions	$ 143,766	$ 58,665	$ 175,663	$ -	$ 378,094
42							
43		Customer Deposits	$ -	-	-	-	$ -
44		Accumulated Deferred Taxes	$ 23,339	-	-	(79,555)	$ (56,216)
45							
46		*ADD: Working Capital*					
47		Prepayments	$ -	-	-	-	$ -
48			$ -	-	-	-	$ -
49		**Total Rate Base**	$ 659,457	$ (58,665)	$ (175,663)	$ 79,555	$ 504,684

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Supplemental Surrebuttal Schedule CSB-5

RATE BASE ADJUSTMENT NO. 1 - UNSUPPORTED PLANT TREATED AS CIAC

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED	
1	CIAC, Unsupported Plant Treated as CIAC	$ -	$ 70,120	$ 70,120	Line 33
2	Amort of CIAC, Unsupported Plant Treated as CIAC	$ -	$ 11,455	$ 11,455	Line 50
3	Net CIAC, Unsupported Plant Treated as CIAC	$ -	$ 58,665	$ 58,665	

UNSUPPORTED PLANT TREATED AS CIAC

Description	Plant Selected In Sample	Unsupported Plant Costs	Staff as Adjusted
2006 Plant Addition, Acct No. 307-Wells & Springs	$ 11,646	$ -	$ 11,646
2007 Plant Addition, Acct No. 310-Power Generation Equip.	$ 20,059	$ -	$ 20,059
2002 Plant Addition, Acct No. 311 - Pumping Equipment	$ 12,580	$ -	$ 12,580
2005 Plant Addition, Acct No. 311 - Pumping Equipment	$ 12,467	$ -	$ 12,467
2008 Plant Addition, Acct No. 311 - Pumping Equipment	19,722	-	19,722
Acct No. 311- Pumping Equipment Subtotal	**$ 44,769**	**$ -**	**$ 44,769**
2001 Plant Addition, Acct No. 330-Distr Reserv & Standpipes	$ 24,296	$ -	$ 24,296
2002 Plant Addition, Acct No. 330-Distr Reserv & Standpipes	31,220	-	31,220
2003 Plant Addition, Acct No. 330-Distr Reserv & Standpipes	42,968	-	42,968
Acct No. 331- Transp. & Distrib. Mains Subtotal	**$ 98,484**	**$ -**	**$ 98,484**
2003 Plant Addition, Acct No. 331-Services	$ 23,284	$ -	$ 23,284
2000 Plant Addition, Acct No. 334-Meters	$ 35,491	$ -	$ 35,491
Total	**$ 233,733**	**$ -**	**$ 233,733**
		x	**30%**
			$ 70,119.90

CALCULATION OF AMORTIZATION OF CIAC ON UNSUPPORTED PLANT

Year Added	Plant Additions	Unsupported Plant	Year Transferred To CIAC	Number of Interim Years	Depreciation Rate	Amortization of CIAC
2000	Meters	$ 35,491	2000	12.5	8.33%	$36,955.00
2001	Distrib Reserviors	$ 24,296	2001	11.5	2.22%	$6,202.77
2002	Pumping Equip	$ 12,580	2002	10.5	12.50%	$16,511.25
2002	Distrib Reserviors	$ 31,220	2002	10.5	2.22%	$7,277.38
2003	Distrib Reserviors	$ 42,968	2003	9.5	2.22%	$9,061.95
2003	Services	$ 23,284	2003	9.5	3.33%	$7,365.89
2005	Pumping Equip	$ 12,467	2005	7.5	12.50%	$11,687.81
2006	Wells and Springs	$ 11,646	2006	6.5	3.33%	$2,520.78
2007	Pwr Gen Equip	$ 20,059	2007	5.5	5.00%	$5,516.23
2008	Pumping Equip	$ 19,722	2008	4.5	12.50%	$11,093.63
		$ 233,733				$38,184.33
					x	30%
						$ 11,455.30

References:
Column A: Company Schedule B-2
Column B: Testimony, CSB, Company Data Request Responses CSB 1.3
Column C: Column [A] + Column [B]

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Supplemental Surrebuttal Schedule CSB-6

RATE BASE ADJUSTMENT NO. 2 -UNSUPPORTED REMOVAL OF CIAC RELATED TO SALE OF STAR/QUAIL VALLEY SYSTEM

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED	
1	Company Proposed Removal of CIAC Related to Sale	$ -	$ 548,628	$ 548,628	
2	Amount of Supported CIAC Related to Sale	$ -	$ (77,715)	$ (77,715)	
3	Unsupported Removal of CIAC Related to Sale	$ -	$ 470,913	$ 470,913	
4					
5	Company Proposed Removal of Amort of CIAC Related to Sale	$ -	$ 343,975	$ 343,975	
6	Amort. Of CIAC on $77,715 Supported CIAC	$ -	$ (48,725)	$ (48,725)	Line 26
7	Total Unsupported Removal of Amortization of CIAC	$ -	$ 295,250	$ 295,250	
8					
9	Net CIAC	$ -	$ 175,663	$ 175,663	
10					
11					
12					
13		Star/Quail Valley System			
14		CIAC	% of CIAC		
15		&	That Is Fully		
16		Amort of CIAC	Amortized		
17	CIAC for Star Valley Plant (CSB 2.17)	$ 548,628			
18	Amortization of CIAC for Star Valley Plant (CSB 2.17)	$ 343,975	63%	Line 18 / Line 17	
19					
20					
21			Amortization		
22			of CIAC on		
23			$77,715 Amount		
24			$ 77,715	From Line 2	
25		Multiplied by	63%	From Line 18	
26			$ 48,725		

References:
Column A: Company Schedule B-2
Column B: Testimony, CSB, Company Data Request Responses CSB 2.16 & CSB 2.17
Column C: Column [A] + Column [B]

Payson Water Company, Inc.
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Supplemental Surrebuttal Schedule CSB-6.1

RATE BASE ADJUSTMENT NO. 3 - ADIT

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Accumulated Deferred Income Taxes	$ 23,339	$ (79,555)	$ (56,216)

References:
Column A: Company Schedule B-2
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

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Supplemental Surrebuttal Schedule CSB-7

OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	ADJ NO.	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
	REVENUES:						
1	Metered Water Sales	$ 313,559			$ 313,559	$ 289,731	$ 603,290
2	Water Sales - Unmetered	-	-		-		-
3	Other Operating Revenues	6,966	-		6,966	-	6,966
4	**Total Revenues**	$ 320,525	$ -		$ 320,525	$ 289,731	$ 610,256
5							
6	*EXPENSES:*						
7	Salaries and Wages	$ 55,097	$ -	1	$ 55,097	$ -	$ 55,097
8	Employee Pensions & Benefits	-	-		-	-	-
9	Purchased Power	50,533	-		50,533	-	50,533
10	Fuel for Power Production	-	-		-	-	-
11	Chemicals	2,181	-		2,181	-	2,181
12	Repairs and Maintenance	28,089	-		28,089	-	28,089
13	Office Supplies & Expense	-	-		-	-	-
14	Contractual Services	58,481	(1,683)	2	56,798	-	56,798
15	Water Testing	11,000	-		11,000	-	11,000
16	Rents	-	-		-	-	-
17	Transportation Expenses	-	-		-	-	-
18	Insurance - General Liability	-	-		-	-	-
19	Insurance - Health and Life	266	-		266	-	266
20	Reg. Comm. Exp.	-	-		-	-	-
21	Reg. Comm. Exp. - Rate Case	65,000	-		65,000	-	65,000
22	Miscellaneous Expense	235,253	(37,033)	3,4,5	198,220	-	198,220
23	Bad Debt Expense	-	-		-	-	-
24	Depreciation Expense	85,632	(26,198)	6	59,434	-	59,434
25	Taxes Other Than Income	-	-		-	-	-
26	Property Taxes	21,030	(1,052)		19,978	6,020	25,998
27	Income Taxes	(109,557)	29,176	7	(80,381)	92,601	12,220
28	Rounding	(1)	-		(1)	-	(1)
29		-					
30	**Total Operating Expenses**	$ 503,004	$ (36,790)		$ 466,214	$ 98,621	$ 564,835
31							
32	**Operating Income (Loss)**	$ (182,479)	$ 36,790		$ (145,689)	$ 191,110	$ 45,422

