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Arizona Corporation Commission
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Exhibit #: S-1 – S-7, A-1 – A-9

EXHIBIT
S-1

BEFORE THE ARIZONA CORPORATION COMMISSION

DOUG LITTLE
Interim Chairman
BOB STUMP
Commissioner
BOB BURNS
Commissioner
TOM FORESE
Commissioner

IN THE MATTER OF THE APPLICATION OF SAHUARITA WATER COMPANY, LLC AN ARIZONA WATER CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PROPERTY AND FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES.	)	DOCKET NO. W-03718A-15-0213

DIRECT

TESTIMONY

OF

MICHAEL S. THOMPSON, P. E.

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

JANUARY 15, 2016

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Engineering Report for Sahuarita Water Company, LLC MST-1

INTRODUCTION

Q. Please state your name and business address.

A. My name is Michael Thompson. 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.

Q. How long have you been employed by the Commission?

A. I have been employed by the Commission since June 2013.

Q. What are your responsibilities as a Utilities Engineer - Water/Wastewater?

A. As a Utilities Engineer specializing in water and wastewater engineering, my responsibilities include: the inspection, investigation, and evaluation of water and wastewater systems; obtaining data and preparing investigative reports; providing technical recommendations and suggesting corrective action for water and wastewater systems; and providing 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 17 companies covering various responsibilities for the Utilities Division Staff ("Utilities Staff" or "Staff").

Q. Have you previously testified before this Commission?

A. Yes, I have testified before this Commission.

Q. What is your educational background?

A. I graduated from the SUNY College of Environmental Science and Forestry ("ESF") at Syracuse, New York, and Syracuse University ("SU") at Syracuse, New York. I have a Bachelor of Science Degree in Pulp and Paper Engineering from ESF and Chemical Engineering from SU.

Q. Briefly describe your pertinent work experience.

A. Prior to my employment with the Commission, I was the Operations Engineer, from 2009 to 2012, for the Southwest and Central Districts of Golden State Water Company ("GSWC"), located in Gardena and Santa Fe Springs, California, respectively. As the Operations Engineer, I provided technical assistance and support to the districts' operations departments with primary focus on resolving operational problems and optimizing the efficiency of the water system operations. Prior to my employment with GSWC, I was employed with Chaparral City Water Company ("Chaparral"), from 2002 to 2009, as District Operations Engineer. While at Chaparral, I performed all capital, new business, and water quality activities within the district. I served as field engineer/construction manager for all capital and new business projects under construction. I also managed all water quality activities including monitoring, sampling, and reporting as required by 40 CFR (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.

From 2000 to 2002, I was employed with the Fountain Hills Sanitary District as Engineering Assistant. I performed plan review of all commercial and residential projects in the Town of Fountain Hills, and managed the district's construction projects.

From 1996 to 2000, I was employed as an Environmental Engineering Specialist with the Arizona Department of Environmental Quality ("ADEQ"). During that time period, I

performed operations and maintenance site inspections of public water systems in Gila, LaPaz, Mohave, and Southwestern Yavapai counties.

Q. Please state your professional membership, registrations, and licenses.

A. I am registered as a Professional Engineer (Civil) in the State of Arizona, a Grade 2 Certified Water Treatment Plant Operator, and a Grade 3 Certified Water Distribution System Operator. I am a member of the American Water Works Association and Arizona Water Association.

PURPOSE OF TESTIMONY

Q. What was your assignment in this rate proceeding?

A. My assignment was to provide Staff's engineering evaluations for the Sahuarita Water Company, LLC ("SWC" or "Company") rate proceedings.

Q. What is the purpose of your testimony in this proceeding?

A. My testimony presents the findings of Staff's engineering evaluation of the operations for the SWC Water System. The findings are contained in the Engineering Report that I have prepared for this proceeding. The report is included as Exhibit MST-1 in this pre-filed testimony.

ENGINEERING REPORT

Q. Please describe the information contained in your Engineering Report.

A. The Report is divided into three (3) general sections: *1) Executive Summary, 2) Engineering Report Discussion, and 3) Engineering Report Figures.* The *Discussion* section for the SWC Water System is further divided into nine (9) subsections: *1) Introduction and Location of the Water System, 2) Description of the Water System, 3) Water Usage, 4) Growth, 5) Arizona Department*

Environmental Quality Compliance, 6) Arizona Department of Water Resources Compliance, 7) Arizona Corporation Commission Compliance, 8) Depreciation Rates, and 9) Other Issues.

Q. Was the Engineering Report prepared by you?

A. Yes.

CONCLUSIONS AND RECOMMENDATIONS

Q. What are Staff's conclusions and recommendations regarding the operations of the SWC Water System?

A. Staff's conclusions and recommendations are contained in the Executive Summary of the Engineering Report.

Q. Does this conclude your Direct Testimony?

A. Yes, it does.

ENGINEERING REPORT FOR
Sahuarita Water Company, LLC

Docket No. W-03718A-15-0213 (Rates)

By Michael Thompson, P. E.

December 21, 2015

EXECUTIVE SUMMARY

CONCLUSIONS

1. The Arizona Corporation Commission ("ACC" or "Commission") Utilities Division Staff ("Utilities Staff" or "Staff") concludes that the Sahuarita Water Company ("SWC" or "Company") water system has adequate production and storage capacity to serve the present customer base and any reasonable growth.

2. SWC's current CC&N covers an area totaling approximately 6.04 square-miles (3,869 acres), and consists of two (2) non-contiguous areas. The service area for the existing water system is within the 5.30 square-miles (3,395.98 acres) of certified area located along the eastern edge of Township 16S and Range 13E and Township 17S and Range 13E.

3. The Arizona Department of Environmental Quality ("ADEQ") Drinking Water Compliance Status Report ("CSR"), dated July 22, 2015, indicates that the SWC water system, Public Water System No. 10-312, is currently delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.

4. The SWC water system service area is located within the Tucson Active Management Area ("AMA"). According to the Arizona Department of Water Resources ("ADWR") water provider compliance report, dated July 2, 2015, SWC is in compliance with its requirements governing water providers and/or community water systems.

5. SWC's water loss during the test year was 5.13 percent which is within the acceptable limits.

6. According to the Commission's Utilities Division Compliance Section database, SWC currently has no delinquent Commission compliance items.

7. SWC has approved Cross-Connection/Backflow Prevention and Curtailment Tariffs on file with the Commission.

8. SWC currently has an approved Off-Site Hook-up Fee Tariff on file with the Commission. The tariff became effective October 25, 2013.

9. SWC does not have any Best Management Practice ("BMP") tariffs on file with the Commission. Per Decision No. 74867, dated December 18, 2014, SWC is no longer required to file any BMP tariffs.

10. Staff concludes that Well No. 23 is currently in operation and considered used and useful to the water systems provision of service.

11. Staff finds the Estancia del Corazon subdivision on-site plant facilities listed in Table Q, totaling $76,082, to be used and useful to the water system's provision of service. Staff also finds the on-site plant facility costs, totaling $76,082, to be reasonable and appropriate to the water system's provision of service.

12. Staff finds the post-test year ("PTY") plant for the arsenic absorption media cost, totaling $150,657, to be reasonable and appropriate to the water system's provision of service.

13. Staff concludes that the PTY capital improvement projects listed in Table R, totaling $214,912, are currently in operation and considered used and useful to the water system's provision of service. Staff also finds the PTY capital improvement project costs, totaling $214,912, to be reasonable and appropriate to the water system's provision of service.

RECOMMENDATIONS

1. Staff recommends the annual water testing expenses of $13,975 be used for purposes of this proceeding.

2. Staff further recommends that SWC use the Staff recommended depreciation rates listed in Table N.

3. Staff further recommends that SWC continue to use the service line and meter installation charges included in Table O.

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A. INTRODUCTION AND LOCATION OF COMPANY

On July 28, 2015, Sahuarita Water Company, LLC ("SWC" or "Company") filed an application with the Arizona Corporation Commission ("ACC" or "Commission") for approval of a rate increase, with a 2014 test year, in Docket No. W-01853A-15-0145. SWC's current rates were approved in Commission Decision No. 72177 dated February 11, 2011, and amended in Decision No. 74389 dated March 19, 2014.

Company Location

SWC is a Class B public utility water company that provides service to approximately 5,596 metered connections.[1] The water system, shown in Figure 1 located in the figure section of this report, is a groundwater-based system serving the Town of Sahuarita ("Sahuarita"), Arizona which is located approximately 20 miles south of the city of Tucson off Interstate Highway 19 in Pima County, Arizona.

Company Ownership and Certificate of Convenience and Necessity ("CC&N") History

On September 16, 1994, Interchange Water Company, Inc. ("IWC") filed an application with the Commission for a CC&N to provide water service to approximately 3,000 acres located within Sahuarita. The CC&N was granted to IWC in Commission Decision No. 59431, dated December 20, 1995. On March 11, 1999, IWC and Rancho Sahuarita Water Company, LLC ("RSWC") filed a joint application for approval of the sale of assets and transfer of the CC&N from IWC to RSWC. The sale and the transfer of assets and the CC&N to RSWC were approved in Decision No. 62032 dated November 2, 1999. On January 2, 2004, RSWC filed an application for an extension of its CC&N, and was granted the extension on June 25, 2004 in Decision No. 67068. On October 18, 2007, RSWC filed Articles of Amendment advising the Commission that RSWC was changing its name to SWC. On December 14, 2007, SWC filed an application for an extension of the CC&N. In Decision No. 70620 dated November 19, 2008, the Commission approved both the name change (RSWC to SWC) and SWC's request for an extension of the CC&N. The CC&N extension approved in Decision No. 70620 covered three (3) parcels each held by a different owner: Mission Peaks 4000, L.L.C. ("Mission Peaks"), Arizona State Land Department ("ASLD"), and Sahuarita Mission Partners ("SMP"). Due to the economic downturn of the real estate market, Mission Peaks sold its parcel to Freeport-McMoRan Copper and Gold, Inc. ("Freeport-McMoRan"), and ASLD sold its parcel to ASARCO, L.L.C. ("ASARCO"). In Decision No. 74604, the parcels owned by Freeport-McMoRan, and ASARCO were deleted from SWC's CC&N. The current CC&N, which covers an area totaling approximately 6.04 square-miles (3,866.84 acres), consists of two (2) non-contiguous areas as shown in Figure 2. The service area for the existing water system is within the 5.30 square-miles (3,393.08 acres) of certified area, located along the eastern edges of Township 16S and Range 13E, and Township 17S and Range 13E. The remaining portion of the certified area, located on the eastern edge of Township 17S and Range 12E and within 0.74 square-miles (473.76 acres), currently has no facilities and is not provided service by SWC.

[1] Per water use data submitted with the application.

B. DESCRIPTION OF THE WATER SYSTEM[2]

The SWC water system was visited on July 28, 2015, by Staff Utilities Engineer, Michael Thompson, and Staff Public Utility Analyst III, Ms. Teresa Hunsaker. Prior to the field inspection, Mr. Thompson and Ms. Hunsaker met with Company representatives Mr. Geoffrey Caron, and Ms. Marian Homiak. Mr. Caron is SWC's General Manager and Ms. Homiak is SWC's Controller. During the field inspection, Mr. Thompson and Ms. Hunsaker were accompanied by Mr. Caron and Mr. Louis Valencia, SWC's Designated Operator.[3]

SWC's water system consists of three (3) active groundwater wells, five (5) inactive wells, three (3) storage tanks, three (3) booster pump stations, six (6) hydro-pneumatic pressure tanks, three (3) emergency generators, twenty three (23) sample stations, 395 fire hydrants, a supervisory control and data acquisition ("SCADA") communications system, an Arsenic Water Treatment Plant ("AWTP") located at Water Plant No. 1 ("WP No. 1"), and a distribution system that encompasses three (3) pressure zones (2,850, 2,950 and 3,050 feet). The in-service plant facilities (i.e., wells, tanks, booster pumps, and visible pipe) appeared to be in proper working order, properly maintained, and in excellent condition. Staff did not observe any leaks at the plant facilities or in the distribution system. A site map of the service area is illustrated in Figure 3. Schematics of the water system are illustrated in Figures 4, 5, 6, and 7.

1. Active Well Sites

The three (3) active groundwater production wells (Well Nos. 14, 18, & 23) pump water directly to WP No. 1 via dedicated raw water transmission mains. Well No. 14, located at the intersection of S. Calle Puente Lindo and E. Calle Puento Lindo, is equipped with a turbine pump and motor which produces approximately 1,800 gallons per minute ("gpm"). The well is owned by Sahuarita; however, SWC operates the well pursuant to a 99-year lease agreement with Sahuarita. There are approximately 84-years remaining on the lease. The well site also contains a 5,000 gallon hydro-pneumatic pressure tank, electrical control panels, a motor control panel, a manual transfer switch with connectors for a portable emergency generator, and a SCADA communications system. Well No. 18, located at 15299 S. Camino Lago Azul, is equipped with a turbine pump and motor which produces approximately 1,350 gpm. The well site also contains a 5,000 gallon hydro-pneumatic pressure tank, electrical control panels, a motor control panel that includes a manual transfer switch with connectors for a portable emergency generator, and a SCADA communications system. Well No. 23, located at WP No. 1, is equipped with a turbine pump and motor which produces approximately 1,800 gpm. The well site also contains a 5,000 gallon hydro-pneumatic pressure tank, tablet chlorination system, electrical control panels, a motor control panel, a SCADA

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[2] The description of the water systems is based on one, or a combination of, the following sources: 1) Company's Application, 2) Information contained in the Company's 2011 Updated Water System Master Plan prepared by Westland Resources, Inc. dated August 2012, 3) Information contained in the Company's Response to Staff Data Requests and, 4) Information collected during Staff's site visit..

[3] Mr. Caron is certified with the Arizona Department of Environmental Quality ("ADEQ") as a Grade 4 Water Distribution System Operator, a Grade 2 Water Treatment Plant Operator, a Grade 1 Wastewater Collection System Operator, and a Grade 1 Wastewater Treatment Plant Operator. Mr. Caron's ADEQ Operator Identification No. is OP009983, with an expiration date of January 31, 2018. Mr. Valencia is certified with the ADEQ as a Grade 4 Water Distribution System Operator, and a Grade 4 Water Treatment Plant Operator. Mr. Valencia's ADEQ Operator Identification No. is OP012274, with an expiration date of April 30, 2017.

communications system, a 500 kW emergency generator, and an automatic transfer switch for the emergency generator. Detailed listings of the active wells are included in Table A.

Table A. SWC Water System Active Wells

Well ID	ADWR Well ID	Pump (hp)	Pump Yield (gpm)	Pump Yield (MGD)	Casing Depth (feet)	Casing Diameter (inches)	Meter Size (inches)	Date Drilled
(T) Well No. 14	55-611142	300	1,800	2.592	1,135	24	10	10/9/1970
(T) Well No. 18	55-611144	300	1,365	1.966	905	20	10	4/18/1975
(T) Well No. 23	55-216840	300	1,800	2.592	1,080	18	10	4/15/2008
Total			4,965	7.150				

(T) indicates Turbine Well.
(MGD) indicates million gallons per day

2. *Inactive Well Sites*

SWC has five (5) inactive wells (Well Nos. 1, 12, 17, 19, & 20) that are utilized for monitoring purposes only. Well No. 1 was drilled in 1997, per an agreement with Phelps Dodge Sierrita, Inc., for the sole purpose of monitoring and investigating a groundwater sulfate plume. Well No. 1 was never equipped for or utilized as a drinking water production well. Freeport-McMoRan, which acquired Phelps Dodge Sierrita, Inc., no longer monitors the well for the sulfate plume. However, SWC continues to monitor the well on a quarterly basis to track aquifer water levels. Well Nos. 12, 17, 19, & 20 were addressed in a previous rate case, Docket No. W-03718A-09-0359, and determined to be not used and useful. Subsequently, they were removed from plant-in-service per Decision No. 72177 dated February 11, 2011. The wells remain as such, however they are utilized by SWC for monitoring its aquifer water levels on a quarterly basis. A detailed listing of the inactive wells are included in Table B.

Table B. SWC Water System Inactive Wells

Well ID	ADWR Well ID	Pump (hp)	Pump Yield (gpm)	Casing Depth (feet)	Casing Diameter (inches)	Meter Size (inches)	Year Drilled
Well No. 1	55-562962	Not Equipped	0	500	8	Not Equipped	1997
Well No. 12	55-611141	Not Equipped	0	982	24	Not Equipped	1970
Well No. 17	55-611143	Not Equipped	0	1,053	24	Not Equipped	1974
Well No. 19	55-611145	Not Equipped	0	990	24	Not Equipped	1981
Well No. 20	55-611146	Not Equipped	0	975	16	Not Equipped	1969

3. Water Plant No. 1 (WP No. 1) – Arsenic Water Treatment Plant ("AWTP") & Well No. 23

WP No. 1 consists of the AWTP, Well No. 23, one (1) 5,000 gallon hydro-pneumatic pressure tank, tablet chlorination system, electrical control panels, a motor control panel, a SCADA communications system, a 500 kW emergency standby generator, and an automatic transfer switch for the emergency generator. The generator provides emergency standby power for both Well No. 23 and the AWTP. A detailed listing of WP No.1 facilities is included in Table C.

Table C. SWC Water System Water Plant No. 1 – Arsenic Water Treatment Plant ("AWTP")

Well ID	Arsenic Filtration Vessels	Hydro-pneumatic Pressure Tank	Arsenic Pre-Filters	Emergency Back-up Generator w/ Automatic Transfer Switch
Well No. 23	4 – 7,000 gallons each (Steel) (2 Pairs – Lead/Lag Vessels)	1 – 5,000 Gallons	2 – Rated at a flow of 2,000 gallons each	1 – 500 kW generator

The AWTP is a Layne Christensen facility designed to treat a maximum flow of 2,000 gpm. The current capacity of the AWTP is capable of providing blended finish water that meets the water system peak daily demand ("PDD") and meeting an arsenic treatment objective where the arsenic concentration of the blended finish water is equal to or less than 8.0 parts per billion ("ppb"). The AWTP became operational on November 25, 2009. The facility consists of two (2) 1,000 gpm treatment trains (treatment trains No. 1 and No. 2), each of which includes two (2) 7,000 gallon steel filtration vessels containing arsenic absorption media, and two (2) pre-filters.[4] Treatment Train No. 1 contains vessels 1-1 and 1-2, and Treatment Train No. 2 contains vessels 2-1 and 2-2. The filtration vessels in each treatment train are arranged in a lead/lag configuration (design). The lead/lag configuration provides flexibility in the treatment plant operation, and enables the treatment plant to meet the design criteria of providing design capacity with one filtration vessel in each treatment train being out of service. Each vessel is designed to contain 375 cubic feet ("ft^3") of arsenic absorption media. Combined, all four (4) vessels contain a total volume of 1,500 ft^3 of arsenic absorption media.

Arsenic is removed from the source water, via an absorption process, as it passes through the lead filtration vessels. Media within the filtration vessels removes arsenic from the source water by absorbing the arsenic onto the media.[5] Once the media in the lead filtration vessels becomes saturated and arsenic breakthrough occurs (exceeds its treatment capacity), the lag filtration vessels are switched to the lead operating position. Media in the lead filtration vessels is then removed and replaced with fresh media (regenerated media) without interrupting the treatment process. The exhausted media is transported to a regeneration facility where the absorbed arsenic is removed and disposed of. The regenerated media (arsenic removed from the media) is returned to the facility for reuse.

[4] In accordance with the requirements stated in ADEQ Engineering Bulletin No. 10 Chapter 4 Section F, a filtration plant shall be designed to provide at least two (2) filter units, and the filters shall be capable of meeting the plant design capacity at the approved filtration rate with the largest filter out of service.

[5] SWC currently uses Layne RT hydrous iron oxide adsorption media, however, SWC will be switching to Purolite FerrIX A33E, an iron-infused anion resin, for future make up media.

The AWTP treats source water from Well Nos. 14, 18, & 23 to meet safe drinking water standards. The current arsenic maximum contaminant level ("MCL") is 10 ppb. Well Nos. 14 & 23 have arsenic concentrations of 22 ppb and 11 ppb, respectively, while Well No. 18 has an arsenic concentration of 8.2 ppb. Currently, all three (3) production wells are capable of pumping water to the AWTP filtration vessels via dedicated raw water transmission mains. Based on the arsenic concentration of each well and the arsenic treatment objective (8.0 ppb or less), a calculated volume of source water is automatically directed to the treatment filtration vessels via the SCADA communications system for arsenic removal. The remaining portion of source water bypasses the filtration vessels to be blended with the treated water from the filtration vessels. The blended water is first delivered to two (2) 2850 zone storage tanks located adjacent to the WP No. 1 site. Blended water from the 2850 zone storage tanks is further distributed to the SWC water distribution system via gravity flow, booster stations, or a combination of both.

4. Storage Tanks

Storage tanks are used primarily to accommodate hourly fluctuations in water demand, PDD fluctuations, fire flow requirements, and emergency reserve storage. Each of these, added together, form the required storage capacity for the water system. Since SWC has a multiple well system, the average daily demand ("ADD") plus fire flow requirement was used to determine SWC storage tank capacities.

SWC's existing water system consists of three (3) storage tanks: a 1.0 million gallon ("MG") and a 1.2 MG 2850 Zone floating storage tanks, and a 350,000 gallon 2950N Zone storage tank. Two (2) of the storage tanks, located adjacent to WP No. 1 in the 2950 Zone, are classified as the 2850 Zone floating storage tanks with capacities of 1.0 MG and 1.2 MG. The 2850 Zone is served by the floating storage tanks via gravity flow. SWC's third tank, the 2950N Zone storage tank located in the 2850 Zone at Well No. 17, receives water from the 2850 Zone floating storage. Booster pumps also located at Well No. 17 provide service to the 2950N Zone from the 2950N Zone storage tank. Detailed listings of the storage tank facilities are included in Table D.

Table D. SWC Water System Storage Tanks

Storage Tank Classification	Storage Tank Capacity (Gallons)	Quantity (Each)	Location
2850 Zone	1,200,000	1	Booster Station No.1 – located adjacent to WP No. 1
2850 Zone	1,000,000	1	Booster Station No.1 – located adjacent to WP No. 1
2950N Zone	350,000	1	Booster Station No.2 – located at Well No. 17
	2,550,000	**3**	

5. *Booster Pump Stations*[6]

The SWC water system consists of two (2) booster pump stations. Booster Pump Station No. 1 ("BPS No. 1"), located at the 2850 Zone storage tank site, consists of a 2950 Zone and a 3050 Zone booster station that draw suction from the two (2) 2850 Zone floating storage tanks to provide service to those respective zones. Each booster pump station consists of four (4) booster pumps and one (1) 5,000 gallon hydro-pneumatic pressure tank. Booster Pump Station No. 2, located at Well Site No. 17, consists of four (4) booster pumps and one (1) 5,000 gallon hydro-pneumatic pressure tank. The booster pumps draw suction from the 2950N Zone storage tank, also located at Well Site No. 17, to provide service to its respective zone. Detailed listings of the booster pump facilities are included in Table E.

Table E. SWC Water System Booster Pump Stations

Booster Pump Facilities		Location
Facilities for the 2950 Elevation Zone	10, 25, 40 & 40 hp Booster Pumps and a 5,000 gallon Hydro-pneumatic Pressure Tank	Booster Station No. 1 (located adjacent to WP No. 1)
Facilities for the 3050 Elevation Zone	25, 50, 75 & 75 hp Booster Pumps and a 5,000 gallon Hydro-pneumatic Pressure Tank	Booster Station No. 1 (located adjacent to WP No. 1)
Facilities for the 2950N Elevation Zone	20, 30, 50 & 100 hp Booster Pumps and a 5,000 gallon Hydro-pneumatic Pressure Tank	Booster Station No. 2 (located at Well No. 17)

6. *Transmission & Distribution Water Mains*

The SWC service area transmission and distribution water main sizing is based on meeting the maximum velocity and maximum pipe friction loss requirements, and maintaining adequate pressure within the system during all flow conditions, especially PHD and PDD plus fire flow conditions. The distribution system is primarily a looped grid system, with the exceptions of dead ends located in cul-de-sacs or areas where looping was not possible or practical. Table F lists distribution water mains within the SWC system.

Table F. SWC Water System Service Area Transmission & Distribution Mains

Diameter (inches)	Material	Length (feet)
4	Poly Vinyl Chloride ("PVC")	5,805
6	PVC	26,507
8	PVC	189,504
12	PVC	61,970
16	PVC	9,054
24	PVC	7,163
Total Length		**(56.8 miles) 300,003**

[6] Booster pump stations are commonly sized to provide peak hourly demand ("PHD") or PDD plus fire flow, whichever is greater.

7. *Pressure Zones*

The highest area of the SWC water system is located near the southwest corner of its service area with an elevation of approximately 2,920 feet. The lowest area of the water system is located near the northeast corner of its service area with an elevation of approximately 2,670 feet. The difference in elevation is approximately 250 feet.

The SWC service area is separated into pressure zones with zone boundaries routinely located at 100 foot intervals. The high water elevations of the zones are also separated by intervals of approximately 100 feet. Static pressure fluctuations within the system typically vary from approximately 40 pounds per square inch ("psi") at the top of a zone to approximately 87 psi at the bottom of a zone. However, system pressure varies with daily demand fluctuations and high demand situations such as a fire flow condition. The SWC water system is currently divided into three pressure zones (2,850, 2,950 and 3,050 feet). The 2,950 pressure zone includes two (2) non-contiguous areas: the area to the north is identified as the 2950 North ("2950N") Zone, while the area to the south is identified as the 2950 Zone. The zone boundaries and high water elevations are shown in Table G.

Table G. SWC Water System Pressure Zones

Pressure Zone	Elevation Boundaries (feet)	Static Pressure (psi)
2850	2650 – 2750	87 – 43
2950 and 2950N	2730 – 2850	95 – 43
3050	2850 – 2950	87 – 43

8. *Customer Meters, Fire Hydrants, Structures & Equipment*

Table H provides a list of SWC customer meters, fire hydrants, structures and equipment.

Table H. SWC Customer Meters, Fire Hydrants, Structures & Equipment

Customer Meters		Fire Hydrants		Structures & Equipment	
Size (inches)	Quantity	Type	Quantity		
5/8 x 3/4	4,701	Standard	395	Well No. 14	Block Wall & Tablet Chlorination Unit
3/4	675			Well No. 18	Block Wall & Tablet Chlorination Unit
1	122			Well No. 23 & WP No. 1	Block Wall, Tablet Chlorination, 500 kW Generator, & by-pass line that blends treated and untreated water
1 1/2	19			Booster Station No. 1	Block Wall & 400 kW Diesel Generator
2	76			Booster Station No. 2	Block Wall & 230 kW Diesel Generator
3 (Compound)	1			Pressure Relief Valve	10-inch PRV w/2-inch by-pass. PRV controls pressure between the 2950 and 2850 Zones.
3 (Turbine)	17				
4 (Compound)	1				
Total	**5,612**		**395**		

C. WATER USE

1. *Water Sold*

The average daily water consumption (gallons used) per connection SWC's water system experienced each month during the 2014 test year are indicated in Table I and graphically illustrated in Figure 8. Customer consumption included an average daily high water usage of 330 gallons per day ("gpd") per connection (5,549 connections) in June 2014, and an average daily low water usage of 197 gpd per connection (5,534 connections) in January 2014. The average daily water usage during the twelve-month period was 250 gpd per connection. SWC reported 534,806,000 gallons of water produced, 507,354,290 gallons of water sold, and 27,451,710 gallons of water unaccounted for during the test year.[7]

Table I. SWC Water Consumption & Water Loss Summary

Month/Year	Active Meters (Connections)	Gallons Produced	Gallons Sold	Gallons Unaccounted For	Gallons Consumed per Day	Gallons Consumed per Day per Connection	Water Loss
Jan-14	5,534	36,353,000	33,810,170	2,542,830	1,090,651	197	6.99%
Feb-14	5,532	39,004,000	39,486,150	482,150	1,410,220	255	-1.24%
Mar-14	5,547	47,889,000	44,652,140	3,236,860	1,440,392	260	6.76%
Apr-14	5,544	47,297,000	44,829,530	2,467,470	1494318	270	5.22%
May-14	5,545	50,363,000	47,918,290	2,444,710	1,545,751	279	4.85%
Jun-14	5,549	57,764,000	55,007,090	2,756,910	1,833,570	330	4.77%
Jul-14	5,559	48,976,000	46,647,180	2,328,820	1,504,784	271	4.76%
Aug-14	5,571	43,246,000	40,732,470	2,513,530	1,313,951	236	5.81%
Sep-14	5,570	44,396,000	41,934,820	2,461,180	1,397,827	251	5.54%
Oct-14	5,587	43,262,000	40,958,710	2,303,290	1,321,249	236	5.32%
Nov-14	5,590	37,540,000	35,081,210	2,458,790	1,169,374	209	6.55%
Dec-14	5,596	38,716,000	36,296,530	2,419,470	1,170,856	209	6.25%
Total		**534,806,000**	**507,354,290**	**27,451,710**	**1,391,075***	**250***	**5.13%***

Note: * Asterisk indicates the value is an average

Table J lists the number of connections, gallons of water sold, and the average daily water consumption (gallons used) per connection that SWC's water system experienced each year from 2005 through 2014. Figure 9, included in the figure section of this report, graphically illustrates the average daily water consumption (gallons used) per connection that SWC experienced during the same period. As indicated in Table J and graphically illustrated in Figure 9, the average daily water consumption per connection has been decreasing each year since 2005, with the exception of slight increases in 2007, 2009 and 2011. Overall, the average daily water consumption per connection has

[7] Water produced and sold during the test year is based on the monthly data taken from the meter reads as submitted with SWC's application.

decreased approximately 33 gallons per day per connection, an 11.7 percent decrease in water consumption since 2005.

Table J. SWC Water System Water Consumption per Connection			
Month/Year	**Active Connections**	**Gallons Sold**	**Average Daily Consumption per Day per Connection**
December – 2005	3,009	310,551,000	283
December – 2006	3,729	375,565,500	276
December – 2007	4,306	444,026,000	283
December – 2008	4,664	458,977,000	269
December – 2009	4,939	509,132,000	282
December – 2010	5,078	499,206,990	269
December – 2011	5,176	516,975,650	274
December – 2012	5,404	536,439,700	271
December – 2013	5,501	520,266,740	259
December – 2014	5,596	507,354,280	250

2. *Non-Accounted For Water*

Non-accounted for water (the difference between the gallons of water produced and sold) should be 10 percent or less and never more than 15 percent. It is important to be able to reconcile the difference between water sold and water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage and any non-metered water use such as construction, theft, and line flushing. As indicated in Table I, SWC had 27,451,710 gallons of water unaccounted for during the test year ending December 2014. As a result, SWC's water loss was 5.13 percent which is within the acceptable limits.

Table K lists SWC's water loss volumes and percentages from the past ten (10) year period, beginning in 2005 and ending in 2014. Figure 10, located in the figure section of this report, graphically illustrates the percentage of water loss SWC experienced during the same period. As indicated in Table K and graphically illustrated in Figure 10, SWC's water loss ranged between 3.70 and 8.40 percent, resulting in an average of 4.72 percent for the ten (10) year period. Furthermore, SWC's water loss each year during the ten (10) year period was below 5.0 percent with the exception of 2006 and 2014 where water loss was 8.40 percent and 5.13 percent, respectively. However, as Table J and Figure 10 indicate, SWC water loss has been gradually increasing since 2012.

Table K. SWC Historical Water Loss (Non-Accounted For Water)			
Year	**Non-Accounted for Water (Gallons)**	**Non-Accounted for Water (Percent)**	**Source**
2005	12,452,590	3.86	Annual Report
2006	34,429,510	8.40	Annual Report
2007	23,159,000	4.96	Annual Report
2008	17,969,000	3.77	Annual Report
2009	19,570,000	3.70	Annual Report
2010	21,580,770	4.14	Annual Report
2011	20,234,210	3.77	Annual Report
2012	26,471,300	4.70	Annual Report
2013	25,893,260	4.74	Annual Report
2014	27,451,720	5.13	Application
Average	**22,921,136**	**4.72**	

3. Water System Analysis

The SWC water system has three (3) active drinking water wells (Well Nos. 14, 18, and 23) with a total potential production capacity of approximately 4,965 gpm (7,149,600 gpd). The water system has three (3) storage tanks with a total capacity of approximately 2,550,000 gallons. During the peak month, June 2014, the water system was serving 5,549 connections when SWC reported 55,007,090 gallons of water sold. Average daily demand for the month of June 2014 was determined to be 1,833,570 gpd, while average daily demand per connection was determined to be 330 gpd. Staff concludes that the SWC water system has adequate production and storage capacity to serve the present customer base and any reasonable growth.

All three (3) of the active drinking water wells currently pump to the AWTP via dedicated raw water transmission mains. Well No. 23 is located next to the AWTP, while Well No. 14 and 18 are located approximately 1.64 miles and 1.05 miles from the AWTP, respectively. Raw source water from all three (3) wells is treated at the AWTP. Depending on the arsenic concentration of each well and the arsenic treatment goal, currently at 8.0 ppb or less, a calculated volume of source water is automatically directed to the AWTP vessels via the SCADA system for arsenic removal. The remaining volume bypasses the AWTP to be blended with the treated water from the AWTP which is then discharged to the 2850 Zone storage tanks for storage and further delivery to the distribution system. Arsenic concentration levels in the wells vary, with Well No. 14 and 23 exceeding the arsenic maximum contaminant level ("MCL") of 10 parts ppb. The current arsenic levels, as provided by SWC, for each well are: Well No. 14 at 22 ppb, Well No. 23 at 11 ppb and Well No. 18 at 8.2 ppb.

The wells are controlled on storage tank level, with any necessary adjustments of operating set-points conducted at the SCADA communications system human machine interface ("HMI"). SWC utilizes an operating strategy where one well is designated the lead well while one of the other

two remaining wells is designated the lag well. Should the lead well become unable to meet system demand and the storage tank levels drop below the lag well set-point, the lag well will start and run with the lead well until the off-set-point is satisfied. Currently, Well No. 23 is set to run in the lead position during the off-peak hours (potential 16 hour operating period), while either Well No. 14 or Well No. 18 are set to run in the lag position. During on-peak hours, either Well No. 14 or Well No. 18 are set to run in the lead position (potential 8 hour operating period). Generally, Well No. 18 is placed in the lead position during the on-peak hours primarily due to the high arsenic concentration in Well No. 14.

Historical well production figures (2009 through 2014) are provided in Table L. As illustrated, Well Nos. 18 and 23 have far greater production than Well No. 14. The only exception was in 2009, when Well No. 23 didn't come on-line until November of that year. Well No. 14 production figures include delivery to the both AWTP and Sahuarita Lake. The reduction in the use of Well No. 14 for treatment at the AWTP is primarily due to its high arsenic concentration. The majority of Well No. 14 production is delivered to Sahuarita Lake.

Table L. SWC Historical Well Production

Year	Well No. 14 Production (Gallons)		Well No. 18 Production (Gallons)	Well No. 23 Production (Gallons)
	Water Pumped to Sahuarita Lake	Water Pumped to AWTP	Water Pumped to AWTP	Water Pumped to AWTP
2009	28,893,000	85,266,697	407,499,303	7,043,000
2010	52,906,530	13,193,710	104,219,981	350,467,543
2011	50,330,100	3,626,720	158,709,043	324,544,005
2010	51,616,000	2,408,000	237,124,000	271,763,000
2013	42,242,000	3,444,000	276,802,000	223,672,000
2014	51,866,000	2,834,000	224,998,000	255,108,000
Average	**46,308,938**	**18,462,188**	**234,892,055**	**238,766,258**

In its July 17, 2009 rate increase application, SWC requested that Well No. 23 be included in post-test year plant. However, in Commission Decision No. 72177, Well No. 23 was excluded from rate base. SWC is currently requesting that Well No. 23 be included in rate base for the following reasons:

1) Due to its relatively low arsenic concentration it has less impact on the AWTP arsenic absorption media.
2) It is the only well equipped with an Emergency Standby Generator which enables SWC to provide water production during an electrical outage.
3) It has lower power costs due to its close proximity to the AWTP.
4) It replaces Well No. 17 which was inactivated due to bacteriological issues.
5) It provides the opportunity for each well to shut down allowing the aquifer to recover.

Based on the July 28, 2015 site visit and inspection of the SWC water system, Staff concludes that Well No. 23 is currently in operation and should be considered used and useful to the water system's provision of service.

D. GROWTH

Table M below and Figure 11, located in the figure section of this report, show SWC's customer growth based on service connection data from its past ten (10) Annual Reports (2005 thru 2014), actual growth in 2015, and its projected growth (2016 thru 2020). From 2006 to 2015, SWC gained approximately 2,647 connections (88 percent increase) for an average of approximately 265 connections per year. However, from 2016 through 2020 SWC is projecting growth to increase by approximately 585 residential connections and approximately 25,000 square feet of commercial business (approximately 10 additional connections) for a total projected growth of 595 connections. The projections are based on land and platted lots that are currently being marketed.

Table M. SWC Actual and Projected Growth

Month/Year	Number of Customers	Source
December – 2005	3,009	Annual Report
December – 2006	3,729	Annual Report
December – 2007	4,306	Annual Report
December – 2008	4,664	Annual Report
December – 2009	4,939	Annual Report
December – 2010	5,078	Annual Report
December – 2011	5,176	Annual Report
December – 2012	5,404	Annual Report
December – 2013	5,501	Annual Report
December – 2014	5,596	Annual Report
December – 2015	5,656	Actual
December – 2016	5,773	Projected
December – 2017	5,892	Projected
December – 2018	6,011	Projected
December – 2019	6,130	Projected
December – 2020	6,251	Projected

E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

1. *Compliance Status*

ADEQ regulates the SWC water system under ADEQ Public Water System Identification ("PWS ID") No. 04-10-312. On July 11, 2013, the Pima County Department of Environmental Quality ("Pima County DEQ") inspected the SWC water system. Based on the Pima County DEQ inspection report, no major deficiencies were found in the operation, maintenance, or certified operator status of the water system.

According to the ADEQ Drinking Water Compliance Status Report ("CSR") dated July 22, 2015, the SWC water system is currently delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4. SWC is considered to be in full compliance by ADEQ.

2. *Water Monitoring and Testing Expenses*

SWC's water sampling for monitoring and testing is divided into two (2) categories, Compliance Analysis and Operational Analysis. Compliance sampling is conducted, as required by ADEQ, on source water, finished/treated water, and water in the distribution system. Operational sampling is conducted on source water, finished/treated water, and at various stages of a treatment process. Operational sampling essentially provides timely data to 1) ensure that a well or plant is operating as expected in producing water that meets regulatory limits; 2) adjust plant operations based on changes to source and finished water quality; 3) adjust chemical additions (volume and type); 4) track the breakthrough of filtration media; and 5) adjust the volume of water required to be treated for contaminant removal in order to maintain compliance with ADEQ.

In its Income Statement, line item 19 (Contractual Services – Water Testing), SWC reported $5,341 in water testing expenses for the 2014 test year. However, upon reviewing SWC's water testing invoices, it was determined that approximately $6,584 and $1020 in additional water testing expenses were entered in Line Item 12 (Repairs and Maintenance) and Line 17 (Contract Services – Other). Consequently, SWC's water testing expenses during the test year were actually $12,945 ($5,341 + $6,584 + $1020).

Staff reviewed, re-evaluated, and recalculated the water monitoring and testing expenses and determined the adjusted annual water testing expenses to be $13,975, as represented in Table N. Staff recommends the annual water testing expenses of $13,975 be used for purposes of this proceeding.

Table N. Staff Recommended Monitoring and Testing					
Compliance Analysis Monitoring & Testing (Routine Tests per 3 Years, unless noted)	**Cost Per Test**	**Number of Samples**	**Cost per Monitoring**	**Total Cost**	**Annual Cost**
Total Coliform - Monthly Tests	$ 12	20	$ 240	$ 2,880	$ 2,880
Inorganics - Priority Pollutants	$ 126	1	$ 126	$ 126	$ 42
Radiochemicals - 1 Routine Test per 6 Years					
Gross Apha	$ 77	1	$ 77	$ 77	$ 13
Radium 226 & 228	$ 176	1	$ 176	$ 176	$ 29
Uranium	$ 135	1	$ 135	$ 135	$ 23
Phase II & V:					
Asbestos - Routine Test per 9 Years	$ 149	1	$ 149	$ 149	$ 17
Inorganics - Barium, Calcium, Fluoride, Etc.	$ 48	1	$ 48	$ 48	$ 16
Nitrate - Routine Test Annually	$ 14	1	$ 14	$ 14	$ 14
Nitrite - Routine Test per 9 Years	$ 14	1	$ 14	$ 14	$ 2
VOCs	$ 158	1	$ 158	$ 158	$ 53
Pesticides/PCBs/Unregulated Contaminants/SOCs:					
EDB & DBCP	$ 135	2	$ 270	$ 270	$ 90
Group 1 - Alachlor, Etc.	w/Group 4	2			
Group 2 - Aldrin, Etc.	$ 135	2	$ 270	$ 270	$ 90
Group 3 - 2,4-Dichlorophenoxyacetic Acid (2,4-D), Etc.	$ 162	2	$ 324	$ 324	$ 108
Group 4 - Benzo[a]Pyrene, Etc.	$ 297	2	$ 594	$ 594	$ 198
Group 5 - Aldicarb, Etc.	$ 194	2	$ 388	$ 388	$ 129
Dioxin	$ 495	2	$ 990	$ 990	$ 330
Diquat	$ 171	2	$ 342	$ 342	$ 114
Endothall	$ 194	2	$ 388	$ 388	$ 129
Glyphosate	$ 171	2	$ 342	$ 342	$ 114
Lead & Copper	$ 34	30	$ 1,020	$ 1,020	$ 340
Disinfection-by-Products (DBPs)					
Total Trihalomethanes (TTHMs) - Routine Test Annually	$ 100	2	$ 200	$ 200	$ 200
Haloacetic Acids (HAA5s) - Routine Test Annually	$ 135	2	$ 270	$ 270	$ 270
Unregulated Contaminant Monitoring Rule (UCMR)					
Distribution System	$ 290	2	$ 580	$ 580	$ 116
Entry Point to Distribution System (EDPS)	$ 1,095	2	$ 2,190	$ 2,190	$ 438
Arsenic - Routine Testing Quarterly	$ 21	1	$ 21	$ 84	$ 84
Operational Analysis Monitoring & Testing					
Water Treatment Plant (WTP)					
Arsenic - Routine Testing Bi-Weekly	$ 31	6	$ 186	$ 4,464	$ 4,464
Wells					
Alkalinity - Routine Testing Monthly	$ 14	3	$ 42	$ 504	$ 504
Arsenic - Routine Testing Monthly	$ 21	3	$ 63	$ 756	$ 756
Calcium (Ca), Hardness - Routine Testing Monthly	$ 7	3	$ 21	$ 252	$ 252
Fluoride - Routine Testing Monthly	$ 14	3	$ 42	$ 504	$ 504
Metals Preparation - ICP/MS	$ 9	3	$ 27	$ 324	$ 324
Metals Preparation - ICP	$ 9	3	$ 27	$ 324	$ 324
Sulfate - Routine Testing Monthly	$ 14	3	$ 42	$ 504	$ 504
Total Dissolved Solids - Routine Testing Monthly	$ 14	3	$ 42	$ 504	$ 504
Totals	**$ 4,671**	**118**	**$ 9,818**	**$ 20,165**	**$ 13,975**

Note: DBCP = Dibromochloropropane, EDB = Ethylene Dibromide, PCBs = Polychlorinated Biphenyls, SOCs = Synthetic Organic Compounds, and VOCs = Volatile Organic Compounds

F. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

The SWC water system service area is located within the Tucson Active Management Area ("AMA"). According to the ADWR water provider compliance report dated July 2, 2015, SWC is in compliance with its requirements governing water providers and/or community water systems.

G. ARIZONA CORPORATION COMMISSION COMPLIANCE

A check of the Utilities Division Compliance Section database showed that there are no delinquent Commission compliance items for SWC.[8]

H. DEPRECIATION RATES

Staff's typical and customary depreciation rates, which vary by National Association of Regulatory Utility Commissioners ("NARUC") plant categories, are illustrated in Table O. These rates represent typical and customary values within a range of anticipated equipment life. SWC is proposing to keep the arsenic absorption media depreciation rate at 67 percent (1.5 years of service life) since it expects the media to last only 1.5 years, on average, going forward. However, after Staff's review and evaluation of SWC's arsenic absorption media timeline, submitted from a data request, Staff has determined that the depreciation rate be changed to 40 percent (2.5 years of service life). Consequently, Staff recommends that SWC use Staff's recommended depreciation rates listed in Table O.

Table O. Depreciation Rate Table

NARUC Acct. No.	Depreciable Plant	SWC Current & Proposed Rates		Staff Recommended Rates	
		Service Life (Years)	Accrual Rate (%)	Service Life (Years)	Accrual Rate (%)
304	Structures & Improvements	30	3.33	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50	40	2.50
306	Lake, River, Canal Intakes	40	2.50	40	2.50
307	Wells & Springs	30	3.33	30	3.33
308	Infiltration Galleries	15	6.67	15	6.67
309	Raw Water Supply Mains	50	2.00	50	2.00
310	Power Generation Equipment	20	5.00	20	5.00
311	Pumping Equipment	8	12.5	8	12.50
320	Water Treatment Equipment				
320.1	Water Treatment Plants	30	3.33	30	3.33
320.2	Solution Chemical Feeders	5	20.00	5	20.00
320.3	Arsenic Treatment Media	1.5	67.00	2.5	40.00
330	Distribution Reservoirs & Standpipes				
330.1	Storage Tanks	45	2.22	45	2.22
330.2	Pressure Tanks	20	5.00	20	5.00

[8] Per Compliance Section email dated July 21, 2015.15

331	Transmission & Distribution Mains	50	2.00	50	2.00
333	Services	30	3.33	30	3.33
334	Meters	12	8.33	12	8.33
335	Hydrants	50	2.00	50	2.00
336	Backflow Prevention Devices	15	6.67	15	6.67
339	Other Plant & Misc. Equipment	15	6.67	15	6.67
340	Office Furniture & Equipment	15	6.67	15	6.67
340.1	Computers & Software	5	20.00	5	20.00
341	Transportation Equipment	5	20.00	5	20.00
342	Stores Equipment	25	4.00	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00	20	5.00
344	Laboratory Equipment	10	10.00	10	10.00
345	Power Operated Equipment	20	5.00	20	5.00
346	Communication Equipment	10	10.00	10	10.00
347	Miscellaneous Equipment	10	10.00	10	10.00
348	Other Tangible Plant	10	10.00	10	10.00

I. OTHER ISSUES

1. *Service Line and Meter Installation Charges*

SWC has not proposed changes to its existing service line and meter installation charges.[9] The installation charges, listed in Table P, are refundable advances and are similar to Staff's current range of charges for service line and meter installations. Staff recommends that SWC continue to use the installation charges included in Table P.

Table P. Service Line and Meter Installation Charges

Meter Size	SWC Current Charges			SWC Proposed Charges			Staff's Recommendations		
	Service Line Charge	Meter Charge	Total Charge	Service Line Charge	Meter Charge	Total Charge	Service Line Charge	Meter Charge	Total Charge
5/8 x 3/4-inch	$445	$155	$600	$445	$155	$600	$445	$155	$600
3/4-inch	$445	$255	$700	$445	$255	$700	$445	$255	$700
1-inch	$495	$315	$810	$495	$315	$810	$495	$315	$810
1-1/2-inch	$550	$525	$1,075	$550	$525	$1,075	$550	$550	$1,075
2-inch Turbine	$830	$1,045	$1,875	$830	$1,045	$1,875	$830	$1,045	$1,875
2-inch Compound	$830	$1,890	$2,720	$830	$1,890	$2,720	$830	$1,890	$2,720
3-inch Turbine	$1,045	$1,670	$2,715	$1,045	$1,670	$2,715	$1,045	$1,670	$2,715
3-inch Compound	$1,165	$2,545	$3,710	$1,165	$2,545	$3,710	$1,165	$2,545	$3,710
4-inch Turbine	$1,490	$2,670	$4,160	$1,490	$2,670	$4,160	$1,490	$2,670	$4,160
4-inch compound	$1,670	$3,645	$5,315	$1,670	$3,645	$5,315	$1,670	$3,645	$5,315
6-inch Turbine	$2,210	$5,025	$7,235	$2,210	$5,025	$7,235	$2,210	$5,025	$7,235

[9] SWC's current charges were approved in Decision No. 72177, effective March 1, 2011.

6-inch Compound	$2,330	$6,920	$9,250	$2,330	$6,920	$9,250	$2,330	$6,920	$9,250
Over 6-inch	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost

2. *Curtailment Tariff*

SWC has an approved Curtailment Tariff on file with the Commission. This tariff became effective September 2, 2015.

3. *Cross-Connection/Backflow Prevention Tariff*

SWC has an approved Cross-Connection/Backflow Prevention Tariff on file with the Commission. This tariff became effective November 1, 2002.

4. *Off-Site Hook-Up Fee*

SWC currently has an approved Off-Site Hook-up Fee Tariff on file with the Commission. The tariff became effective October 25, 3013.

5. *Best Management Practices ("BMP") Tariff*

Currently, SWC does not have any Best Management Practice ("BMP") tariffs on file with the Commission. Per Decision No. 74867, dated December 18, 2014, SWC is no longer required to file any BMP tariffs.

6. *Arsenic Blending Plan*

On November 25, 2009, Pima County DEQ issued a Certificate of Approval of Construction ("AOC") for the AWTP authorizing SWC to operate the treatment plant. Upon placing the AWTP into operation, SWC began blending treated water from the AWTP with untreated water from its wells. According to Arizona Administrative Code ("AAC") R18-4-217, a public water system may use blending to achieve compliance with a Maximum Contaminant Level ("MCL"), in this case Arsenic, if certain requirements are met and written approval has been obtained from ADEQ.

During its field inspection, Staff requested to see SWC's approved arsenic blending plan. SWC was unable to produce its blending plan since it had never obtained one from ADEQ. Consequently, SWC has been blending treated and untreated water without an approved blending plan and written approval from ADEQ. Subsequently, Staff suggested that SWC take measures to develop an arsenic blending plan and obtain written approval from ADEQ. As a result, SWC met with ADEQ on December 1, 2015, to present its proposed blending plan. On December 11, 2015, SWC submitted its blending plan and associated documents for ADEQ approval. Subsequently, ADEQ issued its written approval of SWC's blending plan on December 21, 2015.

7. *Plant Used and Useful – Estancia del Corazon Subdivision*

In Decision No. 72177, the Estancia del Corazon Subdivision, Region 5, Block 29 on-site plant facilities (89 services, 11 fire hydrants, and 1,100 feet of 8-inch distribution main) were removed from plant in service. During its field inspection, Staff determined that the subdivision was completely built-out with homes. Therefore, Staff concludes that the Estancia del Corazon subdivision on-site plant facilities, totaling $76,082, are used and useful to the water systems provision of service. Staff also concludes that the on-site plant facility costs, totaling $76,082, are reasonable and appropriate to the water system's provision of service. A summary of the plant facilities and associated costs is included in Table Q.

Table Q. Estancia del Corazon Subdivision Plant Facilities

Account Number	Plant Facility	Year Construction Completed	Quantity	Original Cost
331	8-inch Ductile PVC Distribution Main	2007	1,100 feet	$30,250
333	Residential Services	2007	89	$30,159
335	Fire Hydrants	2007	11	$15,673
Total				**$76,082**

8. *Post-Test Year Plant - Arsenic Absorption Media Regeneration*

The initial arsenic absorption media installed in the AWTP vessels (approximately 1,500 ft^3) cost approximately $575,005. Since then, two (2) batches of arsenic absorption media (750 ft^3 each) were removed for regeneration and re-installed at a total cost of $245,917. One batch of media was damaged during the regeneration process and replaced with virgin arsenic absorption media by Layne Christensen at the regeneration cost of $130,000. The current arsenic absorption media depreciation rate (NARUC Account No. 320.3), approved in Decision No. 72177, is 67 percent (1.5 years of service life). Subsequently, the initial and regenerated arsenic absorption media were fully depreciated.

On December 8, 2015, SWC received an invoice from Purolite, in the amount of $150,657 for the regeneration of its latest batch (Batch 3-0) of exhausted arsenic absorption media. Batch 3-0 was removed on October 13, 2015, for regeneration and returned and reinstalled as Batch 3-1 on December 15, 2015. SWC is requesting a post-test year ("PTY") plant adjustment in the amount of $150,657 for the regeneration and installation of Batch 3-1 arsenic absorption media. Staff concludes that the PTY plant adjustment for the arsenic absorption media cost, totaling $150,657, is reasonable and appropriate to the water systems provision of service.

9. *Post-Test Year Plant – Manual Transfer Switch & Emergency Standby Generator Improvement Projects*

In its application, SWC requested PTY plant adjustment in the amount of $214,912 for two (2) capital improvement projects that included: 1) the installation of two (2) manual transfer switches; and, 2) an emergency standby generator. Table R illustrates the capital costs associated with SWC's manual transfer switch and emergency standby generator installations.

The first capital improvement project involved the installation of manual transfer switches at two (2) of SWC's well sites. In 2014, SWC had an arc-flash study conducted at Well Site No. 14 and Well Site No. 18. The study concluded that both well sites required the installation of manual transfer switches to mitigate a potential arc-flash incident. Due to the potential danger created by the lack of main power disconnect switches at each well site, SWC had the manual transfer switches installed. Installation was completed in June 2015 at a total capital cost of approximately $34,994.

The second capital improvement project involved the installation of an emergency standby generator at WP No. 1. Due to the lack of an emergency power source at WP No. 1, the location of the AWTP and Well No. 23, SWC determined that an emergency standby generator was needed especially since the AWTP treats all three (3) wells (Well No. 14, 18, & 23). Installation was completed in January 2015 at a total capital cost of approximately $179,918.

Table R. Post Test Year Capital Improvement Projects		
Well No. Site No. 14 & Well Site No. 18 - Manual Transfer Switch Installations		
Item	**Vendor**	**Costs**
Electrical Permits - Manual Transfer Switches	Town of Sahuarita	$ 120
Building Permits - Manual Transfer Switches	Town of Sahuarita	$ 246
Arc-Flash Study	Sturgeon Electric Company, Inc.	$ 2,146
Arc-Flash Mitigation - Manual Transfer Switch Installation's	Sturgeon Electric Company, Inc.	$ 32,482
Sub-total Cost		**$ 34,994**
WP No.1 (AWTP & Well No. 23) - Emergency Standby Generator Installation		
Item	**vendor**	**Costs**
Emergency Generator Installation Design	Richard Canney Engineering	$ 12,000
Electrical Permit - Emergency Standby Generator Installation	Town of Sahuarita	$ 60
Building Permit - Emergency Standby Generator Installation	Town of Sahuarita	$ 272
Emergency Generator - Caterpillar Model C15 PGAN & Automatic Transfer Switch - Caterpillar Model 800A/480V	Empire Power Systems	$ 120,989
Emergency Generator Installation - Crane Service	Desert Hill Crane Service	$ 420
Diesel Fuel	Western Refining Wholesale	$ 2,503
Air Quality Permit	Pima County DEQ	$ 122
Site Inspection	Richard Canney Engineering	$ 696
Site Preparation Work	Sturgeon Electric Company, Inc.	$ 42,856
Sub-total Cost		**$ 179,918**
Total Cost - Manual Transfer Switch and Emergency Standby Generator Installations		**$ 214,912**

The total cost of both SWC PTY capital improvement projects was $214,912. Based on the July 28, 2015, site visit and inspection of the SWC water system, Staff concludes that the PTY capital improvement projects listed in Table R, totaling $214,912, are currently in operation and considered used and useful to the water system's provision of service. Staff also concludes that the PTY capital improvement project costs, totaling $214,912, are reasonable and appropriate to the water system's provision of service.

FIGURES

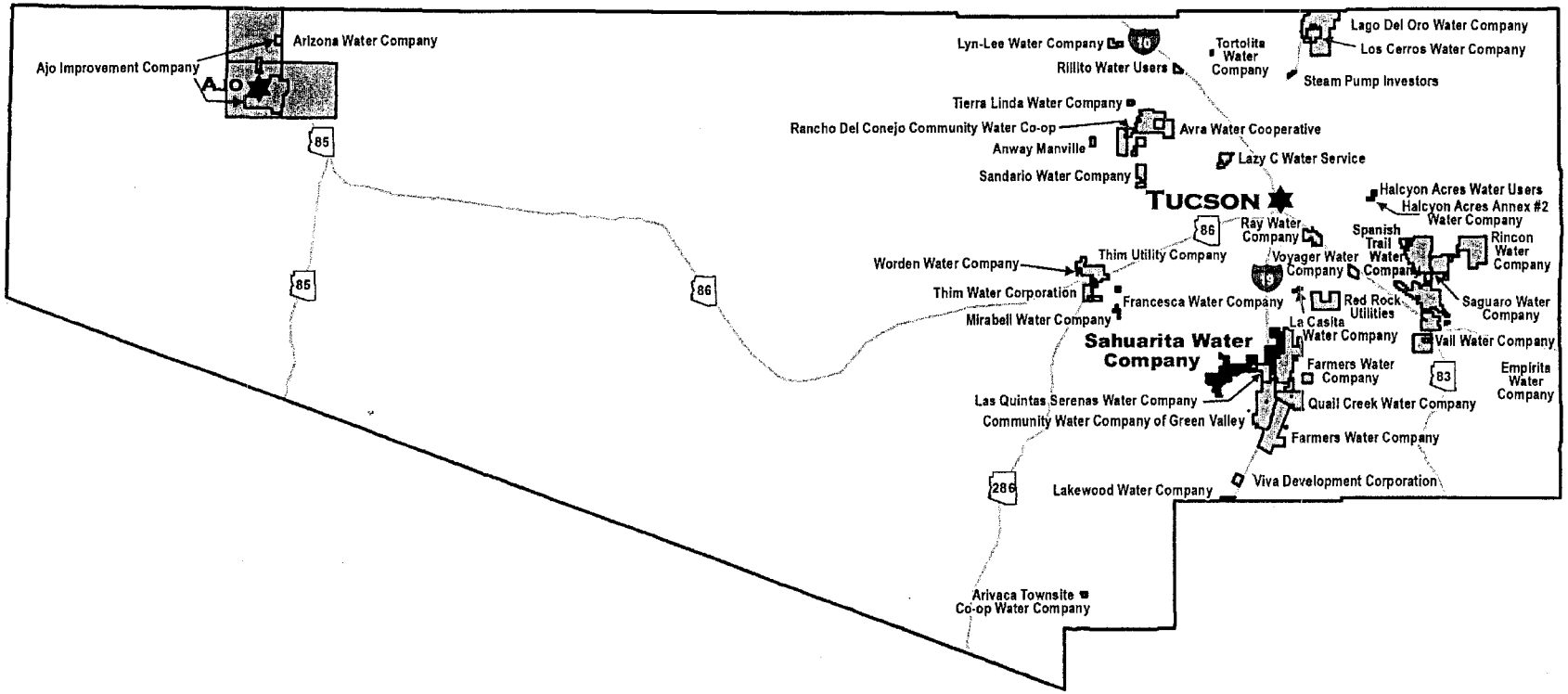

FIGURE 1 – PIMA COUNTY MAP

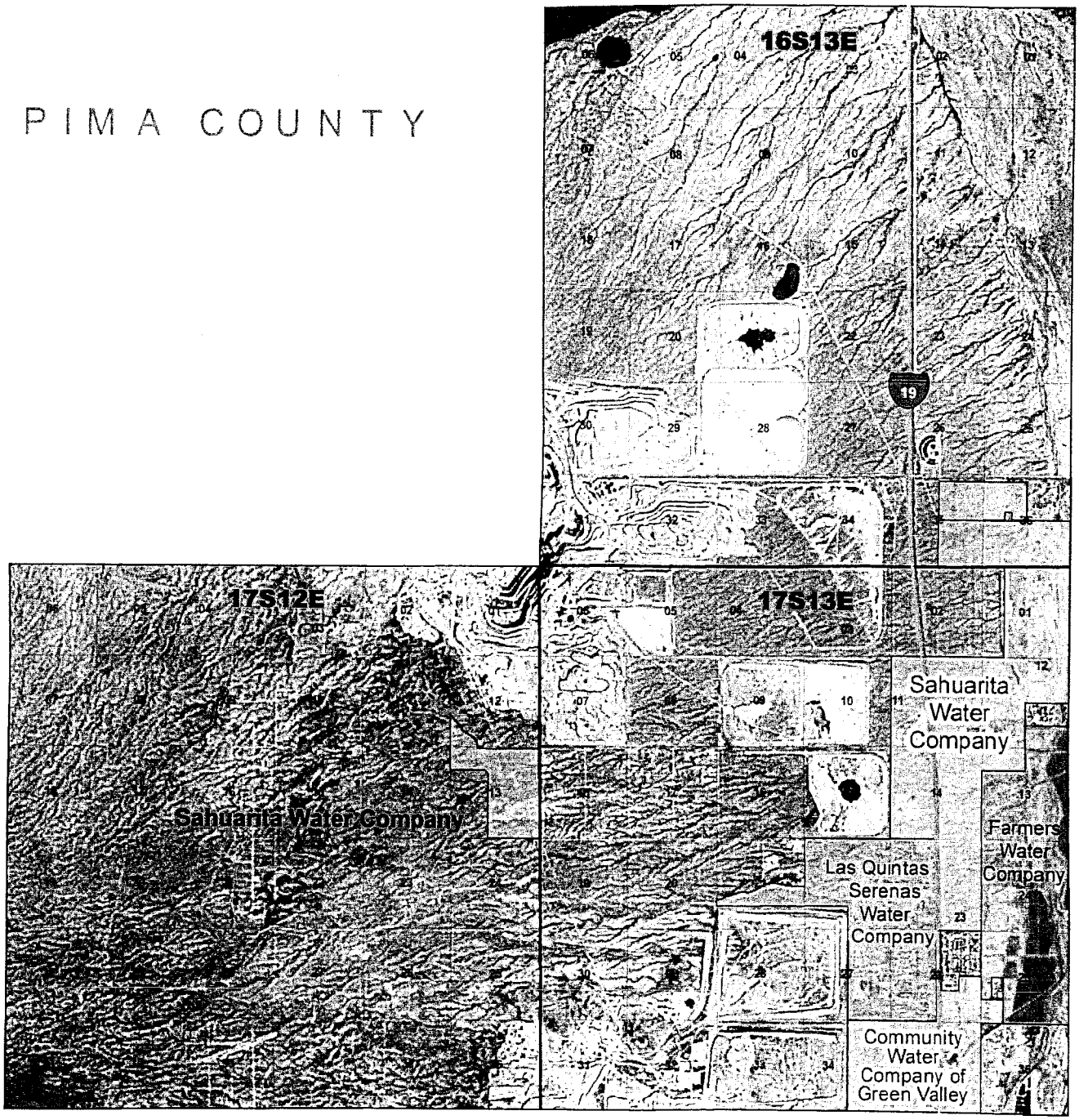

FIGURE 2 – SAHUARITA WATER COMPANY CERTIFICATED AREAS

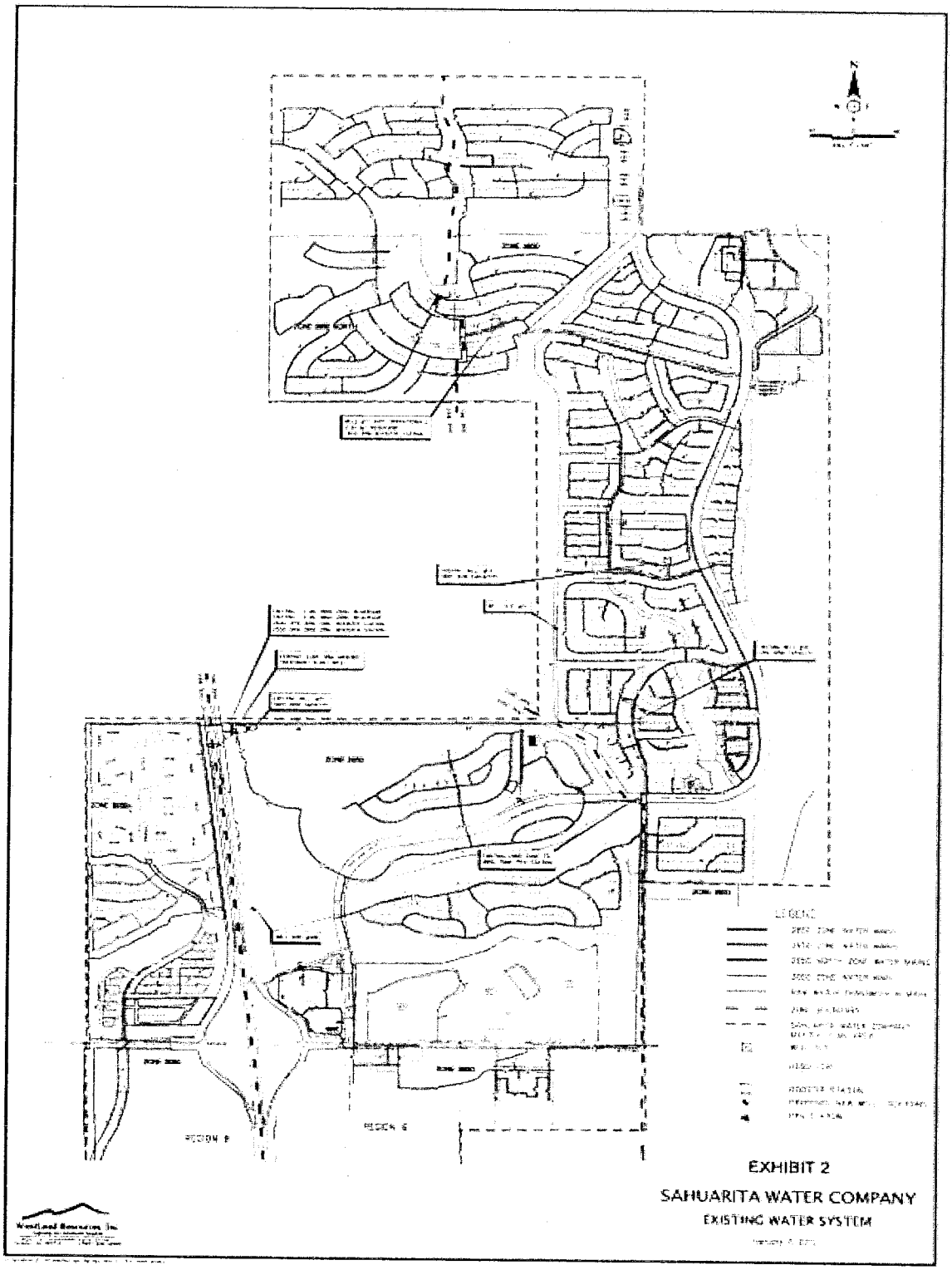

FIGURE 3 – SAHUARITA WATER COMPANY SITE MAP

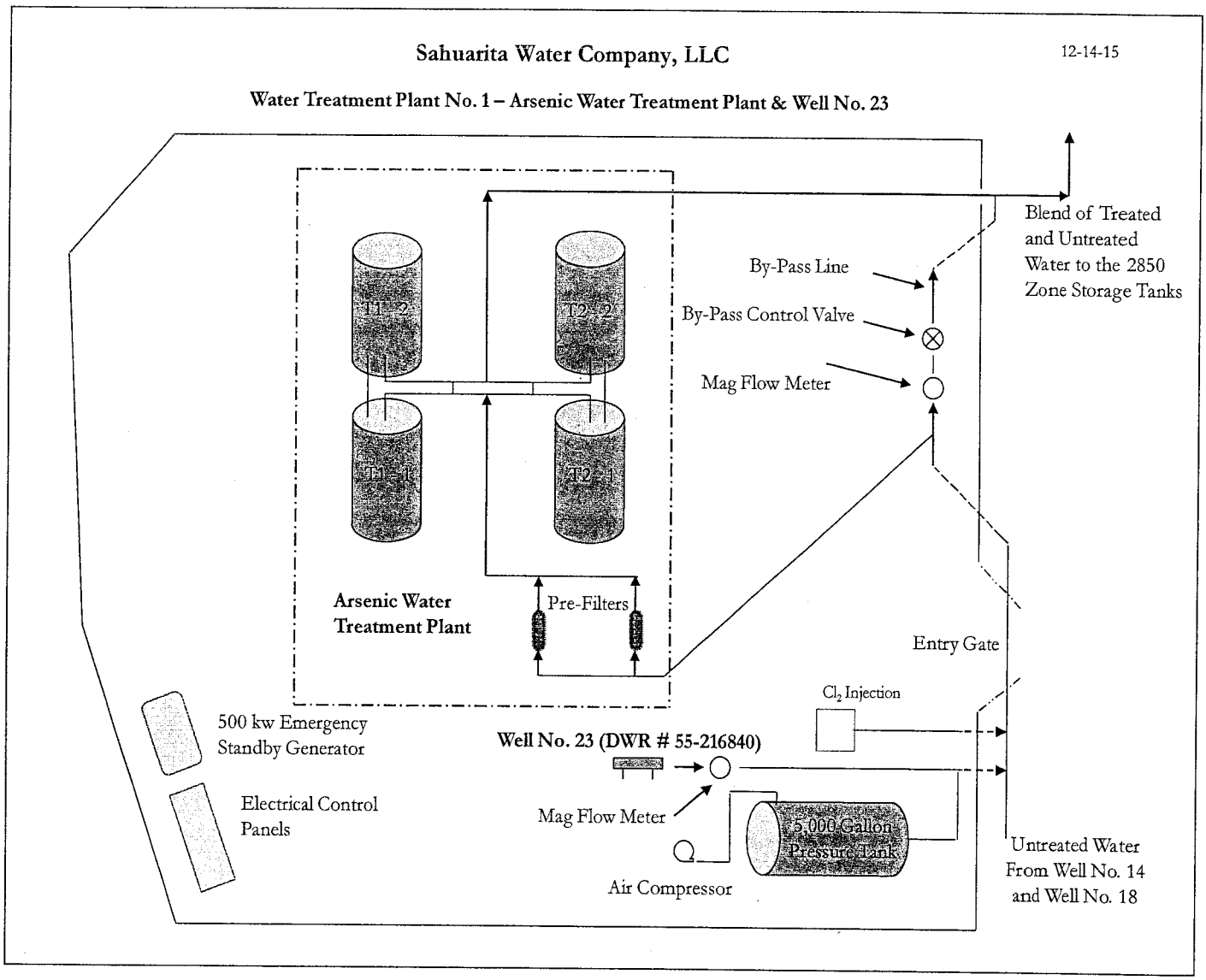

FIGURE 4 – WATER TREATMENT PLANT NO. 1 (AWTP AND WELL NO. 23)

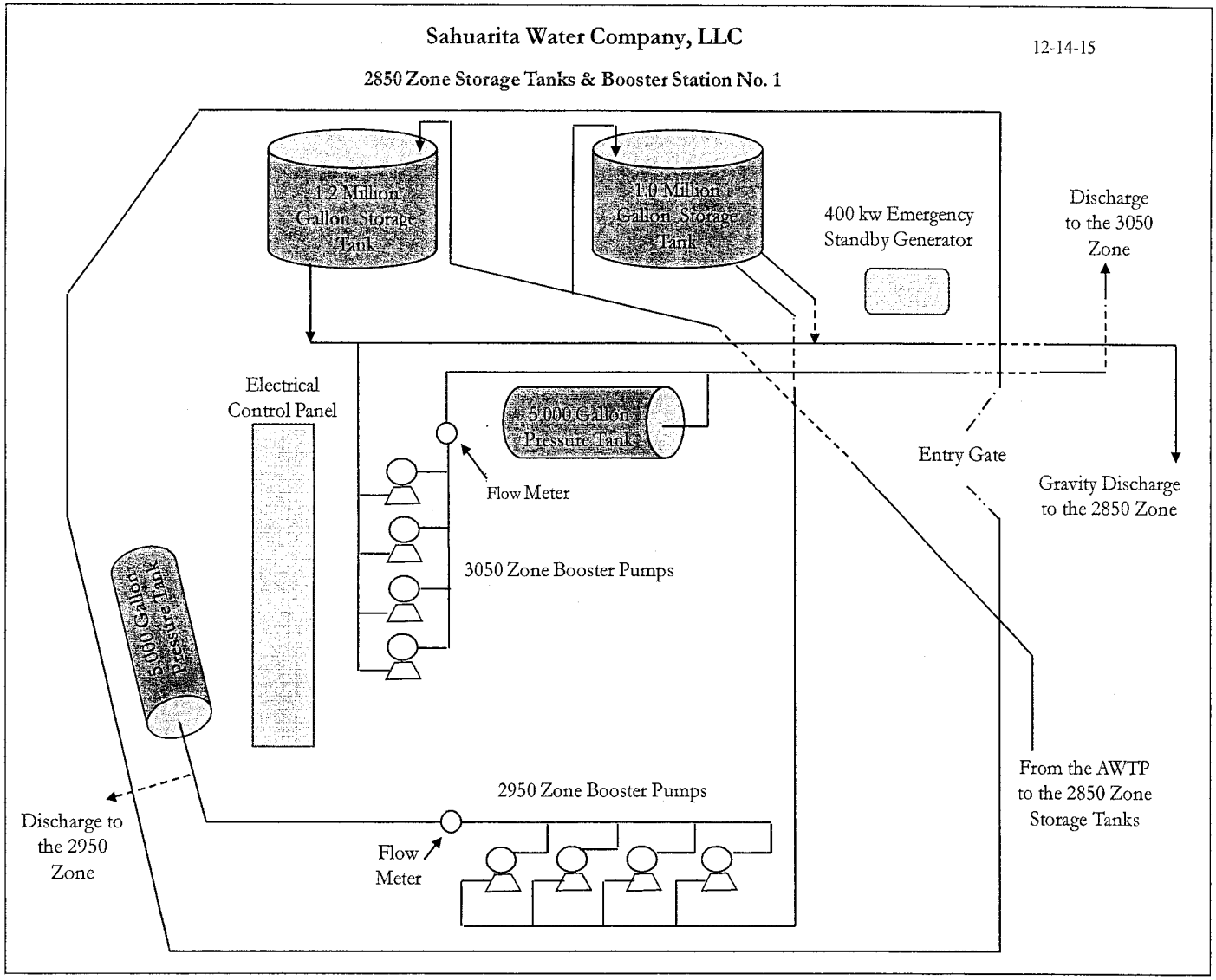

FIGURE 5 – 2850 ZONE STORAGE TANKS AND BOOSTER PUMP STATION NO. 1

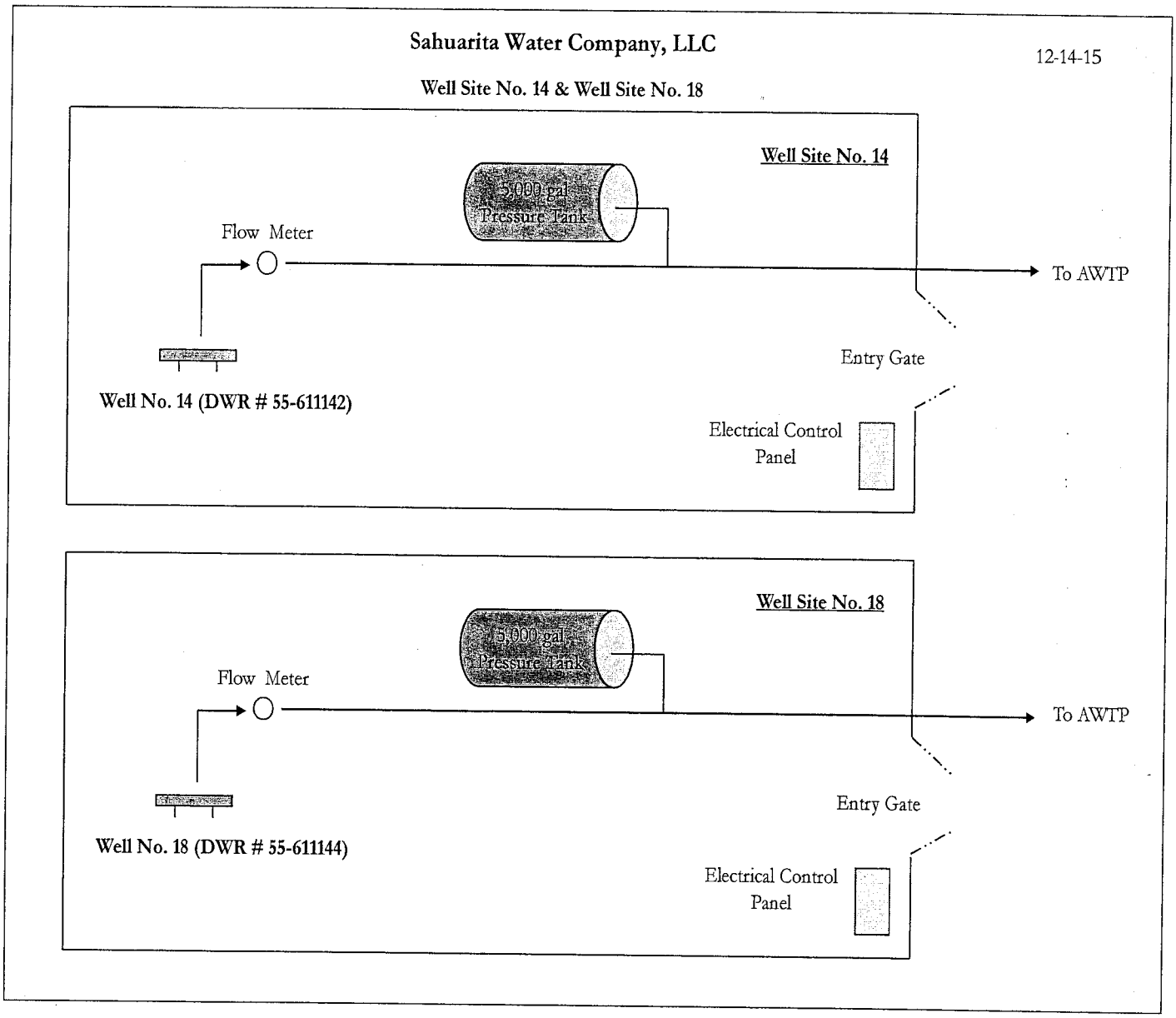

FIGURE 6 – WELL SITE NO. 14 AND WELL SITE NO. 18

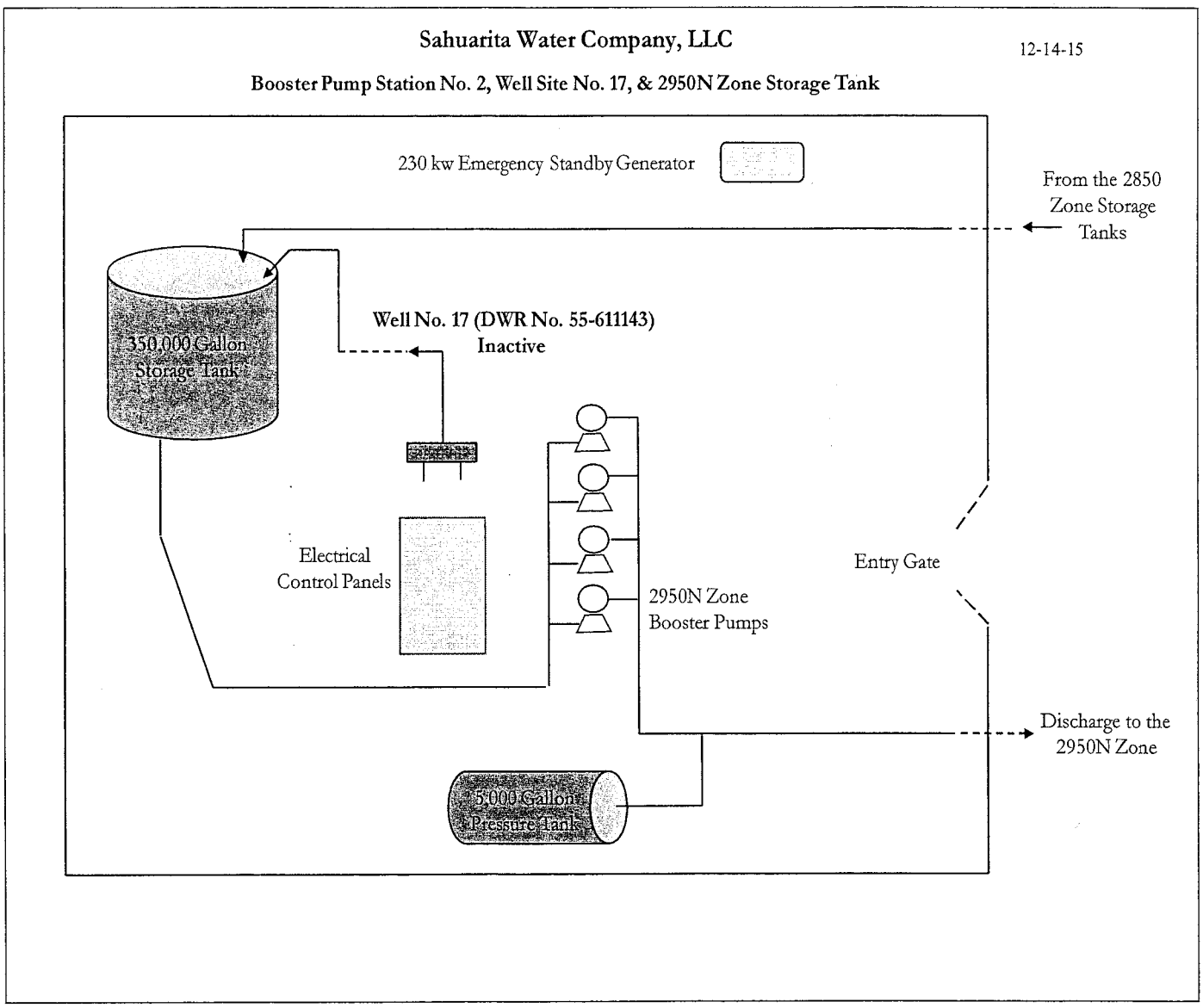

FIGURE 7 – BOOSTER PUMP STATION NO. 2 AND WELL SITE NO. 17

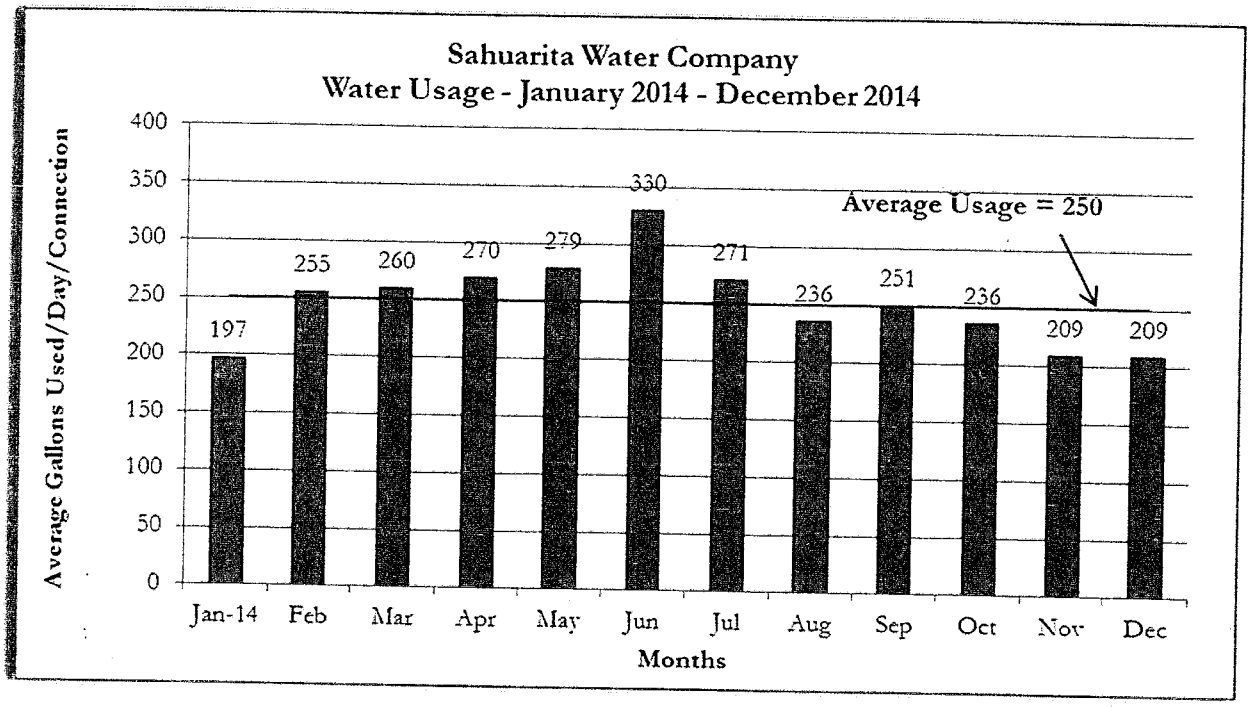

FIGURE 8 – SWC WATER CONSUMPTION

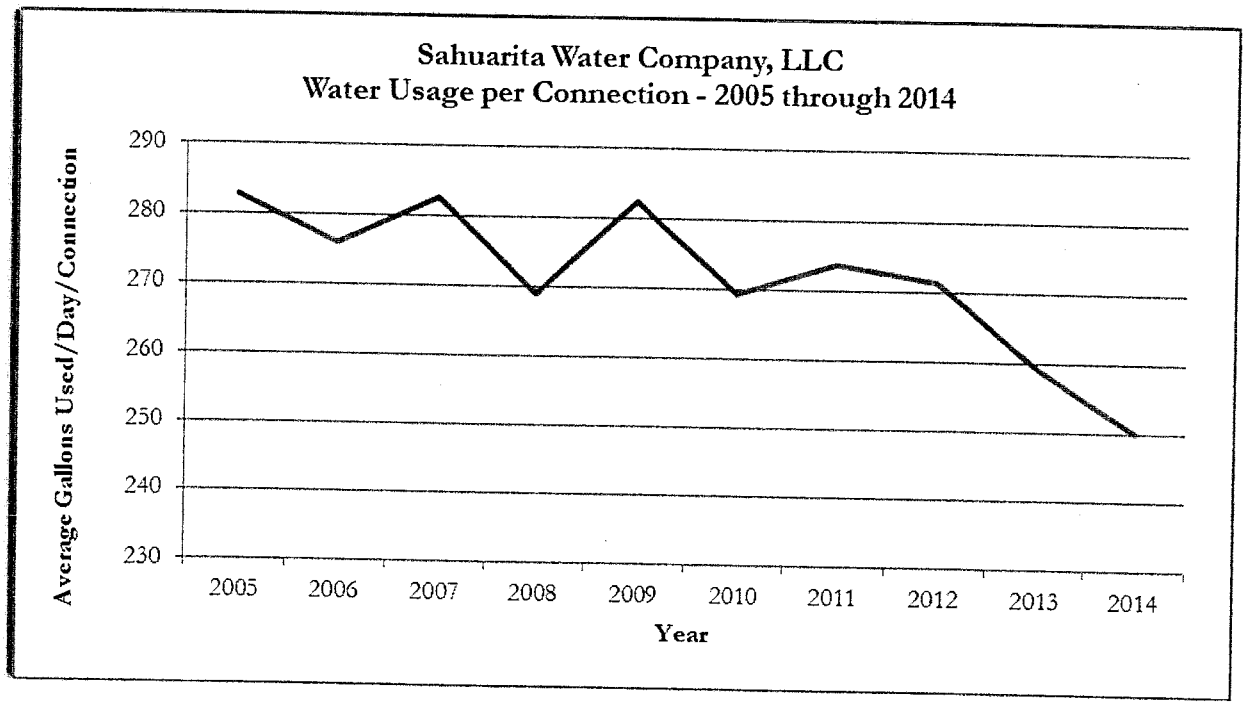

FIGURE 9 – SWC WATER USAGE PER CONNECTION

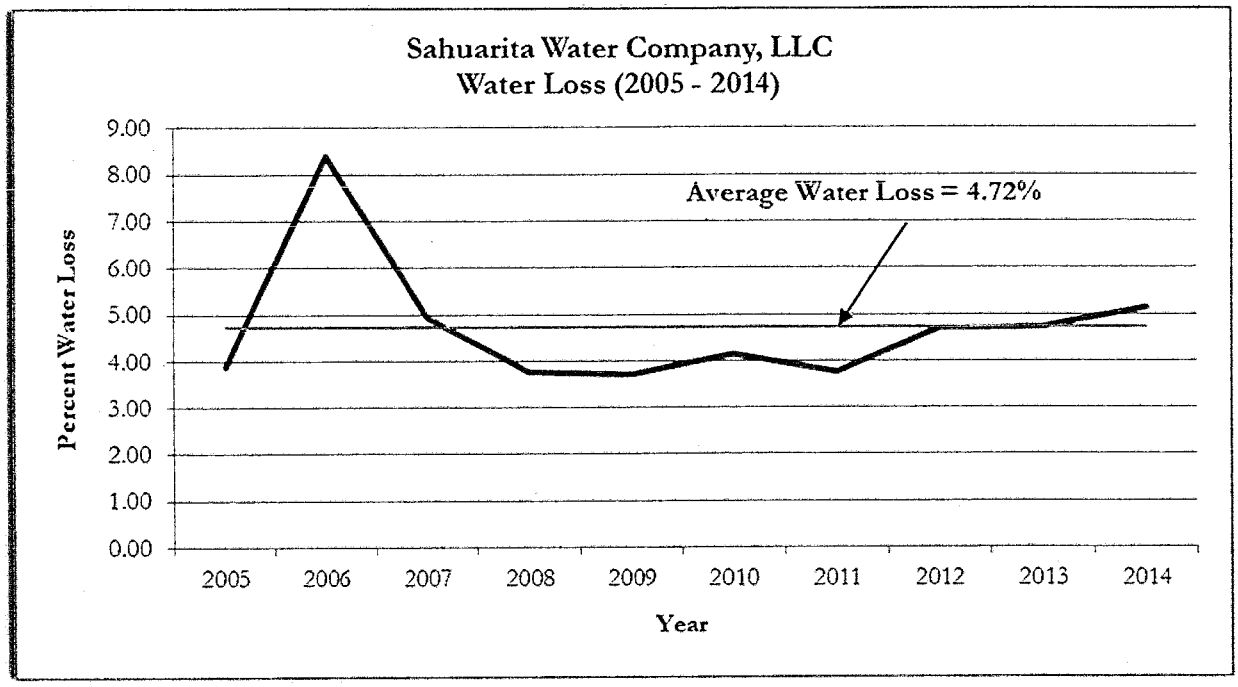

FIGURE 10 – SWC HISTORICAL WATER LOSS

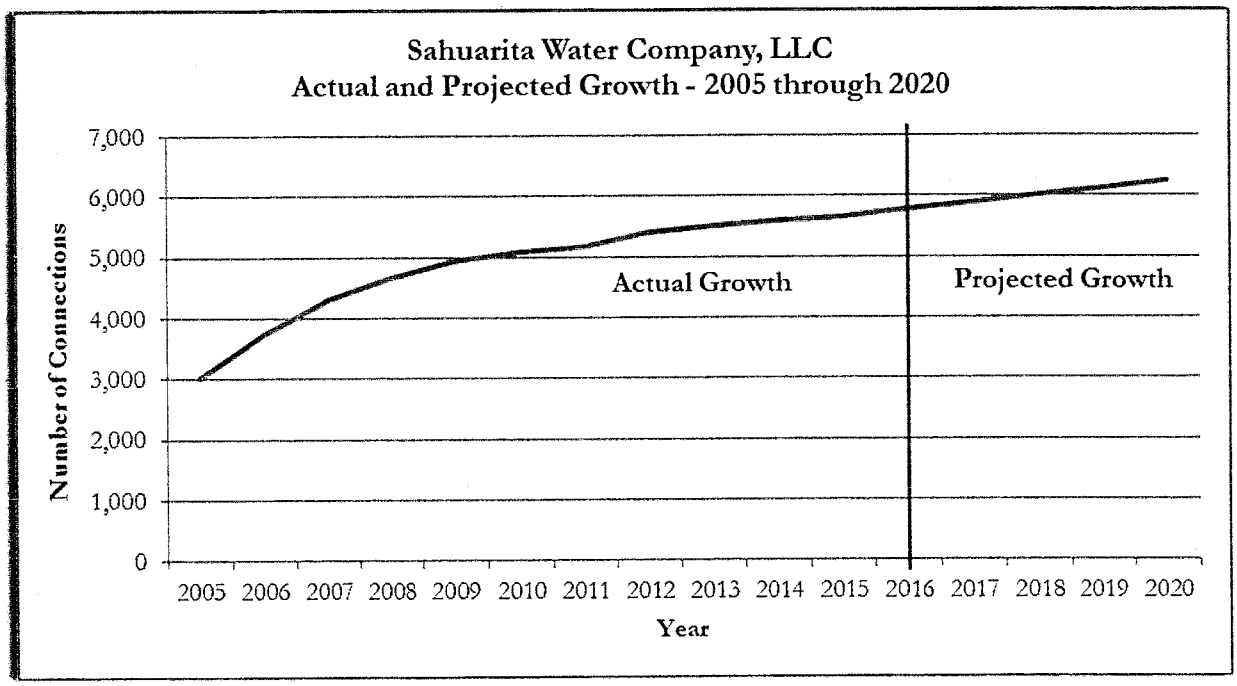

FIGURE 11 – SWC GROWTH

EXHIBIT
S-2

BEFORE THE ARIZONA CORPORATION COMMISSION

DOUG LITTLE
Interim Chairman
BOB STUMP
Commissioner
BOB BURNS
Commissioner
TOM FORESE
Commissioner

IN THE MATTER OF THE APPLICATION OF SAHUARITA WATER COMPANY, LLC, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PROPERTY AND FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES	DOCKET NO. W-03718A-15-0213

DIRECT

TESTIMONY

OF

CRYSTAL S. BROWN

EXECUTIVE CONSULTANT III

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

JANUARY 15, 2016

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EXECUTIVE SUMMARY
SAHUARITA WATER COMPANY, LLC,
DOCKET NO. W-03718A-15-0213

Sahuarita Water Company, LLC ("Sahuarita" or "Company") proposed a 9.20 percent rate of return. Sahuarita's proposed rate of return was calculated using a 10.50 percent cost of equity, a 4.20 percent cost of debt, and a capital structure consisting of 20.57 percent debt and 79.43 percent equity.

Staff recommends an 8.41 percent rate of return. Staff's recommended rate of return was calculated using a 9.50 percent cost of equity, a 4.20 percent cost of debt, and a capital structure consisting of 20.57 percent debt and 79.43 percent equity.

I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Crystal S. Brown. I am an Executive Consultant III employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Briefly describe your responsibilities as an Executive Consultant III.

A. I am responsible for the examination and verification of financial and statistical information included in utility rate applications and other financial matters, including performing studies to estimate the cost of capital component in rate filings and developing revenue requirements. In addition, I 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, auditing, and the cost of capital. 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. My testimony provides Staff's recommended capital structure, cost of equity, and overall rate of return ("ROR") for establishing the revenue requirement for Sahuarita Water Company, LLC ("Sahuarita" or "Company").

Q. Please provide a brief description of Sahuarita.

A. Sahuarita is an Arizona Class B utility engaged in the business of providing water service in the Rancho Sahuarita Master Planned Development in the Town of Sahuarita in Pima County, Arizona. Sahuarita provided service to approximately 16,000 customers during the test year.

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 eight sections. Section I is this introduction. Section II discusses the concept of weighted average cost of capital ("WACC"). Section III presents Staff's cost of debt for Sahuarita. Section IV discusses the concepts of return on equity ("ROE") and risk. Section V presents the methods employed by Staff to estimate Sahuarita's ROE. Section VI presents the findings of Staff's ROE analysis. Section VII discusses the financial risk and economic assessment adjustments. Section VIII presents Staff's ROR recommendation.

Q. Have you prepared any schedules in support of your cost of capital analysis?

A. Yes, my supporting schedules are shown on CSB-1 to CSB-10.

Q. Ms. Brown, are you also sponsoring the pro forma revenue requirement and resulting rate change being recommended by Staff?

A. No. Staff witness Teresa Hunsaker is supporting Staff's recommended pro forma revenue requirement in this case, and she is also supporting the quantification of the resulting change in such revenues Staff is recommending. In completing her responsibilities, Ms. Hunsaker utilizes the capital structure, cost of equity ("COE"), and the overall ROR recommendations that I am sponsoring.

Q. Before discussing Staff's specific rate of return recommendation for Sahuarita, please provide an overview of the approach Staff takes to developing the ROE it utilized in quantifying Staff's overall rate change recommendation?

A. As discussed in greater detail later in my testimony, Staff utilizes traditionally accepted models for estimating a reasonable COE range. These models utilize observed market data and forecasts to define the parameters of what would constitute the reasonable investing returns associated with alternative investments. Generally, Staff believes than any ROE falling within this model-driven cost-of-equity range would be an acceptable ROE for the Commission to recognize in quantifying its final rate change decision. Since, arguably, the low point in this model-driven ROE range is just as reasonable as any other point, Staff believes that any movement ABOVE the low end of this range represents a fair accommodation of any and all company-specific risk factors an individual ACC-regulated utility might be facing. Clearly such company-specific risk factors can exist, and these risk factors may increase or reduce what would otherwise constitute a reasonable ROE for an individual utility. Perhaps unfortunately, but honestly, it is not really possible to precisely quantify specific basis point weighting for each such risk factor, though Staff notes that cost of capital consultants usually go to great lengths to attempt to show that quantifying company-specific basis point weightings for such factors is possible.

Q. Ms. Brown, can you give an example of a company-specific risk consideration that could actually support a lower overall ROE requirement?

A. Yes. A regulated utility with a relatively high percent of equity in its capital structure mix presents a lower risk to stockholders than a regulated utility with a higher reliance on debt. This is because equity holder claims against assets is subordinate to the positions held by debt holders. The point being that NOT ALL company-specific risk considerations increase the required ROE.

Q. Please continue.

A. Once the ROE model-driven reasonableness range has been defined, utilizing the traditionally recognized models such as the Capital Asset Pricing Model ("CAPM") and Discounted Cash Flow ("DCF") models discussed later in my testimony, the next question is "What level of ROE should Staff utilize to build its revenue requirement schedules around"?

Generally, Staff will utilize the mathematically determined mid-point of this ROE model-driven range since, as just noted, this mid-point effectively makes reasonable accommodation for the net of any company-specific risks that might exist.

However, there can be instances where Staff may choose to recommend using some other point within this ROE model-driven range to calculate the underlying utility's revenue requirement and required rate change. Staff believes movement away from the mid-point of the ROE model-driven range will be, and should be, a rare modification to its primary approach. The pending Sahuarita rate case filing does present one of those cases where movement away from the mid-point might be reasonable, so Staff has utilized the upper limit of the ROE model-driven range to quantify the revenue requirement and resulting rate increase sponsored by Staff witness Ms. Hunsaker.

Q. Ms. Brown, before continuing with your explanation of the Sahuarita-specific considerations that resulted in Staff's ROE recommendation in the instant case, can you tell us if Staff has a specific list of factors that would lead to a recommendation from Staff to use an ROE level above or below the model-driven mid-point?

A. No, Staff does not have such a list. Nor does Staff believe that such a list should be generated. Each rate case filing is unique in some respect and defining reasonable ROE recommendations is more or less an art than a science, as we all know.

That being said, Staff believes that it is important to again stress that such movements **from Staff** are likely to be rare. On the other hand, the Commission certainly has considerable latitude in reaching its ultimate ROE finding after giving consideration to all evidence before it.

Q. Ms. Brown, please return to your explanation as to why Staff chose to recommend the high end of the model-driven ROE range in the pending Sahuarita case.

A. As I will discuss in detail later in my testimony, the model-driven range for the ROE in the Sahuarita case spans from a low of 7.6 percent to a high of 9.5 percent, and the mathematically determined mid-point is 8.6 percent. The quarter points within this range are 8.1 percent and 9.0 percent. If Staff had utilized 8.6 percent for ROE in the revenue requirement schedules sponsored by Ms. Hunsaker, Staff would have recommended a small rate decrease for Sahuarita in this case. So as a step to support the general Commission policy of promoting rate change gradualism, Staff recommended utilizing the upper limit ROE of 9.5 percent in this case. Hopefully this accommodation will help the Company push out the timing of the Company's next rate change filing and also moderate the level of Sahuarita's next rate increase.

Again this Staff movement is unique to the Sahuarita case and does not mean that Staff will always be recommending that the Commission only approve rate increases and not authorize rate decreases if such a finding is supported by available and convincing evidence.

Q. Thank you Ms. Brown for those preliminary comments and clarifications. Please continue with your discussion regarding general cost of capital concepts you are sponsoring, and the specific recommendations Staff is making in this case.

A. Again to assure clear communications regarding our shift in focus, I am now returning to Staff's more theoretical and academic discussion of cost of capital concepts, wherein I present and explain how Staff developed its ROE model-driven range results.

Q. Thank you. What is Staff's recommended rate of return for Sahuarita?

A. Staff recommends an 8.41 percent overall ROR, as shown in Schedule CSB-1. The ROR is calculated from the capital structure, ROE and cost of debt. Staff's capital structure is composed of 79.43 percent equity and 20.57 percent debt. Staff's estimated ROE for the Company is based on the results of its DCF method and the CAPM cost of equity methodology estimate- average for the sample companies of 8.6 percent for the CAPM and 8.6 percent average for the DCF. The CAPM model-driven range is 8.2 percent to 9.0 percent (which averages 8.6 percent), while the DSC model range is 7.6 percent to 9.5 percent (which also averages 8.6 percent), as shown on Schedule CSB-3.

Sahuarita's Proposed Overall Rate of Return

Q. Briefly summarize Sahuarita'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 of 9.20 in this proceeding:

Table 1

	Weight	Cost	Weighted Cost
Long-term Debt	20.57%	4.20%	0.86%
Common Equity	79.43%	10.50%	8.34%
Cost of Capital/ROR			**9.20%**

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 alternative business venture.

Q. What is the overall cost of capital?

A. The overall cost of capital for a firm issuing a variety of securities (i.e., stock and indebtedness) represents an average of the various cost rates on all securities issued by the firm adjusted to reflect the relative weighting of each security within the firm's capital structure. Thus, for any given firm, the overall cost of capital is the firm's 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			Percent
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		100.0%

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.

Sahuarita's Capital Structure

Q. What capital structure does Sahuarita propose?

A. The Company proposes a capital structure composed of 20.57 percent long-term debt and 79.43 percent common equity. Sahuarita's proposed capital structure reflects projected long-term debt and common equity balances as of December 31, 2014.

Q. How does Sahuarita's proposed capital structure compare to capital structures of publicly-traded water utilities?

A. Schedule CSB-4 shows the capital structures of six publicly-traded water companies ("sample water companies" or "sample water utilities") as of December 2014. The average capital structure for the sample water utilities is comprised of approximately 46.1 percent debt and 53.9 percent equity.

Staff's Capital Structure

Q. What is Staff's recommended capital structure for Sahuarita?

A. Staff recommends a capital structure composed of 20.57 percent debt and 79.43 percent equity. Staff's recommended capital structure consists of $2,326,035 long-term debt and $8,982,660 common equity as shown on Schedule CSB-10.

IV. 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

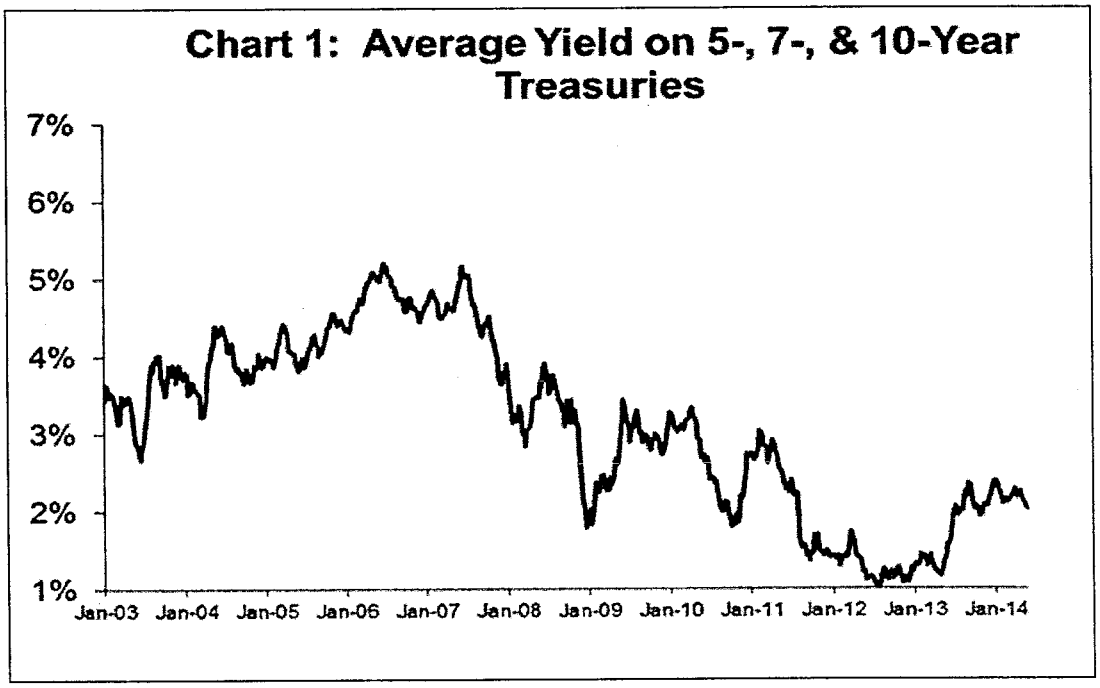
selection of investments to choose from, they will generally choose from investments with similar risks and similar returns. Therefore, the market determines the entity's cost of equity.

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?

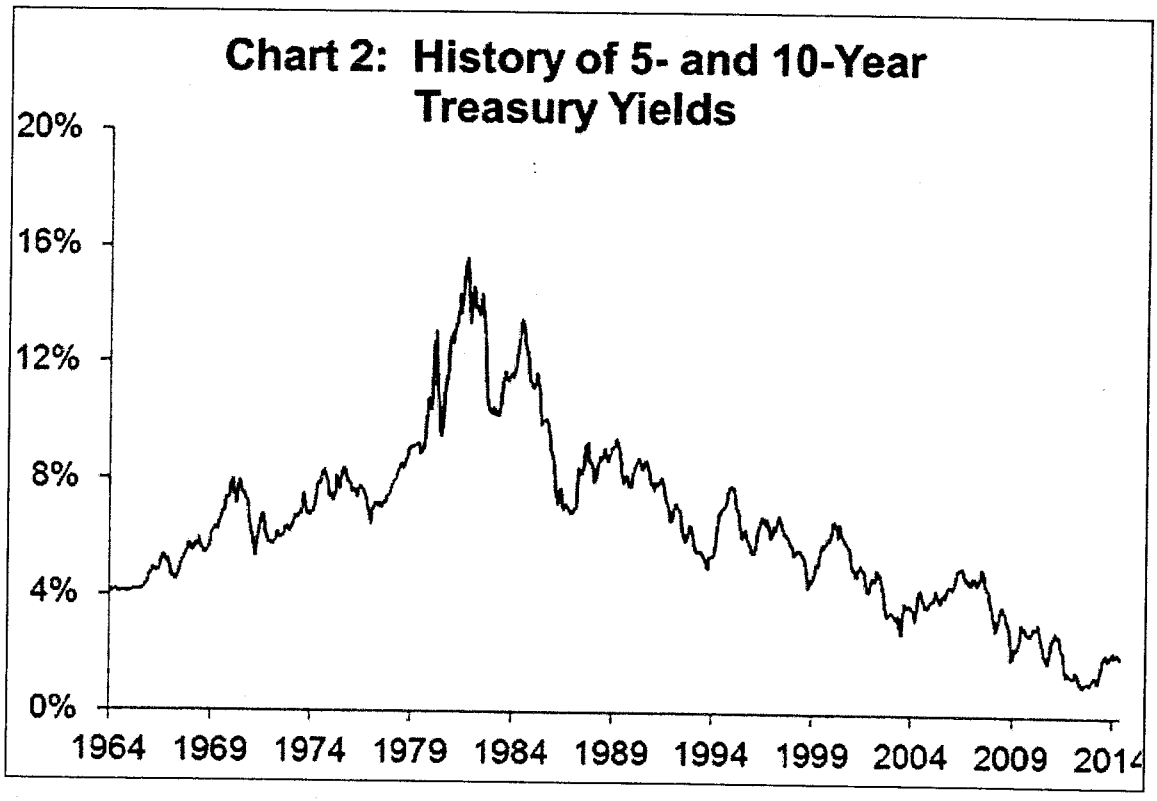
A. A chronological chart of interest rates is a good tool to show interest rate history and identify trends. Chart 1 graphs intermediate U.S. treasury rates from January 3, 2003, to January 30, 2014.



As shown in Chart 1, intermediate-term interest rates generally trended upward from 2003 to mid-2007, trended downward until late-2012, and have trended upward since that time.

Q. What has been the general trend in interest rates longer term?

A. U.S. Treasury rates from January 1964- January 2014 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 in the past 30 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 V, for the water utility industry and the market provide insight into this relationship. In theory, the overall 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 (0.73)[1] 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 opportunities with relatively greater risk, 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 (unsystematic risk, diversifiable risk or firm-specific risk).

[1] See Schedule CSB-7.

Q. What is market risk?

A. Market risk, or systematic risk, is the risk associated with an investment that cannot be reduced through diversification. Market risk stems from factors that affect all securities, such as possibilities of recession, 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 potential 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 industry or similar lines of business tend to experience the same fluctuations in business cycles.

Q. Please define financial risk.

A. Financial risk is the potential fluctuation of earnings, inherent in the use of debt financing, that may impair a firm's ability to provide adequate return; the higher the percentage of debt in a firm'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 may also be 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 Sahuarita's financial risk exposure compare to that of Staff's sample group of water companies?

A. CSB-4 shows the capital structures of Staff's six sample water companies as of December 30, 2014, and Sahuarita's adjusted capital structure as of the end of the test year, December 31, 2014. As shown, the sample water utilities were capitalized with approximately 46.1 percent debt and 53.9 percent equity, while Sahuarita's capital structure consists of approximately 20.57 percent debt and 79.43 percent equity. Thus, Sahuarita bears significantly less financial risk than do Staff's sample companies.

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 determination of a reasonable cost of equity.

Q. Should 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.

V. ESTIMATING THE COST OF EQUITY

Introduction

Q. Did Staff directly estimate the cost of equity for Sahuarita?

A. No. Sahuarita is not a publicly-traded company and, as such, Staff is unable to directly estimate its market cost of equity due to the lack of firm-specific market data. Instead, Staff must estimate the Company's cost of equity indirectly using a representative sample group of publicly traded water utilities as a proxy for Sahuarita. Use of a sample is appropriate, as it reduces the sample error resulting from random fluctuations in the market at the time the information is gathered.

Q. What water utilities did Staff select for its proxy group of sample companies?

A. Staff's sample consists of the following six publicly-traded water utilities: American States Water, California Water, Aqua America, Connecticut Water Services, Middlesex Water and SJW Corp. Staff chose 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 Sahuarita's cost of equity?

A. Staff used two market-based models to estimate the cost of equity for Sahuarita: 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 six 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 December 9, 2015, as reported by *Yahoo Finance.*

Q. Why did Staff use the December 9, 2015, 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 relating to the stock, and as such reveals investors' expectations of future returns. Use of historical average stock prices illogically discounts the most recent information in favor of less recent information. The latter is obviously stale and is representative of underlying conditions that may have changed.

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 CSB-8. Staff calculated historical and projected

growth estimates on dividend-per-share ("DPS"),[2] earnings-per-share ("EPS")[3] 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, 2005-2014. As shown in Schedule CSB-5, the average historical DPS growth rate for the sample was 3.8 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, 2018-2020. The average projected DPS growth rate is 5.7 percent, as shown in Schedule CSB-5.

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, 2005-2014. As shown in Schedule CSB-5, the average historical EPS growth rate for the sample was 7.1 percent.

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[2] Derived from information provided by *Value Line*.
[3] Derived from information provided by *Value Line*.

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, 2018-2020. The average projected EPS growth rate is 5.1 percent, as shown in Schedule CSB-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 CSB-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 CSB-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, 2005-2014. As shown in Schedule CSB-6, the historical average retention (br) growth rate for the sample is 3.1 percent.

Q. How did Staff estimate its projected retention growth rate (br) for the sample water utilities?

A. Staff used the retention growth projections for the sample water utilities for the period, 2018-2020, from *Value Line*. As shown in Schedule CSB-6, the projected average retention growth rate for the sample companies is 4.6 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 2.3, notably higher than 1.0, as shown in Schedule CSB-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 developed by Myron Gordon and discussed in his book *The Cost of Capital to a Public Utility.*[4] 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).

[4] Gordon, Myron J. *The Cost of Capital to a Public Utility.* MSU Public Utilities Studies, Michigan, 1974. pp 31-35.

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:

$$v = 1 - \left(\frac{30}{45} \right)$$

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 1.7 percent for the sample water utilities, as shown in Schedule CSB-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, no portion of the funds raised from the sale of stock by the entity accrues to the benefit of existing shareholders because the *v* term is equal to zero; thus, the *vs* term is also equal to 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 sample 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 4.9 percent based on an analysis of earnings retention for the sample water companies. Staff's projected sustainable growth rate

is 6.3 percent based on retention growth projected by *Value Line*. Schedule CSB-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 5.5 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 CSB-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 CSB-3.

The Multi-Stage DCF

Q. Why did Staff implement the multi-stage DCF model to estimate Sahuarita'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 four-year duration, followed by the 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 internal rate of return (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 Lines*'s projected dividends for the next twelve months, when available, and on the average dividend growth (g) rate of 5.5 percent, calculated in Staff's constant DCF analysis for the remainder of the stage as shown on Schedule CSB-8.

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 2014.[5] 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 6.4 percent to estimate the stage-2 growth rate as shown on Schedule CSB-9.

Q. What is Staff's multi-stage DCF estimate for the sample utilities?

A. Staff's multi-stage DCF estimate is 9.0 percent, as shown in Schedule CSB-3.

Q. What is Staff's overall DCF estimate for the sample utilities?

A. Staff's overall DCF estimate is 8.6 percent. Staff calculated the overall DCF estimate by averaging the constant growth DCF (8.2%) and multi-stage DCF (9.0%) estimates, as shown in Schedule CSB-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 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. The model also assumes that investors will sufficiently diversify their investments to eliminate any non-systematic or unique risk.[6] In

[5] www.bea.doc.gov.

[6] 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.

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 did 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

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 the beta (β) coefficient, 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. As previously noted, 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 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 Sahuarita'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 CSB-7 shows the *Value Line* betas for each of the sample water utilities. The 0.73 average beta for the sample water utilities is Staff's estimated beta for Sahuarita. A security having a beta value of 0.73 is less volatile than the market as a whole, and thus requires a lower return on equity than does the overall 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 2015 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 1926-2014. Staff's historical market risk premium estimate is 7.6 percent, as shown in Schedule CSB-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 12.03 (2.30 + 9.73[7]) percent using the expected dividend yield (2.3 percent over the next twelve months) and the annual per share growth rate (12.03 percent) that *Value Line* projects for all dividend-paying stocks under its review[8] along with the current long-term risk-free rate (30-year Treasury note at 2.88 percent) and the market's average beta

[7] The three to five year price appreciation is 45%. $1.45^{0.25} - 1 = 9.73\%$.
[8] November 4, 2015 issue date.

of 1.0. Staff calculated the current market risk premium as 9.5 percent,[9] as shown in Schedule CSB-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 7.6 percent using the historical market risk premium CAPM and 9.5 percent using the current market risk premium CAPM as shown on Schedule CSB-3.

Q. What is Staff's overall CAPM estimate for the sample utilities?

A. Staff's overall CAPM cost of equity estimate is 8.6 percent which is the average of the historical market risk premium CAPM (7.6 percent) and the current market risk premium CAPM (9.5 percent) estimates, as shown in Schedule CSB-3.

VI. 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 CSB-3 shows the result of Staff's constant-growth DCF analysis. The result of Staff's constant-growth DCF analysis is as follows:

$$k = 2.7\% + 5.5\%$$

$$k = \mathbf{8.2\%}$$

Staff's constant-growth DCF estimate of the cost of equity for the sample water utilities is 8.2 percent.

[9] 12.03% = 2.88% + (1) (9.15%).

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 CSB-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	8.6%
California Water	9.3%
Aqua America	8.8%
Connecticut Water	9.3%
Middlesex Water	9.4%
SJW Corp	8.9%
York Water	9.0%
Average	**9.0%**

Staff's multi-stage DCF estimate of the cost of equity for the sample water utilities is 9.0 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 8.6 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 (9.0 percent) estimates, as shown in Schedule CSB-3.

Q. What is the result of Staff's historical market risk premium CAPM analysis to estimate the cost of equity for the sample utilities?

A. Schedule CSB-3 shows the result of Staff's CAPM analysis using the historical risk premium estimate. The result is as follows:

$$k = 2.1\% + 0.73 * 7.6\%$$

$$k = 7.6\%$$

Staff's CAPM estimate (using the historical market risk premium) of the cost of equity for the sample water utilities is 7.6 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 CSB-3 shows the result of Staff's CAPM analysis using the current market risk premium estimate. The result is:

$$k = 2.9\% + 0.73 * 9.2\%$$

$$k = 9.5\%$$

Staff's CAPM estimate (using the current market risk premium) of the cost of equity to the sample water utilities is 9.5 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 8.6 percent. Staff's overall CAPM estimate is the average of the historical market risk premium CAPM (7.6 percent) and the current market risk premium CAPM (9.5 percent) estimates, as shown in Schedule CSB-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	8.6%
Average CAPM Estimate	8.6%
Overall Average	**8.6%**

Staff's average estimate of the cost of equity to the sample water utilities is 8.6 percent. As previously noted, the full range of Staff's model-driven ROE range is 7.6 percent to 9.5 percent.

Q. Ms. Brown, in the recent past, Staff chose not to incorporate the results of its CAPM-based ROE in developing its overall ROE recommendation. Would you please explain why Staff has moved away from that previous position?

A. Yes. Staff has always calculated the CAPM Model-driven ROE range but effectively gave this result a zero weighting. The zero weighting approach was followed due to a noted divergence of the CAPM Model-driven results from the DCF Model-driven results.

As noted later in my cost-of-capital testimony, Staff is now analyzing two CAPM Models, giving equal weight to both and the result is a CAPM-driven ROE range that compliments the results of its DCF Model runs.

VII. FINANCIAL RISK AND ECONOMIC ASSESSMENT ADJUSTMENTS

Q. Has Staff discontinued the direct recognition of the financial risk and economic assessment adjustments in its cost of equity analysis?

A. Yes. Staff has moved to an approach to developing its ROE recommendation that it believes is more straight forward, conceptually sound, and simpler to understand.

Let me say again that while Staff's recommended revenue requirement is based upon a specific ROE recommendation, Staff also believes that defining a point-in-time specific fair and reasonable ROE can only realistically be achieved to the point of establishing an ROE range of reasonableness. Therefore, while Staff retains the right to evaluate and/or to argue considerations of relevance that might support a more specifically defined ROE, Staff generally believes that any ROE falling within the ROE range it will discuss in specific rate case dockets would constitute an acceptable Commission decision. I will expand upon this statement as I progress through my explanation of Staff's current approach to developing its ROE recommendations.

Q. Ms. Brown, please continue with your explanation of the structure and conceptual support for Staff's current approach to developing its ROE recommendations.

A. In a very broad sense, there are two general steps to developing an estimate of Staff's recommended ROE. These two steps are the use of acceptable ROE models to establish the currently defined market-driven requirements for ROE, and determining how to appropriately give consideration to more specific risk factors (collectively referred to as "other factors" or "more specific risk factors") not directly given attention in these models.

The ROE models referred to would include the traditionally recognized DCF and CAPM Models and variations of assumptions within the use of these Models. Discussions regarding the results from such Models are placed into evidence in most rate cases for Class A and B utilities, including the pending rate application filed by Liberty Sahuarita Sewer. Parties take differing positions with regards to some of the assumptions to be built into these Model runs, but Staff and Mr. Bourassa, on the part of Liberty, have already discussed these Model runs and the assumptions made, so I will not repeat that information here. How to appropriately

give consideration to more specific risk factors is really where Staff's current approach to developing its recommended ROE takes a different direction.

Q. Ms. Brown, before discussing the details and reasonableness of Staff's current approach to giving consideration to these more specific risk factors, can you identify the type of factors to which you are referring?

A. Yes. The factors would include separate ROE modifiers for such things as financial risk and the previous economic assessment adjustment. I would note that Mr. Bourassa spends a great deal of time identifying and discussing such risk factors, specifically on pages 40 through 42 of the cost-of-capital testimony he sponsors.

Mr. Bourassa then assigns a specific ROE modifier to some of these factors, such as his financial risk, which results in a 40 basis point reduction in ROE, but in general he recommends an arbitrary 100 basis point ROE upward adjustment to the conglomeration of all such risks he identifies and discusses. For the most part, as can be seen on Mr. Bourassa's Schedule D-4.1, the Model-driven results have all been and individually adjusted upward by 100 basis points.

Q. Does Staff believe that such other factors can exist that may not be addressed in the traditionally utilized ROE Models?

A. Yes.

Q. How does Staff's approach to giving consideration to such other factors differ from the approach taken by Mr. Bourassa?

A. First, let me say that, instead of capturing ROE adders (or ROE reductions) related to these factors in an arbitrary manner as Mr. Bourassa does, Staff believes it is reasonable for the

Commission to conclude that by using the mid-point of Staff's ROE Model results, reasonable recognition is already being given to the collective spectrum of such other risks.

To be honest, it is a bit disingenuous to suggest to the Commission, as Mr. Bourassa has done, that an exact 40 basis point ROE modifier is required for Sahuarita due to financial risk. Arguably, this could require a 39 basis point reduction, a 41 basis point reduction, or a 50 basis point reduction.

Staff's point here is really not to take issue with Mr. Bourassa's specific ROE basis point recommendations but to point out that, when it comes to developing an ROE recommendation, we are not dealing with an exact science. Staff believes its approach is reasonable and will probably eliminate lengthy discussions and cross examination regarding issues without one correct answer.

Q. Ms. Brown, before discussing Staff's specific arguments regarding the reasonableness of accepting the mid-point of the Model-driven ROE range as a fair accommodation of these other risk factors, please explain how Staff believes the Commission should view the results of the ROE range established through use of the traditional ROE Models.

A. When boiled down, the argument regarding the ROE range defined through use of these traditional ROE models is that any ROE falling within this range should be considered a reasonable ROE for alternative investments with similar risk considerations. Or, said another way, the lowest ROE resulting from the Model runs is just as valid or reasonable as any other ROE point defined by these Model runs.

Staff could have, but chose not to, structure its specific ROE recommendation based upon the lowest, but still reasonable, ROE resulting from these Model runs. Further, any movement above this low point represents an acknowledgement or concession to the other risk factors identified and discussed by Mr. Bourassa.

Q. Ms. Brown, to be clear, what was the lowest ROE resulting from the Model runs made by Staff?

A. As can be seen on Staff Schedule, CSB-3, the lowest ROE is 7.6 percent resulting from the CAPM Historic Market Risk Premium run.

Q. Ms. Brown, would this be a good point to again interject that your current testimony discussion go to how the Staff's ROE model-driven results would have been utilized but for the secondary decision to develop Staff's revenue requirement calculation utilizing the 9.5 percent upper end ROE of the Staff advocated ROE reasonableness range instead of using the mid-point of this ROE reasonableness range?

A. Yes.

Q. Ms. Brown, again for clarification, if Staff had utilized the mid-point of its ROE range to calculate Sahuarita's revenue requirement, how much higher would Staff's ROE recommendation be above this ROE low point?

A. The ROE used in Staff's revenue requirement schedules would have been 8.6 percent which, in essence, represents in a 100 basis point upward adjustment related to the other risk factors.

Q. And, again Ms. Brown, what was the ROE adder recommended by Mr. Bourassa?

A. As seen on Mr. Bourassa's Schedule D-4.1, the ROE adder recommended by Mr. Bourassa was 100 basis points, before factoring in a 40 basis point reduction attributable to Mr. Bourassa's financial risk arguments.

Q. So, would you agree, that effectively, Staff's much simpler approach to making reasonable accommodation for these other risk factors aligns very closely with the results recommended by Mr. Bourassa?

A. Yes. And again, we do not want to lose sight of the fact that Mr. Bourassa's approach, while involving a lot of detailed analysis, still relies upon some very arbitrary ROE modification recommendations, e.g., the required financial risk ROE modifier is exactly minus 40 basis points.

Q. Ms. Brown, are you aware of any other instances where Mr. Bourassa seems to suggest that using an approach which gives consideration to these other risk factors is very close to the manner being recommended by Staff?

A. Yes. In cost of capital testimony filed in both the pending Liberty Bella Vista rate case (Docket No. 15-0367) and in the pending Liberty Rio Rico Water and Wastewater rate cases (Docket No. 15-0368), page 6 line 14 through page 7, line 5, Mr. Bourassa seems to suggest that he followed an approach very similar to the approach Staff is now recommending. In response to a question regarding the "other risk factors" he considered in determining the appropriate ROE for these three utility divisions, Mr. Bourassa says:

> "I considered explicit adjustments to my ROE estimate for these factors and I did take them into consideration when determining **where, within the reasonableness range of analytical results** from the DCF, CAPM, and RPM models, the required ROE for each of the two utilities rightfully falls." [Emphasis supplied.]

Q. Ms. Brown, perhaps a question at this point would be, how the application of Staff's current approach to establishing a recommended ROE varies from utility to utility, if we assume that two rate filings were docketed and processed pretty much simultaneously?

A. Staff's ROE recommendations and the mid-point ROE utilized in Staff's revenue requirement schedules would be the same for both utilities.

Q. So, would that suggest that Staff has not recognized that even minor variances in the size, structure and operating characteristics can and do exist?

A. No. Staff understands that minor differences will always exist. But the Commission should be unpersuaded by suggestions that a more detailed analysis (and perhaps more costly analysis) increases, to any necessary degree, the precision of the results. Staff's approach is reasonable and is less burdened by unsubstantiated suggestions of preciseness that really do not exist.

Q. Ms. Brown, I would like to return to the initial caveat you expressed on behalf of Staff, i.e.,

> **"Staff also believes that defining a point-in-time specific fair and reasonable ROE can only realistically be achieved to the point of establishing an ROE range of reasonableness. Therefore, while Staff retains the right to evaluate and/or to argue considerations of relevance that might support a more specifically defined ROE, Staff generally believes that any ROE falling within the ROE range it will discuss in specific rate case dockets would constitute an acceptable Commission decision."**

By this caveat is Staff suggesting that the Commission should accept its approach to establishing an ROE but then continue to encourage parties to interject general

arguments regarding the recognition of ROE adders to accommodate other general risk factors?

A. No. Regulated utilities, especially smaller utilities, often raise concerns about the complexities, cost, and lack of transparency associated with the process employed to define a range of reasonableness for ROE. Staff shares, and understands these concerns and believes that steps to simplification should be given fair consideration. The caveat raised by Staff was not meant to suggest that Staff was only interested in injecting yet another layer of complexity into the process. Staff's intent was to acknowledge the broad discretion of the Commission to base its final ROE decision on the full range of evidence before it. On a case-by-case basis, any number of additional considerations, individually and collectively, could impact the Commission's ultimate ROE decision.

Q. Thank you Ms. Brown. Are there other modifications to Staff's development of its ROE recommendations that you would like to note?

A. Yes. Staff has incorporated in its analysis two versions of the CAPM (a model which links the COE to risk). As discussed in Section V, the CAPM is composed of a risk free rate and a risk premium. The risk premium is the additional return an investor is paid for assuming all types of risk above and beyond the risk free rate, which includes financial risk and all other compensation that was previously reflected by the economic assessment adjustment.

As shown on Schedule CSB-1, Staff's COE estimates a range from a low of 7.6 percent to a high of 9.5 percent. Staff believes that any point within this range is reasonable. However, Staff believes that the midpoint provides the best balance for all of the various types of risk. Staff's methodology simplifies the COE analysis and recognizes that the Commission could choose to set the ROE anywhere within the Staff recommended range.

VIII. RATE OF RETURN RECOMMENDATION

Q. What overall rate of return did Staff determine for Sahuarita?

A. Staff determined a 8.41 percent ROR for the Company, as shown in Schedule CSB-1 and the following table: (*this table needs to be pulled and replaced*)

Table 3

	Weight	Cost	Weighted Cost
Long-term Debt	20.57%	4.20%	0.86%
Common Equity	79.43%	8.60%	6.83%
Overall ROR			**7.69%**

Q. Does this conclude your direct testimony?

A. Yes, it does.

Sahuarita Water Company, Inc. 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 Capital Structure			
Debt	20.57%	4.20%	0.86%
Common Equity	79.43%	9.50%	7.55%
Weighted Average Cost of Capital			**8.41%**
Company Proposed Capital Structure			
Debt	20.57%	4.20%	0.86%
Common Equity	79.43%	10.50%	8.34%
Weighted Average Cost of Capital			**9.20%**

[D] : [B] x [C]
Supporting Schedules: CSB-3 and CSB-4.

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Sahuarita Water Company, Inc. 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			2.7%	+	5.5%	=	8.2%
Multi-Stage DCF Estimate						=	9.0%
Average DCF Estimate							**8.60%**
CAPM Method	Rf	+	β [3]	x	(Rp)	=	k
Historical Market Risk Premium [5]	2.1%	+	0.73	x	7.6% [6]	=	7.6%
Current Market Risk Premium [4]	2.9%	+	0.73	x	9.2% [7]	=	9.5%
Average CAPM Estimate							**8.60%**
					Staff's Estimated Cost of Equity		**8.6%**
					Economic Assessment Adjustment		0.0%
					Sub-Total		**8.60%**
					Financial Risk Adjustment		0.0%
					Total		**8.60%**

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 2015 Ibbotson SBBI Classic Yearbook data
7 Testimony

Sahuarita Water Company, Inc. Cost of Capital Calculation
Average Capital Structure of Sample Water Utilities

[A]	[B]	[C]	[D]
Company	Debt	Common Equity	Total
American States Water	38.7%	61.3%	100.0%
California Water	45.9%	54.1%	100.0%
Aqua America	50.3%	49.7%	100.0%
Connecticut Water	45.6%	54.4%	100.0%
Middlesex Water	44.3%	55.7%	100.0%
SJW Corp	54.7%	45.3%	100.0%
York Water	43.4%	56.6%	100.0%
Average Sample Water Utilities	**46.1%**	**53.9%**	**100.0%**
Sahuarita	**20.57%**	**79.43%**	**100.0%**

Source:
Sample Water Companies from Value Line

Sahuarita Water Company, Inc. Cost of Capital Calculation
Growth in Earnings and Dividends
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]
Company	Dividends Per Share 2005 to 2014 DPS[1]	Dividends Per Share Projected DPS[1]	Earnings Per Share 2005 to 2014 EPS[1]	Earnings Per Share Projected EPS[1]
American States Water	6.4%	6.7%	11.6%	6.5%
California Water	1.4%	8.3%	5.0%	5.4%
Aqua America	7.8%	9.7%	8.9%	6.6%
Connecticut Water	1.9%	5.2%	5.2%	3.2%
Middlesex Water	1.4%	2.3%	4.5%	3.6%
SJW Corp	3.9%	1.3%	8.5%	NA
York Water	3.9%	6.7%	6.1%	5.3%
Average Sample Water Utilities	**3.8%**	**5.7%**	**7.1%**	**5.1%**

1 Value Line

Sahuarita Water Company, Inc. Cost of Capital Calculation
Sustainable Growth
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]
Company	Retention Growth 2005 to 2014 br	Retention Growth Projected br	Stock Financing Growth vs	Sustainable Growth 2005 to 2014 br + vs	Sustainable Growth Projected br + vs
American States Water	4.6%	7.0%	1.6%	6.3%	8.6%
California Water	2.9%	3.6%	1.2%	4.0%	4.8%
Aqua America	4.3%	5.7%	1.2%	5.5%	6.8%
Connecticut Water	2.3%	4.1%	2.9%	5.2%	7.0%
Middlesex Water	1.6%	3.6%	1.7%	3.3%	5.3%
SJW Corp	4.0%	4.2%	0.9%	4.9%	5.1%
York Water	2.4%	3.8%	2.6%	5.0%	6.5%
Average Sample Water Utilities	**3.1%**	**4.6%**	**1.7%**	**4.9%**	**6.3%**

[B]: Value Line
[C]: Value Line
[D]: Value Line, Yahoo Finance, and Form 10-Ks filed with the Securities and Exchange Commission (http://www.sec.gov/)
[E]: [B]+[D]
[F]: [C]+[D]

Sahuarita Water Company, Inc. Cost of Capital Calculation
Selected Financial Data of Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[G]
Company	Symbol	Spot Price 11/4/2015	Book Value	Mkt To Book	*Value Line* Beta *b*	Raw Beta *braw*
American States Water	AWR	**40.89**	13.72	3.0	**0.70**	0.52
California Water	CWT	**22.67**	13.28	1.7	**0.75**	0.60
Aqua America	WTR	**29.26**	9.39	3.1	**0.75**	0.60
Connecticut Water	CTWS	**36.76**	20.87	1.8	**0.65**	0.45
Middlesex Water	MSEX	**25.24**	12.48	2.0	**0.75**	0.60
SJW Corp	SJW	**31.21**	17.05	1.8	**0.75**	0.60
York Water	YORW	**23.04**	8.59	2.7	**0.75**	0.60
Average				**2.3**	**0.73**	**0.57**

[C]: Msn Money
[D]: Value Line
[E]: [C] / [D]
[F]: Value Line
[G]: (-0.35 + [F]) / 0.67

Sahuarita Water Company, Inc. Cost of Capital Calculation
Calculation of Expected Infinite Annual Growth in Dividends
Sample Water Utilities

[A]	[B]
Description	g
DPS Growth - Historical[1]	3.8%
DPS Growth - Projected[1]	5.7%
EPS Growth - Historical[1]	7.1%
EPS Growth - Projected[1]	5.1%
Sustainable Growth - Historical[2]	4.9%
Sustainable Growth - Projected[2]	6.3%
Average	**5.5%**

1 Schedule CSB-5
2 Schedule CSB-6

Sahuarita Water Company, Inc. 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] 11/4/2015	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	40.9	0.90	0.95	1.00	1.05	6.4%	8.6%
California Water	22.7	0.67	0.71	0.75	0.79	6.4%	9.3%
Aqua America	29.3	0.70	0.74	0.78	0.82	6.4%	8.8%
Connecticut Water	36.8	1.08	1.14	1.20	1.27	6.4%	9.3%
Middlesex Water	25.2	0.77	0.81	0.86	0.90	6.4%	9.4%
SJW Corp	31.2	0.78	0.83	0.87	0.92	6.4%	8.9%
York Water	23.0	0.60	0.63	0.67	0.70	6.4%	9.0%

$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n} \cdot \left[\frac{1}{(1+K)}\right]^n$$

Average **9.0%**

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 CSB-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

Sahuarita Water Company, Inc. Cost of Capital Calculation
Capitalization

	Interest Rate	Annual Interest	Amount outstanding as of 12/31/2014	Percentage of Capital Structure
Long-Term Debt				
WIFA Loan	4.20%	$ 97,693	$ 2,326,035	
Long-Term Debt		$ 97,693	$ 2,326,035	20.57%
Short-Term Debt		$ -		0.00%
Total Debt	4.20%	$ 97,693	$ 2,326,035	20.57%
Common Equity			$ 8,982,660	
Common Shares Outstanding				
Paid in Capital				
Retained Earnings				
Total Common Equity			$ 8,982,660	79.43%
Total Capitalization			$ 11,308,695	100.00%

EXHIBIT
S-3

BEFORE THE ARIZONA CORPORATION COMMISSION

DOUG LITTLE
Interim Chairman
BOB STUMP
Commissioner
BOB BURNS
Commissioner
TOM FORESE
Commissioner

IN THE MATTER OF THE APPLICATION OF SAHUARITA WATER COMPANY, LLC AN ARIZONA WATER CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PROPERTY AND FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES.	)	DOCKET NO. W-03718A-15-0213

DIRECT

TESTIMONY

OF

TERESA B. HUNSAKER

PUBLIC UTILITIES ANALYST

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

JANUARY 15, 2016

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EXECUTIVE SUMMARY
SAHUARITA WATER COMPANY, LLC
DOCKET NO. W-03718A-15-0213

Sahuarita Water Company, LLC ("SWC" or "Company") is an Arizona Limited Liability Company engaged in the business of providing water utility services in Sahuarita, Arizona. The Company served approximately 5,500 customers during the test year ended December 31, 2014. The Company's original Certificate of Convenience and Necessity Application was approved in Decision No. 59431 dated December 28, 1995. The Company's current authorized rates and charges were determined in Decision No. 72177 dated February 11, 2011.

RATE APPLICATION:

The Company proposes an increase of $332,734, or 11.49 percent, over test year revenue of $2,896,746 to $3,229,480. The Company's proposal results in operating income of $855,419 for a 9.20 percent rate of return on its proposed original cost rate base ("OCRB") of $9,298,032.

Staff recommends rates that would increase operating revenue by $70,562, or 2.44 percent over test year revenue of $2,896,746 to $2,967,308 resulting in operating income of $738,256 for an 8.41 percent rate of return. Staff recommends an OCRB of $8,778,456.

CENTRAL ARIZONA GROUND WATER REPLENISHMENT DISTRICT ("CAGRD"):

Staff recommends that the Company continue the CAGRD adjustor mechanism authorized in Decision No. 72177 dated February 11, 2011.

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Teresa B. Hunsaker. I am a Public Utilities Analyst III employed by the Arizona Corporation Commission ("ACC" or "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. In my capacity as a Public Utilities Analyst I analyze and examine accounting, financial, statistical and other information included in utility rate, financing and other applications. In addition, I prepare written reports based on my analyses and present Staff's recommendations to the Commission on utility revenue requirements, rate design and other issues. 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 Accounting from the University of Nevada, Las Vegas and an Associate Degree in Business Management from Clark County Community College. I have attended the National Association of Regulatory Utility Commissioners ("NARUC") Utilities Rate School which presents general regulatory and business issues. I joined the Commission as a Public Utilities Analyst in October of 2013. Prior to employment with the Commission, I worked in several different accounting and auditing positions for more than 25 years.

Q. What is the scope of your testimony in this case?

A. I am presenting Staff's analysis and recommendations regarding Sahuarita Water Company, LLC's ("SWC" or "Company") application for a permanent increase in its rates and charges for water utility service within Pima County, Arizona. I am presenting testimony and

schedules addressing rate base, operating revenues and expenses, revenue requirement, and will file additional direct testimony regarding rate design later. Staff witness, Ms. Crystal Brown, is presenting Staff's cost of capital analysis. Mr. Michael Thompson is presenting Staff's engineering analysis and related recommendations.

Q. What is the basis of your testimony in this case?

A. I performed a regulatory audit of the Company's application and records. The regulatory audit consisted of examining and testing 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 review the background of this application.

A. The Company is an Arizona Limited Liability Company ("LLC") engaged in the business of providing water utility services in Sahuarita, Arizona. The Company served approximately 5,500 customers during the test year ended December 31, 2014. The Company's original Certificate of Convenience and Necessity application was approved in Decision No. 59431 dated December 28, 1995. The Company's current authorized rates and charges were determined in Decision No. 72177 dated February 11, 2011.

Q. Why did the Company file this rate case?

A. Pursuant to Decision No. 74389, the Company was ordered to file a permanent rate case application by no later than June 30, 2015, using a 2014 calendar year test year.

CONSUMER SERVICES

Q. Please provide a brief history of customer complaints received by the Commission regarding the Company. Additionally, please discuss customer responses to the Company's proposed rate increase.

A. A review of the Commission's Consumer Services database for the Company from January 1, 2012, to November 23, 2015, revealed the following:

2012 through 2014 – Zero complaints, inquiries and opinions.

2015 – Two complaints (two disconnect/termination) and zero opinions.

All complaints and inquiries have been resolved and closed.

COMPLIANCE

Q. Please provide a summary of the compliance status of the Company.

A. A check of the ACC's Compliance database indicates that there are currently no delinquencies for the Company.

SUMMARY OF FILING, RECOMMENDATIONS, AND ADJUSTMENTS

Q. Please summarize the Company's proposals in this filing.

A. The Company proposes an increase of $332,734, or 11.49 percent, over test year revenue of $2,896,746, to $3,229,480. The Company's proposal results in operating income of $855,419 for a 9.20 percent rate of return on its proposed original cost rate base ("OCRB") of $9,298,032.

Q. Please summarize Staff's recommendations.

A. Staff recommends rates that would increase operating revenue by $70,562, or 2.44 percent over test year revenue of $2,896,746 to $2,967,308 resulting in operating income of $738,256 for an 8.41 percent rate of return. Staff recommends an OCRB of $8,778,456.

Q. What test year did the Company use in this filing?

A. The Company's rate filing is based on the twelve months ended December 31, 2014 ("test year").

Q. Please summarize the rate base adjustments addressed in your testimony.

A. My testimony addresses the following issues:

Plant Reclassifications – This adjustment reclassifies Water Treatment Equipment and Distribution Reservoirs and Standpipes to the plant sub-categories.

Plant Retirement – This adjustment decreases Plant in Service by $575,005 due to retirement of the original arsenic absorption media investment.

Post-Test Year Plant – This adjustment decreases Plant in Service by $1,650 due to the cost of the arsenic absorption media regeneration being lower that originally estimated.

Accumulated Depreciation – This adjustment decreases accumulated depreciation by $57,079 based upon the adjustments Staff made to Plant in Service.

Q. Please summarize the operating revenue and expense adjustments addressed in your testimony.

A. My testimony addresses the following issues:

Expenses Reclassification – This adjustment reclassifies expenses from repairs and maintenance for water testing of $6,584 and contractual service – other of $1,020 to contractual services – water testing.

Contractual Services - Other Expense – This adjustment decreases contractual services – other expense by $9,983 to reclassify workman's compensation to management fees.

Management Fees Expense – This adjustment decreases Management Services by $28,894 to remove expenses attributable to 2013 that were recorded and paid in the test year, employee bonuses with payroll taxes for non-dedicated and dedicated employees, and to include the reclassification of the workman's compensation from contractual services – other expenses.

Water Testing Expense – This adjustment increases water testing expense by $1,030 to reflect Staff's Engineer's recommended annual water testing costs.

Rate Case Expense – This adjustment decreases rate case expense by $20,000 to reflect Staff's normalization over 5 years.

Depreciation Expense – This adjustment decreases depreciation expense by $43,225 to reflect application of Staff's recommended depreciation rates to Staff recommended plant amounts.

Property Tax Expense – This adjustment has no increase to the adjusted property taxes to Staff's adjusted test year revenues. However, there is an increase due to Staff's recommended revenues requirement.

Income Tax Expense – This adjustment increases income tax expense by $17,532 to reflect application of the Company's income tax rates as provided on the Company's Schedule C-3, Page 2 for this LLC to Staff's adjusted test year taxable income.

RATE BASE

Fair Value Rate Base

Q. Did the Company prepare a schedule showing the elements of Reconstruction Cost New Rate Base?

A. No. The Company's filing treats the OCRB the same as the Fair Value Rate Base ("FVRB").

Rate Base Summary

Q. Please summarize Staff's adjustments to the Company's rate base shown on Schedules TBH-3 and TBH-4.

A. Staff's adjustments to the Company's rate base resulted in a net decrease of $519,576, from $9,298,032 to $8,778,456. This net decrease was primarily due to: (1) reclassification of water treatment equipment and distribution reservoirs and standpipes, (2) the retirement of the original arsenic absorption media, and (3) an adjustment to accumulated depreciation.

Rate Base Adjustment No. 1 – Plant Reclassification

Q. Did Staff reclassify plant to the appropriate classifications?

A. Yes, Staff reclassified and moved $2,001,053 from Water Treatment Equipment in Acct. No. 320 to the appropriate sub-accounts of Water Treatment Equipment into Acct. No. 320.1 in the amount of $1,379,569, Solution Chemical Feeders into Acct. No. 320.2 into the amount of $46,479 and Arsenic Media into Acct. No. 320.3 in the amount of $575,005, as shown on Schedule TBH-5. Staff reclassified and moved $1,848,872 from Distribution Reservoirs and Standpipes in Acct. No. 330 to the appropriate sub-accounts of Storage Tanks into Acct. No. 330.1 in the amount of $1,811,998 and Pressure Tanks into Acct. No. 330.2 in the amount of $36,874, as shown on Schedule TBH-5.

Q. What is Staff's recommendation?

A. Staff recommends the reclassification of plant to the appropriate classifications, as shown on Schedules TBH-4 and TBH-5.

Rate Base Adjustment No. 2 – Plant Retirement

Q. Did Staff make an adjustment for arsenic absorption media included in Water Treatment Plant Equipment?

A. Yes. Staff identified $575,005 in arsenic absorption media that was misclassified to Water Treatment Plant as shown in Rate Base Adjustment No. 1 on Schedules TBH-4 and TBH-5.

Q. Did Staff determine that this plant should have been retired?

A. Yes. Staff reviewed the invoices and expenses from the last rate case to the current period and found that the original batches of arsenic absorption media have since been replaced or regenerated. Therefore, Staff determined that the Company should have retired the original arsenic absorption media investment when the Company began regenerating or replacing the arsenic absorption media.

Q. What is Staff's recommendation?

A. Staff recommends decreasing plant in service account 320.3 arsenic absorption media by $575,005, as shown on Schedules TBH-4 and TBH-6.

Rate Base Adjustment No. 3 – Post –Test Year Plant

Q. Did Staff make an adjustment to the post-test year plant additions requested by the Company?

A. Yes. Staff adjusted the post-test year plant for the arsenic absorption media plant additions of $152,307 to the actual expense of $150,657 resulting in a net decrease of $1,650.

Q. What is Staff's recommendation?

A. Staff recommends decreasing plant in service account 320.3 arsenic absorption media by $1,650, as shown on Schedules TBH-4 and TBH-7.

Rate Base Adjustment No. 4 – Accumulated Depreciation

Q. Did Staff make an adjustment to accumulated depreciation?

A. Yes. Staff adjusted accumulated depreciation to reflect the application of depreciation to the Staff-recommended plant balances.

Q. What is Staff's recommendation?

A. Staff recommends decreasing accumulated depreciation by $57,079, from $6,309,380 to $6,252,301, as shown on Schedules TBH-4 and TBH-8.

OPERATING INCOME

Operating Income Summary

Q. What are the results of Staff's analysis of test year revenues, expenses, and operating income?

A. Staff's analysis resulted in test year operating revenues of $2,896,746, adjusted operating expenses of $2,215,202 and adjusted operating income of $681,544, as shown on Schedules TBH-10 and TBH-11. Staff made nine ~~eight~~ adjustments to operating expenses.

Operating Income Adjustment No. 1 – Expenses Reclassification

Q. Did Staff make an adjustment for repairs and maintenance expense?

A. Yes. Staff decreased repairs and maintenance expense by $6,584 due to the Company inadvertently classifying water testing expenses in that account.

Q. Did Staff make an adjustment for contract services – other expense?

A. Yes. Staff decreased contract services - other expense by $1,020 due to the Company inadvertently classifying water testing expenses in that account.

Q. What is Staff's recommendation?

A. Staff recommends decreasing repairs and maintenance expense by $6,584 and contract services – other expense by $1,020 and reclassifying $7,604 to contractual services – water testing, as shown on Schedules TBH-11 and TBH-12.

Operating Income Adjustment No. 2 – Contractual Services – Other Expense

Q. Did Staff make an adjustment for contractual services – other expense?

A. Yes. Staff decreased contractual services - other expense by $9,983 due to reclassifying workman's compensation in the amount of $9,983 to management fees in Acct No. 634.

Q. What is Staff's recommendation?

A. Staff recommends decreasing contractual services - other expense by $9,983, as shown on Schedules TBH-11 and TBH-13.

Operating Income Adjustment No. 3 – Management Fees Expense

Q. Did Staff make an adjustment for management fees expense?

A. Yes. Staff decreased the management fees expense paid to Rancho Sahuarita Management Company ("RSMC") by $28,894 due to removal of the management fees expenses attributable to 2013 that were recorded and paid in the test year in the amount of $17,407, removal of the employee bonuses for both non-dedicated and dedicated contract employees in the amount of $21,470, and the addition of the reclassification of workman's compensation

in the amount of $9,983. RSMC has steadily increased the salaries of the contract employees over the years as their duties and responsibilities have changed.

Q. Why did Staff make this adjustment to contract employee bonuses?

A. Paying bonuses to non-dedicated and dedicated contract employees covered by RSMC is not necessary to the provision of water services.

Q. What is Staff's recommendation?

A. Staff recommends decreasing management fees expense by $28,894, as shown on Schedules TBH-11 and TBH-14.

Operating Income Adjustment No. 4 – Water Testing Expense

Q. Did Staff make an adjustment for water testing expense?

A. Yes. Staff increased water testing expense by $1,030.

Q. Why did Staff make this adjustment?

A. Staff increased water testing expense based on the determination contained in the Staff Engineering Report on Table M.

Q. What is Staff's recommendation?

A. Staff recommends increasing water testing expense by $1,030, from $12,945 (after Staff's adjustments to water testing) to $13,975, as shown on Schedules TBH-11 and TBH-15.

Operating Income Adjustment No. 5 – Rate Case Expense

Q. What did the Company propose for rate case expense?

A. The Company proposed annual rate case expense of $50,000, calculated by normalizing the anticipated total expense of $250,000 over 5 years.

Q. Did Staff make an adjustment to expected level rate case expense that should be recovered from ratepayers?

A. Yes.

Q. Why did Staff make this adjustment?

A. The Company's anticipated total cost of $250,000 was equivalent to the level of costs incurred to process the previous SWC rate case. However, Staff determined that the Company's present rate case is less complex than the last rate case. Therefore, Staff reduced the total rate case expense to $150,000 to be normalized over a 5 year period.

Q. What is Staff's recommendation?

A. Staff recommends decreasing annual rate case expense by $20,000, from $50,000 to $30,000, as shown on Schedules TBH-11 and TBH-16, to reflect normalization over 5 years.

Operating Income Adjustment No. 7 – Depreciation Expense

Q. Did Staff make an adjustment to depreciation expense?

A. Yes. As a result of adjustments made to plant in service, Staff also adjusted the associated depreciation expense.

Q. What is Staff's recommendation?

A. Staff's adjustment decreases depreciation expense by $43,225, from $721,109 to $677,884. Please see Schedules TBH-11 and TBH-18 for Staff's calculation.

Operating Income Adjustment No. 8 – Property Tax Expense

Q. Did Staff make an adjustment to test year Property Tax Expense?

A. No. There is no adjustment to property taxes based on Staff's adjusted test year revenue. However, there is an increase due to Staff's recommended revenue requirement. Property tax expenses for the test year and recommended revenues are shown on Schedules TBH-11 and TBH-19.

Operating Income Adjustment No. 9 – Income Tax Expense

Q. Did Staff make an adjustment to test year Income Tax Expense?

A. Yes. Staff applied the Company's income tax rates as provided on the Company's Schedule C-3, Page 2 for this LLC to Staff's adjusted test year taxable income. Income tax expenses for the test year and recommended revenues are shown on Schedules TBH-11 and TBH-20.

Q. Does this conclude your direct testimony?

A. Yes, it does.

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Schedule TBH-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	[A] COMPANY ORIGINAL COST	[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	$9,298,032	$8,778,456
2	Adjusted Operating Income (Loss)	$598,003	$681,544
3	Current Rate of Return (L2 / L1)	6.43%	7.76%
4	Required Rate of Return	9.20%	8.41%
5	Required Operating Income (L4 * L1)	$855,419	$738,256
6	Operating Income Deficiency (L5 - L2)	$257,416	$56,713
7	Gross Revenue Conversion Factor	1.2926	1.2442
8	Required Revenue Increase (L7 * L6)	$332,734	$70,562
9	Adjusted Test Year Revenue	$2,896,746	$2,896,746
10	Proposed Annual Revenue (L8 + L9)	$3,229,480	$2,967,308
11	Required Increase in Revenue (%)	11.49%	2.44%

References:
Column [A]: Company Schedule B-1
Column [B]: Staff Schedules OCRB, GRCF, TYOI & COC

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Schedule TBH-2

GROSS REVENUE CONVERSION FACTOR

Line No.	Description	[A]	[B]	[C]	[D]	[E]	[F]
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollectible Factor (Line 11)	0.0000%					
3	Revenues (L1 - L2)	100.0000%					
4	Combined Federal and State Income Tax and Property Tax Rate (L23)	19.6267%					
5	Subtotal (L3 - L4)	80.3733%					
6	**Revenue Conversion Factor (L1 / L5)**	1.244194					
	Calculation of Uncollectible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (L17)	18.1684%					
9	One Minus Combined Income Tax Rate (L7 - L8)	81.8316%					
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	2.8592%					
14	Federal Taxable Income (L12 - L13)	97.1408%					
15	Applicable Federal Income Tax Rate (L55 Col F)	15.7598%					
16	Effective Federal Income Tax Rate (L14 * L15)	15.3092%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		18.1684%				
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	18.1684%					
20	One Minus Combined Income Tax Rate (L18 - L19)	81.8316%					
21	Property Tax Factor	1.7821%					
22	Effective Property Tax Factor (L20 * L21)		1.4583%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17 + L22)			19.6267%			
24	Required Operating Income (Schedule TBH-1, L5)	$ 738,256					
25	Adjusted Test Year Operating Income (Loss) (Schedule TBH-10, L32)	$ 681,544					
26	Required Increase in Operating Income (L24 - L25)		$ 56,713				
27	Income Taxes on Recommended Revenue (Col. [F], L52)	$ 144,546					
28	Income Taxes on Test Year Revenue (Col. [C], L52)	$ 120,232					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 24,314				
30	Recommended Revenue Requirement (Schedule TBH-1, L10)	$ 2,967,308					
31	Uncollectible Rate (L10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$0					
33	Adjusted Test Year Uncollectible Expense	$0					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$0				
35	Property Tax with Recommended Revenue (Schedule TBH-19, L19)	$155,820					
36	Property Tax on Test Year Revenue (Schedule TBH-19, L20)	$154,562					
37	Increase in Property Tax Due to Increase in Revenue (L35 - L36) (Schedule TBH-19, L21)		$ 1,257				
38	Total Required Increase in Revenue (L26 + L29 + L34 +L37)	$82,285					

		(A)	(B)	(C)	(D)	[E]	[F]
		Test Year			Staff Recommended		
		Total		Water	Total		Water
	Calculation of Income Tax:						
39	Revenue	$2,896,746		$2,896,746	$2,967,308		$2,967,308
40	Operating Expenses Excluding Income Taxes	2,094,972		2,094,972	2,096,229		2,096,229
41	Synchronized Interest (L47)	75,495		75,495	75,495		75,495
42	Arizona Taxable Income (L39 - L40 - L41)	$ 726,279		$ 726,279	$ 795,584		$ 795,584
43	Arizona State Effective Income Tax Rate (see Company Schedule C-3, Page 2)	2.7401%		2.7401%	2.8592%		2.8592%
44	Arizona Income Tax (L42 * L43)	$ 19,901		$ 19,901	$ 22,747		$ 22,747
45	Federal Taxable Income (L42 - L44)	$ 706,379		$ 706,379	$ 772,836		$ 772,836
46	Federal Tax Rate (see Company Schedule C-3, Page 2)	14.2034%		14.2034%	15.7598%		15.7598%
47	Federal Tax	$ 100,330		$ 100,330	$ 121,797		$ 121,797
48							
49							
50							
51							
52							
53	Total Federal Income Tax	$ 100,330		$ 100,330	$ 121,797		$ 121,797
54	Combined Federal and State Income Tax (L35 + L42)	$ 120,232		$ 120,232	$ 144,546		$ 144,546

55	COMBINED Applicable Federal Income Tax Rate [Col. [D], L53 - Col. [A], L53] / [Col. [D], L45 - Col. [A], L45]	32.3028%	
56	Applicable Federal Income Tax Rate [Col. [F], L53 - Col. [C], L53] / [Col. [F], L45 - Col. [C], L45]		32.3028%
57	Applicable State Income Tax Rate [Col. [F], L44 - Col. [C], L44] / [Col. [F], L42 - Col. [C], L42]		4.1073%

		Wastewater	Water
	Calculation of Interest Synchronization:		
58	Rate Base	$0	$8,778,456
59	Weighted Average Cost of Debt	0.0000%	0.8600%
60	Synchronized Interest (L59 * L60)	$0	$75,495

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Schedule TBH-3

RATE BASE - ORIGINAL COST/FAIR VALUE

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	REF	[C] STAFF AS ADJUSTED
1	Plant in Service	$27,468,728	($576,655)	1,2,3	$26,892,073
2	Less: Accumulated Depreciation	6,309,380	(57,079)	4	6,252,301
3	Net Plant in Service	$21,159,348	(519,576)		$20,639,772
	LESS:				
4	Net Contribution in Aid-of Construction (CIAC)	$6,335,865	$0		$6,335,865
5	Advances in Aid of Construction (AIAC)	5,189,497	0		5,189,497
6	Customer Deposits	52,876	0		52,876
7	Deferred Income Tax Credits	283,077	0		283,077
	Total Deductions	$11,861,315	$0		$11,861,315
	ADD:				
8	Unamortized Finance Charges	$0	$0		$0
9	Deferred Tax Assets	0	0		0
10	Allowance for Working Capital	0	0		0
11	Rounding	(1)	0		(1)
	Total Additions	($1)	$0		($1)
12	**Original Cost Rate Base**	**$9,298,032**	**(519,576)**		**$8,778,456**

References:
Column [A]: Company Schedule B-1
Column [B]: Schedule TBH-4
Column [C]: Column [A] + Column [B]

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Schedule TBH-4

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Plant Reclass ADJ No. 1	[C] Plant Retirement ADJ No. 2	[D] Post-Test Year ADJ No. 3	[E] Accum. Dep. ADJ No. 4	[F] Not Used ADJ No. 5	[G] STAFF ADJUSTED
				Ref: Sch TBH-5	Ref: Sch TBH-6	Ref: Sch TBH-7	Ref: Sch TBH-8	Ref: Sch TBH-9	
		PLANT IN SERVICE:							
1	301	Organization Costs	$7,541	$0	$0	$0	$0	$0	$7,541
2	302	Franchise Costs	352,403	0	0	0	0	0	352,403
3	303	Land & Land Rights	13,636	0	0	0	0	0	13,636
4	304	Structures & Improvements	401,832	0	0	0	0	0	401,832
5	307	Wells & Springs	2,142,644	0	0	0	0	0	2,142,644
6	310	Power Generation Equipment	549,708	0	0	0	0	0	549,708
7	311	Electric Pumping Equipment	195,407	0	0	0	0	0	195,407
8	320	Water Treatment Equipment	2,001,053	(2,001,053)	0	0	0	0	0
9	320.1	Water Treatment Plants	0	1,379,569	0	0	0	0	1,379,569
10	320.2	Solutions & Feeders	0	46,479	0	0	0	0	46,479
	320.3	Arsenic Media	152,307	575,005	(575,005)	(1,650)	0	0	150,657
11	330	Distribution Reservoirs & Standpipes	1,848,872	(1,848,872)	0	0	0	0	0
12	330.1	Storage Tank	0	1,811,998	0	0	0	0	1,811,998
13	330.2	Pressure Tanks	0	36,874	0	0	0	0	36,874
14	331	Transmission & Distribution Mains	13,281,053	0	0	0	0	0	13,281,053
15	333	Services	2,256,719	0	0	0	0	0	2,256,719
16	334	Meters & Meter Installations	1,489,172	0	0	0	0	0	1,489,172
17	335	Hydrants	732,251	0	0	0	0	0	732,251
18	336	Backflow Prevention Devices	1,660	0	0	0	0	0	1,660
19	339	Other Plant & Misc. Equip.	0	0	0	0	0	0	0
20	340	Office Furniture & Fixtures	160,855	0	0	0	0	0	160,855
21	340.1	Computer & Software	122,607	0	0	0	0	0	122,607
22	341	Transportation Equipment	139,706	0	0	0	0	0	139,706
23	342	Store Equipment	0	0	0	0	0	0	0
24	343	Tools & Work Equipment	37,840	0	0	0	0	0	37,840
25	344	Laboratory Equipment	132	0	0	0	0	0	132
26	345	Power Operated Equipment	0	0	0	0	0	0	0
27	345	Communications Equipment	577,721	0	0	0	0	0	577,721
28	347	Miscellaneous Equipment	695	0	0	0	0	0	695
29	348	Other Intangibles	1,002,914	0	0	0	0	0	1,002,914
30		Gross Utility Plant in Service	$27,468,728	$0	($575,005)	($1,650)	$0	$0	$26,892,073
31		Less: Accumulated Depreciation	6,309,380	0	0	0	(57,079)	0	6,252,301
32		Net Utility Plant in Service (L29 - L30)	$21,159,348	$0	($575,005)	($1,650)	$57,079	$0	$20,639,772
		DEDUCTIONS							
33		Contributions in Aid of Construction (CIAC)	$7,712,717	$0	$0	$0	$0	$0	$7,712,717
34		Less: Accumulated Amortization	1,376,852	0	0	0	0	0	1,376,852
35		Net CIAC (L32 - L33)	$6,335,865	$0	$0	$0	$0	$0	$6,335,865
36		Advances in Aid of Construction (AIAC)	5,189,497	0	0	0	0	0	5,189,497
37		Customer Meter Deposits	52,876	0	0	0	0	0	52,876
38		Deferred Income Tax Credits	283,077	0	0	0	0	0	283,077
39		Total Deductions	$11,861,315	$0	$0	$0	$0	$0	$11,861,315
		ADDITIONS:							
40		Unamortized Finance Charges	$0	$0	$0	$0	$0	$0	$0
41		Deferred Tax Assets	0	0	0	0	0	0	0
42		Allowance for Working Capital	0	0	0	0	0	0	0
43		Rounding	(1)	0	0	0	0	0	(1)
44		Total Additions	($1)	$0	$0	$0	$0	$0	($1)
45		**ORIGINAL COST RATE BASE**	$9,298,032	$0	($575,005)	($1,650)	$57,079	$0	$8,778,456

ADJ No.	Schedule
1	TBH-5
2	TBH-6
3	TBH-7
4	TBH-8
5	TBH-9

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Schedule TBH-5

RATE BASE ADJUSTMENT NO. 1 - Plant Reclassification

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJUSTMENT	[C] STAFF ADJUSTED
1	Water Treatment Equipment	$2,001,053	($2,001,053)	$0
2	Water Treatment Plants	0	1,379,569	1,379,569
3	Solutions & Feeders	0	46,479	46,479
4	Arsenic Media	152,307	575,005	727,312
5	Distribution Reservoirs & Standpipes	1,848,872	(1,848,872)	0
6	Storage Tank	0	1,811,998	1,811,998
7	Pressure Tanks	0	36,874	36,874

REFERENCES:
Column [A]: Company Schedule B-2
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

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Schedule TBH-6

RATE BASE ADJUSTMENT NO. 2 - Plant Retirement

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJUSTMENT	[C] STAFF ADJUSTED
1	Arsenic Media Retirement (original)	$0	($575,005)	($575,005)
2	Total	$0	($575,005)	($575,005)

REFERENCES:
Column [A]: Company Schedule B-2
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

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Schedule TBH-7

RATE BASE ADJUSTMENT NO. 3 - Post-Test Year Plant

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJUSTMENT	[C] STAFF ADJUSTED
1	Arsenic Media Retirement (regeneration)	$152,307	($1,650)	$150,657

REFERENCES:
Column [A]: Company Schedule B-2
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

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Schedule TBH-8

RATE BASE ADJUSTMENT NO. 4 - Accumulated Depreciation

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJUSTMENT	[C] STAFF ADJUSTED
1	Accumulated Depreciation	$6,309,380	($57,079)	$6,252,301

REFERENCES:
Column [A]: Company Schedule B-2
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

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Schedule TBH-9

RATE BASE ADJUSTMENT NO. 5 - NOT USED				
LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Not Used	$0	$0	$0
2	Total	$0	$0	$0

References:
Column [A]: Company Schedule C-2 & Workpapers
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

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Schedule TBH-10

OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND STAFF RECOMMENDED

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY ADJUSTED TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	REF	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1		*REVENUES:*						
2	461	Metered Water Sales	$2,843,219	$0		$2,843,219	$70,562	$2,913,781
3	460	Water Sales - Unmetered	0	0		0	0	0
4	474	Other Operating Revenue	53,527	0		53,527	0	53,527
5		**Total Operating Revenues**	$2,896,746	$0		$2,896,746	$70,562	$2,967,308
6		*OPERATING EXPENSES:*						
7	601	Salaries & Wages	$0	$0		$0	$0	$0
8	610	Purchased Water	5,265	0		5,265	0	5,265
9	615	Purchased Power	138,933	0		138,933	0	138,933
10	618	Chemicals	14,734	0		14,734	0	14,734
11	620	Repairs & Maintenance	102,989	(6,584)	1	96,406	0	96,406
12	621	Office Supplies & Expense	0	0		0	0	0
13	630	Contract Services - Accounting	13,497	0		13,497	0	13,497
14	633	Contract Services - Legal	10,603	0		10,603	0	10,603
15	631	Contract Services - Eng	7,968	0		7,968	0	7,968
16	636	Contract Services - Other	126,034	(11,003)	1, 2	115,031	0	115,031
17	634	Management Fees	765,161	(28,894)	3	736,267	0	736,267
18	635	Contractual Services - Water Testing	5,341	8,634	1, 4	13,975	0	13,975
19	641	Rents	1,666	0		1,666	0	1,666
20	650	Transportation Expense	20,650	0		20,650	0	20,650
21	657	Insurance - General Liability	17,137	0		17,137	0	17,137
22	659	Insurance - Health & Life	0	0		0	0	0
23	666	Regulatory Commission Expense - Rate Case	50,000	(20,000)	5	30,000	0	30,000
24	675	Miscellaneous Expense	29,504	0		29,504	0	29,504
25	670	Bad Debt Expense	541	0		541	0	541
26	403	Depreciation Expense	721,109	(43,225)	7	677,884	0	677,884
27	408	Taxes Other than Income	10,350	0		10,350	0	10,350
28	408.11	Property Taxes	154,562	0	8	154,562	1,257	155,820
29	409	Income Tax	102,700	17,532	9	120,232	24,314	144,546
30		Rounding	(1)	0		(1)	0	(1)
31		**Total Operating Expenses**	$2,298,743	($83,541)		$2,215,202	$25,572	$2,240,774
32		**Operating Income (Loss)**	$598,003	$83,541		$681,544	$44,990	$726,534

References:
Column [A]: Company Schedule C-1
Column [B]: Schedule TBH-11
Column [C]: Column [A] + Column [B]
Column [D]: Schedules TBH-1, TBH-2 and TBH-18
Column [E]: Column [C] + Column [D]

SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
Test Year December 31, 2014

Schedule TBH-11

SUMMARY OF OPERATING INCOME STATEMENT ADJUSTMENTS - TEST YEAR

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Expenses Reclass ADJ No. 1 Ref: Sch TBH-12	[C] Contract Services ADJ No. 2 Ref: Sch TBH-13	[D] Mgmt. Fees ADJ No. 3 Ref: Sch TBH-14	[E] Water Testing ADJ No. 4 Ref: Sch TBH-15	[F] Rate Case ADJ No. 5 Ref: Sch TBH-16	[G] Not Used ADJ No. 6 Ref: Sch TBH-17	[I] Depr. Exp. ADJ No. 7 Ref: Sch TBH-18	[J] Prop. Tax ADJ No. 8 Ref: Sch TBH-19	[K] Income Tax ADJ No. 9 Ref: Sch TBH-20	[T] STAFF ADJUSTED
1		*REVENUES:*											
2	461	Metered Water Sales	$2,843,219	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,843,219
3	460	Water Sales - Unmetered	0	0	0	0	0	0	0	0	0	0	0
4	474	Other Operating Revenue	53,527	0	0	0	0	0	0	0	0	0	53,527
5		**Total Operating Revenues**	$2,896,746	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,896,746
6		*OPERATING EXPENSES:*											
7	601	Salaries & Wages	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
8	610	Purchased Water	5,265	0	0	0	0	0	0	0	0	0	5,265
9	615	Purchased Power	138,933	0	0	0	0	0	0	0	0	0	138,933
10	618	Chemicals	14,734	0	0	0	0	0	0	0	0	0	14,734
11	620	Repairs & Maintenance	102,989	(6,584)	0	0	0	0	0	0	0	0	96,406
12	621	Office Supplies & Expense	0	0	0	0	0	0	0	0	0	0	0
13	630	Contract Services - Accounting	13,497	0	0	0	0	0	0	0	0	0	13,497
14	633	Contract Services - Legal	10,603	0	0	0	0	0	0	0	0	0	10,603
15	631	Contract Services - Eng	7,968	0	0	0	0	0	0	0	0	0	7,968
17	636	Contract Services - Other	126,034	(1,020)	(9,983)	0	0	0	0	0	0	0	115,031
16	634	Management Fees	765,161	0	0	(28,894)	0	0	0	0	0	0	736,267
18	635	Contractual Services - Water Testing	5,341	7,604	0	0	1,030	0	0	0	0	0	13,975
19	641	Rents	1,666	0	0	0	0	0	0	0	0	0	1,666
20	650	Transportation Expense	20,650	0	0	0	0	0	0	0	0	0	20,650
21	657	Insurance - General Liability	17,137	0	0	0	0	0	0	0	0	0	17,137
22	659	Insurance - Health & Life	0	0	0	0	0	0	0	0	0	0	0
23	666	Regulatory Commission Expense - Rate Case	50,000	0	0	0	0	(20,000)	0	0	0	0	30,000
24	675	Miscellaneous Expense	29,504	0	0	0	0	0	0	0	0	0	29,504
25	670	Bad Debt Expense	541	0	0	0	0	0	0	0	0	0	541
26	403	Depreciation Expense	721,109	0	0	0	0	0	0	(43,225)	0	0	677,884
27	408	Taxes Other than Income	10,350	0	0	0	0	0	0	0	0	0	10,350
28	408.11	Property Taxes	154,562	0	0	0	0	0	0	0	0	0	154,562
29	409	Income Tax	102,700	0	0	0	0	0	0	0	0	17,532	120,232
30		Rounding	(1)	0	0	0	0	0	0	0	0	0	(1)
31		**Total Operating Expenses**	$2,298,743	$0	($9,983)	($28,894)	$1,030	($20,000)	$0	($43,225)	$0	$17,532	$2,215,202
32		**Operating Income (Loss)**	$598,003	$0	$9,983	$28,894	($1,030)	$20,000	$0	$43,225	($0)	($17,532)	$681,544

SAHUARITA WATER COMPANY LLC
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Schedule TBH-12

OPERATING INCOME ADJUSTMENT NO. 1 - Expenses Reclassification

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Repairs and Maintenance	$102,989	($6,584)	$96,406
2	Contract Services - Other	126,034	(1,020)	125,014
3	Water Testing	5,341	7,604	12,945
4	Total	$234,364	$0	$234,364

References:
Column [A]: Company Schedule C-2 & Workpapers
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

SAHUARITA WATER COMPANY LLC
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Schedule TBH-13

OPERATING INCOME ADJUSTMENT NO. 2 - Contractual Services - Other Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Contractual Services - Other Expense	$126,034	($9,983)	$116,051
2	Total	$126,034	($9,983)	$116,051

Staff Adjustments

Contractual Services - Workman's Comp (Reclass to Mgmt. Services)	$9,983
Total Adjustment	$9,983

References:
Column [A]: Company Schedule C-2 & Workpapers
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

SAHUARITA WATER COMPANY LLC
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Schedule TBH-14

OPERATING INCOME ADJUSTMENT NO. 3 - Management Fees Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Management Fees Expense	$765,161	($28,894)	$736,267
2	Total	$765,161	($28,894)	$736,267

Staff Adjustments

Remove Management Services for Underpayment of Mar. to Nov. 2013 Ex	$17,407
Remove Bonuses with payroll taxes for Non-Dedicated Employees	8,552
Remove Bonuses with payroll taxes for Dedicated Employees	12,918
Reclass Workman's Compensation from Contractual Services	(9,983)
Total Adjustment	$28,894

References:
Column [A]: Company Schedule C-2 & Workpapers
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

SAHUARITA WATER COMPANY LLC
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Schedule TBH-15

OPERATING INCOME ADJUSTMENT NO. 4 - Water Testing Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Water Testing Expense	$5,341	$1,030	$6,371
2	Total	$5,341	$1,030	$6,371

References:
Column [A]: Company Schedule C-2 & Workpapers
Column [B]: Testimony TBH & Staff Engineering Table M
Column [C]: Column [A] + Column [B]

SAHUARITA WATER COMPANY LLC
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Schedule TBH-16

OPERATING INCOME ADJUSTMENT NO. 5 - Rate Case Expense				
LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Rate Case Expense	$50,000	($20,000)	$30,000
2	Total	$50,000	($20,000)	$30,000

References:
Column [A]: Company Schedule C-2
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
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Schedule TBH-17

OPERATING INCOME ADJUSTMENT NO. 6 - Not Used				
LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Not Used	$0	$0	$0
2	Total	$0	$0	$0

References:
Column [A]: Company Schedule C-2
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

SAHUARITA WATER COMPANY LLC
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Schedule TBH-18

OPERATING INCOME ADJUSTMENT No. 7 - Depreciation Expense

Line No.	ACCT NO.	DESCRIPTION	[A] GROSS UTILITY PLANT IN SERVICE	[B] FULLY/NON DEPRECIABLE	[C] DEPRECIABLE PLANT	[D] DEPREC. RATE	[E] EXPENSE
		Plant In Service					
1	301	Organization Costs	$7,541	$7,541	$0	0.00%	$0
2	302	Franchise Costs	352,403	352,403	0	0.00%	0
3	303	Land & Land Rights	13,636	13,636	0	0.00%	0
4	304	Structures & Improvements	401,832		401,832	3.33%	13,381
5	307	Wells & Springs	2,142,644		2,142,644	3.33%	71,350
6	310	Power Generation Equipment	549,708		549,708	5.00%	27,485
7	311	Electric Pumping Equipment	195,407		195,407	12.50%	24,426
8	320	Water Treatment Equipment					
9	320.1	Water Treatment Plants	1,379,569		1,379,569	3.33%	45,940
10	320.2	Solutions & Feeders	46,479		46,479	20.00%	9,296
11	320.3	Arsenic Media	150,657		150,657	**40.00%**	60,263
12	330	Distribution Reservoirs & Standpipes					
13	330.1	Storage Tank	1,811,998		1,811,998	2.22%	40,226
14	330.2	Pressure Tanks	36,874		36,874	5.00%	1,844
15	331	Transmission & Distribution Mains	13,281,053		13,281,053	2.00%	265,621
16	333	Services	2,256,719		2,256,719	3.33%	75,149
17	334	Meters & Meter Installations	1,489,172		1,489,172	8.33%	124,048
18	335	Hydrants	732,251		732,251	2.00%	14,645
19	336	Backflow Prevention Devices	1,660		1,660	6.67%	111
20	339	Other Plant & Misc. Equip.	0		0	6.67%	0
21	340	Office Furniture & Fixtures	160,855		160,855	6.67%	10,729
22	340.1	Computer & Software	122,607	67,883	54,724	20.00%	10,945
23	341	Transportation Equipment	139,706	123,399	16,307	20.00%	3,261
24	342	Store Equipment	0		0	4.00%	0
25	343	Tools & Work Equipment	37,840		37,840	5.00%	1,892
26	344	Laboratory Equipment	132		132	10.00%	13
27	345	Power Operated Equipment	0		0	5.00%	0
28	345	Communications Equipment	577,721		577,721	10.00%	57,772
29	347	Miscellaneous Equipment	695		695	10.00%	70
30	348	Other Intangibles	1,002,914		1,002,914	**10.00%**	100,291
		Rounding	-	(1)	1		0
31		Subtotal General	$26,892,073	$564,861	$26,327,212		$958,758
32		Less: Amortization of Contributions			$7,712,717	3.64%	$280,874
31		Staff Recommended Depreciation Expense					$677,884
32		Company Proposed Depreciation Expense					721,109
33		Increase/(Decrease) to Depreciation Expense					($43,225)

SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
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Schedule TBH-19

OPERATING INCOME ADJUSTMENT No. 8 - Property Taxes Expense

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	$2,896,746	$2,896,746
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	$5,793,492	$5,793,492
4	Staff Recommended Revenue	2,896,746	2,967,308
5	Subtotal (Line 4 + Line 5)	$8,690,238	$8,760,800
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	$2,896,746	$2,920,267
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	$5,793,492	$5,840,533
10	Plus: 10% of CWIP (Company Excluded)	0	0
11	Less: Net Book Value of Licensed Vehicles	11,415	11,415
12	Full Cash Value (Line 9 + Line 10 - Line 11)	$5,782,077	$5,829,118
13	Assessment Ratio	18.00%	18.00%
14	Assessment Value (Line 12 * Line 13)	$1,040,774	$1,049,241
15	Composite Property Tax Rate - Obtained from ADOR	14.85070%	14.85070%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$154,562	
17	Company Proposed Property Tax	154,562	
18	Staff Test Year Adjustment (Line 16 - Line 17)	$0	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		$155,820
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		154,562
21	Increase in Property Tax Due to Increase in Revenue Requirement		$1,257
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$1,257
23	Increase in Revenue Requirement		$70,562
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		**1.782084%**

REFERENCES:
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1 Page 2
Line 21: Line 19 - Line 20
Line 23: Schedule TBH-10

SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
Test Year December 31, 2014

Schedule TBH-20

OPERATING INCOME ADJUSTMENT NO. 9 - Income Tax Expense				
LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Income Tax Expense	$102,700	$17,532	$120,232
2	Total	$102,700	$17,532	$120,232

References:
Column [A]: Company Schedule C-2
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

EXHIBIT
5-4

BEFORE THE ARIZONA CORPORATION COMMISSION

DOUG LITTLE
Interim Chairman
BOB STUMP
Commissioner
BOB BURNS
Commissioner
TOM FORESE
Commissioner

IN THE MATTER OF THE APPLICATION OF SAHUARITA WATER COMPANY, LLC, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PROPERTY AND FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES	)	DOCKET NO. W-03718A-15-0213

(RATE DESIGN)

DIRECT

TESTIMONY

OF

TERESA B. HUNSAKER

PUBLIC UTILITIES ANALYST

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

FEBRUARY 12, 2016

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EXECUTIVE SUMMARY
SAHUARITA WATER COMPANY, LLC
DOCKET NO. W-03718A-15-0213

Sahuarita Water Company, LLC ("SWC" or "Company") is an Arizona Limited Liability Company. The Company is engaged in the business of providing water utility services in Sahuarita, Arizona. The Company served approximately 5,500 customers during the test year ended December 31, 2014. The Company's original Certificate of Convenience and Necessity Application was approved in Decision No. 59431 dated December 28, 1995. The Company's current authorized rates and charges were determined in Decision No. 72177 dated February 11, 2011.