References:
Column (A): Company Schedule C-1
Column (B): Schedule CSB-16
Column (C): Column (A) + Column (B)
Column (D): Schedules CSB-1 and CSB-2
Column (E): Column (C) + Column (D)

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Supplemental Surrebuttal Schedule CSB-8

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1 Salaries and Wages Ref: Sch CSB-9	[C] ADJ #2 Contractual Services Ref: Sch CSB-10	[D] ADJ #3 $197,722 Corporate Office Allocation Ref: Sch CSB-11	[E] ADJ #4 Misc. Expense, Beaver Valley Write Off Ref: Sch CSB-12	[F] ADJ #5 Misc. Expense, Other Ref: Sch CSB-13	[G] ADJ #6 Depreciation Expense Ref: Sch CSB-14	[H] ADJ #7 Income Tax Expense Ref: Sch CSB-15	[I] ADJ #8 Property Tax Expense Ref: Sch CSB-16	[J] STAFF ADJUSTED
	REVENUES:										
1	Metered Water Sales	$ 313,559	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 313,559
2	Water Sales - Unmetered	-	-	-	-	-	-	-	-	-	-
3	Other Operating Revenues	6,966	-	-	-	-	-	-	-	-	6,966
4	**Total Revenues**	$ 320,525	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 320,525
5											
6	*OPERATING EXPENSES:*										
7	Salaries and Wages	$ 55,097	-	-	-	-	-	-	-	-	$ 55,097
8	Employee Pensions & Benefits	-	-	-	-	-	-	-	-	-	-
9	Purchased Power	50,533	-	-	-	-	-	-	-	-	50,533
10	Fuel for Power Production	-	-	-	-	-	-	-	-	-	-
11	Chemicals	2,181	-	-	-	-	-	-	-	-	2,181
12	Repairs and Maintenance	28,089	-	-	-	-	-	-	-	-	28,089
13	Office Supplies & Expense	-	-	-	-	-	-	-	-	-	-
14	Contractual Services	58,481	-	(1,683)	-	-	-	-	-	-	56,798
15	Water Testing	11,000	-	-	-	-	-	-	-	-	11,000
16	Rents	-	-	-	-	-	-	-	-	-	-
17	Transportation Expenses	-	-	-	-	-	-	-	-	-	-
18	Insurance - General Liability	-	-	-	-	-	-	-	-	-	-
19	Insurance - Health and Life	266	-	-	-	-	-	-	-	-	266
20	Reg. Comm. Exp.	-	-	-	-	-	-	-	-	-	-
21	Reg. Comm. Exp. - Rate Case	65,000	-	-	-	-	-	-	-	-	65,000
22	Miscellaneous Expense	235,253	-	-	(23,819)	(7,857)	(5,357)	-	-	-	198,220
23	Bad Debt Expense	-	-	-	-	-	-	-	-	-	-
24	Depreciation Expense	85,632	-	-	-	-	-	(26,198)	-	-	59,434
25	Taxes Other Than Income	-	-	-	-	-	-	-	-	-	-
26	Property Taxes	21,030	-	-	-	-	-	-	-	(1,052)	19,978
27	Income Taxes	(109,557)	-	-	-	-	-	-	29,176	-	(80,381)
28	Rounding	(1)	-	-	-	-	-	-	-	-	(1)
29		-	-	-	-	-	-				
30	**Total Operating Expenses**	$ 503,004	$ -	$ (1,683)	$ (23,819)	$ (7,857)	$ (5,357)	$ (26,198)	$ 29,176	$ (1,052)	$ 466,214
31											
32	**Operating Income (Loss)**	$ (182,479)	$ -	$ 1,683	$ 23,819	$ 7,857	$ 5,357	$ 26,198	$ (29,176)	$ 1,052	$ (145,689)

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Supplemental Surrebuttal Schedule CSB-9

OPERATING INCOME ADJUSTMENT NO. 1 - SALARIES & WAGES

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS (Col C - Col A)	[C] STAFF AS ADJUSTED	
1	Salaries & Wages	$ 55,097	$ -	$ 55,097	Removed $2,507 Adj.
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

References:

Column A: Company Schedule C-2
Column B: Testimony, CSB; Data Request Responses CSB 1.15, 1.24, and 2.11
Column C: Column [A] + Column [B]

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Supplemental Surrebuttal Schedule CSB-10

OPERATING INCOME ADJUSTMENT NO. 2 - CONTRACTUAL SERVICES

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS (Col C - Col A)	[C] STAFF AS ADJUSTED
1	Contractual Services	$ 70,679	$ -	$ 70,679
2	Legal Expenses Related to Condemnation	$ (12,198)	$ (1,683)	$ (13,881)
3	Total Contractual Services	$ 58,481	$ (1,683)	$ 56,798

References:

Column A: Company Schedule C-2
Column B: Testimony, CSB, Data Request Response CSB 1.31
Column C: Column [A] + Column [B]

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Supplemental Surrebuttal Schedule CSB-11

OPERATING INCOME ADJUSTMENT NO. 3 - $197,722 Corporate Office Allocation

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS (Col C - Col A)	[C] STAFF AS ADJUSTED
1	Miscellaneous Expense	$ 37,531	$ -	$ 37,531
2				
3	**Central Office Overhead Allocation**	$ 197,722	$ (23,819)	$ 173,903
4	Bonuses	$ -	$ -	$ -
5	Star/Quail Valley Costs	$ -	$ -	$ -
6	Other (Advertising, Fines, Utility Plant, Gain on Sale)	$ -	$ -	$ -
7	**Subtotal - Central Office Overhead Allocation**	**$ 197,722**	**$ (23,819)**	**$ 173,903**
8				
9	Total Miscellaneous Expense (L1 + L7)	$ 235,253	$ (23,819)	$ 211,434

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

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Supplemental Surrebuttal Schedule CSB-12

OPERATING INCOME ADJUSTMENT NO. 5 - MISCELLANEOUS EXPENSE, BEAVER DAM WRITE OFF

		[A]	[B]	[C]
LINE NO.	DESCRIPTION	COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Miscellaneous Expense	$ 227,396	$ -	$ 227,396
2	Beaver Dam Write Off (CSB 2.3)	$ 7,857	$ (7,857)	$ -
3	Total Miscellaneous Expense	$ 235,253	$ (7,857)	$ 227,396

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Supplemental Surrebuttal Schedule CSB-13

OPERATING INCOME ADJUSTMENT NO. 4 - MISCELLANEOUS EXPENSE, OTHER

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Miscellaneous Expense	$ 232,815	$ -	$ 232,815
2	Chemicals (CSB 2.6)	$ 2,438	$ (2,438)	$ -
3	Consumption Report Regarding Water Augmentation Costs	$ 1,650	$ -	$ 1,650
4	Cogsdale - Star Valley Deposit Sort	$ 825	$ (825)	$ -
5	Arizona Department of Revenue	$ 1,076	$ (1,076)	$ -
6	ACC Annual Assessment	$ 1,018	$ (1,018)	$ -
7	Total Miscellaneous Expense	$ 239,822	$ (5,357)	$ 234,465

References:

Column A: Company Schedule C-1

Column B: Testimony, CSB

Column C: Column [A] + Column [B]

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Supplemental Surrebuttal Schedule CSB-14

OPERATING INCOME ADJUSTMENT NO. 6 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