RATE DESIGN:

Staff recommends approval of its rate design and service charges.

TYPICAL BILL ANALYSIS:

The typical 5/8 x 3/4-inch meter residential customers with a median usage of 4,500 gallons would experience a $3.79 or a 12.52 percent increase in their monthly bill, from $30.28 to $34.07, under the Company's proposed rates. The typical 5/8 x 3/4-inch meter residential customers with a median usage of 4,500 gallons would experience a $0.32 or a 1.04 percent increase in their monthly bill, from $30.28 to $30.59, under Staff's recommended rates.

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Teresa B. Hunsaker. I am a Public Utilities Analyst III employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same Teresa B. Hunsaker who previously submitted direct testimony in this case?

A. Yes, I am.

Q. What is the scope of your testimony in this case?

A. I am presenting Staff's analysis and recommendations regarding Sahuarita Water Company, LLC's ("SWC" or "Company") application for a permanent increase in its rates and charges for water utility service within Pima County, Arizona.

Q. What is the basis of your testimony in this filing?

A. Based on the adjustments and revenue requirement recommended by Staff, I am presenting Staff's recommended rate design.

BACKGROUND

Q. Please review the background of this application.

A. SWC is an Arizona limited liability company engaged in the business of providing water utility services in Sahuarita, Arizona. The Company served approximately 5,500 customers during the test year ended December 31, 2014. The Company's original Certificate of Convenience and Necessity Application was approved in Decision No. 59431 dated December 28, 1995.

The Company's current authorized rates and charges were determined in Decision No. 72177 dated February 11, 2011.

RATE DESIGN

Q. Would you please summarize the present rate design for the Company?

A. The present monthly minimum charges by meter size are as follows: 5/8 x 3/4-inch $17.15; 3/4-inch $26.80; 1-inch $42.88; 1 1/2-inch $85.75; 2-inch $137.20; 3-inch $274.40; 4-inch $428.75; and 6-inch $875.50. No gallons are included in the monthly minimum charge. The water commodity charges for all meter sizes and customer classes is $2.50 per thousand gallons for zero to 3,000 gallons, $3.75 per thousand gallons for 3,001 to 9,000 and $4.50 per thousand gallons for any consumption over 9,000 gallons. The present rate design also has a commodity charge for standpipe/construction water of $4.50 per thousand gallons for all usage.

Q. Would you please summarize the Company's proposed rate design?

A. The Company's proposed monthly minimum charges by meter size are as follows: 5/8 x 3/4-inch $19.12; 3/4-inch $28.68; 1-inch $47.81; 1 1/2-inch $95.61; 2-inch $152.98; 3-inch $305.96; 4-inch $478.06; and 6-inch $956.11. Zero gallons are included in the monthly minimum charge. The Company proposed commodity charges for the 5/8 x 3/4-inch and the 3/4-inch meters are $2.888 per thousand gallons for zero to 3,000 gallons, $4.188 per thousand gallons for 3,001 to 9,000 gallons, and $4.988 per thousand gallons for any consumption over 9,000 gallons. The proposed commodity rate tiers for the larger residential, commercial, and irrigation customers vary by meter size, but are $4.188 per thousand gallons for the first tier and $4.988 per thousand gallons for any consumption over the first tier. The Company is proposing a commodity charge rate of $4.988 per 1,000 gallons for standpipe customers for all usage.

Q. Would you please summarize Staff's recommended rate design for the Company?

A. Staff's recommended rates and charges are presented on Schedule TBH-1. Staff's recommended monthly minimum charges by meter size are as follows: 5/8 x 3/4-inch $17.46; 3/4-inch $27.11; 1-inch $43.19; 1 1/2-inch $86.06; 2-inch $137.51; 3-inch $274.71; 4-inch $429.06; and 6-inch $857.81. Zero gallons are included in the monthly minimum charge. For the 5/8 x 3/4-inch and 3/4-inch meter residential customers, Staff recommends commodity charges of $2.50 per thousand gallons for zero to 3,000 gallons, $3.50 per thousand gallons for 3,001 to 9,000 gallons, and $4.50 per thousand gallons for any consumption over 9,000 gallons. Staff's recommended larger residential, commercial, and industrial commodity rates have two tiers and vary by meter size, set at $3.75 per thousand gallons for the first tier and $4.50 per thousand gallons for any consumption over the first tier. Staff recommends no change in the commodity charge of $4.50 per 1,000 gallons for standpipe customers for all usage.

Q. What is the rate impact on a typical 5/8 x 3/4-inch meter residential customer in Sahuarita?

A. The typical 5/8 x 3/4-inch meter residential customers with a median usage of 4,500 gallons would experience a $3.79 or a 12.52 percent increase in their monthly bill, from $30.28 to $34.07, under the Company's proposed rates. The typical 5/8 x 3/4-inch meter residential customers with a median usage of 4,500 gallons would experience a $0.32 or a 1.04 percent increase in their monthly bill, from $30.28 to $30.59, under Staff's recommended rates. A typical bill analysis is provided on Schedule TBH-2.

Q. What does Staff recommend for service line and meter installation charges?

A. Staff recommends the service line and meter installation charges as discussed in Table P of the previously docketed Staff Engineering Report and as presented in Schedule TBH-1.

Q. What does Staff recommended for other service charges?

A. Staff's recommended other service charges are presented in Schedule TBH-1 and reflect Staff's experience of what are reasonable and customary charges.

Q. Did the Company propose an after hour service charge of $50.00?

A. Yes, the Company proposed an after hour service charge to replace the non-business reconnection of water utility service of $40.00.

Q. What does Staff recommend for the after hour service charge?

A. Staff accepts the proposed change by the Company of $50.00 for after hour service charge to replace the non-business reconnection of water utility service of $40.00.

Q. Does this conclude your rate design direct testimony?

A. Yes, it does.

SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
Test Year December 31, 2014

RATE DESIGN

Monthly Usage Charge	Present Rates	Company Proposed Rates	Staff Recommended Rates
5/8 x 3/4" Meter	$17.15	$19.12	$17.46
3/4" Meter	26.80	28.68	27.11
1" Meter	42.88	47.81	43.19
1½" Meter	85.75	95.61	86.06
2" Meter	137.20	152.98	137.51
3" Meter	274.40	305.96	274.71
4" Meter	428.75	478.06	429.06
6" Meter	857.50	956.11	857.81

Commodity Rates	Present Rates	Company Proposed Rates	Staff Recommended Rates
5/8 x 3/4" & 3/4" Meter - Residential			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 3,000 Gallons	$2.500	$2.888	$2.500
From 3,001 to 9,000 Gallons	3.750	4.188	3.750
Over 9,000 Gallons	4.500	4.988	4.500
5/8 x 3/4" & 3/4" Meter - Commercial & Industrial			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 9,000 Gallons	$3.750	$4.188	$3.750
Over 9,000 Gallons	4.500	4.988	4.500
1" - Residential, Commercial & Industrial			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 20,000 Gallons	$3.750	$4.188	$3.750
Over 20,000 Gallons	4.500	4.988	4.500
1½" - Residential, Commercial & Industrial			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 55,000 Gallons	$3.750	$4.188	$3.750
Over 55,000 Gallons	4.500	4.988	4.500
2" - Residential, Commercial & Industrial			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 90,000 Gallons	$3.750	$4.188	$3.750
Over 90,000 Gallons	4.500	4.988	4.500
3" - Residential, Commercial & Industrial			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 200,000 Gallons	$3.750	$4.188	$3.750
Over 200,000 Gallons	4.500	4.988	4.500
4" - Residential, Commercial & Industrial			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 350,000 Gallons	$3.750	$4.188	$3.750
Over 350,000 Gallons	4.500	4.988	4.500

RATE DESIGN CONT.

Commodity Rates	Present Rates	Company Proposed Rates	Staff Recommended Rates
6" - Residential, Commercial & Industrial			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 750,000 Gallons	$3.750	$4.188	$3.750
Over 750,000 Gallons	4.500	4.988	4.500
Construction/Bulk			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
All Gallons	$4.500	$4.988	$4.500

Service Line and Meter Installation Charges	Present Rates			Company Proposed Rates			Staff Recommended Rates		
	Service Line	Meter Charge	Total Charge	Service Line	Meter Charge	Total Charge	Service Line	Meter Charge	Total Charge
5/8" x 3/4" Meter	$445	$155	$600	$445	$155	$600	$445	$155	$600
3/4" Meter	445	255	700	445	255	700	445	255	700
1" Meter	495	315	810	495	315	810	495	315	810
1½" Meter	550	525	1,075	550	525	1,075	550	525	1,075
2" Turbine Meter	830	1,045	1,875	830	1,045	1,875	830	1,045	1,875
2" Compound Meter	830	1,890	2,720	830	1,890	2,720	830	1,890	2,720
3" Turbine Meter	1,045	1,670	2,715	1,045	1,670	2,715	1,045	1,670	2,715
3" Compound Meter	1,165	2,545	3,710	1,165	2,545	3,710	1,165	2,545	3,710
4" Turbine Meter	1,490	2,670	4,160	1,490	2,670	4,160	1,490	2,670	4,160
4" Compound Meter	1,670	3,645	5,315	1,670	3,645	5,315	1,670	3,645	5,315
6" Turbine Meter	2,210	5,025	7,235	2,210	5,025	7,235	2,210	5,025	7,235
6" Compound Meter	2,330	6,920	9,250	2,330	6,920	9,250	2,330	6,920	9,250
Over 6"	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost

Service Charges	Present Rates	Company Proposed Rates	Staff Recommended Rates
Establishment or Reestablishment of Water Utility Service:			
Establishment	$25.00	$25.00	$25.00
Establishment (after hours)	40.00	N/A	N/A
Reestablishment (within 12 months)	*	*	*
Reconnection of Water Utility Service:			
During normal business hours	25.00	25.00	N/A
During non-business hours	40.00	N/A	N/A
Reconnection (delinquent)	N/A	N/A	25.00
After Hours Service Charge	N/A	50.00	50.00
Meter Test (if correct)	25.00	25.00	25.00
Meter Re-Read	N/A	25.00	25.00
Deposit Requirement	**	**	**
Deposit Interest	6%	6%	6%
NSF Check	15.00	15.00	15.00
Deferred Payment (per month)	1.5%	1.5%	1.5%
Late Charge (per month)	***	***	***
Charge of Moving Customer Meter - Customer Request	At Cost	At Cost	At Cost
Main Extension and Additional Facilities	At Cost	At Cost	At Cost

* Per Commission Rule A.A.C. R14-2-403.D. Number of months off the system times the monthly minimum.
** Per Commission Rules (R14-2-403.B)
*** Minimum $5.00 or 1.5% per month.

SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
Test Year December 31, 2014

Schedule TBH-2

TYPICAL BILL ANALYSIS						
General Service 5/8 x 3/4-Inch Meter						
Company Proposed	Gallons		Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	4,677		$30.94	$34.81	$3.87	12.50%
Median Usage	4,500		$30.28	$34.07	$3.79	12.52%
Staff Recommended						
Average Usage	4,677		$30.94	$31.25	$0.31	1.00%
Median Usage	4,500		$30.28	$30.59	$0.32	1.04%

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

Gallons	Present		Company Proposed		%	Staff Recommended		%
	Minimum Charge	$17.15	Minimum Charge	$19.12		Minimum Charge	$17.46	
	1st Tier Rate	$2.500	1st Tier Rate	$2.888		1st Tier Rate	$2.500	
	1st Tier Break-over	3,000	1st Tier Break-over	3,000		1st Tier Break-over	3,000	
	2nd Tier Rate	$3.750	2nd Tier Rate	$4.188		2nd Tier Rate	$3.750	
	2nd Tier Break-over	9,000	2nd Tier Break-over	9,000		2nd Tier Break-over	9,000	
	3rd Tier Rate	$4.500	3rd Tier Rate	$4.988		3rd Tier Rate	$4.500	
Consumption	Rates		Rates		Increase	Rates		Increase
-	$17.15		$19.12		11.49%	$17.46		1.81%
1,000	$19.65		$22.01		12.00%	$19.96		1.58%
2,000	$22.15		$24.90		12.40%	$22.46		1.40%
3,000	$24.65		$27.78		12.71%	$24.96		1.26%
4,000	$28.40		$31.97		12.58%	$28.71		1.09%
5,000	$32.15		$36.16		12.47%	$32.46		0.96%
6,000	$35.90		$40.35		12.39%	$36.21		0.86%
7,000	$39.65		$44.54		12.32%	$39.96		0.78%
8,000	$43.40		$48.72		12.27%	$43.71		0.71%
9,000	$47.15		$52.91		12.22%	$47.46		0.66%
10,000	$51.65		$57.90		12.10%	$51.96		0.60%
11,000	$56.15		$62.89		12.00%	$56.46		0.55%
12,000	$60.65		$67.88		11.91%	$60.96		0.51%
13,000	$65.15		$72.86		11.84%	$65.46		0.48%
14,000	$69.65		$77.85		11.78%	$69.96		0.45%
15,000	$74.15		$82.84		11.72%	$74.46		0.42%
16,000	$78.65		$87.83		11.67%	$78.96		0.39%
17,000	$83.15		$92.82		11.62%	$83.46		0.37%
18,000	$87.65		$97.80		11.58%	$87.96		0.35%
19,000	$92.15		$102.79		11.55%	$92.46		0.34%
20,000	$96.65		$107.78		11.52%	$96.96		0.32%
25,000	$119.15		$132.72		11.39%	$119.46		0.26%
30,000	$141.65		$157.66		11.30%	$141.96		0.22%
35,000	$164.15		$182.60		11.24%	$164.46		0.19%
40,000	$186.65		$207.54		11.19%	$186.96		0.17%
45,000	$209.15		$232.48		11.15%	$209.46		0.15%
50,000	$231.65		$257.42		11.12%	$231.96		0.13%
75,000	$344.15		$382.12		11.03%	$344.46		0.09%
100,000	$456.65		$506.82		10.99%	$456.96		0.07%

EXHIBIT
S-5

BEFORE THE ARIZONA CORPORATION COMMISSION

DOUG LITTLE
Chairman
BOB STUMP
Commissioner
BOB BURNS
Commissioner
TOM FORESE
Commissioner
ANDY TOBIN
Commissioner

IN THE MATTER OF THE APPLICATION OF SAHUARITA WATER COMPANY, LLC, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PROPERTY AND FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES	)	DOCKET NO. W-03718A-15-0213

SURREBUTTAL

TESTIMONY

OF

CRYSTAL S. BROWN

EXECUTIVE CONSULTANT III

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

APRIL 1, 2016

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EXECUTIVE SUMMARY
SAHUARITA WATER COMPANY, LLC,
DOCKET NO. W-03718A-15-0213

Staff continues to recommend an 8.41 percent rate of return. Staff's recommended rate of return was calculated using a 9.50 percent cost of equity, a 4.20 percent cost of debt, and a capital structure consisting of 20.57 percent debt and 79.43 percent equity.

I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Crystal S. Brown. I am an Executive Consultant III 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, 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 Sahuarita Water Company's ("Sahuarita" or "Company") witness, Thomas J. Bourassa.

Q. Please explain how Staff's surrebuttal testimony is organized.

A. Staff's surrebuttal testimony is presented in three 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. Lastly, Section III presents Staff's recommendations.

II. STAFF'S RESPONSE TO THE REBUTTAL TESTIMONY FILED BY THE COMPANY'S COST OF CAPITAL WITNESS, MR. THOMAS J. BOURASSA

Q. Please summarize the capital structure, cost of debt, cost of equity, and overall weighted average cost of capital proposed in Mr. Bourassa's rebuttal testimony.

A. In his rebuttal testimony, Mr. Bourassa is proposing a capital structure consisting of 20.57 percent debt and 79.43 percent equity. Mr. Bourassa proposes a 10.5 percent cost of equity

("COE") and a 4.2 percent cost of debt for the Company. Mr. Bourassa's cost of capital proposals result in an overall rate of return ("ROR") for Sahuarita of 9.2 percent.

The 10.5 percent rebuttal return on equity ("ROE") proposal being made by Mr. Bourassa is the same as his 10.5 percent ROE proposal found in his direct testimony. Staff's ROE recommendation is 9.5 percent in both its direct and surrebuttal cost of capital filings.

Q. Is there a primary conceptual basis for the difference in the ROE proposals of the Company and the ROE recommendations supported by Staff?

A. Yes. The Company follows what is called a company-specific approach to developing its ROE proposal, whereas Staff follows the portfolio approach to defining its fair and reasonable ROE recommendation. I will discuss the differences in these two approaches in my testimony but generally both approaches rely on the results generated from application of the discounted cash flow ("DCF") and capital asset pricing model ("CAPM") ROE models. The Company then adds the results of a number of company-specific risk considerations whereas, under Staff's portfolio approach, such risk adders are *not directly* given consideration because in the capital markets such risks can be, *and are*, addressed by diversification of the investor's portfolio so ratepayers *should not* be required to compensate for a risk that can be reasonably, and simply, addressed through an investment tool existing in the market place. That tool is "portfolio diversification."

On page 5, line 21, of Mr. Bourassa's rebuttal testimony he says that investors "do not ignore" the various company-specific risks that exist. Staff agrees with this statement which is exactly why prudent investors diversify their portfolios. And since portfolio diversification is both a simple and logical step for investors to take to safeguard their investments from

such risks, there is no reason for ratepayers to be required to compensate investors for these risks.

Comments Regarding Staff's Range of COEs

Q. Did Staff review the Company's comments concerning Staff's position that any COE in Staff's range of COE's is reasonable?

A. Yes.

Q. What were the Company's comments?

A. Mr. Bourassa concludes on page 14, line 7, that " . . . the mid-point (and sometimes the median) is arguably the most 'fair' estimate . . ." of a range of COE's, but he goes on to suggest that under the *Bluefield* and *Hope* standards further specific consideration of other risk factors must be made, which then leads Mr. Bourassa into a lengthy discussion of other company-specific risk considerations that he ultimately suggests he has been able to specifically measure from the perspective of Sahuarita Water, e.g., risk "X" requires a "19" basis point adjustment whereas risk "Z" requires a further "17" basis point adjustment to ROEs.

Q. Does Staff agree?

A. No, Staff does not. The *Hope* and *Bluefield* Supreme Court decisions which Mr. Bourassa makes reference to set forth the standard criteria which must result from a Commission's ROE decision in order to conclude that the ROE constitutes a fair rate of return. Staff notes that those court decisions do not:

1. Prescribe the *types of COE models* to be used
2. Prescribe that a certain *number of COE models* be used, and

3. Prescribe that an *exact point within a range of COE's* be used

Rather, the *Hope* and *Bluefield* Supreme Court decisions identify certain criteria that must be met for a rate of return to be deemed "fair." Those criteria are capital attraction, financial integrity, and comparable earnings. The DCF and CAPM models are foundational cost of capital ("COC") models that have been recognized as models that generate results that meet these criteria. Also, these models are widely used by other public utility commissions; are taught in National Association of Regulatory Utility Commissioners ("NARUC") training classes; and have been adopted for establishing reasonable ROE ranges by this Commission for at least 25 years.

Therefore, since the DCF and CAPM models produce results that meet the fairness standards of the *Hope* and *Bluefield* court cases and Staff used the DCF and CAPM models to calculate each of the points in Staff's ROE reasonableness range, then any point in Staff's range of COE's is reasonable and fair.

Comments Regarding Moving Higher Than the Low Point of Staff's Model-Driven ROE Range

Q. Would you please clarify Staff's statement that "moving higher than the low point of the range makes a reasonable acknowledgement of, or concession to, the other risk factors"?

A. Yes. First, let me say that Staff acknowledges that all models or approaches used to defining a fair ROE range can have shortcomings, even if what are termed to be shortcomings are simply differences of professional judgement regarding the assumptions to be made in generating results from these generally accepted models. There is no perfect or absolute way to determine "required return" in a constantly changing financial marketplace. So, by moving above the low result from Staff's model-driven ROE range, Staff is merely trying to find

common ground with those who are of the opinion that investors actually require a higher ROE because of consideration "A" or "B".

Q. By suggesting that any point within its model-driven ROE range would be a reasonable ROE for the Commission to authorize, and by using an ROE above the low point of Staff's model-driven ROE range in its revenue requirement schedules, is Staff also attempting to find common ground with parties that might argue that one more model variation, or one more approach to developing the ROE range should be given consideration?

A. Yes.

Compensation for Company Specific Risk

Q. Should investors expect to be compensated for company-specific risk?

A. No, they should not. The type of risk that investors should expect to be compensated for are systematic risks (i.e., market risks). Quite simply, market risks cannot be diversified away because investors can and certainly do diversify their investment portfolios as the means for effectively safeguarding their investments from company-specific risk. This point is made on page 52 of Mr. Roger Morin, Ph.D.'s book *Regulatory Finance, Utilities' Cost of Capital*, where he states, "Thus, for a diversified investor, the relevant risk of a security is reduced to its market risk, or beta, the risk that cannot be diversified away." Therefore, investors should not be expected to be compensated for company-specific risks as those risks can be diversified away.

In Staff's opinion, anyone who argues that investors must be directly compensated for company-specific risk is also arguing that for some reason ratepayers must step up and compensate for a specific investor's failure to take advantage of a simple investment tool – that being portfolio diversification. Such advocates typically go to great lengths to suggest

that they have developed a way to quantify exactly what level of compensation an investor requires for each element of company-specific risk. This is totally unnecessary. The failure on the part of an investor to diversify his/her portfolio is *not* a decision that should become a financial obligation of ratepayers.

Q. Is systematic (i.e., market) risk addressed and incorporated in both the DCF model and the CAPM?

A. Yes. The DCF Model is a cash flow assessment tool used to derive the COE. For the DCF, it is assumed that all cash flow items have equivalent exposure to systematic risk. For the CAPM, systematic risk is reflected in the Beta which measures a stock's riskiness compared to the market as a whole.

Comments Regarding Comparing Staff's Recommended COE to that of the Proxy Group

Q. Mr. Bourassa asserted that investors would be better off investing in publically traded companies (i.e., his proxy group of companies) than from investing in Sahuarita Water. This discussion starts on page 8 of Mr. Bourassa's rebuttal testimony and the actual statement regarding such assertion appears on page 10 of this testimony. Is this a reasonable comparison?

A. No, it is not. An investor in the proxy group does not have the same level of influence over management decisions as do principal investors in Sahuarita. The influence of the principal investors includes, but is not limited to, controlling the amount and timing of rate increases, plant additions, and having complete access to the cash provided by operating income and depreciation expense. The principal investors can use this cash for any purpose they choose.

Staff does not intend to get into a lengthy discussion regarding this point, but this ability to influence management decision making to the benefit of the primary investors in Sahuarita is

an observable reality, and the value of such influence is omitted by Mr. Bourassa as he discusses and then quantifies the firm-specific risks faced by Sahuarita's investors.

For example, Schedule E-2 of the Company's application shows that Sahuarita reported operating income during the years 2012 to 2014 of $974,050 in 2012, $764,382 in 2013, and $739,570 in 2014. As shown on Schedule E-4, the amount of distributions during the same period were $328,049 in 2012, $450,000 in 2013, and $2,067,562 in 2014. Effectively, Sahuarita's principal investors were able to "draw" $367,609[1] more than the Company made during this period of time. This suggests a significant ability to influence management's distribution making decisions that investors in the proxy group do not have.

This ability to influence management decisions is one of the main reasons why Sahuarita's ROE should not be unequivocally compared to the achieved and forecasted ROE's of the proxy group as Mr. Bourassa has done. Instead, a reasonable comparison would be to the ROEs recently authorized by the Commission for other ACC-regulated water and wastewater companies.

III. STAFF RECOMMENDATIONS

Q. In updating its COC analysis for the Company, did Staff's recommended ROE and overall ROR change from the levels recommended by Staff in direct testimony?

A. No, it did not. Staff recommended the highest COE in the range; this COE did not change after the update was performed.

Q. What are Staff's recommendations for the Company?

A. Staff recommends the following for Sahuarita's cost of capital:

[1] ($974,050 + $764,382 + $739,570) – ($328,049 +$450,000 + $2,067,567) = -$367,609

1. A capital structure of 20.57 percent debt and 79.43 percent equity.
2. A 4.20 percent cost of debt.
3. A 9.50 percent return on equity.
4. An 8.41 percent overall rate of return.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

Sahuarita Water Company, Inc. 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 Capital Structure			
Debt	20.57%	4.20%	0.86%
Common Equity	79.43%	9.50%	7.55%
Weighted Average Cost of Capital			**8.41%**
Company Proposed Capital Structure			
Debt	20.57%	4.20%	0.86%
Common Equity	79.43%	10.50%	8.34%
Weighted Average Cost of Capital			**9.20%**

[D] : [B] x [C]
Supporting Schedules: CSB-3 and CSB-4.

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Sahuarita Water Company, Inc. 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			2.3%	+	5.6%	=	7.9%
Multi-Stage DCF Estimate						=	8.7%
Average DCF Estimate							**8.30%**
CAPM Method	Rf	+	β [5]	x	(Rp)	=	k
Historical Market Risk Premium [5]	2.1%	+	0.73	x	7.6% [6]	=	7.6%
Current Market Risk Premium [4]	2.9%	+	0.73	x	9.2% [7]	=	9.5%
Average CAPM Estimate							**8.60%**
					Staff's Estimated Cost of Equity		**9.5%**
					Economic Assessment Adjustment		0.0%
					Sub-Total		**9.50%**
					Financial Risk Adjustment		0.0%
					Total		**9.50%**

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 2015 Ibbotson SBBI Classic Yearbook data
7 Testimony

Sahuarita Water Company, Inc. Cost of Capital Calculation
Average Capital Structure of Sample Water Utilities

[A]	[B]	[C]	[D]
Company	Debt	Common Equity	Total
American States Water	38.7%	61.3%	100.0%
California Water	45.9%	54.1%	100.0%
Aqua America	50.3%	49.7%	100.0%
Connecticut Water	45.6%	54.4%	100.0%
Middlesex Water	44.3%	55.7%	100.0%
SJW Corp	54.7%	45.3%	100.0%
York Water	43.4%	56.6%	100.0%
Average Sample Water Utilities	**46.1%**	**53.9%**	**100.0%**
Sahuarita	**20.57%**	**79.43%**	**100.0%**

Source:
Sample Water Companies from Value Line

Sahuarita Water Company, Inc. Cost of Capital Calculation
Growth in Earnings and Dividends
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]
Company	Dividends Per Share 2005 to 2014 DPS[1]	Dividends Per Share Projected DPS[1]	Earnings Per Share 2005 to 2014 EPS[1]	Earnings Per Share Projected EPS[1]
American States Water	6.4%	6.7%	11.6%	6.5%
California Water	1.4%	8.3%	5.0%	5.4%
Aqua America	7.8%	9.7%	8.9%	6.6%
Connecticut Water	1.9%	5.2%	5.2%	3.2%
Middlesex Water	1.4%	2.3%	4.5%	3.6%
SJW Corp	3.9%	1.3%	8.5%	NA
York Water	3.9%	6.7%	6.1%	5.3%
Average Sample Water Utilities	**3.8%**	**5.7%**	**7.1%**	**5.1%**

1 Value Line

Sahuarita Water Company, Inc. Cost of Capital Calculation
Sustainable Growth
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]
Company	Retention Growth 2005 to 2014 br	Retention Growth Projected br	Stock Financing Growth vs	Sustainable Growth 2005 to 2014 br + vs	Sustainable Growth Projected br + vs
American States Water	4.6%	7.0%	1.6%	6.2%	8.5%
California Water	2.9%	3.6%	1.4%	4.3%	5.0%
Aqua America	4.3%	5.7%	1.2%	5.5%	6.9%
Connecticut Water	2.3%	4.1%	3.4%	5.7%	7.5%
Middlesex Water	1.6%	3.6%	2.0%	3.6%	5.6%
SJW Corp	4.0%	4.2%	1.1%	5.0%	5.2%
York Water	2.4%	3.8%	3.0%	5.4%	6.8%
Average Sample Water Utilities	**3.1%**	**4.6%**	**2.0%**	**5.1%**	**6.5%**

[B]: Value Line
[C]: Value Line
[D]: Value Line, Yahoo Finance, and Form 10-Ks filed with the Securities and Exchange Commission (http://www.sec.gov/)
[E]: [B]+[D]
[F]: [C]+[D]

Sahuarita Water Company, Inc. Cost of Capital Calculation
Selected Financial Data of Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[G]
Company	Symbol	Spot Price 3/17/2016	Book Value	Mkt To Book	*Value Line* Beta *b*	Raw Beta *braw*
American States Water	AWR	**38.72**	13.97	2.8	**0.70**	0.52
California Water	CWT	**26.18**	13.48	1.9	**0.75**	0.60
Aqua America	WTR	**32.13**	9.57	3.4	**0.75**	0.60
Connecticut Water	CTWS	**43.76**	21.34	2.1	**0.65**	0.45
Middlesex Water	MSEX	**30.74**	12.61	2.4	**0.75**	0.60
SJW Corp	SJW	**36.28**	17.26	2.1	**0.75**	0.60
York Water	YORW	**30.49**	8.71	3.5	**0.75**	0.60
Average				**2.6**	**0.73**	**0.57**

[C]: Msn Money
[D]: Value Line
[E]: [C] / [D]
[F]: Value Line
[G]: (-0.35 + [F]) / 0.67

Sahuarita Water Company, Inc. Cost of Capital Calculation
Calculation of Expected Infinite Annual Growth in Dividends
Sample Water Utilities

[A]	[B]
Description	g
DPS Growth - Historical[1]	3.8%
DPS Growth - Projected[1]	5.7%
EPS Growth - Historical[1]	7.1%
EPS Growth - Projected[1]	5.1%
Sustainable Growth - Historical[2]	5.1%
Sustainable Growth - Projected[2]	6.5%
Average	**5.6%**

1 Schedule CSB-5
2 Schedule CSB-6

Sahuarita Water Company, Inc. 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] 3/17/2016	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	38.7	0.90	0.95	1.00	1.06	6.4%	8.7%
California Water	26.2	0.67	0.71	0.75	0.79	6.4%	8.9%
Aqua America	32.1	0.70	0.74	0.78	0.82	6.4%	8.5%
Connecticut Water	43.8	1.08	1.14	1.21	1.27	6.4%	8.8%
Middlesex Water	30.7	0.77	0.81	0.86	0.91	6.4%	8.9%
SJW Corp	36.3	0.78	0.83	0.87	0.92	6.4%	8.5%
York Water	30.5	0.60	0.63	0.67	0.71	6.4%	8.3%

Average 8.7%

$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n}\left[\frac{1}{(1+K)}\right]^n$$

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

1 [B] see Schedule CSB-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

Sahuarita Water Company, Inc. Cost of Capital Calculation
Capitalization

	Interest Rate	Annual Interest	Amount outstanding as of 12/31/2014	Percentage of Capital Structure
Long-Term Debt				
WIFA Loan	4.20%	$ 97,693	$ 2,326,035	
Long-Term Debt		$ 97,693	$ 2,326,035	20.57%
Short-Term Debt		$ -		0.00%
Total Debt	4.20%	$ 97,693	$ 2,326,035	20.57%
Common Equity			$ 8,982,660	
Common Shares Outstanding				
Paid in Capital				
Retained Earnings				
Total Common Equity			$ 8,982,660	79.43%
Total Capitalization			$ 11,308,695	100.00%

EXHIBIT
S-8

BEFORE THE ARIZONA CORPORATION COMMISSION

DOUG LITTLE
Chairman
BOB STUMP
Commissioner
BOB BURNS
Commissioner
TOM FORESE
Commissioner
ANDY TOBIN
Commissioner

IN THE MATTER OF THE APPLICATION OF SAHUARITA WATER COMPANY, LLC AN ARIZONA WATER CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PROPERTY AND FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES.	)	DOCKET NO. W-03718A-15-0213

SURREBUTTAL

TESTIMONY

OF

MICHAEL S. THOMPSON, P. E.

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

APRIL 1, 2016

SURREBUTTAL TESTIMONY
SAHUARITA WATER COMPANY, LLC
DOCKET NO. W-03718A-15-0213

RECOMMENDATIONS:

1. Staff recommends that the original arsenic media be given an average useful service life of 15 years, and a depreciation rate of 6.67 percent.

2. Staff further recommends that regenerated arsenic media be given an average useful service life of 2 ½ years, and a depreciation rate of 40 percent.

3. Staff further recommends that SWC use the Staff recommended depreciation rates shown in Exhibit MST-1.

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PURPOSE OF TESTIMONY 1

ORIGINAL & REGENERATED ARSENIC MEDIA DEPRECIATION 1

EXHIBIT

DEPRECIATION RATE TABLE MST-1

INTRODUCTION

Q. Please state your name and business address.

A. My name is Michael Thompson. 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.

Q. Did you submit Direct Testimony on behalf of the ACC Utilities Division Staff ("Staff") in this case?

A. Yes.

PURPOSE OF TESTIMONY

Q. What is the purpose of your Surrebuttal Testimony?

A. To respond to the Rebuttal Testimony filed by Geoff Caron on behalf of Sahuarita Water Company, LLC ("SWC"). My testimony addresses Mr. Caron's comments regarding the depreciation of the original and regenerated arsenic media.

ORIGINAL & REGENERATED ARSENIC MEDIA DEPRECIATION

Q. Does Staff agree with Mr. Caron's recommended depreciation rates for the original and regenerated arsenic media?

A. Yes. After an extensive conversation with Mr. Caron and a review of additional information provided by SWC, Staff was able to reach a better understanding of the operational/performance aspects of the arsenic media. Therefore, Staff has modified its position and is recommending that the original arsenic media be given an average useful

service life of 15 years, and a depreciation rate of 6.67 percent. Staff further recommends that regenerated arsenic media be given an average useful service life of 2 ½ years, and a depreciation rate of 40 percent.

Q. Has Staff revised its depreciation rate table to reflect the National Association of Regulatory Utility Commissioners ("NARUC") Accounts for the original and regenerated arsenic media?

A. Yes. Staff revised the depreciation table to include NARUC Account No. 320.4 – Arsenic Media, and NARUC Account No. 320.5 – Regenerated Arsenic Media. Staff's revised depreciation table, attached to this testimony, is shown on Exhibit MST-1. Staff recommends that SWC use the Staff recommended depreciation rates shown in Exhibit MST-1.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes, it does.

DEPRECIATION RATES FOR WATER COMPANIES

NARUC Account No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
301	Organization	----	0.00
302	Franchises	----	0.00
303	Land and Land Rights	----	0.00
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.00
320.3	Point-of-Use Treatment Devices	10	10.00
320.4	Arsenic Treatment Media	15	6.67
320.5	Arsenic Treatment Media Regeneration	2.5	40.00
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc. Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	10	10.00

EXHIBIT
S-7

BEFORE THE ARIZONA CORPORATION COMMISSION

DOUG LITTLE
Chairman
BOB STUMP
Commissioner
BOB BURNS
Commissioner
TOM FORESE
Commissioner
ANDY TOBIN
Commissioner

IN THE MATTER OF THE APPLICATION OF SAHUARITA WATER COMPANY, LLC, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PROPERTY AND FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES.	)	DOCKET NO. W-03718A-15-0213

SURREBUTTAL

TESTIMONY

OF

TERESA B. HUNSAKER

PUBLIC UTILITIES ANALYST

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

APRIL 1, 2016

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ATTACHMENTS

Company's Response to DR TBH 1.34 ..... Attachment A

EXECUTIVE SUMMARY
SAHUARITA WATER COMPANY, LLC
DOCKET NO. W-03718A-15-0213

Staff's surrebuttal testimony recommends rates that would increase operating revenues by $166,419 to produce operating revenues of $3,063,165 resulting in operating income of $122,456 or a 5.75 percent increase over test year revenues of $2,896,746. Staff also recommends a revised original cost rate base ("OCRB") of $9,359,714. Staff's recommend rate of return is 8.41 percent.

Staff's direct testimony recommended rates that would increase operating revenues by $70,562 to produce operating revenues of $2,967,308.

Typical Bill Analysis

The typical 5/8 x 3/4-inch meter residential customers with a median usage of 4,500 gallons would experience a $2.18 or a 7.18 percent increase in their monthly bill, from $30.28 to $32.45, under Staff's surrebuttal recommended rates.

I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Teresa B. Hunsaker. I am a Public Utilities Analyst III employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same Teresa B. Hunsaker who filed direct testimony in this case?

A. Yes, I am.

II. 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 Sahuarita Water Company ("SWC" or "Company") witnesses Mr. Geoff Caron and Mr. Thomas J. Bourassa regarding revenue requirement, rate base, and operating revenues and expenses.

Q. Did you attempt to address every issue raised by the Company in its rebuttal testimony?

A. No. I limited my discussion to certain issues as outlined below. My silence on any particular issue raised in the Company's rebuttal testimony does not indicate that I agree with the Company's stated rebuttal position on the issue. Rather, where I do not respond, I rely on my direct testimony.

III. SUMMARY OF PROPOSED REVENUES

Q. Has Staff reviewed Mr. Bourassa's rebuttal testimony regarding revenue requirement for the Company?

A. Yes.

Q. Please summarize the proposed and recommended revenue requirement, revenue increases, and percentage increase.

A. The proposed and recommended revenue requirement, revenue increase, and percentage increase are as follows:

	Revenue Requirement	Revenue Increase	% Increase
Company - Direct	$3,229,480	$332,733	11.49%
Staff - Direct	$2,967,308	$70,562	2.44%
Company – Rebuttal	$3,173,385	$276,638	9.55%
Staff - Surrebuttal	$3,063,165	$166,419	5.75%

Q. What are the primary reasons why the Company's revenue requirement is higher and proposed increase larger than Staff's recommendation?

A. The difference in revenue requirement is primarily a result of the differences in plant in service, cost of capital, and operating expenses.

IV. RATE BASE

Q. Has Staff reviewed Mr. Bourassa's rebuttal testimony regarding rate base for the Company?

A. Yes. The Company's filing treats the original cost rate base ("OCRB") the same as the fair value rate base ("FVRB").

Q. Would Staff please identify the respective rate base proposed by the Company and recommended by Staff?

A. Yes, the rate bases proposed by the Company and recommended by Staff are as follows:

	OCRB/FVRB
Company - Direct	$9,298,032
Staff – Direct	$8,778,456
Company - Rebuttal	$9,359,714
Staff - Surrebuttal	$9,359,714

Q. What changes did Staff make to Rate Base in surrebuttal testimony?

A. Staff made changes to the following adjustments:

1. Rate Base Adjustment No. 1 – Plant Reclassifications
2. Rate Base Adjustment No. 2 – Plant Additions and Retirements
3. Rate Base Adjustment No. 4 - Accumulated Depreciation ("A/D")
4. Rate Base Adjustment No. 5a – Contributions in Aid of Construction ("CIAC") and Accumulated Amortization
5. Rate Base Adjustment No. 5b – Accumulated Deferred Income Taxes ("ADIT")

Q. Will Staff please discuss the Company's proposed OCRB?

A. Yes. Staff worked directly with the Company after Staff's direct testimony was filed to correct the Company's proposed OCRB. The Company has detailed these changes in its rebuttal testimony by both of the Company's witnesses. Based on these discussions and responses by the Company to Staff's data requests, Staff and the Company were able to resolve the issues in the OCRB. Staff will address the rebuttal rate base adjustments to OCRB to Plant in Service ("PIS"), Accumulated Depreciation ("A/D"), Contribution in Aid

of Construction ("CIAC") and Accumulated Amortization, and Accumulated Deferred Income Taxes ("ADIT").

Plant in Service ("PIS")

Q. Does Staff concur with the Company's proposed PIS adjustments in the Company's rebuttal testimony?

A. Yes. Staff worked directly with the Company to properly reflect the following as shown in Staff's Adjustments No. 1 and No. 2:

1. Reverse the retirements for arsenic media;
2. Reclassification of the arsenic media costs and water treatment equipment;
3. Reclassification of the original arsenic media costs; and,
4. Retirement of original arsenic media.

Q. Does Staff concur with the Company's proposed rebuttal treatment of the reclassification of the original arsenic media costs to a separate plant account?

A. Yes. Staff concurs with the Company that the useful life for the original arsenic media costs is approximately 15 years.

Q. Does Staff concur with the Company's reclassification of the Water Treatment Equipment?

A. Yes. Staff concurs with the Company's reversal of the $120,000 retirement of arsenic media costs as shown in Staff's Adjustment No. 2.

Accumulated Depreciation ("A/D")

Q. Does Staff concur with the Company's proposed A/D adjustments in the Company's rebuttal testimony?

A. Yes. Staff concurs with the Company's proposed A/D adjustments. Due to the proposed adjustments to PIS, the proposed A/D adjustments are appropriate as reflected in the plant reconstruction provided by the Company as shown in Staff's Adjustment No. 4.

Contributions in Aid of Construction ("CIAC")

Q. Does Staff concur with the Company's proposed adjustments to CIAC and/or Accumulated Amortization?

A. Yes. Staff concurs with the Company's proposed CIAC adjustments to the accumulated amortization as shown in Staff's Adjustment No. 5a.

Accumulated Deferred Income Taxes ("ADIT")

Q. Does Staff concur with the Company's proposed adjustments to ADIT?

A. Yes. Staff concurs with the Company's proposed adjustments to ADIT in Staff's Adjustment No. 5b.

V. OPERATING INCOME

Q. What changes did Staff make to Operating Income in its surrebuttal testimony?

A. Staff made changes to the following adjustments:

1. Operating Income Adjustment No. 7 – Depreciation Expense
2. Operating Income Adjustment No. 9 – Income Tax Expense

Q. Has Staff reviewed Mr. Bourassa's rebuttal testimony regarding revenue and expenses for the Company?

A. Yes.

Q. Does Staff concur with all of the Company's expense adjustments in the Company's rebuttal testimony?

A. No. Staff's depreciation expense is only different due to rounding, and Staff will address the Company's rebuttal testimony regarding incentive pay bonuses to contract employees.

Depreciation Expense

Q. Please describe the total difference in Staff's depreciation expense to the Company's depreciation expense.

A. Staff depreciated Original Arsenic Media – Plant Account 320.4 at 6.67 percent as shown on Schedule TBH-18. Staff's total adjusted depreciation expense for the test year is $22,028. The Company depreciated Original Arsenic Media – Plant Account 320.4 at 6.66 percent on Rebuttal Schedule C-2, Page 2. The Company's total adjusted depreciation expense for the test year is $22,049. The total difference is $21.

Contractual Services – Management Fees Expense

Q. Does Staff concur with the Company's proposed contractual services – management fees expense adjustment for bonuses in the Company's rebuttal testimony?

A. No. Staff continues to disagree with the inclusion of incentive pay bonuses with payroll taxes for non-dedicated and dedicated employees of Rancho Sahuarita Management Company ("RSMC"). Staff removed all incentive pay bonuses for both non-dedicated and dedicated contract employees in the amount of $21,470. RSMC has steadily increased the salaries of the contract employees over the years as their duties and responsibilities have changed. Through

numerous data requests provided by the Company, Staff reviewed the salary increases without bonuses over several years (Projected 2015, Test Year 2014 and 2013) and the increases varied from approximately 0.5 percent to approximately 18.0 percent. The national average in 2015 for pay increases has projected an increase of 3.0 percent.

Q. Did Staff review the distribution of the incentive pay bonuses to dedicated employees in 2014? Please explain.

A. Yes. Staff reviewed the distribution of incentive pay bonuses to non-dedicated and dedicated contract employees covered by RSMC. Approximately 66 percent of these bonuses were paid to seven dedicated contract employees (13 total employees) including one employee that is allocated at 89 percent to the Company directly. The dedicated employees in managerial or supervisory roles consisted of four employees that were provided with approximately 95 percent of these bonuses.

Q. Did Staff review the distribution of the incentive pay bonuses to non-dedicated employees in 2014? Please explain.

A. Yes. The four non-dedicated employees received approximately 38 percent of their entire bonuses from the Company and 62 percent from an affiliate Company. However, the Company has been allocated from 10 percent to 30 percent of their salary and benefits.

Q. Has Staff been provided with incentive plans or documentation to support that bonuses are part of the total compensation package?

A. No. In the Company's response to Data Request TBH 1.34b, the Company stated that "There is nothing in writing and it is entirely up to the Managing Partner. Items that are considered are overall performance and vehicle use. During the year, employees are not

reimbursed for the use of their private vehicles and this is also taken into consideration at the end of the year." Staff has provided a copy of this data request in Attachment A.

Q. What is Staff's recommendation?

A. Staff continues to recommend that no incentive pay bonuses to dedicated or non-dedicated contract employees be funded by rate payers. Staff recommends that all contract employees be required to properly account for the use of their personal vehicles for business purposes and be reimbursed by the Company.

Income Taxes Expense

Q. Did Staff make any corrections in its schedule to test year Income Tax Expense?

A. Yes. Staff inadvertently linked the wrong tax rates in direct testimony that created an error in Adjustment No. 9. Staff has properly linked the appropriate tax rates in surrebuttal testimony and schedules.

Q. Did Staff make an adjustment to test year Income Tax Expense?

A. Yes. Staff applied the Company's income tax rates as provided on the Company's Schedule C-3, Page 2 for this LLC to Staff's adjusted test year taxable income. Income tax expenses for the test year and recommended revenues are shown on Schedules TBH-11 and TBH-20.

VI. RATE DESIGN

Q. What is Staff's recommended rate design for water service?

A. The Staff's recommended rates are shown on Surrebuttal Schedule TBH-21, pages 1 and 2.

Q. Did Staff review the recommended revenue requirement generated in direct testimony as discussed by the Company in its rebuttal testimony?

A. Yes. Staff reviewed the recommended revenue requirement through Staff's recommended rate design. Due to Staff's acceptance of the Company's usage normalization and revenue annualization, Staff adjusted the rate design in surrebuttal to take into consideration these adjustments to revenue.

Q. What is the rate impact on a typical 5/8 x 3/4-inch meter residential customer with median usage in Staff's recommended surrebuttal rates?

A. The typical 5/8 x 3/4-inch meter residential customers with a median usage of 4,500 gallons would experience a $2.18 or a 7.18 percent increase in their monthly bill, from $30.28 to $32.45, under Staff's recommended rates. A typical bill analysis is provided on Schedule TBH-22.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
Test Year December 31, 2014

SURREBUTTAL TESTIMONY OF TERESA B. HUNSAKER

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TBH-4	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
TBH-5	RATE BASE ADJUSTMENT NO. 1 - Plant Reclassification
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TBH-8	RATE BASE ADJUSTMENT NO. 4 - Accumulated Depreciation
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SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
Test Year December 31, 2014

Surrebuttal Schedule TBH-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	[A] COMPANY ORIGINAL COST	[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	$9,298,032	$9,359,714
2	Adjusted Operating Income (Loss)	$598,003	$664,683
3	Current Rate of Return (L2 / L1)	6.43%	7.10%
4	Required Rate of Return	9.20%	8.41%
5	Required Operating Income (L4 * L1)	$855,419	$787,140
6	Operating Income Deficiency (L5 - L2)	$257,416	$122,456
7	Gross Revenue Conversion Factor	1.2926	1.3590
8	Required Revenue Increase (L7 * L6)	$332,734	$166,419
9	Adjusted Test Year Revenue	$2,896,746	$2,896,746
10	Proposed Annual Revenue (L8 + L9)	$3,229,480	$3,063,165
11	Required Increase in Revenue (%)	11.49%	5.75%

References:
Column [A]: Company Schedule B-1
Column [B]: Staff Schedules OCRB, GRCF, TYOI & COC

SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
Test Year December 31, 2014

Surrebuttal Schedule TBH-2

GROSS REVENUE CONVERSION FACTOR

Line No.	Description	[A]	[B]	[C]	[D]	[E]	[F]
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollectible Factor (Line 11)	0.0000%					
3	Revenues (L1 - L2)	100.0000%					
4	Combined Federal and State Income Tax and Property Tax Rate (L23)	26.4168%					
5	Subtotal (L3 - L4)	73.5832%					
6	**Revenue Conversion Factor (L1 / L5)**	1.359005					
	Calculation of Uncollectible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (L17)	25.0817%					
9	One Minus Combined Income Tax Rate (L7 - L8)	74.9183%					
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 (L57 Col E)	3.3693%					
14	Federal Taxable Income (L12 - L13)	96.6307%					
15	Applicable Federal Income Tax Rate (L56 Col E)	22.4694%					
16	Effective Federal Income Tax Rate (L14 * L15)	21.7123%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		25.0817%				
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	25.0817%					
20	One Minus Combined Income Tax Rate (L18 - L19)	74.9183%					
21	Property Tax Factor	1.7821%					
22	Effective Property Tax Factor (L20 * L21)		1.3351%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17 + L22)			26.4168%			
24	Required Operating Income (Schedule TBH-1, L5)	$ 787,140					
25	Adjusted Test Year Operating Income (Loss) (Schedule TBH-10, L32)	$ 664,683					
26	Required Increase in Operating Income (L24 - L25)		$ 122,456				
27	Income Taxes on Recommended Revenue (Col. [F], L52)	$ 156,892					
28	Income Taxes on Test Year Revenue (Col. [C], L52)	$ 115,895					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 40,997				
30	Recommended Revenue Requirement (Schedule TBH-1, L10)	$ 3,063,165					
31	Uncollectible Rate (L10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$0					
33	Adjusted Test Year Uncollectible Expense	$0					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$0				
35	Property Tax with Recommended Revenue (Schedule TBH-19, L19)	$157,528					
36	Property Tax on Test Year Revenue (Schedule TBH-19, L20)	$154,562					
37	Increase in Property Tax Due to Increase in Revenue (L35 - L36) (Schedule TBH-19, L21)		$ 2,966				
38	Total Required Increase in Revenue (L26 + L29 + L34 +L37)	$ 166,419					

		(A)	(B)	(C)	(D)	(E)	(F)
		Test Year			Staff Recommended		
		Total		Water	Total		Water
	Calculation of Income Tax:						
39	Revenue	$2,896,746		$2,896,746	$3,063,165		$3,063,165
40	Operating Expenses Excluding Income Taxes	2,116,169		2,116,169	2,119,134		2,119,134
41	Synchronized Interest (L47)	80,494		80,494	80,494		80,494
42	Arizona Taxable Income (L39 - L40 - L41)	$ 700,084		$ 700,084	$ 863,537		$ 863,537
43	Arizona State Effective Income Tax Rate (see Company Schedule C-3, Page 2)	2.7401%		2.7401%	2.8592%		2.8592%
44	Arizona Income Tax (L42 * L43)	$ 19,183		$ 19,183	$ 24,690		$ 24,690
45	Federal Taxable Income (L42 - L44)	$ 680,901		$ 680,901	$ 838,846		$ 838,846
46	Federal Tax Rate (see Company Schedule C-3, Page 2)	14.2034%		14.2034%	15.7598%		15.7598%
47	Federal Tax	$ 96,711		$ 96,711	$ 132,201		$ 132,201
48							
49							
50							
51							
52							
53	Total Federal Income Tax	$ 96,711		$ 96,711	$ 132,201		$ 132,201
54	Combined Federal and State Income Tax (L35 + L42)	$ 115,895		$ 115,895	$ 156,892		$ 156,892

55	COMBINED Applicable Federal Income Tax Rate [Col. [D], L53 - Col. [A], L53] / [Col. [D], L45 - Col. [A], L45]	22.4694%	
56	Applicable Federal Income Tax Rate [Col. [F], L53 - Col. [C], L53] / [Col. [F], L45 - Col. [C], L45]		22.4694%
57	Applicable State Income Tax Rate [Col. [F], L44 - Col. [C], L44] / [Col. [F], L42 - Col. [C], L42]		3.3693%

		Wastewater	Water
	Calculation of Interest Synchronization:		
58	Rate Base	$0	$9,359,714
59	Weighted Average Cost of Debt	0.0000%	0.8600%
60	Synchronized Interest (L59 * L60)	$0	$80,494

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Surrebuttal Schedule TBH-3

RATE BASE - ORIGINAL COST/FAIR VALUE

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	REF	[C] STAFF AS ADJUSTED
1	Plant in Service	$27,468,728	($39,152)	1,2,3	$27,429,576
2	Less: Accumulated Depreciation	6,309,380	(161,732)	4	6,147,648
3	Net Plant in Service	$21,159,348	122,579		$21,281,927
	LESS:				
4	Net Contribution in Aid-of Construction (CIAC)	$6,335,865	$22,097	5a	$6,357,962
5	Advances in Aid of Construction (AIAC)	5,189,497	0		5,189,497
6	Customer Deposits	52,876	0		52,876
7	Accumulated Deferred Income Taxes (ADIT)	283,077	38,801	5b	321,878
	Total Deductions	$11,861,315	$60,898		$11,922,213
	ADD:				
8	Unamortized Finance Charges	$0	$0		$0
9	Deferred Tax Assets	0	0		0
10	Allowance for Working Capital	0	0		0
11	Rounding	(1)	1		0
	Total Additions	($1)	$1		$0
12	**Original Cost Rate Base**	**$9,298,032**	**61,682**		**$9,359,714**

References:
Column [A]: Company Schedule B-1
Column [B]: Schedule TBH-4
Column [C]: Column [A] + Column [B]

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Surrebuttal Schedule TBH-4

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Plant Reclass ADJ No. 1	[C] Plant Add and Retire ADJ No. 2	[D] Post-Test Year ADJ No. 3	[E] Accum. Dep. ADJ No. 4	[F] CIAC ADJ No. 5a	[G] ADIT ADJ No. 5b	[H] STAFF ADJUSTED
				Ref: Sch TBH-5	Ref: Sch TBH-6	Ref: Sch TBH-7	Ref: Sch TBH-8	Ref: Sch TBH-9a	Ref: Sch TBH-9b	
		PLANT IN SERVICE:								
1	301	Organization Costs	$7,541	$0	$0	$0	$0	$0	$0	$7,541
2	302	Franchise Costs	352,403	0	0	0	0	0	0	352,403
3	303	Land & Land Rights	13,636	0	0	0	0	0	0	13,636
4	304	Structures & Improvements	401,832	0	0	0	0	0	0	401,832
5	307	Wells & Springs	2,142,644	0	0	0	0	0	0	2,142,644
6	310	Power Generation Equipment	549,708	0	0	0	0	0	0	549,708
7	311	Electric Pumping Equipment	195,407	0	0	0	0	0	0	195,407
8	320	Water Treatment Equipment	2,001,053	(2,121,053)	120,000	0	0	0	0	0
9	320.1	Water Treatment Plants	0	1,499,569	0	0	0	0	0	1,499,569
10	320.2	Solutions & Feeders	0	46,479	0	0	0	0	0	46,479
11	320.3	Arsenic Media	152,307	(152,307)	0	0	0	0	0	0
12	320.4	Original Arsenic Media	0	575,005	(157,503)	0	0	0	0	417,503
13	320.5	Regenerated Arsenic Media	0	152,307	0	(1,650)	0	0	0	150,657
14	330	Distribution Reservoirs & Standpipes	1,848,872	(1,848,872)	0	0	0	0	0	0
15	330.1	Storage Tank	0	1,811,998	0	0	0	0	0	1,811,998
16	330.2	Pressure Tanks	0	36,874	0	0	0	0	0	36,874
17	331	Transmission & Distribution Mains	13,281,053	0	0	0	0	0	0	13,281,053
18	333	Services	2,256,719	0	0	0	0	0	0	2,256,719
19	334	Meters & Meter Installations	1,489,172	0	0	0	0	0	0	1,489,172
20	335	Hydrants	732,251	0	0	0	0	0	0	732,251
21	336	Backflow Prevention Devices	1,660	0	0	0	0	0	0	1,660
22	339	Other Plant & Misc. Equip.	0	0	0	0	0	0	0	0
23	340	Office Furniture & Fixtures	160,855	0	0	0	0	0	0	160,855
24	340.1	Computer & Software	122,607	0	0	0	0	0	0	122,607
25	341	Transportation Equipment	139,706	0	0	0	0	0	0	139,706
26	342	Store Equipment	0	0	0	0	0	0	0	0
27	343	Tools & Work Equipment	37,840	0	0	0	0	0	0	37,840
28	344	Laboratory Equipment	132	0	0	0	0	0	0	132
29	345	Power Operated Equipment	0	0	0	0	0	0	0	0
30	345	Communications Equipment	577,721	0	0	0	0	0	0	577,721
31	347	Miscellaneous Equipment	695	0	0	0	0	0	0	695
32	348	Other Intangibles	1,002,914	0	0	0	0	0	0	1,002,914
33		Gross Utility Plant in Service	$27,468,728	$0	($37,503)	($1,650)	$0	$0	$0	$27,429,576
34		Less: Accumulated Depreciation	6,309,380	0	0	0	(161,732)	0	0	6,147,648
35		Net Utility Plant in Service (L29 - L30)	$21,159,348	$0	($37,503)	($1,650)	$161,732	$0	$0	$21,281,927
		DEDUCTIONS								
36		Contributions in Aid of Construction (CIAC)	$7,712,717	$0	$0	$0	$0	$0	$0	$7,712,717
37		Less: Accumulated Amortization	1,376,852	0	0	0	0	(22,097)	0	1,354,755
38		Net CIAC (L32 - L33)	$6,335,865	$0	$0	$0	$0	$22,097	$0	$6,357,962
39		Advances in Aid of Construction (AIAC)	5,189,497	0	0	0	0	0	0	5,189,497
40		Customer Meter Deposits	52,876	0	0	0	0	0	0	52,876
41		Accumulated Deferred Income Taxes (ADIT)	283,077	0	0	0	0	0	38,801	321,878
42		Total Deductions	$11,861,315	$0	$0	$0	$0	$22,097	$38,801	$11,922,213
		ADDITIONS:								
43		Unamortized Finance Charges	$0	$0	$0	$0	$0	$0	$0	$0
44		Deferred Tax Assets	0	0	0	0	0	0	0	0
45		Allowance for Working Capital	0	0	0	0	0	0	0	0
46		Rounding	(1)	0	0	0	0	0	1	0
47		Total Additions	($1)	$0	$0	$0	$0	$0	$1	$0
48		**ORIGINAL COST RATE BASE**	$9,298,032	$0	($37,503)	($1,650)	$161,732	($22,097)	($38,800)	$9,359,714

ADJ No.	Schedule
1	TBH-5
2	TBH-6
3	TBH-7
4	TBH-8
5a	TBH-9a
5b	TBH-9b

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Surrebuttal Schedule TBH-5

RATE BASE ADJUSTMENT NO. 1 - Plant Reclassification

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJUSTMENT	[C] STAFF ADJUSTED
1	Water Treatment Equipment	$2,001,053	(2,121,053)	($120,000)
2	Water Treatment Plants	0	1,499,569	1,499,569
3	Solutions & Feeders	0	46,479	46,479
4	Arsenic Media	152,307	(152,307)	0
5	**Original Arsenic Media**	0	575,005	575,005
6	**Regenerated Arsenic Media**	0	152,307	152,307
7	Distribution Reservoirs & Standpipes	1,848,872	(1,848,872)	0
8	Storage Tank	0	1,811,998	1,811,998
9	Pressure Tanks	0	36,874	36,874

REFERENCES:
Column [A]: Company Schedule B-2
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

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Surrebuttal Schedule TBH-6

RATE BASE ADJUSTMENT NO. 2 - Plant Additions and Retirements

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJUSTMENT	[C] STAFF ADJUSTED
1	Original Arsenic Media Additions (Batch 3.0)	$0	$130,000	$130,000
2	Original Arsenic Media Retirement (original - Batch 1.0)	0	(287,503)	(287,503)
3	Water Treatment Equipment (Misclassified)	0	120,000	120,000
4	Total	$0	($37,503)	($37,503)

REFERENCES:
Column [A]: Company Schedule B-2
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

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Surrebuttal Schedule TBH-7

RATE BASE ADJUSTMENT NO. 3 - Post-Test Year Plant

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJUSTMENT	[C] STAFF ADJUSTED
1	Regenerated Arsenic Media	$152,307	($1,650)	$150,657

REFERENCES:
Column [A]: Company Schedule B-2
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

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Surrebuttal Schedule TBH-8

RATE BASE ADJUSTMENT NO. 4 - Accumulated Depreciation				
LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJUSTMENT	[C] STAFF ADJUSTED
1	Accumulated Depreciation	$6,309,380	($161,732)	$6,147,648

REFERENCES:
Column [A]: Company Schedule B-2
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

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Surrebuttal Schedule TBH-9a

RATE BASE ADJUSTMENT NO. 5a - Contributions in Aid of Construction ("CIAC") Amortization

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	CIAC Amortization	$1,376,852	($22,097)	$1,354,755
2	Total	$1,376,852	($22,097)	$1,354,755

References:
Column [A]: Company Schedule C-2 & Workpapers
Column [B]: Testimony TBH, Company Rebuttal Schedule B-2
Column [C]: Column [A] + Column [B]

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Surrebuttal Schedule TBH-9b

RATE BASE ADJUSTMENT NO. 5b - Accumulated Deferred Income Taxes ("ADIT")

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	ADIT	$283,077	$38,801	$321,878
2	Total	$283,077	$38,801	$321,878

References:
Column [A]: Company Schedule C-2 & Workpapers
Column [B]: Testimony TBH, Company Rebuttal Schedule B-2
Column [C]: Column [A] + Column [B]

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Surrebuttal Schedule TBH-10

OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND STAFF RECOMMENDED

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY ADJUSTED TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	REF	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1		*REVENUES:*						
2	461	Metered Water Sales	$2,843,219	$0		$2,843,219	$166,419	$3,009,638
3	460	Water Sales - Unmetered	0	0		0	0	0
4	474	Other Operating Revenue	53,527	0		53,527	0	53,527
5		**Total Operating Revenues**	$2,896,746	$0		$2,896,746	$166,419	$3,063,165
6		*OPERATING EXPENSES:*						
7	601	Salaries & Wages	$0	$0		$0	$0	$0
8	610	Purchased Water	5,265	0		5,265	0	5,265
9	615	Purchased Power	138,933	0		138,933	0	138,933
10	618	Chemicals	14,734	0		14,734	0	14,734
11	620	Repairs & Maintenance	102,989	(6,584)	1	96,406	0	96,406
12	621	Office Supplies & Expense	0	0		0	0	0
13	630	Contract Services - Accounting	13,497	0		13,497	0	13,497
14	633	Contract Services - Legal	10,603	0		10,603	0	10,603
15	631	Contract Services - Eng	7,968	0		7,968	0	7,968
16	636	Contract Services - Other	126,034	(11,003)	1, 2	115,031	0	115,031
17	634	Management Fees	765,161	(28,894)	3	736,267	0	736,267
18	635	Contractual Services - Water Testing	5,341	8,634	1, 4	13,975	0	13,975
19	641	Rents	1,666	0		1,666	0	1,666
20	650	Transportation Expense	20,650	0		20,650	0	20,650
21	657	Insurance - General Liability	17,137	0		17,137	0	17,137
22	659	Insurance - Health & Life	0	0		0	0	0
23	666	Regulatory Commission Expense - Rate Case	50,000	(20,000)	5	30,000	0	30,000
24	675	Miscellaneous Expense	29,504	0		29,504	0	29,504
25	670	Bad Debt Expense	541	0		541	0	541
26	403	Depreciation Expense	721,109	(22,028)	7	699,081	0	699,081
27	408	Taxes Other than Income	10,350	0		10,350	0	10,350
28	408.11	Property Taxes	154,562	0	8	154,562	2,966	157,528
29	409	Income Tax	102,700	13,195	9	115,895	40,997	156,892
30		Rounding	(1)	0		(1)	0	(1)
31		**Total Operating Expenses**	$2,298,743	($66,680)		$2,232,063	$43,962	$2,276,025
32		**Operating Income (Loss)**	$598,003	$66,680		$664,683	$122,456	$787,140

References:
Column [A]: Company Schedule C-1
Column [B]: Schedule TBH-11
Column [C]: Column [A] + Column [B]
Column [D]: Schedules TBH-1, TBH-2 and TBH-18
Column [E]: Column [C] + Column [D]

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Surrebuttal Schedule TBH-11

SUMMARY OF OPERATING INCOME STATEMENT ADJUSTMENTS - TEST YEAR

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Expenses Reclass ADJ No. 1	[C] Contract Services ADJ No. 2	[D] Mgmt. Fees ADJ No. 3	[E] Water Testing ADJ No. 4	[F] Rate Case ADJ No. 5	[G] Not Used ADJ No. 6	[H] Depr. Exp. ADJ No. 7	[I] Prop. Tax ADJ No. 8	[K] Income Tax ADJ No. 9	[T] STAFF ADJUSTED
				Ref: Sch TBH-12	Ref: Sch TBH-13	Ref: Sch TBH-14	Ref: Sch TBH-15	Ref: Sch TBH-16	Ref: Sch TBH-17	Ref: Sch TBH-18	Ref: Sch TBH-19	Ref: Sch TBH-20	
1		*REVENUES:*											
2	461	Metered Water Sales	$2,843,219	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,843,219
3	460	Water Sales - Unmetered	0	0	0	0	0	0	0	0	0	0	0
4	474	Other Operating Revenue	53,527	0	0	0	0	0	0	0	0	0	53,527
5		**Total Operating Revenues**	$2,896,746	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,896,746
6		*OPERATING EXPENSES:*											
7	601	Salaries & Wages	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
8	610	Purchased Water	5,265	0	0	0	0	0	0	0	0	0	5,265
9	615	Purchased Power	138,933	0	0	0	0	0	0	0	0	0	138,933
10	618	Chemicals	14,734	0	0	0	0	0	0	0	0	0	14,734
11	620	Repairs & Maintenance	102,989	(6,584)	0	0	0	0	0	0	0	0	96,406
12	621	Office Supplies & Expense	0	0	0	0	0	0	0	0	0	0	0
13	630	Contract Services - Accounting	13,497	0	0	0	0	0	0	0	0	0	13,497
14	633	Contract Services - Legal	10,603	0	0	0	0	0	0	0	0	0	10,603
15	631	Contract Services - Eng	7,968	0	0	0	0	0	0	0	0	0	7,968
17	636	Contract Services - Other	126,034	(1,020)	(9,983)	0	0	0	0	0	0	0	115,031
16	634	Management Fees	765,161	0	0	(28,894)	0	0	0	0	0	0	736,267
18	635	Contractual Services - Water Testing	5,341	7,604	0	0	1,030	0	0	0	0	0	13,975
19	641	Rents	1,666	0	0	0	0	0	0	0	0	0	1,666
20	650	Transportation Expense	20,650	0	0	0	0	0	0	0	0	0	20,650
21	657	Insurance - General Liability	17,137	0	0	0	0	0	0	0	0	0	17,137
22	659	Insurance - Health & Life	0	0	0	0	0	0	0	0	0	0	0
23	666	Regulatory Commission Expense - Rate Case	50,000	0	0	0	0	(20,000)	0	0	0	0	30,000
24	675	Miscellaneous Expense	29,504	0	0	0	0	0	0	0	0	0	29,504
25	670	Bad Debt Expense	541	0	0	0	0	0	0	0	0	0	541
26	403	Depreciation Expense	721,109	0	0	0	0	0	0	(22,028)	0	0	699,081
27	408	Taxes Other than Income	10,350	0	0	0	0	0	0	0	0	0	10,350
28	408.11	Property Taxes	154,562	0	0	0	0	0	0	0	0	0	154,562
29	409	Income Tax	102,700	0	0	0	0	0	0	0	0	13,195	115,895
30		Rounding	(1)	0	0	0	0	0	0	0	0	0	(1)
31		**Total Operating Expenses**	$2,298,743	$0	($9,983)	($28,894)	$1,030	($20,000)	$0	($22,028)	$0	$13,195	$2,232,063
32		**Operating Income (Loss)**	$598,003	$0	$9,983	$28,894	($1,030)	$20,000	$0	$22,028	($0)	($13,195)	$664,683

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Surrebuttal Schedule TBH-12

OPERATING INCOME ADJUSTMENT NO. 1 - Expense Reclassifications			
LINE NO. DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1 Repairs and Maintenance	$102,989	($6,584)	$96,406
2 Contract Services - Other	126,034	(1,020)	125,014
3 Water Testing	5,341	7,604	12,945
4 Total	$234,364	$0	$234,364

References:
Column [A]: Company Schedule C-2 & Workpapers
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

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Surrebuttal Schedule TBH-13

OPERATING INCOME ADJUSTMENT NO. 2 - Contractual Services - Other Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Contractual Services - Other Expense	$126,034	($9,983)	$116,051
2	Total	$126,034	($9,983)	$116,051

Staff Adjustments

Contractual Services - Workman's Comp (Reclass to Mgmt. Services)	$9,983
Total Adjustment	$9,983

References:
Column [A]: Company Schedule C-2 & Workpapers
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

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Surrebuttal Schedule TBH-14

OPERATING INCOME ADJUSTMENT NO. 3 - Management Fees Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Management Fees Expense	$765,161	($28,894)	$736,267
2	Total	$765,161	($28,894)	$736,267

Staff Adjustments

Remove Management Services for Underpayment of Mar. to Nov. 2013 Ex	$17,407
Remove Bonuses with payroll taxes for Non-Dedicated Employees	8,552
Remove Bonuses with payroll taxes for Dedicated Employees	12,918
Reclass Workman's Compensation from Contractual Services	(9,983)
Total Adjustment	$28,894

References:
Column [A]: Company Schedule C-2 & Workpapers
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

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Surrebuttal Schedule TBH-15

OPERATING INCOME ADJUSTMENT NO. 4 - Water Testing Expense				
LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Water Testing Expense	$5,341	$1,030	$6,371
2	Total	$5,341	$1,030	$6,371

References:
Column [A]: Company Schedule C-2 & Workpapers
Column [B]: Testimony TBH & Staff Engineering Table M
Column [C]: Column [A] + Column [B]

SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
Test Year December 31, 2014

Surrebuttal Schedule TBH-16

OPERATING INCOME ADJUSTMENT NO. 5 - Rate Case Expense				
LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Rate Case Expense	$50,000	($20,000)	$30,000
2	Total	$50,000	($20,000)	$30,000

References:
Column [A]: Company Schedule C-2
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
Test Year December 31, 2014

Surrebuttal Schedule TBH-17

OPERATING INCOME ADJUSTMENT NO. 6 - Not Used				
LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Not Used	$0	$0	$0
2	Total	$0	$0	$0

References:
Column [A]: Company Schedule C-2
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
Test Year December 31, 2014

Surrebuttal Schedule TBH-18

OPERATING INCOME ADJUSTMENT No. 7 - Depreciation Expense

Line No.	ACCT NO.	DESCRIPTION	[A] GROSS UTILITY PLANT IN SERVICE	[B] FULLY/NON DEPRECIABLE	[C] DEPRECIABLE PLANT	[D] DEPREC. RATE	[E] EXPENSE
	Plant In Service						
1	301	Organization Costs	$7,541	$7,541	$0	0.00%	$0
2	302	Franchise Costs	352,403	352,403	0	0.00%	0
3	303	Land & Land Rights	13,636	13,636	0	0.00%	0
4	304	Structures & Improvements	401,832		401,832	3.33%	13,381
5	307	Wells & Springs	2,142,644		2,142,644	3.33%	71,350
6	310	Power Generation Equipment	549,708		549,708	5.00%	27,485
7	311	Electric Pumping Equipment	195,407		195,407	12.50%	24,426
8	320	Water Treatment Equipment					
9	320.1	Water Treatment Plants	1,499,569		1,499,569	3.33%	49,936
10	320.2	Solutions & Feeders	46,479	46,479	0	20.00%	0
11	320.3	Point Of Use Systems	0		0	**10.00%**	0
12	320.4	Original Arsenic Media	417,503		417,503	**6.67%**	27,835
13	320.5	Regenerated Arsenic Media	150,657		150,657	**40.00%**	60,263
14	330	Distribution Reservoirs & Standpipes					
15	330.1	Storage Tank	1,811,998		1,811,998	2.22%	40,226
16	330.2	Pressure Tanks	36,874		36,874	5.00%	1,844
17	331	Transmission & Distribution Mains	13,281,053		13,281,053	2.00%	265,621
18	333	Services	2,256,719		2,256,719	3.33%	75,149
19	334	Meters & Meter Installations	1,489,172		1,489,172	8.33%	124,048
20	335	Hydrants	732,251		732,251	2.00%	14,645
21	336	Backflow Prevention Devices	1,660		1,660	6.67%	111
22	339	Other Plant & Misc. Equip.	0		0	6.67%	0
23	340	Office Furniture & Fixtures	160,855		160,855	6.67%	10,729
24	340.1	Computer & Software	122,607	67,883	54,724	20.00%	10,945
25	341	Transportation Equipment	139,706	123,399	16,307	20.00%	3,261
26	342	Store Equipment	0		0	4.00%	0
27	343	Tools & Work Equipment	37,840		37,840	5.00%	1,892
28	344	Laboratory Equipment	132		132	10.00%	13
29	345	Power Operated Equipment	0		0	5.00%	0
30	345	Communications Equipment	577,721		577,721	10.00%	57,772
31	347	Miscellaneous Equipment	695		695	10.00%	70
32	348	Other Intangibles	1,002,914		1,002,914	**10.00%**	100,291
		Rounding	-	(1)	1		0
33		Subtotal General	$27,429,576	$611,340	$26,818,236		$981,293
34		Less: Amortization of Contributions			$7,712,717	3.66%	$282,212
31		Staff Recommended Depreciation Expense					$699,081
32		Company Proposed Depreciation Expense					721,109
33		Increase/(Decrease) to Depreciation Expense					($22,028)

SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
Test Year December 31, 2014

Surrebuttal Schedule TBH-19

OPERATING INCOME ADJUSTMENT No. 8 - Property Taxes Expense

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	$2,896,746	$2,896,746
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	$5,793,492	$5,793,492
4	Staff Recommended Revenue	2,896,746	3,063,165
5	Subtotal (Line 4 + Line 5)	$8,690,238	$8,856,657
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	$2,896,746	$2,952,219
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	$5,793,492	$5,904,438
10	Plus: 10% of CWIP (Company Excluded)	0	0
11	Less: Net Book Value of Licensed Vehicles	11,415	11,415
12	Full Cash Value (Line 9 + Line 10 - Line 11)	$5,782,077	$5,893,023
13	Assessment Ratio	18.00%	18.00%
14	Assessment Value (Line 12 * Line 13)	$1,040,774	$1,060,744
15	Composite Property Tax Rate - Obtained from ADOR	14.85070%	14.85070%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$154,562	
17	Company Proposed Property Tax	154,562	
18	Staff Test Year Adjustment (Line 16 - Line 17)	$0	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		$157,528
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		154,562
21	Increase in Property Tax Due to Increase in Revenue Requirement		$2,966
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$2,966
23	Increase in Revenue Requirement		$166,419
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		**1.782084%**

REFERENCES:
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1 Page 2
Line 21: Line 19 - Line 20
Line 23: Schedule TBH-10

SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
Test Year December 31, 2014

Surrebuttal Schedule TBH-20

OPERATING INCOME ADJUSTMENT NO. 9 - Income Tax Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Income Tax Expense	$102,700	$13,195	$115,895
2	Total	$102,700	$13,195	$115,895

References:
Column [A]: Company Schedule C-2
Column [B]: Testimony TBH
Column [C]: Column [A] + Column [B]

SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
Test Year December 31, 2014

RATE DESIGN

Monthly Usage Charge	Present Rates	Company Proposed Rates	Staff Recommended Rates
5/8 x 3/4" Meter	$17.15	$19.12	$18.35
3/4" Meter	26.80	28.68	28.00
1" Meter	42.88	47.81	43.98
1½" Meter	85.75	95.61	86.85
2" Meter	137.20	152.98	138.30
3" Meter	274.40	305.96	275.50
4" Meter	428.75	478.06	429.85
6" Meter	857.50	956.11	858.60

Commodity Rates	Present Rates	Company Proposed Rates	Staff Recommended Rates
5/8 x 3/4" & 3/4" Meter - Residential			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 3,000 Gallons	$2.500	$2.888	$2.750
From 3,001 to 9,000 Gallons	3.750	4.188	3.900
Over 9,000 Gallons	4.500	4.988	4.740
5/8 x 3/4" & 3/4" Meter - Commercial & Industrial			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 9,000 Gallons	$3.750	$4.188	$3.900
Over 9,000 Gallons	4.500	4.988	4.740
1" - Residential, Commercial & Industrial			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 20,000 Gallons	$3.750	$4.188	$3.900
Over 20,000 Gallons	4.500	4.988	4.740
1½" - Residential, Commercial & Industrial			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 55,000 Gallons	$3.750	$4.188	$3.900
Over 55,000 Gallons	4.500	4.988	4.740
2" - Residential, Commercial & Industrial			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 90,000 Gallons	$3.750	$4.188	$3.900
Over 90,000 Gallons	4.500	4.988	4.740
3" - Residential, Commercial & Industrial			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 200,000 Gallons	$3.750	$4.188	$3.900
Over 200,000 Gallons	4.500	4.988	4.740
4" - Residential, Commercial & Industrial			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 350,000 Gallons	$3.750	$4.188	$3.900
Over 350,000 Gallons	4.500	4.988	4.740

RATE DESIGN CONT.

Commodity Rates	Present Rates	Company Proposed Rates	Staff Recommended Rates
6" - Residential, Commercial & Industrial			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
From 1 to 750,000 Gallons	$3.750	$4.188	$3.900
Over 750,000 Gallons	4.500	4.988	4.740
Construction/Bulk			
Gallons Included in Minimum	0	0	0
Excess of Minimum - per 1,000 Gallons			
All Gallons	$4.500	$4.988	$4.740

Service Line and Meter Installation Charges	Present Rates			Company Proposed Rates			Staff Recommended Rates		
	Service Line	Meter Charge	Total Charge	Service Line	Meter Charge	Total Charge	Service Line	Meter Charge	Total Charge
5/8" x 3/4" Meter	$445	$155	$600	$445	$155	$600	$445	$155	$600
3/4" Meter	445	255	700	445	255	700	445	255	700
1" Meter	495	315	810	495	315	810	495	315	810
1½" Meter	550	525	1,075	550	525	1,075	550	525	1,075
2" Turbine Meter	830	1,045	1,875	830	1,045	1,875	830	1,045	1,875
2" Compound Meter	830	1,890	2,720	830	1,890	2,720	830	1,890	2,720
3" Turbine Meter	1,045	1,670	2,715	1,045	1,670	2,715	1,045	1,670	2,715
3" Compound Meter	1,165	2,545	3,710	1,165	2,545	3,710	1,165	2,545	3,710
4" Turbine Meter	1,490	2,670	4,160	1,490	2,670	4,160	1,490	2,670	4,160
4" Compound Meter	1,670	3,645	5,315	1,670	3,645	5,315	1,670	3,645	5,315
6" Turbine Meter	2,210	5,025	7,235	2,210	5,025	7,235	2,210	5,025	7,235
6" Compound Meter	2,330	6,920	9,250	2,330	6,920	9,250	2,330	6,920	9,250
Over 6"	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost

Service Charges	Present Rates	Company Proposed Rates	Staff Recommended Rates
Establishment or Reestablishment of Water Utility Service:			
Establishment	$25.00	$25.00	$25.00
Establishment (after hours)	40.00	N/A	N/A
Reestablishment (within 12 months)	*	*	*
Reconnection of Water Utility Service:			
During normal business hours	25.00	25.00	N/A
During non-business hours	40.00	N/A	N/A
Reconnection (delinquent)	N/A	N/A	25.00
After Hours Service Charge	N/A	50.00	50.00
Meter Test (if correct)	25.00	25.00	25.00
Meter Re-Read	N/A	25.00	25.00
Deposit Requirement	**	**	**
Deposit Interest	6%	6%	6%
NSF Check	15.00	15.00	15.00
Deferred Payment (per month)	1.5%	1.5%	1.5%
Late Charge (per month)	***	***	***
Charge of Moving Customer Meter - Customer Request	At Cost	At Cost	At Cost
Main Extension and Additional Facilities	At Cost	At Cost	At Cost

* Per Commission Rule A.A.C. R14-2-403.D. Number of months off the system times the monthly minimum.
** Per Commission Rules (R14-2-403.B)
*** Minimum $5.00 or 1.5% per month.

SAHUARITA WATER COMPANY LLC
Docket No. W-03718A-15-0213
Test Year December 31, 2014

Surrebuttal Schedule TBH-22

TYPICAL BILL ANALYSIS

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

Company Proposed	Gallons		Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	4,677		$30.94	$34.81	$3.87	12.50%
Median Usage	4,500		$30.28	$34.07	$3.79	12.52%
Staff Recommended						
Average Usage	4,677		$30.94	$33.14	$2.20	7.12%
Median Usage	4,500		$30.28	$32.45	$2.18	7.18%

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

Gallons	Present		Company Proposed	%	Staff Recommended	%
	Minimum Charge	$17.15	Minimum Charge	$19.12	Minimum Charge	$18.35
	1st Tier Rate	$2.500	1st Tier Rate	$2.888	1st Tier Rate	$2.750
	1st Tier Break-over	3,000	1st Tier Break-over	3,000	1st Tier Break-over	3,000
	2nd Tier Rate	$3.750	2nd Tier Rate	$4.188	2nd Tier Rate	$3.900
	2nd Tier Break-over	9,000	2nd Tier Break-over	9,000	2nd Tier Break-over	9,000
	3rd Tier Rate	$4.500	3rd Tier Rate	$4.988	3rd Tier Rate	$4.740
Consumption	Rates		Rates	Increase	Rates	Increase
-	$17.15		$19.12	11.49%	$18.35	7.00%
1,000	$19.65		$22.01	12.00%	$21.10	7.38%
2,000	$22.15		$24.90	12.40%	$23.85	7.67%
3,000	$24.65		$27.78	12.71%	$26.60	7.91%
4,000	$28.40		$31.97	12.58%	$30.50	7.39%
5,000	$32.15		$36.16	12.47%	$34.40	7.00%
6,000	$35.90		$40.35	12.39%	$38.30	6.69%
7,000	$39.65		$44.54	12.32%	$42.20	6.43%
8,000	$43.40		$48.72	12.27%	$46.10	6.22%
9,000	$47.15		$52.91	12.22%	$50.00	6.04%
10,000	$51.65		$57.90	12.10%	$54.74	5.98%
11,000	$56.15		$62.89	12.00%	$59.48	5.93%
12,000	$60.65		$67.88	11.91%	$64.22	5.89%
13,000	$65.15		$72.86	11.84%	$68.96	5.85%
14,000	$69.65		$77.85	11.78%	$73.70	5.81%
15,000	$74.15		$82.84	11.72%	$78.44	5.79%
16,000	$78.65		$87.83	11.67%	$83.18	5.76%
17,000	$83.15		$92.82	11.62%	$87.92	5.74%
18,000	$87.65		$97.80	11.58%	$92.66	5.72%
19,000	$92.15		$102.79	11.55%	$97.40	5.70%
20,000	$96.65		$107.78	11.52%	$102.14	5.68%
25,000	$119.15		$132.72	11.39%	$125.84	5.61%
30,000	$141.65		$157.66	11.30%	$149.54	5.57%
35,000	$164.15		$182.60	11.24%	$173.24	5.54%
40,000	$186.65		$207.54	11.19%	$196.94	5.51%
45,000	$209.15		$232.48	11.15%	$220.64	5.49%
50,000	$231.65		$257.42	11.12%	$244.34	5.48%
75,000	$344.15		$382.12	11.03%	$362.84	5.43%
100,000	$456.65		$506.82	10.99%	$481.34	5.41%

Sahuarita Water Company, LLC

W-03718A-15-0213

ATTACHMENT A

SAHUARITA WATER COMPANY, LLC
DOCKET NO. W-03718A-15-0213
RESPONSE TO STAFF'S FIRST SET OF DATA REQUESTS

Date:	August 19, 2015
Response provided by:	Marian Homiak
Title:	Controller
Company Name:	Sahuarita Water Company, LLC
Address:	4549 East Ft Lowell Road Tucson, AZ 85712
Company Response Number:	TBH 1.34

Q. Incentive Pay (included in the Management Fees) – Please provide the following information:

a. A detailed explanation for any incentive plans in existence during the years of 2012, 2013 and 2014.
b. For all incentive plans in effect during the Test Year, please provide documentation explain how the plan works.
c. The total dollar amount of incentive pay included in the test year income statement of your application.
d. Please state the account numbers used to record incentive pay.

RESPONSE:

a. It is the general policy for management to give, at its discretion a year-end bonus to employees for their work over the past year.
b. There is nothing in writing and it is entirely up to the Managing Partner. Items that are considered are overall performance and vehicle use. During the year, employees are not reimbursed for the use of their private vehicles and this is also taken into consideration at the end of the year.
c. The total dollar amount of incentive pay (bonus) included in the test year income statement of our application is:

Dedicated Employees:	$12,000.00
Non-Dedicated Employees:	8,552.44

d. AC#634.8

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
SUSAN BITTER SMITH- CHAIRMAN
BOB STUMP
BOB BURNS
DOUG LITTLE
TOM FORESE

IN THE MATTER OF THE APPLICATION OF SAHUARITA WATER COMPANY, INC. FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PROPERTY AND FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES.	DOCKET NO. W-03718A-15-_____

Direct Testimony of

Geoff Caron

on Behalf of

Sahuarita Water Company

June 26, 2015

PENGAD 800-631-6989
EXHIBIT
A-1

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II. Company Overview 3
III. Purpose for the Rate Filing 6

I. INTRODUCTION.

Q. Please state your name and business address.

A. My name is Geoff Caron. My address is 725 W Via Ranch Sahuarita Blvd. #101 Sahuarita, AZ 85629

Q. What is your position with Company

A. I am the General Manager of Sahuarita Water Company which I will refer to as "SWC". I am responsible for overseeing the daily operations of the company including directing, organizing, planning, budgeting, operations and maintenance, water quality and customer service.

Q. Please describe your education and experience.

A. I am currently in my 19th year of Utilities Operations. I hold a Grade 4 Water Distribution Certification, Grade 2 Water Treatment Certification and Grade 1 Certifications in Waste Water Collection and Waste Water Treatment. I started my career in water utilities in 1996 with Metro Water District, where I worked until 2001. I first started as a meter reader, but quickly began working on obtaining water certifications. My responsibilities included mainline construction and repair, equipment operation, well pump/booster pump and motor maintenance, customer service, and supervision of small crews. In September of 2001, I accepted a position with the Town of Marana as a Water Operator III and the operator in direct responsible charge of the facilities per A.A.C. R18-5-104. I was later promoted to Utilities Superintendent, where I handled the many challenges related to hiring, equipping and training staff, acquiring tools and equipment, developing standards and procedures for the design and construction of the water system and working closely with developers and engineers. During this time the Marana Water Department more than tripled in size. In 2007, I took a position with Flowing Wells Irrigation District as the Assistant

Superintendent. Working directly under the District Superintendent, I was responsible for supervision of field staff, planning/permitting mainline replacement projects, compliance with federal, state and local regulations, budget planning and working with developers and engineers for new and existing water service. In 2011, I took a position as Distribution Operator II for Avra Water Co-op, Inc. I left Avra in February 2014 to become the General Manager for Sahuarita Water Company. During my short tenure with Sahuarita Water Company I have become familiar with the National Association of Regulatory Utility Commissioners ("NARUC") accounting practices. Additionally, I have spent a great amount of time learning about the Arizona Department of Water Resources ("ADWR") and Central Arizona Groundwater Replenishment District ("CAGRD") requirements in the Tucson Active Management Area.

Q. Have you previously testified before the commission?

A. No. This is my first time testifying before the Arizona Corporation Commission ("Commission").

Q. What is the purpose of your direct testimony?

A. To support SWC's application for an increase in rates, and the recovery and pass-through of certain operating expenses. In that regard, I will provide background on the Company and its operations. I will also summarize significant capital improvements that SWC completed in order to provide adequate and reliable service, and changes in operating costs that are contributing to the need for a rate increase. In addition, I will address various other aspects of the relief being requested in this case.

II. COMPANY OVERVIEW.

Q. Please describe Sahuarita Water Company.

A. SWC provides water service to over 5,500 connections or roughly 16,000 customers located in the Rancho Sahuarita Master Planned Development in the Town of Sahuarita in Pima County, Arizona. Although the Company services a number of commercial, industrial and irrigation customers, the majority of our customers are residential. The largest residential customer class (nearly 87 percent of the customer base) is served by 5/8-inch meters. SWC utilizes 11 direct employees of Rancho Sahuarita Management Company, which is an affiliate of SWC, and the costs associated with those employees are allocated to SWC based upon SWC's utilization of their time and services.

Q. What are the SWC's water resources?

A. SWC is dependent solely on groundwater. We operate three groundwater wells, two owned by SWC and the other owned by the Town of Sahuarita ("Sahuarita"). SWC holds a 99-year lease on the Sahuarita Well. SWC is a member service area within the CAGRD, which replenishes pumped groundwater on behalf of SWC.

Q. Is Sahuarita Water located within an active management area or "AMA"?

A. Yes, we are provider within the Tucson Active Management Area (TAMA).

Q. Is the company a designated provider of an assured water supply?

A. Yes, the SWC holds a designation of 10,983 Acre-feet of assured water supply with ADWR (DWR No. 86-401203.0001).

Q. How does the Company promote water conservation to its customers?

A. As part of SWC's commitment to conservation, conservation tips and literature are available to our customers 24/7 at http://sahuaritawater.com/water-conservation/ Reminders about the website are periodically printed on the water bill. Free written conservation literature is available to our customers in the business office and is provided to all new customers when they establish an account. Additionally, SWC currently maintains a water-efficient demonstration garden with appropriate signage on the plants and techniques used. SWC maintains a trained water-conservation-audit specialist on staff, who conducts residential audits and is available for consultations. SWC staff also reviews abnormally high and low reads. Both low and high reads are then checked against the usage history for those accounts. If there is an anomaly, a water operator is sent out to get a re-read and check for leaks or a stuck meter. If the meter is stuck it will be replaced. If no leaks are found, but there is higher than normal usage, the customer is contacted by one of our customer service representatives. If the reason for the high usage is unknown, then we recommend a water audit be conducted at their property free of charge. SWC also provides youth education instruction and reaches over 400 students in the Sahuarita Unified School District annually. We believe that our water conservation policies have contributed to SWC's decreases in annual production. SWC's annual production has decreased 4.6 percent since 2012.

Q. What water quality challenges does SWC face in providing safe and reliable service to customers?

A. Wells 14, 18 and 23 have Arsenic levels over the Maximum Contaminant Level (MCL) of 10 parts per billion (ppb). Raw water from all three wells is treated at our main arsenic treatment plant (WTP 1). The treatment process utilizes blending treated water with raw water, only treating what is necessary. The arsenic level of the finished water ranges for 7-8 ppb. Staff monitors the blended flows very carefully to insure the longest life from the

arsenic media. Our goal is to maintain arsenic levels below the primary MCL while getting the most out of the treatment media before it becomes exhausted. This is a careful balance of quality over costs that are ultimately funded by the rate payer.

Q. Is the Company in compliance with all applicable federal, state and local regulations?

A. Yes, the company is in compliance with all local, state, and federal regulations.

Q. Has SWC experienced significant growth since its last general rate case in 2009?

A. The population in our service has grown from 4,700 connections in 2009 to over 5,500 connections in 2015. However, the Company has been able to accommodate the additional service connections with the infrastructure that was already in place. Although we anticipate doubling in size at build out, the real estate downturn is still in effect in Sahuarita. We are expecting to start building infrastructure again in 2016.

Q. How has SWC prepared to serve future growth within its service area?

A. In 2011, Westland Resources prepared a Water System Master Plan ("Master Plan") for SWC. A brief summary of the plan is as follows: The Master Plan identifies the capacity of our existing plant and current system demands and compares that to future build-out requirements. The Master Plan then identifies infrastructure that will need to be added to serve future build out. This includes sizing and location of storage, boosters, wells, treatment and transmission infrastructure. The Master Plan also includes a facility cost timeline. The Master Plan was updated again in 2012, and in late 2013 we incorporated it into SWC's Emergency Operations Plan.

Q. Please describe the customer satisfaction record of SWC.

A. The overall satisfaction of our customers appears to be very good. According to our records we have only received a total of six official complaints since 2008.

Q. How would you characterize the overall condition of SWC's water system?

A. The condition of SWC's system is very good. The infrastructure is 15 years and newer. Fortunately we have seen very few system failures (leaks). We do our best to maintain the systems integrity through various preventative and predictive maintenance programs, which include valve exercising, hydrant maintenance, quarterly pump and motor maintenance and routine inspection cleaning and repair of our reservoirs. In 2014 we had two reservoirs inspected, cleaned and repaired. During this time we also chose to install cathodic protection in all three reservoirs. Management will continue to develop programs that keep the company on the preventative side of the spectrum rather the alternative of corrective maintenance.

Q. What percentage of system water losses does Sahuarita incur?

A. SWC's water loss three-year average is currently 4.51%

III. PURPOSE FOR THE RATE FILING.

Q. Please summarize the Company's rate application.

A. Sahuarita Water Company ("SWC" or the "Company") submits its Application for an increase to its revenues by $332,734, or approximately 11.49% over the adjusted and annualized test-year revenues, for a total revenue requirement of $3,229,480, to be effective no later than June 30, 2016. SWC utilized a 12-month test year ending on December 31, 2014 for the preparation of this Application and the supporting schedules. Further, the Company seeks a rate of return of 9.2% on its fair value rate base of $9,298,032 based on a cost of debt equaling 4.2% and a return on equity of 10.5% - and a balanced capital structure consisting of approximately 20.57% debt and 79.43% equity. Further, SWC seeks inclusion of approximately $363,231 of post-test year plant that is known and measurable and necessary to serve existing customers as of the end of the test

year. SWC's request also includes a usage normalization adjustment to reflect the decreased consumption by SWC customers expected to continue over the next five years and for the foreseeable future. The Company also seeks to include a total of $765,161 in management fees (an increase of $82,274) that are based on the actual time expended by non-dedicated employees to the operations of SWC as a reasonable expense. SWC seeks inclusion of $172,088 for income tax expense based on an effective state and federal income tax rate of approximately 21.23% for an S Corporation, which is less than what it would have been if the Company elected to be taxed as a stand-alone C Corporation (37.23%), but is a reasonable expense based on business activities of SWC. The Company proposes to allocate the increase in rates along the same percentage as it currently exists between the monthly usage charge and the commodity rates. Thomas J. Bourassa describes and details the specific rate base and income statement adjustments, as well as the cost of capital and capital structure, in separate direct testimonies.

Q. Why is Sahuarita filing a general rate case application at this time?

A. Under Decision No. 74389 (March 19, 2014) the Commission requires SWC to file a rate case by June 30, 2015, using 2014 as a historical test year. Because of the requirement, SWC management seeks a rate increase so that the Company is earning a fair and reasonable return on its investment. Additionally, because of our conservation efforts, we have seen a decline in water usage since our last rate case. At this time we will be requesting a water usage normalization adjustment to account for lost revenue.

Q. What significant capital investments has SWC made since its last rate case?

A. Significant improvements include the addition of well 23 in 2009. The well provides needed redundancy to the SWC system and allows SWC to meet peak-day demand with the largest well out of service as well as provide water during electrical outages. At that time, well 23 was considered a replacement for well 17, which had significant

bacteriological problems. The overall cost and flushing needed to remediate well 17 proved to be cost prohibitive. After an extensive aquifer study, the location of well 23 was chosen. After approval from ADWR, the well was drilled and equipped.

At this time, well 23 is considered to be our main well. It is located at the same site and shares a power source with SWC's WTP 1. This made an ideal location for a standby generator as it will power both a water source and the treatment plant, which are both needed for water production. The generator installed at this location will be explained later in my testimony.

We also undertook three major capital projects in 2010, including SCADA (supervisory control and data acquisition) communication upgrades and the rehabilitation of wells 14 and 18.

Q. Please describe the SCADA communication upgrade.

A. Prior to the SCADA communications upgrade, SWC was experiencing loss of communications between sites and the Human Machine Interface (HMI). This resulted in unreliable and difficult operation of the system. SWC's SCADA communications was also dependent on a third party vendor. This project consisted of radio study that resulted in installing a new a Master Radio at WTP 1, and two remote radios; one at the current SWC office and one at Booster Station 2. WTP 1 was already equipped with highly-reliable fiber optic communications to Well 14, 18 and 23 and Booster Station 1 and provides control for all these facilities. The new master radio provides communications from WTP 1 to Booster Station 2 and to the SWC building, where the HMI is located.

Q. What was involved in rehabilitating Well 14?

A. Well 14 was pulled for inspection; video of the well indicated plugged perforations. The well was brushed and bailed. The post brush and bail video showed the casing to be in good condition. SWC also replaced 200 feet of column pipe, and 40 feet of shaft tube. The contractor found the pump to be in good condition and reusable. Two well sounding tubes were added for water level monitoring (one tube for a transmitter connected to SCADA and the other for manual sounding), the flow meter was also upgraded from a propeller meter to a mag meter. The well was re-quipped, flushed, tested for microbiological contaminates and placed back in service on August 4, 2010.

Q. Please describe the improvements to Well 18.

A, Well 18 was pulled for inspection, video of the well indicated plugged perforations. The well was brushed and bailed. Post brush and bail video of the well showed loose encrustation was removed but some of the hared material still remained. The well pump bearings and shaft were replaced. The remainder of the column pipe, tube and shaft were reusable. The well was re-quipped, flushed, tested for microbiological contaminates and placed back in service on September 7, 2010.

Q. What other capital improvement projects did SWC undertake?

A. In September of 2011 and March of 2013, the treatment media in lead vessels at WTP 1 became exhausted. The media was regenerated for reuse.

In 2013, variable frequency drives (VFDs) were installed at booster stations 1 and 2. The addition of the VFDs also included the necessary programming to operate over SCADA. The VFDs replaced aged motor starters and control panels.

In 2014, we added a second pre-filter at the influent point of WTP 1. This project created redundancy for a single point of failure at the treatment facility. The additional filter also allows our two largest wells to operate simultaneously during peak-day demand. Our engineer determined in our Master Plan that this was not operationally possible, prior to the addition of the pre-filter.

A new 250-GPM pump was added to our booster station 2. This pump was called for in our Master Plan to supplement needed fire flow at build out. Operationally, this pump was needed to supplement our VFD pump (mentioned above) during peak day demand. Prior to the installation of this pump a much larger pump was supplementing the drive, but because of the pump volume, the pump was short cycling. Short cycling can damage pumps and is inefficient.

Lastly, we upgraded our automatic meter reading (AMR) equipment to the latest Sensus product. This system allows for upgrading to advanced metering infrastructure (AMI) in the future. I will discuss this more in later testimony.

Q. Is the company requesting post-test year plant to be included in rate base?

A. Yes. SWC is requesting inclusion of two specific items as post-test year plant in rate base that are known and measurable and for the purpose of serving existing customers. In 2014, we had an arc flash study performed at our facilities. The study concluded that two of our well sites were classified as "category dangerous" at all times due to lack of a main power disconnect switch. SWC hired a contractor/engineer to design and install manual transfer switches at these two well sites which mitigated the arc flash danger and allows our operators to service the electrical panels. The completion of the Arc-Flash mitigation project did not occur until June 2015. The importance of a safe work environment for our

operators is crucial to be able to supply safe drinking water to our customers. We are therefore requesting the cost of this project to be considered in this case.

The second project that we believe should be included in rate base as post-test year plant is the addition of an emergency standby generator. Of the three wells SWC operates, none have an emergency source of power. Additionally, WTP 1 (which is required to treat all three wells) did not have an emergency source of power. After looking at the peak-day demand that occurred in June of 2014, which was 2,353,000 gallons, we determined that if we were to experience a long term power outage, our storage could be depleted in a 24 hours. Even in a curtailment, SWC does not have the necessary storage to provide water in a long-term power outage without a water source that has an emergency power supply. Because of the need for both a source of water and the arsenic treatment plant, we decided that a generator was needed at well 23, because the well shares a power source with the WTP 1. The generator and manual transfer switch were also connected to our SCADA system for monitoring and control. This allows an operator to determine whether or not the generator is needed when there is an outage. This will save on fuel costs that are ultimately passed down to the customer. The generator and transfers switch became used and useful in January 2015.

Q. What are SWC's projected capital expenditures for the next few years?

A. SWC is planning to make the following expenditures:

- Add a service truck to its fleet. The truck will have a welder/generator and a crane for servicing items including pumps, motors, and fire hydrants. We will also replace trucks with over 100,000 miles.
- Meter replacements for meters over 10-years old or over one-million gallons. This includes large meter replacement (such as replacing turbo meters with more accurate Sensus Omni meters).

- SCADA improvements, including an upsized RTU panel at booster station one, and replacing outdated PLC's with Ethernet ready units for better communication reliability.
- Brush bail and inspection of Wells 14, 18, and 23. The well pump, tube and shaft, and column pipe are over 15-years old in wells 14 and 18. As mentioned earlier in my testimony, these items were reused when the wells were last pulled for maintenance. It is anticipated that replacement of these items may be necessary at the time of the next inspection.
- Perform pump and motor efficiency studies to determine whether the pumps are operating at their best efficiency point. We will repair or replace pumps as necessary.
- As mentioned earlier in my testimony, SWC staff is looking to upgrade our meter reading system to the Sensus FlexNet system. This is an AMI technology that allows the utility to access meter reads from a central location by way of two-way radio and eliminates the need for meter readers. FlexNet also gives customers real-time access to their water usage.

Q. What have been the significant changes to operating expenses since 2009?

A. Staff was able to lower power costs at Well 23 due to implementing "time of use" electricity rates at the site. Additional staff and organizational structuring have changed payroll since the last rate case. The cost to regenerate our treatment media at WTP 1 has increased by 27% since our last regeneration in 2013. The 2013 regeneration was down 11% from the 2011 generation because we changed contractors. If we use the original price of our first media regeneration the current cost has increased 15%. Our current agreement calls for additional anticipated increases of up to 5% a year for the next three years. At this time, SWC is not aware of another contractor that has the necessary facility and certifications to regenerate our arsenic treatment media.

Q. Does it remain the case that there are no affiliate profits in the allocated costs to Sahuarita from its parent company, Rancho Sahuarita?

A. Yes. Costs from human resources, accounting and management services from the parent company, allocated based upon the proportion of time utilized by the Company, have no affiliate profit allocated as part of those costs.

Q. Is the Company proposing any changes to any of its adjustor mechanisms currently in effect?

A. No.

Q. Why should the Central Arizona Groundwater Replenishment District ("CAGRD") adjustor approved in the last rate case remain in effect for SWC?

A. The CAGRD assessment will continue to increase each year. This increasing assessment is also a known and measurable increase that the Company incurs, but that also encourages the conservation of water by providing for the replenishment of groundwater. As a designated provider, all water delivered within its service area is subject to the CAGRD Fee assessment. The fee assessments are set by CAGRD. SWC remains as a conduit collecting what is similar to a privilege or usage tax (which is how the Company originally described the assessment in significant detail when it originally requested a mechanism to recover the assessments). Further, the assessments remain independent of the operations of the Company; and are therefore not an operating expense. Yet the Company will continue to incur the assessment going forward. Further, SWC remains dependent on the CAGRD to replenish groundwater, and must pay the assessment in order for it to remain a designated provider and to demonstrate a 100-year water supply.

Q. Do you have any concluding comments regarding the Company's rate application?

A. Only that we believe that the requests we are making in this case and the overall proposal results in just and reasonable rates, balancing the need for SWC to have a reasonable opportunity to earn its rate of return on fair value rate base with the need to moderate rate impacts on our customers. We strive to provide high-quality service to our customers and believe we have and continue to provide adequate, safe and reliable water service. This proposal will allow us to maintain such service to our customers.

Q. Does this conclude your Direct Testimony?

A. Yes.

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
DOUG LITTLE - CHAIRMAN
BOB STUMP
BOB BURNS
TOM FORESE
ANDY TOBIN

IN THE MATTER OF THE APPLICATION OF SAHUARITA WATER COMPANY, LLC, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PROPERTY AND FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES.	DOCKET NO. W-03718A-15-0213

Rebuttal Testimony of

Geoff Caron

on Behalf of

Sahuarita Water Company

March 11, 2016

PENGAD 800-631-6989
EXHIBIT
A-2

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I. INTRODUCTION.

Q. Please state your name and business address.

A. My name is Geoff Caron. My address is 725 W Via Ranch Sahuarita Blvd. #101 Sahuarita, AZ 85629

Q. Did you file Direct Testimony in this proceeding?

A. Yes.

Q. On whose behalf are you filing your Rebuttal Testimony in this proceeding?

A. My Rebuttal Testimony is filed on behalf of Sahuarita Water Company, LLC ("Sahuarita" or "the Company")

Q. Which Commission Staff testimony do you address in your Rebuttal Testimony?

A. I am addressing Staff's recommended Rate Base Adjustment No. 2 – Plant Retirement. Mr. Thomas J. Bourassa will also be addressing this and other recommended Staff adjustments to rate base, operating revenues and expenses in his pre-filed Rebuttal Testimony. Mr. Bourassa will also address Staff's cost of capital and return on equity recommendations on behalf of Sahuarita.

II. RECOMMENDATION REGARDING ARSENIC ABSORPTION MEDIA PLANT AND REGENERATION.

Q. Do you agree with Staff's Rate Base Adjustment No. 2 – Plant Retirement?

A. No. Staff decreases the Plant in Service by $575,005 – removing the arsenic adsorption media from plant in service essentially. Staff accounting witness Teresa B. Hunsaker indicates in her Direct Testimony that Staff found that the original batches of arsenic

adsorption media "have since been replaced or regenerated."[1] Further, Staff engineering witness Michael S. Thompson indicates in his engineering report that "the initial and regenerated arsenic adsorption media were fully depreciated."[2] But the Company's original arsenic media is still in use and is not fully depreciated. The primary purpose of my Rebuttal Testimony is to clarify the arsenic media that is in use and what has been regenerated versus what has been replaced.

Q. Is there a difference between replacing arsenic media versus regeneration?

A. Yes. Replacing the arsenic media means it is taken out of service and replaced with new media. Regeneration treats the arsenic media after a certain period so that it can remain in use. In Sahuarita's case, we have regenerated the original media acquired in 2009; but we have not replaced it. Thus, the arsenic adsorption media is not fully depreciated as Staff suggests. The Company believes there was some confusion over whether the arsenic media is still in service based on how it was classified in the last rate case for Sahuarita – and that this confusion is the basis for Staff's adjustment.

Q. Have you identified the source of the confusion?

A. Yes, I believe so. In Sahuarita's last rate case (Docket No. W-03718A-09-0359), the account established for arsenic media (Account No. 320.3) does not actually reflect the actual operation of the arsenic media, which has an estimated useful life of 10-to-15 years. Instead, the depreciation rate established for that account more accurately reflects the useful life of regeneration of the arsenic media (67%). Further, Staff's adjustments also appear to reflect subtraction of $120,000 for arsenic media regeneration that had not yet occurred. Rather, the $575,005 in arsenic adsorption media that Ms. Hunsaker indicates was "misclassified" should have been reflected in this account, but with a depreciation rate

[1] See Page 7 of Ms. Hunsaker's Direct Testimony submitted on January 15, 2016.
[2] See Page 21 of Staff's Engineering Report submitted on January 15, 2016.

no greater than 10%. We are recommending a depreciation rate of 6.67% for Original Arsenic Media, to reflect a useful life of 15 years.

Q. Have you already spoken to Staff regarding this adjustment?

A. Yes. Based on conversations to date, we feel that we have reached resolution of this issue.

Q. Even so, do you believe it would be helpful to explain the purpose and origins of Sahuarita's purchase and use of the arsenic media?

A. Yes. The original arsenic media was included in the total cost to construct the Arsenic Treatment Plant (completed in 2009) with an expected useful life of 10-to-15 years. This includes a range of six-to-eight regenerations, according to the manufacturer. Media regeneration is necessary to remove the arsenic that becomes entrapped or adsorbed in the resin during normal operation. When the regeneration process is completed, the same physical media returns, but minus the arsenic previously adsorbed. This process helps prolong the life of the media, so that it does not have to be replaced every couple of years.

Eventually, however, the resin beads in the media break down, because the regeneration process exposes the media to caustic compounds. This means that the media must be replaced at some point, when it can no longer be regenerated. The manufacturer for the media analyzes the condition of the media after each regeneration process, and will notify Sahuarita when the media can no longer be regenerated.

After the final regeneration, the media will be placed into service until break-through arsenic levels reach 8 micrograms per liter (μg/l). At this time, the original media will be removed and replaced with a new batch. The process then starts over.

Q. How did Sahuarita acquire its arsenic media needed for the arsenic treatment plant?

A. The Company's original purchase cost included what was needed for the entire arsenic treatment plant. But the operation of the plant splits the media into two configurations, a lead configuration and a lag configuration. These were labeled Batch 1.0 and Batch 2.0 respectively. Future media replacement will only include half of the total media originally purchased at a time (the exhausted media in the lead vessels of the arsenic treatment plant). The original purchase cost equaled approximately $575,005, which is the total amount of Staff's Rate Base Adjustment No. 2.

Q. Has any of the arsenic media been regenerated?

A. Yes. In 2011, Batch 1.0 (one-half of the total original media purchased) was supposed to be regenerated. During this process the manufacturer inadvertently destroyed Batch 1.0 – but replaced it for $130,000 (equal to the cost of regeneration.) For ease of tracking the media, this "replaced" batch was labelled Batch 3.0. Batch 2.0 was regenerated in 2013 at a cost of $115,917. In 2015, Batch 3.0 was regenerated at a cost of $150,657.

Q. What would it cost to replace the arsenic adsorption media versus regenerating it?

A. The cost to replace 790 cubic feet (cu/ft) of Layne RT media (1 batch) would be approximately $472,810 – including $589 per cubic-feet (cu/ft), and $7,500 for freight.

Q. As a result of the clarification, what are you recommending regarding the treatment of arsenic media in this case going forward?

A. Mr. Bourassa details these adjustments, but I am recommending that the original purchase cost for the arsenic media at $575,005 be reflected in the new Original Arsenic Media Account No. 320.4, adjusted for depreciation and reflecting a fifteen-year useful life. The "replaced" Batch 3.0 should also be included in Account 320.4, but we also recommend reflecting the removal of Batch 1.0 from this account. The original arsenic media amount

of $575,005 should be subtracted from the Arsenic Treatment Plant amount of $1,814,684 that was originally included in Account 320 (Water Treatment Equipment). Sahuarita believes that the Arsenic Treatment Plant, with a 30-year useful life, should equal $1,239,679.

I also recommend that a new account – Account No. 320.5 – be established to track the costs of *regenerating* arsenic media. The costs included in this account should be the following:

- $115,917 – for the regeneration of Batch 2.0 in 2013 (which should be fully depreciated).
- $150,657 – for the regeneration of Batch 3.0 in 2015; this is the same as Staff's Rate Base Adjustment No. 3 – for Post-Test Year Plant. Because it is regeneration, it belongs in the new Account No. 320.5.

Q. What depreciation rate are you recommending for Arsenic Media Regeneration – Account No. 320.5?

A. I am recommending a depreciation rate of 40% or 2 ½ years. I believe a 40% depreciation rate more accurately describes the regeneration's useful life based on my training, background and experience operating the Company's water system.

Q. Does Mr. Bourassa also speak to the adjustments involving arsenic media?

A. Yes and he includes further detail on the reasons for the accounting adjustments we are recommending. My purpose is more to describe the actual operation and history of the arsenic media, which I hope clears up this issue in this rate case.

III. OTHER ISSUES.

Q. Do you have any other comments regarding Staff's Direct Testimony?

A. Only to say that my silence on the other issues and adjustments in Staff's Direct Testimony does not mean that we accept all of Staff's adjustments and positions. Mr. Bourassa details areas where we disagree with Staff, including on operating expense adjustments and cost of capital. Still, Sahuarita is modifying its position and adjustments on several issues in light of Staff's Direct Testimony and in an effort to find agreement on many of those issues. The Company will continue to review its position as the rate case procedure continues.

Q. Does this conclude your Rebuttal Testimony?

A. Yes.

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
SUSAN BITTER SMITH- CHAIRMAN
BOB STUMP
BOB BURNS
DOUG LITTLE
TOM FORESE

IN THE MATTER OF THE APPLICATION OF SAHUARITA WATER COMPANY, INC. FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PROPERTY AND FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES.	DOCKET NO. W-03718A-15-_____

Direct Testimony of

Thomas J. Bourassa

Rate Base, Income Statement & Rate Design

June 26, 2015

PENGAD 800-631-6989
EXHIBIT
A-3

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I. INTRODUCTION.

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive, Phoenix, Arizona 85029.

Q. WHAT IS YOUR PROFESSION AND BACKGROUND?

A. I am a Certified Public Accountant and am self-employed, providing consulting services to utility companies as well as general accounting services. I have a B.S. in Chemistry and Accounting from Northern Arizona University (1980) and an M.B.A. with an emphasis in Finance from the University of Phoenix (1991).

Q. COULD YOU BRIEFLY SUMMARIZE YOUR PRIOR WORK AND REGULATORY EXPERIENCE?

A. Prior to becoming a private consultant, I was employed by High-Tech Institute, Inc., and served as controller and chief financial officer. Prior to working for High-Tech Institute, I worked as a division controller for the Apollo Group, Inc. Before joining the Apollo Group, I was employed at Kozoman & Kermode, CPAs. In that position, I prepared compilations and other write-up work for water and wastewater utilities, as well as tax returns.

In my private practice, I have prepared and/or assisted in the preparation of numerous water and wastewater utilities rate applications before the Arizona Corporation Commission ("Commission"). A copy of my regulatory work experience is attached as **Exhibit TJB-DT1**.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. On behalf of the Applicant, Sahuarita Water Company L.L.C. ("SWC" or the "Company"). The Company is seeking a determination of its fair value rate base ("FVRB") and the setting of rates and charges for utility service based on that finding.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. I will testify in support of SWC's proposed adjustments to its rates and charges for utility service. I am sponsoring the direct Schedules ("A" through "C" and "E" through "F"), which are filed concurrently herewith. I was responsible for and/or supervised the preparation of these schedules based on my investigation and review of the Company's relevant books and records. The Company has not prepared a cost of service study ("G" schedules). Consequently, the G Schedules are omitted.

Q. WHY DIDN'T THE COMPANY PREPARE A COST OF SERVICE STUDY?

A. Because the Commission does not set rates for water and wastewater utility service based on cost of service, and because the changes to the rate design the Company is proposing do not necessitate a cost of service study, the substantial expense of doing a cost of service study could not be justified. I have taken a similar approach in other cases without complaint.

Q. PLEASE CONTINUE?

A. For convenience, my direct testimony is being filed in two volumes. In this volume, I address rate base, income statement (revenue and operating expenses), required increase in revenue, and rate design and proposed rates and charges for service.

In a second volume, I address cost of capital and sponsor the "D" Schedules. SWC is recommending a cost of common equity of 10.5 percent and a cost of debt of 4.2

percent. As shown on Schedule D-1, the Company's test period capital structure for ratemaking purposes consists of 79.43 percent equity and 20.57 percent debt. The weighted average cost of capital is therefore 9.20 percent.

II. OVERVIEW OF APPLICATION.

Q. PLEASE SUMMARIZE SWC'S APPLICATION.

A. SWC's FVRB is $9,298,032 and the Company is seeking a revenue requirement of $3,229,480. These are based on a test year used ending December 31, 2014, with pro forma adjustments for known and measurable changes to rate base, expenses, and revenues. These pro forma adjustments are necessary to obtain a normal or realistic relationship between revenues, expenses, and rate base on a going-forward basis, and they are consistent with standard ratemaking principles and are appropriate under the Commission's rules and regulations governing rate applications.[1]

The increase in revenues to provide for recovery of operating expenses and a 9.2 percent return on rate base is approximately $332,734, an increase of approximately 11.49 percent over the adjusted and annualized test year revenues.

Q. WHY IS THE COMPANY FILING FOR RATE INCREASES AT THIS TIME?

A. Two reasons. First, the Company was ordered to file a rate case by June 30, 2015 in Decision No. 74389 (March 19, 2014), which granted the Company recovery of income taxes. Second, revenues from SWC's initial rates have not kept pace with operating expenses since SWC's last test year. Rate base is higher by approximately $500,000 and SWC's customer base has grown from approximately 4,700 customers at the end of the last test year (December 31, 2008) to approximately 5,530 at the end of the current test

[1] *See* A.A.C. R14-2-103.

year. At this time, rate increases are necessary to ensure that SWC recovers its reasonable operating expenses and has an adequate opportunity to earn a fair and reasonable return on the fair value of its utility plant and property devoted to public service.

III. RATE BASE, INCOME STATEMENT AND SUMMARY SCHEDULES.

A. "A", "E" And "F" Schedules

Q. PLEASE DESCRIBE THE "A", "E" and "F" SCHEDULES.

A. The A-1 Schedule is a summary of the rate base, operating income, current operating margin, required operating margin, operating income deficiency, and the increase in gross revenue. The return on FVRB, proposed increase in the revenue requirement; and revenues at present and proposed and customer classifications are also shown on this schedule.

The A-2 Schedule is a summary of results of operations for the test year, prior years, and a projected year at present rates and proposed rates.

Schedule A-3 contains the capital structure for the test year and the two prior years.

Schedule A-4 contains the plant construction and plant-in-service for the test year and prior years. The projected plant additions are also shown on this schedule.

Schedule A-5 is the summary of the changes in financial position (cash flow) for the prior two years, the test year at present rates, and a projected year with both present and proposed rates.

The "E" Schedules are based on SWC's actual operating results, as reported in annual reports filed with the Commission. The E-1 Schedule contains the comparative balance sheet data for the years 2012, 2013, and 2014 – with each ending on December

31.

Schedule E-2, page 1, contains the income statement for the years 2012, 2013, and 2014 – with each ending on December 31.

Schedule E-3 contains the statements of changes in SWC's financial position for the test year and the two prior years.

Schedule E-4 provides the changes in membership equity.

Schedule E-5 contains plant-in-service at the end of the test year, and one year prior to the end of the test year (December 31, 2013).

Schedule E-7 contains operating statistics for the years 2012, 2013, and 2014 – with each ending on December 31.

Schedule E-8 contains the taxes charged to operations.

The accountant's notes to the financial statements and the financial assumptions used in preparing the rate filing schedules are shown on Schedules E-9 and F-4, respectively, in accordance with the Commission's standard filing requirements.

Schedule F-1 contains the results of operations at the present rates (actual and adjusted), and at proposed rates.

Schedule F-2 contains the summary of changes in financial position (cash flow) for the prior two years, the test year at present rates, and a projected year with both present and proposed rates.

Schedule F-3 shows projected construction requirements for 2016, 2017, and 2018.

Schedule F-4 contains the assumptions used in developing the adjustments and projections contained in the rate filing.

B. "B" Schedules (Rate Base)

Q. WOULD YOU EXPLAIN THE RATE BASE SCHEDULES, WHICH ARE LABELED AS THE "B" SCHEDULES?

A. Yes. I will start with Schedule B-5, which is the working capital allowance. I used the "formula method" of computing the working capital allowance to reduce costs. However, the Company is not requesting a working capital allowance.

Q. WHY DIDN'T THE COMPANY PREPARE A LEAD-LAG STUDY AND USE THE RESULTS OF THAT STUDY TO COMPUTE WORKING CAPITAL?

A. Because the Company is not seeking a working capital allowance and the costs to prepare a lead-lag study outweigh the benefits.

Q. DID SWC FILE SCHEDULES B-3 AND B-4?

A. The Company did not file Schedules B-3 and B-4. SWC is requesting that its original cost rate base ("OCRB") be used as its FVRB.

Q. HAVE YOU PREPARED SCHEDULES SHOWING ADJUSTMENTS TO THE ORIGINAL COST RATE BASE?

A. Yes. Schedule B-2 shows adjustments to the OCRB cost rate base proposed by the Company. Schedule B-2, pages 2 through 6, provide the supporting information. There are four adjustments shown in Schedule B-2.

Q. PLEASE DESCRIBE ADJUSTMENT NUMBER 1.

A. Adjustment number 1, as shown on Schedule B-2, page 2, adjusts plant-in-service ("PIS"). There are three PIS adjustments included in Adjustment 1. These are shown on Schedule

B-2, page 3, and are labeled as adjustments 1-A, 1-B and 1-C.

Q. DO ANY OF THESE ADJUSTMENTS REFLECT INCLUSION OF POST-TEST YEAR PLANT?

A. Yes. Adjustment 1-A in Schedule B-2 increases PIS to reflect post-test year plant. Post-test year plant consists of electrical generation equipment and arsenic media, both of which were placed into service since the end of the test year. All of the post-test year plant is and will be used to serve existing customers, are known and measurable adjustments. They are revenue neutral and are necessary to serve the test year-end number of customers.

Q. WHAT CRITERIA FOR INCLUSION OF POST-TEST YEAR PLANT CAN BE FOUND, IF ANY, IN RECENT COMMISSION DECISIONS?

A. The Commission approved the inclusion of post-test year plant in rate base in several cases because (i) the plant was revenue neutral (i.e., providing service to customers at end of test year); and (ii) it has been completed and placed into service a reasonable time before the hearing, so that it could be inspected and audited.

Q. PLEASE DESCRIBE THE "B" AND "C" ADJUSTMENTS TO ADJUSTMENT NUMBER 1 ON SCHEDULE B-2.

A. Adjustment 1-B in Schedule B-2 adjusts PIS to reflect retirement of arsenic media, which was not retired as of the end of the test year.

Adjustment 1-C in Schedule B-2 adjusts PIS to reflect the reconciliation of the Company's PIS detail to recorded general ledger amounts as reflected on Schedule E-1.

Q. WHAT IS THE PURPOSE OF ADJUSTMENT NUMBER 2 ON SCHEDULE B-2 REGARDING ACCUMULATED DEPRECIATION?

A. Adjustment 2 shown on Schedule B-2, page 2, adjusts accumulated depreciation ("A/D"). The details of the A/D adjustments are shown on Schedule B-2, page 4. There are two A/D adjustments included in Adjustment 2. These are shown on Schedule B-2, page 4, and are labeled as adjustments "A", and "B".

Adjustment "A" adjusts A/D for the proposed retirements shown in Adjustment 1-B in Schedule B-2.

Adjustment "B" adjusts A/D to reflect the re-computed amounts of A/D per the Company's B-2 plant detail schedule, pages 3.4 to 3.10.

Q. DO THE PLANT IN SERVICE AND ACCUMULATED DEPRECIATION BALANCES SHOWN ON SCHEDULE B-2 REFLECT THE LAST COMMISSION RATE ORDER?

A. Yes. The Company's reconstruction of the PIS balance started with the PIS balance approved in the last rate case. Reconciliation to the starting balances for PIS and accumulated depreciation are shown on Schedule B-2, page 3.4. Plant additions and retirements since the end of the last test year have been added to and deducted from total plant shown on Schedule B-2, pages 3.5 to 3.10. Pages 3.5 to 3.10 of the schedule show the details for the accumulated depreciation from the end of the last test year through the end of the test year using the half-year convention for depreciation.

Q. PLEASE DESCRIBE THE ADJUSTMENT FOR DEFERRED INCOME TAXES, ADJUSTMENT NUMBER 3, ON SCHEDULE B-2.

A. Adjustment number 3, shown on Schedule B-2, page 5, reflects deferred income taxes. The Company's computation is based on the adjusted PIS, A/D, AIAC, and CIAC in the

instant case and the adjusted tax basis of its assets using the effective tax rates computed on the Schedule C-3, page 2. The detail of the Company's deferred income tax computation is shown on Schedule B-2, pages 5 and 5.1.

Q. THE COMPANY IS A LIMITED LIABILITY COMPANY WHICH DOES NOT PAY INCOME TAXES. DO LIMITED LIABILITY COMPANIES NORMALLY RECORD DEFERRED INCOME TAXES?

A. No. Limited liability companies ("LLC's") are tax pass-through entities and the members pay income taxes. However, for rate making purposes, the Company is proposing deferred income taxes to be included in rate base to be consistent with its proposal to include SWC's income tax expense in operating expenses and to insure a proper match of rate base, revenue and expenses. Decision No. 74389 (March 19, 2014), had approved including income taxes as a recoverable expense for the Company. Such recovery is consistent with the Commission's policy statement approved in Decision No. 73739 (February 22, 2013).

Q. PLEASE CONTINUE WITH YOUR TESTIMONY REGARDING THE RATE BASE SCHEDULES.

A. Adjustment number 4, labeled as 4a and 4b and shown on Schedule B-2, page 6, adjusts CIAC and amortization based on additional CIAC recorded since the since the last test year. The recomputed amortization balance reflects the annual composite depreciation rate for plant-in-service for each year since the last test year.

Q. HOW WAS THE PROPOSED "FAIR VALUE" RATE BASE SHOWN ON A-1 DETERMINED?

A. As stated, the FVRB shown on Schedule A-1 is based on OCRB, with no adjustment for

the current values of the Company's plant and property.

C. C Schedules (Income Statement)

Q. PLEASE EXPLAIN THE ADJUSTMENTS YOU ARE PROPOSING TO THE REVENUES AND/OR EXPENSES STATEMENT AS SHOWN ON SCHEDULES C-1 AND C-2.

A. The following is a summary of adjustments shown on Schedule C-1:

Adjustment 1 annualizes depreciation expense. The proposed depreciation rate for each component of utility plant is shown on Schedule C-2, page 2. The depreciation rates approved in the Company's last rate case were account specific rates. The Company proposes to continue to use these rates.

Adjustment 2 increases the property taxes based on proposed revenues. The details of the computation are shown on Schedule C-2, page 3.

Q. HOW DID YOU COMPUTE THE PROPERTY TAXES AT PROPOSED RATES?

A. To determine full cash value, I used the method employed by the Arizona Department of Revenue - Centrally Valued Properties ("ADOR" or "the Department"). This method determines full cash value by using twice the average of three years of revenue, plus an addition for CWIP and a deduction for the book value of transportation equipment. In the instant case, I used two times the adjusted revenues for the year ending December 31, 2014, and one year of revenues at proposed rates. The assessed value (18 percent of full cash value)[2] was then multiplied by the property tax rate to determine adjusted property tax expense.

[2] Cite to A.R.S. § 42-15001.

Q. IS THIS CONSISTENT WITH PRIOR COMMISSION DECISIONS?

A. Yes. The Commission approved this method for ascertaining property tax expense in cases including in *Chaparral City Water Company*, Decision No. 68176 (September 30, 2005), and in *Litchfield Park Service Company*, Decision No. 67279 (October 5, 2004).

Q. IS THIS SYNCHRONIZATION OF PROPERTY TAX EXPENSE WITH REVENUES PROPER RATE MAKING?

A. Yes. Like income taxes, property taxes must be adjusted to ensure that the new rates are sufficient to produce the revenue requirement. For this reason, the Commission has repeatedly approved the use of proposed revenues to determine an appropriate level of property tax expense to be recovered through rates.

Q. PLEASE CONTINUE WITH YOUR DISCUSSION OF THE INCOME STATEMENT ADJUSTMENTS.

A. Adjustment 3 shows the rate case expense estimated by the Company. The Company estimates rate case expense of $250,000. The Company proposes that rate case expense be recovered over five years because it believes a five-year cycle for future rate cases is reasonable given this utility's circumstances.

Q. HOW DID YOU ARRIVE AT THIS AMOUNT?

A. Based on my experience with rate cases before the Commission, and that of the Company's counsel. Given SWC's size and the anticipated nature, length and complexity of the proceedings, I estimate this rate case to cost a total of $250,000.

Q. PLEASE EXPLAIN WHY YOU REFER TO THIS AMOUNT AS AN "ESTIMATE"?

A. Because ultimately several different factors contribute to what the final actual rate case expense will be for a particular case. Thus, I can only make an educated guess based on my experience. The specifics of who may intervene, what unique issues may come into dispute, what kind of procedural issues we will encounter, are just some of the factors that determine the final total expense to process a rate case through the Commission. Thus, it is necessary to propose a reasonable estimate reflective of past experience with similar sized utilities.

Q. SHOULDN'T THE COMPANY'S EQUITY HOLDERS BEAR SOME OF THE BURDEN OF RATE CASE EXPENSE?

A. As a practical matter, actual rate case expense often turns out to be higher than what is included in rates. So utility equity holders wind up bearing the burden of such expense. Even though my estimate of $250,000 for rate case expense is reasonable, it is likely SWC will actually incur a higher amount of total rate case expense, especially if it turns out that several issues will be in dispute. I would also agree that if the utility does something improper, or advances positions in bad-faith, it should shoulder the burden of such actions. But, the Commission dictates the process, not the utility, and absent such "improper action" or "bad faith" circumstances, which are not present in this case, the utility should be allowed to recover its reasonably incurred rate case expense.

Q. PLEASE CONTINUE WITH YOUR DISCUSSION OF THE INCOME STATEMENT ADJUSTMENTS.

A. Adjustment 4 annualizes revenues to the year-end number of customers. The annualization was based on the number of customers at the end of the test year, compared

to the actual number of customers during each month of the test year. Average revenues by month were computed for the test year. The average revenues were then multiplied by the increase (or decrease) in number of customers for each month of the test year. Adjustment number 4 also increase purchased power expense and chemicals expense based upon the expected additional gallons to be sold from the revenue annualization.

Adjustment 5 reduces revenues based upon water usage normalization. Usage normalization reflects the expected reduction in gallons sold primarily due to conservation and is based upon an analysis of trends in customer usage from 2010 through 2014. Adjustment number 5 also reduces purchased power expense and chemicals expense based upon the expected reduction in gallons to be sold from the usage normalization.

Adjustment 6 removes Central Arizona Ground Water Replenishment District ("CAGRD") fees recorded during the test year from purchased water expense totaling $512,734 and removes CAGRD surcharge revenues recorded during the test year from metered revenues totaling $386,411. SWC recovers CAGRD costs from its approved surcharge mechanism.[3]

Adjustment 7 reduces purchased power expense and miscellaneous revenues by $12,863 for reimbursements of purchased power costs covered under a well sharing agreement.

Adjustment 8 reduces metered revenues by $8,855 to eliminate an overbilling error in metered revenues due the application of incorrect rates to some customers during the test year. The Company has made refunds to customers.

Adjustment 9 increases contractual services costs (management fees) for known and measurable changes to the allocated portions of operations, accounting and billing, and corporate overhead costs since the end of the test year.

[3] Decision 72177, February 11, 2011.

Q. DO THE CONTRACTUAL COSTS THE COMPANY HAS RECORDED IN EXPENSE FOR THE TEST YEAR INCLUDE ANY AFFILIATE PROFIT?

A. No. The test year costs reflect actual costs.

Q. PLEASE DISCUSS ADJUSTMENT NOS. 10 AND 11.

A. Adjustment 10 reflects interest synchronization with rate base.

Adjustment 11 reflects the incomes taxes based upon the adjusted test year revenues and expenses and at the effective tax rate. The computation of the effective income tax rate follows the framework set-forth in Decision No. 73379.

IV. RATE DESIGN (H SCHEDULES).

Q. WHAT ARE THE COMPANY'S PRESENT AND PROPOSED RATES FOR WATER SERVICE?

A. The Company's present and proposed rates are shown on Schedule H-3.

Q. WHAT IS THE IMPACT OF THE COMPANY'S PROPOSED RATES ON A 5/8X3/4 INCH METERED RESIDENTIAL CUSTOMER WITH AN AVERAGE BILL?

A. As shown on Schedule H-2, page 1, the present monthly bill for a 5/8x3/4 inch metered residential customer using an average of 4,604 gallons is $30.94. The proposed monthly bill for a 5/8x3/4 inch metered residential customer using an average of 4,604 gallons would be $34.81, an increase of $3.87, or 12.50 percent above the present rates.

Q. HAS THE COMPANY PROPOSED A CHANGE IN THE OVERALL RATE DESIGN STRUCTURE AS PART OF ITS PROPOSAL?

A. No. The Company rate design reflects the inverted-tier design adopted in the last case including the respective break-over points. The monthly minimums and commodity charges were increased to recover the Company's proposed revenue requirement and in approximately the same overall proportions as the test year. In other words, under present rates, the Company recovered approximately 47.9 percent of revenues from the monthly minimums and 52.1 percent from the commodity rates. Under the proposed rates, the Company will recover approximately 47.6 percent of revenues from the monthly minimums and 52.4 percent from the commodity rates. Schedule H-3, pages 3 and 4, show the revenue recovery from the monthly minimums and commodity rates under present and proposed rates.

Q. ARE THERE ANY CHANGES TO THE MISCELLANEOUS SERVICE CHARGES?

A. Yes. The Company proposes to: (i) eliminate the Establishment – After Hours ($40) and Reconnection – Delinquent and After Hours ($40) charges; and (ii) proposes to replace those charges with an After Hours Charge of $50. This charge will apply to all services provided after hours and at the customer's request to have the service performed after regular business hours.

Q. ARE THERE ANY CHANGES TO THE METER AND SERVICE LINE INSTALLATION CHARGES?

A. No.

Q. ARE THERE ANY CHANGES TO THE OFF-SITE HOOK-UP FEES?

A. No.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY ON RATE BASE, INCOME STATEMENT AND RATE DESIGN?

A. Yes.

Exhibit TJB-DT1

RESUME OF THOMAS J. BOURASSA, CPA

EDUCATIONAL BACKGROUND

B.S. Northern Arizona University Chemistry/Accounting (1980)
M.B.A. University of Phoenix with Emphasis in Finance (1991)
C.P.A. State of Arizona (1995)
Continuing Professional Education – In areas of tax, accounting, management, economics, finance, business valuation, consulting, and ethics (80 hrs every two years)

MEMBERSHIPS

Arizona Society of CPAs
Water Utilities Association of Arizona
American Water Works Association
Society of Regulatory Financial Analysts

EMPLOYMENT EXPERIENCE

1995 – Present	CPA - Self Employed Consultant to utilities on regulatory matters including all aspects of rate applications (rate base, income statement, cost of capital, cost of service, and rate design), rate reviews, certificates of convenience and necessity (CC&N), CC&N extensions, financing applications, accounting order applications, and off-site facilities hook-up fee applications. Provide expert testimony as required. Consult on various aspects of business, financial and accounting matters including best business practices, generally accepted accounting principles, generally accepted ratemaking principles, project analysis, cash flow analysis, regulatory treatment of certain expenditures and investments, business valuations, and rate reviews. Litigation support services.
1992-1995	Employed by High-Tech Institute, Phoenix, Arizona as Controller and C.F.O.
1989-1992	Employed by Alta Technical School, a division of University of Phoenix as Division Controller.
1985-1989	Employed by M.L.R. Builders, Tampa and Pensacola, Florida as Operations/Accounting Manager
1982-1985	Employed by and part owner in Area Sand and Clay Company, Pensacola, Florida.

1981-1982	Employed by Purdue University, West Lafayette, Indiana as Teaching Assistant.

SUMMARY OF REGULATORY WORK EXPERIENCE AS SELF EMPLOYED CONSULTANT

COMPANY/CLIENT	FUNCTION
Tierra Buena Water Company ACC Docket No. W-02076A-15-013	Permanent Rate Application – Water. Assisted in preparation of short-form schedules.
Red Rock Utilities, LLC ACC Docket No. W-04245A-14-0295	Permanent Rate Application – Water and Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Quail Creek Water Company ACC Docket No. W-02514A-14-0370	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Tonto Basin Water Company ACC Docket No. W-03515A-14-0310	Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.
Navajo Water ACC Docket No. W-03511A-14-304	Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.
Alaska Power Company Regulatory Commission of Alaska Docket No. U-14-002	Prepared schedules and testified on cost of capital.
Anchorage Municipal Light & Power Regulatory Commission of Alaska Docket No. U-13-184	Prepared schedules and testified on cost of capital.
Liberty Utilities (Pine Bluff) Inc. Arkansas Public Service Commission Docket No. 14-020-U	Permanent Rate Application – Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.
Abra Water Company	Permanent Rate Application – Prepared

COMPANY/CLIENT	FUNCTION
ACC Docket No. W-01782A-14-0084	schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
EPCOR Water Arizona, Inc. ACC Docket No. W-01303A-14-0010	Permanent Rate Application – Prepared rate designs and cost of Service studies for Mohave Water District, Mohave Wastewater District, Paradise Valley Water District, Tubac Water District, and Sun City Water District.
Liberty Utilities (Midstates Natural Gas), Inc. Missouri Public Service Commission Case No. GR-2014-0152	Permanent Rate Application – Assist in preparing required rate application schedules for Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Hydro Resources, LLC. ACC Docket No. W-20770A-13-0313	Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and initial rates.
Little Park Water Company ACC Docket No. W-02192A-13-0336	Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.
Utility Source, LLC. ACC Docket No. WS-04235A-13-0331	Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Payson Water Company ACC Docket No. W-03514A-13-0111 ACC Docket No. W-03514A-13-0142	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital. Financing Application. Prepared financial ratios and debt surcharge mechanism.
Goodman Water Company	Valuation

COMPANY/CLIENT	FUNCTION
Verde Santa Fe Wastewater ACC Docket No. SW-03437A-13-0292	Permanent Rate Application – Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Lago Del Oro Water Company ACC Docket No. W-01944A-13-0215	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.
Chaparral City Water Company ACC Docket No. W-02113A-13-0118	Permanent Rate Application – Prepared and testified on cost of service study.
Las Quintas Serenas Water Company ACC Docket No. W-01583A-13-0117	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Southwest Environmental Utilities. Inc. ACC Docket No. WS-20878A-13-0065	Certificate of Convenience and Necessity – Water and Wastewater. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and initial rates.
Litchfield park Service Company ACC Docket No. SW-01428A-13-0043 ACC Docket No. W-01428A-13-0042	Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, Cost of Service, and Cost of Capital.
Beaver Dam Water Company ACC Docket No. WS-03067A-12-0232	Permanent Rate Application. Prepared schedules on Plant, Income Statement, Revenue Requirement, and Rate Design.
Rio Rico Utilities ACC Docket No. WS-02676A-12-0196	Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.
Vail Water Company ACC Docket No. W-01651B-12-0339	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue

COMPANY/CLIENT	FUNCTION
	Requirement, Cost of Service, Rate Design, and Cost of Capital.
Avra Water Co-Op. ACC Docket No. W-02126A-11-0480	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.
Pima Utility Company ACC Docket No. W-02199A-11-0329 ACC Docket No. SW-02199A-11-0330	Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital. Work on financing application.
Liberty Utilities (CALPECO Electric), LLC) Docket No. 11202020	Work on preparation of permanent rate application. Prepared schedules on Rate Base, Plant, Income Statement, Revenue Requirement.
Livco Water Company ACC Docket No. SW-02563A-11-0213	Permanent Rate Application – Water and Sewer. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.
Orange Grove Water Company ACC Docket No. W-02237A-11-0180	Permanent Rate Application. Prepared schedules on Plant, Income Statement, Revenue Requirement, and Rate Design.
Goodman Water Company ACC Docket No. W-02500A-10-0382	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Doney Park Water ACC Docket No. W-01416A-10-0450	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Grimmelmann, et. al. v. Pulte Home Corporation, et. al., case no. CV-08-1878-PHX-FJM, the United States District Court	Consultant to defendant and expert witness for defendant on rates and ratemaking.

COMPANY/CLIENT	FUNCTION
for the District of Arizona.	
Southern Arizona Home Builders Association	Consultant on ratemaking aspects to line extension policies (electric).
H2O Water Company	Valuation
Tierra Linda HOA Water Company	Valuation
Las Quintas Serenas Water Company ACC Docket No. W-01583A-09-0589	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Coronado Utilities ACC Docket No. SW-04305A-09-0291	Permanent Rate Application – Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Little Park Water Company ACC Docket No. W-02192A-09-0531	Permanent Rate Application. Prepared schedules on Plant, Income Statement, Revenue Requirement, and Rate Design.
Sahuarita Water Company ACC Docket No. W-03718A-09-0359	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, Cost of Service, and Cost of Capital.
Bella Vista Water Company Southern Sunrise Water Company Northern Sunrise Water Company ACC Docket No. W-02465A-09-0414 ACC Docket No. W-02453A-09-0414 ACC Docket No. W-02454A-09-0414	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, Cost of Service, and Cost of Capital.
Rio Rico Utilities, Inc ACC Docket No. WS-02676A-09-0257	Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

COMPANY/CLIENT	FUNCTION
Litchfield park Service Company ACC Docket No. SW-01428A-09-0103 ACC Docket No. W-01428A-09-0104	Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, Cost of Service, and Cost of Capital.
Town of Thatcher v. City of Safford, CV 2007-240, Superior Court of Arizona	Consultant to plaintiff on ratemaking and cost of service.
Valencia Water Company California Public Utility Commission Case No. 09-05-002	Cost of Capital
Valley Utilities ACC Docket No. W-01412A-08-0586	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Black Mountain Sewer Company ACC Docket No. SW-02361A-08-0609	Permanent Rate Application – Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Far West Water and Sewer Company ACC Docket No. WS-03478A-08-0608	Interim Rate Application (Emergency Rates)
Farmers Water Company ACC Docket No. W-01654A-08-0502	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Far West Water and Sewer Company ACC Docket No. WS-03478A-08-0454	Permanent Rate Application. Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design and Cost of Capital.
Ridgeline Water Company, LLC ACC Docket No. W-20589A-08-0173	Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and intitial rates.

COMPANY/CLIENT	FUNCTION
Sacramento Utilities, Inc. ACC Docket No. SW-20576A-08-0067	Certificate of Convenience and Necessity – Wastewater. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and financing.
Johnson Utilities ACC Docket No. WS-02987A-08-0180	Permanent Rate Application. Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design and Cost of Capital. Participate in 40-252 proceeding.
Orange Grove Water Company ACC Docket No. W-02237A-08-0455	Permanent Rate Application. Prepared schedules on Plant, Income Statement, Revenue Requirement, and Rate Design.
Far West Water and Sewer Company ACC Docket No. WS-03478A-07-0442	Financing Application. Prepare schedules to support application.
Oak Creek Water No.1 ACC Docket No. W-01392A-07-0679	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
ICR Water Users Association Docket W-02824-07-0388	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Johnson Utilities	Valuation consultant in the matter of the sale of Johnson Utilities assets to the Town of Florence.
H2O, Inc ACC Docket No. W-02234A-07-0550	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Chaparral City Water Company ACC Docket No. W-02113A-07-0551	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

COMPANY/CLIENT	FUNCTION
Valley Utilities ACC Docket No. W-01412A-07-0561	Financing Application. Prepare schedules to support application.
Valley Utilities ACC Docket No. W-01412A-07-280	Emergency Rate Application. Prepare schedules to support application.
Valley Utilities ACC Docket No. W-01412A-07-0278	Accounting Order. Assist in preparing definition and scope of costs for deferral for future regulatory consideration and treatment.
Litchfield Park Service Company ACC Docket No. W-01427A-06-0807	Accounting Order. Assist in preparing definition and scope of costs for deferral for future regulatory consideration and treatment.
Golden Shores Water Company ACC Docket No. W-01815A-07-0117	Permanent Rate Application. Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Diablo Village Water Company ACC Docket No. W-02309A-07-0140	Off-site facilities hook-up fee application. Prepare schedules to support application.
Diablo Village Water Company ACC Docket No. W-02309A-07-0399	Permanent Rate Application (Class C). Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Sahuarita Water Company (Rancho Sahuarita Water Co.) ACC Docket No. W-03718A-07-0687	Extension Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and financing.
Utility Source, L.L.C. ACC Docket No. WS-04235A-06-0303	Permanent Rate Application- Water and Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

COMPANY/CLIENT	FUNCTION
Tierra Buena Water Company	Valuation of Tierra Buena Water Company for estate purposes.
Goodman Water Company ACC Docket No. W-02500A-06-0281	Permanent Rate Application (Class C). Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, and Cost of Capital.
Links at Coyote Wash Utilities ACC Docket No. SW-04210A-06-0220	Certificate of Convenience and Necessity – Sewer. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rate design.
New River Utilities ACC Docket No. W-0173A-06-0171	Extension Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and financing.
Johnson Utilities ACC Docket No. WS-02987A-04-0501 Docket WS-02987A-04-0177	Extension of Certificate of Convenience and Necessity – Sewer. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rate design.
Bachmann Springs Utility ACC Docket No. WS-03953A-07-0073	Permanent Rate Application – Water and Sewer. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.
Avra Water Cooperative ACC Docket No. W-02126A-06-0234	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Gold Canyon Sewer Company ACC Docket No. SW-025191A-06-0015	Permanent Rate Application – Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
State of Arizona v. Far West Water and Sewer, No. 1 CA-CR 06-0160	Expert witness on behalf of defendant in penalty phase of case.
Far West Water and Sewer Company	Permanent Rate Application – Sewer.

COMPANY/CLIENT	FUNCTION
ACC Docket No. WS-03478A-05-0801	Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Black Mountain Sewer Company ACC Docket No. SW-02361A-05-0657	Permanent Rate Application – Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Balterra Sewer Company ACC Docket No. SW-02304A-05-0586	Certificate of Convenience and Necessity – Sewer. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rate design.
Community Water Company of Green Valley ACC Docket No. W-02304A-05-0830	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
McClain Water Systems Northern Sunrise Water Southern Sunrise Water ACC Docket No. W-020453A-06-0251	Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rate design.
Valley Utilities Water Company ACC Docket No. W-01412A-04-0376	Off-site facilities hook-up fee application. Prepare schedules to support application.
Valley Utilities Water Company ACC Docket No. W-01412A-04-0376	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, and Revenue Requirement. Assisted in preparation of Rate Design.
Beardsley Water Company ACC Docket No. W-02074A-04-0358	Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.
Pine Water Company, Inc. ACC Docket No. W-03512A-03-0279	Interim and Permanent Rate Application, Financing Application - Water. Prepared schedules and testified on Rate Base,

COMPANY/CLIENT	FUNCTION
	Plant, Income Statement, Cost of Capital, and Rate Design.
Chaparral City Water Company ACC Docket No. W-02113A-04-0616	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, and Income Statement. Assisted in preparation Rate Design.
Tierra Linda Home Owners Association ACC Docket No. W-0423A-04-0075	Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rate design.
Diamond Ventures - Red Rock Utilities ACC Docket No. WS-04245A-04-0184	Certificate of Convenience and Necessity – Water and Sewer. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rate design.
Arizona-American Water Company, Inc. ACC Docket No. WS-01303A-02-0867 ACC Docket No. WS-01303A-02-0868 ACC Docket No. WS-01303A-02-0869 ACC Docket No. WS-01303A-02-0870 ACC Docket No. WS-01303A-02-0908	Permanent Rate Application Water and Sewer (10 divisions). Prepared schedules and testimony on Rate Base, Plant, Income Statement, and Revenue Requirement. Assisted in preparation of Rate Design.
Bella Vista Water Company, Inc. ACC Docket No. W-02465A-01-0776	Permanent Rate Application - Water. Prepared schedules and testimony on Rate Base, Plant, Income Statement, and Revenue Requirement. Assisted in preparation of Cost of Capital and Rate Design.
Green Valley Water Company Docket (2000 Not Filed)	Permanent Rate Application. Prepared schedules and testimony on Rate Base, Plant, Income Statement, and Revenue Requirement. Assisted in preparation of Cost of Capital and Rate Design.
Gold Canyon Sewer Company ACC Docket No. SW-02519A-00-0638	Permanent Rate Application - Sewer. Prepared schedules and testimony on Rate

COMPANY/CLIENT	FUNCTION
	Base, Plant, Revenue Requirement, and Income Statement. Assisted in preparation of Cost of Capital and Rate Design.
Rio Verde Utilities, Inc. ACC Docket No. WS-02156A-00-0321	Permanent Rate Application – Water and Sewer. Prepared schedules and testimony on Rate Base, Plant, Revenue Requirement, and Income Statement. Assisted in preparation of Cost of Capital and Rate Design.
Livco Water Company Livco Sewer Company ACC Docket No. SW-02563A-05-0820	Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.
Livco Water Company ACC Docket No. SW-02563A-07-0506	Permanent Rate Application – Water and Sewer. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.
Cave Creek Sewer Company	Revenue Requirement, Rate Adjustment and Rate Design - Sewer.
Avra Water Cooperative ACC Docket No. W-02126A-00-0269	Permanent Rate Application – Water. Assisted in preparation of Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Town of Oro Valley	Revenue Requirements, Water Rate Adjustments and Rate Design.
Far West Water Company ACC Docket No. WS-03478A-99-0144	Permanent Rate Application – Water. Assisted in preparation of schedules for Rate Base, Income Statement, Revenue Requirement, Lead-Lag Study, Cost of Capital, and Rate Design.
MHC Operating Limited Partnership Sedona Venture Wastewater ACC Docket No. W-	Permanent Rate Application – Sewer. Assisted in preparation of schedules for Rate Base, Plant, Income Statement, and Rate Design.
Vail Water Company	Permanent Rate Application. Assisted in

COMPANY/CLIENT	FUNCTION
ACC Docket No. W-01651B-99-0406	preparation of schedules for Rate Base, Plant, Income Statement, and Rate Design.
E&T Water Company ACC Docket No. W-01409A-95-0440	Permanent Rate Application - Water. Assisted in preparation of schedules for Rate Base, Plant, Income Statement, and Rate Design.
New River Utility ACC Docket No. W-01737A-99-0633	Permanent Rate Application - Water. Assisted in preparation of schedules for Rate Base, Plant, Income Statement, and Rate Design.
Golden Shores Water ACC Docket No. W-01815A-98-0645	Permanent Rate Application – Water. Assisted in preparation of schedules for Rate Base, Plant, Income Statement, and Rate Design.
Ponderosa Utility Company ACC Docket No. W-01717A-99-0572	Permanent Rate Application – Water. Assisted in preparation of schedules for Rate Base, Plant, Income Statement, and Rate Design.
Chaparral City Water Company Docket (1999 Not Filed)	Permanent Rate Application - Water. Prepared schedules and testimony on Rate Base, Plant, Revenue Requirement, and Income Statement. Assisted in preparation of Cost of Capital and Rate Design.

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
DOUG LITTLE - CHAIRMAN
BOB STUMP
BOB BURNS
TOM FORESE
ANDY TOBIN

IN THE MATTER OF THE APPLICATION OF SAHUARITA WATER COMPANY, LLC, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PROPERTY AND FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES.	DOCKET NO. W-03718A-15-0213

REBUTTAL TESTIMONY OF

THOMAS J. BOURASSA

RATE BASE, INCOME STATEMENT & RATE DESIGN

MARCH 11, 2016

PENGAD 800-631-6989
EXHIBIT
A-4

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive, Phoenix, Arizona 85029.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying in this proceeding on behalf of the applicant, Sahuarita Water Company, LLC. ("SWC" or the "Company").

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THE INSTANT CASE?

A. Yes, my Direct Testimony was submitted in support of the initial application in this docket. There were two volumes, one addressing rate base, income statement and rate design, and the other addressing cost of capital.

Q. WHAT IS THE PURPOSE OF THIS REBUTTAL TESTIMONY?

A. I will provide Rebuttal Testimony in response to the direct filings by Staff. More specifically, this first volume of my Rebuttal Testimony relates to rate base, income statement and rate design for SWC. In a second, separate volume of my Rebuttal Testimony, I will present an update to the Company's requested cost of capital as well as provide responses to Staff on the cost of capital and rate of return applied to the fair value rate base, and the determination of operating income.

II. SUMMARY OF SWC'S REBUTTAL POSITION

Q. WHAT IS THE REVENUE THE COMPANY IS PROPOSING IN THIS REBUTTAL TESTIMONY?

A. The Company proposes a total revenue requirement of $3,173,385, which constitutes an increase in revenues of $276,638, or 9.55% over adjusted test year revenues.

Q. HOW DO THESE COMPARE WITH THE COMPANY'S DIRECT FILING?

A. In the direct filing, the Company requested a total revenue requirement of $3,229,480, which required an increase in revenues of $332,733, or 11.49%.

Q. WHAT ACCOUNTS FOR THE DIFFERENCE?

A. In its rebuttal filing, SWC has adopted a number of rate base and revenue/expense adjustments recommended by Staff, as well as proposed a number of adjustments of its own based on known and measurable changes to the test year.

The net result of these adjustments is: (1) the Company's proposed operating expenses have decreased by $49,997, from $2,298,742 in the direct filing to $2,248,744; and (2) a net increase in rate base of $61,682 from the direct filing of $9,298,032 to $9,359,714.

The Company continues to recommend a cost of equity of 10.5%. In addition, the Company continues to recommend a 9.2% rate of return on FVRB based on the Company weighted average cost of capital which reflects the Company's capital structure of 20.57% debt and 79.43% equity. I discuss the Company proposed return on equity, cost of debt, and capital structure in my cost of capital testimony.

Q. WHAT ARE THE PROPOSED REVENUE REQUIREMENTS AND RATE INCREASES FOR THE COMPANY AND STAFF AT THIS STAGE OF THE PROCEEDING?

A. The proposed revenue requirements and proposed rate increases are as follows:

	Revenue Requirement	Revenue Incr.	% Increase
Company-Direct	$3,229,480	$332,733	11.49%
Staff	$2,967,308	$70,562	2.44%
Company-Rebuttal	$3,173,385	$276,638	9.55%

Q. WOULD YOU PLEASE IDENTIFY THE PARTIES' RESPECTIVE RATE BASE RECOMMENDATIONS?

A. Yes, the rate bases proposed by the Company and Staff are as follows:

	OCRB	FVRB
Company-Direct	$ 9,298,032	$ 9,298,032
Staff	$ 8,778,456	$ 8,778,456
Company Rebuttal	$ 9,359,714	$ 9,359,714

III. RATE BASE

Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S PROPOSED ORIGINAL COST RATE BASE?

A. Yes. The Company's rebuttal rate base adjustments to OCRB are detailed on rebuttal schedules B-2, pages 3 through 6. Rebuttal Schedule B-2, pages 1 and 2, summarize the Company's proposed adjustments and the rebuttal OCRB.

A. **Plant-in Service (PIS)**

Q. PLEASE DISCUSS THE COMPANY'S PROPOSED ADJUSTMENTS TO PLANT-IN-SERVICE, AND IDENTIFY ANY ADJUSTMENTS YOU HAVE ACCEPTED FROM STAFF?

A. The Company's proposed plant-in-service ("PIS") adjustment is Rebuttal B-2, Adjustment 1, and is summarized on Rebuttal Schedule B-2, page 2. Rebuttal B-2, Adjustment 1, actually consists of seven individual adjustments labeled as "A", "B", "C", "D", "E", "F", and "G" on Rebuttal Schedule B-2, page 3.

Adjustment A reflects the reversal of $250,000 of retirements for arsenic media (Acct. 320.3) the Company proposed in its direct filing.[1] In its initial filing, the Company proposed retirements of totaling $365,917 consisting of $120,000, $130,000, and $115,917 the Company treated as regeneration costs.[2] Based upon discussions with Staff, these were not regeneration costs, but rather original arsenic media costs.

Adjustment B reflects a reclassification of $250,000 of arsenic media cost from Plant Account 320.3 – Arsenic Media to Plant Accounts 320 – Water Treatment Equipment for $120,000 and 320.4 – Original Arsenic Media for $130,000. The net impact on the total PIS balance is zero.

Adjustment C reflects a reclassification of $575,005 of original arsenic media costs from Plant Account 320 – Water Treatment Equipment to plant account 320.4 – Original Arsenic Media.

Adjustment D reflects the retirement of original arsenic media totaling $287,502.50.

[1] See Direct Schedule B-2, page 3.2.
[2] See Direct Schedule B-2, page 3.2.

Q. PLEASE EXPLAIN THE REASONS FOR PIS ADJUSTMENTS "A", "B", "C", AND "D".

A. These adjustments reflect a change in the treatment of arsenic media related costs. After discussions with Staff, it was determined that the accounting of the arsenic media costs, as the Company now proposes, more appropriately adheres to the history and nature of the transactions surrounding the arsenic media.

Q. BRIEFLY DESCRIBE THE HISTORY AND NATURE OF THE ARSENIC MEDIA TRANSACTIONS.

A. SWC witness Mr. Geoff Caron also details the history of the arsenic media, from an engineering and operational perspective, in his Rebuttal Testimony. In 2009, the Company installed original virgin arsenic media in its arsenic water treatment plant at a cost of $575,005. The arsenic media was separated into two vessels (a primary and a secondary). I will refer to these as Batch 1.0 and Batch 2.0. In 2011, Batch 1.0 was scheduled for regeneration, but Batch 1.0 was destroyed during the process of regeneration. In 2012, the Company purchased replacement arsenic media (Batch 3.0) and the vendor agreed to only charge the Company the cost of regeneration rather than the cost of new virgin arsenic media. The Company paid $130,000 for the new arsenic media to replace Batch 1.0 in 2012. In 2013, Batch 2.0 was regenerated at a cost of $115,917.

Q. HOW IS THE REBUTTAL TREATMENT OF THE ARSENIC MEDIA COST DIFFERENT THAN THE COMPANY PROPOSED IN ITS DIRECT FILING?

A. In the Company's direct filing, the Company proposed retiring $250,000 of arsenic media related costs which the Company assumed to be related to regeneration. The Company did not propose to reclassify the $575,005 of original arsenic media to a separate plant account, so these costs were included in the Plant Account 320 – Water Treatment Equipment balance. In the rebuttal filing, the $250,000 of cost is considered part of the original

arsenic media and is ultimately transferred to account 320.4 – Original Arsenic Media. As reflected in the rebuttal filing, plant account 320.4 – Original Arsenic Media has a balance of $417,503.[3] That amount consists of $575,005 of cost for the original arsenic media purchased in 2009 (Batch 1.0 and Batch 2.0) – plus $130,000 of the replacement media purchased in 2012 (Batch 3.0) – less the retirement of original media in 2011 (Batch 1.0) costing $287,503.

Q. WHY IS THE COMPANY PROPOSING THE RECLASSIFICATION OF THE ORIGINAL ARSENIC MEDIA COSTS TO A SEPARATE PLANT ACCOUNT?

A. Because the original arsenic media has a useful life of approximately 15 years, which is less than the useful life of other water treatment plant, which currently has an estimated useful life of 30 years.

Q. IS STAFF IN AGREEMENT WITH THE COMPANY ON THE COMPANY'S PROPOSED REBUTTAL TREATMENT OF THESE COSTS?

A. I will let Staff speak for itself, but based upon my discussions with Staff I believe so.

Q. THANK YOU. PLEASE CONTINUE WITH YOUR DISCUSSION OF THE COMPANY'S REBUTTAL PIS ADJUSTMENTS?

A. Adjustment E reflects a reclassification of PIS which is a reflection, in part, of Staff's proposed reclassification.[4] The net impact on the overall PIS balance is zero.

Q. WHAT'S DIFFERENT?

A. The Company proposes reclassification of the $575,005 of arsenic media from plant account 320 – Water Treatment Equipment to account 320.4 (Original Arsenic Media) as

[3] See Rebuttal Schedule B-2, page 3.
[4] Hunsaker Dt. at 6-7. See also Staff Schedule TBH-5.

its PIS adjustment B. The $575,005 reclassification is reflected in the Staff proposed reclassification.[5]

Q. IN ITS PROPOSED RECLASSIFICATION STAFF RECLASSIFIES $1,379,569 FROM PLANT ACCOUNT 320 – WATER TREATMENT EQUIPMENT TO PLANT ACCOUNT 320.1 – WATER TREATMENT PLANTS WHILE THE COMPANY RECLASSIFIES $1,499,569. WHY IS THERE A DIFFERENCE?

A. The difference of $120,000 ($1,499,569 minus $1,379,569) is due to the reversal of the $120,000 retirement of arsenic media costs the Company proposed in its direct filing.

Q. PLEASE DESCRIBE ADJUSTMENTS "F" AND "G".

A. Adjustment F reflects a downward adjustment of $1,650 to account 320.5 – Arsenic Media and reflects the adoption of Staff proposed adjustment post-test year arsenic media regeneration costs.[6]

Adjustment G reflects the reconciliation of the PIS balance to the reconstruction of PIS shown on Rebuttal Schedule B-2, pages 3.8 through 3.14. As shown, there are no differences between the reconstructed balance and the adjusted balances shown on Rebuttal Schedule B-2, page 3.7. This means I have accounted for all of the Company's proposed PIS adjustments in the plant reconstruction.

B. <u>Accumulated Depreciation (A/D)</u>

Q. PLEASE DISCUSS THE COMPANY'S PROPOSED ADJUSTMENTS TO ACCUMULATED DEPRECIATION, AND IDENTIFY ANY ADJUSTMENTS YOU HAVE ACCEPTED FROM STAFF?

A. The Company's proposed accumulated depreciation ("A/D") adjustment is rebuttal B-2,

[5] Hunsaker Dt. at 6-7. See also Staff Schedule TBH-5.
[6] Hunsaker Dt. at 7-8. See also Staff Schedule TBH-7.

Adjustment 2, and is summarized on Rebuttal Schedule B-2, page 2. Rebuttal B-2, Adjustment 2, also consists of six individual adjustments labeled as "A", "B", "C", "D", "E", and "F" on Rebuttal Schedule B-2, page 4.

Adjustment A increases A/D by $250,000 and reflects the reversal of the Company's direct filing retirement of arsenic media costs. This adjustment is a corresponding adjustment to PIS adjustment A discussed above.

Adjustment B reduces A/D by $206,345 and reflects the change in A/D from reclassifying arsenic media related costs in PIS adjustment B.

Adjustment C increases A/D by $38,511 and reflects the change in A/D and reflects the change in A/D from reclassifying arsenic media related costs in PIS adjustment C.

Adjustment D reduces A/D by $287,503 and reflects the retirement of original arsenic media (Batch 1). This adjustment is a corresponding adjustment to PIS adjustment D discussed above.

Adjustment E increases A/D by $43,604 and reflects the change in the A/D balance from reclassifying plant costs in PIS adjustment E.

Adjustment F reflects the reconciliation of the A/D balance to the reconstruction of A/D shown on Rebuttal Schedule B-2, pages 3.8 through 3.14. As shown, there are no differences between the reconstructed balance and the adjusted balances shown on Rebuttal Schedule B-2, page 4.6; which means I have accounted for all of the Company's proposed A/D adjustments in the plant reconstruction.

C. Contributions-in-Aid of Construction (CIAC) and Accumulated Amortization (A.A.)

Q. PLEASE DISCUSS THE COMPANY'S PROPOSED ADJUSTMENTS TO CONTRIBUTIONS-IN-AID OF CONSTRUCTION AND/OR ACCUMULATED AMORTIZATION.

A. In Rebuttal B-2 Adjustment 3, as shown on Schedule B-2, page 2, the Company increases accumulated amortization ("A.A.") of CIAC by $22,097. This adjustment recognizes the changes to the annually computed composite amortization rates in the intervening years since the last test year resulting from the Company's proposed plant adjustments.

D. Accumulated Deferred Income Taxes (ADIT)

Q. PLEASE DISCUSS THE COMPANY'S PROPOSED ADJUSTMENTS TO ACCUMULATED DEFERRED INCOME TAXES.

A. In Rebuttal B-2 Adjustment 4, as shown on Schedule B-2, page 2, the Company reduces accumulated deferred income taxes ("ADIT") by $38,801 from $283,078 to $321,878. The proposed change in the ADIT balance reflects the Company proposed changes to the PIS, A/D, CIAC, and A.A. balances.

IV. REVENUES AND EXPENSES

Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S PROPOSED REBUTTAL ADJUSTMENTS TO REVENUES AND EXPENSES AND IDENTIFY ANY ADJUSTMENTS YOU HAVE ACCEPTED FROM STAFF AND/OR RUCO?

A. The Company's proposed rebuttal adjustments are detailed on Rebuttal Schedule C-2, pages 1-12. The rebuttal income statement with adjustments is summarized on Rebuttal

Schedule C-1, page 1-2.

Adjustment 1 annualizes depreciation expense. Annualized depreciation expense is lower reflecting the Company's proposed adjustments to PIS, proposed changes to the depreciation rate for arsenic media regeneration (Plant Account 320.5) for 67% to 40% (2.5-year useful life), and proposed depreciation rate for original arsenic media (Plant Account 320.4) of 6.67% (15-year useful life).