LINE NO.		DESCRIPTION	[A] PLANT In SERVICE Per Staff	[B] NonDepreciable or Fully Depreciated PLANT	[C] DEPRECIABLE PLANT (Col A - Col B)	[D] DEPRECIATION RATE	[E] DEPRECIATION EXPENSE (Col C x Col D)
1	301	Organization Cost	$ 221	$ (221)	$ -	0.00%	$ -
2	302	Franchises	-	-	$ -	0.00%	$ -
3	303	Land and Land Rights	16,500	(16,500)	$ -	0.00%	
4	304	Structures and Improvements	300,078	-	300,078	3.33%	9,993
5	305	Collecting and Impounding Reserviors	2,531	-	2,531	3.33%	84
6	306	Lake, River, and Other Intakes	-	-	-	2.50%	-
7	307	Wells and Springs	273,013	-	273,013	3.33%	9,091
8	309	Supply Mains	3,681	-	3,681	2.00%	74
9	310	Power Generation Equipment	8,310	-	8,310	5.00%	416
10	311	Pumping Equipment	217,608	-	217,608	12.50%	27,201
11	320	Water Treatment Equipment	10,567	-	10,567	3.33%	352
12	330	Distribution Reservoirs and Standpipes	273,800	-	273,800	2.22%	6,078
13	330.2	Pressure Tanks	-	-	-	5.00%	-
14	331	Transmission and Distribution Mains	439,972	-	439,972	2.00%	8,799
15	333	Services	81,823	-	81,823	3.33%	2,725
16	334	Meters and Meter Installations	199,952	-	199,952	8.33%	16,656
17	335	Hydrants	1,171	-	1,171	2.00%	23
18	336	Backflow Prevention Devices	-	-	-	6.67%	-
19	339	Other Plant and Miscellaneous Equipment	320,820	-	320,820	6.67%	21,399
20	340	Office Furniture and Equipment	-	-	-	6.67%	-
21	341	Transportation Equipment	-	-	-	20.00%	-
22	340.1	Computers and Software	-	-	-	20.00%	-
23	343	Tools, Shop, and Garage Equipment	72	-	72	5.00%	4
24	344	Laboratory Equipment	-	-	-	10.00%	-
25	345	Power Operated Equipment	-	-	-	5.00%	-
26	346	Communication Equipment	9,267	-	9,267	10.00%	927
27	347	Miscellaneous Equipment	-	-	-	10.00%	-
28	348	Other Tangible Equipment	-	-	-	10.00%	-
29		Total Plant	$ 2,159,386	$ (16,721)	$ 2,142,665		$ 103,821
30							
31							
32							
33		Composite Depreciation Rate (Depr Exp / Depreciable Plant):	4.85%				
34		CIAC:	$ 916,069				
35		Amortization of CIAC (Line 33 x Line 34):	$ 44,387				
36							
37		Depreciation Expense Before Amortization of CIAC:	$ 103,821				
38		Less Amortization of CIAC:	$ 44,387				
39		Test Year Depreciation Expense - Staff:	$ 59,434				
40		Depreciation Expense - Company:	85,632				
41		**Staff's Total Adjustment:**	**$ (26,198)**				

References:
Column [A]: Schedule CSB-4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Supplemental Surrebuttal Schedule CSB-15

OPERATING INCOME ADJUSTMENT NO. 7 - TEST YEAR INCOME TAXES

LINE NO.	DESCRIPTION	(A)	(B)
	Calculation of Income Tax:	Test Year	
1	Revenue	$ 320,525	
2	Less: Operating Expenses - Excluding Income Taxes	$ 546,596	
3	Less: Synchronized Interest (L17)	$ -	
4	Arizona Taxable Income (L1- L2 - L3)	$ (226,071)	
5	Arizona State Income Tax Rate	6.500%	
6	Arizona Income Tax (L4 x L5)		$ (14,695)
7	Federal Taxable Income (L4 - L6)	$ (211,376)	
8	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ (7,500)	
9	Federal Tax on Second Income Bracket ($51,001 - $75,000) @ 25%	$ (6,250)	
10	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ (8,500)	
11	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ (43,437)	
12	Federal Tax on Fifth Income Bracket ($335,001 - $10,000,000) @ 34%	$ -	
13	Total Federal Income Tax		$ (65,687)
14	Combined Federal and State Income Tax (L6 + L13)		$ (80,381)
	Calculation of Interest Synchronization:		
15	Rate Base	$ 504,684	
16	Weighted Average Cost of Debt	0.00%	
17	Synchronized Interest (L16 x L17)	$ -	
18	Income Tax - Per Staff	$ (80,381)	
19	Income Tax - Per Company	$ (109,557)	
20	**Staff Adjustment**	**$ 29,176**	

Payson Water Company, Inc.
Docket No. W-03514A-13-0111
Test Year Ended December 31, 2012

Supplemental Surrebuttal Schedule CSB-16

OPERATING INCOME ADJUSTMENT NO. 8 - PROPERTY TAX EXPENSE

LINE NO.	Property Tax Calculation	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	$ 320,525	$ 320,525
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	641,050	$ 641,050
4	Staff Recommended Revenue, Per Schedule CSB-1	320,525	$ 610,256
5	Subtotal (Line 4 + Line 5)	961,575	1,251,306
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	320,525	$ 417,102
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	641,050	$ 834,204
10	Plus: 10% of CWIP -	-	-
11	Less: Net Book Value of Licensed Vehicles	-	$ -
12	Full Cash Value (Line 9 + Line 10 - Line 11)	641,050	$ 834,204
13	Assessment Ratio	19.0%	19.0%
14	Assessment Value (Line 12 * Line 13)	121,800	$ 158,499
15	Composite Property Tax Rate	16.4025%	16.4025%
			$ -
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	$ 19,978	
17	Company Proposed Property Tax	21,030	
18	Staff Test Year Adjustment (Line 16-Line 17)	$ (1,052)	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		$ 25,998
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 19,978
21	Increase in Property Tax Expense Due to Increase in Revenue Requirement		$ 6,020
22	Increase to Property Tax Expense		$ 6,020
23	Increase in Revenue Requirement		289,731
24	Increase to Property Tax per Dollar Increase in Revenue (Line19/Line 20)		2.077650%

Monthly Usage Charge	United System Present	C&S Systems Present	Company Proposed Rates Consolidated	Staff Recommended Rates Consolidated
Meter Size (All Classes):				
5/8 x 3/4 Inch	$ 16.00	$ 17.00	$ 39.24	$ 23.00
3/4 Inch	18.40	25.50	58.85	36.00
1 Inch	21.28	42.50	98.09	60.00
1 1/2 Inch	32.00	85.00	196.18	120.00
2 Inch	56.00	136.00	313.89	200.00
3 Inch	80.00	255.00	627.78	400.00
4 Inch	128.00	425.00	980.90	600.00
6 Inch	No Tariff	850.00	1,961.80	1,200.00
8 Inch	No Tariff	No Tariff	3,138.88	2,000.00
Commodity Charge - Per 1,000 Gallons				
C&S System (All Meter Sizes)				
Per 1,000 gallons, for all gallons	N/A	$ 1.4800	N/A	N/A
United Systems (All Meter Sizes)				
First 4,000 gallons	$ 1.9300	N/A	N/A	N/A
Over 4,000 gallons	2.9900	N/A	N/A	N/A
5/8"x3/4" and 3/4 "Meters (Consolidated)				
First 4,000 gallons	N/A	N/A	$ 2.7500	N/A
4,001 to 10,000 gallons	N/A	N/A	4.7500	N/A
Over 10,000 gallons	N/A	N/A	6.7500	N/A
First 3,000 gallons	N/A	N/A	N/A	$ 4.0000
3,001 to 10,000 gallons	N/A	N/A	N/A	7.6640
Over 10,000 gallons	N/A	N/A	N/A	9.6170
1" Meter (Consolidated)				
First 25,000 gallons	N/A	N/A	4.0000	N/A
Over 25,000 gallons	N/A	N/A	4.2500	N/A
First 18,000 gallons	N/A	N/A	N/A	7.6640
Over 18,000 gallons	N/A	N/A	N/A	9.6170
1 1/2" Meter (Consolidated)				
First 50,000 gallons	N/A	N/A	4.0000	N/A
Over 50,000 gallons	N/A	N/A	4.2500	N/A
First 38,000 gallons	N/A	N/A	N/A	7.6640
Over 38,000 gallons	N/A	N/A	N/A	9.6170
2" Meter (Consolidated)				
First 80,000 gallons	N/A	N/A	4.0000	N/A
Over 80,000 gallons	N/A	N/A	4.2500	N/A
First 60,000 gallons	N/A	N/A	N/A	7.6640
Over 60,000 gallons	N/A	N/A	N/A	9.6170
3" Meter (Consolidated)				
First 160,000 gallons	N/A	N/A	4.0000	N/A
Over 160,000 gallons	N/A	N/A	4.2500	N/A
First 120,000 gallons	N/A	N/A	N/A	7.6640
Over 120,000 gallons	N/A	N/A	N/A	9.6170
4" Meter (Consolidated)				
First 250,000 gallons	N/A	N/A	4.0000	N/A
Over 250,000 gallons	N/A	N/A	4.2500	N/A
First 200,000 gallons	N/A	N/A	N/A	7.6640
Over 200,000 gallons	N/A	N/A	N/A	9.6170

6" Meter (Consolidated)				
First 500,000 gallons	N/A	N/A	4.0000	N/A
Over 500,000 gallons	N/A	N/A	4.2500	N/A
First 450,000 gallons	N/A	N/A	N/A	7.6640
Over 450,000 gallons	N/A	N/A	N/A	9.6170
8" Meter (Consolidated)				
First 800,000 gallons	N/A	N/A	4.0000	N/A
Over 800,000 gallons	N/A	N/A	4.2500	N/A
First 679,000 gallons	N/A	N/A	N/A	7.6640
Over 679,000 gallons	N/A	N/A	N/A	9.6170

Other Service Charges

	United System	C&S Systems	Consolidated Company Proposed	Consolidated Staff Recommended
Establishment	$ 25.00	$ 25.00	$ 25.00	$ 25.00
Establishment (After Hours)	$ 35.00	$ 35.00	$ 35.00	Remove from Tariff
Reconnection (Delinquent)	$ 20.00	$ 20.00	$ 20.00	$ 20.00
Reconnection (Delinquent and After Hours)	$ 30.00	$ 30.00	$ 30.00	Remove from Tariff
Meter Test (If Correct)	$ 25.00	$ 20.00	$ 25.00	$ 25.00
Deposit	*	*	*	*
Deposit Interest*	6.00%	6.00%	6.00%	6.00%
Reestablishment (within 12 months)	**	**	**	**
NSF Check	$ 17.50	$ 10.00	$ 17.50	$ 17.50
Deferred Payment (per month)	1.50%	1.50%	1.50%	1.5% per month
Meter Re-Read (if correct and not error)	$ 15.00	$ 10.00	$ 15.00	$ 15.00
Late Charge per month (per R-14-2-409 G (6)	1.50%	1.50%	1.50%	1.5% per month
After Hour Service Charge (at cust. request)	N/A	N/A	N/A	$ 35.00

* Per Commission Rule R14-2-403(B).
** Number of months off the system times the monthly minimum per A.A.C. R14-2-403(D).

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).

All advances and/or contributions are to include labor, materials, overheads, and all applicable taxes.

Service and Meter Installation Charges

Service Size	United Systems and C&S System Total Present	Consolidated Proposed Service Line Charge	Consolidated Proposed Meter Insallation Charge	Consolidated Total Proposed Charge	Consolidated Recommended Service Line Charge	Consolidated Recommended Meter Insallation Charge	Consolidated Total Recommended Charge
5/8 x 3/4 Inch	$ 430.00	$ 445.00	$ 155.00	$ 600.00	$ 445.00	$ 155.00	$ 600.00
3/4 Inch	$ 480.00	$ 445.00	$ 255.00	$ 700.00	$ 445.00	$ 255.00	$ 700.00
1 Inch	$ 550.00	$ 495.00	$ 315.00	$ 810.00	$ 495.00	$ 315.00	$ 810.00
1 1/2 Inch	$ 775.00	$ 550.00	$ 525.00	$ 1,075.00	$ 550.00	$ 525.00	$ 1,075.00
2 Inch	$ 1,305.00	N/A	N/A	N/A	N/A	N/A	N/A
2 Inch Turbine	N/A	$ 830.00	$ 1,045.00	$ 1,875.00	$ 830.00	$ 1,045.00	$ 1,875.00
2 Inch Compound	N/A	$ 830.00	$ 1,890.00	$ 2,720.00	$ 830.00	$ 1,890.00	$ 2,720.00
3 Inch	$ 1,815.00	N/A	N/A	N/A	N/A	N/A	N/A
3 Inch Turbine	N/A	$ 1,045.00	$ 1,670.00	$ 2,715.00	$ 1,045.00	$ 1,670.00	$ 2,715.00
3 Inch Compound	N/A	$ 1,165.00	$ 2,545.00	$ 3,710.00	$ 1,165.00	$ 2,545.00	$ 3,710.00
4 Inch	$ 2,860.00	N/A	N/A	N/A	N/A	N/A	N/A
4 Inch Turbine	N/A	$ 1,490.00	$ 2,670.00	$ 4,160.00	$ 1,490.00	$ 2,670.00	$ 4,160.00
4 Inch Compound	N/A	$ 1,670.00	$ 3,645.00	$ 5,315.00	$ 1,670.00	$ 3,645.00	$ 5,315.00
6 Inch - United Systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 Inch - C&S Systems	$ 5,275.00	N/A	N/A	N/A	N/A	N/A	N/A
6 Inch Turbine	N/A	$ 2,210.00	$ 5,025.00	$ 7,235.00	$ 2,210.00	$ 5,025.00	$ 7,235.00
6 Inch Compound	N/A	$ 2,330.00	$ 6,920.00	$ 9,250.00	$ 2,330.00	$ 6,920.00	$ 9,250.00
8 Inch	N/A	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost

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

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	2,903	$ 21.60	$ 47.22	$ 25.62	118.60%
Median Usage	1,434	18.77	43.18	$ 24.42	130.10%
Staff Recommended					
Average Usage	2,903	$ 21.60	$ 34.61	$ 13.01	60.22%
Median Usage	1,434	18.77	28.74	$ 9.97	53.11%

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

Gallons	Present	Company Proposed	%	Staff Recommended	%
	5/8"	5/8"		5/8"	
Consumption	Rates	Rates	Increase	Rates	Increase
-	$ 16.00	$ 39.24	145.25%	$ 23.00	43.75%
1,000	17.93	41.99	134.19%	27.00	50.59%
2,000	19.86	44.74	125.28%	31.00	56.09%
3,000	21.79	47.49	117.94%	35.00	60.62%
4,000	23.72	50.24	111.80%	42.66	79.87%
5,000	26.71	54.99	105.88%	50.33	88.42%
6,000	29.70	59.74	101.14%	57.99	95.26%
7,000	32.69	64.49	97.28%	65.66	100.84%
8,000	35.68	69.24	94.06%	73.32	105.49%
9,000	38.67	73.99	91.34%	80.98	109.42%
10,000	41.66	78.74	89.01%	88.65	112.79%
11,000	44.65	85.49	91.47%	98.27	120.08%
12,000	47.64	92.24	93.62%	107.88	126.45%
13,000	50.63	98.99	95.52%	117.50	132.07%
14,000	53.62	105.74	97.20%	127.12	137.07%
15,000	56.61	112.49	98.71%	136.73	141.54%
16,000	59.60	119.24	100.07%	146.35	145.55%
17,000	62.59	125.99	101.29%	155.97	149.19%
18,000	65.58	132.74	102.41%	165.58	152.49%
19,000	68.57	139.49	103.43%	175.20	155.51%
20,000	71.56	146.24	104.36%	184.82	158.27%
25,000	86.51	179.99	108.06%	232.90	169.22%
30,000	101.46	213.74	110.66%	280.99	176.94%
35,000	116.41	247.49	112.60%	329.07	182.68%
40,000	131.36	281.24	114.10%	377.16	187.12%
45,000	146.31	314.99	115.29%	425.24	190.65%
50,000	161.26	348.74	116.26%	473.33	193.52%
75,000	236.01	517.49	119.27%	713.75	202.42%
100,000	310.76	686.24	120.83%	954.18	207.05%

Typical Bill Analysis for C&S System
General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	6,961	$ 27.30	$ 64.30	$ 37.00	135.53%
Median Usage	4,500	23.66	52.62	$ 28.96	122.38%
Staff Recommended					
Average Usage	6,961	$ 27.30	$ 65.36	$ 38.05	139.38%
Median Usage	4,500	23.66	46.50	$ 22.84	96.52%