Q. WHY IS THE COMPANY PROPOSING A DEPRECIATION RATE OF 40% FOR ARSENIC MEDIA REGENERATION?

A. The Company is adopting the Staff proposed depreciation rate for arsenic media regeneration costs.[7] The 40% rate is reflective of the Company's actual experience with media regeneration.

Q. ARE THE OTHER DEPRECIATION RATES PROPOSING BY THE COMPANY CONSISTENT WITH THE RECOMMENDATIONS OF STAFF?

A. I believe so. Based upon my discussions with Staff a depreciation rate of 6.67% is appropriate for Plant Account 320.4 – Original Arsenic Media. But, again, I will let Staff speak for itself.

Q. DO YOU BELIEVE THAT THE PARTIES' DEPRECIATION EXPENSE PROPOSALS WILL BE SIMILAR?

A. Yes, assuming the parties agree on the depreciable balances as set forth on the Company's Rebuttal Schedule C-2, page 2.

[7] See Staff Schedule TBH-18.

Q. PLEASE DESCRIBE ADJUSTMENTS 2 AND 3 IN REBUTTAL SCHEDULE C-2, PAGE 2.

A. Adjustment 2 changes the property taxes to reflect the Company's rebuttal proposed revenues. Staff and the Company are in agreement on the method of computing property taxes. This method utilizes the ADOR formula and inputs two years of adjusted revenues plus one year of proposed revenues. I computed the property taxes based on the Company's proposed revenues, and then used the property tax rate and assessment ratio that was used in the direct filing.

Adjustment 3 reduces annual rate case expense by $15,000 and reflects a reduction in the Company's proposed total rate case expense by $75,000 from $250,000 to $175,000 amortized over 5 years or $35,000 annually.

Q. WHAT IS STAFF PROPOSING FOR RATE CASE EXPENSE?

A. Staff is proposing total rate case expense of $150,000 amortized over 5 years or $30,000 annually. The difference in annual cost between the parties is now $5,000.

Q. WHY DOES THE COMPANY BELIEVE $175,000 OF TOTAL RATE CASE EXPENSE IS APPROPRIATE FOR THIS RATE CASE?

A. The Company was authorized rate case expense of $225,000 in its prior case.[8] The Company believes one major issue (arsenic media cost treatment) has been resolved, but there still remain disputes between the parties particularly over the level of some expenses and the cost of capital. A request for $175,000 is reasonable given the now known remaining disputes with Staff. How the issues will be resolved going forward will directly impact the ultimate cost to the Company. That said, the Company will revisit its request at the appropriate time based upon the then existing facts and circumstances.

[8] See Decision No. 72177 (February 11, 2011) at Page 23.

Q. THANK YOU. PLEASE CONTINUE WITH YOUR DISCUSSION OF THE COMPANY'S PROPOSED REBUTTAL REVENUE AND EXPENSE ADJUSTMENTS.

A. Adjustment 4 reflects the reclassification of certain expenses. Specifically, the adjustment reduces Repairs and Maintenance expense by $6,584 and Contractual Services – Other by $1,020 and increases Contractual Services – Water Testing by $7,604. This adjustment adopts the Staff proposed expense reclassification.[9]

Adjustment 5 reclassifies workman's compensation insurance of $9,983 from Contractual Services – Other to Contractual Services – Management Fees and reflects the adoption of the Staff proposed expense reclassification.[10]

Adjustment 6 reduces Contractual Services - Management fees by $17,407 for prior year management fee expenses and reflects the adoption of the Staff proposed expense adjustment.[11]

Adjustment 7 reduces Contractual Services – Management fees by $8,803 and reflects the Company's proposed reduction of bonuses from the test year amount of $21,470 to $12,967. The $12,967 represents a 5-year average of bonuses paid to employees (both dedicated and non-dedicated).

Q. DOES STAFF PROPOSE AN ADJUSTMENT TO CONTRACTUAL SERVICES – MANAGEMENT FEES FOR BONUSES?

A. Yes. Staff reduces Contractual Services – Management Fees by $21,470, eliminating all bonuses from expenses.[12] The Company strongly disagrees with the removal of all bonuses from test year expenses.

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[9] Hunsaker Dt. at 9.
[10] Hunsaker Dt. at 9.
[11] Hunsaker Dt. at 9.
[12] Hunsaker Dt. at 9.

Q. WHY DOES THE COMPANY OPPOSE THIS ADJUSTMENT?

A. There are several reasons. First, Staff has not really explained its recommended disallowance. Staff's entire justification appears to be that paying bonuses is not necessary to the provision of water service.[13] Staff's analysis does not take into consideration that bonuses are part of the *total* compensation, which must be competitive in order to attract and retain qualified employees who are necessary to provide safe and reliable water service. At this point, no one is arguing that it was unreasonable or prudent for the management company to pay bonuses. Second, and as I mentioned above, bonuses or incentive programs are just a part of an employee's overall or total compensation. Some of the compensation is held back and paid as a bonus which creates a continuing incentive. But, the focus should be on total compensation which has to be market competitive or, all other things being equal, employees will leave for what they perceive to be a better paying job. This will then lead to higher turnover and ultimately a degradation of service to the customer. A similar concept applies to recruiting new employees. One of the primary considerations they make is the compensation and benefits package. Employee pay and benefits packages have to be market competitive. Third, it is reasonable for part of the total compensation package to consist of bonuses or incentive pay. Bonuses provided to employees whose responsibilities are toward providing water service, based on their performance in doing so, is directly and reasonably related to providing water service. That is the standard as to whether these amounts should be included in rates.

Q. DOES THE MANAGEMENT FEE CONTAIN COSTS FOR RETIREMENT PLANS?

A. No, which makes the management fees all the more reasonable in my view.

[13] Hunsaker Dt. at 10.

Q. BUT HOW DO WE KNOW THAT THE MANAGEMENT COMPANY WILL PAY THE SAME AMOUNT OF BONUSES IN THE FUTURE?

A. We do not. Nor do we know how much the Company will pay for power, fuel, chemicals, paper clips, or lawyers. But the Company did have a known and measurable amount of bonuses paid during the test year, which was included in its direct filing. But in light of Staff's position, the Company reviewed the bonuses paid over the past five years. Essentially, the Company is amending its proposal to include a normalized amount of bonuses to include in rates, based on the average of bonuses paid over the past five years – which is nearly $9,000 less than the amount paid in the test year.

Q. SO THE MANAGEMENT COMPANY HAS HISTORICALLY PAID BONUSES AND PASSED THOSE COSTS ON TO SWC?

A. Yes, and that is the point. Like any expense, the year to year amount may vary slightly but the bonus program is there, and it is a recurring expense that will continue and the amount the Company has proposed provides a reasonable expense level. The bonuses paid that SWC is seeking recovery for is a necessary cost of providing service.

Q. TO SUMMARIZE YOUR TESTIMONY ON THIS EXPENSE, WHY IS AUTHORIZING THIS EXPENSE TO BE INCLUDED IN THE COST OF SERVICE IN THE PUBLIC INTEREST?

A. First, achievement pay is an important tool in recruiting employees who ultimately provide service to SWC through the management company. Second, achievement pay is not purely a financial measure but rather is represented by a balanced approach which evaluates such things as the quality and level of customer service and both financial and operational reliability provided and financial. Third, this expense was incurred and will be a continuing expense going forward that ultimately helps SWC provide quality utility service to its customers.

Q. THANK YOU. PEASE CONTINUE WITH YOUR DISCUSSION OF THE REVENUE AND EXPENSE ADJUSTMENTS.

A. Adjustment 8 increases Contractual Services – Water Testing by $1,030 and reflects the adoption of the Staff proposed adjustment.[14]

Adjustment 9 is intentionally left blank.

Adjustment 10 adjusts interest expense to reflect interest synchronization with rate base.

Adjustment 11 adjusts income taxes to reflect the Company proposed adjusted test year revenues and expenses.

V. RATE DESIGN

Q. WHAT ARE SWC'S PROPOSED RATES FOR WATER SERVICE?

A. The Company's proposed rates are shown on Rebuttal Schedule H-3, pages 1 and 2.

Q. WHAT WILL BE THE AVERAGE 5/8 x 3/4-INCH METERED CUSTOMER AVERAGE MONTHLY BILL UNDER THE COMPANY'S REBUTTAL PROPOSED RATES?

A. As shown on Schedule H-2, page 1, the average monthly bill under proposed rates for a 5/8 x 3/4 inch metered customer, using an average of 4,677 gallons, is $34.21 – equivalent to a $3.24 increase over the present monthly bill of $30.94 or a 10.56 percent increase.

Q. IS THE COMPANY MODIFYING ITS PROPOSED RATE DESIGN FROM ITS DIRECT FILING?

A. No.

[14] Hunsaker Dt. at 10.

Q. PLEASE DISCUSS THE STAFF PROPOSED RATE DESIGN.

A. Before I begin, I would note that the Staff proposed rates do not generate Staff's proposed revenue requirement. According to my revenue proof of the Staff rates, Staff's proposed rates produce approximately $48,000 less revenue than the Staff proposed revenue requirement. I have spoken with Staff about this issue and Staff has agreed to look into the matter. That said, the rate designs proposed by each of the parties are similar; an inverted 3-tier design for the ¾-inch and smaller residential metered customers and an inverted 2-tier design for other meter sizes and classes (residential, commercial, industrial public authority and irrigation). The proposed break-over points are the same between the parties.

Q. WHAT ABOUT REVENUE RECOVERY FROM THE MONTHLY MINIMUMS AND COMMODITY RATES?

A. Revenue recovery from the monthly minimums and the commodity rates are similar. For example, under the Company's proposed rates, recovery from the monthly minimums is 47.46% whereas under the Staff proposed rates revenue recovery from the monthly minimums is 48.3%. Revenue recovery from the first, second and third tier commodity rates are 23.91%, 25.19%, and 3.45%, respectively under the Company's proposed rates whereas Revenue recovery from the first, second and third tier commodity rates are 23.29%, 24.98%, 3.43%, respectively under Staff's proposed rates.

Q. IS THERE ANY DISAGREEMENT BETWEEN THE PARTIES WITH RESPECT TO THE MISCELLANEOUS SERVICE CHARGES?

A. No.

Q. IS THERE ANY DISAGREEMENT BETWEEN THE PARTIES WITH RESPECT TO THE METER AND SERVICE LINE CHARGES?

A. No.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY ON RATE BASE, INCOME STATEMENT AND RATE DESIGN?

A. Yes.

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
DOUG LITTLE - CHAIRMAN
BOB STUMP
BOB BURNS
TOM FORESE
ANDY TOBIN

IN THE MATTER OF THE APPLICATION OF SAHUARITA WATER COMPANY, LLC FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PROPERTY AND FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES.	DOCKET NO. W-03718A-15-0213

REJOINDER TESTIMONY OF

THOMAS J. BOURASSA

RATE BASE, INCOME STATEMENT & RATE DESIGN

APRIL 15, 2016

PENGAD 800-631-6989
EXHIBIT
A-5

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive, Phoenix, Arizona 85029.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying in this proceeding on behalf of the applicant, Sahuarita Water Company, LLC. ("SWC" or the "Company").

Q. ARE YOU THE SAME THOMAS J. BOURASSA THAT FILED DIRECT AND REBUTTAL TESTIMONY IN THIS DOCKET?

A. Yes, I prepared direct testimonies in two volumes; one volume on the rate base, income statement, revenue requirement and rate design and the second volume of cost of capital. I also prepared two volumes of rebuttal testimonies with the same division. My background information and qualifications are set forth in the rate base and revenue requirement volume of my direct testimony.

Q. DID YOU ALSO PREPARE REJOINDER TESTIMONY ON THOSE ISSUES IN THIS DOCKET?

A. Yes, in this volume, I present my rejoinder testimony on rate base, income statement, revenue requirement and rate design. I present my cost of capital rejoinder testimony in a separate volume.

Q. WHAT IS THE PURPOSE OF THIS REBUTTAL TESTIMONY?

A. I will provide rebuttal testimony in response to Staff's surrebuttal filing. More specifically, this first volume of my rebuttal testimony relates to rate base, income statement and rate design for SWC. In a second, separate volume of my rejoinder testimony, I will present an update to the Company's requested cost of capital, as well as respond to Staff's surrebuttal testimony on the cost of capital and rate of return applied to the fair value rate base, and the determination of operating income.

II. SUMMARY OF SWC'S REJOINDER POSITION

Q. WHAT IS THE REVENUE THE COMPANY IS PROPOSING IN THIS REJOINDER TESTIMONY?

A. The Company proposes a total revenue requirement of $3,173,385, which constitutes an increase in revenues of $276,638, or 9.55% over adjusted test year revenues.

Q. HOW DO THESE COMPARE WITH THE COMPANY'S REBUTTAL FILING?

A. They are the same.

Q. WHAT ARE THE PROPOSED REVENUE REQUIREMENTS AND RATE INCREASES FOR THE COMPANY AND STAFF AT THIS STAGE OF THE PROCEEDING?

A. The proposed revenue requirements and proposed rate increases are as follows:

	Revenue Requirement	Revenue Incr.	% Increase
Company-Rebuttal	$3,173,385	$ 276,638	9.55%
Staff-Surrebuttal	$3,063,165	$ 166,419	5.75%
Company-Rejoinder	$3,173,385	$ 276,638	9.55%

III. RATE BASE

Q. WOULD YOU PLEASE IDENTIFY THE PARTIES' RESPECTIVE RATE BASE RECOMMENDATIONS?

A. Yes, the rate bases proposed by the Company and Staff are as follows:

	OCRB	FVRB
Staff Surrebuttal	$ 9,359,714	$ 9,359,714
Company Rejoinder	$ 9,359,714	$ 9,359,714

Q. ARE THERE ANY REMAINING DISPUTES BETWEEN THE PARTIES WITH RESPECT TO THE RATE BASE?

A. No. Staff and the Company are in agreement after resolving the arsenic media treatment issue.[1] The Company's proposed adjustments to rate base for rejoinder are the same as discussed in my rebuttal testimony.[2] Staff and the Company have

[1] *See* Surrebuttal Testimony of Teresa B. Hunsaker ("Hunsaker Sb.") at 3.

[2] *See* Rebuttal Testimony of Thomas J. Bourassa ("Bourassa Rb.") at 3-9.

agreed on the balances for plant-in-service, advances-in-aid of construction, contributions-in-aid of construction, and accumulated deferred income taxes.[3]

IV. REVENUES AND EXPENSES.

Q. DOES THE COMPANY PROPOSE TO REVISE OR TO PROPOSE ADDITIONAL ADJUSTMENT TO REVENUES AND/OR EXPENSES?

A. No. The Company's proposed adjustments to revenues and/or expenses for rejoinder are the same as discussed in my rebuttal testimony.[4]

Q. WHAT ARE THE REMAINING ISSUES IN DISPUTE WITH RESPECT TO REVENUES AND/OR EXPENSES?

A. There are two issues in dispute, rate case expense and management fees expenses – bonuses.

Q. WHAT ARE THE COMPANY AND STAFF PROPOSING FOR RATE CASE EXPENSE?

A. The Company is proposing total rate case expense of $175,000 amortized over 5 years or $35,000 annually. Staff is proposing total rate case expense of $150,000 amortized over 5 years or $30,000 annually. The difference in annual cost between the parties is $5,000.

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[3] Hunsaker Sb. at 3-4.

[4] Bourassa Rb. at 9-15.

Q. DID STAFF PROVIDE ANY ADDITIONAL TESTIMONY ON RATE CASE EXPENSE?

A. No. The Company continues to believe its rate case expense recommendation is appropriate.

Q. DO YOU HAVE ANY RESPONSES TO THE STAFF TESTIMONY CONCERNING INCENTIVE PAY (BONUSES)?

A. Yes. First, regarding historical pay increases exceeding the national average, Staff admits that employees have changed responsibilities over the years which would explain at least some higher-than-normal pay increases.[5] Second, Staff did not consider that some pay increases were necessary to bring pay rates more in line with the market so as to provide employees with an incentive to stay with the Company. It is more costly to continually hire and train new employees than to retain employees. Third, at the end of the say, even with the pay increases over the years, Staff has not shown that the total allocated wages including incentive pay of both the non-dedicated and dedicated employees are unreasonable.

Q. HAVE YOU ANALYZED THE COMPANY'S WAGES AND WHAT DID YOU FIND?

A. Yes. I conducted a study comparing the average wage for each position based upon the American Water Works Association 2015 Compensation Survey for Small and Medium Sized Utilities ("AWWA Compensation Survey") and determined that even with the incentive pay, the total comparative wages (excluding incentive pay) on a stand-alone company basis exceeded the test year allocated wages (including incentive pay) by over $345,000. Assuming the same

[5] Hunsaker Sb. at 6.

affiliate relationship whereby some wages are from non-dedicated employees, the total allocated comparative wages (excluding incentive pay) exceeded the test year allocated wages (including incentive pay) by nearly $20,000. Considering the Company has recommended reducing the incentive pay requested in this case by nearly $13,000, the "savings" to rate payers is nearly $350,000 or over $30,000, depending on your viewpoint. I would note, using the average comparative wages ignores length of service so the average comparative base wages from the AWWA Compensation Survey used in my study likely understate the "savings" presented here.

Q. WOULD A SMALL STAND-ALONE UTILITY HAVE DEDICATED EMPLOYEES FOR SOME OF THE POSITIONS THAT ARE CURRENTLY NON-DEDICATED?

A. Arguably they should. This Commission is well aware of the operational and financial issues surrounding many small utilities in this state. I believe these issues could be significantly mitigated by more comprehensive management. Through SWC's affiliate relationship with its parent, SWC is able to capitalize on the skills and expertise of upper management that are not available to many small utilities, and, at a fraction of the cost of hiring these employees directly.

Q. DOES IT MATTER HOW THE INCENTIVE PAY WAS DISTRIBUTED AMONG DEDICATED AND NON-DEDICATED EMPLOYEES?

A. Not in my view. Incentive pay is typically higher for management because these employees have the ultimate responsibility for insuring the Company provides safe and reliable service to customers.

Q. DO YOU HAVE ANY FINAL THOUGHTS?

A. Yes. Considering the total compensation included in the test year is reasonable using an objective standard like the AWWA Compensation Survey, the Company has historically paid incentives annually, and they are an integral part of employee compensation, the Company recommended incentive pay should be adopted. The Commission should not discourage utilities from efforts to reasonably compensate employees, incentivize performance, as well as attract and retain the most qualified employees.

V. RATE DESIGN

Q. WHAT ARE SWC'S PROPOSED RATES FOR WATER SERVICE?

A. The Company's proposed rates are shown on Rebuttal Schedule H-3, pages 1 and 2.

Q. WHAT WILL BE THE AVERAGE 5/8 x 3/4-INCH METERED CUSTOMER AVERAGE MONTHLY BILL UNDER THE COMPANY'S REBUTTAL PROPOSED RATES?

A. As shown on Rejoinder Schedule H-2, page 1, the average monthly bill under proposed rates for a 5/8 x 3/4 inch metered customer, using an average of 4,677 gallons, is $34.21 – equivalent to a $3.24 increase over the present monthly bill of $30.94 or a 10.56 percent increase.

Q. ARE THE PARTIES PROPOSING ANY CHANGES TO THE RATE DESIGN?

A. No.

Q. DO THE STAFF PROPOSED RATES NOW PRODUCE STAFF'S PROPOSED REVENUE REQUIREMENT?

A. Yes.

Q. HOW DO THE REVENUE RECOVERY FROM THE MONTHLY MINIMUMS AND COMMODITY RATES COMPARE BETWEEN THE COMPANY PROPOSED RATES AND THE STAFF PROPOSED RATES?

A. Revenue recovery from the monthly minimums and the commodity rates are similar. For example, under the Company's proposed rates, recovery from the monthly minimums is 47.46% whereas under the Staff proposed rates revenue recovery from the monthly minimums is 47.88%. Revenue recovery from the first, second and third tier commodity rates are 23.91%, 25.19%, and 3.45%, respectively under the Company's proposed rates whereas the revenue recovery from the first, second and third tier commodity rates are 23.85%, 24.84%, 3.44%, respectively under Staff's proposed rates.

Q. IS THERE ANY DISAGREEMENT BETWEEN THE PARTIES WITH RESPECT TO THE MISCELLANEOUS SERVICE CHARGES?

A. No.

Q. IS THERE ANY DISAGREEMENT BETWEEN THE PARTIES WITH RESPECT TO THE METER AND SERVICE LINE CHARGES?

A. No.

Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY ON RATE BASE, INCOME STATEMENT AND RATE DESIGN?

A. Yes.

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
SUSAN BITTER SMITH- CHAIRMAN
BOB STUMP
BOB BURNS
DOUG LITTLE
TOM FORESE

IN THE MATTER OF THE APPLICATION OF SAHUARITA WATER COMPANY, INC. FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PROPERTY AND FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES.	DOCKET NO. W-03718A-15-_____

Direct Testimony of

Thomas J. Bourassa

Cost of Capital

June 26, 2015

PENGAD 800-631-6989
EXHIBIT
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ADMITTED

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I. INTRODUCTION.

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive, Phoenix, Arizona 85029.

Q. ARE YOU THE SAME THOMAS J. BOURASSA THAT FILED DIRECT TESTIMONY ON RATE BASE, INCOME STATEMENT, REVENUE REQUIREMENT AND RATE DESIGN IN THIS DOCKET?

A. Yes, and all of my background information and testimony regarding my qualifications is contained in that portion of my direct testimony.

II. SUMMARY OF TESTIMONY AND THE PROPOSED COST OF CAPITAL FOR THE COMPANY.

Q. WHAT IS THE PURPOSE OF THIS PORTION OF YOUR DIRECT TESTIMONY?

A. This portion of my direct testimony will focus on cost of capital issues. I will testify in support of Sahuarita Water Company, L.L.C.'s ("SWC" or "the Company") proposed rate of return on its fair value rate base. I am sponsoring the Company's "D" Schedules, which are attached to this testimony. Also attached to this testimony are Exhibits TJB-COC-DT-1 through TJB-COC-DT-2, which are discussed herein. As noted above, I am also sponsoring direct testimony that addresses the Company's rate base, income statement (revenue and operating expenses), required increase in revenue, and its rate design and proposed rates and charges for service. For the convenience of the Commission and the parties, that testimony and my related schedules are being filed

separately.

Q. PLEASE SUMMARIZE YOUR COST OF CAPITAL TESTIMONY.

A. I have determined that the cost of equity for the publicly traded water utilities falls in the range of 9.8 percent to 11.10 percent with an average of 10.30 percent. After considering the differences in business and financial risk between SWC and the publicly traded water utilities, the cost of equity for SWC falls in the range of 10.4 percent to 11.0 percent with a mid-point of 10.7 percent. I am recommending a return on equity ("ROE") of no less than 10.5 percent for SWC.

Q. WHAT IS THE RECOMMENDED CAPITAL STRUCTURE FOR SWC?

A. The actual capital structure at the end of the test year (December 31, 2014) was approximately 20.57 percent debt and 79.43 percent equity. The Company is proposing this capital structure for ratemaking purposes.

Q. WHAT IS THE RECOMMENDED COST OF DEBT?

A. The Company's recommended cost of debt is 4.2 percent. The cost of debt is based upon the current cost of debt on SWC's Water Infrastructure Finance Authority ("WIFA") loan.

Q. WHAT IS THE WEIGHTED AVERAGE COST OF CAPITAL?

A. The weighted cost of capital is 9.2 percent as shown on Schedule D-1.

Q. PLEASE SUMMARIZE THE APPROACH YOU USED TO ESTIMATE THE COST OF EQUITY FOR THE COMPANY.

A. The cost of equity for SWC cannot be estimated directly because the Company's equity is not in the form of a publicly traded security and thus there is no market data for SWC.

Consequently, I applied market-based models (Discounted Cash Flow ("DCF"), Risk Premium Model ("RPM"), and CAPM ("CAPM")), using data from a sample of water utilities selected from the Value Line Investment Survey. There are seven water utilities in my sample: American States Water, Aqua America, California Water, Connecticut Water, Middlesex Water, SJW Corp., and York Water Company. As explained later in my testimony, these companies aren't really comparable to SWC, but they are utilities with available market data and the Utilities Division Staff has relied on data for these water utilities in a number of recent water and sewer utility rate cases.

III. OVERVIEW OF THE RELATIONSHIP BETWEEN RISK AND THE EXPECTED RETURN ON INVESTMENT.

Q. PLEASE DEFINE THE COST OF EQUITY.

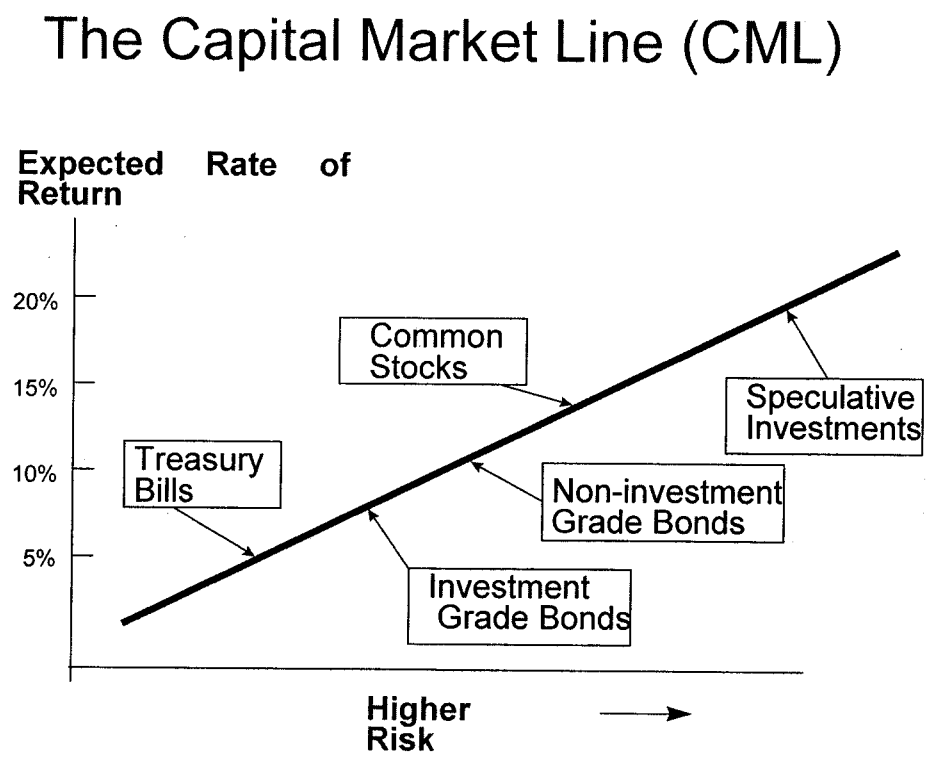
A. The cost of equity is the rate of return that equity investors expect to receive on their investment. Investors can choose from numerous investment options, not simply publicly traded stock. Investments have varying degrees of risk, ranging from relatively low risk assets such as Treasury securities to somewhat higher risk corporate bonds to even higher risk common stocks. As the level of risk increases, investors require higher returns on their investment. The cost of equity is therefore expected rate of return that that the market requires to attract funds to a particular investment.[1] Finance models that are used to estimate the cost of equity rely on this basic concept.

Q. CAN YOU ILLUSTRATE THE CAPITAL MARKET RISK-RETURN CONCEPT?

A. Yes. The following graph depicts the risk-return relationship that has become widely

[1] Shannon P. Pratt and Roger J. Grabowski, *Cost of capital: Applications and Examples 5th Ed.* (Hoboken, NJ, John Wiley and Sons, 2014); p. 2.

known as the Capital Market Line ("CML"). The CML illustrates in a general way the risk-return relationship.



The CML can be viewed as a continuum of the available investment opportunities for investors. Investment risk increases as you move upward and to the right along the CML. Again, the return required by investor's increases with the risk.

Q. HOW DOES THE RISK-RETURN TRADE OFF CONCEPT WORK IN THE CAPITAL MARKET?

A. As indicated by the CML, the allocation of capital in a free market economy is based upon the relative risk of, and expected return from, an investment. In general, investors rank investment opportunities in the order of their relative risks. Investment alternatives in which the expected return is commensurate with the perceived risk become viable

investment options. If all other factors remain equal, the greater the risk, the higher the rate of return investors will require to compensate them for the possibility of loss of either the principal amount invested or the expected annual income from such investment.

Short-term Treasury bills provide a high degree of certainty and in nominal terms (after considering inflation) are considered virtually risk free. Long-term bonds and preferred stocks, having priority claims to assets and fixed income payments, are relatively low risk, but are not risk free. The market values of long-term bonds often fluctuate when government policies or other factors cause interest rates to change. Common stocks are higher and to the right on the CML continuum because they are exposed to more risk. Common stock risk includes the nature of the underlying business and financial strength of the issuing corporation as well as market-wide factors, such as general changes in capital costs.

The capital markets reflect investor expectations and requirements each day through market prices. Prices for stocks and bonds change to reflect investor expectations and the relative attractiveness of one investment relative to others. While the example provided above seems straightforward, returns on common stocks are not directly observable in advance, in contrast to debt or preferred stocks with fixed payment terms. This means that these returns must be estimated from market data. Estimating the cost of equity capital should be a matter of informed judgment about the relative risk of the investment in question and the expected rate of return characteristics of other alternative investments.

The estimation of a utility's cost of equity is complex. It requires an analysis of the factors influencing the cost of various types of capital, such as interest on long-term debt, dividends on preferred stock, and earnings on common equity. The data for such an analysis comes from highly competitive capital markets, where the firm raises funds by issuing common stock, selling bonds, and by borrowing (both long- and short-term) from

banks and other financial institutions. In the capital markets, the cost of capital, whether the capital is in the form of debt or equity, is determined by two important factors: (1) The pure or real rate of interest, often called the risk-free rate of interest; and (2) The uncertainty or risk premium (the compensation the investor requires over and above the real or pure rate of interest for subjecting his capital to additional risk).

Q. PLEASE DISCUSS THESE FACTORS IN GREATER DETAIL.

A. The pure rate of interest essentially reflects both the time preference for and the productivity of capital. From the standpoint of the individual, it is the rate of interest required to induce the individual to forgo present consumption and offer the funds thus saved to others for a specified length of time. Moreover, the pure rate of interest concept is based on the assumption that no uncertainty effects the investment undertaken by the individual, i.e., there is no doubt that the periodic interest payments will be made and the principal returned at the end of the time period. In reality, investments without any risk do not exist. Every commitment of funds involves some degree of uncertainty.

Turning to the second factor affecting the cost of capital, it is generally accepted that the higher the degree of uncertainty, the higher the cost of capital. Investors are regarded as risk adverse and require that the rate of return increase as the risk(s) (uncertainty) associated with an investment increase(s).

Q. CAN YOU PROVIDE SOME PERSPECTIVE ON YOUR PREVIOUS DISCUSSION WITH RESPECT TO RETURNS ON COMMON STOCKS?

A. Yes. Conceptually,

[1] Required Return for Common Stocks = Return on a risk-free asset + Risk Premium

where the risk premium investors require for common stocks will be higher than the risk

premium they require for investment grade bonds. This relationship is depicted in the graph of the CML above. As I will discuss later in this testimony, this concept is the basis of risk premium methods, such as the Capital Asset Pricing Model ("CAPM"), that are used to estimate the cost of equity.

Q. PLEASE DISCUSS IN MORE DETAIL THE IMPACT OF RISK ON CAPITAL COSTS.

A. With reference to specific utilities, risk is often discussed as consisting of two separate types of risk: business risk and financial risk.

Business risk, the basic risk associated with any business undertaking, is the uncertainty associated with the enterprise's day-to-day operations. In essence, it is a function of the normal day-to-day business environment, both locally and nationally. Business risks include the condition of the economy and capital markets, the state of labor markets, regional stability, government regulation, technological obsolescence, and other similar factors that may impact demand for the business product and its cost of production. For utilities, business risk also includes the volatility of revenues due to abnormal weather conditions, degree of operational leverage, regulation, and regulatory climate. Regulation, for example, can compound the business risk if it is unpredictable in reacting to cost increases, both in terms of the time lag and magnitude for recovery of such increases. Regulatory lag makes it difficult to earn a reasonable return, particularly in an inflationary environment and/or when there is significant lag between the timing of investment in capital projects and its recognition in rates. Put simply, the greater the degree of uncertainty regarding the various factors affecting a company's business, the greater the risk of an investment in that company and the greater the compensation required by the investor.

Financial risk, on the other hand, concerns the distribution of business risk to the

various capital investors in the utility. As I discussed earlier, permanent capital is normally divided into three categories: long-term debt, preferred stock, and common equity. Because common equity owners have only a residual claim on earnings after debt and preferred stockholders are paid, financial risk tends to be concentrated in that element of the firm's capital. Thus, a decision by management to raise additional capital by issuing additional debt concentrates even more of the financial risk of the utility in the common equity owners.

Q. WHAT ARE THE DETERMINANTS OF THE RISK FREE RATE IN EQUATION [1]?

A. The risk-free rate can be disaggregated in to a "real" rate of interest and an inflation premium (expected future inflation).

Q. WHAT ARE THE DETERMINANTS OF THE REQUIRED RISK PREMIUM FROM EQUATION [1]?

A. The risk premium can be disaggregated into five general components: 1) Interest Rate Risk; 2) Business Risk; 3) Regulatory Risk; 4) Financial Risk; and, 5) Liquidity Risk.[2]

Interest Rate Risk refers to the variability in return caused by subsequent changes in interest rates and stems from the inverse relationship between interest rates and asset prices. For example, bond prices fall when interest rates rise and visa versa.

Business risk, the basic risk associated with any business undertaking, is the uncertainty associated with the enterprise's day-to-day operations. In essence, it is a function of the normal day-to-day business environment, both locally and nationally which collectively increase the probability that expected future income flows accruing to investors may not be realized. Business risks include the condition of the economy and

[2] Dr. Roger Morin, *New Regulatory Finance* (Vienna Virginia, Public Utilities Reports 2006); p. 36.

capital markets, the state of labor markets, regional stability, technological obsolescence, degree of competition, sales volatility, government regulation, and other similar factors that may impact demand for the business product and its cost of production. For utilities, business risk also includes the volatility of revenues due to abnormal weather conditions and the degree of operational leverage.

Regulatory risk refers to the quality and consistency of regulation applied to a given regulated utility. Regulatory jurisdictions are evaluated on the basis of three major factors: earnable return on equity, regulatory quality, and regulatory practices.[3] These three factors collectively impact a utility ability to earn its authorized return. The type of test year employed (historical or future), length of regulatory lag, capital structure and rate base issues, and length of regulatory lag are among the reasons a utility may or may not have a reasonable opportunity to earn its authorized return.

Regulation can compound the business risk if it is unpredictable in reacting to cost increases, both in terms of the time lag and magnitude for recovery of such increases. Regulatory lag makes it difficult to earn a reasonable return, particularly in an inflationary environment and/or when there is significant lag between the timing of investment in capital projects and its recognition in rates. Put simply, the greater the degree of uncertainty regarding the various factors affecting a company's business, the greater the risk of an investment in that company and the greater the compensation required by the investor.

Financial risk concerns the distribution of business risk to the various capital investors in the utility and refers to the additional variability imparted to income available to common shareholders stemming from the company's method of financing its capital needs. Permanent capital is normally divided into three categories: long-term debt, preferred stock, and common equity. Because common equity owners have only a

[3] Morin, p.43.

residual claim on earnings after debt and preferred stockholders are paid, financial risk tends to be concentrated in that element of the firm's capital. Thus, a decision by management to raise additional capital by issuing additional debt concentrates even more of the financial risk of the utility in the common equity owners.

Construction risk is an important component of financial risk. Construction risk is the risk of both tying capital up in projects that are not earning returns, or of not having sufficient capital to build the assets you need to keep generating returns. If a company has a large construction budget relative to internally generated cash flows, it will require external financing which will also have an impact on financial risk. It is important that companies have access to capital funds on reasonable terms and conditions. Utilities are more susceptible to construction risk for two reasons. First, water and wastewater utilities generally have high capital requirements to build plant to serve customers. Second, utilities have a mandated obligation to serve leaving less flexibility both in the timing and discretion of scheduling capital projects. This is compounded by the limited ability to wait for more favorable market conditions to raise the capital necessary to fund the capital projects, and then the lag between when plant can be built and when rates can be approved to provide returns on and of that capital. It is imperative there is access to needed capital and on reasonable terms and conditions. The return allowed on common equity will have a critical role in determining those terms and conditions.[4]

Although often discussed separately, the two types of risks (business and financial) are interrelated. A study by Scott and Martin found statistically significant results for unregulated firms in twelve industries that "smaller equity ratios (higher leverage use) are generally associated with larger companies."[5] One should expect unregulated enterprises

[4] Morin, p. 48.
[5] Scott, D.F. and Martin, J.D., "Industry Influence on Financial Structure," *Financial Management*, Spring 1975, pp. 67-71.

to seek the best balance between debt and equity to obtain the lowest overall cost of capital. The findings of Scott and Martin suggest smaller firms found it prudent to *offset higher business risks related to being small by reducing financial risk.* This evidence suggests the least cost equity ratio for SWC may be bigger than the average equity ratio for the benchmark water proxy group.

Finally, Liquidity Risk refers to the ability to readily convert an investment into cash without sustaining a loss. Capital market theory generally assumes that investments are liquid and observations about risk and return are drawn from information about liquid investments. Non-publicly traded or privately-held investments possess little liquidity.

Q. IS INVESTMENT RISK SIZE RELATED?

A. Yes. Investment risk is size related.[6] In other words, investment risk increases as company size decreases.[7] Investment liquidity may be a significant factor explaining this relationship. However, the illiquidity of smaller stocks does not capture the size effect completely.[8] Size may be a proxy for one or more true unknown factors correlated with size.[9]

IV. THE MEANING OF "JUST AND REASONABLE" RATE OF RETURN.

Q. HAVE THE COURTS SET FORTH ANY CRITERIA THAT GOVERN THE RATE OF RETURN THAT A UTILITY'S RATES SHOULD PRODUCE?

A. Yes. In 1923, the U.S. Supreme Court set forth the following criteria for determining whether a rate of return is reasonable in *Bluefield Water Works and Improvement Co. v.*

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[6] Morin, p. 49.
[7] *Id.*
[8] Duff & Phelps, *2015 Valuation Handbook; Guide to Cost of Capital* (Hoboken, NJ, John Wiley and Sons, 2014); p. 4-21 – 4-22.
[9] Duff & Phelps, p.4-25.

Public Service Commission of West Virginia, 262 U.S. 679, 692-93 (1923):

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments on other business undertakings which are attended by corresponding risks and uncertainties .... The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market, and business conditions generally.

Then, in *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944), the U.S. Supreme Court stated the following regarding the return to owners of a company:

> [T]he return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

320 U.S. at 603.

In summary, under *Hope* and *Bluefield*:

(1) The rate of return should be similar to the return in businesses with similar or comparable risks;

(2) The return should be sufficient to ensure the confidence in the financial integrity of the utility; and

(3) The return should be sufficient to maintain and support the utility's credit.

Q. HAVE THESE CRITERIA BEEN APPLIED IN REGULATORY PROCEEDINGS?

A. Yes, but the application of the "reasonableness" criteria laid down by the Supreme Court has resulted in controversy. The typical method of computing the overall cost of capital is quite straightforward: it is the composite, weighted cost of the various classes of capital

(debt, preferred stock, and common equity) used by the utility. Calculating the proportion that each class of capital bears to total capital does the weighting. However, there is no consensus regarding the best method of estimating the cost of equity capital. The increasing regulatory use of market-based finance models in equity return determination has not led to a universally accepted means of estimating the ROE. In addition, the market-based results are too often applied to a book-value investment base, which, as I will discuss, understates the return expected by investors who invest in real markets based on market values.

V. THE ESTIMATED COST OF EQUITY FOR SWC.

A. The Publicly Traded Utilities That Comprise the Sample Group Used to Estimate the Company's Cost of Equity.

Q. PLEASE DESCRIBE THE APPROACH YOU FOLLOWED IN YOUR COST OF CAPITAL ANALYSIS FOR SWC.

A. Again, estimating the cost of equity is a matter of informed judgment. The development of an appropriate rate of return for a regulated enterprise involves a determination of the level of risk associated with that enterprise and the determination of an appropriate return for that risk level. Practitioners employ various techniques that provide a link to actual capital market data and assist in defining the various relationships that underlie the equity cost estimation process.

Since SWC is not publicly traded, the information required to directly estimate its cost of equity is not available. Accordingly, as previously noted, I used a sample group of water utilities as a starting point to develop an appropriate cost of equity for SWC. An analysis of a proxy group serves as a starting point because no proxy group can be

selected to be identical in risk to SWC. Therefore, the proxy group's results must be adjusted to reflect the unique relative risks, financial and business risks, of SWC, as I will discuss in detail below.

For the three models contained in my analysis, I use data from a sample of publicly traded water utilities, or proxy group, selected from the *Value Line Investment Survey* as a starting point in my analysis. There are seven water utilities in my sample: American States Water (AWR), Aqua America (WTR), California Water Company (CWT), Connecticut Water (CTWS), Middlesex Water (MSEX), SJW Corp. (SJW), and York Water Company (YORW).

The basis of selection for the proxy group of seven water companies was to select those companies which meet the following criteria: 1) they are included in the Water Company Group of AUS Utility Reports (August 2014); 2) they are followed by the *Value Line Investment Survey*; 3) they have at least ten years of historical financial and market information; 4) they have a *Value Line* adjusted beta; 5) they have not cut or omitted their common dividends during the five years ending 2013 or through the time of the preparation of this testimony; 6) they have 60 percent or greater of 2013 total net operating income derived from regulated water operations; and 7) which, at the time of the preparation of this testimony, had not publicly announced that they were involved in any major merger or acquisition activity.

Q. ARE THE WATER UTILITIES IN YOUR SAMPLE DIRECTLY COMPARABLE TO SWC?

A. No, but they are utilities for which market data is available. All of them are regulated, they primarily provide water service, although some provide both water and wastewater services, and their primary source of revenues is from regulated services. Therefore, they provide a useful starting point for developing a cost of equity for the Company

recognizing that the proxy group is not perfectly comparable to SWC.

Q. BRIEFLY, WHY IS A COMPARABLE PROXY GROUP NECESSARY IN A COST OF CAPITAL ANALYSIS?

A. First, a fair rate of return for a specific utility is the return required by investors to hold correspondingly risky assets. Market data for a sample of comparable risk companies provides insight into the investors' required return and that satisfies the U.S. Supreme Court's decisions in *Bluefield* and *Hope* which I discussed earlier. The comparable earnings standard set forth in the *Hope* and *Bluefield* decisions require the rate of return afforded to utilities be similar to the return in businesses with similar or comparable risks. It follows that a proxy group of companies with comparable risk is the starting point in a cost of capital analysis.

Second, a primary objective of rate regulation is to determine an authorized ROE that is both fair to customers and provides satisfactory returns for SWC. The best estimate of that ROE is SWC's cost of equity. The cost of equity is a cost of service fairly recovered from customers through rates. It is also satisfactory to SWC because it is commensurate with returns an investor in SWC would expect to earn from investments of comparable risk. To estimate the cost of equity requires market data that reveal investor's required returns. But, SWC is not publicly traded so there is no market information to determine the cost of equity. This necessitates the selection of a proxy group.

Q. PLEASE PROVIDE A GENERAL DESCRIPTION OF THE WATER UTILITIES IN YOUR SAMPLE.

A. Schedule D-4.2 lists the percentages of regulated revenues, operating revenues, net plant, S&P bond ratings, allowed ROE's, *Value Line* betas, market capitalization, and market size category for the seven water utilities. Comparative data for SWC is also shown in

Schedule D-4.2. The seven sample companies may be generally described as follows:

(1) American States Water (AWR) primarily serves the California market through Golden State Water Company, which provides water services to over 256,000 customers within 75 communities in 10 counties in the State of California, primarily in Los Angeles, San Bernardino, and Orange counties. AWR also owns an electric utility service provider (Bear Valley Electric Service) with over 23,600 customers. AWR also provides contractual services to the U.S. government and private entities located in 5 states through its subsidiary, American States Utility Services. Total operating revenues for AWR are nearly $465 million and net plant is nearly $999 million.

(2) Aqua America (WTR) owns regulated utilities in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Indiana, and Virginia, serving nearly 940,000 customers. WTR's utility base is diversified among residential water, commercial water, fire protection, industrial water, other water, and wastewater customers. Total operating revenues for WTR are nearly $780 million and net plant is over $4.4 billion.

(3) California Water Service Group (CWT) owns subsidiaries in California, New Mexico, Washington, and Hawaii serving nearly 506,000 customers. CWT also owns HWS Utility Services which conducts the Company's non-regulated business. These services include providing billing, water quality testing, and water and wastewater system operations and management services to cities and other companies. Operating revenues for CWT are nearly $598 million and net plant is nearly $1.6 billion.

(4) Connecticut Water Services (CTWS) owns subsidiaries in Connecticut and

Maine serving over 123,000 customers. CTWS also provides utility operating services under contract to municipalities and other water systems. Revenues for CTWS are nearly $95 million and net plant is nearly $495 million.

(5) Middlesex Water (MSEX) owns subsidiaries in New Jersey, and Delaware serving over 100,000 customers and provides water service under contract to municipalities in central New Jersey serving a population of 219,000. Operating revenues for MSEX is over $117 million and net plant is over $465 million.

(6) SJW Corp. (SJW) owns San Jose Water, which provides water service in a 138 square mile area in San Jose, California, and surrounding communities serving nearly 229,000 customers. SJW also owns operations in Texas serving approximately 12,000 connections. San Jose Water Company also provides non-regulated services under agreements with municipalities and other utilities. Operating revenues for SJW are nearly $318 million and net plant is nearly $944 million.

(7) York Water Company (YORW) provides water service in the state of Pennsylvania serving over 65,000 water and wastewater customers in more than 47 communities. Operating revenues for YORW are nearly $46 million and net plant is nearly $250 million.

While SWC has significant differences with the utilities within the water proxy group, I will discuss specific measures of business risk that quantify the differences between SWC and the water proxy group later in my testimony.

Q. HOW DOES SWC COMPARE TO THE SAMPLE WATER UTILITIES?

A. It is much smaller with fewer customers, a relatively small and limited service territory, far less revenues and far less net plant. At the end of the test year, the Company had approximately 5,500 wastewater customers. The larger publicly traded water companies have many times the customers as does SWC. SWC's revenues totaled approximately $3.4 million, and net plant-in-service was approximately $21.2 million. The average revenues of my water proxy group is over 103 times greater than SWC and has nearly 62 times the net plant than SWC. The smallest of the publicly traded water utilities in my proxy group (York Water Company) has nearly 14 times the revenues and nearly 12 times the net plant than SWC. So, the water proxy group utilities are much larger and, according to the empirical financial data, less risky than SWC.

Q. DO RECENT DEVELOPMENTS IN THE WATER UTILITY INDUSTRY ARE IMPACT INVESTMENTS?

A. Yes. On the whole, the water utility industry is expected to continue to confront increasing need for infrastructure upgrades and replacement, as well as possible additional demand. *Value Line Investment Survey* (April 17, 2015) continues to stress that many utilities have facilities that are decades old and in need of significant maintenance and, in some cases, massive renovation and replacement. As infrastructure costs continue to climb, many smaller companies are at a serious disadvantage. *Value Line* notes that most of the companies in this sector lack the finances necessary to fund improvements on their own. This will require water utilities in this sector to rely heavily upon debt and equity offerings for funding. The additional funding will thwart share-earnings and dilute shareholder gains. A copy of the most recent Value Line report on the water industry along with each water utility in my proxy group is attached as Exhibit TJB-COC-DT-1. Along with the industry as a whole, SWC faces these risks

Q. WHAT OTHER RISK FACTORS DISTINGUISH SWC FROM THE LARGER SAMPLE OF WATER UTILITIES?

A. First, water utilities are capital intensive and typically have relatively large construction budgets. As I have previously discussed in this testimony, firms with large capital budgets face construction risk (a form of financial risk). The size of a utility's capital budget relative to the size of the utility itself often increases construction risk. In addition, large utilities are more able to fund greater portions of their capital budgets from their earnings, cash flows, and short-term borrowings, and they have access to both equity and debt capital from the public markets that helps to provide flexibility and balance to their capital structures. For smaller utilities, like SWC, the ability to fund relatively large capital budgets from earnings, cash flows, and short-term debt is difficult, if not impossible, without reliance upon additional outside capital that is typically limited to debt capital from limited sources.

Second, smaller companies are simply less able to cope with significant events that affect sales, revenues and earnings. In general, the loss of revenues from a few larger customers or from trends in the reduction of water use by customers through conservation or the makeup of the customer base, for example, would have a greater effect on a small company than on a much larger company with a larger customer base. In addition, the effect of extreme weather conditions, including prolonged droughts or extremely wet weather will have a greater affect upon a small operating water utility than upon the much larger, more geographically diverse holding companies.

Third, there are a number of other factors including the differences in regulatory environments, differences in the type of test year used for rate making, and differences in the available regulatory mechanisms for recovery of costs outside of a rate case. The large water utilities in my water proxy group are generally not subject to the adverse impacts of an unfavorable regulatory environment of one jurisdiction.

All these factors have an impact on the ability of a smaller utility to actually earn its authorized return and leads to a greater variability of earnings for SWC compared to the water proxy group, which means greater risk.

Q. ARE THERE QUANTITATIVE MEASURES THAT CAN BE USED TO HELP IDENTIFY DIFFERENCES IN BUSINESS RISK?

A. Yes. There are a number of fundamental accounting based risk measures that can be used to assess the relative differences between firms and include: 1) The co-efficient of variance of ROE; 2) The co-efficient of variance of operating income; 3) The co-efficient of variance of operating margin, and 4) Operating leverage. The first three are a reflection of the distributions of earnings. These are meaningful when measured against the distribution of earnings of alternative investments, like the water utilities in my water proxy group.

The coefficients of variance for ROE, operation income and operating margin can be quantified using relatively simple formulas:

[2] Co-efficient of Variance of ROE = Standard Deviation of ROE/Mean of ROE

[3] Co-efficient of Variance of Operating Income = Standard Deviation of Operating Income/Mean of Operating Income

[4] Co-efficient of Variance of Operating Margin = Standard Deviation of Operating Margin/Mean of Operating Margin

The Operating Leverage formula is expressed as:

[5] Operating Leverage = Percentage Change in Operating Income/ Percentage Change in Sales

Using the business risk measures expressed in equations [2], [3], and [4], the greater the co-efficient of variation or operating leverage, the greater the risk to investors

of not receiving expected returns.[10] Below are the computed co-efficient of variation for ROE, Operating Income, and Operating Margin, as well as Operating Leverage using the most recent 5 years of historical data for my water proxy group and SWC:

Company	Business Risk Co-efficient of variance of ROE	Business Risk Co-efficient of variance of Operating Income	Business Risk Co-efficient of variance of Operating Margin	Operating Leverage
Water Proxy Group	0.1271	0.1579	0.0895	2.48
SWC	0.5719	0.4959	0.4649	70.15
Relative Risk of SWC	4.5	3.14	5.19	28.28

This shows that SWC is 3 to 5 times more risky than the water proxy group (ignoring operating leverage).

Q. CAN METRICS LIKE A COMPANY'S CO-EFFICIENT OF ROE, OPERATING INCOME, AND OPERATING MARGIN, BE USED ALONG WITH MARKET DATA TO DEVELOP COMPANY-SPECIFIC RISK PREMIUMS?

A. Yes. *Duff & Phelps* publishes comparative risk characteristics using market data that provides a nexus between a market beta and the metrics operating margin the coefficient of variation in operating margin, and the coefficient of variation in return on equity.[11] This information can be used to develop an implied beta for SWC for use in the CAPM. By comparing the results of the CAPM for the water proxy group with the CAPM for

[10] Tuller, Lawrence W., *The Small Business Valuation Book*, Adams Media Corporation, 1994. ("Tuller") p.89.

[11] *2015 Valuation Handbook, Guide to Cost of Capital*, Duff & Phelps, LLC., Exhibits D-1 through D-2.

SWC using the implied beta, an indicated risk premium for SWC can be developed. As one would expect, the implied beta for SWC is higher than the beta of my water proxy group and a risk premium of 130 to 180 basis points over the cost of equity of the water proxy group is indicated. I will discuss this method and the implied beta for SWC in more detail in the Company Specific Risk Premium section of my testimony.

Q. WHAT ABOUT LIQUIDITY RISK, MR. BOURASSA?

A. A rational investor would not regard an investment in SWC as having the same level of risk as WTR or even CTWS, because of the previously mentioned small size characteristics of SWC, and the fact that an investment in SWC is relatively illiquid compared to the publicly traded water utilities. An investor in a publicly traded stock can sell his/her stock in a very short period of time if he/she is dissatisfied with the returns. An investor in a non-publicly traded stock does not have the ability to sell quickly. Consequently, investors will require a greater risk premium, often called liquidity risk. As a consequence of these differences in risk, the results produced by the DCF, RPM, and CAPM methodologies, utilizing data for the sample utilities, often understate the appropriate return on equity for a small-regulated water utility provider such as SWC.

Q. IS THERE A RELATIONSHIP BETWEEN A UTILITY'S CAPITAL STRUCTURE AND ITS COST OF CAPITAL?

A. Yes. Generally speaking, when a firm engages in debt financing, it exposes itself to greater risk. Once debt becomes significant relative to the total capital structure, the risk increases in a geometric fashion compared to the linear percentage increase in the debt ratio itself. This risk is illustrated by considering the effect of leverage on net earnings. For example, as leverage increases, the equity ratio falls. This creates two adverse effects. First, equity earnings decline rapidly and may even disappear. Second, the "cushion" of

equity protection for debt falls. A decline in the protection afforded debt holders, or the possibility of a serious decline in debt protection, will act to increase the cost of debt financing. Therefore, one may conclude that each new financing, whether through debt or equity, impacts the marginal cost of future financing by any alternative method.

For a firm already perceived as being over-leveraged, this additional borrowing would cause the marginal cost of both equity and debt to increase. On the other hand, if the same firm instead successfully employed equity funding, this could actually reduce the real marginal cost of additional borrowing, even if the particular equity issuance occurred at a higher unit cost than an equivalent amount of debt.

Q. HOW DO THE CAPITAL STRUCTURES OF THE SAMPLE WATER UTILITIES COMPARE TO SWC?

A. Schedule D-4.3 shows that the debt and equity capital structure used to develop the cost of capital for SWC contains 79.43 percent equity and 20.57 percent debt, compared to the average of the water utility sample of approximately 55 percent equity and 45 percent debt. Having less debt in its capital structure implies that SWC has lower financial risk as the sample water utilities.

B. <u>Overview of the DCF, RPM, AND CAPM Methodologies</u>

Q. PLEASE EXPLAIN THE GENERAL APPROACHES TO ESTIMATING THE COST OF CAPITAL.

A. These two broad approaches:

1) identify comparable-risk sample companies and estimate the cost of capital directly, or,

2) find the location of the CML and estimate the relative risk of the company, which jointly determines the cost of capital.

The Discounted Cash Flow ("DCF") method is an example of a method falling into the first general approach. It is a direct method, but uses only a subset of the total capital market evidence. The DCF rests on the premise that the fundamental value of an asset (stock) is its ability to generate future cash flows to the owner of that asset (stock). I will explain the DCF in detail in a moment, but for now, the DCF is simply the sum of a stock's expected dividend yield and the expected long-term growth rate. Dividend yields are readily available, but long-term growth estimates are not.

The Risk Premium Model ("RPM") model and Capital Asset Pricing Model ("CAPM") are examples methods falling into the second general approach. An equity risk premium is made first by determining the relationship between the cost of equity and an interest rate over time. To implement these approaches, generally, it is assumed that the past relationship will continue on into the future. The RPM generally uses a small subset of the capital market evidence whereas the CAPM uses information on all securities rather than a small subset. I will explain the RPM and CAPM in more detail later. For now, both the RPM and CAPM reflect a risk-return relationship, often depicted graphically as the CML. The RPM and CAPM cost of equity estimates are the sum of a risk-free return and a risk premium.

Each of these methods measures investor expectations. In the final analysis, ROE estimates are subjective and should be based on sound, informed judgment rationally articulated and supported by competent evidence. I have applied three versions of the DCF, one version of the RPM, and two versions of the CAPM to "bracket" the fair cost of equity capital for the publicly traded water utilities in my proxy group. I then add 50 basis points to results of the models for the water proxy group to account for the differences in risk between the water proxy group and SWC.

C. Explanation of the DCF Model and Its Inputs

Q. PLEASE EXPLAIN IN DETAIL THE DCF METHOD OF ESTIMATING THE COST OF EQUITY.

A. The DCF model is based on the concept that the current price of a share of stock is equal to the present value of future cash flows from the purchase of the stock. In other words, the DCF model is an attempt to replicate the market valuation process that sets the price investors are willing to pay for a share of a company's stock. It rests on the assumption that investors rely on the expected returns (i.e., cash flow they expect to receive) to set the price of a security. The DCF model in its most general form is:

[6] $P_0 = CF_1/(1+k) + CF_2/(1+k)^2 + \ldots + CF_n/(1+k)^n$

where k is the cost of equity; n is a very large number; P_0 is the current stock price; and, CF_1, CF_2,...CF_n are all the expected future cash flows expected to be received in periods 1, 2, ... n.

Equation [6] can be written to show that the current price (P_0) is also equal to

[7] $P_0 = CF_1/(1+k) + CF_2/(1+k)^2 + \ldots + P_t/(1+k)^t$

where P_t is the price expected to be received at the end of the period t. If the future price (P_t) included a premium (an expected increase in the stock price or capital gain), the price the investor would pay today (in anticipation of receiving that premium) would increase. In other words, by estimating the cash flows from the purchase of a stock in the form of dividends and capital gains, we can calculate the investor's required rate of return, i.e., the rate of return an investor presumptively used in bidding the current price to the stock (P_0) to its current level.

Equation [7] is a Market Price version of the DCF model. As with the general form of the DCF model in equation [6], in the Market Price approach the current stock price (P_0) is the present value of the expected cash inflows. The cash flows are comprised

of dividends and the final selling price of the stock. The estimated cost of equity (k) is the rate of return investors expect if they bought the stock at today's price, held the stock and received dividends through the transition period, and then sold it for price (P_t).

Q. CAN YOU PROVIDE AN EXAMPLE TO ILLUSTRATE THE MARKET PRICE VERSION OF THE DCF MODEL?

A. Yes. Assume an investor buys a share of common stock for $40. If the expected dividend during the coming year is $2.00, then the expected dividend yield is 5 percent ($2.00/$40 = 5.0 percent). If the stock price is also expected to increase to $43.00 after one year, this $3.00 expected gain adds an additional 7.5 percent to the expected total rate of return ($3.00/$40 = 7.5 percent). Thus, the investor buying the stock at $40 per share expects a total return of 12.5 percent (5 percent dividend yield plus 7.5 percent price appreciation). The total return of 12.5 percent is the appropriate measure of the cost of capital because this is the rate of return that caused the investor to commit $40 of his capital by purchasing the stock.

Q. PLEASE CONTINUE WITH YOUR DESCRIPTION OF THE DCF MODEL.

A. Under the assumption that future cash flow is expected to grow at a constant rate ("g"), equation [6] can be solved for k and rearranged into the simple form:

$$[8] \qquad k = CF_1/P_0 + g$$

where CF_1/P_0 is the expected dividend yield and g is the expected long-term dividend (price) growth rate ("g"). The expected dividend yield is computed as the ratio of next period's expected dividend ("CF_1") divided by the current stock price ("P_0").

This form of the DCF model is known as the constant growth DCF model and recognizes that investors expect to receive a portion of their total return in the form of current dividends and the remainder through future dividends and capital (price)

appreciation. A key assumption of this form of the model is that investors expect that same rate of return (k) every year and that market price grows at the same rate as dividends. But, this has not been historically true for the water utility sample, as shown by the data in Schedule D-4.4 and Schedule D-4.5. As a result, estimates of long-term growth rates (g) should take this into account.

Q. ARE THERE ANY CONCERNS ABOUT APPLYING THE DCF MODEL TO UTILITY STOCKS?

A. There are a number of reasons why caution must be used when applying the DCF model to utility stocks. First, a non-publicly traded company does not have a stock market price. Using the stock prices from a proxy group assumes that SWC's stock would be similarly priced and has similar dividend yields as the publicly traded water companies. Second, the stock price and dividend yield components may be unduly influenced by structural changes in the industry, such as mergers and acquisitions, which influence investor expectations. Third, the DCF model is based on a number of assumptions that may not be realistic given the current capital market environment. The traditional DCF model assumes that the stock price, book value, dividends, and earnings all grow at the same rate. This has not been historically true for the sample water utility companies.

We should be especially concerned with the DCF model's applicability under current market conditions. The Federal Reserve's bond buying programs have kept longer-term bond yields low and interest rates are expected to rise,[12] but in the meantime, and because bond yields are still very low, investors are "chasing yields" and driving up the stock prices of companies that pay dividends, like utilities. The *Value Line* Investment Survey (April 17, 2015) for the Water Utility Industry notes:

[12] *Blue Chip Financial Forecasts*, April 2015.

> Low bond yields seem to have driven many income-oriented investors into the equity markets. All this money chasing income has brought down the yield on water utilities, relative to the average stock. Currently, the yield of a typical water utility is only about 60 to 65 basis points higher than the average stock. This spread is very low, on an historical basis.

Consider that while dividend yields for the water proxy group have been decreasing, the 1-year, 3-year, and 5-year annualized total returns for the water proxy group are 16.85 percent, 15.83 percent, and 11.98 percent, respectively, which are all significantly higher than my DCF estimate of the cost of equity of 9.4 to 9.7 percent.[13] In fact, the water utility proxy group has outperformed the S&P 500 over the past year.[14] The expected equity returns suggested by the market based DCF model does not line up with recent experience in the markets. As Dr. Morin notes:

> To the extent that increases (decreases) in relative market valuation are anticipated by investors, especially myopic investors with short-term investment horizons, the standard DCF model will understate (overstate) the cost of equity.

Another way of stating this point is that the DCF model does not account for the ebb and flow of investor sentiments over the course of the business cycle. The problem was particularly acute in the mid 1990's and mid 2000's where investors, faced with very low returns on short-term fixed-income securities and an uncertain market outlook, sought higher yields offered by utility stocks in a so-called flight to quality, boosting their stock price and lowering the dividend yield.[15] The circumstances then are not so different than what is occurring today.

Fourth, the application of the DCF model produces estimates of the cost of equity

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[13] *Value Line* Analyzer data from May 14, 2015.

[14] Total 1-year return for the S&P 500 as reported by Value Line was 13.94 percent compared to the water proxy group of 16.85 percent.

[15] Morin, Roger A., "New Regulatory Finance," *Public Utility Reports, Inc.* at 433 (2006).

that are consistent with investor expectations *only* when the market price of a stock and the stock's book value are approximately the same. The DCF model will understate the cost of equity when the market-to-book ratio exceeds 1.0 and conversely will overstate the cost of equity when the market-to-book ratio is less than 1.0. The reason for this is that the market-derived return produced by the DCF is often applied to book value rate base by regulators.

Fifth, the assumption of a constant growth rate may be unrealistic, and there may be difficulty in finding an adequate proxy for the growth rate. Historical growth rates can be downward biased as a result of the impact of anemic historical growth rates in earnings, mergers and acquisitions, restructuring, unfavorable regulatory decisions, and even abnormal weather patterns. Further, by placing too much emphasis on the past, the estimation of future growth becomes circular.

Q. LET'S TURN TO THE SPECIFIC INPUTS USED IN YOUR DCF MODELS. WHAT DATA HAVE YOU USED TO COMPUTE THE EXPECTED DIVIDEND YIELD (CF_1/P_0) IN YOUR MODELS?

A. First, I computed a current dividend yield (CF_0/P_0). The expected dividend yield (CF_1/P_0) is the current dividend yield (CF_0/P_0) times one plus the growth rate (g). I used the spot price for each of the stocks of the water utilities in the sample group on as reported by the *Value Line Investment Analyzer* for May 22, 2015 for P_0. The current dividend (CF_0) is the current indicated dividend as reported by Value Line. In my schedules, the current dividend yield is denoted as (D_0/P_0), where D_0 is the current dividend and P_0 is the spot stock price. (D_1/P_0) is used to denote the expected dividend yield in the schedules.

Q. WHAT MEASURES OF GROWTH ("g") HAVE YOU USED?

A. I have used two estimates of growth; one based on an average of historical and forecast growth and the other based only on forecast growth. For my average historical and forecast growth estimate, I average the 5-year historical average growth rates in the stock price, book value per share ("BVPS"), earnings per share ("EPS") and dividends per share ("DPS") with *Value Line's* forecast of EPS growth.[16] Using the historical average of growth in price, BVPS, EPS, and DPS is reasonable because investors know that, in equilibrium, common stock prices, BVPS, EPS and DPS will all grow at the same rate and would take information about changes in stock prices and growth in BVPS into account when they price utilities' stocks. As I stated either, a basic assumption of the DCF model is that the stock price, BVPS, EPS and DPS all grow at the same rate. For my forecast growth estimate, I have used the growth forecasts from *Value Line.*[17]

Q. WHY DID YOU INCORPORATE AN HISTORICAL GROWTH RATE ESTIMATE INTO ONE OF YOUR GROWTH ESTIMATES?

A. Past growth rates may provide a reasonable basis for determining prospective growth rates. Their use assumes the past is a reflection of the future. While I believe the use of historical growth rates gives added recognition to the past, which is already incorporated into analyst estimates of growth, I nevertheless include a version of the DCF that reflects historical growth. I would point out, however, that historical growth rates may not be the best measure for the future. The empirical evidence indicates that analyst estimates of growth are the best measure of growth for use in the DCF for utility stocks.[18]

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[16] *See* Schedule D-4.4.

[17] *See* Schedule D-4.4.

[18] David A. Gordon, Myron J. Gordon and Lawrence I. Gould, *Choice Among Methods of Estimating Share Yield*, Journal of Portfolio Management (Spring 1989) 50-55. Gordon, Gordon and Gould found that a consensus of analysts' forecasts of earnings per share growth for the next five years provides a more accurate estimate of growth required in the DCF model than three different historical measures of growth (historical EPS, historical DPS, and historical retention growth). They explain that this result makes sense

Q. WHY DID YOU USE FORECASTED GROWTH RATES IN YOUR GROWTH ESTIMATES?

A. The DCF model requires estimates of growth that investors expect in the future and not past estimates of growth that have already occurred. Accordingly, I use analysts' forecasts of growth. Logically, in estimating future growth, financial institutions and analysts have taken into account all relevant historical information on a company as well as other more recent information.[19] To the extent that past results provide useful indications of future growth prospects, analysts' forecasts would already incorporate that information. In addition, a stock's current price reflects known historic information on that company, including its past earnings history. Any further recognition of the past will double count what has already occurred. Therefore, forward-looking growth rates should be used.

D. Explanation of the RPM and Its Inputs

Q. PLEASE EXPLAIN THE RPM METHODOLOGY FOR ESTIMATING THE COST OF EQUITY.

A. The RPM is sometimes referred to as the "bond yield plus risk premium method". The general approach is to determine the spread between the return on debt and the return on equity and add this spread to the current debt yield to derive an estimate of the cost of equity. To implement the RPM, it is assumed that the past relationship will continue into the future. The RPM is widely used by analysts and investors.[20]

The RPM formula provides a formal risk-return relationship and is stated as:

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because analysts would take into account such past growth as indicators of future growth as well as any new information.

[19] Gordon, Gordon, and Gould.

[20] Morin, Roger A., *New Regulatory Finance*, Public Utility Reports, Inc. (2006) at 108.

(6) $k = K_d +$ Historical bond-equity spread

where k is the expected return on equity and K_d is the current cost of debt or debt yield.

Q. HOW DID YOU DETERMINE THE HISTORICAL BOND-EQUITY SPREAD?

A. I computed the bond-equity spread as the difference between the average total realized market return of my water proxy group and the average annual long-term treasury yields for the years 1999-2014 - a 16-year historical period.[21]

Q. WHY DID YOU USE TOTAL REALIZED MARKET RETURNS?

A. Total realized market returns are market based which makes this approach a market-based approach. While the annual actual risk premium in any given year may not equal the required risk premium, over longer periods of time, the average actual risk premiums can provide a good estimate of the average risk premium required.

Q. WHAT DO YOU USE AS THE CURRENT COST OF DEBT (K_d)?

A. I use the expected U.S. Long-term Treasury rate for 2016-2018 serves as the basis for the risk free rate. Since the cost of capital is an opportunity cost and is prospective, it necessarily requires the use of a forward-looking bond yield. In recent years, interest rates have dropped to very low levels when compared to interest rates for similar securities in the past. From 1999 to 2007, the annual average rates for long-term Treasury bonds was 5.24 percent ranging from a low of 4.84 percent in 2007 to a high of 5.94 in 2000. In 2008, and during the recent recession, that annual average dropped to 4.24 percent and dropped further in 2012 to 2.9 percent.

The drop in long-term treasury rates has been largely attributed to the market intervention by the Federal Reserve through its quantitative easing programs. Long-term

[21] *See* Schedule D-4.9.

Treasury rates for 2013 and 2014 averaged 3.45 percent and 3.34 percent, respectively. For the first 5 months of 2015, long-term Treasury rates have averaged 2.64 percent. The Federal Reserve is expected begin raising interest rates towards the end of this year, and as early as September. Notwithstanding these current low rates, 30-year Treasury rates are expected to bounce back up in 2016-2018 timeframe. Analysts at *Value Line* expect that future average to be 4.1 percent. The consensus estimate made by analysts surveyed by the *Blue Chip Financial Forecasts* indicates analysts expect that average to be higher at 4.2 percent. For my analyses, I have relied upon the average of *Value Line Quarterly Forecast* forecasts and the consensus forecast reported by *Blue Chip Financial Forecasts* of 4.2 percent.[22]

Q. WHY DO YOU USE LONG-TERM U.S. TREASURY YIELDS?

A. The yields on long-term Treasury bonds match more closely with the perpetual nature of common stock investments.[23] Further, short-term rates are more volatile, fluctuate widely and are subject to more random disturbances than long-term rates. In short, long-term Treasury rates are preferred for these reasons and because long-term rates are more appropriately matched to securities with an indefinite life or long-term investment horizon.

E. <u>Explanation of the CAPM and Its Inputs</u>

Q. PLEASE EXPLAIN THE CAPM METHODOLOGY FOR ESTIMATING THE COST OF EQUITY.

A. Like the RPM, the CAPM is the sum of a risk-free rate plus a risk premium. And, like the

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[22] *See* Schedule D-4.8.
[23] Morin at 112.

RPM, it quantifies the additional return required by investors for bearing incremental risk. The CAPM was developed by William Sharpe and John Lintner in the mid-1960's and is a common topic in college finance textbooks. The CAPM provides a formal risk-return relationship premised on the idea that only market risk matters, as measure by beta. The traditional version of CAPM is represented by the formula:

$$[9] \quad k = R_f + \beta(R_m - R_f)$$

where k is the expected return, R_f is the risk-free rate (or zero beta asset), R_m is the market return, $(R_m - R_f)$ is the market risk premium, and β is beta.

Q. ARE THERE ANY CONCERNS ABOUT APPLYING THE CAPM MODEL TO UTILITY STOCKS?

A. Yes. I have concerns with using this model in most periods because mechanical application of the model may produce unreasonable results. The traditional CAPM only captures a single measure of systematic risk as measured by beta, but there are other forms of systematic risk priced by the market such as company size. A size premium is necessary because, even after adjusting for the beta risk of small stocks, they generally outperform larger stocks. Size may just be a proxy for other risks. Nevertheless, the empirical evidence indicates that beta alone does not measure the risk of smaller companies.[24]

Q. ARE THERE ALTERNATIVES TO THE TRADITIONAL CAPM?

A. Yes, alternative versions of the CAPM have been developed that provide more robust explanations of returns required by investors. A version of the CAPM called the Empirical CAPM or ECAPM was developed to recognize that estimations of R_f is higher than the return on long-term Treasuries. Dr. Roger Morin discusses ECAPM at pages

[24] Duff & Phelps at 2-5.

189-191 of his book, New Regulatory Finance. The ECPAM is represented as follows:

$$[10] \quad k = R_f + .25(R_m - R_f) + .75\beta(R_m - R_f)$$

Duff & Phelps suggest a version of the CAPM in which a size premium is included.[25] This modified CAPM ("MCAPM") is represented as follows:

$$[11] \quad k = R_f + \beta(R_m - R_f) + RP_s$$

where k is the expected return, R_f is the risk-free rate (or zero beta asset), R_m is the market return, $(R_m - R_f)$ is the market risk premium, β is beta, and RP_s is the size premium. The MCAPM recognizes the CAPM is incomplete and does not fully account for the higher returns that are needed on small company stocks. In other words, the higher risks associated with smaller firms are not fully accounted for by beta.[26]

Q. IS FIRM SIZE A UNIQUE RISK?

A. No. The firm size is a systematic risk factor and is an adjustment to the pure CAPM.[27] Putting aside the empirical financial data, the need for a risk premium for size makes sense. Company size is a significant element of business risk for which investors expect to be compensated through greater returns. Smaller companies are simply less able to cope with significant events that affect sales, revenues, and earnings. For example, smaller companies face more risk exposure to business cycles and economic conditions, both nationally and locally. Additionally, the loss of revenues from a few larger customers would have a greater effect on a small company than on a much larger company with a larger, more diverse, customer base. Moreover, smaller companies are generally less diverse in their operations and have less financial flexibility.

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[25] Duff & Phelps at 2-7.

[26] *Morningstar, Ibbotson SBBI 2013 Valuation Yearbook,* pp. 85-88.

[27] Shannon P. Pratt and Roger J. Grabowski. *Cost of Capital: Applications and Examples, Fourth Edition.* John Wiley and Sons, 2010, p. 56.

Q. DID YOU EMPLOY EITHER OF THESE ALTERNATIVE CAPM METHODS AS PART OF YOUR ANALYSIS?

A. No. Instead, I conducted a risk study to develop an indicated additional risk premium for SWC. Based on this study I add a risk premium to the results of each method I use (the DCF, RPM, and the CAPM) as an alternative way of dealing with additional risk associated with SWC. Having said that, these two methods would produce an indicated cost of equity for my water proxy group in the range of 9.8 percent to 11.3 percent with a mid-point of 10.6 percent, which is greater than my overall estimate for my water proxy group of 10.1 percent.

Q. WHAT IS THE RISK-FREE RATE (R_f)?

A. It is the return on an investment with no risk. The U.S. Treasury rate serves as the basis for the risk-free rate because the yields are directly observable in the market and are backed by the U.S. government. Practically speaking, short-term rates are volatile, fluctuate widely and are subject to more random disturbances than long-term rates. In short, long-term Treasury rates are preferred for these reasons and because long-term rates are more appropriately matched to securities with an indefinite life or long-term investment horizon.

Q. WHAT DO YOU ADOPT AS THE RETURN FOR THE RISK-FREE RATE?

A. I use long-term expected Treasury bond rates as the measure of the risk-free return for use with CAPM cost of equity estimates from two sources: the *Blue Chip Financial Forecasts* and the *Value Line Quarterly Forecast*.[28] The appropriate choice for the risk-free rate is the expected return for long-term Treasury securities.[29] Thus, when determining an

[28] *See* Schedule D-4.9.
[29] *Duff & Phelps* at 3-1.

estimate of the risk-free rate, it is appropriate to adopt a return that is no less than the expected return on the long-term Treasury bond rate. Both of my CAPM estimates are based on expected yields of the long-term treasury rates for 2016 through 2018 (from *Blue Chip Financial Forecasts* and *Value Line Quarterly Forecasts*).[30] The 2016 to 2018 timeframe is the period when new rates will be in effect for the Company.

Q. WHAT IS BETA AND WHAT DOES IT MEASURE?

A. Beta is a measure of the relative risk of a security in relation to the market. In other words, it is a measure of the sensitivity of a security to the market as a whole. This sensitivity is also known as systematic risk. It is estimated by regressing a security's excess returns against a market portfolio's excess returns. The slope of the regression line is the beta.

Beta for the market is 1.0. A security with a beta greater than 1.0 is considered riskier than the market. A security with a beta less than 1.0 is considered less risky than the market.

There are computational problems surrounding beta. It depends on the return data, the time period used, its duration, the choice of the market index, and whether annual, monthly, or weekly return figures are used. Betas are estimated with error. Based on empirical evidence, high betas will tend to have a positive error (risk is overestimated) and low betas will have a negative error (risk is underestimated).[31]

Q. WHAT DID YOU USE AS THE PROXY OF THE BETA FOR SWC?

A. I used the average beta of the sample water utility companies. Betas were obtained from *Value Line Investment Analyzer* (weekly data as if May 14, 2015). *Value Line* is the

[30] *See* Schedule D-4.8.

[31] Eugene F. Fama and Kenneth R. French, "The Capital Asset Pricing Model: Theory and Evidence," *Journal of Economic Perspectives* (Summer 2004) 25-46.

source for estimated betas that I regularly employ. The average beta for my water proxy group as shown on Schedule D-4.2 is 0.74. I should note that because SWC is not publicly traded, SWC has no beta. In my expert opinion, I strongly believe that SWC, if it were publicly traded, would have a higher beta than the sample water utility companies.

Q. WHY WOULD SWC HAVE A HIGHER BETA?

A. As previously indicated, smaller companies are inherently more risky than larger companies. *Morningstar* reports that when betas (a measure of market risk) are properly estimated, betas are greater for small companies than for larger companies.[32] *Morningstar* also finds that even after accounting for differences in beta risk, small firms require an additional risk premium over and above the added risk premium indicated by differences in beta risk.

Q. PLEASE EXPLAIN THE MARKET RISK PREMIUM.

A. The market-risk premium (R_m-R_f) is the return an investor expects to receive as compensation for market risk. It is the expected market return minus the risk-free rate. Approaches for estimating the market risk premium can be historical or prospective.

Since expected returns are not directly observable, historical realized returns are often used as a proxy for expected returns on the basis that the historical market risk premium follows what is known in statistics as a "random walk." If the historical risk premium does follow the random walk, then one should expect the risk premium to remain at its historical mean. Based on this argument, the best estimate of the future market risk premium is the historical mean. *Duff & Phelps* provides historical market returns for various asset classes from 1926 to 2014. This publication also provides market risk premiums over U.S. Treasury bonds, which make it an excellent source for historical

[32] *Ibbotson SBBI 2012 Valuation Yearbook*, Morningstar, Chapter 7.

market risk premiums.

Prospective market risk premium estimation approaches necessarily require examining the returns expected from common equities and bonds. One method employs applying the DCF model to a representative market index such as the *Value Line* 1700 stocks. The expected return from the DCF is measured for a number of periods of time, and then subtracted from the prevailing risk-free rate for each period to arrive at market risk premium for each period. The market risk premium subsequently employed in the CAPM is the average market risk premium of the overall period.

Q. HOW MANY MARKET RISK PREMIUM ESTIMATES DID YOU PREPARE IN CONNECTION WITH YOUR ASSIGNMENT FOR SWC?

A. I used two market risk premium estimates: An historical market risk premium and a current market risk premium.

Q. HOW DID YOU ESTIMATE THE HISTORICAL MARKET RISK PREMIUM?

A. I used the *Duff & Phelps* measure of the average premium of the market over long-term treasury securities from 1926 through 2014, which uses the S&P 500 market index. The average historical market risk premium over long-term treasury securities is 7.0 percent.

Q. IS THE S&P 500 INDEX A LARGE COMPANY INDEX?

A. Yes. The S&P 500 consists of the 500 largest companies and only approximately 20 percent of the S&P 500 would be considered Mid-Cap companies. Further, there are no companies in the Low-Cap or Micro-Cap categories. Because it is heavily weighted with Large-Cap companies, the S&P 500 is essentially a large company index. *Morningstar* refers to the S&P 500 as a large company index and cautions that "if using a large company index to calculate the equity risk premium, an adjustment is usually needed to

account for the different risk and return characteristics of small stocks."[33]

Q. HOW DID YOU ESTIMATE THE CURRENT MARKET RISK PREMIUM?

A. I derived a market risk premium by, first, using the DCF model to compute an expected market return for each of the past 12 months using *Value Line's* projections of the median dividend yield for the dividend yield in the DCF and an average of the median EPS, DPS and BVPS growth on the *Value Line* 1700 stocks. I then subtracted the historical monthly average 30-year Treasury yield for each month from the expected market returns to arrive at the expected market risk premiums. Finally, I averaged the computed market risk premiums to determine the current market risk premium for the last 12 months, 9 months, 6 months, and 3 months. The data and computations are shown on Schedule D-4.10. The recent 3 month average current market risk premium is 9.25 percent. Estimates of the current market risk premium have ranged from 8.5 percent to 9.7 percent over the past 12 months. My recommended market risk premium is based on the recent 3-month average estimate of 9.25 percent and is well within the past 12-month range.

F. <u>Financial Risk Adjustment</u>

Q. ARE YOU RECOMMENDING A FINANCIAL RISK ADJUSTMENT TO ACCOUNT FOR DIFFERENCES IN LEVERAGE BETWEEN YOUR WATER PROXY GROUP AND SWC?

A. Yes. I have included a downward financial risk adjustment to the cost of equity of 40 basis points based upon the Hamada method[34] to account for the difference in financial risk

[33] *Morningstar, 2014 Ibbotson SBBI 2014 Classic Yearbook, p. 152.*

[34] "Effects of the Firm's Capital Structure on Systematic Risk of Common Stock," *Journal of Finance*, Vol. 27 No. 2 (May 1972) 435 – 453.

between SWC and the water proxy group.[35]

G. Company Specific Risk Premium

Q. PLEASE DISCUSS YOUR COMPANY-SPECIFIC RISK PREMIUM.

A. As I testified earlier, SWC is not directly comparable to the publicly traded water utilities in my water proxy group. The characteristics associated with small size, such as the lack of diversification, limited revenue and cash flow, relatively small customer base, lack of investment liquidity, and earnings volatility, increase the smaller water and wastewater utilities over the risk associated with the water proxy group.

Q. PLEASE DISCUSS SIZE RISK FOR SMALL UTILITY COMPANIES.

A. Investment risk increases as the firm size decreases, all else remaining constant. There is a great deal of empirical evidence that the firm size phenomenon exists. Morningstar's *Ibbotson SBBI 2013 Valuation Yearbook* (Chapter 7) reports that smaller companies have experienced higher returns that are not fully explainable by their higher betas and that beta is inversely related to company size. In other words, smaller companies not only have higher betas but higher returns than larger ones. Even after accounting for differences in beta risk, small companies require an additional risk premium over and above the added risk premium indicated by differences in beta risk. Dr. Zepp also reported evidence that the stocks of small water or wastewater utilities are more risky than the stocks of larger water utilities, such as those in the water utilities sample.[36] Even the California PUC conducted a study that showed smaller water utilities are more risky than larger ones.[37]

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[35] *See* Schedule D-4.14.

[36] Thomas M. Zepp, *Utility Stocks and the Size Effect – Revisited*, The Quarterly Review Economics and Finance, Vol. 43, Issue 3, Autumn 2003, 578-582.

[37] Staff Report on Issues Related to Small Water Utilities, June 10, 1991 and CPUC Decision 92-03-093.

Based on the evidence, it is clear that investors require higher returns on small company stocks than on large company stocks. I have included in Schedule D-4.15 the results of a *Morningstar* study using annual data reporting the size premium based upon firm size and return data (i) provided in Duff & Phelps *2015 Valuation Handbook, Guide to Cost of Capital*, and (ii) contained in Dr. Thomas M. Zepp's 2003 article in The Quarterly Review Economic and Finance. Based on these sources, I have estimated that a small company risk premium in the range of 99 to 367 basis points is appropriate for SWC.

Q. HAVE YOU CONDUCTED A COMPARATIVE RISK STUDY TO DEVELOP AN INDICATED RISK PREMIUM FOR SWC OVER THE WATER PROXY GROUP COST OF EQUITY?

A. Yes. Attached as Exhibit TJB-COC-DT-2 is the risk study I prepared. To conduct my risk study, I started by computing the 5-year historical operating margin, coefficient of variation of operating margin, coefficient of variation of ROE. Operating margin is a measure of profitability. The co-efficient of variation of operating margin is a measure of earnings variability. Both of these metrics are highly correlated with size and risk. Next, I cross-referenced these metrics with data published by *Duff & Phelps*[38] and identified the corresponding market portfolio beta for SWC and for my water proxy group. I then computed the relative difference in beta between SWC and my proxy group. Assuming that the relative difference in the market portfolio beta for the all publicly traded companies is the same for small publicly traded water utilities, I then computed an implied beta for SWC using the difference in portfolio betas.[39] Finally, I used the CAPM to compute the indicated cost of equity for SWC and compared the results to the CAPM results for my water proxy group.[40]

[38] *Duff & Phelps*, Exhibits D-1, and D-2.
[39] *See* page 1 of the Exhibit TJB-COC-2.
[40] *See* page 2 of the Exhibit TJB-COC-2.

Q. BASED ON YOUR COMPARATIVE RISK STUDY WHAT ADDITIONAL RISK PREMIUM IS INDICATED?

A. The indicated risk premium for SWC is in the range of 130 to 180 basis points which falls in the range of small company risk premiums based two other sources of data discussed above.

Q. WHAT COMPANY SPECIFIC-RISK PREMIUM DO YOU RECOMMEND FOR SWC?

A. To be conservative, I add an upward risk premium of 100 basis points to the results of my models, which is at the bottom end of the range of my risk premium estimates. I computed a 40 basis point downward adjustment to reflect the difference in financial risk between SWC and the water proxy group. In effect, the net upward adjustment to the indicated cost of equity is 60 basis points (100 basis points less 40 basis points). That said my recommended 10.5 percent return on equity is 40 basis points above the midpoint of the overall results for the water proxy group of 10.1 percent.