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

Gallons	Present	Company Proposed	%	Staff Recommended	%
	5/8"	5/8"		5/8"	
Consumption	Rates	Rates	Increase	Rates	Increase
-	$ 17.00	$ 39.24	130.82%	$ 23.00	35.29%
1,000	18.48	41.99	127.22%	27.00	46.10%
2,000	19.96	44.74	124.15%	31.00	55.31%
3,000	21.44	47.49	121.50%	35.00	63.25%
4,000	22.92	50.24	119.20%	42.66	86.14%
5,000	24.40	54.99	125.37%	50.33	106.26%
6,000	25.88	59.74	130.83%	57.99	124.08%
7,000	27.36	64.49	135.71%	65.66	139.97%
8,000	28.84	69.24	140.08%	73.32	154.23%
9,000	30.32	73.99	144.03%	80.98	167.10%
10,000	31.80	78.74	147.61%	88.65	178.77%
11,000	33.28	85.49	156.88%	98.27	195.27%
12,000	34.76	92.24	165.36%	107.88	210.36%
13,000	36.24	98.99	173.15%	117.50	224.22%
14,000	37.72	105.74	180.33%	127.12	237.00%
15,000	39.20	112.49	186.96%	136.73	248.81%
16,000	40.68	119.24	193.12%	146.35	259.76%
17,000	42.16	125.99	198.84%	155.97	269.94%
18,000	43.64	132.74	204.17%	165.58	279.43%
19,000	45.12	139.49	209.15%	175.20	288.30%
20,000	46.60	146.24	213.82%	184.82	296.61%
25,000	54.00	179.99	233.31%	232.90	331.30%
30,000	61.40	213.74	248.11%	280.99	357.64%
35,000	68.80	247.49	259.72%	329.07	378.30%
40,000	76.20	281.24	269.08%	377.16	394.96%
45,000	83.60	314.99	276.78%	425.24	408.66%
50,000	91.00	348.74	283.23%	473.33	420.14%
75,000	128.00	517.49	304.29%	713.75	457.62%
100,000	165.00	686.24	315.90%	954.18	478.29%

0000031996

Arizona Corporation Commission
DOCKETED
FEB 17 2000
DOCKETED BY

BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK
CHAIRMAN
JIM IRVIN
COMMISSIONER
WILLIAM A. MUNDELL
COMMISSIONER

IN THE MATTER OF THE APPLICATION OF C & S WATER COMPANY, INC. FOR A PERMANENT RATE INCREASE AND FINANCING APPROVAL.

DOCKET NO. W-02134A-99-0176

DECISION NO. 62320

ORDER

EXHIBIT
S-17
ADMITTED

Open Meeting
February 15 and 16, 2000
~~Phoenix~~, Arizona

BY THE COMMISSION:

On February 24, 1999, C & S Water Company, Inc. ("C&S" or "Applicant") filed with the Arizona Corporation Commission ("Commission") an application for a permanent rate increase and a request for approval of financing.

On March 26, 1999, the Commission's Utilities Division ("Staff") filed notice that the portion of the application related to the rate increase had met the sufficiency requirements of A.A.C. R14-2-103. Based on its application C&S would be treated as a Class D utility, however, pursuant to an agreement with Staff, Applicant stipulated that the utility would be treated as a Class B water utility with respect to the issuance of a final Order on the application by the Commission since it had been filed as part of a group of five applications by its parent corporation, Brooke Utilities, Inc. ("Brooke").

Applicant provided notice to its customers of the application on or about March 29, 1999. In response thereto, the Commission has received 13 letters raising various concerns and a petition containing the signatures of 13 customers opposing the size of the proposed rate increase.

On October 8, 1999, Staff filed its Staff Report, recommending that the rates proposed by Staff be approved and that a portion of the financing application also be approved. Subsequently, due to an error in the calculation of Applicant's Debt Service Coverage ("DSC") ratio, Staff filed a revised Staff Report on November 16, 1999, to replace the original report. In response, on December

8, 1999, C&S filed a "Narrative Rebuttal" to the revised Staff Report.

* * * * * * * * * *

Having considered the entire record herein and being fully advised in the premises, the Commission finds, concludes, and orders that:

FINDINGS OF FACT

1. Pursuant to authority granted by the Commission, C&S is an Arizona corporation engaged in the business of providing water service to the public in an area approximately 10 miles southeast of Payson, Gila County, Arizona.[1]

2. Applicant provides water service by means of two interconnected systems, the Gisela Water System ("Gisela") acquired pursuant to the terms of Decision No. 54854 (January 23, 1986) and the Triple T Water System ("Triple T") acquired pursuant to Decision No. 57515 (August 14, 1991).

3. At present, Gisela's rates for water service were approved in Decision No. 54296 (December 24, 1984) and Triple T's by Decision No. 48089 (July 13, 1977).

4. On February 24, 1999, C&S filed with the Commission an application requesting authority to increase its rates and charges for both systems and requested approval for an open line of credit in the amount of $150,000 originally with Brooke. Brooke is controlled by Crystal Investments L.L.C. ("Crystal") which owns 90 percent of the stock, and by Mr. Robert Hardcastle, Brooke's President, who owns the remaining 10 percent of the stock. Crystal is controlled by Mr. Lee Jameson, a principal in Jaco Oil Company ("Jaco"), and a Jameson family trust.

5. On March 26, 1999, Staff filed notice that the rate application met the sufficiency requirements of A.A.C. R14-2-103.

6. During the Test Year ended June 30, 1998 ("TY"), Applicant served a total of 156 customers, 133 on its Gisela system and 23 on its Triple T system.

7. On April 2, 1999, C&S notified its customers of the application herein and in response thereto, 13 customers sent letters voicing their concerns and protesting the proposed rates and 13

[1] C&S is a wholly-owned subsidiary of Brooke which acquired C&S on or about August 8, 1996, at which time Brooke acquired the outstanding stock of Mr. Richard S. Williamson in United Utilities, Inc., through which he controlled 18 Arizona water utilities.

customers also signed a petition in opposition to the proposed rate increase.

8. Staff conducted an investigation of Applicant's proposed rates and charges and its request for financing approval, and in the revised Staff Report filed November 16, 1999, recommended that its proposed rates and slightly more than half of Applicant's request for what Staff termed "short-term" debt be converted to long-term debt without a hearing. Staff further recommended the remainder of the requested debt be treated as paid in capital. Staff also recommended that the Commission approve an issuance of common stock by C&S in order to fund future capital expenditures.

9. The rates and charges for Applicant at present, as proposed in the application, and as recommended by Staff are as follows:

	Present Rates		Proposed Rates	
	Gisela	Triple T	Company	Staff
MONTHLY USAGE CHARGE:				
5/8" x ¾" Meter	$13.00	$7.50	$21.21	$13.60
¾" Meter	-	-	-	20.40
1" Meter	-	-	$23.00	34.00
1 ½" Meter	-	-	-	68.00
2" Meter	-	-	-	108.80
3" Meter	-	-	-	204.00
4" Meter	-	-	-	340.00
6" Meter	-	-	-	680.00
Gallons included in Minimum	2,000	2,000	0	0
Commodity Charge in excess of minimum – Per 1,000 Gallons				
5/8" Meter	$1.48	$1.25	$2.50	-
1" Meter	-	-	3.50	-
All meter sizes	-	-	-	$2.00
SERVICE LINE AND METER INSTALLATION CHARGES: (Refundable pursuant to A.A.C. R14-2-405)				
5/8" x ¾" Meter (Same side of street as main line)	$125.00	-	-	-
5/8" x ¾" Meter (Other side of street from main line)	$250.00	-	-	-
5/8" x ¾" Meter (Either side of the street)	-	-	$100.00	$430.00
¾" Meter	-	-	455.00	480.00
1" Meter	-	-	520.00	550.00
1 ½" Meter	-	-	740.00	775.00

2" Meter	-	-	1,800.00	1,305.00
3" Meter	-	-	2,340.00	1,815
4" Meter	-	-	3,405.00	2,860.00
6" Meter	-	-	6,510.00	5,275.00

SERVICE CHARGES:

Establishment	$25.00	-	$25.00	$25.00
Establishment (After Hours)	45.00	-	35.00	35.00
Reconnection	20.00	-	20.00	20.00
Reconnection (After Hours)	-	-	30.00	30.00
Deposit	*	-	50.00	*
Deposit Interest	*	-	6%	*
Reestablishment (Within 12 Months)	**	-	**	**
NSF Check	$10.00	-	$10.00	$10.00
Deferred Payment (Per Month)	1.50%	-	1.50%	1.50%
Meter Reread (If Correct)	$5.00	-	$25.00	$10.00
Meter Test	25.00	-	-	$20.00
Late Payment Penalty (Per Month)	-	-	Per rule	1.50%

* Per Commission Rule A.A.C. R-14-2-403(B).

** Number of months off system times the monthly minimum, per Commission Rule A.A.C. R14-2-403(D).

10. Pursuant to the Staff Report, Applicant's fair value rate base ("FVRB") is determined to be $50,719, which is the same as its original cost rate base.[2]

11. Applicant's present rates and charges produce operating revenues of $36,166 and adjusted operating expenses of $43,713[3] which resulted in an adjusted operating loss of $7,547 for the TY.

12. The rates and charges Applicant proposed would produce operating revenues of $60,639 and operating expenses of $51,659, resulting in net operating income of $8,980 for a 17.71 percent rate of return on FVRB.

13. The rates and charges Staff recommended would produce adjusted operating revenues of $49,758 and adjusted operating expenses of $44,443, resulting in net operating income of $5,315

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[2] Staff decreased Applicant's FVRB by $28,006 primarily due to an adjustment to plant in service of $19,127, a substantial portion of which consisted of C.W.I.P. in the amount of $17,501, and the removal of a claim for a deferred tax asset in the amount of $10,000 that is a non rate base item carried forward from the prior owner and r substantiated.

[3] Staff removed $7,946 from Applicant's claimed TY operating expenses primarily due to the amortization of Applicant's claimed water testing and rate case expenses over three years and by revising the depreciation rate by $2,523 from a five percent composite rate to a 2.764 percent composite rate to better reflect actual plant life.

for a 10.48 percent rate of return on FVRB.

14. Staff is recommending a revenue increase of approximately $13,600 which Staff believes will enable C&S to meet its operating needs and service Applicant's long-term financing needs arising from debt which Staff recommends be authorized hereinafter.

15. Applicant's proposed rates would increase the average Gisela customer's (6,295 gallons) monthly bill by 90.9 percent, from $19.36 to $36.95, and the median Gisela customer's (3,923 gallons) monthly bill by 95.7 percent, from $15.85 to $31.02.

16. Applicant's proposed rates would increase the average Triple T customer's (7,283 gallons) monthly bill by 179.5 percent, from $14.10 to $39.42, and the median Triple T customer's (3,667 gallons) monthly bill by 217 percent from $9.58 to $30.38.

17. Staff's proposed rates would increase the average Gisela customer's (6,295 gallons) monthly bill by 35.3 percent, from $19.36 to $26.19, and the median Gisela customer's (3,923 gallons) monthly bill by 35.3 percent from $15.85 to $21.45.

18. Staff's proposed rates would increase the average Triple T customer's (7,283 gallons) monthly bill by 99.7 percent, from $14.10 to $28.17, and the median Triple T customer's (3,667 gallons) monthly bill by 118.4 percent from $9.58 to $20.93.

19. Based on its analysis, Staff concluded that Applicant's cost of capital consists of 51.92 percent long-term debt at a cost of 10 percent (with a weighted cost of 5.19 percent) and 48.08 percent equity at a cost of 11.00 percent (with a weighted cost of 5.29 percent) for an overall weighted cost of capital of 10.48 percent.

20. Applicant's request for long-term financing approval arises out of past "short term" loans reflected by a promissory note dated January 1, 1997, for an open line of credit with Brooke in the amount of $150,000, payable at 10 percent interest and whose terms expired on December 31, 1997.

21. Through the end of the TY, C&S had utilized $43,047 of unapproved debt from its line of credit with Brooke using $14,404 to cover capital improvements for Gisela and Triple T and another $28,643 to cover operating expenses and losses incurred by Applicant.

22. C&S is requesting approval of a new open line of credit with Jaco in the amount of

$100,000, payable at 10 percent interest per annum for a period of five years with a maturity dat January 1, 2004, in order to replace the debt owed to Brooke.

23. C&S is also seeking financing approval for additional debt of $56,400 to cover the following projected capital expenditures:

- In 1999, $18,100 comprised of $2,000 to replace non-functional meters, $3,100 to replace required fencing at a booster station, and $13,000 to remodel a well/tank site;
- In 2000, $37,400 comprised of $900 to replace existing non-functional meters, $22,000 for the construction of a 50,000 gallon storage tank, $3,000 for required fencing of a booster station at Triple T, and $11,500 to remodel an old well/tank site at Triple T; and
- In 2001, $900 to replace any remaining non-functional meters.

24. Normally, Staff would not recommend approval of debt to cover operating losses or expenses because Staff believes that a utility should seek rate relief as soon as it is necessary to meet its fiscal requirements, however, when Brooke acquired its interest in C&S, its financial records were totally inadequate in order to file a rate case because of Mr. Williamson's prior mismanagement.

25. With respect to the allowance of any portion of the previously unapproved debt being approved for the payment of operating expenses, under the circumstances herein, Staff recommended that the Commission approve only up to $25,200 of the $43,047 requested by Applicant for long-term debt. Based on Staff's proposed revenue increase, this is the maximum amount of debt Applicant can afford to carry. Staff further recommends that the terms for this debt should not exceed an interest rate of 10 percent per annum and be payable for a period of five years as requested by C&S.

26. Staff is further recommending that the remaining balance, $17,847, of previously unauthorized debt be converted into paid in capital.

27. Lastly, in order to fund the projected capital expenditures for 1999, 2000 and 2001 as proposed by Applicant, Staff recommends that the Commission approve a common stock issuance by C&S in an amount not to exceed $56,400 since Staff engineers found the capital expenditures to be reasonable and necessary.[4]

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[4] According to the Staff Report, Applicant's well produces 90 gallons of water per minute and with a storage capacity of 30,000 gallons, C&S can adequately serve up to 85 connections. However, during the TY, Applicant had 156 connections with 67 percent being year-round residents. It is obvious that C&S needs additional storage capacity

28. Under the terms of Applicant's loan agreement with Jaco, its minimum credit requirements are for a Times Interest Earned Ratio ("TIER") of at least 1.50 and a DSC of at least 1.25.

29. Staff believes that if its recommended rates and charges are adopted they will produce revenues sufficient to enable Applicant to have a TIER of 2.11 and a DSC ratio of 1.25.

30. Staff has verified that C&S is current on its property tax payments to Gila County and for the collection and payment of its sales taxes.

31. Under the terms of Decision No. 60972 (June 19, 1998), under a corporate reorganization by Brooke, C&S was to be transferred to an entity known as Payson Water Company, Inc., but this reorganization was conditioned upon C&S filing, within 365 days of Decision No. 60972, a copy of its franchise for its certificated service area and a statement from the Arizona Department of Environmental Quality ("ADEQ") that the water which it delivers to its customers does not exceed the allowed Maximum Contaminant Level ("MCL") and meets the quality standards of the Safe Drinking Water Act ("SDWA"). According to the Staff Report, C&S had not complied with these conditions, however, on December 16, 1999, C&S filed a copy of its franchise and was awaiting the results of recently conducted water tests.

32. Staff has made the following additional recommendations:

- that C&S be ordered to initiate a back-flow prevention program and develop an emergency operation plan and submit same to Staff for its review;
- that C&S include in its Tariff a provision to allow for the flow-through of appropriate state and local sales taxes as provided in A.A.C. R14-2-608(D)(5);
- that C&S be ordered to install its planned 50,000 gallon storage tank by June 1, 2000;
- that the Commission approve long-term debt in an amount of $25,200 for C&S at an interest rate not to exceed 10 percent per annum and payable over five years;
- that the Commission order C&S to convert $17,847 in unauthorized debt to paid in capital;
- that the Commission authorize C&S to issue up to $56,400 in common stock to

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and the lack of storage capacity has been taken into account in its planned capital expenditure program which includes remodeling pumping facilities that should help resolve customer complaints regarding low pressure and water outages.

fund its capital expenditure program for the years 1999, 2000, and 2001;

- that the Commission order C&S to file, within 60 days of the effective date this Decision, copies of all executed loan documents with the Director of the Commission's Utilities Division; and
- that the Commission condition approval and the effective date of the implementation of the rates authorized hereinafter upon C&S filing a statement from ADEQ which indicates that Applicant's water system has no MCL violations and is delivering water that meets the quality standards of the SDWA.

33. Under the circumstances herein, we generally find that Staff's recommendations are reasonable and should be adopted. However, while we agree with Staff's recommendations with respect to the revenues that Applicant should derive from its rates and charges, we believe that the rate design authorized hereinafter will ensure that Applicant will be better able to meet its obligations and provide its customers with quality service. Additionally, we believe that C&S should have until December 31, 2000 to complete the installation of the 50,000 gallon storage tank.