H. Summary and Conclusions

Q. HAVE YOU PREPARED A SCHEDULE THAT SUMMARIZES YOUR EQUITY COST ESTIMATES AND PRESENTS YOUR RECOMMENDATIONS?

A. Yes. The equity cost estimates and my recommendations are summarized in Schedule D-4.1.

In the first part of my analysis, I applied two versions of the constant growth DCF model; one using historical and forecast growth and one using only forecast growth. The DCF models produce an indicated equity cost for the water proxy group in the range of

9.4 percent to 9.7 percent.[41]

In the second part of my analysis, I applied a risk premium model. I used historical annual total market returns for the water proxy group and historical average annual average long-term treasury yields to develop an equity risk premium to which I added the expected long-term treasury to estimate the current cost of equity. My risk premium model produces an indicated cost of equity of 10.6 percent for the water proxy group.[42]

In the third part of my analysis, I applied two versions of the CAPM – a historical risk premium CAPM and a current market risk premium CAPM. The CAPM analyses produce an indicated cost of equity in the range of 9.4 percent to 11.0 percent for the water proxy group.[43]

The overall results on the DCF, CAPM, and RPM analyses for the water proxy group are in the range of 9.8 percent to 10.4 percent with a mid-point of 10.1 percent.

In the fourth part of my analysis, I determine that a downward adjustment of 40 basis points is required to account for the difference in financial risk between the water proxy group and SWC.

In the fifth part of my analysis, I reviewed the financial literature on the small firm size effect and determined that an appropriate risk premium for small utilities like SWC that should be applied to the DCF, RPM, and CAPM results is the range of 99 to 367 basis points.[44]

In the sixth part of my analysis, I conducted a comparative risk study using market based information and determined the indicated risk premium for SWC falls in the range of 130 to 180 basis points.[45] To be conservative, I recommend a risk premium of 100

[41] *See* Schedule D-4.7, pages 1 and 2.
[42] *See* Schedule D-4.9.
[43] *See* Schedule D-4.11.
[44] *See* Schedule D-4.12.
[45] *See* Exhibit TJB-COC-2 and Schedule D-4.12.

basis points. Using my recommended risk premium of 100 basis points the additional risk premium, the DCF models produce an indicated equity cost for SWC in the range of 10.4 percent to 10.7 percent. My risk premium model produces an indicated cost of equity of 11.6 percent for SWC. My CAPM analyses produce an indicated cost of equity in the range of 10.8 percent to 11.4 percent for SWC. After adjusting for the difference in financial risk, the range of cost of equity estimates falls in the range of 10.4 to 11.0 percent with a midpoint of 10.7 percent.[46]

Q. WHAT EQUITY RETURN DO YOU RECOMMEND?

A. I am recommending a cost of equity of no less than 10.5 percent.

Q. DOES THAT CONCLUDE YOUR DIRECT TESTIMONY ON COST OF CAPITAL?

A. Yes.

[46] *See* Schedule D-4.1.

Exhibit TJB-COC-DT-1

The Water Utility Industry consists almost exclusively of regulated water companies. Thus, these utilities are monopolies in the markets where they operate, but state regulators establish the returns that can be earned on their investments.

California is in the midst of an historic drought. Three utilities in this industry have a major presence in the state. Due, in part, to reasonable regulation, these conditions have not had a meaningful impact on any of the companies.

The water infrastructure in the United States is in need of a major overhaul. Capital improvements have been deferred by just about every water system for years, if not decades. Large sums of money will be required to remove and replace old pipeline distribution systems.

Consolidation should continue to occur as small, cash-strapped, municipally-run water districts sell themselves to large investor-owned companies that have access to the funds needed to modernize systems.

Yield spreads continue to tighten between water utility stocks and the median dividend yield for equities that do distribute income to shareholders.

California's Historic Drought

Several years into a severe lack of rain and mountain snow, the state is in the midst of a severe water shortage. Governor Brown recently mandated that residents reduce water consumption by 25%. How is this situation effecting water utilities operating there? Surprisingly, the three company's in this issue that distribute water in the Golden State, *American States Water*, *California Water*, and *SJW*, have not really been negatively impacted in a meaningful way. We believe constructive regulation by the California Public Utilities Commission (CPUC) is the reason why. In what is not typically identified as a business-friendly state, the CPUC has acted prudently in getting utilities on board in helping to reduce water consumption. Usually, the more water a company sells, the higher the profits it can generate. Conversely, when demand declines, revenues and profits decrease. Thus, it is not in the best interest of water utilities to help curtail demand. The CPUC has resolved this conflict by using a mechanism called "decoupling." Basically, this allows water companies to promote less water usage without their bottom lines taking a bit hit.

An Aging Water Infrastructure

America's water distribution is in terrible shape. This is the result of years of deferring much needed maintenance and modernization. Both investor- and municipally-owned systems are now faced with burdensome construction budgets. Unfortunately, many of the over 50,000 domestic water districts do not have the financial wherewithal to fund the required improvements. As a result, the large companies in this sector have been on acquisition sprees. Instead of making one or two substantial takeovers, most of the purchases are of the tuck-in variety. Because this is one industry that is filled with redundancies, synergies can actually be achieved that help to fuel earnings growth.

INDUSTRY TIMELINESS: 64 (of 97)

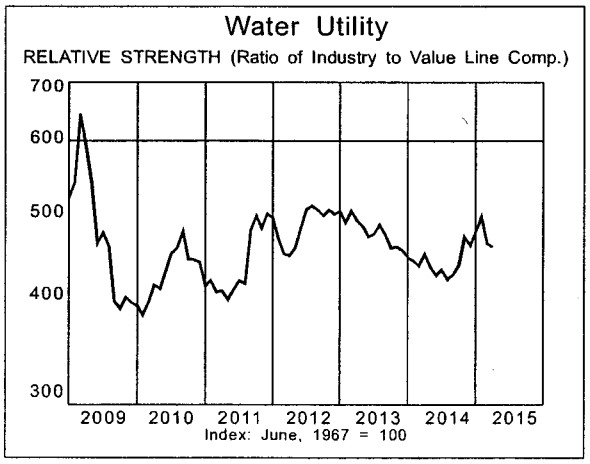
External Financing Will Be Required

To finance the projected capital outlays, water utilities will be forced to issue new debt and equity. Currently, most of these companies have decent balance sheets. (Not one equity in the group has a Financial Strength rating lower than a B+.) Over the next three- to five-year period, we expect the financial metrics of the industry to decline somewhat. Still, there doesn't appear to be any one utility that is expected to become highly leveraged during this period. Much of this is due to relatively constructive state regulatory commissions. Unlike electric utilities, which have been dealt some harsh rulings in the past, in general, authorities have been fair to the water sector. This is probably due to the differences in the industries. Digging up and replacing old pipes is more of a pay as you go operation, whereas, electric utilities sometimes have to spend hundreds of million of dollars on a plant that when finished, could result in huge increases in homeowners monthly bills.

Conclusion

The water utility industry has many positive attributes. State regulators are reasonable, the group has relatively solid finances, earnings are well defined and they don't face market risk that nonregulated industries do because of their monopoly status. However, almost all of the good news appears to be reflected in many of the utilities' stock prices. Out of nine companies, only *American States Water* is ranked to do better than the broader market averages in the year ahead. Moreover, the dividend yields on these stocks are much closer currently than in the past to the yield of the median stock that pays a dividend in the *Value Line* universe. This probably is due to the steep decline in interest rates that has occurred in the U.S. over the past several years. Low bond yields seem to have driven many income-oriented investors into the equity markets. All of this money chasing income has brought down the yield on water utilities, relative to the average stock. Currently, the yield of a typical water utility equity is only about 60 to 65 basis points higher than the average stock. This spread is very low, on an historical basis.

James A. Flood



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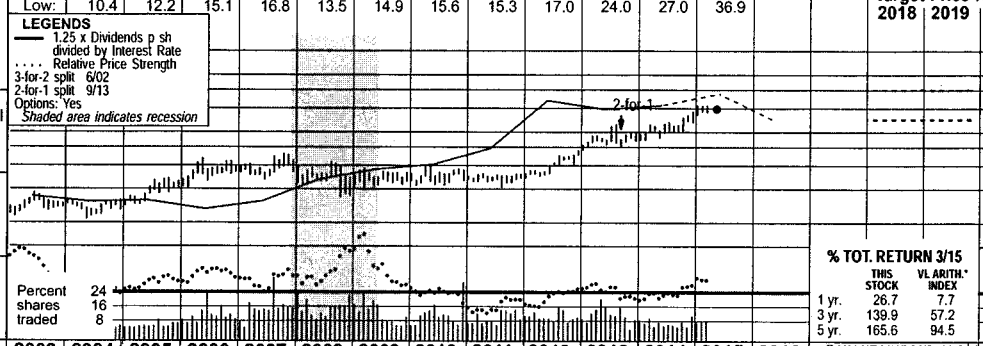
TIMELINESS 3 Lowered 5/16/14
SAFETY 2 Raised 7/20/12
TECHNICAL 2 Raised 4/3/15
BETA .70 (1.00 = Market)

High:	13.4	17.3	21.9	23.1	21.0	19.4	19.8	18.2	24.1	33.1	38.7	41.7
Low:	10.4	12.2	15.1	16.8	13.5	14.9	15.6	15.3	17.0	24.0	27.0	36.9

Target Price Range 2018 | 2019 | 2020

LEGENDS
— 1.25 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
3-for-2 split 6/02
2-for-1 split 9/13
Options: Yes
Shaded area indicates recession



2018-20 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+25%)	8%
Low	35	(-10%)	Nil

Insider Decisions

	M	J	J	A	S	O	N	D	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	1	0	1
to Sell	0	1	0	0	1	0	3	0	1

Institutional Decisions

	2Q2014	3Q2014	4Q2014
to Buy	96	81	99
to Sell	68	86	87
Hld's(000)	23236	23032	23380

% TOT. RETURN 3/15

	THIS STOCK	VL ARITH.* INDEX
1 yr.	26.7	7.7
3 yr.	139.9	57.2
5 yr.	165.6	94.5

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
6.45	6.08	6.53	6.89	6.99	6.81	7.03	7.88	8.75	9.21	9.74	10.71	11.12	12.12	12.19	12.17	*12.35*	*13.35*	Revenues per sh	*15.35*
1.13	1.10	1.26	1.27	1.04	1.11	1.32	1.45	1.65	1.69	1.70	2.11	2.13	2.48	2.65	*2.65*	*2.70*	*2.80*	"Cash Flow" per sh	*3.70*
.60	.64	.67	.67	.39	.53	.66	.67	.81	.78	.81	1.11	1.12	1.41	1.61	1.57	*1.60*	*1.65*	Earnings per sh A	*2.15*
.43	.43	.43	.44	.44	.44	.45	.46	.48	.50	.51	.52	.55	.64	.76	.83	*.88*	*.93*	Div'd Decl'd per sh B■	*1.12*
2.15	1.51	1.59	1.34	1.88	2.51	2.12	1.95	1.45	2.23	2.09	2.12	2.13	1.77	2.52	1.90	*2.05*	*2.10*	Cap'l Spending per sh	*2.40*
5.91	6.37	6.61	7.02	6.98	7.51	7.86	8.32	8.77	8.97	9.70	10.13	10.84	11.80	12.72	13.24	*13.80*	*14.25*	Book Value per sh	*15.45*
26.87	30.24	30.24	30.36	30.42	33.50	33.60	34.10	34.46	34.60	37.06	37.26	37.70	38.53	38.72	38.29	*38.00*	*37.50*	Common Shs Outst'g C	*37.50*
17.1	15.9	16.7	18.3	31.9	23.2	21.9	27.7	24.0	22.6	21.2	15.7	15.4	14.3	17.2	22.2	*Bold figures are*		Avg Ann'l P/E Ratio	*20.5*
.97	1.03	.86	1.00	1.82	1.23	1.17	1.50	1.27	1.36	1.41	1.00	.97	.91	.97	1.17	*Value Line*		Relative P/E Ratio	*1.30*
4.2%	4.2%	3.9%	3.6%	3.5%	3.6%	3.1%	2.5%	2.5%	2.9%	2.9%	3.0%	3.2%	3.1%	2.7%	2.4%	*estimates*		Avg Ann'l Div'd Yield	*2.7%*
						236.2	268.6	301.4	318.7	361.0	398.9	419.3	466.9	472.1	465.8	*470*	*500*	Revenues ($mill)	*575*
						22.5	23.1	28.0	26.8	29.5	41.4	42.0	54.1	62.7	61.1	*61.0*	*62.5*	Net Profit ($mill)	*80.0*
						47.0%	40.5%	42.6%	37.8%	38.9%	43.2%	41.7%	39.9%	36.3%	38.4%	*38.5%*	*38.0%*	Income Tax Rate	*38.0%*
						--	12.2%	8.5%	6.9%	3.2%	5.8%	2.0%	2.5%	2.5%	*.5%*	*.5%*	*1.0%*	AFUDC % to Net Profit	*2.0%*
						50.4%	48.6%	46.9%	46.2%	45.9%	44.3%	45.4%	42.2%	39.8%	39.1%	*41.0%*	*43.0%*	Long-Term Debt Ratio	*42.0%*
						49.6%	51.4%	53.1%	53.8%	54.1%	55.7%	54.6%	57.8%	60.2%	60.9%	*59.0%*	*57.0%*	Common Equity Ratio	*58.0%*
						532.5	551.6	569.4	577.0	665.0	677.4	749.1	787.0	818.4	832.6	*890*	*935*	Total Capital ($mill)	*1070*
						713.2	750.6	776.4	825.3	866.4	855.0	896.5	917.8	981.5	1003.5	*1060*	*1120*	Net Plant ($mill)	*1240*
						5.4%	6.0%	6.7%	6.4%	5.9%	7.6%	7.1%	8.3%	8.9%	8.6%	*9.0%*	*8.5%*	Return on Total Cap'l	*8.5%*
						8.5%	8.1%	9.3%	8.6%	8.2%	11.0%	10.3%	11.9%	12.7%	12.1%	*11.5%*	*11.5%*	Return on Shr. Equity	*13.0%*
						8.5%	8.1%	9.3%	8.6%	8.2%	11.0%	10.3%	11.9%	12.7%	12.1%	*11.5%*	*11.5%*	Return on Com Equity	*13.0%*
						2.8%	2.7%	3.9%	3.1%	3.2%	5.8%	5.3%	6.6%	6.8%	5.6%	*5.0%*	*5.0%*	Retained to Com Eq	*6.0%*
						67%	67%	58%	64%	61%	47%	49%	45%	47%	53%	*55%*	*56%*	All Div'ds to Net Prof	*52%*

CAPITAL STRUCTURE as of 12/31/14
Total Debt $326.1 mill. **Due in 5 Yrs** $41.6 mill.
LT Debt $325.8 mill. **LT Interest** $21.5 mill.
(LT interest earned: 5.7 x: total interest coverage: 5.4 x) (39% of Cap'l)
Leases, Uncapitalized: Annual rentals $0.4 mill.
Pension Assets-12/14 $140.6 mill. **Oblig.** $185.2 mill.
Pfd Stock None.

Common Stock 38,220,567 shs. as of 2/23/15

MARKET CAP: $1.5 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2012	2013	12/31/14
Cash Assets	23.5	38.2	76.0
Other	160.5	153.4	133.5
Current Assets	184.0	191.6	209.5
Accts Payable	40.6	49.8	41.9
Debt Due	3.3	6.3	.3
Other	49.8	44.8	57.1
Current Liab.	93.7	100.9	99.3
Fix. Chg. Cov.	488%	531%	533%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '18-'20
Revenues	5.5%	6.5%	*4.0%*
"Cash Flow"	7.5%	8.5%	*6.0%*
Earnings	9.0%	13.0%	*6.5%*
Dividends	4.0%	6.5%	*8.0%*
Book Value	5.5%	6.5%	*4.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2012	107.6	114.3	133.5	111.5	466.9
2013	110.6	120.7	130.9	109.9	472.1
2014	102.0	115.6	138.3	109.9	465.8
2015	*103*	*117*	*140*	*110*	*470*
2016	*105*	*125*	*150*	*120*	*500*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2012	.27	.40	.49	.26	1.41
2013	.35	.43	.53	.30	1.61
2014	.28	.39	.54	.36	1.57
2015	*.30*	*.45*	*.55*	*.30*	*1.60*
2016	*.31*	*.46*	*.57*	*.31*	*1.65*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.13	.14	.14	.14	.55
2012	.14	.14	.1775	.1775	.64
2013	.1775	.1775	.2025	.2025	.76
2014	.2025	.2025	.213	.213	.83
2015	.213				

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden States Water Company, it supplies water to 258,191 customers in 75 communities and 10 counties. Service areas include the greater metropolitan areas of Los Angeles and Orange Counties. The company also provides electric utility services to 23,716 customers in the city of Big Bear Lake and in areas of San Bernardino County. Sold Chaparral City Water of Arizona (6/11). Has 707 employees. Blackrock, Inc., owns 9.8% of out. shares; Vanguard, 8.5%; off. & dir. 1.5%. (4/15 Proxy). Chairman: Lloyd Ross. President & CEO: Robert J. Sprowls. Inc: CA. Addr: 630 East Foothill Boulevard, San Dimas, CA 91773. Tel: 909-394-3600. Internet: www.aswater.com.

American States Water's earnings growth should be modest through 2016. The company's main subsidiary, Golden State Water Co., has been coming close to earning the allowable return on its common equity for the past two years. Thus, there isn't much room for bottom-line expansion in the near term. All told, we only expect share net to increase 2% this year, followed by a 3% increase in 2016.

Growth in the military business should bolster long-term profits. Through its ASUS subsidiary, the company provides water to nine armed forces bases under six 50-year contracts. This operation, in which returns are not capped by state regulators, has been responsible for 20% to 25% of American States' share earnings. Over the next five years, up to 50 more bases may privatize their water and wastewater systems. As ASUS has performed successfully in this sector, we expect it to win a proportionate amount of these contracts.

Operating in California has not been a negative for the company. Regulators in the state have worked well with the industry in response to the record-breaking drought now plaguing the region. Usually, a decrease in water usage translates into reduced revenues for a utility, making conservation almost not in their interest. In a process known as decoupling, GSWC is allowed to structure fees that result in it not being penalized to incentivize households to use less water. Indeed, over the past six years, water usage has declined 16%-17%. Moreover, California permits utilities to collect increased expenses as they are incurred, not after the fact, as many other state regulators require.

Management believes that a 5% dividend growth rate is sustainable over the next 3- to 5-year period. Though this is below historical levels, the expected increase in the annual payout is not far off the industry average. With the help from nonregulated businesses, we think there is potential upside to this figure.

American Water shares do not stand out for either short- or long-term potential performance. The stock's strong showing has eliminated much of its attractiveness.

James A. Flood *April 17, 2015*

(A) Primary earnings. Excludes nonrecurring gains/(losses): '04, 7¢; '05, 13¢; '06, 3¢; '08, (14¢); '10, (23¢) '11, 10¢. Next earnings report due mid-May. Quarterly earnings may not add due to rounding.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for splits.

Company's Financial Strength	A
Stock's Price Stability	85
Price Growth Persistence	70
Earnings Predictability	85

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AQUA AMERICA NYSE-WTR

RECENT PRICE	P/E RATIO	RELATIVE P/E RATIO	DIV'D YLD
26.81	21.6 (Trailing: 22.2 Median: 24.0)	1.12	2.6%

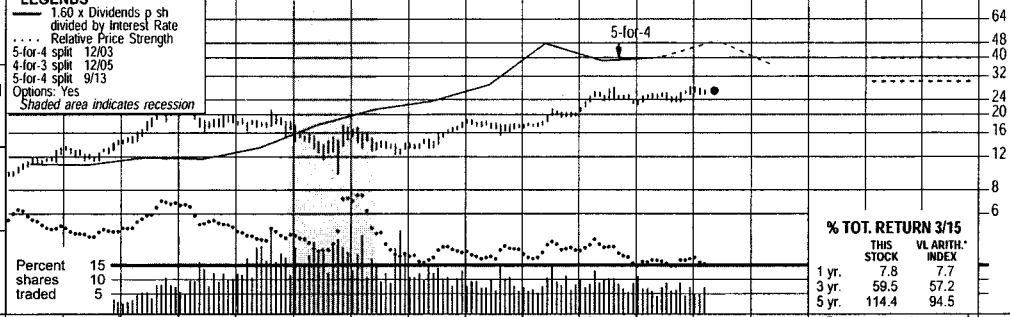
VALUE LINE

TIMELINESS 3 Lowered 5/24/13
SAFETY 2 Raised 4/20/12
TECHNICAL 2 Raised 4/3/15
BETA .70 (1.00 = Market)

High:	14.8	23.4	23.8	21.3	17.6	17.2	18.4	19.0	21.5	28.1	28.2	28.1
Low:	11.3	14.0	16.1	15.1	9.8	12.3	13.2	15.4	16.8	20.6	22.4	25.4

Target Price Range 2018 | 2019 | 2020

LEGENDS
— 1.60 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
5-for-4 split 12/03
4-for-3 split 12/05
5-for-4 split 9/13
Options: Yes
Shaded area indicates recession



2018-20 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	40	(+50%)	13%
Low	30	(+10%)	6%

Insider Decisions

	M	J	J	A	S	O	N	D	J
to Buy	0	0	0	0	0	0	0	0	0
Options	2	1	0	1	0	0	2	1	1
to Sell	3	1	1	2	1	2	5	2	2

Institutional Decisions

	2Q2014	3Q2014	4Q2014
to Buy	127	139	137
to Sell	133	126	140
Hld's(000)	81999	80311	81382

% TOT. RETURN 3/15

	THIS STOCK	VL ARITH.* INDEX
1 yr.	7.8	7.7
3 yr.	59.5	57.2
5 yr.	114.4	94.5

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
1.93	1.97	2.16	2.28	2.38	2.78	3.08	3.23	3.61	3.71	3.93	4.21	4.10	4.32	4.32	4.37	*4.55*	*4.70*	Revenues per sh	*5.70*
.58	.61	.69	.76	.77	.87	.97	1.01	1.10	1.14	1.29	1.42	1.45	1.51	1.82	*1.90*	*2.35*	*2.50*	"Cash Flow" per sh	*3.05*
.33	.37	.41	.43	.46	.51	.57	.56	.57	.58	.62	.72	.83	.87	1.16	1.20	*1.25*	*1.30*	Earnings per sh A	*1.65*
.22	.23	.24	.26	.28	.29	.32	.35	.38	.41	.44	.47	.50	.54	.58	.63	*.71*	*.77*	Div'd Decl'd per sh B■	*.98*
.72	.93	.87	.96	1.06	1.23	1.47	1.64	1.43	1.58	1.66	1.89	1.90	1.98	1.73	1.84	*1.95*	*2.00*	Cap'l Spending per sh	*2.00*
2.74	3.08	3.32	3.49	4.27	4.71	5.04	5.57	5.85	6.26	6.50	6.81	7.21	7.90	8.63	9.27	*9.65*	*10.05*	Book Value per sh	*11.40*
133.50	139.78	142.47	141.49	154.31	158.97	161.21	165.41	166.75	169.21	170.61	172.46	173.60	175.43	177.93	178.59	*176.50*	*175.00*	Common Shs Outst'g C	*170.00*
21.2	18.2	23.6	23.6	24.5	25.1	31.8	34.7	32.0	24.9	23.1	21.1	21.3	21.9	21.2	20.2	*Bold figures are*		Avg Ann'l P/E Ratio	*21.5*
1.21	1.18	1.21	1.29	1.40	1.33	1.69	1.87	1.70	1.50	1.54	1.34	1.34	1.39	1.19	1.06	*Value Line*		Relative P/E Ratio	*1.35*
3.0%	3.3%	2.5%	2.5%	2.5%	2.3%	1.8%	1.8%	2.1%	2.8%	3.1%	3.1%	2.8%	2.8%	2.4%	2.6%	*estimates*		Avg Ann'l Div'd Yield	*2.6%*

CAPITAL STRUCTURE as of 12/31/14
Total Debt $1630.7 mill. **Due in 5 Yrs** $436.9 mill.
LT Debt $1560.7 mill. **LT Interest** $70.0 mill.
(Total interest coverage: 3.9x) (49% of Cap'l)

Pension Assets-12/14 232.4 mill. **Oblig.** $281.2 mill.

Pfd Stock None

Common Stock 176,823,519 shares as of 2/12/15

MARKET CAP: $4.7 billion (Mid Cap)

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		18-20
496.8	533.5	602.5	627.0	670.5	726.1	712.0	757.8	768.6	779.9	*800*	*825*	Revenues ($mill)	*970*
91.2	92.0	95.0	97.9	104.4	124.0	144.8	153.1	205.0	213.9	*225*	*230*	Net Profit ($mill)	*280*
38.4%	39.6%	38.9%	39.7%	39.4%	39.2%	32.9%	39.0%	10.0%	*10.5%*	*18.0%*	*20.0%*	Income Tax Rate	*27.0%*
--	--	--	--	--	--	--	--	1.1%	2.4%	*2.0%*	*2.5%*	AFUDC % to Net Profit	*3.0%*
52.0%	51.6%	55.4%	54.1%	55.6%	56.6%	52.7%	52.7%	48.9%	48.5%	*49.5%*	*50.0%*	Long-Term Debt Ratio	*50.0%*
48.0%	48.4%	44.6%	45.9%	44.4%	43.4%	47.3%	47.3%	51.1%	51.5%	*50.5%*	*50.0%*	Common Equity Ratio	*50.0%*
1690.4	1904.4	2191.4	2306.6	2495.5	2706.2	2646.8	2929.7	3003.6	3216.1	*3370*	*3505*	Total Capital ($mill)	*3955*
2280.0	2506.0	2792.8	2997.4	3227.3	3469.3	3612.9	3936.2	4167.3	4402.0	*4550*	*4700*	Net Plant ($mill)	*5000*
6.9%	6.4%	5.9%	5.7%	5.6%	5.9%	6.9%	6.6%	8.0%	*7.5%*	*8.0%*	*7.5%*	Return on Total Cap'l	*8.5%*
11.2%	10.0%	9.7%	9.3%	9.4%	10.6%	11.6%	11.0%	13.4%	12.9%	*13.0%*	*13.0%*	Return on Shr. Equity	*14.5%*
11.2%	10.0%	9.7%	9.3%	9.4%	10.6%	11.6%	11.0%	13.4%	12.9%	*13.0%*	*13.0%*	Return on Com Equity	*14.5%*
4.9%	3.7%	3.2%	2.8%	2.7%	3.7%	4.6%	4.3%	6.7%	6.1%	*5.5%*	*5.5%*	Retained to Com Eq	*6.0%*
56%	63%	67%	70%	72%	65%	60%	61%	50%	53%	*57%*	*53%*	All Div'ds to Net Prof	*59%*

CURRENT POSITION ($MILL.)	2012	2013	12/31/14
Cash Assets	5.5	5.1	4.1
Receivables	92.9	95.4	97.0
Inventory (AvgCst)	11.8	11.4	12.8
Other	150.7	59.8	38.6
Current Assets	260.9	171.7	152.5
Accts Payable	55.5	65.8	60.0
Debt Due	125.4	123.0	70.0
Other	93.3	78.1	95.3
Current Liab.	274.2	266.9	225.3
Fix. Chg. Cov.	413%	388%	389%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '18-'20
Revenues	6.5%	4.0%	*4.5%*
"Cash Flow"	8.0%	8.0%	*9.5%*
Earnings	8.5%	11.0%	*8.0%*
Dividends	7.5%	7.0%	*9.0%*
Book Value	8.0%	6.0%	*5.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2102	164.0	191.7	214.6	187.5	757.8
2013	180.0	195.7	204.3	188.6	768.6
2014	182.7	195.3	210.5	191.4	779.9
2015	*185*	*200*	*215*	*200*	*800*
2016	*190*	*205*	*220*	*210*	*825*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2012	.15	.24	.29	.19	.87
2013	.26	.30	.36	.24	1.16
2014	.24	.31	.38	.28	1.20
2015	*.25*	*.32*	*.39*	*.29*	*1.25*
2016	*.26*	*.33*	*.41*	*.30*	*1.30*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.124	.124	.124	.132	.50
2012	.132	.132	.132	.14	.54
2013	.14	.14	.152	.152	.58
2014	.152	.152	.165	.165	.63
2015	.165				

BUSINESS: Aqua America, Inc. is the holding company for water and wastewater utilities that serve approximately three million residents in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Florida, Indiana, and five other states. Has 1,617 employees. Acquired AquaSource, 7/03; Consumers Water, 4/99; and others. Water supply revenues '14: residential, 68%; commercial, 17%; industrial & other, 15%. Officers and directors own .8% of the common stock; Vangurad Group, 6.6%; State Street Capital Corp., 6.3%; Blackrock, Inc, 6.1% (4/14 Proxy). Chairman & Chief Executive Officer: Nicholas DeBenedictis. Incorporated: Pennsylvania. Address: 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010. Telephone: 610-525-1400. Internet: www.aquaamerica.com.

Aqua America has healthy long-term dividend growth prospects. Based upon our projections of the company's ability to internally generate cash, we estimate that the annual payout may increase roughly 9% per annum through 2018-2020. This is a much higher rate than that of the typical stock in the industry.

Earnings gains will probably moderate both this year and next. Excluding the $0.11-a-share gain from the sale of its operations in Fort Wayne, Aqua's share net rose 3.4% in 2014. Considering that 2013 was an exceptional year, the comparison was actually good. Due to some rate relief, synergies from acquisitions, and the ability to earn returns on capital investments with little regulatory lag, we expect the utility to record 4% bottom-line increases in both 2015 and 2016.

Expansion via acquisitions is a major part of the company's strategy. Most water systems in the U.S. are small and municipally owned. Over the past two decades, Aqua has made over 300 purchases, including 16 in 2014. As these smaller water districts realize that they do not have the finances to modernize their aging infrastructures, they will continue to look toward merging with larger companies. With a significant amount of redundancies, cost savings from synergies can be significant in this industry

Low energy prices could impact nonregulated operations. Hydraulic fracking has become a major presence in Aqua's service areas. With each well requiring five million gallons of water, transporting it by truck is both burdensome and expensive. Extending pipeline systems directly to the wells can be very profitable for water utilities. Revenues from this sector should decline, however, as drillers shut wells until the energy market recovers.

Investors willing to sacrifice some returns for more certainty may like these shares. On the plus side, Aqua America stock has a decent well-protected dividend yield, favorable payout growth prospects, a solid balance sheet, the highest (95) mark for Stock Price Stability, well-defined earnings, and a 2 (Above Average) Safety rank. All told, we believe that the potential total returns are adequate on a risk-adjusted basis.

James A. Flood *April 17, 2015*

(A) Diluted egs. Excl. nonrec. gains (losses): '99, (9¢); '00, 2¢; '01, 2¢; '02, 4¢; '03, 3¢; '12, 18¢. Excl. gain from disc. operations: '12, 7¢; '13, 9¢; '14, 11¢. May not sum due to rounding. Next earnings report due mid-May.
(B) Dividends historically paid in early March, June, Sept. & Dec. ■ Div'd. reinvestment plan available (5% discount).
(C) In millions, adjusted for stock splits.

Company's Financial Strength	A
Stock's Price Stability	95
Price Growth Persistence	60
Earnings Predictability	95

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CALIFORNIA WATER NYSE-CWT

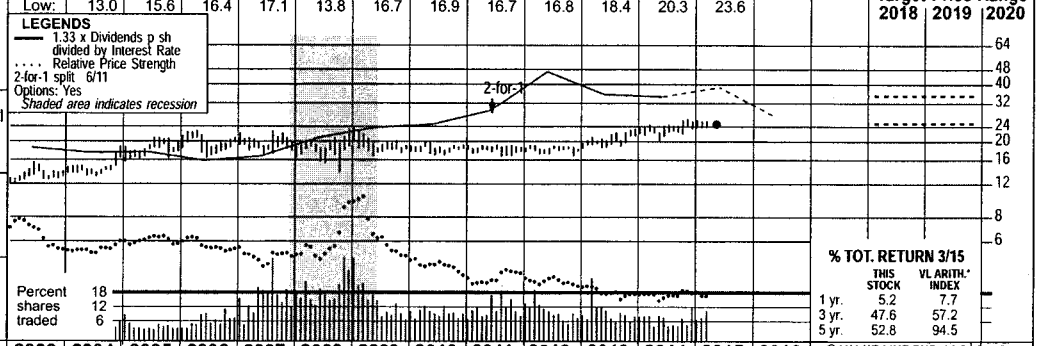
RECENT PRICE	P/E RATIO		RELATIVE P/E RATIO	DIV'D YLD	
24.76	19.2	(Trailing: 23.1 Median: 20.0)	0.99	2.7%	VALUE LINE

TIMELINESS **3** Raised 6/20/14
SAFETY **3** Lowered 7/27/07
TECHNICAL **2** Raised 4/3/15
BETA .75 (1.00 = Market)

High:	19.0	21.1	22.9	22.7	23.3	24.1	19.8	19.4	19.3	23.4	26.4	26.0
Low:	13.0	15.6	16.4	17.1	13.8	16.7	16.9	16.7	16.8	18.4	20.3	23.6

Target Price Range
2018 | 2019 | 2020

LEGENDS
— 1.33 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 6/11
Options: Yes
Shaded area indicates recession



2018-20 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	35	(+40%)	11%
Low	25	(Nil)	3%

Insider Decisions

	M	J	J	A	S	O	N	D	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	1	0	0	0	0	0
to Sell	1	0	0	0	0	0	3	2	0

Institutional Decisions

	2Q2014	3Q2014	4Q2014
to Buy	57	53	81
to Sell	56	53	59
Hld's(000)	30279	29552	29654

% TOT. RETURN 3/15

	THIS STOCK	VL ARITH.* INDEX
1 yr.	5.2	7.7
3 yr.	47.6	57.2
5 yr.	52.8	94.5

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
7.98	8.08	8.13	8.67	8.18	8.59	8.72	8.10	8.88	9.90	10.82	11.05	12.00	13.34	12.23	12.50	*12.80*	*13.25*	Revenues per sh	*16.80*
1.37	1.26	1.10	1.32	1.26	1.42	1.52	1.36	1.56	1.86	1.93	1.93	2.07	2.32	2.21	*2.50*	*2.60*	*2.65*	"Cash Flow" per sh	*3.20*
.77	.66	.47	.63	.61	.73	.74	.67	.75	.95	.98	.91	.86	1.02	1.02	1.19	*1.20*	*1.20*	Earnings per sh A	*1.55*
.54	.55	.56	.56	.56	.57	.57	.58	.58	.59	.59	.60	.62	.63	.64	.65	*.67*	*.69*	Div'd Decl'd per sh B ■	*.97*
1.72	1.23	2.04	2.91	2.19	1.87	2.01	2.14	1.84	2.41	2.66	2.97	2.83	3.04	2.58	*2.75*	*2.50*	*2.60*	Cap'l Spending per sh	*3.10*
6.71	6.45	6.48	6.56	7.22	7.83	7.90	9.07	9.25	9.72	10.13	10.45	10.76	11.28	12.54	13.22	*13.75*	*14.25*	Book Value per sh C	*16.00*
25.87	30.29	30.36	30.36	33.86	36.73	36.78	41.31	41.33	41.45	41.53	41.67	41.82	41.98	47.74	47.81	*48.00*	*48.00*	Common Shs Outst'g D	*50.00*
17.8	19.6	27.1	19.8	22.1	20.1	24.9	29.2	26.1	19.8	19.7	20.3	21.3	17.9	20.1	19.3	*Bold figures are*		Avg Ann'l P/E Ratio	*20.0*
1.01	1.27	1.39	1.08	1.26	1.06	1.33	1.58	1.39	1.19	1.31	1.29	1.34	1.14	1.13	1.02	*Value Line*		Relative P/E Ratio	*1.25*
4.0%	4.3%	4.4%	4.5%	4.2%	3.9%	3.1%	2.9%	3.0%	3.1%	3.1%	3.2%	3.4%	3.5%	3.1%	2.8%	*estimates*		Avg Ann'l Div'd Yield	*3.2%*
						320.7	334.7	367.1	410.3	449.4	460.4	501.8	560.0	584.1	597.5	*615*	*635*	Revenues ($mill) E	*840*
						27.2	25.6	31.2	39.8	40.6	37.7	36.1	42.6	47.3	56.7	*57.5*	*57.5*	Net Profit ($mill)	*77.5*
						42.4%	37.4%	39.9%	37.7%	40.3%	39.5%	40.5%	37.5%	30.3%	*33.0%*	*28.5%*	*29.5%*	Income Tax Rate	*36.0%*
						3.3%	10.6%	8.3%	8.6%	7.6%	4.2%	7.6%	8.0%	4.3%	2.7%	*2.0%*	*4.5%*	AFUDC % to Net Profit	*5.0%*
						48.3%	43.5%	42.9%	41.6%	47.1%	52.4%	51.7%	47.8%	41.6%	40.1%	*43.0%*	*43.5%*	Long-Term Debt Ratio	*41.5%*
						51.1%	55.9%	56.6%	58.4%	52.9%	47.6%	48.3%	52.2%	58.4%	59.9%	*57.0%*	*56.5%*	Common Equity Ratio	*58.5%*
						568.1	670.1	674.9	690.4	794.9	914.7	931.5	908.2	1024.9	1045.9	*1160*	*1215*	Total Capital ($mill)	*1370*
						862.7	941.5	1010.2	1112.4	1198.1	1294.3	1381.1	1457.1	1515.8	1590.4	*1660*	*1730*	Net Plant ($mill)	*1820*
						6.3%	5.2%	5.9%	7.1%	6.5%	5.5%	5.5%	6.3%	6.0%	6.8%	*6.5%*	*6.0%*	Return on Total Cap'l	*7.0%*
						9.3%	6.8%	8.1%	9.9%	9.6%	8.6%	8.0%	9.0%	7.9%	9.0%	*9.0%*	*8.5%*	Return on Shr. Equity	*9.5%*
						9.3%	6.8%	8.1%	9.9%	9.6%	8.6%	8.0%	9.0%	7.9%	9.0%	*9.0%*	*8.5%*	Return on Com Equity	*9.5%*
						2.1%	1.0%	1.8%	3.8%	3.8%	3.0%	2.3%	3.4%	3.4%	4.1%	*4.0%*	*3.5%*	Retained to Com Eq	*3.5%*
						78%	86%	77%	61%	60%	66%	71%	62%	56%	55%	*56%*	*58%*	All Div'ds to Net Prof	*63%*

CAPITAL STRUCTURE as of 12/31/14
Total Debt $504.9 mill. **Due in 5 Yrs** $206.7 mill.
LT Debt $419.2 mill. **LT Interest** $20.0 mill.
(LT interest earned: 4.2x; total int. cov.: 4.0x)
(40% of Cap'l)
Pension Assets-12/14 $306.3 mill.
Oblig. $390.6 mill.
Pfd Stock None

Common Stock 47,800.997 shs.
as of 2/9/15

MARKET CAP: $1.2 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2012	2013	12/31/14
Cash Assets	38.8	27.5	19.6
Other	107.8	112.0	134.5
Current Assets	146.6	139.5	154.1
Accts Payable	46.8	55.1	59.4
Debt Due	136.3	54.7	85.7
Other	59.7	56.8	72.6
Current Liab.	242.8	166.6	217.7
Fix. Chg. Cov.	296%	301%	299%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '18-'20
Revenues	4.0%	7.0%	5.0%
"Cash Flow"	6.0%	6.5%	5.5%
Earnings	5.5%	4.0%	7.5%
Dividends	1.0%	1.5%	7.0%
Book Value	5.5%	4.5%	5.5%

Cal-endar	QUARTERLY REVENUES ($ mill.)E Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2012	116.8	143.6	178.1	121.5	560.0
2013	111.4	154.4	184.4	133.7	584.1
2014	110.5	158.4	191.2	137.4	597.5
2015	*115*	*165*	*195*	*140*	*615*
2016	*120*	*170*	*200*	*145*	*635*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2012	.03	.31	.56	.12	1.02
2013	.01	.28	.61	.12	1.02
2014	d.11	.36	.70	.24	1.19
2015	*Nil*	*.32*	*.73*	*.15*	*1.20*
2016	*Nil*	*.31*	*.74*	*.15*	*1.20*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.154	.154	.154	.154	.62
2012	.1575	.1575	.1575	.1575	.63
2013	.16	.16	.16	.16	.64
2014	.1625	.1625	.1625	.1625	.65
2015	.1675				

BUSINESS: California Water Service Group provides regulated and nonregulated water service to 477,900 customers in 85 communities in the state of California. Accounts for over 94% of total customers. Also operates in Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Rio Grande Corp; West Hawaii Utilities (9/08). Revenue breakdown, '14: residential, 68%; business, 19%; industrial, 5%; public authorities, 3%; other 5%. '14 reported depreciation rate: 4.0%. Has 1,105 employees. President, Chairman, and CEO: Peter C. Nelson. Inc.: DE. Address: 1720 North First St., San Jose, CA 95112-4598. Tel.: 408-367-8200. Internet: www.calwatergroup.com.

State regulators (CPUC) have been working well with California Water Services during the region's historic drought. The more water it sells, the more revenues a water utility generates. Due to the ongoing lack of rainfall, the CPUC has implemented "decoupling." This mechanism encourages conservation, without having a major impact on a water utility's profits.

The company had a much better-than-expected fourth quarter. Fueled by rate relief implemented last year and reduced expenses, California Water's earnings per share doubled to $0.24, on a year-over-year basis in the December interim. This resulted in a hefty 17% bottom-line gain in 2014.

We expect profits to be flattish over the next two years. The bulk of the earnings gains resulting from higher rates were reflected in California Water's earnings in 2014. Based on state regulations, California water utilities can only file for adjustments for increased expenses once every three years. With most of the recent cost reductions probably not sustainable, we estimate that the company's share earnings will barely budge from last year's tally of $1.19, and come in at $1.20 for both 2015 and 2016.

The latest dividend hike was a bit of a disappointment. We had been looking for a 4.6% increase in the quarterly payout to $0.17 a share, instead it was only raised by 3.1% to $0.1675.

California Water's finances are in fine shape. The equity-to-total capital ratio was at an industry high of 60% at year-end 2014. Much of this can be attributed to a large equity offering in 2013. Capital expenditures to replace an aging pipleine infrastructure will probably increase in the years ahead. Because of the strong balance sheet, we don't anticipate any major equity offerings out to the late decade. Additional debt may be required, but we believe the utility's financial metrics will remain above the industry averages.

These shares are not of particular interest at this juncture. On the plus side, CWT's yield is higher than most of the stocks in the water industry. Over the pull to 2018-2020, however, the stock has below-average total return potential.

James A. Flood *April 17, 2015*

(A) Basic EPS. Excl. nonrecurring gain (loss): '00, (4¢); '01, 2¢; '02, 4¢; '11, 4¢. Next earnings report due mid-May. (B) Dividends historically paid in late Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available. (C) Incl. intangible assets. In '14 : $7.3 mill., $0.15/sh. (D) In millions, adjusted for splits. (E) Excludes non-reg. rev.

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	40
Earnings Predictability	90

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CONNECTICUT WATER NDQ-CTWS

RECENT PRICE	P/E RATIO	RELATIVE P/E RATIO	DIV'D YLD
36.82	18.7 (Trailing: 19.2 Median: 22.0)	0.97	2.9%

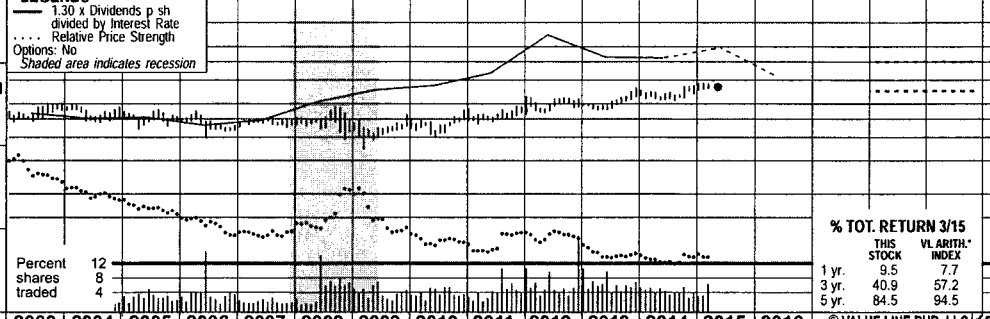
VALUE LINE

TIMELINESS 3 Lowered 11/21/14
SAFETY 3 New 1/18/13
TECHNICAL 2 Raised 3/27/15
BETA .65 (1.00 = Market)

High:	29.8	28.2	27.7	25.6	29.0	26.4	27.9	29.1	32.8	36.4	37.5	38.6
Low:	23.8	21.9	20.3	22.4	19.3	17.3	20.0	23.3	26.2	27.8	31.0	35.1

Target Price Range 2018 | 2019 | 2020

LEGENDS
— 1.30 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: No
Shaded area indicates recession



2018-20 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+35%)	10%
Low	35	(-5%)	2%

Insider Decisions

	M	J	J	A	S	O	N	D	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	2Q2014	3Q2014	4Q2014
to Buy	40	50	36
to Sell	32	34	46
Hld's(000)	4304	4299	4296

Percent shares traded 12 8 4

% TOT. RETURN 3/15

	THIS STOCK	VL ARITH.* INDEX
1 yr.	9.5	7.7
3 yr.	40.9	57.2
5 yr.	84.5	94.5

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
5.87	5.70	5.93	5.77	5.91	6.04	5.81	5.68	7.05	7.24	6.93	7.65	7.93	9.47	8.29	8.45	*8.75*	*9.00*	Revenues per sh	*12.50*
1.65	1.73	1.78	1.78	1.89	1.91	1.62	1.52	1.90	1.95	1.93	2.04	2.11	2.64	2.63	*3.00*	*3.20*	*3.35*	"Cash Flow" per sh	*3.60*
1.03	1.09	1.13	1.12	1.15	1.16	.88	.81	1.05	1.11	1.19	1.13	1.13	1.53	1.66	1.92	*2.00*	*2.10*	Earnings per sh A	*2.25*
.79	.79	.80	.81	.83	.84	.85	.86	.87	.88	.90	.92	.94	.96	.98	1.01	*1.05*	*1.09*	Div'd Decl'd per sh B■	*1.30*
1.42	1.43	1.86	1.98	1.49	1.58	1.96	1.96	2.24	2.44	3.28	3.06	2.61	2.79	3.02	4.11	*4.60*	*4.15*	Cap'l Spending per sh	*2.85*
8.61	8.92	9.25	10.06	10.46	10.94	11.52	11.60	11.95	12.23	12.67	13.05	13.50	20.95	17.92	18.84	*20.10*	*21.15*	Book Value per sh D	*24.15*
7.26	7.28	7.65	7.94	7.97	8.04	8.17	8.27	8.38	8.46	8.57	8.68	8.76	8.85	11.04	11.12	*11.20*	*11.35*	Common Shs Outst'g C	*12.00*
18.2	18.2	21.5	24.3	23.5	22.9	28.6	29.0	23.0	22.2	18.4	20.7	23.0	19.4	18.4	17.7	*Bold figures are*		Avg Ann'l P/E Ratio	*19.0*
1.04	1.18	1.10	1.33	1.34	1.21	1.52	1.57	1.22	1.34	1.23	1.32	1.44	1.23	1.03	.93	*Value Line*		Relative P/E Ratio	*1.20*
4.2%	4.0%	3.3%	3.0%	3.0%	3.1%	3.4%	3.6%	3.6%	3.6%	4.1%	3.9%	3.6%	3.2%	3.2%	3.0%	*estimates*		Avg Ann'l Div'd Yield	*2.8%*

CAPITAL STRUCTURE as of 12/31/14
Total Debt $181.0 mill. Due in 5 Yrs $19.3 mill.
LT Debt $176.6 mill. LT Interest $7.0 mill.
(Total interest coverage: 4.4x)
(46% of Cap'l)
Leases, Uncapitalized: Annual rentals $.1 mill.
Pension Assets-12/14 $61.6 mill.
Oblig. $79.8 mill.

Pfd Stock $0.8 mill. Pfd Divd NMF

Common Stock 11,152,627 shs.
as of 3/1/15
MARKET CAP: $400 million (Small Cap)

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		18-20
47.5	46.9	59.0	61.3	59.4	66.4	69.4	83.8	91.5	94.0	*98.0*	*102*	Revenues ($mill)	*150*
7.2	6.7	8.8	9.4	10.2	9.8	9.9	13.6	18.3	21.3	*23.0*	*24.0*	Net Profit ($mill)	*27.0*
--	23.5%	32.4%	27.2%	19.5%	35.2%	41.3%	32.0%	28.0%	*14.5%*	*18.0%*	*19.5%*	Income Tax Rate	*30.0%*
--	--	--	1.7%	--	--	--	1.7%	2.0%	2.4%	*2.5%*	*2.5%*	AFUDC % to Net Profit	*2.0%*
44.9%	44.4%	47.8%	46.9%	50.6%	49.5%	53.2%	49.0%	46.9%	45.7%	*45.5%*	*47.5%*	Long-Term Debt Ratio	*47.5%*
54.6%	55.1%	51.8%	52.7%	49.1%	50.2%	46.5%	50.8%	52.9%	54.2%	*54.5%*	*52.5%*	Common Equity Ratio	*52.5%*
172.3	174.1	193.2	196.5	221.3	225.6	254.2	364.6	373.6	386.8	*420*	*455*	Total Capital ($mill)	*550*
247.7	268.1	284.3	302.3	325.2	344.2	362.4	447.9	471.9	506.9	*535*	*560*	Net Plant ($mill)	*675*
5.0%	4.9%	5.5%	5.9%	5.5%	5.4%	4.9%	4.8%	5.9%	*6.4%*	*6.5%*	*6.5%*	Return on Total Cap'l	*6.0%*
7.5%	6.9%	8.7%	9.0%	9.3%	8.6%	8.3%	7.3%	9.2%	10.2%	*10.0%*	*10.0%*	Return on Shr. Equity	*9.5%*
7.6%	7.0%	8.7%	9.1%	9.4%	8.7%	8.3%	7.3%	9.2%	10.2%	*10.0%*	*10.0%*	Return on Com Equity	*9.5%*
.3%	NMF	1.6%	1.9%	2.3%	1.6%	1.4%	2.8%	3.8%	4.5%	*4.5%*	*4.5%*	Retained to Com Eq	*4.0%*
95%	105%	82%	79%	76%	81%	83%	62%	59%	53%	*53%*	*52%*	All Div'ds to Net Prof	*58%*

CURRENT POSITION ($MILL.)	2012	2013	12/31/14
Cash Assets	13.2	18.4	2.5
Accounts Receivable	11.5	12.3	12.0
Other	11.7	16.2	21.7
Current Assets	36.4	46.9	36.2
Accts Payable	10.0	10.8	10.0
Debt Due	3.0	4.1	4.4
Other	2.9	7.8	9.2
Current Liab.	15.9	22.7	23.6
Fix. Chg. Cov.	408%	375%	375%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '18-'20
Revenues	4.0%	5.0%	*5.5%*
"Cash Flow"	3.0%	6.5%	*5.5%*
Earnings	2.5%	8.0%	*6.5%*
Dividends	1.5%	2.0%	*4.5%*
Book Value	6.0%	8.0%	*4.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2012	18.5	21.3	24.5	19.5	83.8
2013	19.7	22.6	27.6	21.6	91.5
2014	20.3	25.4	27.6	20.7	94.0
2015	*21.5*	*26.5*	*29.0*	*21.0*	*98.0*
2016	*22.5*	*27.5*	*30.0*	*22.0*	*102.0*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2012	.22	.47	.67	.16	1.53
2013	.24	.39	.86	.17	1.66
2014	.27	.67	.76	.22	1.92
2015	*.35*	*.60*	*.80*	*.25*	*2.00*
2016	*.36*	*.62*	*.85*	*.27*	*2.10*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.233	.233	.238	.238	.942
2012	.238	.238	.2425	.2425	.962
2013	.2425	.2425	.2475	.2475	.98
2014	.2475	.2475	.2575	.2575	1.01
2015	.2575				

BUSINESS: Connecticut Water Service, Inc. is a non-operating holding company, whose income is derived from earnings of its wholly-owned subsidiary companies (regulated water utilities). In 2014, 93% of net income was derived from these activities. Provides water services to 400,000 people in 77 municipalities throughout Connecticut and Maine. Acquired The Maine Water Company, January, 2012; Biddeford and Saco Water, December, 2012. Incorporated: Connecticut. Has 265 employees. Chairman/President/Chief Executive Officer: Eric W. Thornburg. Officers and directors own 2.3% of the common stock; BlackRock, Inc. 7.0%; (4/15 proxy). Address: 93 West Main Street, Clinton, CT 06413. Telephone: (860) 669-8636. Internet: www.ctwater.com.

Connecticut Water Services will be hard-pressed to repeat last year's impressive performance. Share net rose 16% in 2014, thanks mostly to an agreement with regulators regarding a rebate from the IRS. Still, we estimate that the utility can string together two consecutive solid years in 2015 and 2016. Margins are improving as the company is successfully integrating two acquisitions made in 2012. Moreover, the Biddleford and Saco operation in Maine was recently granted a significant rate increase. As a result, we think Connecticut Water can still grow earnings 4%-5% per annum over the next two years.

Capital expenditures are scheduled to be large in the short term. In addition, to having to replace older pipes (like almost every other water utility), the company has agreed to supply water to two new customers. Funds are being spent to extend the infrastructure in Connecticut to service the town of Mansfield and the University of Connecticut's Storrs campus, which is the size of a small city. Overall, we expect the capital budget to average over $50 million a year through 2016, which represents a 10% increase over the relatively large outlays made in 2014. Starting in 2017, however, construction should take a breather.

The balance sheet is strong enough to handle the increased spending. The equity-to-total capital ratio will most likely decline from its very healthy level of 54.5% to 52.5% by year-end 2016. Despite the dip, this percentage is high for a water utility.

Dividend growth prospects have improved. Over the past five- and 10-year periods, the company has only raised its annual payout by 1.5% and 2.0%, respectively. This rate lagged the industry mean by a wide margin. We expect this gap to narrow substantially in the long term. Indeed, dividend hikes through late decade will probably average 4.5%.

Shares of Connecticut Water do not hold much appeal at their recent price. Despite having a high yield, the stock is expected to only perform in line with the market averages in the year ahead. Potential returns through late decade are even less attractive.

James A. Flood *April 17, 2015*

(A) Diluted earnings. Next earnings report due mid-May. Quarterly earnings do not add in 2012 due to rounding.
(B) Dividends historically paid in mid-March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for split.
(D) Includes intangibles. In 2014: $31.7 million/$2.85 a share.

Company's Financial Strength	B+
Stock's Price Stability	85
Price Growth Persistence	50
Earnings Predictability	85

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MIDDLESEX WATER NDQ-MSEX

RECENT PRICE 22.97 | P/E RATIO 19.6 (Trailing: 20.3 Median: 21.0) | RELATIVE P/E RATIO 1.02 | DIV'D YLD 3.4% | VALUE LINE

TIMELINESS 3 Lowered 4/11/14
SAFETY 2 New 10/21/11
TECHNICAL 2 Raised 4/3/15
BETA .75 (1.00 = Market)

High:	21.8	23.5	20.5	20.2	19.8	17.9	19.3	19.4	19.6	22.5	23.7	23.5
Low:	16.7	17.1	16.5	16.9	12.0	11.6	14.7	16.5	17.5	18.6	19.1	21.6

Target Price Range 2018 | 2019 | 2020

2018-20 PROJECTIONS

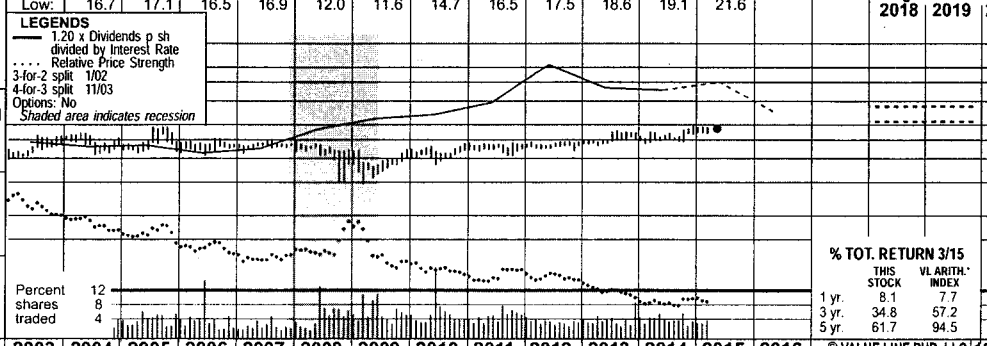
	Price	Gain	Ann'l Total Return
High	30	(+30%)	10%
Low	25	(+10%)	4%

Insider Decisions

	M	J	J	A	S	O	N	D	J
to Buy	2	0	0	0	1	0	1	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	1	0	0	0	1	0	0	0	1

Institutional Decisions

	2Q2014	3Q2014	4Q2014
to Buy	41	32	39
to Sell	34	40	37
Hld's(000)	6463	6339	6372



% TOT. RETURN 3/15

	THIS STOCK	VL ARITH.* INDEX
1 yr.	8.1	7.7
3 yr.	34.8	57.2
5 yr.	61.7	94.5

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
5.35	5.39	5.87	5.98	6.12	6.25	6.44	6.16	6.50	6.79	6.75	6.60	6.50	6.98	7.19	7.26	*7.40*	*7.70*	Revenues per sh	*9.10*
1.19	.99	1.18	1.20	1.15	1.28	1.33	1.33	1.49	1.53	1.40	1.55	1.46	1.56	1.72	*1.90*	*1.95*	*2.00*	"Cash Flow" per sh	*2.25*
.76	.51	.66	.73	.61	.73	.71	.82	.87	.89	.72	.96	.84	.90	1.03	1.13	*1.15*	*1.20*	Earnings per sh A	*1.35*
.60	.61	.62	.63	.65	.66	.67	.68	.69	.70	.71	.72	.73	.74	.75	.76	*.77*	*.78*	Div'd Decl'd per sh B■	*.85*
2.33	1.32	1.25	1.59	1.87	2.54	2.18	2.31	1.66	2.12	1.49	1.90	1.50	1.36	1.26	1.40	*1.80*	*2.00*	Cap'l Spending per sh	*2.00*
6.95	6.98	7.11	7.39	7.60	8.02	8.26	9.52	10.05	10.03	10.33	11.13	11.27	11.48	11.82	12.24	*12.75*	*13.25*	Book Value per sh	*14.30*
10.00	10.11	10.17	10.36	10.48	11.36	11.58	13.17	13.25	13.40	13.52	15.57	15.70	15.82	15.96	16.12	*16.25*	*16.25*	Common Shs Outst'g C	*17.00*
17.6	28.7	24.6	23.5	30.0	26.4	27.4	22.7	21.6	19.8	21.0	17.8	21.7	20.8	19.7	19.5	*Bold figures are*		Avg Ann'l P/E Ratio	*20.5*
1.00	1.87	1.26	1.28	1.71	1.39	1.46	1.23	1.15	1.19	1.40	1.13	1.36	1.32	1.11	1.01	*Value Line*		Relative P/E Ratio	*1.30*
4.4%	4.2%	3.8%	3.7%	3.5%	3.4%	3.5%	3.7%	3.7%	4.0%	4.7%	4.2%	4.0%	4.0%	3.7%	3.5%	*estimates*		Avg Ann'l Div'd Yield	*3.1%*

CAPITAL STRUCTURE as of 12/31/14
Total Debt $160.9 mill. Due in 5 Yrs $49.8 mill.
LT Debt $136.0 mill. LT Interest $4.6 mill.
(LT interest earned: 6.0x)
(41% of Cap'l)

Pension Assets-12/14 $51.6 mill.
Oblig. $75.0 mill.
Pfd Stock $2.4 mill. Pfd Div'd: $.2 mill.

Common Stock 16,129,050 shs.
as of 2/28/15

MARKET CAP: $375 million (Small Cap)

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		18-20
74.6	81.1	86.1	91.0	91.2	102.7	102.1	110.4	114.8	117.1	*120*	*125*	Revenues ($mill)	*155*
8.5	10.0	11.8	12.2	10.0	14.3	13.4	14.4	16.6	18.4	*18.6*	*18.6*	Net Profit ($mill)	*23.0*
27.6%	33.4%	32.6%	33.2%	34.1%	32.1%	32.7%	33.9%	34.1%	*35.0%*	*34.5%*	*34.0%*	Income Tax Rate	*34.0%*
--	--	--	--	--	6.8%	6.1%	3.4%	1.9%	*1.0%*	*1.0%*	*1.5%*	AFUDC % to Net Profit	*2.5%*
55.3%	49.5%	49.0%	45.6%	46.6%	43.1%	42.3%	41.5%	40.4%	40.5%	*40.5%*	*42.0%*	Long-Term Debt Ratio	*43.5%*
41.3%	47.5%	49.6%	51.8%	52.1%	55.8%	56.6%	57.4%	58.7%	58.8%	*58.5%*	*57.5%*	Common Equity Ratio	*56.5%*
231.7	264.0	268.8	259.4	267.9	310.5	312.5	316.5	321.4	335.7	*350*	*375*	Total Capital ($mill)	*430*
288.0	317.1	333.9	366.3	376.5	405.9	422.2	435.2	446.5	465.4	*485*	*505*	Net Plant ($mill)	*550*
5.0%	5.1%	5.6%	5.8%	5.0%	5.7%	5.2%	5.4%	5.9%	*6.5%*	*6.5%*	*6.0%*	Return on Total Cap'l	*6.5%*
8.2%	7.5%	8.6%	8.6%	7.0%	8.1%	7.5%	7.8%	8.7%	9.3%	*9.0%*	*9.0%*	Return on Shr. Equity	*9.5%*
8.6%	7.8%	8.7%	8.9%	7.0%	8.2%	7.5%	7.8%	8.7%	9.3%	*9.0%*	*9.0%*	Return on Com Equity	*9.5%*
.6%	1.3%	1.8%	2.0%	.1%	2.1%	1.0%	1.4%	2.4%	3.0%	*3.0%*	*3.0%*	Retained to Com Eq	*3.5%*
94%	84%	79%	78%	98%	75%	87%	83%	73%	67%	*67%*	*65%*	All Div'ds to Net Prof	*63%*

CURRENT POSITION ($MILL.)	2012	2013	12/31/14
Cash Assets	3.0	4.8	2.7
Other	21.6	21.0	20.2
Current Assets	24.6	25.8	22.9
Accts Payable	3.8	6.3	6.4
Debt Due	11.1	33.8	24.9
Other	41.1	12.6	12.6
Current Liab.	56.0	52.7	43.9
Fix. Chg. Cov.	554%	697%	695%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '18-'20
Revenues	1.5%	1.0%	*6.5%*
"Cash Flow"	3.0%	1.5%	*5.5%*
Earnings	3.5%	1.5%	*5.0%*
Dividends	1.5%	1.5%	*2.0%*
Book Value	4.5%	3.0%	*2.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2012	23.5	27.4	32.4	27.1	110.4
2013	27.0	29.1	31.3	27.4	114.8
2014	27.1	29.2	32.7	28.1	117.1
2015	*28.0*	*30.0*	*33.0*	*29.0*	*120*
2016	*29.0*	*31.0*	*35.0*	*30.0*	*125*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2012	.11	.23	.38	.17	.90
2013	.20	.28	.36	.19	1.03
2014	.20	.29	.42	.22	1.13
2015	*.21*	*.31*	*.43*	*.20*	*1.15*
2016	*.22*	*.32*	*.45*	*.21*	*1.20*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.183	.183	.183	.185	.73
2012	.185	.185	.185	.1875	.74
2013	.1875	.1875	.1875	.19	.75
2014	.19	.19	.19	.1925	.76
2015	.1925				

BUSINESS: Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey, Delaware, and Pennsylvania. It also operates water and wastewater systems under contract on behalf of municipal and private clients in NJ and DE. Its Middlesex System provides water services to 60,000 retail customers, primarily in Middlesex County, New Jersey. In 2014, the Middlesex System accounted for 60% of operating revenues. At 12/31/14, the company had 282 employees. Incorporated: NJ. President, CEO, and Chairman: Dennis W. Doll. Officers & directors own 3.5% of the common stock; BlackRock Institutional Trust Co., 6.6% (4/15 proxy). Add.: 1500 Ronson Road, Iselin, NJ 08830. Tel.: 732-634-1500. Internet: www.middlesexwater.com.

Middlesex Water had a surprisingly good 2014. For the second straight year, the company was able to post a double-digit gain in earnings per share. This was impressive considering that the utility is still in recovery mode following the 2013 loss of two major customers — a Hess refinery and the borough of Sayreville.

Bottom-line gains should moderate. The rate relief that was granted in New Jersey and Delaware will not have as positive an impact on profits as was the case last year. On the positive side, an agreement to distribute water at the Dover Air Force Base (a major military installation) should provide a consistent source of revenues. Overall, we expect Middlesex's 2015 share net to barely rise, from $1.13 to $1.15 in 2015. Next year will probably be better, as we think per-share earnings can increase 4%, to $1.20.

We are not expecting Middlesex to change its remarkably consistent dividend policy through 2016. Since 2004, the utility has raised the payout by exactly $0.01 a share each and every year. With a dividend growth rate of 1.5% over both the past five- and 10-year periods, the company has lagged the industry mean by a substantial margin. When this tradition started, the dividend to net profits percentage was relatively high, meaning there was little room for increases. This figure fell to 57% in 2014, so Middlesex appears to have the flexibility to distribute a greater share of profits to shareholders.

The balance sheet may not be big, but it is strong. At the end of last year, Middlesex's equity-to-total capital ratio was close to 59%, the second highest in the industry. And, while this metric will most likely decline as debt is added to help fund the upgrading of the pipeline network, the utility's finances should remain very sound by late decade.

Middlesex stock has the highest yield of any member in the water industry. At 3.4%, the equity has a payout that is almost 80 basis points above the group average. Indeed, it is the only one that has a yield above 3%. Basically, investors are demanding a premium to own shares in this company. Despite the generous current income, the stock's potential returns through 2018-2020 are still subpar.

James A. Flood *April 17, 2015*

(A) Diluted earnings. May not sum due to rounding. Next earnings report due mid-May.
(B) Dividends historically paid in mid-Feb., May, Aug., and November.■ Div'd reinvestment plan available.
(C) In millions, adjusted for splits.

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	40
Earnings Predictability	80

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SJW CORP. NYSE-SJW

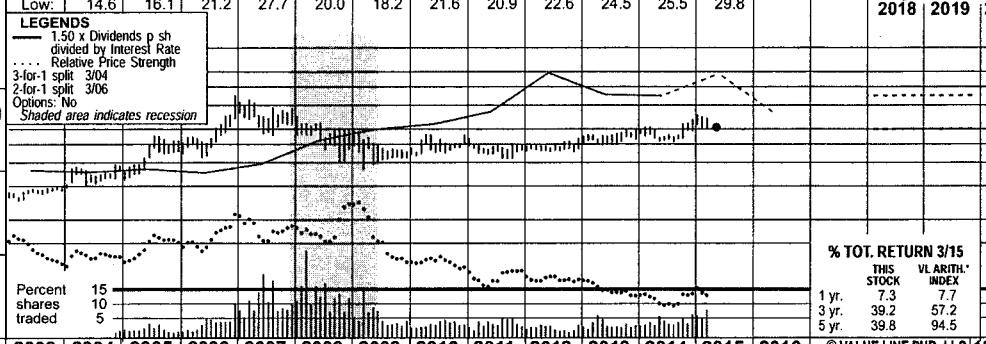
RECENT PRICE **30.62** | P/E RATIO **24.3** (Trailing: 12.1 / Median: 24.0) | RELATIVE P/E RATIO **1.26** | DIV'D YLD **2.6%** | VALUE LINE

TIMELINESS 4 Lowered 12/19/14
SAFETY 3 New 4/22/11
TECHNICAL 2 Raised 3/27/15
BETA .80 (1.00 = Market)

High:	19.6	27.8	45.3	43.0	35.1	30.4	28.2	26.8	26.9	30.1	33.7	35.7					
Low:	14.6	16.1	21.2	27.7	20.0	18.2	21.6	20.9	22.6	24.5	25.5	29.8					

Target Price Range 2018 | 2019 | 2020

LEGENDS
— 1.50 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
3-for-1 split 3/04
2-for-1 split 3/06
Options: No
Shaded area indicates recession



2018-20 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	45	(+45%)	12%
Low	30	(Nil)	2%

Insider Decisions

	M	J	J	A	S	O	N	D	J
to Buy	1	1	0	1	1	0	0	1	0
Options	0	0	0	0	0	0	1	0	0
to Sell	0	0	0	0	1	0	1	0	0

Institutional Decisions

	2Q2014	3Q2014	4Q2014
to Buy	45	38	49
to Sell	40	45	47
Hld's(000)	10965	10784	10867

Percent shares traded 15 10 5

% TOT. RETURN 3/15

	THIS STOCK	VL ARITH.* INDEX
1 yr.	7.3	7.7
3 yr.	39.2	57.2
5 yr.	39.8	94.5

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
6.40	6.74	7.45	7.97	8.20	9.14	9.86	10.35	11.25	12.12	11.68	11.62	12.85	14.01	13.73	15.76	*14.15*	*14.05*	Revenues per sh	*17.60*
1.43	1.23	1.49	1.55	1.75	1.89	2.21	2.38	2.30	2.44	2.21	2.38	2.80	2.97	2.90	*4.50*	*3.45*	*3.55*	"Cash Flow" per sh	*3.90*
.87	.58	.77	.78	.91	.87	1.12	1.19	1.04	1.08	.81	.84	1.11	1.18	1.12	2.54	*1.35*	*1.40*	Earnings per sh A	*1.75*
.40	.41	.43	.46	.49	.51	.53	.57	.61	.65	.66	.68	.69	.71	.73	.75	*.78*	*.81*	Div'd Decl'd per sh B■	*1.05*
1.77	1.89	2.63	2.06	3.41	2.31	2.83	3.87	6.62	3.79	3.17	5.65	3.75	5.67	4.68	*5.00*	*5.00*	*4.95*	Cap'l Spending per sh	*4.90*
7.88	7.90	8.17	8.40	9.11	10.11	10.72	12.48	12.90	13.99	13.66	13.75	14.20	14.71	15.92	17.75	*18.30*	*19.05*	Book Value per sh	*21.30*
18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.28	18.36	18.18	18.50	18.55	18.59	18.67	20.17	20.29	*20.50*	*21.00*	Common Shs Outst'g C	*23.00*
15.5	33.1	18.5	17.3	15.4	19.6	19.7	23.5	33.4	26.2	28.7	29.1	21.2	20.4	24.3	11.0	*Bold figures are*		Avg Ann'l P/E Ratio	*22.0*
.88	2.15	.95	.94	.88	1.04	1.05	1.27	1.77	1.58	1.91	1.85	1.33	1.30	1.37	.58	*Value Line*		Relative P/E Ratio	*1.40*
3.0%	2.1%	3.0%	3.4%	3.5%	3.0%	2.4%	2.0%	1.7%	2.3%	2.8%	2.8%	2.9%	3.0%	2.7%	2.7%	*estimates*		Avg Ann'l Div'd Yield	*2.8%*

CAPITAL STRUCTURE as of 12/31/14
Total Debt $398.2 mill. **Due in 5 Yrs** $21.2 mill.
LT Debt $384.4 mill. **LT Interest** $18.1 mill.
(Total interest coverage: 2.9x) (52% of Cap'l)

Leases, Uncapitalized: Annual rentals $5.5 mill.

Pension Assets-12/14 $91.4 mill. **Oblig.** $128.7 mill.

Pfd Stock None.

Common Stock 20,336,409 shs. as of 2/13/15

MARKET CAP: $625 million (Small Cap)

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		18-20
180.1	189.2	206.6	220.3	216.1	215.6	239.0	261.5	276.9	319.7	*290*	*295*	Revenues ($mill)	*405*
20.7	22.2	19.3	20.2	15.2	15.8	20.9	22.3	23.5	51.8	*27.5*	*29.0*	Net Profit ($mill)	*40.0*
41.6%	40.8%	39.4%	39.5%	40.4%	38.8%	41.1%	41.1%	38.7%	*32.5%*	*37.0%*	*36.0%*	Income Tax Rate	*38.0%*
1.6%	2.1%	2.7%	2.3%	2.0%	--	--	--	2.0%	*1.0%*	*1.0%*	*1.0%*	AFUDC % to Net Profit	*1.5%*
42.6%	41.8%	47.7%	46.0%	49.4%	53.7%	56.6%	55.0%	51.1%	51.6%	*52.5%*	*52.5%*	Long-Term Debt Ratio	*53.5%*
57.4%	58.2%	52.3%	54.0%	50.6%	46.3%	43.4%	45.0%	48.9%	48.4%	*47.5%*	*47.5%*	Common Equity Ratio	*46.5%*
341.2	391.8	453.2	470.9	499.6	550.7	607.9	610.2	656.2	744.6	*790*	*845*	Total Capital ($mill)	*1025*
484.8	541.7	645.5	684.2	718.5	785.5	756.2	831.6	898.7	963.0	*1010*	*1065*	Net Plant ($mill)	*1200*
7.6%	7.0%	5.7%	5.8%	4.4%	4.3%	4.9%	5.0%	5.0%	8.3%	*5.0%*	*5.0%*	Return on Total Cap'l	*5.5%*
10.6%	9.7%	8.2%	8.0%	6.0%	6.2%	7.9%	8.1%	7.3%	14.4%	*7.5%*	*7.5%*	Return on Shr. Equity	*8.0%*
10.6%	9.7%	8.2%	8.0%	6.0%	6.2%	7.9%	8.1%	7.3%	14.4%	*7.5%*	*7.5%*	Return on Com Equity	*8.0%*
5.6%	5.2%	3.5%	3.3%	1.2%	1.2%	3.1%	3.3%	2.8%	10.1%	*3.0%*	*3.0%*	Retained to Com Eq	*3.5%*
47%	46%	57%	59%	80%	80%	61%	59%	62%	28%	*58%*	*58%*	All Div'ds to Net Prof	*59%*

CURRENT POSITION ($MILL.)	2012	2013	12/31/14
Cash Assets	2.5	2.3	2.4
Other	40.4	37.4	65.7
Current Assets	42.9	39.7	68.1
Accts Payable	8.5	12.6	7.0
Debt Due	20.7	23.0	13.8
Other	19.9	23.6	23.9
Current Liab.	49.1	59.2	44.7
Fix. Chg. Cov.	317%	268%	270%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '18-'20
Revenues	5.5%	4.0%	*4.0%*
"Cash Flow"	6.0%	4.0%	*4.5%*
Earnings	3.5%	.5%	*6.5%*
Dividends	4.5%	3.5%	*5.5%*
Book Value	5.5%	2.5%	*5.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2012	51.1	65.6	82.4	62.4	261.5
2013	50.1	74.2	85.2	67.4	276.9
2014	54.6	70.4	125.4	69.3	319.7
2015	*56.0*	*73.0*	*89.0*	*72.0*	*290*
2016	*57.0*	*74.0*	*90.0*	*74.0*	*295*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2012	.06	.28	.53	.31	1.18
2013	.07	.37	.44	.24	1.12
2014	.04	.34	1.88	.28	2.54
2015	*.05*	*.40*	*.53*	*.37*	*1.35*
2016	*.05*	*.40*	*.57*	*.38*	*1.40*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.173	.173	.173	.173	.69
2012	.1775	.1775	.1775	.1775	.71
2013	.1825	.1825	.1825	.1825	.73
2014	.1875	.1875	.1875	.1875	.75
2015	.1950				

BUSINESS: SJW Corporation engages in the production, purchase, storage, purification, distribution, and retail sale of water. It provides water service to approximately 229,000 connections that serve a population of approximately one million people in the San Jose area and 12,000 connections that serve approximately 36,000 residents in a service area in the region between San Antonio and Austin, Texas. The company offers nonregulated water-related services. Also owns and operates commercial real estate investments. Has about 395 employees. Officers & directors (including Nancy O. Moss) own 27.9% of outstanding shares. Chrm.: Charles J. Toeniskoetter. Inc.: CA. Address: 110 W. Taylor Street, San Jose, CA 95110. Tel.: (408) 279-7800. Int: www.sjwater.com.

SJW's main operating service area is in the midst of an historic drought. The vast majority of the utility's revenues are derived from its water operations in the thriving San Jose area of California. The lack of rain and snow in the mountains has led to the state placing severe restrictions on water usage for conservation purposes. This should result in a steep decline in demand for water. To date, regulators have worked with water utilities using a mechanism know as "decoupling." Basically, this process doesn't meaningfully penalize utilities for encouraging residents to reduce consumption.

SJW's earnings have been skewed. In 2014, the company's profits more than doubled due to a one-time event. The utility received a large payment in the third quarter for past expenses that it was forced to absorb. Since the funds were received as compensation for normal business expenses, we did not classify it as a nonrecurring event.

SJW's bottom line should post decent gains over the next two years. We think that the company's share net can reach $1.35 in 2015. If 2014 had been a normal year, the year-over-year comparison would have been favorable. Next year's per-share earnings will probably only show a modest $0.05-a-share increase to $1.40, however. During 2015 and 2016, opposite forces will be at work pulling the utility's profits in different directions. On the positive side, SJW will be earning a return on the funds spent modernizing its pipeline infrastructure. Conversely, margins may be restrained by the scarcity of surface water, which would force SJW to pay more to either extract more ground water or purchase it from other sources.

The recent dividend increase was adequate. Though the 4% hike was positive in that it was higher than the company's historical growth rate, we thought that there was room for a 5% raise. This would have put the company's growth rate more in line with the industry norm.

These shares are ranked to underperform the broader market averages in the year ahead. Moreover, total return potential over the next three- to five-year period is subpar, as well.

James A. Flood *April 17, 2015*

(A) Diluted earnings. Excludes nonrecurring losses : '03, $1.97; '04, $3.78; '05, $1.09; '06, $16.36; '08, $1.22; '10, $0.46. Next earnings report due mid-May. Quarterly earnings may not add due to rounding.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for stock splits.

Company's Financial Strength	B+
Stock's Price Stability	80
Price Growth Persistence	30
Earnings Predictability	70

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YORK WATER NDQ-YORW

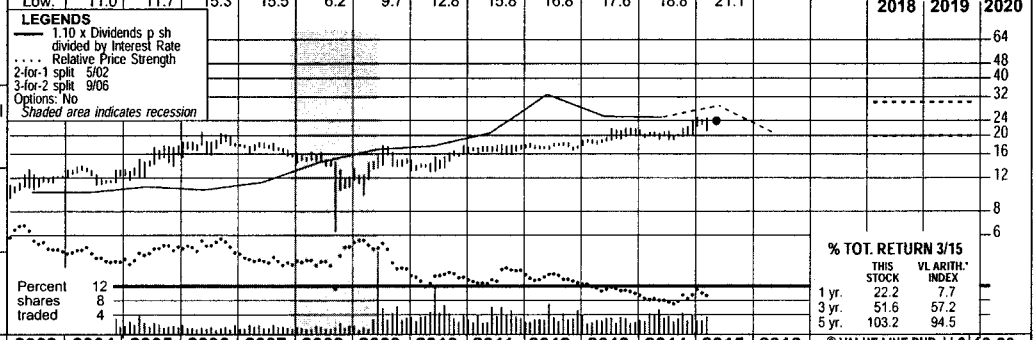
RECENT PRICE **24.01** | P/E RATIO **24.5** (Trailing: 27.0 / Median: 25.0) | RELATIVE P/E RATIO **1.27** | DIV'D YLD **2.5%** | VALUE LINE

TIMELINESS 3 Raised 3/27/15
SAFETY 2 New 7/19/13
TECHNICAL 2 Lowered 4/17/15
BETA .70 (1.00 = Market)

High:	14.0	17.9	21.0	18.5	16.5	18.0	18.0	18.1	18.5	22.0	24.3	25.0
Low:	11.0	11.7	15.3	15.5	6.2	9.7	12.8	15.8	16.8	17.6	18.8	21.1

Target Price Range 2018 | 2019 | 2020

LEGENDS
— 1.10 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 5/02
3-for-2 split 9/06
Options: No
Shaded area indicates recession



2018-20 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	30	(+25%)	8%
Low	20	(-15%)	-1%

Insider Decisions

	M	J	J	A	S	O	N	D	J
to Buy	1	0	4	2	1	4	0	0	4
Options	0	0	0	0	0	0	0	0	0
to Sell	0	1	0	0	0	0	0	0	0

Institutional Decisions

	2Q2014	3Q2014	4Q2014
to Buy	29	30	32
to Sell	28	30	24
Hld's(000)	3603	3656	3767

Percent shares traded 12 8 4

% TOT. RETURN 3/15

	THIS STOCK	VL ARITH.* INDEX
1 yr.	22.2	7.7
3 yr.	51.6	57.2
5 yr.	103.2	94.5

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
--	--	2.05	2.05	2.17	2.18	2.58	2.56	2.79	2.89	2.95	3.07	3.18	3.21	3.27	3.58	*3.85*	*4.00*	Revenues per sh	*4.75*
--	--	.59	.57	.65	.65	.79	.77	.86	.88	.95	1.07	1.09	1.12	1.19	*1.35*	*1.50*	*1.55*	"Cash Flow" per sh	*1.75*
--	--	.43	.40	.47	.49	.56	.58	.57	.57	.64	.71	.71	.72	.75	.89	*.95*	*1.00*	Earnings per sh A	*1.15*
--	--	.34	.35	.37	.39	.42	.45	.48	.49	.51	.52	.53	.54	.55	.57	*.60*	*.63*	Div'd Decl'd per sh B	*.79*
--	--	.75	.66	1.07	2.50	1.69	1.85	1.69	2.17	1.18	.83	.74	.94	.76	1.10	*1.10*	*1.20*	Cap'l Spending per sh	*1.15*
--	--	3.79	3.90	4.06	4.65	4.85	5.84	5.97	6.14	6.92	7.19	7.45	7.73	7.98	8.15	*8.15*	*8.65*	Book Value per sh	*9.60*
--	--	9.46	9.55	9.63	10.33	10.40	11.20	11.27	11.37	12.56	12.69	12.79	12.92	12.98	12.83	*12.50*	*12.50*	Common Shs Outst'g C	*12.00*
--	--	17.8	26.9	24.5	25.7	26.3	31.2	30.3	24.6	21.9	20.7	23.9	24.4	26.3	23.6	*Bold figures are*		Avg Ann'l P/E Ratio	*22.5*
--	--	.91	1.47	1.40	1.36	1.40	1.68	1.61	1.48	1.46	1.32	1.50	1.55	1.48	1.24	*Value Line*		Relative P/E Ratio	*1.40*
--	--	4.4%	3.3%	3.2%	3.1%	2.9%	2.5%	2.8%	3.5%	3.6%	3.5%	3.1%	3.1%	2.8%	2.5%	*estimates*		Avg Ann'l Div'd Yield	*3.0%*

CAPITAL STRUCTURE as of 12/31/14
Total Debt $84.8 mill. **Due in 5 Yrs** $30.5 mill.
LT Debt $84.8 mill. **LT Interest** $5.1 mill.
(Total interest coverage: 4.0x)
(45% of Cap'l)
Pension Assets 12/14 $30.6 mill.
Oblig. $40.9 mill.

Pfd Stock None

Common Stock 12,837,661 shs.
as of 3/9/14

MARKET CAP: $300 million (Small Cap)

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		18-20
26.8	28.7	31.4	32.8	37.0	39.0	40.6	41.4	42.4	45.9	*48.0*	*50.0*	Revenues ($mill)	*57.0*
5.8	6.1	6.4	6.4	7.5	8.9	9.1	9.3	9.7	11.5	*12.0*	*12.5*	Net Profit ($mill)	*14.0*
36.7%	34.4%	36.5%	36.1%	37.9%	38.5%	35.3%	37.6%	37.6%	29.8%	*29.5%*	*29.5%*	Income Tax Rate	*36.5%*
--	7.2%	3.6%	10.1%	--	1.2%	1.1%	1.1%	.8%	1.3%	*1.5%*	*1.5%*	AFUDC % to Net Profit	*1.0%*
44.1%	48.3%	46.5%	54.5%	45.7%	48.3%	47.1%	46.0%	45.1%	44.8%	*47.5%*	*47.0%*	Long-Term Debt Ratio	*48.0%*
55.9%	51.7%	53.5%	45.5%	54.3%	51.7%	52.9%	54.0%	54.9%	55.2%	*52.5%*	*53.0%*	Common Equity Ratio	*52.0%*
90.3	126.5	125.7	153.4	160.1	176.4	180.2	184.8	188.4	189.4	*195*	*205*	Total Capital ($mill)	*220*
155.3	174.4	191.6	211.4	222.0	228.4	233.0	240.3	244.2	253.2	*260*	*265*	Net Plant ($mill)	*280*
8.4%	6.2%	6.7%	5.7%	6.2%	6.5%	6.4%	6.4%	6.5%	*7.4%*	*7.5%*	*7.5%*	Return on Total Cap'l	*8.0%*
11.6%	9.3%	9.5%	9.2%	8.6%	9.8%	9.5%	9.3%	9.3%	11.0%	*11.5%*	*11.5%*	Return on Shr. Equity	*12.0%*
11.6%	9.3%	9.5%	9.2%	8.6%	9.8%	9.5%	9.3%	9.3%	11.0%	*11.5%*	*11.5%*	Return on Com Equity	*12.0%*
3.0%	2.2%	1.7%	1.4%	1.9%	2.7%	2.5%	2.4%	2.4%	*4.0%*	*4.5%*	*4.5%*	Retained to Com Eq	*3.5%*
74%	77%	82%	85%	78%	72%	73%	74%	74%	64%	*63%*	*63%*	All Div'ds to Net Prof	*69%*

CURRENT POSITION ($MILL.)	2012	2013	12/31/14
Cash Assets	4.0	7.6	1.5
Accounts Receivable	6.4	3.8	4.0
Other	1.2	3.8	5.7
Current Assets	11.6	15.2	11.2
Accts Payable	1.1	1.8	1.6
Debt Due	.1	--	--
Other	4.3	6.0	4.3
Current Liab.	5.5	7.8	5.9
Fix. Chg. Cov.	414%	417%	417%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '18-'20
Revenues	4.5%	3.0%	*5.5%*
"Cash Flow"	6.5%	6.5%	*6.5%*
Earnings	5.5%	5.0%	*6.5%*
Dividends	4.5%	2.5%	*5.0%*
Book Value	7.0%	5.0%	*3.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2012	9.6	10.4	11.0	10.4	41.4
2013	10.1	10.7	10.9	10.7	42.4
2014	10.6	11.8	12.0	11.5	45.9
2015	*11.0*	*12.0*	*12.5*	*12.5*	*48.0*
2016	*11.5*	*12.5*	*13.0*	*13.0*	*50.0*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2012	.15	.17	.22	.18	.72
2013	.17	.18	.19	.21	.75
2014	.16	.22	.23	.28	.89
2015	*.19*	*.25*	*.26*	*.25*	*.95*
2016	*.20*	*.26*	*.28*	*.26*	*1.00*

Cal-endar	QUARTERLY DIVIDENDS PAID B Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.131	.131	.131	.131	.524
2012	.134	.134	.134	.134	.535
2013	.138	.138	.138	.138	.552
2014	.1431	.1431	.1431	.1431	.572
2015	.1495	.1495			

BUSINESS: The York Water Company is the oldest investor-owned regulated water utility in the United States. It has operated continuously since 1816. As of December 31, 2014, the company's average daily availability was 35.2 million gallons and its service territory had an estimated population of 190,000. Has more than 65,100 customers. Residential customers accounted for 63% of 2014 revenues; commercial and industrial (29%); other (8%). It also provides sewer billing services. Incorporated: PA. York had 106 full-time employees at 12/31/14. President/CEO: Jeffrey R. Hines. Officers/directors own 1.1% of the common stock (4/15 proxy). Address: 130 East Market Street York, Pennsylvania 17401. Telephone: (717) 845-3601. Internet: www.yorkwater.com.

York Water had a strong finish in 2014. Share earnings came in at $0.28, $0.04 above our fourth-quarter estimate, which was actually a few cents higher than the Wall Street consensus. For the full year, the company was able to post a robust 19% year-over-year increase in the bottom line.

Earnings growth should moderate, but remain solid. The December interim's gains were due to a combination of a lower tax rate, better cost controls, and higher tariffs being in effect. Although the rate relief will not have as large an impact on profits going forward, we still expect York to benefit from a reduced tax burden and a successful cost-containment program. All told, we expect earnings per share to rise 7% this year, to $0.95, and increase by a nickel in 2016, to $1.00.

Capital spending has picked up. As is the case with almost all of its peers, the company is in the process of repairing and modernizing an aging pipeline and wastewater infrastructure. Last year, construction expenditures rose a hefty 40% as management targeted more funds for this purpose. We believe that the budget will remain near this level through the end of the decade.

The balance sheet is strong enough to handle these expenses. At the end of 2014, York's equity-to-total capital ratio stood at 55%, much higher than the industry norm. And, even though we expect this metric to weaken, we estimate that it will still be a healthy 52% in three to five years.

York shares are expected to perform in line with the broader market averages in the year ahead. True, the company's earnings outlook is improving and the stock's yield is 50 basis points higher than the typical stock followed by *Value Line*. However, these positive attributes appear to be already incorporated into the price of the stock. Indeed, the equity's long-term potential returns are unattractive as it is already trading well within our projected 2018-2020 Target Price Range. Those investors seeking safety, current income, and well-defined earnings, as well as good dividend growth, can probably find a better selection in the water utility industry.

James A. Flood *April 17, 2015*

(A) Diluted earnings. Next earnings report due mid-May.
(B) Dividends historically paid in mid-January, April, July, and October.
(C) In millions, adjusted for splits.

Company's Financial Strength	B+
Stock's Price Stability	90
Price Growth Persistence	55
Earnings Predictability	100

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Exhibit TJB-COC-DT-2

Sahuarita Water Company, LLC
Comparative Risk Study
Computations of Operating Margin and Coefficient of Variation of Operating Margin

Line No.										
1										Co-efficient
2	Operating Income EBIT ($ in millions)								Std	of variation
3			2014	2013	2012	2011	2010	Average	Dev.	of Operating Income
4	Company	Symbol								
5	American States Water	AWR	119	119	111	95	73	103.40	19.62	0.1897
6	Aqua America	WTR	314	305	322	286	272	299.80	20.52	0.0685
7	California Water	CWT	109	93	93	90	85	94.00	9.00	0.0957
8	Connecticut Water	CTWS	25	22	20	16	14	19.40	4.45	0.2294
9	Middlesex	MSEX	34	31	28	24	27	28.80	3.83	0.1331
10	SJW Corp.	SJW	93	53	55	54	38	58.60	20.45	0.3490
11	York Water Company	YORW	22	21	21	20	20	20.80	0.84	0.0402
12										
13	Water Proxy Group									0.1579
14										
15	Sahuarita Water Company, LLC		0.74	0.76	0.97	0.71	0.10	0.66	0.33	0.4959
16										
17	**Risk relative to the average risk of the water utilities sample**									**3.14**
18										
19	Sales ($ in millions)		2014	2013	2012	2011	2010	Average		
20	Company	Symbol								
21	American States Water	AWR	466	472	467	419	399	445		
22	Aqua America	WTR	780	769	758	712	726	749		
23	California Water	CWT	598	584	560	502	460	541		
24	Connecticut Water	CTWS	94	91	84	69	66	81		
25	Middlesex	MSEX	117	115	110	102	103	109		
26	SJW Corp.	SJW	320	277	262	239	216	263		
27	York Water Company	YORW	46	42	41	41	39	42		
28										
29	Sahuarita Water Company, LLC		3.35	3.26	3.27	3.01	2.42	3.06		
30										Co-efficient
31	Operating Margin (%)								Std	of variation
32	Company	Symbol	2014	2013	2012	2011	2010	Average	Dev.	of Operating Margin
33	Amercian Water Works	AWK	25.54%	25.21%	23.77%	22.67%	18.30%	23.10%	0.03	0.1264
34	Aqua America	WTR	40.26%	39.66%	42.48%	40.17%	37.47%	40.01%	0.02	0.0447
35	California Water	CWT	18.23%	15.92%	16.61%	17.93%	18.48%	17.43%	0.01	0.0637
36	Connecticut Water	CTWS	26.60%	24.18%	23.81%	23.19%	21.21%	23.80%	0.02	0.0815
37	Middlesex	MSEX	29.06%	26.96%	25.45%	23.53%	26.21%	26.24%	0.02	0.0772
38	SJW Corp.	SJW	29.06%	19.13%	20.99%	22.59%	17.59%	21.88%	0.04	0.2029
39	York Water Company	YORW	47.83%	50.00%	51.22%	48.78%	51.28%	49.82%	0.02	0.0304
40										
41	Average Water Proxy Group							28.90%		0.0895
42										
43	Sahuarita Water Company, LLC		22.05%	23.42%	29.82%	23.54%	4.34%	20.63%	0.10	0.4649
44										
45	**Risk relative to the average risk of the water utilities sample**									**5.19**
46										
47										Co-efficient
48	Return on Equity (ROE)								Std	of variation
49			2014	2013	2012	2011	2010	Average	Dev.	of ROE
50	Company	Symbol								
51	American States Water	AWR	12.1%	12.7%	11.9%	10.3%	11.0%	11.6%	0.01	0.0818
52	Aqua America	WTR	12.9%	13.4%	11.0%	11.6%	10.6%	11.9%	0.01	0.1015
53	California Water	CWT	9.0%	9.0%	9.0%	8.0%	8.6%	8.7%	0.00	0.0502
54	Connecticut Water	CTWS	10.2%	9.3%	7.3%	8.3%	8.7%	8.8%	0.01	0.1239
55	Middlesex	MSEX	9.3%	8.7%	7.8%	7.5%	8.2%	8.3%	0.01	0.0865
56	SJW Corp.	SJW	14.4%	7.0%	8.1%	7.9%	6.2%	8.7%	0.03	0.3744
57	York Water Company	YORW	11.0%	9.4%	9.3%	9.5%	9.8%	9.8%	0.01	0.0711
58										
59	Water Proxy Group		11.3%	9.9%	9.2%	9.0%	9.0%	9.7%		0.1271
60										
61	Sahuarita Water Company, LLC		7.90%	7.26%	9.45%	6.67%	0.13%	6.28%	0.04	0.5719
62										
63	**Risk relative to the average risk of the water utilities sample**									**4.50**

Sahuarita Water Company, LLC
Comparative Risk Study
Beta Estimate Using Duff and Phelps Risk Study Portfolio Information

Line No.		Portfolio	Operating Margin	Portfolio	CV (Operating Margin)[1]	Portfolio	CV (ROE)[1]	
	A. Beta Estimates for Water Sample Group and Company							
1	Company	5	20.63%	5	46.49%	10	57.19%	
2	Water Proxy Group	2	28.90%	17	8.95%	23	12.71%	
			Portfolio Beta[2]		Portfolio Beta[3]		Portfolio Beta[3]	Average
3	Company		0.98		1.27		1.17	
4	Water Proxy Group		0.83		0.99		0.89	
5	Percentage Difference		18.1%		28.3%		31.5%	**25.9%**
	B. Assume percentage difference is the same for water utilities as companies in general							
6	Water Sample Group[5]		0.74		0.74		0.74	
7	Implied Beta for Company[6]		0.87		0.95		0.97	**0.93**

Notes:
[1] See Risk Study. CV stands for Coefficient of Variation,
[2] Source is Duff & Phelps 2105 Valuation Handbook, Risk Study, Exhibit D-1, Companies Ranked by Operating Margin.
[3] Source is Duff & Phelps 2105 Valuation Handbook, Risk Study, Exhibit D-2, Companies Ranked by CV (Operating Margin).
[5] Source is Schedule D-4.3.
[6] Calculated by multiplying (1+ percentage difference in risk study betas) times average beta for the water sample group.

Sahuarita Water Company, LLC
Comparative Risk Study
Traditional Capital Asset Pricing Model (CAPM) Using Implied Beta
To Find Additional Risk Premium

Line No.		Rf[1]	+	Implied beta[2]	x	RP_M		=	k	CAPM Results From Schedule D-4.11	Indicated Company Risk Premium
1	Historical Market Risk Premium CAPM	4.2%	+	0.93	x	7.00%	[3]	=	10.7%	9.4%	1.3%
2	Currrent Market Risk Premium CAPM	4.2%	+	0.93	x	9.25%	[4]	=	12.8%	11.0%	1.8%

Notes:
[1] Forecasts of long-term treasury yields. See Scehdule D-4.9.
[2] Implied Beta computed from Duff and Phelps 2015 Valuation Handbook Risk Study information. See page 1 of exhibit.
[3] Historical Market Risk Premium Duff & Phelps 2015 Valuation Handbook, Appendix 3, Long-Horizon ERP.
[4] See Schedule D-4.10

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
DOUG LITTLE - CHAIRMAN
BOB STUMP
BOB BURNS
TOM FORESE
ANDY TOBIN

IN THE MATTER OF THE APPLICATION OF SAHUARITA WATER COMPANY, LLC, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PROPERTY AND FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES.	DOCKET NO. W-03718A-15-0213

REBUTTAL TESTIMONY OF

THOMAS J. BOURASSA

COST OF CAPITAL

MARCH 11, 2016

EXHIBIT
A-2
ADMITTED
PENGAD 800-631-6989

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C. Comments on the Staff Testimony and ROE Recommendation 6

I. INTRODUCTION.

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive, Phoenix, Arizona 85029.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?

A. I am testifying on behalf of the applicant, Sahuarita Water Company, LLC. ("SWC" or the "Company").

Q. ARE YOU THE SAME THOMAS J. BOURASSA THAT FILED DIRECT TESTIMONY IN THIS DOCKET?

A. Yes, my Direct Testimony was presented in two volumes. My background information and qualifications are set forth in the rate base and revenue requirement volume of my Direct Testimony.

Q. DID YOU ALSO PREPARE REBUTTAL TESTIMONY ON THOSE ISSUES IN THIS DOCKET?

A. Yes, my Rebuttal Testimony on rate base, income statement, revenue requirement and rate design is being filed in a separate volume at the same time as this testimony. In this volume, I present my cost of capital Rebuttal Testimony. Also attached are two exhibits, which are discussed below.

II. SUMMARY OF REBUTTAL TESTIMONY AND THE PROPOSED COST OF CAPITAL FOR THE COMPANY.

A. Summary of Company's Rebuttal Recommendation.

Q. WHAT IS YOUR RECOMMENDED COST OF CAPITAL?

A. I recommend a return on equity (ROE") of 10.5 percent, the same as my recommendation in the Company's initial filing. My recommendation of 10.5 percent is above the mid-point of the range of my discounted cash flow (DCF), Risk Premium, and capital asset pricing model (CAPM) analyses of 10.0 percent for the publicly traded water utilities ("water proxy group"). My recommendation of 10.5 percent is also below the mid-point of the range of estimates for SWC of 11.1 percent – taking into account a downward financial risk adjustment of 40 basis points, and recognizing the Company's lower financial risk compared to the water proxy group, but also recognizing the higher risk in SWC compared to the water proxy group through an upward risk adjustment for SWC of 150 basis points.[1] I also recommend a capital structure consisting of 20.57 percent debt and 79.43 percent equity and a cost of debt of 4.2 percent. Based on these recommendations, the weighted average cost of capital ("WACC") is 9.2 percent.[2] Therefore, I recommend a return of at least 9.2 percent be applied to SWC's fair value rate base ("FVRB").

Q. HAVE YOU UPDATED YOUR COST OF CAPITAL ANALYSIS?

A. Yes, the results of my updated analysis for the water proxy group are somewhat lower than those in my Direct Testimony. The range of my rebuttal DCF, Risk Premium, and CAPM analyses for the water proxy group is from 9.6 percent to 10.4 percent with a mid-point of

[1] *See* Rebuttal COC Schedule D-4.1.
[2] See Rebuttal COC Schedule D-1.

10.0 percent.[3] This compares to my direct filing where the range was from 9.8 percent to 10.4 percent with midpoint estimate of 10.1 percent.[4]

The results of my updated analysis for SWC are higher than those in my direct testimony. The range of my rebuttal DCF, Risk Premium, and CAPM analyses for SWC is 10.7 percent to 11.5 percent with a mid-point of 11.1 percent.[5] My direct DCF, DCF, Risk Premium, and CAPM analyses for SWC showed the indicated cost of equity in the range of 10.4 percent to 11.0 percent with a midpoint of 10.7 percent.[6]

After considering the differences in business and financial risk between SWC and the publicly traded water utilities, the cost of equity for SWC falls in the range of 10.7 percent to 11.5 percent with a mid-point of 11.1 percent. However, despite a somewhat higher indicated cost of equity for SWC, I continue to recommend a ROE of 10.5 percent for SWC, which is the same as I proposed in my Direct Testimony, to avoid creating additional issues in this case.

Q. WHAT CHANGE HAVE YOU MADE TO YOUR RECOMMEND RISK PREMIUM FOR SWC?

A. Instead of recommending a 100 basis point premium to reflect the additional risks of an investment in SWC compared to the water proxy group, I now recommend 150 basis points which is at the mid-point of my risk premium estimates based upon my risk study. My risk study was shown in my direct Exhibit TJB-COC-DT-2. I provide an updated risk study in rebuttal Exhibit TJB-COC-RT-2.

Q. WHY HAVE YOU CHANGED YOUR RISK PREMIUM RECOMMENDATION?

A. In my direct analysis, I was overly conservative by recommending a risk premium that was 100 basis points below the indicated risk premium from my study, which indicated a 140

[3] *See* Rebuttal COC Schedule D-4.1.
[4] *See* Direct COC Schedule D-4.1.
[5] *See* Rebuttal COC Schedule D-4.1.
[6] *See* Direct COC Schedule D-4.1.

to 160 basis point risk premium. I no longer believe that the risk premium should be only 100 basis points given the now indisputably unique nature of regulation in Arizona relative to the other states in which the sample companies operate, and the risks such regulation brings.

Q. WHAT DO YOU MEAN BY THE "NOW" INDISPUTABLY UNIQUE NATURE OF ARIZONA REGULATION?

A. On or about August 18, 2015, the Arizona court of appeals issued its decision in *RUCO v. Arizona Corporation Commission* ("SIB Decision"). In the SIB Decision, the court declared the recently approved SIB mechanisms to be contrary to Arizona law.[7] The court further concluded that a fair value finding cannot be made without considering all of the other elements of ratemaking like revenues and expenses.[8] The court's written opinion repeatedly recognizes the unique nature of Arizona's legal framework for utility regulation, and makes it clear that notwithstanding the demands of the public interest, the law trumps all. As the court put it:

> We recognize the Commission's legitimate desire to "initiate innovative procedures in an attempt to deal promptly and equitably with increasingly complex regulatory matters," and its corresponding goal of avoiding "a constant series of extended rate hearings [that] are not necessary to protect the public interest." (Citation omitted). But the question before us is not whether the SIB mechanism represents prudent public policy. Our focus is on the propriety of that mechanism given the unique and express provisions of our state constitution.[9]

Even our state courts recognize the unique regulatory risk utilities in Arizona face.

[7] SIB Decision at 18 ¶¶ 49-50.
[8] SIB Decision at 14-15 ¶¶ 40-42.
[9] SIB Decision at 17 ¶ 48.

Q. BUT MR. BOURASSA, YOU ARE NOT AN ATTORNEY. HOW CAN YOU OFFER YOUR OPINION ON THIS LEGAL DECISION?

A. I do not have to be an attorney to read the opinion and analyze its impact on risk. More importantly, I have nearly 20 years of experience testifying before multiple PUCs as an expert on ratemaking, including cost of capital analysis. In that capacity I believe I am unquestionably qualified to evaluate the court's opinion and assess the impacts on the rate setting process. Indeed, the court's opinion echoes what I have claimed for years, which is that the regulatory risks Arizona utilities face are higher. Unfortunately, the court also limits the tools available to the Commission to address regulatory risks. All of this has a direct bearing on the analyses I conduct when trying to determine the reasonable and appropriate cost of capital and return on equity for water utilities like SWC.

Q. DON'T ALL ARIZONA UTILITIES FACE THE SAME REGULATORY RISKS?

A. I don't think the *Bluefield* and *Hope* comparable risk standard (discussed below), would allow for such a narrow consideration, but that's not the point. The point is that we use a group of sample publicly-traded utility companies to determine the returns on equity for water and sewer companies in rates cases before the Commission. Those utilities operate in other states – states that do not face the limitations of Arizona's "unique" constitution. Regulation along with other factors (including size, limited service territory, and smaller customer base) impact an Arizona utility's ability to earn its authorized return and cause greater fluctuations in earnings.[10] This is risk that investors do not ignore. Therefore, we have to take those differences into account in determining equity returns.

Unlike Staff, I have actually quantified the relative risk differences between the water proxy group and SWC, using commonly accepted metrics that valuation experts would (and should) consider in determining the cost of capital.[11]

[10] See Direct Testimony of Thomas J. Bourassa ("Bourassa Dt.") at 9 and 20.
[11] Bourassa Dt. at 20-23.

B. Summary of the Staff Recommendations.

Q. PLEASE SUMMARIZE THE RECOMMENDATIONS OF STAFF FOR THE COST OF EQUITY AND THE RATE OF RETURN ON FAIR VALUE RATE BASE.

A. Staff is recommending a capital structure consisting of 20.57 percent debt and 79.43 percent equity.[12] Staff determined a cost of equity of 8.6 percent based on the average cost of equity produced by its DCF and CAPM models but is recommending a 9.5 percent ROE.[13] Staff also determined the cost of debt to be 4.2 percent.[14] Based on the foregoing capital structure, cost of equity and cost of debt, Staff recommends weighted cost of capital ("WACC") is 8.41 percent.[15]

Staff used a sample of seven publicly traded water utilities; all of which are the same as those I used in my analysis.[16] But Staff did not consider financial risk, firm size, or firm-specific risks in its analysis.

C. Comments on the Staff Testimony and ROE Recommendation.

Q. BEFORE ADDRESSING STAFF'S COST OF CAPITAL TESTIMONY, DO YOU HAVE SOME ITEMS TO CORRECT FROM STAFF'S TESTIMONY?

A. Yes, I have a few "housekeeping" comments. On page 2 of Ms. Brown's testimony she states that the Company has 16,000 customers. This is incorrect, as the Company only has about 5,500 customers. On page 6, Staff states that it uses six publicly traded utility companies in its proxy group and on page 16 Staff lists six companies. However, Staff actually uses seven as shown on Schedules CSB-4, CSB-5, CSB-6, CSB-7 and CSB-9. On page 36 of Ms. Brown's testimony, she refers to the Company as Liberty Sahuarita Sewer.

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[12] Direct Testimony of Crystal S. Brown ("Brown Dt.") at 5-6.
[13] *Id.* at 5.
[14] *Id.* at 6.
[15] *Id.*
[16] *Id.* *See also* Staff Schedule CSB-4.

The Company is not associated in any way with Liberty Utilities Corp. or any other entity with the name "Liberty". Finally, on page 43 of Ms. Brown's testimony, she provides a computation of a WACC in Table 3 of 7.69 percent which does not match her recommendation on the same page of 8.41 percent.

Q. WITH THOSE ITEMS ADDRESSED, PLEASE DESCRIBE YOUR PRIMARY CRITICISMS OF STAFF'S COST OF CAPITAL ANALYIS. .

A. Ms. Brown asserts her cost of capital analysis is more straightforward, conceptually sound, and simpler to understand.[17] I disagree. Let's start with Staff's assertion that is models are straightforward. I would not characterize the DCF and CAPM as straightforward or easy to understand; after all, they have many assumptions that do not always hold true and the process of determining reasonable inputs is not easy. One cannot simply mechanically apply these models and accept the indicated results as Staff appears to have done here, and has done in the past.. That said, apart from the differences in the inputs, I employ the same basic DCF and CAPM models as does Staff. So the Company's approach is not any less straightforward than Staff's in that respect.

Q. DOES STAFF'S COST OF CAPITAL ANALYSIS IGNORE THE LIMITATIONS OF THE MODELS THEY EMPLOY?

A. Yes, Staff's witness Crystal Brown makes some broad assertions about the models she uses to determine Staff's recommendations. . First, with all due respect, Ms. Brown has not, until recently, been a cost of capital witness and, therefore, lacks the expertise and experience to make these sweeping assertions. Second, Staff does not discuss and, therefore, does not recognize, the limitations imposed by the assumptions underlying the DCF and CAPM. For example, the DCF model assumes that earnings, dividends, book

[17] Brown Dt. at 73.

value, and market price, all grow at this same rate.[18] Also, Staff's analysis gives less weight to the best estimate of growth for the DCF.[19] Further, Staff makes no accommodation and/or consideration of current capital market conditions to recognize that the DCF model may, as a result, understate the true expected cost of equity at this time.[20]

Likewise, Staff also uses spot interest rates for its risk-free rate in its CAPM when the cost of capital estimation in a ratemaking setting is a forward looking process. As such, models to determine the cost of capital, like the CAPM, are prospective in nature, which require inputs such as forecasted interest rates.[21] I can go on, but in the end, the failure to recognize and account for the limitations in the use of these complex models undermines Ms. Brown's bold assertion that Staff's cost of capital analysis is always conceptually sound.

Q. DOES STAFF'S ANALYSIS PROVIDE SWC WITH A RETURN THAT IS ON PAR WITH INVESTMENTS OF COMPARABLE RISK?

A. No, not in my professional opinion based on my experience. Indeed, Staff's approach is only simpler in the sense that Staff ignores the necessary work and analysis required by *Hope* and *Bluefield* to provide SWC with a return that is commensurate with returns on investments of comparable risk.[22] Obviously, SWC is more risky than the large publicly traded water utilities. A great deal of my Direct Testimony was devoted to this explaining why this is the case.[23] Further, I prepared a risk study to specifically quantify this risk difference, which happens to be consistent with the empirical financial data and with published studies.[24]

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[18] Bourassa COC Dt. at 28.
[19] Bourassa COC Dt. at 31 – 32.
[20] Bourassa COC Dt. at 28-29.
[21] Morin, p. 172.
[22] Bourassa COC Dt. at 12 – 13.
[23] Bourassa COC Dt. at 13-24; 41 – 43.
[24] *See* Exhibit TJB-COC-RB2 and Schedule D-4.15.

Q. DO YOU BELIEVE STAFF'S ANALYSIS RESULTS IN A REASONABLE RANGE OF COST OF EQUITY FOR SWC?

A. No. At the end of the day, I believe the unreasonableness of Staff's cost of equity analysis which has a midpoint of 8.6 percent and her cost of equity recommendation of 9.5 percent speak for themselves. An equity return of 8.6 percent as indicated by her models is not even within the realm of reasonableness as measured by currently authorized returns and projected equity returns; both of which are available to investors to consider and both of which are considerably higher than Staff's cost of equity analysis and Staff's return of equity recommendation.

Q. HOW DOES STAFF'S RECOMMENDATION COMPARE TO THE ACTUAL AND FORECAST COMMON EQUITY RETURNS AND CURRENTLY AUTHORIZED RETURNS?

A. *Value Line*, a reputable publication used by the Company and Staff cost of capital witness, publishes forecasts of returns on common equity for larger water publicly traded companies. These water utilities are included in my sample group and Staff's sample group. *AUS Utility Reports* also provides the currently authorized ROE for these utilities. The reported currently authorized returns as the projected ROEs are as follows:

		Currently	Value Line[2]			
Company	Symbol	Authorized[1]	2014 Actual	2015 Projected	2016 Projected	2018-20 Projected
American States Water	AWR	9.43%	12.0%	12.5%	12.5%	14.5%
Aqua America	WTR	9.79%	12.9%	13.0%	13.5%	14.0%
California Water	CWT	9.43%	9.1%	7.5%	9.0%	9.5%
Connecticut Water	CTWS	9.63%	10.2%	10.5%	10.0%	9.5%
Middlesex	MSEX	9.75%	9.3%	10.0%	10.0%	9.5%
SJW Corp.	SJW	9.43%	14.4%	7.0%	8.0%	7.5%
York Water Company	YORW	NM	11.0%	11.0%	12.0%	12.0%
Average		9.6%	11.3%	10.2%	10.7%	10.9%

[1] AUS Utility Reports (January 2016)

[2] Value Line Rating and Reports (January 15, 2016)

The Staff cost of equity analysis mid-point result of 8.6 percent is well below *all* of the returns listed above.[25] The Staff ROE recommendation of 9.5 percent is below that of the currently authorized returns and well below *all* of the actual and projected returns listed above.

Q. WHAT CONCLUSIONS CAN BE DRAWN FROM THE RETURN DATA YOU JUST PRESENTED, MR. BOURASSA?

A. For one, they are all much higher than the Staff returns produced by their models, before any consideration of financial or other risks. For another, since we are applying a return to a book value rate base, book equity returns have relevance. If we are to meet the comparable earnings standards set forth in *Hope* and *Bluefield,* then a comparison to book returns is an essential element. These utilities' rates will be in effect during approximately the same time period as SWC's new rates. Yet, if the Staff recommendation is adopted, SWC will be allowed to earn much less. In short, SWC will not even be given the opportunity to earn a return commensurate with investments of comparable risk.

Something is very wrong with the results of Staff cost of capital analysis and its recommendation. Investors would be better off investing in the publicly traded utility companies than investing in SWC.[26] In fact, an investor would be hard-pressed to invest in SWC under Staff's analysis. Putting aside the additional risks of investing in SWC, only the Company's cost of capital analysis comes close to reflecting what the public traded companies are expected to earn. At the end of the day, when all the expert and lawyer wrangling over inputs and assumptions is done, the results should still pass the simple, common-sense "smell test" and the Staff recommendation doesn't pass that test.

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[25] The Staff models produces an indicated ROE of 8.6 percent which is 100 basis points below the currently authorized returns, 270 basis points below the actual equity returns for 2014, 210 basis points below the 2016 projected equity returns, and 230 basis points below the projected returns for 2018-2010. Even the Staff recommended return of 9.5 percent is 180 basis points below the actual equity returns for 2014, 120 basis points below the 2016 projected equity returns, and 140 basis points below the projected returns for 2018-2010.

[26] *Value Line* reports the total 3-year and 5-year market returns for the water proxy group are 14.15% and 11.66% respectively.

Q. MS. BROWN TESTIFIES (ON PAGES 37 AND 40) THAT YOUR FINANCIAL RISK ADJUSTMENT AND YOUR RISK PREMIUM FOR THE COMPANY IS ARBITRARY. PLEASE COMMENT.

A. Again, Ms. Brown's inexperience and lack of expertise on this aspect of ratemaking is impacting her testimony. The financial risk adjustment I recommend is anything but arbitrary. In fact, Staff has used the Hamada method in past cases to adjust for financial risk, the Commission has adopted it many times on Staff's recommendation, and never do I recall Staff referring to the Hamada method as arbitrary.[27] The Hamada method is an accepted method for quantifying the differences in financial risk between firms with different levels of leverage (the amount of debt in capital structure). Professor Hamada developed his methodology from an extension of the CAPM using market values of firms.[28] Dr. Morin describes the same methodology in his textbook, *New Regulatory Finance*.[29]

With regard to my risk premium adjustment, I have not only identified the risk differences between SWC and the water proxy group, but quantified them as well. I did not pick a number out of thin air. My recommended risk premium adjustment is supported by facts and a detailed analysis. I not only describe all the reasons for the risk differences, but I also quantified the relative risks and computed a specific range of risk adjustments that would be appropriate, based upon market data.[30] In the end, the results of my detailed risk study are entirely consistent with the numerous reasons why the SWC is more risky and consistent with the empirical market financial data. My work hardly qualifies as arbitrary.

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[27] *See Liberty Utilities (Bella Vista Water) Corp. (formerly Bella Vista Water Company),et al.,* W-02465A-09-0411, W-20453A-09-0412, and W-20454A-09-0413; *Liberty Litchfield Park (formerly Litchfield Park Service Company),* Docket Nos. SW- 01428A-09-0103, W-01427A-09-0104, W-01427A-09-0116, and W-01427A-09-0120 (consolidated); *Liberty Rio Rico (formerly Rio Rico Utilities, Inc.),* Docket No. WS- 02676A- 09-0257.

[28] "Effects of the Firm's Capital structure on Systematic Risk of Common Stock," *Journal of Finance*, Vol. 27 No. 2 (May 1972) 435 – 453.

[29] Morin, pp. 222 – 223.

[30] Bourassa COC Dt. at 18 – 23; 41 – 43.

Finally, the mid-point of Ms. Brown's cost of capital analysis is 8.6 percent[31], but she recommends 9.5 percent, effectively adding 90 basis points to the average results of her results. Ms. Brown explains that she is recommending the high-end of the range of estimates produced by her analysis to avoid a recommendation for decrease in revenues.[32] But she did not take a similar approach in the recent Liberty Utilities (Black Mountain Sewer) Corp. ("Liberty Back Mountain") rate case.[33] In the Liberty Black Mountain rate case Staff was recommending a rate decrease based in part upon Ms. Brown's recommended ROE of 8.6 percent which as the average of the results of Staff cost of capital analysis.[34] Staff did not recommend a higher ROE in that case to avoid a rate decrease recommendation.

In my view, a risk premium is warranted for SWC in this case; but I also believe that a risk premium was warranted in the Liberty Black Mountain case based upon the supportable evidence, and not some arbitrary decision by Staff to avoid or not to avoid a recommendation for a rate decrease. What if Staff surrebuttal results indicate a rate increase rather than a rate decrease is indicated using Staff's 8.6 percent mid-point for the ROE? Would that mean that Staff will lower its recommendation from 9.5 percent to 8.6 percent?

Q. MS. BROWN TESTIFIES (ON PAGE 3) THAT ANY RETURN ON EQUITY FALLING IN THE RANGE OF A COST OF CAPITAL ANALYSIS COULD BE CONSIDERED A REASONABLE RETURN ON EQUITY. DO YOU AGREE?

A. No. I disagree. First of all, I am not sure whose cost of capital analysis is Staff referring to. Clearly, there are differences in the indicated costs of equity results produced by the models each party utilized in this instant case. Even so, just because Staff's CAPM produces a certain indicated cost of equity does not mean that the result is reasonable. As I

[31] *See* Staff Schedule CBS-3.
[32] Brown Dt. at 5.
[33] *See* Direct Testimony of Crystal S. Brown in Docket No. SW-02361A-15-0206 at 80.
[34] *Id.*

showed from the data I previously discussed on page 9, Staff's range of results for cost of equity is simply not reasonable.

Second, each of the methods used by the parties does not produce perfect proxies for the cost of capital. All methods have significant limitations. Each has its own way of estimating the cost of capital and each has its own underlying assumptions. That is why multiple methods should be used and considerable and reasoned judgment must be made on the inputs and their applicability under current market conditions. As Dr. Morin states:

> Each methodology requires the exercise of considerable judgment on the reasonableness of the assumptions underlying the methodology and on the reasonableness of the proxies used to validate a theory. *The inability of the DCF model to account for changes in relative market valuation, discussed below, is a vivid example of the potential shortcomings of the DCF model when applied to a given company.* Similarly, the inability of the CAPM to account for variables that affect security returns other than beta tarnishes its use.
>
> *No one individual method provides the necessary level of precision for determining a fair return, but each method provides useful evidence to facilitate the exercise of an informed judgment.* Reliance on any single method or preset formula is inappropriate when dealing with investor expectations because of possible measurement difficulties and vagaries in individual companies' market data.
>
> When measuring equity costs, which essentially deals with the measurement of investor expectations, no single methodology provides a foolproof panacea. Each methodology requires the exercise of considerable judgment on the reasonableness of the assumptions underlying the methodology and on the reasonableness of the proxies used to validate the theory. It follows that more than one methodology should be employed in arriving at a judgment on the cost of equity and that these methodologies should be applied across a series of comparable risk companies. [35]

In sum, Ms. Brown's is over-reliant on a mechanical application of models, and is really basing of Staff's range of equity returns, on the results of its CAPM.[36] As I have shown, however, her results are not reasonable.

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[35] Morin, pp. 428-429 [emphasis added].

[36] Ms. Brown testifies that the range of estimates of its models is 7.6% to 9.5% on page 42 of her testimony, which is the range of her CAPM estimates shown on Schedule CSB-3.

Q. MS. BROWN ALSO TESTIFIES (ON PAGE 38-39) THAT ANY ROE ABOVE THE LOW-POINT OF ITS RANGE OF ESTIMATES MAKES A REASONABLE ACKNOWLEDGMENT OF OR CONCESSION TO THE OTHER RISK FACTORS ATTRIBUTED TO SWC. DO YOU AGREE?

A. No. First, because the cost of capital is an estimation process and we don't know whether the low point of a range is correct or the high point of a range is correct, the mid-point (and sometimes the median) is arguably the most "fair" estimate, unless there is a reasonable argument to do otherwise.

Second, in my experience, Staff typically recommends the mid-point of its analyses of its water proxy group in almost every case.[37] Until the recent assignment of Ms. Brown as Staff cost of capital witness, I do not recall Staff ever making the argument that it chose the mid-point of its results because Staff was recognizing other additional risks associated with an investment in the utility in the rate case. In fact, Staff has argued in the past, using portfolio theory, that investors should not be expected to receive higher returns for Company specific risks (unique risks) and that an investment in the utility therefore has no more risk than the water proxy group. Why is this case any different for Staff? The answer is, it is not, or at least should not be.

Q. BUT, MR. BOURASSA, YOU ARE RECOMMENDING A SPECIFIC RISK PREMIUM ADJUSTMENT FOR SWC. WOULDN'T STAFF'S PORTFOLIO THEORY ARGUMENT BE JUSTIFICATION FOR DENYING YOUR RECOMMENDED RISK PREMIUM ADJUSTMENT?

A. No. First, the risk of smaller companies *is* a systematic risk and not a unique risk.[38] Second, I bracketed the range of small company risk premiums garnered from the empirical financial data and studies, and then specifically quantified the risk premium for SWC from my risk study. In quantifying that risk premium, I use market portfolio data

[37] Brown Dt. at 4.
[38] Bourassa COC Dt. at 36.

provided by Duff & Phelps as the basis for determining the additional systematic risk of SWC due to its smaller size.[39]

Q. DO YOU HAVE ANY FURTHER COMMENTS ON MS. BROWN'S TESTIMONY?

A. Not at this time. Again, I think the Staff cost of equity analysis result of 8.6 percent, and its ROE recommendation of 9.5 percent, clearly show how flawed Staff's cost of capital analysis is in this rate case.

Q. WHAT ROE DO YOU RECOMMEND?

A. While I can support a ROE of 11.1 percent, I am recommending a ROE of *no less than* 10.5 percent, the same ROE as I proposed in my direct testimony.

Q. DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY ON COST OF CAPITAL?

A. Yes.

[39] Bourassa COC Dt. at 41 – 43.

Exhibit TJB-COC-RT-1

Shares of companies in the Water Utility Industry performed well since our last report. This marks the second-straight impressive quarterly performance.

Strong equity prices have resulted in low yields for members of the group. Indeed, income-oriented investors may be disappointed that the average yield for this industry is now the same as the median for the typical dividend-paying stock in the *Value Line* universe.

Each water company is involved in a substantial building program. Most of the spending is on replacing and modernizing existing pipelines, valves, and wastewater facilities. These programs should last well past late decade.

External financing will most likely continue to be needed to fund these expenditures. Overall, most water utilities are in decent financial health, however. Much of this can be attributed to regulators being relatively reasonable in rate cases. There is a general understanding that underinvestment in the past has led to a deterioration in the nation's water infrastructure and billions of dollars in capital will be needed to improve the system.

Larger firms have been buying up lots of small municipally owned water districts that don't have the financial wherewithal to perform the required upgrades. Because there are significant redundancies in the industry, the acquiring firms can usually generate better returns with the purchased assets.

Despite the Federal Reserve's recent rate hike, yields on income-generating nondistressed securities of all types, remain very low, leaving income investors with difficult choices.

Yields On Water Stocks Are Low

Historically, sought out for above-average yields and strong dividend growth prospects, water utility equities currently do not offer any premium in the form of current income. Since our last report in mid-October, the shares of the nine members of the group appreciated by 4.9%, versus 1.9% for the S&P 500 Index. We can only speculate that the rash of uneasiness in world markets sent investors into safe sectors of the economy, such as the water industry.

Large Construction Programs

For years, insufficient funding was made to properly maintain America's water infrastructure, leading to a general state of disrepair. At some point, executives and regulators realized that massive amounts of money would have to be spent to replace aging pipes, valves, and other equipment. Thus, over the past five to 10 years, water utilities, in cooperation with state regulators, have been involved in major building projects.

External Financing Is Required

Internally generated funds are not sufficient to fund the amount of construction now underway. Every member of the industry has had to turn to the debt and equity markets to raise needed capital. Fortunately, the company's balance sheets have remained in relatively solid

INDUSTRY TIMELINESS: 34 (of 97)

condition. Of the nine firms, two have Financial Strength ratings of an A, two a B++, and five a B+. (The average rating for the typical *Value Line* stock is B+.)

With the stocks having done well, now may be a good time to tap the equity markets. In the recent past, many companies have relied mostly on debt, due to the prolonged low interest rate environment. One feature of the water industry is that it isn't big in terms of market capitalization. In fact, we think that the rarity of water stocks is probably one of the reasons they tend to trade at a premium. For example, the market capitalization of Con Edison alone is only modestly less than the total of the entire water industry combined. The scarcity of water stocks is one of the reasons its yield is 2.4%, while the electric industry's yield is 3.8%, 140 basis points higher.

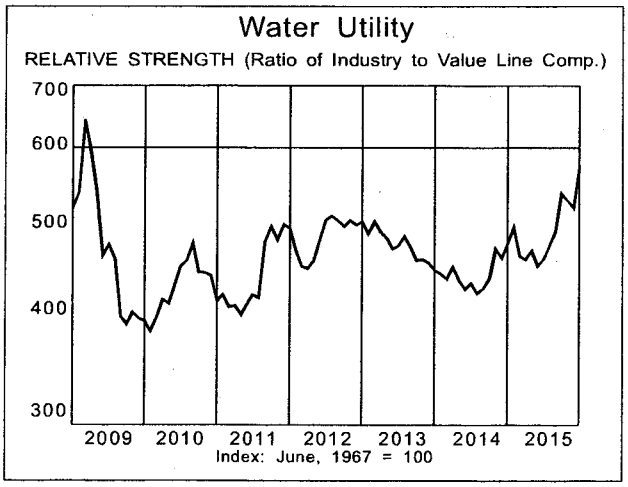
Consolidation

The overwhelming majority of water districts in the U.S. are small and run by local municipal-water districts. Include the small micro-districts in the mix, and the number of different water authorities rises to over 100,000. As the infrastructure ages and the EPA increases the number of costly mandates, some are selling themselves to better capitalized, more-professional investor-owned companies. The arrangements have proved successful in most cases because of the large amount of redundancies that exist in this industry. The smaller district get the capital spending they need to update their systems, and the buyers are able to use their resources and expertise to improve the facilities while generating better returns on the assets. We wouldn't be surprised if this trend picked up in the future.

Conclusion

Of the nine stocks in the industry, three are ranked to outperform the broader market averages in the year ahead; *American States Water*, *American Water Works*, and *The York Water Company*. Since many investors in this sector are more buy-and-hold types, they should be aware that none of these three issues offer attractive long-term appeal, however.

James A. Flood



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RECENT PRICE 36.97 | P/E RATIO 23.4 (Trailing: 24.5 Median: 21.0) | RELATIVE P/E RATIO 1.29 | DIV'D YLD 2.4% | VALUE LINE

TIMELINESS 3 Lowered 5/16/14
SAFETY 2 Raised 7/20/12
TECHNICAL 3 Raised 11/21/14
BETA .70 (1.00 = Market)

High:	14.5	13.4	17.3	21.9	23.1	21.0	19.4	19.8	18.2	24.1	33.1	38.7	
Low:	10.8	10.4	12.2	15.1	16.8	13.5	14.9	15.6	15.3	17.0	24.0	27.0	

Target Price Range 2017 | 2018 | 2019

2017-19 PROJECTIONS

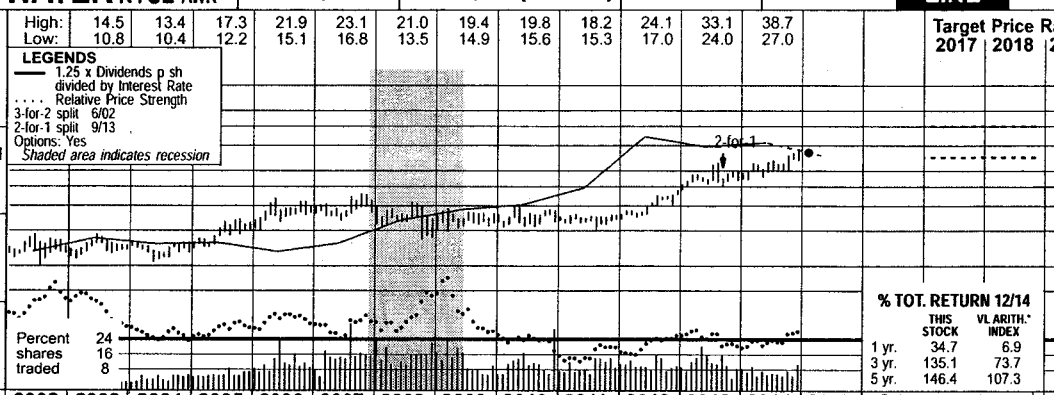
	Price	Gain	Ann'l Total Return
High	50	(+35%)	10%
Low	35	(-5%)	2%

Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	0	0	0	0	0	0	0	0
Options	0	1	0	0	0	0	0	0	0
to Sell	0	2	0	0	1	0	0	1	0

Institutional Decisions

	1Q2014	2Q2014	3Q2014
to Buy	79	96	81
to Sell	72	68	86
Hld's(000)	23233	23236	23032



% TOT. RETURN 12/14

	THIS STOCK	VL ARITH.* INDEX
1 yr.	34.7	6.9
3 yr.	135.1	73.7
5 yr.	146.4	107.3

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	© VALUE LINE PUB. LLC	17-19
5.51	6.45	6.08	6.53	6.89	6.99	6.81	7.03	7.88	8.75	9.21	9.74	10.71	11.12	12.12	12.19	12.50	13.35	Revenues per sh	15.05
1.02	1.13	1.10	1.26	1.27	1.04	1.11	1.32	1.45	1.65	1.69	1.70	2.11	2.13	2.48	2.65	2.55	2.75	"Cash Flow" per sh	3.35
.54	.60	.64	.67	.67	.39	.53	.66	.67	.81	.78	.81	1.11	1.12	1.41	1.61	1.50	1.60	Earnings per sh A	2.00
.42	.43	.43	.43	.44	.44	.44	.45	.46	.48	.50	.51	.52	.55	.64	.76	.83	.90	Div'd Decl'd per sh B■	1.15
1.56	2.15	1.51	1.59	1.34	1.88	2.51	2.12	1.95	1.45	2.23	2.09	2.12	2.13	1.77	2.52	2.05	2.40	Cap'l Spending per sh	2.40
5.74	5.91	6.37	6.61	7.02	6.98	7.51	7.86	8.32	8.77	8.97	9.70	10.13	10.84	11.80	12.72	13.15	13.05	Book Value per sh	15.25
26.87	26.87	30.24	30.24	30.36	30.42	33.50	33.60	34.10	34.46	34.60	37.06	37.26	37.70	38.53	38.72	38.00	37.50	Common Shs Outst'g C	37.50
15.5	17.1	15.9	16.7	18.3	31.9	23.2	21.9	27.7	24.0	22.6	21.2	15.7	15.4	14.3	17.2	21.0		Avg Ann'l P/E Ratio	21.0
.81	.97	1.03	.86	1.00	1.82	1.23	1.17	1.50	1.27	1.36	1.41	1.00	.97	.91	.97	1.09		Relative P/E Ratio	1.30
5.0%	4.2%	4.2%	3.9%	3.6%	3.5%	3.6%	3.1%	2.5%	2.5%	2.9%	2.9%	3.0%	3.2%	3.1%	2.7%	2.6%		Avg Ann'l Div'd Yield	2.7%

CAPITAL STRUCTURE as of 9/30/14
Total Debt $317.1 mill. **Due in 5 Yrs** $7.6 mill.
LT Debt $310.8 mill. **LT Interest** $22.0 mill.
(LT interest earned: 5.7 x: total interest coverage: 5.4 x) (38% of Cap'l)
Leases, Uncapitalized: Annual rentals $2.2 mill.
Pension Assets-12/13 $127.5 mill. **Oblig.** $152.7 mill.
Pfd Stock None.

Common Stock 38,400,038 shs. as of 10/31/14

MARKET CAP: $1.4 billion (Mid Cap)

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		17-19
228.0	236.2	268.6	301.4	318.7	361.0	398.9	419.3	466.9	472.1	475	500	Revenues ($mill)	565
16.5	22.5	23.1	28.0	26.8	29.5	41.4	42.0	54.1	62.7	56.0	57.0	Net Profit ($mill)	75.0
37.4%	47.0%	40.5%	42.6%	37.8%	38.9%	43.2%	41.7%	39.9%	36.3%	38.5%	39.0%	Income Tax Rate	38.0%
--	--	12.2%	8.5%	6.9%	3.2%	5.8%	2.0%	2.5%	.5%	.5%	2.0%	AFUDC % to Net Profit	2.0%
47.7%	50.4%	48.6%	46.9%	46.2%	45.9%	44.3%	45.4%	42.2%	39.8%	40.0%	41.0%	Long-Term Debt Ratio	42.0%
52.3%	49.6%	51.4%	53.1%	53.8%	54.1%	55.7%	54.6%	57.8%	60.2%	60.0%	59.0%	Common Equity Ratio	58.0%
480.4	532.5	551.6	569.4	577.0	665.0	677.4	749.1	787.0	818.4	830	870	Total Capital ($mill)	980
664.2	713.2	750.6	776.4	825.3	866.4	855.0	896.5	917.8	981.5	1000	1040	Net Plant ($mill)	1160
5.2%	5.4%	6.0%	6.7%	6.4%	5.9%	7.6%	7.1%	8.3%	8.9%	9.0%	8.5%	Return on Total Cap'l	8.5%
6.6%	8.5%	8.1%	9.3%	8.6%	8.2%	11.0%	10.3%	11.9%	12.7%	11.5%	12.0%	Return on Shr. Equity	12.5%
6.6%	8.5%	8.1%	9.3%	8.6%	8.2%	11.0%	10.3%	11.9%	12.7%	11.5%	12.0%	Return on Com Equity	12.5%
1.0%	2.8%	2.7%	3.9%	3.1%	3.2%	5.8%	5.3%	6.6%	6.8%	5.5%	5.0%	Retained to Com Eq	5.5%
84%	67%	67%	58%	64%	61%	47%	49%	45%	47%	59%	56%	All Div'ds to Net Prof	58%

CURRENT POSITION ($MILL.)	2012	2013	9/30/14
Cash Assets	23.5	38.2	57.9
Other	160.5	153.4	128.7
Current Assets	184.0	191.6	186.6
Accts Payable	40.6	49.8	49.7
Debt Due	3.3	6.3	6.3
Other	49.8	44.8	64.6
Current Liab.	93.7	100.9	120.6
Fix. Chg. Cov.	488%	531%	533%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '17-'19
Revenues	5.5%	6.5%	4.0%
"Cash Flow"	7.5%	8.5%	5.5%
Earnings	9.0%	13.0%	6.5%
Dividends	4.0%	6.5%	10.0%
Book Value	5.5%	6.5%	4.5%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	94.3	109.8	119.9	95.3	419.3
2012	107.6	114.3	133.5	111.5	466.9
2013	110.6	120.7	130.9	109.9	472.1
2014	101.9	115.6	138.3	119.2	475
2015	110	125	145	120	500

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	.19	.34	.42	.17	1.12
2012	.27	.40	.49	.26	1.41
2013	.35	.43	.53	.30	1.61
2014	.28	.39	.54	.29	1.50
2015	.30	.45	.55	.30	1.60

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.13	.14	.14	.14	.55
2012	.14	.14	.1775	.1775	.64
2013	.1775	.1775	.2025	.2025	.76
2014	.2025	.2025	.213	.213	.83
2015					

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Company, it supplies water to more than 250,000 customers in 75 communities in 10 counties. Service areas include the greater metropolitan areas of Los Angeles and Orange Counties. The company also provides electric utility services to nearly 23,250 customers in the city of Big Bear Lake and in areas of San Bernardino County. Sold Chaparral City Water of Arizona (6/11). Has 728 employees. Officers & directors own 2.9% of common stock (4/12 Proxy). Chairman: Lloyd Ross. President & CEO: Robert J. Sprowls. Inc: CA. Addr: 630 East Foothill Boulevard, San Dimas, CA 91773. Tel: 909-394-3600. Internet: www.aswater.com.

Shares of American States Water have surged since our October report. The price of the stock has increased 21%, well above the 4% gain posted by the market averages. The entire water sector has done well, but American States' performance has been especially strong. This is unusual because water utilities are generally considered to be low-Beta, defensive equities. One possibility for American States' stock movement could be that investors are willing to pay a large premium for higher-yielding stocks with good dividend growth prospects. Another is that the company repurchased more of its own shares on the open market (at a very high price).

The attractiveness of the stock has been greatly reduced. Despite American States being one of the best run water utilities in the country, with very favorable long-term dividend growth prospects, our concern is with the valuation of the equity. True, these shares are ranked to perform in line with the market in the year ahead. However, total return potential through 2017-2019 is now below average.

Meanwhile, the company's earnings may be restrained by its current high return on equity. States regulate the upper limit as to what utilities are allowed to earn on the common equity dedicated to the water business. (Please note the calculations on our page can vary significantly from how regulators arrive at their numbers.) Hence, we estimate that American States' share net declined 6% in 2014, to $1.50, because 2013's results were aided by a one-time recovery of certain expenses. In 2015, we expect earnings per share to recover and rise 6%, to $1.60.

Nonregulated operations could well be a swing factor in the company's earnings. American States provides water services to nine domestic military bases. Profits from this segment can be uneven, but they carry higher margins than the regulated water business. We estimate that this endeavor accounts for almost 20% of the utility's total earnings. With an estimated 50 to 70 bases expected to privatize their water operations in the next few years, the company may pick up another 15 to 20. This would make our long-term earnings estimates somewhat conservative.

James A. Flood *January 16, 2015*

(A) Primary earnings. Excludes nonrecurring gains/(losses): '04, 7¢; '05, 13¢; '06, 3¢; '08, (14¢); '10, (23¢) '11, 10¢. Next earnings report due mid February. Quarterly earnings may not add due to rounding.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for splits.

Company's Financial Strength	A
Stock's Price Stability	85
Price Growth Persistence	65
Earnings Predictability	85

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AQUA AMERICA NYSE-WTR

RECENT PRICE	26.35	P/E RATIO	21.3 (Trailing: 22.5 / Median: 24.0)	RELATIVE P/E RATIO	1.18	DIV'D YLD	2.6%	VALUE LINE

TIMELINESS 3 Lowered 5/24/13
SAFETY 2 Raised 4/20/12
TECHNICAL 3 Raised 12/26/14
BETA .70 (1.00 = Market)

High:	13.4	14.8	23.4	23.8	21.3	17.6	17.2	18.4	19.0	21.5	28.1	28.2
Low:	9.5	11.3	14.0	16.1	15.1	9.8	12.3	13.2	15.4	16.8	20.6	22.4

2017-19 PROJECTIONS

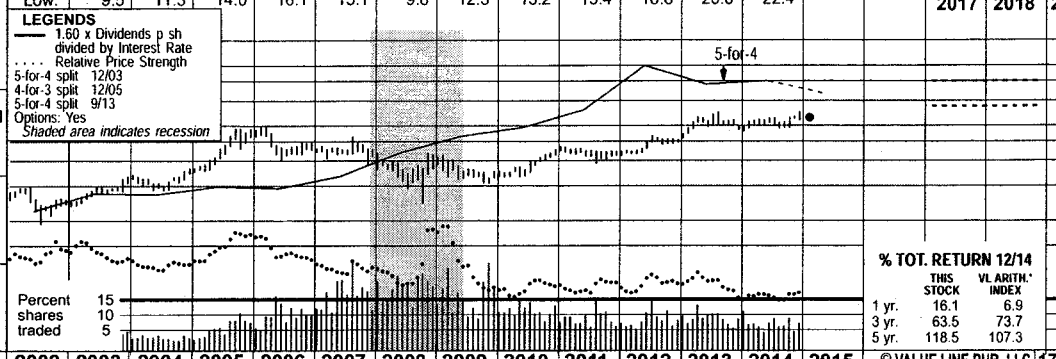
	Price	Gain	Ann'l Total Return
High	40	(+50%)	14%
Low	30	(+15%)	7%

Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	0	0	0	0	0	0	0	0
Options	3	2	0	2	1	0	1	0	0
to Sell	1	4	1	3	1	1	2	1	2

Institutional Decisions

	1Q2014	2Q2014	3Q2014
to Buy	130	127	139
to Sell	145	133	126
Hld's(000)	82758	81999	80311



Target Price Range 2017 | 2018 | 2019

% TOT. RETURN 12/14

	THIS STOCK	VL ARITH.* INDEX
1 yr.	16.1	6.9
3 yr.	63.5	73.7
5 yr.	118.5	107.3

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	© VALUE LINE PUB. LLC	17-19
1.67	1.93	1.97	2.16	2.28	2.38	2.78	3.08	3.23	3.61	3.71	3.93	4.21	4.10	4.32	4.32	*4.50*	*4.75*	Revenues per sh	*5.65*
.49	.58	.61	.69	.76	.77	.87	.97	1.01	1.10	1.14	1.29	1.42	1.45	1.51	1.82	*1.90*	*2.05*	"Cash Flow" per sh	*2.90*
.32	.33	.37	.41	.43	.46	.51	.57	.56	.57	.58	.62	.72	.83	.87	1.16	*1.20*	*1.30*	Earnings per sh A	*1.55*
.20	.22	.23	.24	.26	.28	.29	.32	.35	.38	.41	.44	.47	.50	.54	.58	.63	*.69*	Div'd Decl'd per sh B■	*.90*
.65	.72	.93	.87	.96	1.06	1.23	1.47	1.64	1.43	1.58	1.66	1.89	1.90	1.98	1.73	*1.75*	*1.95*	Cap'l Spending per sh	*1.95*
2.57	2.74	3.08	3.32	3.49	4.27	4.71	5.04	5.57	5.85	6.26	6.50	6.81	7.21	7.90	8.63	*8.85*	*9.05*	Book Value per sh	*11.00*
90.25	133.50	139.78	142.47	141.49	154.31	158.97	161.21	165.41	166.75	169.21	170.61	172.46	173.60	175.43	177.93	*176.50*	*175.00*	Common Shs Outst'g C	*170.00*
22.5	21.2	18.2	23.6	23.6	24.5	25.1	31.8	34.7	32.0	24.9	23.1	21.1	21.3	21.9	21.2	*20.8*		Avg Ann'l P/E Ratio	*21.5*
1.17	1.21	1.18	1.21	1.29	1.40	1.33	1.69	1.87	1.70	1.50	1.54	1.34	1.34	1.39	1.19	*1.08*		Relative P/E Ratio	*1.35*
2.9%	3.0%	3.3%	2.5%	2.5%	2.5%	2.3%	1.8%	1.8%	2.1%	2.8%	3.1%	3.1%	2.8%	2.8%	2.4%	2.5%		Avg Ann'l Div'd Yield	*2.6%*
						442.0	496.8	533.5	602.5	627.0	670.5	726.1	712.0	757.8	768.6	*790*	*835*	Revenues ($mill)	*960*
						80.0	91.2	92.0	95.0	97.9	104.4	124.0	144.8	153.1	205.0	*215*	*230*	Net Profit ($mill)	*265*
						39.4%	38.4%	39.6%	38.9%	39.7%	39.4%	39.2%	32.9%	39.0%	10.0%	*15.0%*	*28.0%*	Income Tax Rate	*28.0%*
						--	--	--	--	--	--	--	--	2.9%	1.1%	*2.0%*	*2.0%*	AFUDC % to Net Profit	*2.0%*
						50.0%	52.0%	51.6%	55.4%	54.1%	55.6%	56.6%	52.7%	52.7%	48.9%	*51.0%*	*51.0%*	Long-Term Debt Ratio	*52.0%*
						50.0%	48.0%	48.4%	44.6%	45.9%	44.4%	43.4%	47.3%	47.3%	51.1%	*49.0%*	*49.0%*	Common Equity Ratio	*48.0%*
						1497.3	1690.4	1904.4	2191.4	2306.6	2495.5	2706.2	2646.8	2929.7	3003.6	*3200*	*3325*	Total Capital ($mill)	*3950*
						2069.8	2280.0	2506.0	2792.8	2997.4	3227.3	3469.3	3612.9	3936.2	4167.3	*4360*	*4400*	Net Plant ($mill)	*5000*
						6.7%	6.9%	6.4%	5.9%	5.7%	5.6%	5.9%	6.9%	6.6%	8.0%	*8.5%*	*9.0%*	Return on Total Cap'l	*8.5%*
						10.7%	11.2%	10.0%	9.7%	9.3%	9.4%	10.6%	11.6%	11.0%	13.4%	*13.5%*	*14.5%*	Return on Shr. Equity	*14.0%*
						10.7%	11.2%	10.0%	9.7%	9.3%	9.4%	10.6%	11.6%	11.0%	13.4%	*13.5%*	*14.5%*	Return on Com Equity	*14.0%*
						4.6%	4.9%	3.7%	3.2%	2.8%	2.7%	3.7%	4.6%	4.3%	6.7%	*6.5%*	*7.0%*	Retained to Com Eq	*6.0%*
						57%	56%	63%	67%	70%	72%	65%	60%	61%	50%	*53%*	*53%*	All Div'ds to Net Prof	*58%*

CAPITAL STRUCTURE as of 9/30/14
Total Debt $1653.6 mill. **Due in 5 Yrs** $324.6 mill.
LT Debt $1560.0 mill. **LT Interest** $70.0 mill.
(Total interest coverage: 3.9x) (49% of Cap'l)

Pension Assets-12/13 $232.4 mill.
Oblig. $281.2 mill.

Pfd Stock None
Common Stock 176,633,848 shares
as of 10/24/14

MARKET CAP: $4.7 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2012	2013	9/30/14
Cash Assets	5.5	5.1	4.8
Receivables	92.9	95.4	105.7
Inventory (AvgCst)	11.8	11.4	12.6
Other	150.7	59.8	84.4
Current Assets	260.9	171.7	207.5
Accts Payable	55.5	65.8	48.9
Debt Due	125.4	123.0	93.6
Other	93.3	78.1	92.9
Current Liab.	274.2	266.9	235.4
Fix. Chg. Cov.	413%	388%	389%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '17-'19
Revenues	6.5%	4.0%	*5.0%*
"Cash Flow"	8.0%	8.0%	*10.5%*
Earnings	8.5%	11.0%	*8.5%*
Dividends	7.5%	7.0%	*9.0%*
Book Value	8.0%	6.0%	*5.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	163.6	178.3	197.3	172.7	712.0
2012	164.0	191.7	214.6	187.5	757.8
2013	180.0	195.7	204.3	188.6	768.6
2014	182.7	195.3	210.5	*201.5*	*790*
2015	*195*	*210*	*220*	*210*	*835*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.18	.22	.24	.19	.83
2012	.15	.24	.29	.19	.87
2013	.26	.30	.36	.24	1.16
2014	.24	.31	.38	*.27*	*1.20*
2015	*.27*	*.32*	*.40*	*.31*	*1.30*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.124	.124	.124	.132	.50
2012	.132	.132	.132	.14	.54
2013	.14	.14	.152	.152	.58
2014	.152	.152	.165	.165	.63
2015					

BUSINESS: Aqua America, Inc. is the holding company for water and wastewater utilities that serve approximately three million residents in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Florida, Indiana, and five other states. Acquired AquaSource, 7/03; Consumers Water, 4/99; and others. Water supply revenues '13: residential, 60.3%; commercial, 15.8%; industrial & other, 23.9%. Officers and directors own .8% of the common stock; Vangurad Group, 6.6%; State Street Capital Corp., 6.3%; Blackrock, Inc, 6.1% (4/14 Proxy). Chairman & Chief Executive Officer: Nicholas DeBenedictis. Incorporated: Pennsylvania. Address: 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010. Telephone: 610-525-1400. Internet: www.aquaamerica.com.

Aqua America should record solid earnings in 2015. The company probably posted decent results in 2014 as we think earnings per share rose 3.4%, to $1.20. This figure is much better than it appears, as 2013 was an outstanding year and comparisons with it are very difficult. Fueled by an expanding rate base (on which the utility earns a return), we expect share net to increase a healthy 8%, to $1.30 a share this year.

Acquisitions will continue to remain a key part of Aqua's strategy. The U.S. water market consists of over 50,000 municipally-run districts, many of which are financially strapped and don't have the required funds to upgrade their antiquated water infrastructure. Some are willing to sell themselves to a well-capitalized utility. Since there are many redundancies in the business, Aqua is able to integrate purchases and improve profitability by reducing costs. An estimated 20 acquisitions were made last year, and we think that will represent the low end of Aqua's long-term merger activity.

Dividend growth prospects are excellent. Over the next three- to five-year period, the utility's annual payout will likely be hiked 9% annually, a level well above that of its peers.

Nonregulated operations will probably be affected by declining oil prices. Exploring for oil and gas domestically requires large quantities of water, which are usually shipped to the drilling site by trucks. This is an expensive and cumbersome process. Aqua has simplified the procedure by extending water pipelines right to the rigs. Energy producers are willing to pay high fees for such a service. However, with oil prices having declined by about 50% since last summer, energy exploration could fall substantially if crude prices do not recover.

Income-oriented investors will find much to like about these shares. True, the stock's yield is lower than the industry average. However, buyers typically have to sacrifice more current income to obtain a water utility with such robust dividend growth prospects. Indeed, the equity's capital appreciation and total return potential through 2017-2019 are much higher than others in the group.

James A. Flood *January 16, 2015*

(A) Diluted egs. Excl. nonrec. gains (losses): '99, (9¢); '00, 2¢; '01, 2¢; '02, 4¢; '03, 3¢; '12, 18¢. Excl. gain from disc. operations: '12, 7¢; '13, 9¢. May not sum due to rounding. Next earnings report due mid February.
(B) Dividends historically paid in early March, June, Sept. & Dec. ■ Div'd. reinvestment plan available (5% discount).
(C) In millions, adjusted for stock splits.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	60
Earnings Predictability	95

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CALIFORNIA WATER NYSE-CWT

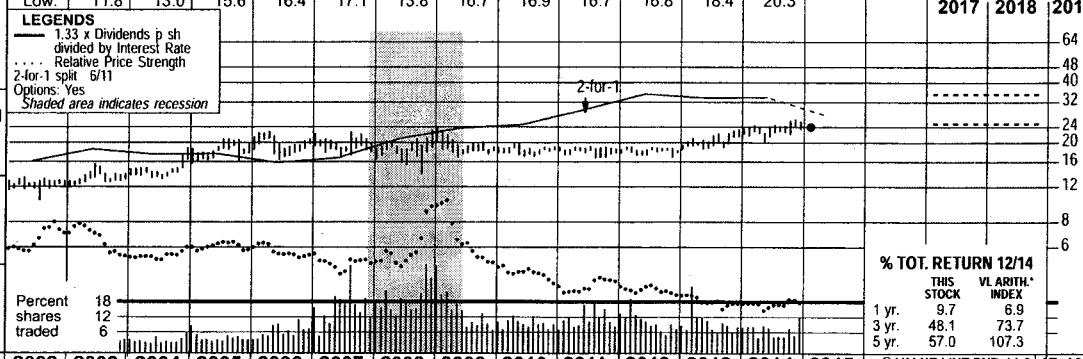
RECENT PRICE	24.08	P/E RATIO	20.1 (Trailing: 22.5 Median: 20.0)	RELATIVE P/E RATIO	1.11	DIV'D YLD	2.8%	VALUE LINE

TIMELINESS 3 Raised 6/20/14
SAFETY 3 Lowered 7/27/07
TECHNICAL 2 Raised 1/16/15
BETA .70 (1.00 = Market)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
High:	15.7	19.0	21.1	22.9	22.7	23.3	24.1	19.8	19.4	19.3	23.4	26.4
Low:	11.8	13.0	15.6	16.4	17.1	13.8	16.7	16.9	16.7	16.8	18.4	20.3

Target Price Range 2017 | 2018 | 2019

LEGENDS
— 1.33 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 6/11
Options: Yes
Shaded area indicates recession



2017-19 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	35	(+45%)	11%
Low	25	(+5%)	4%

Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	0	0	0	0	0	0	0	0
Options	0	1	0	0	0	0	1	0	0
to Sell	0	0	0	1	0	0	0	0	0

Institutional Decisions

	1Q2014	2Q2014	3Q2014
to Buy	64	57	53
to Sell	58	56	53
Hld's(000)	29389	30279	29552

% TOT. RETURN 12/14

	THIS STOCK	VL ARITH.* INDEX
1 yr.	9.7	6.9
3 yr.	48.1	73.7
5 yr.	57.0	107.3

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	© VALUE LINE PUB. LLC	17-19
7.38	7.98	8.08	8.13	8.67	8.18	8.59	8.72	8.10	8.88	9.90	10.82	11.05	12.00	13.34	12.23	12.50	13.25	Revenues per sh	16.60
1.30	1.37	1.26	1.10	1.32	1.26	1.42	1.52	1.36	1.56	1.86	1.93	1.93	2.07	2.32	2.21	2.40	2.60	"Cash Flow" per sh	3.00
.73	.77	.66	.47	.63	.61	.73	.74	.67	.75	.95	.98	.91	.86	1.02	1.02	1.10	1.25	Earnings per sh A	1.50
.54	.54	.55	.56	.56	.56	.57	.57	.58	.58	.59	.59	.60	.62	.63	.64	.65	.67	Div'd Decl'd per sh B ■	.95
1.37	1.72	1.23	2.04	2.91	2.19	1.87	2.01	2.14	1.84	2.41	2.66	2.97	2.83	3.04	2.58	2.50	2.60	Cap'l Spending per sh	3.20
6.69	6.71	6.45	6.48	6.56	7.22	7.83	7.90	9.07	9.25	9.72	10.13	10.45	10.76	11.28	12.54	13.00	13.55	Book Value per sh C	16.00
25.24	25.87	30.29	30.36	30.36	33.86	36.73	36.78	41.31	41.33	41.45	41.53	41.67	41.82	41.98	47.74	48.00	48.00	Common Shs Outst'g D	50.00
17.8	17.8	19.6	27.1	19.8	22.1	20.1	24.9	29.2	26.1	19.8	19.7	20.3	21.3	17.9	20.1	21.3		Avg Ann'l P/E Ratio	20.0
.93	1.01	1.27	1.39	1.08	1.26	1.06	1.33	1.58	1.39	1.19	1.31	1.29	1.34	1.14	1.13	1.11		Relative P/E Ratio	1.25
4.2%	4.0%	4.3%	4.4%	4.5%	4.2%	3.9%	3.1%	2.9%	3.0%	3.1%	3.1%	3.2%	3.4%	3.5%	3.1%	2.8%		Avg Ann'l Div'd Yield	3.2%

CAPITAL STRUCTURE as of 9/30/14
Total Debt $491.1 mill. **Due in 5 Yrs** $89.3 mill.
LT Debt $422.8 mill. **LT Interest** $27.0 mill.
(LT interest earned: 3.4x; total int. cov.: 3.2x)
(40% of Cap'l)
Pension Assets-12/13 $266.2 mill.
Oblig. $383.2 mill.
Pfd Stock None

Common Stock 47,803,849 shs.
as of 10/28/14

MARKET CAP: $1.2 billion (Mid Cap)

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		17-19
315.6	320.7	334.7	367.1	410.3	449.4	460.4	501.8	560.0	584.1	600	635	Revenues ($mill) E	830
26.0	27.2	25.6	31.2	39.8	40.6	37.7	36.1	42.6	47.3	52.5	60.0	Net Profit ($mill)	75.0
39.6%	42.4%	37.4%	39.9%	37.7%	40.3%	39.5%	40.5%	37.5%	30.3%	27.5%	35.0%	Income Tax Rate	37.0%
3.2%	3.3%	10.6%	8.3%	8.6%	7.6%	4.2%	7.6%	8.0%	4.3%	2.0%	4.5%	AFUDC % to Net Profit	5.0%
48.6%	48.3%	43.5%	42.9%	41.6%	47.1%	52.4%	51.7%	47.8%	41.6%	40.5%	40.5%	Long-Term Debt Ratio	40.5%
50.8%	51.1%	55.9%	56.6%	58.4%	52.9%	47.6%	48.3%	52.2%	58.4%	59.5%	59.5%	Common Equity Ratio	59.5%
565.9	568.1	670.1	674.9	690.4	794.9	914.7	931.5	908.2	1024.9	1050	1095	Total Capital ($mill)	1350
800.3	862.7	941.5	1010.2	1112.4	1198.1	1294.3	1381.1	1457.1	1515.8	1575	1630	Net Plant ($mill)	1820
6.1%	6.3%	5.2%	5.9%	7.1%	6.5%	5.5%	5.5%	6.3%	6.0%	6.5%	7.0%	Return on Total Cap'l	7.0%
8.9%	9.3%	6.8%	8.1%	9.9%	9.6%	8.6%	8.0%	9.0%	7.9%	8.5%	9.0%	Return on Shr. Equity	9.5%
9.0%	9.3%	6.8%	8.1%	9.9%	9.6%	8.6%	8.0%	9.0%	7.9%	8.5%	9.0%	Return on Com Equity	9.5%
2.1%	2.1%	1.0%	1.8%	3.8%	3.8%	3.0%	2.3%	3.4%	3.4%	3.5%	4.5%	Retained to Com Eq	3.5%
77%	78%	86%	77%	61%	60%	66%	71%	62%	56%	59%	54%	All Div'ds to Net Prof	63%

CURRENT POSITION ($MILL.)	2012	2013	9/30/14
Cash Assets	38.8	27.5	29.5
Other	107.8	112.0	147.8
Current Assets	146.6	139.5	177.3
Accts Payable	46.8	55.1	71.9
Debt Due	136.3	54.7	68.3
Other	59.7	56.8	75.2
Current Liab.	242.8	166.6	215.4
Fix. Chg. Cov.	296%	301%	299%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '17-'19
Revenues	4.0%	7.0%	5.0%
"Cash Flow"	6.0%	6.5%	5.5%
Earnings	5.5%	4.0%	7.5%
Dividends	1.0%	1.5%	7.0%
Book Value	5.5%	4.5%	5.5%

Cal-endar	QUARTERLY REVENUES ($ mill.)E Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	98.1	131.4	169.3	103.0	501.8
2012	116.8	143.6	178.1	121.5	560.0
2013	111.4	154.6	184.4	133.7	584.1
2014	110.5	158.4	191.2	139.9	600
2015	125	160	200	150	635

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.03	.29	.50	.04	.86
2012	.03	.31	.56	.12	1.02
2013	.01	.28	.61	.12	1.02
2014	d.11	.36	.70	.15	1.10
2015	.03	.32	.75	.15	1.25

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.154	.154	.154	.154	.62
2012	.1575	.1575	.1575	.1575	.63
2013	.16	.16	.16	.16	.64
2014	.1625	.1625	.1625	.1625	.65
2015					

BUSINESS: California Water Service Group provides regulated and nonregulated water service to roughly 471,900 customers in 83 communities in California, Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Rio Grande Corp; West Hawaii Utilities (9/08). Revenue breakdown, '13: residential, 70%; business, 19%; public authorities, 5%; industrial, 5%; other 1%. '13 reported depreciation rate: 3.8%. Has 1,131 employees. President, Chairman, and Chief Executive Officer: Peter C. Nelson. Inc.: Delaware. Address: 1720 North First Street, San Jose, California 95112-4598. Telephone: 408-367-8200. Internet: www.calwatergroup.com.

Previously granted rate relief should help propel California Water Service Group's earnings for the next few years. Utilities in the state are only allowed to file a petition seeking higher tariffs every three years. Hence, the relatively favorable decision allowed by California regulators last summer will have a positive effect on the company's bottom line through 2017. In addition, a major potential regulatory risk has been removed for the next several years.

We are raising our bottom-line estimates for the company, yet again. Third-quarter earnings came in higher than we expected, even though the recent rate hike was only in effect for part of the quarter. Expectations for the year-ending period are favorable, too. All told, share net should probably reach $1.10, a 7.4% increase over 2013's uninspiring showing. In 2015, with the rates in effect for the entire year, a 13.6% hike in earnings per share, to $1.25, is possible.

Dividend growth should accelerate as well. Over the past five- and ten-year periods, California Water's annual dividend payout averaged a meager 1.0%, and 1.5%, respectively. This rate was significantly below the average of the typical water utility. In the coming year, we are conservatively estimating that there will be a $0.03 (4.6%) increase. Furthermore, annual hikes through 2017-2019 could be in the 7% range.

California Water is not being meaningfully impacted by the area's severe drought. State regulators have implemented rules so that water utilities won't be penalized for a decline in water consumption due to conservation measures. Also, future demand should be met with water from the company's own wells along with a dependable secondary source that sells its bulk water. Moreover, any change in the price of water will just be passed along directly to consumers.

These shares do not have much to offer. Despite a strong balance sheet and solid dividend growth prospects, the recent strong price showing by the equity of California Water has greatly reduced its near-term attraction. Moreover, total return potential through 2017-2019 is below average for a stock followed by *Value Line.*

James A. Flood *January 16, 2015*

(A) Basic EPS. Excl. nonrecurring gain (loss): '00, (4¢); '01, 2¢; '02, 4¢; '11, 4¢. Next earnings report due mid-February. (B) Dividends historically paid in late Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available. (C) Incl. intangible assets. In '13: $18.2 mill., $0.38/sh. (D) In millions, adjusted for splits. (E) Excludes non-reg. rev.

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	40
Earnings Predictability	90

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CONNECTICUT WATER NDQ-CTWS

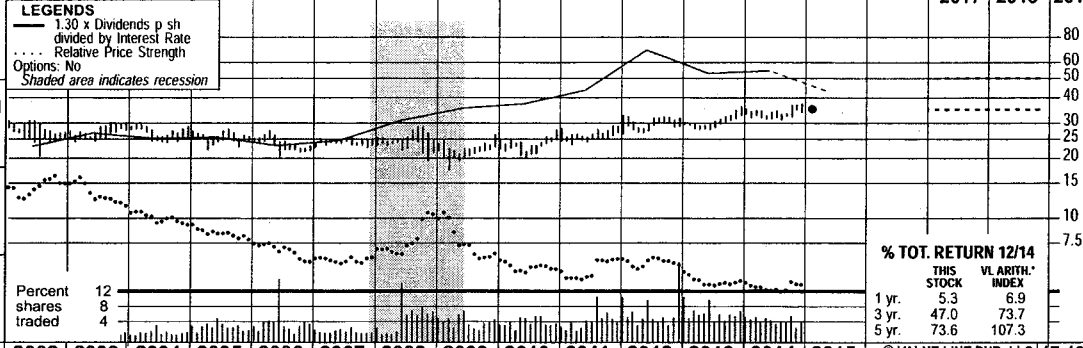
RECENT PRICE	35.18	P/E RATIO	18.4 (Trailing: 18.8 / Median: 22.0)	RELATIVE P/E RATIO	1.02	DIV'D YLD	3.0%	VALUE LINE

TIMELINESS 3 Lowered 11/21/14
SAFETY 3 New 1/18/13
TECHNICAL 2 Raised 1/16/15
BETA .65 (1.00 = Market)

High:	30.4	29.8	28.2	27.7	25.6	29.0	26.4	27.9	29.1	32.8	36.4	37.5
Low:	24.0	23.8	21.9	20.3	22.4	19.3	17.3	20.0	23.3	26.2	27.8	31.0

Target Price Range 2017 | 2018 | 2019

LEGENDS
— 1.30 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: No
Shaded area indicates recession



2017-19 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+40%)	12%
Low	35	(Nil)	3%

Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	1Q2014	2Q2014	3Q2014
to Buy	44	40	50
to Sell	27	32	34
Hld's(000)	4324	4304	4299

Percent shares traded 12 8 4

% TOT. RETURN 12/14

	THIS STOCK	VL ARITH.* INDEX
1 yr.	5.3	6.9
3 yr.	47.0	73.7
5 yr.	73.6	107.3

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	© VALUE LINE PUB. LLC	17-19
5.58	5.87	5.70	5.93	5.77	5.91	6.04	5.81	5.68	7.05	7.24	6.93	7.65	7.93	9.47	8.29	*8.95*	*9.25*	Revenues per sh	*12.50*
1.59	1.65	1.73	1.78	1.78	1.89	1.91	1.62	1.52	1.90	1.95	1.93	2.04	2.11	2.64	2.63	*2.90*	*3.10*	"Cash Flow" per sh	*3.40*
1.02	1.03	1.09	1.13	1.12	1.15	1.16	.88	.81	1.05	1.11	1.19	1.13	1.13	1.53	1.66	*1.90*	*2.00*	Earnings per sh A	*2.15*
.78	.79	.79	.80	.81	.83	.84	.85	.86	.87	.88	.90	.92	.94	.96	.98	1.01	*1.05*	Div'd Decl'd per sh B■	*1.20*
1.12	1.42	1.43	1.86	1.98	1.49	1.58	1.96	1.96	2.24	2.44	3.28	3.06	2.61	2.79	3.02	*4.10*	*4.85*	Cap'l Spending per sh	*3.00*
8.52	8.61	8.92	9.25	10.06	10.46	10.94	11.52	11.60	11.95	12.23	12.67	13.05	13.50	20.95	17.92	*18.85*	*19.80*	Book Value per sh D	*21.65*
6.80	7.26	7.28	7.65	7.94	7.97	8.04	8.17	8.27	8.38	8.46	8.57	8.68	8.76	8.85	11.04	*11.15*	*11.35*	Common Shs Outst'g C	*12.00*
15.5	18.2	18.2	21.5	24.3	23.5	22.9	28.6	29.0	23.0	22.2	18.4	20.7	23.0	19.4	18.4	*17.7*		Avg Ann'l P/E Ratio	*20.0*
.81	1.04	1.18	1.10	1.33	1.34	1.21	1.52	1.57	1.22	1.34	1.23	1.32	1.44	1.23	1.03	*.92*		Relative P/E Ratio	*1.25*
4.9%	4.2%	4.0%	3.3%	3.0%	3.0%	3.1%	3.4%	3.6%	3.6%	3.6%	4.1%	3.9%	3.6%	3.2%	3.2%	3.0%		Avg Ann'l Div'd Yield	*2.8%*

CAPITAL STRUCTURE as of 9/30/14
Total Debt $175.6 mill. **Due in 5 Yrs** $18.6 mill.
LT Debt $173.4 mill. **LT Interest** $7.0 mill.
(Total interest coverage: 4.4x)
(45% of Cap'l)
Leases, Uncapitalized: Annual rentals $.1 mill.
Pension Assets $56.8 mill. **Oblig.** $64.2 mill.
Pfd Stock $0.8 mill. **Pfd Divd** NMF
Common Stock 11,112,589 shs. as of 10/31/14
MARKET CAP: $400 million (Small Cap)

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		17-19
48.5	47.5	46.9	59.0	61.3	59.4	66.4	69.4	83.8	91.5	*100*	*105*	Revenues ($mill)	*150*
9.4	7.2	6.7	8.8	9.4	10.2	9.8	9.9	13.6	18.3	*21.0*	*22.5*	Net Profit ($mill)	*26.0*
22.9%	--	23.5%	32.4%	27.2%	19.5%	35.2%	41.3%	32.0%	28.0%	*19.0%*	*20.5%*	Income Tax Rate	*30.5%*
--	--	--	--	1.7%	--	--	--	1.7%	2.0%	*.5%*	*2.0%*	AFUDC % to Net Profit	*2.0%*
42.8%	44.9%	44.4%	47.8%	46.9%	50.6%	49.5%	53.2%	49.0%	46.9%	*45.5%*	*47.0%*	Long-Term Debt Ratio	*48.0%*
56.7%	54.6%	55.1%	51.8%	52.7%	49.1%	50.2%	46.5%	50.8%	52.9%	*54.5%*	*53.0%*	Common Equity Ratio	*52.0%*
155.1	172.3	174.1	193.2	196.5	221.3	225.6	254.2	364.6	373.6	*385*	*425*	Total Capital ($mill)	*500*
246.1	247.7	268.1	284.3	302.3	325.2	344.2	362.4	447.9	471.9	*500*	*530*	Net Plant ($mill)	*580*
7.0%	5.0%	4.9%	5.5%	5.9%	5.5%	5.4%	4.9%	4.8%	5.9%	*6.0%*	*6.0%*	Return on Total Cap'l	*6.5%*
10.6%	7.5%	6.9%	8.7%	9.0%	9.3%	8.6%	8.3%	7.3%	9.2%	*10.0%*	*10.0%*	Return on Shr. Equity	*10.0%*
10.6%	7.6%	7.0%	8.7%	9.1%	9.4%	8.7%	8.3%	7.3%	9.2%	*10.0%*	*10.0%*	Return on Com Equity	*10.0%*
3.1%	.3%	NMF	1.6%	1.9%	2.3%	1.6%	1.4%	2.8%	3.8%	*4.5%*	*5.0%*	Retained to Com Eq	*5.5%*
71%	95%	105%	82%	79%	76%	81%	83%	62%	59%	*53%*	*53%*	All Div'ds to Net Prof	*56%*

CURRENT POSITION ($MILL.)	2012	2013	9/30/14
Cash Assets	13.2	18.4	1.6
Accounts Receivable	11.5	12.3	13.0
Other	11.7	16.2	24.7
Current Assets	36.4	46.9	39.3
Accts Payable	10.0	10.8	9.0
Debt Due	3.0	4.1	2.2
Other	2.9	7.8	9.9
Current Liab.	15.9	22.7	21.1
Fix. Chg. Cov.	408%	375%	375%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '17-'19
Revenues	4.0%	5.0%	*6.5%*
"Cash Flow"	3.0%	6.5%	*5.5%*
Earnings	2.5%	8.0%	*7.0%*
Dividends	1.5%	2.0%	*4.0%*
Book Value	6.0%	8.0%	*3.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	16.0	17.4	20.6	15.4	69.4
2012	18.5	21.3	24.5	19.5	83.8
2013	19.7	22.6	27.6	21.6	91.5
2014	20.3	27.3	29.4	*23.0*	*100*
2015	*22.0*	*28.0*	*32.0*	*23.0*	*105*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	.26	.37	.39	.11	1.13
2012	.22	.47	.67	.17	1.53
2013	.24	.39	.86	.17	1.66
2014	.27	.67	.76	*.20*	*1.90*
2015	*.35*	*.60*	*.80*	*.25*	*2.00*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.233	.233	.238	.238	.942
2012	.238	.238	.2425	.2425	.962
2013	.2425	.2425	.2475	.2475	.98
2014	.2475	.2475	.2575	.2575	1.01
2015					

BUSINESS: Connecticut Water Service, Inc. is a non-operating holding company, whose income is derived from earnings of its wholly-owned subsidiary companies (regulated water utilities). Its largest subsidiary, Connecticut Water, accounted for about 85% of the holding company's net income in 2012, and provides water services to 400,000 people in 55 towns throughout Connecticut and Maine. Acquired The Maine Water Co., 1/12; Biddeford and Saco Water, 12/12. Inc.: CT. Has about 260 employees. Chairman/President/CEO: Eric W. Thornburg. Officers and directors own 2.4% of the common stock; BlackRock, Inc. 7.3%; The Vanguard Group, 3.8% (4/14 proxy). Address: 93 West Main Street, Clinton, CT 06413. Telephone: (860) 669-8636. Internet: www.ctwater.com.