CONCLUSIONS OF LAW

1. Applicant is a public service corporation within the meaning of Article XV of the Arizona Constitution and A.R.S. §§ 40-250, 40-251, 40-301, and 40-302.

2. The Commission has jurisdiction over Applicant and of the subject matter of the application.

3. Notice of the application was provided in the manner prescribed by law.

4. The rates and charges authorized hereinafter are just and reasonable and should be approved without a hearing.

5. Staff's recommendations, as set forth in Findings of Fact No. 32 are reasonable and should be adopted subject to the extension of time until December 31, 2000, which C&S should have to install its additional 50,000 gallon storage tank.

6. The proposed long-term financing is for lawful purposes within Applicant's corporate powers, is compatible with the public interest, with sound financial practices, and the proper performance by Applicant of service as a public service corporation, and will not impair Applicant's ability to perform that service.

7. The financing approved herein is for the purposes stated in the application and

reasonably necessary for those purposes, and while some of such purposes are wholly or in part, reasonably chargeable to operating expenses or to income, they are necessary to enable Applicant to continue to provide service to its customers.

8. In consideration of Staff's recommendations with respect to Applicant's financing request, no hearing is necessary and the request should be summarily granted.

ORDER

IT IS THEREFORE ORDERED that C & S Water Company, Inc. is hereby directed to file on or before February 29, 2000, a revised rate schedule setting forth the following rates and charges:

MONTHLY USAGE CHARGE:

5/8" x ¾" Meter	$17.00
¾" Meter	25.50
1" Meter	42.50
1 ½" Meter	85.00
2" Meter	136.00
3" Meter	255.00
4" Meter	425.00
6" Meter	850.00

GALLONAGE CHARGE – Per 1,000 Gallons $1.48

SERVICE LINE AND METER INSTALLATION CHARGES:
(Refundable pursuant to A.A.C. R14-2-405)

5/8" x ¾" Meter	$430.00
¾" Meter	480.00
1" Meter	550.00
1 ½" Meter	775.00
2" Meter	1,305.00
3" Meter	1,815.00
4" Meter	2,860.00
6" Meter	5,275.00

SERVICE CHARGE:

Establishment	$25.00
Establishment (After Hours)	35.00
Reconnection	20.00
Reconnection (After Hours)	30.00
Deposit	*
Deposit Interest	*

Reestablishment (Within 12 Months)	**
NSF Check	$10.00
Deferred Payment (Per Month)	1.50%
Meter Reread (If Correct)	$10.00
Meter Test	$20.00
Late Payment Penalty (Per Month)	1.50%

* Per Commission Rule A.A.C. R-14-2-403(B).

** Number of months off system times the monthly minimum, per Commission Rule A.A.C. R14-2-403(D).

IT IS FURTHER ORDERED that the above rates and charges shall be effective for all service provided on and after the first day of the month following that in which C&S Water Company, Inc., files, with the Director of the Utilities Division, a statement from ADEQ that the utility has no MCL violations and is delivering water which meets the quality standards of the Safe Drinking Water Act.

IT IS FURTHER ORDERED that C & S Water Company, Inc. shall notify its customers of the rates and charges authorized hereinabove and the effective date of same by means of an insert in its next regular monthly billing statement which precedes the month of implementation.

IT IS FURTHER ORDERED that C & S Water Company, Inc., shall file, within 60 days the effective date of this Decision, with the Director of the Commission's Utilities Division a copy of the notice mailed to its customers.

IT IS FURTHER ORDERED that C & S Water Company, Inc. shall comply with all Staff recommendations which appear in Findings of Fact No. 32 hereinabove except that C&S Water Company, Inc. shall have until December 31, 2000 to install the 50,000 gallon storage tank and file an affidavit with the Commission within 10 days from the date the installation is complete that it has met compliance.

IT IS FURTHER ORDERED that C & S Water Company, Inc. shall file a copy of its ADEQ back-flow prevention program and a copy of its emergency operation plan with the Commission's Director of Utilities.

IT IS FURTHER ORDERED that C & S Water Company, Inc. shall include in its tariff a provision to allow for the flow-through of any proportionate state and local taxes in accordance with A.A.C. R14-2-409(D)(5).

IT IS FURTHER ORDERED that C & S Water Company, Inc. be, and the same hereby is,

authorized to issue long-term debt in an amount not to exceed $25,200 for a term of five years at no greater rate of interest than ten percent per annum.

IT IS FURTHER ORDERED that C & S Water Company, Inc. shall convert $17,847 in previously unauthorized debt to paid in capital.

IT IS FURTHER ORDERED that C & S Water Company, Inc. be, and the same hereby is, authorized to issue up to $56,400 in common stock to fund projected capital expenditures.

IT IS FURTHER ORDERED that C & S Water Company, Inc. is hereby authorized to engage in any transactions and to execute any documents necessary to effectuate the authorization granted hereinabove and file, within 60 days of the effective date of this Decision, with the Director of the Commission's Utilities Division, certification that the transactions have been completed and copies of all executed loan documents.

IT IS FURTHER ORDERED that such authority shall be expressly contingent upon C & S Water Company, Inc.'s use of the proceeds for the purposes set forth in the application.

IT IS FURTHER ORDERED that approval of the financing set forth hereinabove does not constitute or imply approval or disapproval by the Commission of any particular expenditure of the proceeds derived thereby for purposes of establishing just and reasonable rates.

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IT IS FURTHER ORDERED that C & S Water Company, Inc. shall cease from issuing additional long-term debt without prior Commission approval in the future.

IT IS FURTHER ORDERED that this Decision shall become effective immediately.

BY ORDER OF THE ARIZONA CORPORATION COMMISSION.

CHAIRMAN COMMISSIONER COMMISSIONER

IN WITNESS WHEREOF, I, BRIAN C. McNEIL, Executive Secretary of the Arizona Corporation Commission, have hereunto set my hand and caused the official seal of the Commission to be affixed at the Capitol, in the City of Phoenix, this 17th day of February 2000.

BRIAN C. McNEIL
EXECUTIVE SECRETARY

DISSENT _____
MES:bbs

SERVICE LIST FOR: C & S WATER COMPANY, INC.

DOCKET NO. W-02134A-99-0176

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BEFORE THE ARIZONA CORPORATION COMMISSION

RECEIVED

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AZ CORP COMMISSION
DOCKET CONTROL

EXHIBIT
Number S-18
ADMITTED

COMMISSIONERS

BOB STUMP, CHAIRMAN
GARY PIERCE
BRENDA BURNS
BOB BURNS
SUSAN BITTER SMITH

IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC. AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO. W-03514A-13-0111
IN THE MATTER OF THE APPLICATION OF PAYSON WATER CO., INC. FOR AUTHORITY TO ISSUE EVIDENCE OF INDEBTEDNESS IN AN AMOUNT NOT TO EXCEED $1,238,000 IN CONNECTION WITH INFRASTRUCTURE IMPROVEMENTS TO THE UTILITY SYSTEM; AND ENCUMBER REAL PROPERTY AND PLANT AS SECURITY FOR SUCH INDEBTEDNESS.	DOCKET NO. W-03514A-13-0142 **STAFF'S NOTICE OF FILING**

The Utilities Division ("Staff") of the Arizona Corporation Commission ("Commission") hereby submits the revised Attachment B, "Summer Water Augmentation Surcharge" for East Verde Park and the revised Attachment C "Purchased Water Surcharge Examples" for Mesa Del Caballo.

RESPECTFULLY SUBMITTED this 12th day of February, 2014.

Robin R. Mitchell
Attorney, Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007
(602) 542-3402

Original and thirteen (13) copies of the foregoing filed this 12th day of February, 2014 with:

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Copy of the foregoing mailed and emailed this 12th day of February, 2014, to:

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Revised

Attachment B

SUMMER

WATER AUGMENTATION SURCHARGE TARIFF

FOR

EAST VERDE PARK

EAST VERDE PARK SUMMER WATER AUGMENTATION SURCHARGE

I. Purpose and Applicability

The Summer Water Augmentation Surcharge can only be implemented during the months of May through September.

The maximum amount of water augmentation cost that can be recovered during any given year is $10,000.

The purpose of this tariff is to authorize Payson to make monthly adjustments to its rates and charges for water service in order to recover costs incurred for water purchases and hauling ("Water Augmentation Costs") in the event that Payson experiences extreme water shortages for the East Verde Park water system. These charges are applicable to all connections and will be assessed based on usage, as provided below.

II. Definitions

Unless the context otherwise requires, the definitions set forth in R-14-2-401 of the Arizona Corporation Commission's ("Commission") rules and regulations governing water utilities shall apply in interpreting this tariff schedule.

"Avoided Production Costs" means the unit cost of production (cost per 1,000 gallons) avoided by the Company because of reliance upon augmented water rather than pumping groundwater from the Company's wells and booster stations.

"Company" means Payson Water Company.

"Curtailment Account Balance" means the monies collected under the curtailment tariff authorized in Decision No. 67821.

"Water Augmentation Cost" means the actual cost of water purchased and water hauling costs. The maximum amount of water Augmentation cost that can be recovered during any given year is $10,000.

"Water Augmentation Quantity" means the actual quantity of augmented water (in thousands of gallons).

"Water Augmentation Surcharge" means the surcharge calculated in accordance with Section IV below.

"Surcharge Rate" means the rate per 1,000 gallons that is calculated in accordance with Section III below.

"Water Sold" means the actual quantity (in thousands of gallons) of water sold by the Company to its Customers during the month corresponding to the month in which water was purchased.

III. Surcharge Rate Calculation

The surcharge is calculated using data from the previous month's bill. For example, the water augmentation surcharge that is applied on the July bill is calculated using the June water augmentation costs and the June total gallons sold. See Attachment B.1, page 1 for an example of the calculation.

For each month that the Company augments water, the Company will calculate the Surcharge Rate per the following formula:

[(Water Augmentation Cost – Curtailment Account Balance[1]) - (Water Augmentation Quantity x Avoided Production Costs)] / Water Sold

IV. Terms and Conditions

(A) Assessment and Billing of the Water Augmentation Surcharge: For any month in which water is purchased, after completing its billing for the month and receiving the billing for the month, Payson Water Company will make the surcharge calculation to determine the Surcharge Rate.

In the following month, Payson Water Company will bill the Summer Water Augmentation Surcharge to its customers. Each individual customer's billing for the Summer Water Augmentation Surcharge will be based on that customer's actual usage for the previous month (the month corresponding to the Water Augmentation) times the Surcharge Rate.

The Water Augmentation Surcharge shall be presented as a separate line item on the customer billing.

(B) Notice to Commission: For any month in which the Company intends to bill customers a Water Augmentation Surcharge, the Company shall provide Commission Staff notice of the Company's intent to bill the Water Augmentation Surcharge. The notice to Commission Staff shall include the following:

1. The Water Augmentation Cost.
2. The Water Augmentation Quantity.
3. A copy of the bills received for the water Augmentation.
4. A description of the system problem necessitating water Augmentation and a description of the action being taken by the Company to resolve the problem, including the date operations did or are expected to return to normal.
5. The dates for beginning and ending water Augmentation.
6. A schedule showing the calculation of the Surcharge Rate in excel format with formulas intact, including a schedule showing the determination of the Avoided Production Costs.

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[1] Consideration of the Curtailment Account Balance could result in a negative cost recovered position. Therefore, the amount of the curtailment balance to be subtracted in the calculation of the water augmentation surcharge shall be limited to the amount which would not cause the surcharge to be a negative amount. However, the surcharge can be $0 but cannot go below $0.

Payson Water Company
Docket Nos. W-03514A-13-0111 and W-03514A-13-0142
EAST VERDE PARK
Water Augmentation Surcharge Calculation Example

Example 1 - Median Usage Customer - East Verde Park

This example illustrates how the water augmentation surcharge would be calculated for a East Verde Park customer using 2,000 gallons in the month of June.

[A] Total June Water & Hauling Costs		[B] June Ending Curtailment Acct. Balance		[D] Avoided Costs $0.60 x 494 gallons (See page 2 for calculation of $0.60)		[E] Total Gallons Sold In June Gallons In '000s		[F] Water Augmentation Surcharge Per 1,000 Gallons
($3,000	-	$100	-	$296)	/	494	=	$5.27

[G] Customer's June Usage Gallons In '000s		[H] Water Augmentation Surcharge (From Col. F)		[I] Total Water Augmentation Surcharge on July Bill
2	x	$5.27	=	$10.54

Payson Water Company
Docket Nos. W-03514A-13-0111 and W-03514A-13-0142
Calculation of Avoided Costs

	Calculation of Avoided Costs			
	Current Cost	Divided by	Total Gallons Sold Per 1,000 From Sch E-7	Cost Per 1,000 Gallons
Purchased Power for Wells (See Note Below)	$ 28,241	/	51,230	$ 0.55
Depreciation Expense on Wells	$ -	/	51,230	$ -
Chemicals	$ 2,438	/	51,230	$ 0.05
Water Testing	$ -	/	51,230	$ -
				$ 0.60

Note: The $28,241 was calculated by taking the Company's actual test year purchased pumping power expense of $56,482 and dividing that number by 2. The purchased pumping power expense was divided by 2 to reflect that approximately half of the purchased pumping power was incurred for pumping water out of the wells and the other half of the purchased pumping power was incurred to transport the water from the storage tanks to the customers.

Revised

Attachment C

PURCHASED WATER SURCHARGE CALCULATION EXAMPLES FOR MESA DEL CABALLO

Payson Water Company
Docket Nos. W-03514A-13-0111 and W-03514A-13-0142
MESA DEL CABALLO

Purchasaed Water Surcharge Calculation Example - When Less Than 100% of All Water Purchased From Town of Payson

Examples assume that 25% of total water purchased from the Town of Payson

Example 1 - Median Usage Customer - Mesa Del Caballo

This example illustrates how the purchased water surcharge would be calculated for a Mesa Del Caballo customer using 4,500 gallons; 75% (or 3,375) from Payson Water Company and 25% (or 1,125) from the Town of Payson.

	[A] Total Usage Assumption		[B] % of Gallons From Town of Payson		[C] Gallons In '000s From Town of Payson Col A x Col B	[D] Town of Payson Commodity Rate	[E] Avoided Costs (See page 2 for Calculation)	[F] Difference in Rate per 1,000 gal Col D - Col E	[G] Purchased Water Surcharge Col C x Col F
Block 1	4,000	x	25%	=	1.000	$7.48	$ 0.60	$ 6.88	$ 6.88
Block 2	500	x	25%	=	0.125	$7.48	$ 0.60	$ 6.88	$ 0.86
Total Usage Assumption	4,500				1.125				
								Total Monthly Surcharge	$ 7.74 *

*Excludes Taxes

Example 2 - High Usage Customer - Mesa Del Caballo

This example illustrates how the purchased water surcharge would be calculated for a Mesa Del Caballo customer using 25,000 gallons; 75% (or 18,750) from Payson Water Company and 25% (or 6,250) from the Town of Payson.

	[A] Total Usage Assumption		[B] % of Gallons From Town of Payson		[C] Gallons In '000s From Town of Payson Col A x Col B	[D] Town of Payson Commodity Rate	[E] Payson Water Company Tariff Rate	[F] Difference In Rate per 1,000 gal Col D - Col E	[G] Purchased Water Surcharge Col C x Col F
Block 1	4,000	x	25%	=	1.000	$7.48	$ 1.93	$ 5.55	$ 5.55
Block 2	21,000	x	25%	=	5.250	$7.48	$ 2.99	$ 4.49	$ 23.57
Total Usage Assumption	25,000				6.250				
								Total Monthly Surcharge	$ 29.12 *

*Excludes Taxes

Payson Water Company
Docket Nos. W-03514A-13-0111 and W-03514A-13-0142
Calculation of Avoided Costs

	Calculation of Avoided Costs			
	Current Cost	Divided by	Total Gallons Sold Per 1,000 From Sch E-7	Cost Per 1,000 Gallons
Purchased Power for Wells (See Note Below)	$ 28,241	/	51,230	$ 0.55
Depreciation Expense on Wells	$ -	/	51,230	$ -
Chemicals	$ 2,438	/	51,230	$ 0.05
Water Testing	$ -	/	51,230	$ -
				$ 0.60

Note: The $28,241 was calculated by taking the Company's actual test year purchased pumping power expense of $56,482 and dividing that number by 2. The purchased pumping power expense was divided by 2 to reflect that approximately half of the purchased pumping power was incurred for pumping water out of the wells and the other half of the purchased pumping power was incurred to transport the water from the storage tanks to the customers.