Connecticut Water Service probably finished up a successful 2014. Thanks to a deal reached in 2013 with Connecticut regulators, the utility agreed to lower customers' bills and delay seeking higher rates in return for being allowed to hold on to an IRS tax refund. In addition, Connecticut Water was able to cut costs by merging the two utilities that it operates in Maine. All told, we think that share net probably rose a robust 14%, to $1.90.

Bottom-line gains should moderate this year. A recent petition for higher rates in Maine and the ongoing tax benefits should enable share earnings to rise $0.10, or 5%, in 2015. If not for the difficult comparison with last year, these number would be more impressive.

Capital expenditures are expected to rise a sizable 20% in 2015. Like most water utilities, Connecticut Water is in the process of upgrading an antiquated infrastructure. We estimate that about $46 million was spent on modernizations in 2014. The company has announced plans to increase this total to $55 million this year.

Connecticut Water's finances should be able to handle the additional capital spending. Entering 2014's fourth quarter, the company's equity-to-total capital ratio stood at a very healthy 55%. Internally generated funds will probably not be sufficient to cover the capital budget over the next three- to five-year period. Issuance of new debt will be required and the quality of Connecticut's balance sheet may decline somewhat, but it still should remain in relatively good shape.

Two future projects will increase the company's revenues. Pipelines are being extended to include the town of Mansfield and the main campus of the University of Connecticut in Storrs to expand Connecticut Water's service area.

These shares have lost most of their appeal. Like the rest of the sector, the stock of Connecticut Water has outperformed the market by a wide margin since our October report. Hence, the equity is now less attractive on a relative basis. The Timelessness rank has also been dropped a notch to 3 (Average). Moreover, prospects to 2017-2019 are now well below average compared to other stocks in the *Value Line* universe.

James A. Flood *January 16, 2015*

(A) Diluted earnings. Next earnings report due early February. Quarterly earnings do not add in '12 due to rounding.
(B) Dividends historically paid in mid-March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for split.
(D) Includes intangibles. In '13: $31.7 million/$2.87 a share.

Company's Financial Strength	B+
Stock's Price Stability	90
Price Growth Persistence	50
Earnings Predictability	85

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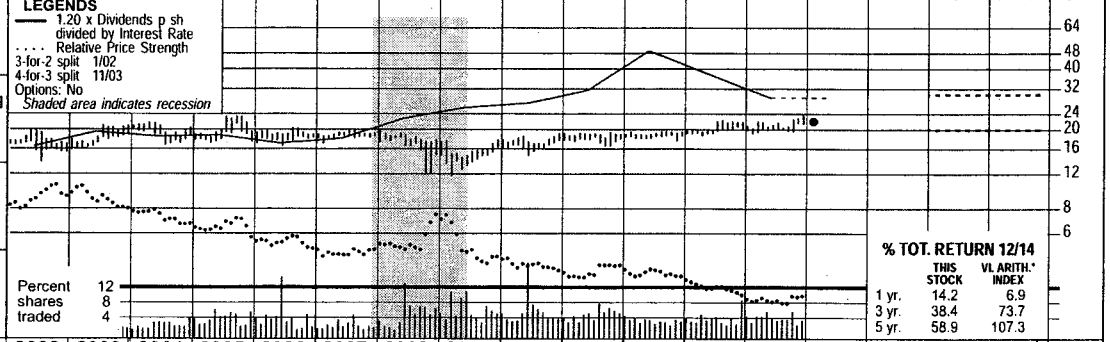
MIDDLESEX WATER NDQ-MSEX

RECENT PRICE 22.07 | P/E RATIO 19.5 (Trailing: 20.1 Median: 21.0) | RELATIVE P/E RATIO 1.08 | DIV'D YLD 3.5% | VALUE LINE

TIMELINESS 3 Lowered 4/11/14
SAFETY 2 New 10/21/11
TECHNICAL 3 Lowered 9/26/14
BETA .70 (1.00 = Market)

High:	21.2	21.8	23.5	20.5	20.2	19.8	17.9	19.3	19.4	19.6	22.5	23.7
Low:	15.8	16.7	17.1	16.5	16.9	12.0	11.6	14.7	16.5	17.5	18.6	19.1

LEGENDS
— 1.20 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
3-for-2 split 1/02
4-for-3 split 11/03
Options: No
Shaded area indicates recession



Target Price Range 2017 | 2018 | 2019

2017-19 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	30	(+35%)	11%
Low	20	(-10%)	2%

Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	0	0	2	0	0	0	1	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	1	0	0	0	1	0

Institutional Decisions

	1Q2014	2Q2014	3Q2014
to Buy	37	41	32
to Sell	34	34	40
Hld's(000)	6432	6463	6339

Percent shares traded 12 8 4

% TOT. RETURN 12/14

	THIS STOCK	VL ARITH.* INDEX
1 yr.	14.2	6.9
3 yr.	38.4	73.7
5 yr.	58.9	107.3

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	© VALUE LINE PUB. LLC	17-19
4.39	5.35	5.39	5.87	5.98	6.12	6.25	6.44	6.16	6.50	6.79	6.75	6.60	6.50	6.98	7.19	*7.30*	*8.00*	Revenues per sh	*10.00*
1.02	1.19	.99	1.18	1.20	1.15	1.28	1.33	1.33	1.49	1.53	1.40	1.55	1.46	1.56	1.72	*1.80*	*1.90*	"Cash Flow" per sh	*2.15*
.71	.76	.51	.66	.73	.61	.73	.71	.82	.87	.89	.72	.96	.84	.90	1.03	*1.10*	*1.15*	Earnings per sh A	*1.25*
.58	.60	.61	.62	.63	.65	.66	.67	.68	.69	.70	.71	.72	.73	.74	.75	.76	*.77*	Div'd Decl'd per sh B■	*.83*
2.68	2.33	1.32	1.25	1.59	1.87	2.54	2.18	2.31	1.66	2.12	1.49	1.90	1.50	1.36	1.26	*1.30*	*2.00*	Cap'l Spending per sh	*2.00*
6.80	6.95	6.98	7.11	7.39	7.60	8.02	8.26	9.52	10.05	10.03	10.33	11.13	11.27	11.48	11.82	*12.15*	*12.30*	Book Value per sh D	*13.25*
9.82	10.00	10.11	10.17	10.36	10.48	11.36	11.58	13.17	13.25	13.40	13.52	15.57	15.70	15.82	15.96	*16.15*	*16.25*	Common Shs Outst'g C	*17.00*
15.2	17.6	28.7	24.6	23.5	30.0	26.4	27.4	22.7	21.6	19.8	21.0	17.8	21.7	20.8	19.7	*19.0*		Avg Ann'l P/E Ratio	*21.0*
.79	1.00	1.87	1.26	1.28	1.71	1.39	1.46	1.23	1.15	1.19	1.40	1.13	1.36	1.32	1.11	*.99*		Relative P/E Ratio	*1.30*
5.4%	4.4%	4.2%	3.8%	3.7%	3.5%	3.4%	3.5%	3.7%	3.7%	4.0%	4.7%	4.2%	4.0%	4.0%	3.7%	3.6%		Avg Ann'l Div'd Yield	*3.3%*

CAPITAL STRUCTURE as of 9/30/14
Total Debt $165.3 mill. **Due in 5 Yrs** $56.4 mill.
LT Debt $129.2 mill. **LT Interest** $4.5 mill.
(LT interest earned: 6.0x)
(40% of Cap'l)

Pension Assets-12/13 $46.4 mill.
Oblig. $56.0 mill.
Pfd Stock $2.4 mill. **Pfd Div'd:** $.1 mill.

Common Stock 16,111,268 shs.
as of 10/31/14

MARKET CAP: $350 million (Small Cap)

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		17-19
71.0	74.6	81.1	86.1	91.0	91.2	102.7	102.1	110.4	114.8	*118*	*125*	Revenues ($mill)	*150*
8.4	8.5	10.0	11.8	12.2	10.0	14.3	13.4	14.4	16.6	*17.5*	*18.5*	Net Profit ($mill)	*21.0*
31.1%	27.6%	33.4%	32.6%	33.2%	34.1%	32.1%	32.7%	33.9%	34.1%	*34.5%*	*35.0%*	Income Tax Rate	*34.5%*
--	--	--	--	--	--	6.8%	6.1%	3.4%	1.9%	*1.5%*	*1.5%*	AFUDC % to Net Profit	*2.0%*
53.8%	55.3%	49.5%	49.0%	45.6%	46.6%	43.1%	42.3%	41.5%	40.4%	*40.0%*	*42.5%*	Long-Term Debt Ratio	*43.5%*
42.5%	41.3%	47.5%	49.6%	51.8%	52.1%	55.8%	56.6%	57.4%	58.7%	*59.5%*	*57.0%*	Common Equity Ratio	*56.0%*
214.5	231.7	264.0	268.8	259.4	267.9	310.5	312.5	316.5	321.4	*330*	*350*	Total Capital ($mill)	*400*
262.9	288.0	317.1	333.9	366.3	376.5	405.9	422.2	435.2	446.5	*460*	*470*	Net Plant ($mill)	*500*
5.1%	5.0%	5.1%	5.6%	5.8%	5.0%	5.7%	5.2%	5.4%	5.9%	*6.0%*	*6.0%*	Return on Total Cap'l	*6.5%*
8.5%	8.2%	7.5%	8.6%	8.6%	7.0%	8.1%	7.5%	7.8%	8.7%	*9.0%*	*9.5%*	Return on Shr. Equity	*9.5%*
9.0%	8.6%	7.8%	8.7%	8.9%	7.0%	8.2%	7.5%	7.8%	8.7%	*9.0%*	*9.5%*	Return on Com Equity	*9.5%*
.9%	.6%	1.3%	1.8%	2.0%	.1%	2.1%	1.0%	1.4%	2.4%	*3.0%*	*3.0%*	Retained to Com Eq	*3.0%*
90%	94%	84%	79%	78%	98%	75%	87%	83%	73%	*69%*	*67%*	All Div'ds to Net Prof	*66%*

CURRENT POSITION ($MILL.)	2012	2013	9/30/14
Cash Assets	3.0	4.8	5.1
Other	21.6	21.0	23.7
Current Assets	24.6	25.8	28.8
Accts Payable	3.8	6.3	7.2
Debt Due	11.1	33.8	36.1
Other	41.1	12.6	13.4
Current Liab.	56.0	52.7	56.7
Fix. Chg. Cov.	554%	697%	695%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '17-'19
Revenues	1.5%	1.0%	*6.5%*
"Cash Flow"	3.0%	1.5%	*5.5%*
Earnings	3.5%	1.5%	*5.0%*
Dividends	1.5%	1.5%	*2.0%*
Book Value	4.5%	3.0%	*2.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	24.0	26.1	28.7	23.3	102.1
2012	23.5	27.4	32.4	27.1	110.4
2013	27.0	29.1	31.3	27.4	114.8
2014	27.1	29.2	32.7	*29.0*	*118*
2015	*29.0*	*31.0*	*34.0*	*31.0*	*125*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	.11	.23	.32	.12	.84
2012	.11	.23	.38	.17	.90
2013	.20	.28	.36	.19	1.03
2014	.20	.29	.42	*.19*	*1.10*
2015	*.21*	*.31*	*.43*	*.20*	*1.15*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.183	.183	.183	.185	.73
2012	.185	.185	.185	.1875	.74
2013	.1875	.1875	.1875	.19	.75
2014	.19	.19	.19	.1925	.76
2015					

BUSINESS: Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey, Delaware, and Pennsylvania. It also operates water and wastewater systems under contract on behalf of municipal and private clients in NJ and DE. Its Middlesex System provides water services to 60,000 retail customers, primarily in Middlesex County, New Jersey. In 2013, the Middlesex System accounted for 60% of operating revenues. At 12/31/13, the company had 279 employees. Incorporated: NJ. President, CEO, and Chairman: Dennis W. Doll. Officers & directors own 3.3% of the common stock; BlackRock, 7.4%; Vanguard 3.3%. (4/14 proxy). Add.: 1500 Ronson Road, Iselin, NJ 08830. Tel.: 732-634-1500. Internet: www.middlesexwater.com.

Middlesex Water Company has an incredibly consistent dividend policy. In late October, the company raised its dividend by one-quarter of $0.01. For the full year, the increase works out to one cent. This marks the 12th straight year in which the utility has raised the annual payout by $0.01.

Consistency is not always a good characteristic for a company. The latest dividend hike represents a paltry 1.3% yearly hike, compared to the industry average of over 6%. Indeed, this represented the lowest rate of growth of any regulated water utility in the industry. What's more, we don't anticipate any change in Middlesex's one-cent-a-year philosophy until 2016 or 2017.

Near-term earnings prospects are not bad for a water utility. Even though we are not looking for a great comparison in the fourth quarter, better-than-expected results in the September period were probably enough to enable the company to earn $1.10 a share, a solid 7% increase over 2013. Modest rate increases in both New Jersey and Delaware were most likely behind most of the gains. All things considered, this was a good showing, considering that the company lost its largest client (a Hess refinery) and the borough of Sayreville less than two years ago. In 2015, the increase in profits will probably be less impressive, as we estimate only calls for a 4%-5% advance in share net to $1.15.

The balance sheet may be small but it is relatively solid. With net plant just a little north of $450 million and total capital of only about $330 million, Middlesex has better than average financial metrics compared to the rest of the industry.

More attractive candidates can be found for those investors insisting on being involved in the water utility industry. If a water utility stock must be selected, we think that most current valuations in the group are too high. Moreover, Middlesex would not be our recommendation. Typically, utilities with subpar dividend growth prospects must compensate buyers by having a much higher yield. Middlesex's yield does not appear to be high enough to make up for its poor dividend growth prospects.

James A. Flood *January 16, 2015*

(A) Diluted earnings. May not sum due to rounding. Next earnings report due mid-February.
(B) Dividends historically paid in mid-Feb., May, Aug., and November.■ Div'd reinvestment plan available.
(C) In millions, adjusted for splits.

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	40
Earnings Predictability	80

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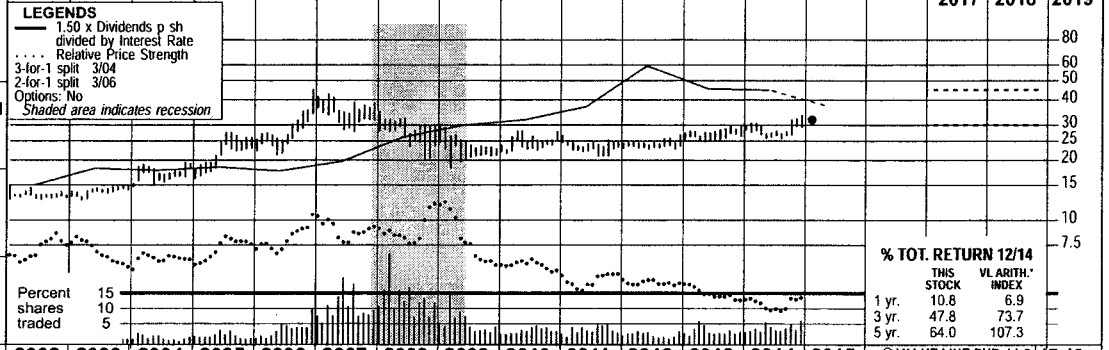
SJW CORP. NYSE-SJW

RECENT PRICE	32.02	P/E RATIO	11.6 (Trailing: 12.9 / Median: 24.0)	RELATIVE P/E RATIO	0.64	DIV'D YLD	2.5%	VALUE LINE

TIMELINESS 4 Lowered 12/19/14
SAFETY 3 New 4/22/11
TECHNICAL 2 Raised 1/2/15
BETA .85 (1.00 = Market)

High:	15.0	19.6	27.8	45.3	43.0	35.1	30.4	28.2	26.8	26.9	30.1	33.7
Low:	12.6	14.6	16.1	21.2	27.7	20.0	18.2	21.6	20.9	22.6	24.5	25.5

LEGENDS
— 1.50 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
3-for-1 split 3/04
2-for-1 split 3/06
Options: No
Shaded area indicates recession



Target Price Range
2017 | 2018 | 2019

2017-19 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	45	(+40%)	11%
Low	30	(-5%)	1%

Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	0	0	1	1	0	1	1	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	1	0

Institutional Decisions

	1Q2014	2Q2014	3Q2014
to Buy	32	45	38
to Sell	39	40	45
Hld's(000)	10980	10965	10784

Percent shares traded 15 10 5

% TOT. RETURN 12/14

	THIS STOCK	VL ARITH.* INDEX
1 yr.	10.8	6.9
3 yr.	47.8	73.7
5 yr.	64.0	107.3

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	© VALUE LINE PUB. LLC	17-19
5.58	6.40	6.74	7.45	7.97	8.20	9.14	9.86	10.35	11.25	12.12	11.68	11.62	12.85	14.01	13.73	*15.85*	*14.75*	Revenues per sh	*17.15*
1.26	1.43	1.23	1.49	1.55	1.75	1.89	2.21	2.38	2.30	2.44	2.21	2.38	2.80	2.97	2.90	*4.40*	*3.35*	"Cash Flow" per sh	*3.85*
.76	.87	.58	.77	.78	.91	.87	1.12	1.19	1.04	1.08	.81	.84	1.11	1.18	1.12	*2.60*	*1.45*	Earnings per sh A	*1.70*
.39	.40	.41	.43	.46	.49	.51	.53	.57	.61	.65	.66	.68	.69	.71	.73	.75	*.79*	Div'd Decl'd per sh B■	*1.00*
1.81	1.77	1.89	2.63	2.06	3.41	2.31	2.83	3.87	6.62	3.79	3.17	5.65	3.75	5.67	4.68	*4.60*	*5.25*	Cap'l Spending per sh	*5.00*
7.53	7.88	7.90	8.17	8.40	9.11	10.11	10.72	12.48	12.90	13.99	13.66	13.75	14.20	14.71	15.92	*17.55*	*18.55*	Book Value per sh	*20.70*
19.01	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.28	18.36	18.18	18.50	18.55	18.59	18.67	20.17	*20.50*	*21.00*	Common Shs Outst'g C	*23.00*
13.1	15.5	33.1	18.5	17.3	15.4	19.6	19.7	23.5	33.4	26.2	28.7	29.1	21.2	20.4	24.3	*10.9*		Avg Ann'l P/E Ratio	*22.0*
.68	.88	2.15	.95	.94	.88	1.04	1.05	1.27	1.77	1.58	1.91	1.85	1.33	1.30	1.36	*.57*		Relative P/E Ratio	*1.40*
3.9%	3.0%	2.1%	3.0%	3.4%	3.5%	3.0%	2.4%	2.0%	1.7%	2.3%	2.8%	2.8%	2.9%	3.0%	2.7%	2.6%		Avg Ann'l Div'd Yield	*2.7%*
						166.9	180.1	189.2	206.6	220.3	216.1	215.6	239.0	261.5	276.9	*325*	*310*	Revenues ($mill)	*395*
						16.0	20.7	22.2	19.3	20.2	15.2	15.8	20.9	22.3	23.5	*52.0*	*30.0*	Net Profit ($mill)	*39.0*
						42.1%	41.6%	40.8%	39.4%	39.5%	40.4%	38.8%	41.1%	41.1%	38.7%	*30.0%*	*38.0%*	Income Tax Rate	*38.5%*
						2.1%	1.6%	2.1%	2.7%	2.3%	2.0%	--	--	2.0%	--	*1.0%*	*1.0%*	AFUDC % to Net Profit	*2.0%*
						43.7%	42.6%	41.8%	47.7%	46.0%	49.4%	53.7%	56.6%	55.0%	51.1%	*52.0%*	*52.0%*	Long-Term Debt Ratio	*53.5%*
						56.3%	57.4%	58.2%	52.3%	54.0%	50.6%	46.3%	43.4%	45.0%	48.9%	*48.0%*	*47.5%*	Common Equity Ratio	*46.5%*
						328.3	341.2	391.8	453.2	470.9	499.6	550.7	607.9	610.2	656.2	*750*	*825*	Total Capital ($mill)	*1025*
						456.8	484.8	541.7	645.5	684.2	718.5	785.5	756.2	831.6	898.7	*965*	*1010*	Net Plant ($mill)	*1200*
						6.5%	7.6%	7.0%	5.7%	5.8%	4.4%	4.3%	4.9%	5.0%	5.0%	*8.5%*	*5.0%*	Return on Total Cap'l	*5.5%*
						8.7%	10.6%	9.7%	8.2%	8.0%	6.0%	6.2%	7.9%	8.1%	7.3%	*14.5%*	*8.0%*	Return on Shr. Equity	*8.0%*
						8.7%	10.6%	9.7%	8.2%	8.0%	6.0%	6.2%	7.9%	8.1%	7.3%	*14.5%*	*8.0%*	Return on Com Equity	*8.0%*
						3.6%	5.6%	5.2%	3.5%	3.3%	1.2%	1.2%	3.1%	3.3%	2.8%	*10.5%*	*3.5%*	Retained to Com Eq	*3.5%*
						58%	47%	46%	57%	59%	80%	80%	61%	59%	62%	*29%*	*54%*	All Div'ds to Net Prof	*59%*

CAPITAL STRUCTURE as of 9/30/14
Total Debt $393.3 mill. **Due in 5 Yrs** $21.2 mill.
LT Debt $384.5 mill. **LT Interest** $18.1 mill.
(Total interest coverage: 2.9x) (52% of Cap'l)

Leases, Uncapitalized: Annual rentals $5.5 mill.

Pension Assets $91.4 mill. **Oblig.** $128.7 mill.

Pfd Stock None.

Common Stock 20,238,134 shs. as of 10/24/14

MARKET CAP: $650 million (Small Cap)

CURRENT POSITION ($MILL.)	2012	2013	9/30/14
Cash Assets	2.5	2.3	5.6
Other	40.4	37.4	64.9
Current Assets	42.9	39.7	70.5
Accts Payable	8.5	12.6	12.3
Debt Due	20.7	23.0	8.8
Other	19.9	23.6	30.7
Current Liab.	49.1	59.2	51.8
Fix. Chg. Cov.	317%	268%	270%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '17-'19
Revenues	5.5%	4.0%	*4.0%*
"Cash Flow"	6.0%	4.0%	*5.0%*
Earnings	3.5%	.5%	*7.0%*
Dividends	4.5%	3.5%	*6.0%*
Book Value	5.5%	2.5%	*5.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	43.7	59.0	73.9	62.4	239.0
2012	51.1	65.6	82.4	62.4	261.5
2013	50.1	74.2	85.2	67.4	276.9
2014	54.6	70.4	125.4	*74.6*	*325*
2015	*60.0*	*75.0*	*95.0*	*80.0*	*310*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	.03	.29	.44	.35	1.11
2012	.06	.28	.53	.31	1.18
2013	.07	.37	.44	.24	1.12
2014	.04	.34	1.88	*.34*	*2.60*
2015	*.10*	*.43*	*.55*	*.35*	*1.45*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.173	.173	.173	.173	.69
2012	.1775	.1775	.1775	.1775	.71
2013	.1825	.1825	.1825	.1825	.73
2014	.1875	.1875	.1875	.1875	.75
2015					

BUSINESS: SJW Corporation engages in the production, purchase, storage, purification, distribution, and retail sale of water. It provides water service to approximately 228,000 connections that serve a population of approximately one million people in the San Jose area and 11,000 connections that serve approximately 36,000 residents in a service area in the region between San Antonio and Austin, Texas. The company offers nonregulated water-related services, including water system operations, cash remittances, and maintenance contract services. SJW also owns and operates commercial real estate investments. Has about 379 employees. Chrm.: Charles J. Toeniskoetter. Inc.: CA. Address: 110 W. Taylor Street, San Jose, CA 95110. Tel.: (408) 279-7800. Int: www.sjwater.com.

SJW's impressive 2014 performance was the result of a one-time event. In the third quarter, the utility's share net spiked to $1.88, versus the $0.44 recorded in the similar 2013 period. Behind this whopping increase was SJW's recognition of $58.2 million in revenues due the company for expenses incurred in previous years. The delay in recovering the revenues was the reason for the previous four quarters having negative year-over-year comparisons. We are not backing out the profits as a nonrecurring item because they were earned by the utility's main business during the course of normal operations. It's just that they were recognized all at the same time. Investors should note that SJW's P/E and relative P/E ratio will be out of kilter for the next three months.

Earnings in 2015 will not be as poor as they will probably appear. Excluding the large one-time item taken by SJW last year, we estimate that the utility could have shown close to a double-digit increase in earnings per share.

SJW is in the midst of overhauling its outdated infrastructure. To remove and install new pipes, as well as repair and modernize waste facilities, the company will need to spend close to $1 billion annually over the next several years.

The large projected capital outlays will only have a minor impact on the company's balance sheet. SJW will have to issue new debt because internally generated funds will not cover the entire long-term capital budget. The common equity-to-total capital ratio will most likely decline from the current 48% level to about 46.5% by later in the decade. This should leave the utility with marginally below-average finances.

Shares of SJW do not have good near-term prospects. Our proprietary system has dropped the ranking of SJW one notch to 4 (Below Average) for year-ahead relative performance.

Long-term prospects are not encouraging either. The 18% rise in the price of the equity since our October report has reduced much of SJW's appeal. With the stock already trading in our 2017-2019 projected Target Price Range, both total return and capital appreciation potential are not impressive.

James A. Flood *January 16, 2015*

(A) Diluted earnings. Excludes nonrecurring losses : '03, $1.97; '04, $3.78; '05, $1.09; '06, $16.36; '08, $1.22; '10, 46¢. Next earnings report due mid February. Quarterly egs. may not add due to rounding.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for stock splits.

Company's Financial Strength	B+
Stock's Price Stability	80
Price Growth Persistence	30
Earnings Predictability	80

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YORK WATER NDQ-YORW

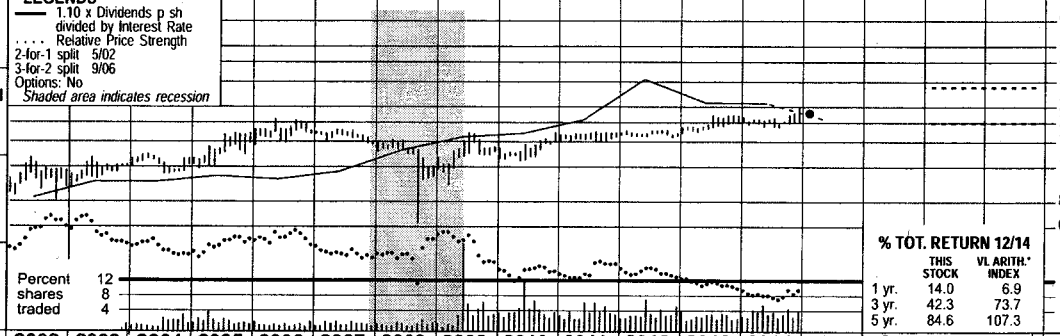
RECENT PRICE 22.35 | P/E RATIO 24.3 (Trailing: 27.3 Median: 25.0) | RELATIVE P/E RATIO 1.34 | DIV'D YLD 2.7% | VALUE LINE

TIMELINESS 3 Raised 12/19/14
SAFETY 2 New 7/19/13
TECHNICAL 3 Lowered 10/10/14
BETA .65 (1.00 = Market)

High:	13.5	14.0	17.9	21.0	18.5	16.5	18.0	18.0	18.1	18.5	22.0	24.3
Low:	9.3	11.0	11.7	15.3	15.5	6.2	9.7	12.8	15.8	16.8	17.6	18.8

Target Price Range 2017 | 2018 | 2019

LEGENDS
— 1.10 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 5/02
3-for-2 split 9/06
Options: No
Shaded area indicates recession



2017-19 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	30	(+35%)	10%
Low	20	(-10%)	1%

Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	1	4	1	0	4	2	1	4
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	1	0	0	0	0

Institutional Decisions

	1Q2014	2Q2014	3Q2014
to Buy	30	29	30
to Sell	21	28	30
Hld's(000)	3634	3603	3656

% TOT. RETURN 12/14

	THIS STOCK	VL ARITH.* INDEX
1 yr.	14.0	6.9
3 yr.	42.3	73.7
5 yr.	84.6	107.3

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	© VALUE LINE PUB. LLC	17-19
--	--	--	2.05	2.05	2.17	2.18	2.58	2.56	2.79	2.89	2.95	3.07	3.18	3.21	3.27	3.60	3.85	Revenues per sh	4.65
--	--	--	.59	.57	.65	.65	.79	.77	.86	.88	.95	1.07	1.09	1.12	1.19	1.35	1.45	"Cash Flow" per sh	1.70
--	--	--	.43	.40	.47	.49	.56	.58	.57	.57	.64	.71	.71	.72	.75	.85	.95	Earnings per sh A	1.10
--	--	--	.34	.35	.37	.39	.42	.45	.48	.49	.51	.52	.53	.54	.55	.57	.60	Div'd Decl'd per sh B	.75
--	--	--	.75	.66	1.07	2.50	1.69	1.85	1.69	2.17	1.18	.83	.74	.94	.76	.95	.95	Cap'l Spending per sh	1.00
--	--	--	3.79	3.90	4.06	4.65	4.85	5.84	5.97	6.14	6.92	7.19	7.45	7.73	7.98	8.20	8.00	Book Value per sh	8.90
--	--	--	9.46	9.55	9.63	10.33	10.40	11.20	11.27	11.37	12.56	12.69	12.79	12.92	12.98	12.80	12.50	Common Shs Outst'g C	11.80
--	--	--	17.8	26.9	24.5	25.7	26.3	31.2	30.3	24.6	21.9	20.7	23.9	24.4	26.3	24.2		Avg Ann'l P/E Ratio	22.5
--	--	--	.91	1.47	1.40	1.36	1.40	1.68	1.61	1.48	1.46	1.32	1.50	1.55	1.48	1.26		Relative P/E Ratio	1.40
--	--	--	4.4%	3.3%	3.2%	3.1%	2.9%	2.5%	2.8%	3.5%	3.6%	3.5%	3.1%	3.1%	2.8%	2.8%		Avg Ann'l Div'd Yield	3.0%

CAPITAL STRUCTURE as of 9/30/14
Total Debt $84.9 mill. **Due in 5 Yrs** $19.5 mill.
LT Debt $84.9 mill. **LT Interest** $5.1 mill.
(Total interest coverage: 4.0x)
(45% of Cap'l)
Pension Assets 12/13 $27.1 mill.
Oblig. $32.1 mill.

Pfd Stock None

Common Stock 12,809,217 shs.
as of 11/4/14

MARKET CAP: $275 million (Small Cap)

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		17-19
22.5	26.8	28.7	31.4	32.8	37.0	39.0	40.6	41.4	42.4	46.0	48.0	Revenues ($mill)	55.0
4.8	5.8	6.1	6.4	6.4	7.5	8.9	9.1	9.3	9.7	11.0	12.0	Net Profit ($mill)	13.0
36.7%	36.7%	34.4%	36.5%	36.1%	37.9%	38.5%	35.3%	37.6%	37.6%	37.5%	38.0%	Income Tax Rate	37.5%
--	--	7.2%	3.6%	10.1%	--	1.2%	1.1%	1.1%	.8%	1.5%	1.5%	AFUDC % to Net Profit	1.0%
42.5%	44.1%	48.3%	46.5%	54.5%	45.7%	48.3%	47.1%	46.0%	45.1%	45.0%	46.0%	Long-Term Debt Ratio	50.0%
57.5%	55.9%	51.7%	53.5%	45.5%	54.3%	51.7%	52.9%	54.0%	54.9%	55.0%	54.0%	Common Equity Ratio	50.0%
83.6	90.3	126.5	125.7	153.4	160.1	176.4	180.2	184.8	188.4	190	185	Total Capital ($mill)	210
140.0	155.3	174.4	191.6	211.4	222.0	228.4	233.0	240.3	244.2	250	255	Net Plant ($mill)	270
7.6%	8.4%	6.2%	6.7%	5.7%	6.2%	6.5%	6.4%	6.4%	6.5%	7.0%	8.0%	Return on Total Cap'l	7.5%
10.0%	11.6%	9.3%	9.5%	9.2%	8.6%	9.8%	9.5%	9.3%	9.3%	10.5%	12.0%	Return on Shr. Equity	12.5%
10.0%	11.6%	9.3%	9.5%	9.2%	8.6%	9.8%	9.5%	9.3%	9.3%	10.5%	12.0%	Return on Com Equity	12.5%
2.1%	3.0%	2.2%	1.7%	1.4%	1.9%	2.7%	2.5%	2.4%	2.4%	3.5%	4.5%	Retained to Com Eq	4.0%
79%	74%	77%	82%	85%	78%	72%	73%	74%	74%	67%	66%	All Div'ds to Net Prof	68%

CURRENT POSITION ($MILL.)	2012	2013	9/30/14
Cash Assets	4.0	7.6	3.2
Accounts Receivable	6.4	3.8	4.2
Other	1.2	3.8	4.3
Current Assets	11.6	15.2	11.7
Accts Payable	1.1	1.8	2.7
Debt Due	.1	--	--
Other	4.3	6.0	8.9
Current Liab.	5.5	7.8	11.6
Fix. Chg. Cov.	414%	417%	417%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '17-'19
Revenues	4.5%	3.0%	6.5%
"Cash Flow"	6.5%	6.5%	7.0%
Earnings	5.5%	5.0%	7.0%
Dividends	4.5%	2.5%	5.5%
Book Value	7.0%	5.0%	2.5%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	9.6	10.5	10.5	10.0	40.6
2012	9.6	10.4	11.0	10.4	41.4
2013	10.1	10.7	10.9	10.7	42.4
2014	10.6	11.8	12.1	11.5	46.0
2015	11.0	12.0	12.5	12.5	48.0

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	.17	.19	.19	.16	.71
2012	.15	.17	.22	.18	.72
2013	.17	.18	.19	.21	.75
2014	.16	.22	.23	.24	.85
2015	.20	.25	.25	.25	.95

Cal-endar	QUARTERLY DIVIDENDS PAID B Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.131	.131	.131	.131	.524
2012	.134	.134	.134	.134	.535
2013	.138	.138	.138	.138	.552
2014	.1431	.1431	.1431	.1431	.572
2015	.1495				

BUSINESS: The York Water Company is the oldest investor-owned regulated water utility in the United States. It has operated continuously since 1816. As of December 31, 2013, the company's average daily availability was 35.0 million gallons and its service territory had an estimated population of 190,000. Has more than 63,000 customers. Residential customers accounted for 63% of 2013 revenues; commercial and industrial (29%); other (8%). It also provides sewer billing services. Incorporated: PA. York had 105 full-time employees at 12/31/13. President/CEO: Jeffrey R. Hines. Officers/directors own 1.1% of the common stock (3/14 proxy). Address: 130 East Market Street York, Pennsylvania 17401. Telephone: (717) 845-3601. Internet: www.yorkwater.com.

In late November, The York Water Company raised its dividend by 4.5%. This increase is much higher than the subpar (for a water utility) 2.5% annual growth rate that the company averaged over the past five years. We believe this is the start of a trend in which York will probably be able to raise the yearly payout between 5% and 6% for the next five years.

The company has solid short-term earning prospects. For the last 10 months of 2014, Pennsylvania regulators allowed York to raise customers' monthly bills. This probably enabled the company to earn $0.85 a share in 2014, a 13% increase over 2013. In 2015, due to a combination of the higher tariffs being in effect for all 12 months, along with a slower increase in expenses thanks to some cost cutting, we look for a 12% increase in share earnings, to $0.95.

The capital budget is manageable. Most U.S. water utilities have aging infrastructures that are in need of repair. We estimate that York spent about $12 million for this purpose last year and will come close to this figure again in 2015. So, while the outlays will be meaningful, they will not be overwhelming.

Finances should remain solid. Cash on hand and internally generated funds were probably sufficient to meet 2014's planned expenditures. Over the next three- to five-year period, however, York will most likely have to access the debt markets to fully fund the capital budget. Currently, the company is well capitalized, as its common equity-to-total capital ratio is a healthy 55%. So, while the company's financial condition may slip a few notches, we think the balance sheet will remain healthy.

As has been the case with most water utilities, York shares have been performing extremely well. In December alone, the value of the equity rose 20%. This strong showing has reduced the dividend yield to only 2.7%, or only 60 basis points higher than the median of all dividend-paying companies in the *Value Line* universe. Investors have been willing to pay a substantial premium for just a little more current income. In addition, the recent price run-up in the stock has left it with meager potential returns through 2017-2019.

James A. Flood *January 16, 2015*

(A) Diluted earnings. Next earnings report due mid February.
(B) Dividends historically paid in mid-January, April, July, and October.
(C) In millions, adjusted for splits.

Company's Financial Strength	B+
Stock's Price Stability	90
Price Growth Persistence	55
Earnings Predictability	100

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Exhibit TJB-COC-RT-2

Sahuarita Water Company, LLC
Comparative Risk Study
Computations of Operating Margin and Coefficient of Variation of Operating Margin

Line No.	Operating Income EBIT ($ in millions)									Co-efficient of variation
3			2014	2013	2012	2011	2010	Average	Std Dev.	of Operating Income
4	Company	Symbol								
5	American States Water	AWR	119	119	111	95	73	103.40	19.62	0.1897
6	Aqua America	WTR	314	305	322	286	272	299.80	20.52	0.0685
7	California Water	CWT	109	93	93	90	85	94.00	9.00	0.0957
8	Connecticut Water	CTWS	25	22	20	16	14	19.40	4.45	0.2294
9	Middlesex	MSEX	34	31	28	24	27	28.80	3.83	0.1331
10	SJW Corp.	SJW	93	53	55	54	38	58.60	20.45	0.3490
11	York Water Company	YORW	22	21	21	20	20	20.80	0.84	0.0402
13	Water Proxy Group									0.1579
15	Sahuarita Water Company, LLC		0.74	0.76	0.97	0.71	0.10	0.66	0.33	0.4959
17	**Risk relative to the average risk of the water utilities sample**									**3.14**

19	Sales ($ in millions)							
20	Company	Symbol	2014	2013	2012	2011	2010	Average
21	American States Water	AWR	466	472	467	419	399	445
22	Aqua America	WTR	780	769	758	712	726	749
23	California Water	CWT	598	584	560	502	460	541
24	Connecticut Water	CTWS	94	91	84	69	66	81
25	Middlesex	MSEX	117	115	110	102	103	109
26	SJW Corp.	SJW	320	277	262	239	216	263
27	York Water Company	YORW	46	42	41	41	39	42
29	Sahuarita Water Company, LLC		3.35	3.26	3.27	3.01	2.42	3.06

31	Operating Margin (%)									Co-efficient of variation
32	Company	Symbol	2014	2013	2012	2011	2010	Average	Std Dev.	of Operating Margin
33	Amercian Water Works	AWK	25.54%	25.21%	23.77%	22.67%	18.30%	23.10%	0.03	0.1264
34	Aqua America	WTR	40.26%	39.66%	42.48%	40.17%	37.47%	40.01%	0.02	0.0447
35	California Water	CWT	18.23%	15.92%	16.61%	17.93%	18.48%	17.43%	0.01	0.0637
36	Connecticut Water	CTWS	26.60%	24.18%	23.81%	23.19%	21.21%	23.80%	0.02	0.0815
37	Middlesex	MSEX	29.06%	26.96%	25.45%	23.53%	26.21%	26.24%	0.02	0.0772
38	SJW Corp.	SJW	29.06%	19.13%	20.99%	22.59%	17.59%	21.88%	0.04	0.2029
39	York Water Company	YORW	47.83%	50.00%	51.22%	48.78%	51.28%	49.82%	0.02	0.0304
41	Average Water Proxy Group							28.90%		0.0895
43	Sahuarita Water Company, LLC		22.05%	23.42%	29.82%	23.54%	4.34%	20.63%	0.10	0.4649
45	**Risk relative to the average risk of the water utilities sample**									**5.19**

48	Return on Equity (ROE)									Co-efficient of variation
49			2014	2013	2012	2011	2010	Average	Std Dev.	of ROE
50	Company	Symbol								
51	American States Water	AWR	12.1%	12.7%	11.9%	10.3%	11.0%	11.6%	0.01	0.0818
52	Aqua America	WTR	12.9%	13.4%	11.0%	11.6%	10.6%	11.9%	0.01	0.1015
53	California Water	CWT	9.0%	9.0%	9.0%	8.0%	8.6%	8.7%	0.00	0.0502
54	Connecticut Water	CTWS	10.2%	9.3%	7.3%	8.3%	8.7%	8.8%	0.01	0.1239
55	Middlesex	MSEX	9.3%	8.7%	7.8%	7.5%	8.2%	8.3%	0.01	0.0865
56	SJW Corp.	SJW	14.4%	7.0%	8.1%	7.9%	6.2%	8.7%	0.03	0.3744
57	York Water Company	YORW	11.0%	9.4%	9.3%	9.5%	9.8%	9.8%	0.01	0.0711
59	Water Proxy Group		11.3%	9.9%	9.2%	9.0%	9.0%	9.7%		0.1271
61	Sahuarita Water Company, LLC		7.90%	7.26%	9.45%	6.67%	0.13%	6.28%	0.04	0.5719
63	**Risk relative to the average risk of the water utilities sample**									**4.50**

Sahuarita Water Company, LLC
Comparative Risk Study
Beta Estimate Using Duff and Phelps Risk Study Portfolio Information

A. Beta Estimates for Water Sample Group and Company

Line No.		Portfolio	Operating Margin	Portfolio	CV (Operating Margin)[1]	Portfolio	CV (ROE)[1]
1	Company	5	20.63%	5	46.49%	10	57.19%
2	Water Proxy Group	2	28.90%	17	8.95%	23	12.71%

		Portfolio Beta[2]	Portfolio Beta[3]	Portfolio Beta[3]	Average
3	Company	0.98	1.27	1.17	
4	Water Proxy Group	0.83	0.99	0.89	
5	Percentage Difference	18.1%	28.3%	31.5%	**25.9%**

B. Assume percentage difference is the same for water utilities as companies in general

6	Water Sample Group[5]	0.72	0.72	0.72	
7	Implied Beta for Company[6]	0.85	0.92	0.95	**0.91**

Notes:
[1] See Risk Study. CV stands for Coefficient of Variation,
[2] Source is Duff & Phelps 2105 Valuation Handbook, Risk Study, Exhibit D-1, Companies Ranked by Operating Margin.
[3] Source is Duff & Phelps 2105 Valuation Handbook, Risk Study, Exhibit D-2, Companies Ranked by CV (Operating Margin).
[5] Source is Schedule D-4.3.
[6] Calculated by multiplying (1+ percentage difference in risk study betas) times average beta for the water sample group.

Sahuarita Water Company, LLC
Comparative Risk Study
Traditional Capital Asset Pricing Model (CAPM) Using Implied Beta
To Find Additional Risk Premium

Line No.		Rf[1]	+	Implied beta[2]	x	RP_M		=	k	CAPM Results From Schedule D-4.11	Indicated Company Risk Premium
1	Historical Market Risk Premium CAPM	4.5%	+	0.91	x	7.00%	[3]	=	10.9%	9.5%	1.4%
2	Currrent Market Risk Premium CAPM	4.5%	+	0.91	x	8.83%	[4]	=	12.5%	10.9%	1.6%

Notes:
[1] Forecasts of long-term treasury yields. See Scehdule D-4.9.
[2] Implied Beta computed from Duff and Phelps 2015 Valuation Handbook Risk Study information. See page 1 of exhibit.
[3] Historical Market Risk Premium Duff & Phelps 2015 Valuation Handbook, Appendix 3, Long-Horizon ERP.
[4] See Schedule D-4.10

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
DOUG LITTLE - CHAIRMAN
BOB STUMP
BOB BURNS
TOM FORESE
ANDY TOBIN

IN THE MATTER OF THE APPLICATION OF SAHUARITA WATER COMPANY, LLC, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PROPERTY AND FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES.	DOCKET NO. W-03718A-15-0213

REJOINDER TESTIMONY OF

THOMAS J. BOURASSA

COST OF CAPITAL

APRIL 15, 2016

PENGAD 800-631-6989
EXHIBIT
A-8
ADMITTED

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I. INTRODUCTION.

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive, Phoenix, Arizona 85029.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?

A. I am testifying on behalf of the applicant, Sahuarita Water Company, LLC. ("SWC" or the "Company").

Q. ARE YOU THE SAME THOMAS J. BOURASSA THAT FILED DIRECT AND REBUTTAL TESTIMONY IN THIS DOCKET?

A. Yes, I prepared direct testimonies in two volumes; one volume on the rate base, income statement, revenue requirement and rate design and the second volume of cost of capital. I also prepared two volumes of rebuttal testimonies with the same division. My background information and qualifications are set forth in the rate base and revenue requirement volume of my direct testimony.

Q. DID YOU ALSO PREPARE REJOINDER TESTIMONY ON THOSE ISSUES IN THIS DOCKET?

A. Yes, my rejoinder testimony on rate base, income statement, revenue requirement and rate design is being filed in a separate volume at the same time as this testimony. In this volume, I present my cost of capital rejoinder testimony.

II. SUMMARY OF REBUTTAL TESTIMONY AND THE PROPOSED COST OF CAPITAL FOR THE COMPANY.

A. Summary of Company's Rebuttal Recommendation.

Q. WHAT IS YOUR RECOMMENDED COST OF CAPITAL?

A. I continue to recommend a return on equity (ROE") of 10.5 percent, which is the same recommendation I made in my rebuttal testimony. My recommendation of 10.5 percent is above the mid-point of the range of my DCF, Risk Premium, and CAPM analyses of 9.9 percent for the publicly traded water utilities ("water proxy group"). My recommendation of 10.5 percent is also below the mid-point of the range of estimates for SWC of 11.1 percent, which takes into account a downward financial risk adjustment of 30 basis points, and which recognizes the Company's lower financial risk compared to the water proxy group, and an upward risk adjustment for SWC of 150 basis points to recognize the higher risk of an investment in SWC compared to the water proxy group.[1] I also recommend a capital structure consisting of 20.57 percent debt and 79.43 percent equity and a cost of debt of 4.2 percent. Based on these recommendations, the weighted average cost of capital ("WACC") is 9.2 percent.[2] Therefore, I recommend a return of at least 9.2 percent be applied to SWC's fair value rate base ("FVRB").

[1] *See* Rejoinder COC Schedule D-4.1.

[2] See Rejoinder COC Schedule D-1.

Q. HAVE YOU UPDATED YOUR COST OF CAPITAL ANALYSIS FOR REJOINDER?

A. Yes. The results of my updated analysis for the water proxy group are somewhat lower than those in my direct testimony. The range of my rejoinder DCF, Risk Premium, and CAPM analyses for the water proxy group is from 9.5 percent to 10.2 percent with a mid-point of 9.9 percent.[3] This compares to my recommendation in rebuttal, where the range for the water proxy group was from 9.6 percent to 10.4 percent, with a midpoint estimate of 10.0 percent.[4]

Moreover, the results of my updated analysis for SWC are similar to those in my rebuttal testimony. The range of my rejoinder DCF, Risk Premium, and CAPM analyses for SWC is 10.7 percent to 11.4 percent, with a mid-point of 11.1 percent.[5] By comparison, my DCF, Risk Premium, and CAPM analyses for SWC in rebuttal showed that the indicated cost of equity was in the range of 10.7 percent to 11.5 percent, with a midpoint of 11.1 percent.[6]

After considering the differences in business and financial risk between SWC and the publicly traded water utilities, the cost of equity for SWC falls in the range of 10.7 percent to 11.4 percent with a mid-point of 11.1 percent. However, despite a somewhat higher indicated cost of equity for SWC of 11.1 percent, I continue to recommend a ROE of 10.5 percent for SWC.

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[3] *See* Rejoinder COC Schedule D-4.1.

[4] *See* Rebuttal COC Schedule D-4.1.

[5] *See* Rejoinder COC Schedule D-4.1.

[6] *See* Rebuttal COC Schedule D-4.1.

B. Summary of the Staff Recommendations.

Q. PLEASE SUMMARIZE THE SURREBUTTAL RECOMMENDATIONS OF STAFF FOR THE COST OF EQUITY AND THE RATE OF RETURN ON FAIR VALUE RATE BASE.

A. Staff continues to recommend a capital structure consisting of 20.57 percent debt and 79.43 percent equity.[7] Staff's updated cost of capital analysis determined a cost of equity of 8.5 percent based on the average cost of equity produced by its DCF and CAPM models, but is recommending a 9.5 percent ROE.[8] Staff also continues to recommend a cost of debt of 4.2 percent.[9] Based on the foregoing capital structure, cost of equity and cost of debt, Staff continues to recommend a weighted cost of capital ("WACC") is 8.41 percent.[10]

C. Comments on the Staff Surrebuttal Testimony and ROE Recommendation.

Q. DO YOU HAVE ANY CRITICISMS OF THE STAFF'S SURREBUTTAL COST OF CAPITAL ANALYSES?

A. Yes. Ms. Brown asserts that Staff updated its cost of capital analysis.[11] But after a review of her work papers, I find that not all of the Staff's models have been updated. In particular, Ms. Brown did not update its current market risk premium

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[7] *See* Staff Surrebuttal Schedule CSB-1; *See also* Surrebuttal Testimony of Crystal S. Brown ("Brown Sb.") at 8.

[8] *See* Staff Surrebuttal Schedule CSB-4; *See also* Brown Sb at 8.

[9] *See* Staff Surrebuttal Schedule CSB-4.

[10] Brown Sb. at 8.

[11] Brown Sb. at 7.

CAPM shown on Staff Surrebuttal Schedule CSB-4, which is still based upon *Value Line's* median dividend yield and median price appreciation data from the *Value Line* Summary and Index dated November 6, 2015. Using more recent information, which would have been available to Ms. Brown when she updated the Staff models, the indicated cost of equity of Staff's current market risk premium CAPM would be 10.9 percent, not 9.5 percent.[12]

Based on Ms. Brown's assertion that any point in Staff's "range of the [cost of equity] is fair and reasonable"[13] and that Staff, then the 10.9 percent is also fair and reasonable. While I will leave it up to Ms. Brown to respond, based upon her previous testimony in this case where she asserted that Staff was using the upper limit of its range in this case[14], I would expect Ms. Brown to revise Staff's recommendation upward. That said, my 10.5 percent recommendation would fall well within the Staff range of reasonable ROEs.

Q. WHAT WAS SWC'S AUTHORIZED ROE FROM ITS LAST RATE CASE?

A. SWC came into this rate case with a 10.3 ROE from the last rate case.[15] Ironically, SWC filed the instant case in keeping with a schedule of every 3-to-5 years – so as to avoid too drastic a rate increase resulting from staying out for an extended period of time. Yet as a result of filing this case, Staff recommends reducing that ROE by 80 basis points. Staff's analysis suggests that risk of an investment in

[12] Staff used a spot price for the stock prices of its sample group using the stock prices on March 17, 2016 which provides a benchmark of the timeframe Staff prepared its analysis. Accordingly, I used the median dividend yield and median price appreciation from *Value Line* Summary and Index dated March 18, 2016.

[13] Brown Sb. at 4.

[14] Direct Testimony of Crystal S. Brown ("Brown Dt.") at 5.

[15] *See* Decision 72177, February 11, 2011

SWC has declined significantly since its last rate case, and a drastic drop of 80 basis points in the return is required. My analysis demonstrates otherwise.

Q. PLEASE RESPOND TO MS. BROWN'S TESTIMONY (ON PAGE 2) THAT UNDER STAFF'S PORTFOLIO APPROACH COMPANY-SPECIFIC RISKS ARE ADDRESSED BY DIVERSIFICATION AND THEREFORE INVESTORS SHOULD NOT BE COMPENSATED FOR THOSE RISKS.

A. Portfolio theory is one of the underpinnings of the CAPM and rests on the notion that a diversified investor is only exposed to market risk, and is therefore only rewarded with higher expected returns for bearing only market-related risk (systematic risk) and not unique or company-specific risks. The CAPM assumes that investors are fully diversified, which is a questionable assumption for most investors.[16] That said, the traditional CAPM only captures a single measure of systematic risk as measured by beta, but there are other forms of systematic risk priced by the market such as company size that are not captured by beta. Based on empirical evidence, betas are estimated with error. That is, high betas will tend to have a positive error (risk is overestimated) and low betas will have a negative error (risk is underestimated).[17] Simply put, the CAPM is incomplete and does not fully account for the higher returns that are needed on small company stocks. Stated another way, the higher risks associated with smaller firms are not fully accounted for by beta.[18] Therefore, Ms. Brown's portfolio theory argument is not a

[16] Pratt, Shannon P. and Grabowski, Roger J., *Cost of Capital: Applications and Examples, Fifth Edition.* John Wiley and Sons, 2014, p. 272.

[17] Eugene F. Fama and Kenneth R. French, "The Capital Asset Pricing Model: Theory and Evidence," *Journal of Economic Perspectives* (Summer 2004) 25-46.

[18] Morningstar, *Ibbotson SBBI 2013 Valuation Yearbook,* pp. 85-88. See also Pratt, p. 297.

valid justification for not recognizing the additional risk of an investment in SWC because of its size.

Q. COMPANY SIZE IS A SYSTEMATIC RISK (MARKET RISK)?

A. Yes. To repeat what I have stated in earlier rounds of testimony, the risk of smaller companies *is* a systematic risk and *not* a unique or company-specific risk.[19] Ms. Brown has not refuted this. Simply put, because it is a systematic risk, SWC's ROE should reflect the increased risk because of its smaller size. The risk due to small size is just as much a systematic risk as financial risk. The Commission has recognized financial risk adjustments to the cost of capital in the past based upon the differences between the leverage in the water proxy group and the leverage in the utility. Arguably, the financial risk adjustments are just as much company-specific as my recommended risk premium for SWC, but Staff has never made a portfolio argument against financial risk adjustments.

Q. IS YOUR RISK PREMIUM FOR SWC SIMPLY A NUMBER YOU PULLED OUT OF THIN AIR?

A. No. While I bracketed the small company risk premiums from the financial evidence,[20] I specifically quantified the range of the appropriate risk premium over the returns of the water proxy for SWC based upon market based portfolio data from *Duff & Phelps*, which provide a nexus between market betas and the metrics operating margin, the coefficient of variation in operating margin, and the

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[19] Pratt, p. 78-79. *See also* Direct Testimony of Thomas J. Bourassa ("Bourassa COC Dt.") at 35-36; Rebuttal Testimony of Thomas J. Bourassa ("Bourassa COC Rb.") at 15.

[20] Bourassa COC Dt. at 45.

coefficient of variation in return on equity.[21] Using both specific data from the water proxy group and SWC, I have demonstrated that an investment in SWC is more risky than an investment in the water proxy group.[22] Further, I developed a range of appropriate risk premiums (130 to 170 basis points) to recognize the additional risk of SWC over the water proxy group.[23] Finally, my recommended risk premium of 150 basis points falls well within the range of small company risk premiums gleaned from the empirical finance evidence (99 to 373 basis points).[24]

Q. MS. BROWN (ON PAGE 5) RELIES ON A QUOTE FROM DR. MORIN'S BOOK, NEW REGULATORY FINANCE, TO JUSTIFY HER REJECTION ASSERTION OF A RISK PREMIUM. WOULD DR. MORIN AGREE THAT SMALL COMPANY RISK IS A MARKET RISK?

A. Yes. In his book, New Regulatory Finance, Dr. Morin states, "Investment risk increases as company size diminishes, all else remaining constant. Small companies have very different returns than large ones, and on average they have been higher. The greater risk of small stocks [as measured by beta] does not fully account for their higher returns over many historical periods. The size phenomenon is well documented in the finance literature."[25] He also states, "Given the evidence of a small firm premium, that is, small market-cap socks experience higher returns than large market cap stock with equivalent betas, the CAPM understates the risk of smaller utilities, and a cost of equity bases purely on a CAPM beta will therefore

[21] Bourassa COC Dt. at 22.

[22] Bourassa COC Dt. at 21.

[23] *See* Rejoinder Exhibit TJB-COC-RJ-1

[24] *See* Rejoinder Schedule D-4.15.

[25] Morin, Roger A., *New Regulatory Finance*, Public Utility Reports, Inc., 2006, p. 181.

produce too low an estimate for these small companies."[26] Finally, he concludes, "... size is a significant factor that increases both business risk and financial risk, and, therefore, the cost of capital."[27]

Q. PLEASE COMMENT ON MS. BROWN'S TESTIMONY (ON PAGE 4) THAT SINCE THE DCF AND CAPM MODELS PRODUCE RESULTS MEETING THE FAIRNESS STANDARDS OF HOPE AND BLUEFIELD, ANY POINT IN STAFF'S RANGE IF COST OF EQUITY ESTIMATES IS REASONABLE AND FAIR.

A. First, it is not axiomatic that the model results are fair and reasonable, particularly when the models are mechanically applied. There are conceptual, empirical, and computation issues surrounding each of the models which I have discussed extensively throughout my direct and rebuttal testimony. At the end of the day, the results must pass a reasonableness test.[28] I doubt any reasonable person would view a 7.6 percent ROE (the low end of Staff's range) or an 8.5 percent ROE (the mid-point of Staff's range) as being fair and reasonable, given all of the evidence presented in this matter. The average current and projected book returns for the water proxy group are 11.3 percent and 10.9 percent, respectively, significantly higher than even the high end of Staff's range of 9.5 percent.[29] Only the high end of Staff's range (9.5 percent) comes close to the average current authorized return for the water proxy group of 9.6 percent.[30]

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[26] Morin, p. 187.

[27] Morin, p 187.

[28] Bourassa COC Rb. at 9-10.

[29] Bourassa COC Rb. at 9.

[30] *See* Rejoinder COC Schedule D-4.2.

Q. SHOULD CURRENT ARIZONA AUTHORIZED RETURNS BE THE STANDARD FOR A FAIR AND REASONABLE RETURN AS SUGGESTED BY MS. BROWN?

A. It should not be the only standard, but I would agree with the caveat that one must use caution in simply accepting Arizona's authorized return, as a standard, because some of the current authorized returns may be based on settlements where the parties have agreed to a lower return in order to settle issues in a rate case. In other words, the currently authorized returns may understate the true fully litigated return regulators may have authorized.

Q. WHAT ADJUSTMENT IS NECESSARY TO SWC'S ROE TO PROPERLY REFLECT ITS RISK BY COMPARISON TO THE PROXY GROUP?.

A. Given the evidence in this case, SWC is more risky than the water proxy group. A risk premium of 130 to 170 basis points over the returns of the water proxy group is required to meet the *Hope* and *Bluefield* criteria of providing a return similar to investments of comparable risk. Even if one accepts Staff's mid-point estimate of 8.5 percent as fair and reasonable for the water proxy group, SWC's cost of equity should be in the in the range of 9.8 percent (8.5 + 1.3) to 10.2 percent (8.5 + 1.7) in order to meet the *Hope* and *Bluefield* criteria.

Q. PLEASE COMMENT ON MS. BROWN'S TESTIMONY (ON PAGE 6 AND 7) IN WHICH SHE ASSERTS THE COST OF CAPITAL FOR SWC SHOULD REFLECT THE VALUE OF THE INFLUENCE THE INVESTOR MAY HAVE ON THE COMPANY.

A. With all due respect, Ms. Brown has turned financial theory on its head. Simply stated, financial theory clearly establishes that the cost of capital is an opportunity

cost which a function of the investment, not the investor. Whether investor control of a company results in efficiencies and/or differential shareholder benefits between firms, these are not a result of differences in the cost of capital between minority investors or controlling investors.[31] The value of two companies of comparable risk may be different because one has higher cash flows than the other, but the cost of capital is no different.

Further, Ms. Brown's argument leads to absurd results. Her argument implies that if an investor sold a company to a group of investors (none of whom had a controlling interest) or it became publicly traded with no discernable controlling interest, the company's cost of capital would increase simply by a change in ownership or control. Further, it implies two utilities that are identical in all respects but for their ownership would have two different sets of returns. This is not only inconsistent with financial theory, but it discriminates against certain forms of ownership.

Q. DIDN'T THE COMPANY DISTRIBUTE MORE TO SHAREHOLDERS THAN IT EARNED OVER THE PAST FEW YEARS AS MS. BROWN TESTIFIES?

A. Yes. But, Ms. Brown's testimony is specious and conceals the fact that any utility company in SWC's situation, whether publicly traded or privately-held, would have done the same.

[31] Pratt, p. 865.

Q. WHY?

A. Because the amount of capital in the SWC far exceeded the rate base. Further, SWC did not need the excess capital for capital improvements. An efficient allocation of resources demanded the Company return capital to its investors.

Q. PLEASE EXPLAIN.

A. The amount of investor capital not recognized in rate base does not contribute to the earnings of a utility company. When there is a discrepancy between the total capital investment and the rate base, the fair return on common equity will not be achieved.[32] For example, if the cost of equity is 10 percent and the book equity is $12 million, then the earnings necessary is $1.2 million (10% x $12 million). If the return is applied to an equity component of $9, then the result would be equity earnings of $900,000 (10% X $900,000), or $300,000 less than could be achieved by comparable risk investments.

While total capital and rate base are rarely exactly the same, significant differences lead to an inefficient use of capital. An inefficient use of capital would not be tolerated by prudent management (and investors) and they would take action to minimize the discrepancy whether the company was a publicly traded company or a privately-held company.

Q. PLEASE BE MORE SPECIFIC ON THE COMPANY'S EXCESS CAPITAL SITUATION.

A. In the prior rate case (test year ended 12/31/2008), the total capital in the Company

[32] Morin, p. 493.

was nearly $12.7 million.[33] But, the rate base approved in the prior rate case was only about $8.8 million.[34] So, $3.9 million of investor capital was not being recognized in its earnings base. The allowed earnings in the last case were $402,000 less than the earnings required to achieve the authorized return on its equity capital.[35] In the instant case, the total capital of the Company is over $11.3 million, and the proposed rate base is about $9.4 million. So, there remains a $1.9 million discrepancy. Had the Company not returned capital to its investors, the total capital would have ballooned to over $16 million and the discrepancy would have ballooned to over $4.7 million; a highly inefficient allocation of resources. Investors could invest this capital in other investments and had the opportunity to earn a return on this capital rather than no return at all. As I suggested, any utility company management would have taken steps to minimize the discrepancy between invested capital and rate base in this situation. If management did not, investors would have demanded they do so.

Q. DOES THAT CONCLUDE YOUR REJOINDER TESTIMONY ON COST OF CAPITAL?

A. Yes.

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[33] *See* Docket No. W-03718A-09-0359, Company Schedule D-1

[34] *See* Decision 72177, February 11, 2011.

[35] $8.8 million X 10.3% minus 12.7 million x 10.3 percent.

Exhibit TJB-COC-RJ-1

Sahuarita Water Company, LLC
Comparative Risk Study
Computations of Operating Margin and Coefficient of Variation of Operating Margin

Exhibit
Page 1 of 3

Line No.

Operating Income EBIT ($ in millions)									
Company	Symbol	2014	2013	2012	2011	2010	Average	Std Dev.	Co-efficient of variation of Operating Income
American States Water	AWR	119	119	111	95	73	103.40	19.62	0.1897
Aqua America	WTR	314	305	322	286	272	299.80	20.52	0.0685
California Water	CWT	109	93	93	90	85	94.00	9.00	0.0957
Connecticut Water	CTWS	25	22	20	16	14	19.40	4.45	0.2294
Middlesex	MSEX	34	31	28	24	27	28.80	3.83	0.1331
SJW Corp.	SJW	93	53	55	54	38	58.60	20.45	0.3490
York Water Company	YORW	22	21	21	20	20	20.80	0.84	0.0402
Water Proxy Group									0.1579
Sahuarita Water Company, LLC		0.74	0.76	0.97	0.71	0.10	0.66	0.33	0.4959
Risk relative to the average risk of the water utilities sample									**3.14**

Sales ($ in millions)							
Company	Symbol	2014	2013	2012	2011	2010	Average
American States Water	AWR	466	472	467	419	399	445
Aqua America	WTR	780	769	758	712	726	749
California Water	CWT	598	584	560	502	460	541
Connecticut Water	CTWS	94	91	84	69	66	81
Middlesex	MSEX	117	115	110	102	103	109
SJW Corp.	SJW	320	277	262	239	216	263
York Water Company	YORW	46	42	41	41	39	42
Sahuarita Water Company, LLC		3.35	3.26	3.27	3.01	2.42	3.06

Operating Margin (%)									
Company	Symbol	2014	2013	2012	2011	2010	Average	Std Dev.	Co-efficient of variation of Operating Margin
Amercian Water Works	AWK	25.54%	25.21%	23.77%	22.67%	18.30%	23.10%	0.03	0.1264
Aqua America	WTR	40.26%	39.66%	42.48%	40.17%	37.47%	40.01%	0.02	0.0447
California Water	CWT	18.23%	15.92%	16.61%	17.93%	18.48%	17.43%	0.01	0.0637
Connecticut Water	CTWS	26.60%	24.18%	23.81%	23.19%	21.21%	23.80%	0.02	0.0815
Middlesex	MSEX	29.06%	26.96%	25.45%	23.53%	26.21%	26.24%	0.02	0.0772
SJW Corp.	SJW	29.06%	19.13%	20.99%	22.59%	17.59%	21.88%	0.04	0.2029
York Water Company	YORW	47.83%	50.00%	51.22%	48.78%	51.28%	49.82%	0.02	0.0304
Average Water Proxy Group							28.90%		0.0895
Sahuarita Water Company, LLC		22.05%	23.42%	29.82%	23.54%	4.34%	20.63%	0.10	0.4649
Risk relative to the average risk of the water utilities sample									**5.19**

Return on Equity (ROE)									
Company	Symbol	2014	2013	2012	2011	2010	Average	Std Dev.	Co-efficient of variation of ROE
American States Water	AWR	12.1%	12.7%	11.9%	10.3%	11.0%	11.6%	0.01	0.0818
Aqua America	WTR	12.9%	13.4%	11.0%	11.6%	10.6%	11.9%	0.01	0.1015
California Water	CWT	9.0%	9.0%	9.0%	8.0%	8.6%	8.7%	0.00	0.0502
Connecticut Water	CTWS	10.2%	9.3%	7.3%	8.3%	8.7%	8.8%	0.01	0.1239
Middlesex	MSEX	9.3%	8.7%	7.8%	7.5%	8.2%	8.3%	0.01	0.0865
SJW Corp.	SJW	14.4%	7.0%	8.1%	7.9%	6.2%	8.7%	0.03	0.3744
York Water Company	YORW	11.0%	9.4%	9.3%	9.5%	9.8%	9.8%	0.01	0.0711
Water Proxy Group		11.3%	9.9%	9.2%	9.0%	9.0%	9.7%		0.1271
Sahuarita Water Company, LLC		7.90%	7.26%	9.45%	6.67%	0.13%	6.28%	0.04	0.5719
Risk relative to the average risk of the water utilities sample									**4.50**

Sahuarita Water Company, LLC
Comparative Risk Study
Beta Estimate Using Duff and Phelps Risk Study Portfolio Information

Line No.		Portfolio	Operating Margin	Portfolio	CV (Operating Margin)[1]	Portfolio	CV (ROE)[1]	
	A. Beta Estimates for Water Sample Group and Company`							
1	Company	4	20.63%	4	46.49%	9	57.19%	
2	Water Proxy Group	2	28.90%	18	8.95%	22	12.71%	
			Portfolio Beta[2]		Portfolio Beta[3]		Portfolio Beta[4]	Average
3	Company		0.95		1.33		1.24	
4	Water Proxy Group		0.84		1.02		0.91	
5	Percentage Difference		13.1%		30.4%		36.3%	**26.6%**
	B. Assume percentage difference is the same for water utilities as companies in general							
6	Water Sample Group[5]		0.71		0.71		0.71	
7	Implied Beta for Company[6]		0.80		0.93		0.97	**0.90**

Notes:
[1] See Risk Study. CV stands for Coefficient of Variation,
[2] Source is Duff & Phelps 2016 Valuation Handbook, Risk Study, Exhibit D-1, Companies Ranked by Operating Margin.
[3] Source is Duff & Phelps 2016 Valuation Handbook, Risk Study, Exhibit D-2, Companies Ranked by CV (Operating Margin).
[4] Source is Duff & Phelps 2016 Valuation Handbook, Risk Study, Exhibit D-3, Companies Ranked by CV (Operating Margin).
5 Source is Rejoinder Schedule D-4.3.
[6] Calculated by multiplying (1+ percentage difference in risk study betas) times average beta for the water sample group.

Sahuarita Water Company, LLC
Comparative Risk Study
Traditional Capital Asset Pricing Model (CAPM) Using Implied Beta
To Find Additional Risk Premium

Line No.		Rf[1]	+	Implied beta[2]	x	RP_M		=	k	CAPM Results From inder Schedule D	Indicated Company Risk Premium
1	Historical Market Risk Premium CAPM	4.3%	+	0.90	x	7.00%	[3]	=	10.6%	9.3%	1.3%
2	Currrent Market Risk Premium CAPM	4.3%	+	0.90	x	8.77%	[4]	=	12.2%	10.5%	1.7%

Notes:
[1] Forecasts of long-term treasury yields. See Scehdule D-4.9.
[2] Implied Beta computed from Duff and Phelps 2016 Valuation Handbook Risk Study information. See page 1 of exhibit.
[3] Historical Market Risk Premium Duff & Phelps 2016 Valuation Handbook, Appendix 3, Long-Horizon ERP.
4 See Rejoinder Schedule D-4.10

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Final Schedule A-1
Page 1
Witness: Bourassa

Line No.		
1	Fair Value Rate Base	$ 9,359,656
2		
3	Adjusted Operating Income	658,238
4		
5	Current Rate of Return	7.03%
6		
7	Required Operating Income	$ 817,098
8		
9	Required Rate of Return on Fair Value Rate Base	8.73%
10		
11	Operating Income Deficiency	$ 158,860
12		
13	Gross Revenue Conversion Factor	1.2963
14		
15	Increase in Gross Revenue Revenue Requirement	205,930
16		
17	Adjusted Test Year Revenues	$ 2,896,746
18	Increase in Gross Revenue Revenue Requirement	$ 205,930
19	Proposed Revenue Requirement	$ 3,102,677
20	% Increase	7.11%
21		

22	Customer Classification		Present Rates	Proposed Rates	Dollar Increase	Percent Increase
24	5/8 Inch	Residential	$ 1,754,351	$ 1,889,450	$ 135,099	7.70%
25	3/4 Inch	Residential	374,310	393,631	19,321	5.16%
26	1 Inch	Residential	56,962	61,104	4,143	7.27%
27		**Subtotal**	$ 2,185,623	$ 2,344,186	$ 158,563	7.25%
28						
29	1 Inch	Commercial	$ 635	$ 680	$ 45	7.14%
30	1.5 Inch	Commercial	2,774	2,979	204	7.37%
31	2 Inch	Commercial	78,061	83,853	5,792	7.42%
32	3 Inch	Commercial	8,473	9,105	631	7.45%
33		**Subtotal**	$ 89,943	$ 96,616	$ 6,673	7.42%
34						
35	1 Inch	Public Authority	$ 10,908	$ 11,709	$ 801	7.35%
36	2 Inch	Public Authority	19,539	20,941	1,402	7.18%
37	4 Inch	Public Authority	35,006	37,651	2,644	7.55%
38		**Subtotal**	$ 65,453	$ 70,301	$ 4,848	7.41%
39						
40	5/8 Inch	Irrigation	$ 14,044	$ 15,095	$ 1,051	7.48%
41	3/4 Inch	Irrigation	5,122	5,464	342	6.68%
42	1 Inch	Irrigation	76,839	82,538	5,700	7.42%
43	1.5 Inch	Irrigation	40,234	43,229	2,995	7.44%
44	2 Inch	Irrigation	383,182	411,924	28,742	7.50%
45	3 Inch	Irrigation	-	-	-	0.00%
46		**Subtotal**	$ 519,420	$ 558,250	$ 38,830	7.48%
47						
48	3 Inch	Construction	$ 32,933	$ 35,357	$ 2,424	7.36%
49						
50	**Subtotal Revenues before Annualization**		$ 2,893,372	$ 3,104,710	$ 211,338	7.30%
51	**Usage Normalization**		(73,316)	(81,190)	(7,874)	10.74%
52	**Revenue Annualization**		24,165	25,835	1,670	6.91%
53	Other Water Revenues		53,528	53,528	-	0.00%
54	Reconciling Amount H-1 to C-1		(1,001)	(206)	796	-79.52%
55	**Total of Water Revenues**		$ 2,896,747	$ 3,102,676	$ 205,930	7.11%
56						

57 SUPPORTING SCHEDULES:
58 B-1
59 C-1
60 C-3
61 H-1

PENGAD 800-631-6989
EXHIBIT
A-9
ADMITTED

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Summary of Rate Base

Exhibit
Final Schedule B-1
Page 1
Witness: Bourassa

Line No.		Original Cost Rate base	Fair Value Rate Base
1			
2	Gross Utility Plant in Service	$ 27,429,576	$ 27,429,576
3	Less: Accumulated Depreciation	6,147,648	6,147,648
4			
5	Net Utility Plant in Service	$ 21,281,928	$ 21,281,928
6			
7	Less:		
8	Advances in Aid of		
9	Construction	5,189,497	5,189,497
10	Contributions in Aid of		
11	Construction	7,712,717	7,712,717
12			
13	Accumulated Amortization of CIAC	(1,354,681)	(1,354,681)
14			
15	Customer Security Deposits	52,876	52,876
16	Deferred Income Taxes & Credits	321,863	321,863
17			
18			
19			
20	Plus:		
21	Unamortized Debt Issuance		
22	Costs	-	-
23	Deferred Reg. Assets	-	-
24	Working capital	-	-
25			
26			
27			
28			
29	Total Rate Base	$ 9,359,656	$ 9,359,656
30			
31			
32			
33	SUPPORTING SCHEDULES:		RECAP SCHEDULES:
34	B-2		A-1
35	B-3		
36	B-5		
37			
38			

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments

Exhibit
Final Schedule B-2
Page 1
Witness: Bourassa

Line No.		Adjusted at End of Test Year	Final Proforma Adjustment Amount	Final Adjusted at end of Test Year
1	Gross Utility			
2	Plant in Service	$ 27,468,728	(39,153)	$ 27,429,576
3				
4	**Less:**			
5	Accumulated			
6	Depreciation	6,309,380	(161,733)	6,147,648
7				
8				
9	Net Utility Plant			
10	in Service	$ 21,159,348		$ 21,281,928
11				
12	**Less:**			
13	Advances in Aid of			
14	Construction	5,189,497	-	5,189,497
15				
16	Contributions in Aid of			
17	Construction	7,712,717	-	7,712,717
18				
19	Accumulated Amort of CIAC	(1,376,852)	22,171	(1,354,681)
20				
21	Customer Security Deposits	52,876		52,876
22	Deferred Income Taxes & Credits	283,078	38,785	321,863
23				
24				
25				
26	**Plus:**			
27	Unamortized Debt Issuance			
28	Costs	-		-
29	Deferred Reg. Assets	-	-	-
30	Working capital	-	-	-
31				
32				
33				
34				
35	Total	$ 9,298,032		$ 9,359,656
36				
37				
38				
39	SUPPORTING SCHEDULES:		RECAP SCHEDULES:	
40	B-2, pages 2		B-1	
41				
42				
43				
44				
45				
46				
47				
48				

Sahuarita Water Company, LLC
Test Year Ended September 30, 2008
Original Cost Rate Base Proforma Adjustments

Exhibit
Final Schedule B-2
Page 2
Witness: Bourassa

Line No.		Adjusted at End of Test Year	Proforma Adjustments 1 Plant	2 Accumulated Depr.	3 CIAC	4 ADIT	Final at end of Test Year
1	Gross Utility						
2	Plant in Service	$ 27,468,728	(39,153)				$ 27,429,576
3							
4	**Less:**						
5	Accumulated						
6	Depreciation	6,309,380		(161,733)			6,147,648
7							
8							
9	Net Utility Plant						
10	in Service	$ 21,159,348	$ (39,153)	$ 161,733	$ -	$ -	$ 21,281,928
11							
12	**Less:**						
13	Advances in Aid of						
14	Construction	5,189,497					5,189,497
15							
16	Contributions in Aid of						
17	Construction (CIAC)	7,712,717					7,712,717
18							
19	Accumulated Amort of CIAC	(1,376,852)			22,171		(1,354,681)
20							
21	Customer Security Deposits	52,876					52,876
22	Deferred Income Taxes & Credits	283,078				38,785	321,863
23							
24							
25	**Plus:**						
26	Unamortized Finance						
27	Charges	-					-
28							
29	Allowance for Working Capital	-					-
30							
31	Total	$ 9,298,032	$ (39,153)	$ 161,733	$ (22,171)	$ (38,785)	$ 9,359,656
32							
33							
34							
35	SUPPORTING SCHEDULES:						
36	B-2, pages 3-6						
37	E-1						

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1

Exhibit
Final Schedule B-2
Page 3
Witness: Bourassa

Line No.	Acct. No.	Description	Adjusted Orginal Cost	A Arsenic Media Retirement Reversal	B Repclassify Arsenic Media	C Relcassify Arsenic Media	D Orginal Arsenic Media Retirement	E Reclassify Plant	F Arsenic Media Regen. PTY Plant	G Adjustmtents To Rconcile Plant to Reconstruction	Final Adjusted Original Cost
				Adjustments							
1		Plant-in-Service									
5	301	Organization Cost	7,541							-	7,541
6	302	Franchise Cost	352,403							-	352,403
7	303	Land and Land Rights	13,636							-	13,636
8	304	Structures and Improvements	401,832							-	401,832
9	305	Collecting and Impounding Res.	-							-	-
10	306	Lake River and Other Intakes	-							-	-
11	307	Wells and Springs	2,142,644							-	2,142,644
12	308	Infiltration Galleries and Tunnels	-							-	-
13	309	Supply Mains	-							-	-
14	310	Power Generation Equipment	549,708							-	549,708
15	311	Electric Pumping Equipment	195,407							-	195,407
16	320	Water Treatment Equipment	2,001,053		120,000	(575,005)		(1,546,048)		-	-
17	320.1	Water Treatment Plant	-					1,499,569		-	1,499,569
18	320.2	Chemical Solution Feeders	-					46,479		-	46,479
19	320.3	Arsenic Media	152,307	250,000	(250,000)			(152,307)		(0)	(0)
20	320.4	Original Arsenic Media	-		130,000	575,005	(287,503)	-		-	417,503
21	320.5	Arsenic Media Regneration	-					152,307	(1,650)	-	150,657
22	330	Dist. Reservoirs & Standpipe	1,848,872					(1,848,872)		-	-
23	330.1	Storage tanks	-					1,811,998		-	1,811,998
24	330.2	Pressure Tanks	-					36,874		-	36,874
25	331	Trans. and Dist. Mains	13,281,054							-	13,281,054
26	333	Services	2,256,719							-	2,256,719
27	334	Meters	1,489,172							-	1,489,172
28	335	Hydrants	732,251							-	732,251
29	336	Backflow Prevention Devices	1,660							-	1,660
30	339	Other Plant and Misc. Equip.	-							-	-
31	340	Office Furniture and Fixtures	160,855							-	160,855
32	340.1	Computers and Software	122,607							-	122,607
33	341	Transportation Equipment	139,706							-	139,706
34	342	Stores Equipment	-							-	-
35	343	Tools and Work Equipment	37,840							-	37,840
36	344	Laboratory Equipment	132							-	132
37	345	Power Operated Equipment	-							-	-
38	346	Communications Equipment	577,721							-	577,721
39	347	Miscellaneous Equipment	695							-	695
40	348	Other Tangible Plant	1,002,914							-	1,002,914
41			-								-
42		TOTALS	$ 27,468,728	$ 250,000			$ (287,503)	$ -	$ (1,650)	$ (0)	$ 27,429,576
43											
44		Plant-in-Service per Books									$ 27,468,728
45											
46		Increase (decrease) in Plant-in-Service									$ (39,153)
47											
48		Adjustment to Plant-in-Service									$ (39,153)
49											
50		SUPPORTING SCHEDULES									
51		B-2, pages 3.1-3.7									

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 - A

Exhibit
Final Schedule B-2
Page 3.1
Witness: Bourassa

Line No.				
1	Reverse Retirement of Arsenic Media			
2				
3				
4	Acct.			Orginal
5	No.	Description		Cost
6	320.3	Arsenic Media	$	120,000
7	320.3	Arsenic Media		130,000
8				
9		TOTALS	$	250,000
10				
11				
12				
13				
14				
15				
16				
17				
18	SUPPORTING SCHEDULE			
19	Testimony			
20	Workpapers			

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 - B

Exhibit
Final Schedule B-2
Page 3.3
Witness: Bourassa

Line No.				
1	Reclassify Arsenic Media			
2				
3				
4	Acct.			Orginal
5	No.	Description		Cost
6	320	Water Treatment Equipment	$	120,000
7	320.3	Arsenic Media		(250,000)
8	320.4	Original Arsenic Media - Batch 3		130,000
9				
10		TOTALS	$	-
11				
12				
13				
14				
15				
16				
17				
18	SUPPORTING SCHEDULE			
19	Testimony			
20	Workpapers			

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 - C

Exhibit
Final Schedule B-2
Page 3.3
Witness: Bourassa

Line No.				
1	Reclass Arsenic Media Cost			
2				
3				
4	Acct.			Orginal
5	No.	Description		Cost
6	320	Water Treatment Equipment	$	(575,005)
7	320.4	Original Arsenic Media - Batch 1		287,503
8	320.4	Original Arsenic Media - Batch 2		287,503
9				
10		TOTALS	$	-
11				
12				
13				
14				
15				
16				
17				
18				
19	SUPPORTING SCHEDULE			
20	Testimony			
21	Workpapers			

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 - D

Exhibit
Final Schedule B-2
Page 3.4
Witness: Bourassa

Line No.				
1	Retire Arsenic Media			
2				
3				
4	Acct.			Orginal
5	No.	Description		Cost
6	320.4	Original Arsenic Media - Batch 1	$	(287,503)
7				
8				
9				
10		TOTALS	$	(287,503)
11				
12				
13				
14				
15				
16				
17				
18				
19	SUPPORTING SCHEDULE			
20	Testimony			
21	Workpapers			

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 - E

Exhibit
Final Schedule B-2
Page 3.5
Witness: Bourassa

Line No.				
1	Reclass Plant			
2				
3				
4	Acct.			Orginal
5	No.	Description		Cost
6	320	Water Treatment Equipment	$	(1,546,048)
7	320.1	Water Treatment Plant		1,499,569
8	320.2	Chemical Solution Feeders		46,479
9	320.3	Arsenic Media		(152,307)
10	320.4	Original Arsenic Media		-
11	320.5	Arsenic Media Regneration		152,307
12	330	Distribution Reservoirs and Standpipes	$	(1,848,872)
13	330.1	Storage Tanks		1,811,998
14	330.2	Pressure Tanks		36,874
15		TOTALS	$	-
16				
17				
18				
19				
20				
21				
22				
23	SUPPORTING SCHEDULE			
24	Testimony			
25	Workpapers			

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 - F

Exhibit
Final Schedule B-2
Page 3.6
Witness: Bourassa

Line No.					
1	Revice Cost of Post-Test Year Plant - Arsenic Media				
2					
3					
4					
5					Amount
6	320.5	Arsenic Media Regneration	Revised Arsenic Media Regeneration Costs	$	150,657
7	320.5	Arsenic Media Regneration	Proposed Arsenic Media Regeneration Costs per Direct		152,307
8					
9					
10	Increase (decrease) in Arseninc Media Regneration Cost (320.5)			$	(1,650)
11					
12					
13					
14					
15					
16					
17					
18	SUPPORTING SCHEDULE				
19	Testimony				
20	Workpapers				

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 - G

Exhibit
Final Schedule B-2
Page 3.7
Witness: Bourassa

Line No.

1 Reconciliation of Plant to Plant Reconstruction

Acct. No.	Description	Adjusted Orginal Cost	Rebuttal B-2 Adjustments	Rebuttal Adjusted Orginal Cost	Rebuttal Plant Per Reconstruction	Difference
301	Organization Cost	7,541	-	7,541	7,541	-
302	Franchise Cost	352,403	-	352,403	352,403	-
303	Land and Land Rights	13,636	-	13,636	13,636	-
304	Structures and Improvements	401,832	-	401,832	401,832	-
305	Collecting and Impounding Res.	-	-	-	-	-
306	Lake River and Other Intakes	-	-	-	-	-
307	Wells and Springs	2,142,644	-	2,142,644	2,142,644	-
308	Infiltration Galleries and Tunnels	-	-	-		-
309	Supply Mains	-	-	-		-
310	Power Generation Equipment	549,708	-	549,708	549,708	-
311	Electric Pumping Equipment	195,407	-	195,407	195,407	-
320	Water Treatment Equipment	2,001,053	(2,001,053)	-	-	-
320.1	Water Treatment Plant	-	1,499,569	1,499,569	1,499,569	-
320.2	Chemical Solution Feeders	-	46,479	46,479	46,479	-
320.3	Arsenic Media Regneration	152,307	(152,307)	(0)	(0)	(0)
320.4	Originial Arsenic Media	-	417,503	417,503	417,503	-
320.5	Arsenic Media Regneration	-	150,657	150,657	150,657	
330	Dist. Reservoirs & Standpipe	1,848,872	(1,848,872)	-	-	-
330.1	Storage tanks	-	1,811,998	1,811,998	1,811,998	-
330.2	Pressure Tanks	-	36,874	36,874	36,874	-
331	Trans. and Dist. Mains	13,281,054	-	13,281,054	13,281,054	-
333	Services	2,256,719	-	2,256,719	2,256,719	-
334	Meters	1,489,172	-	1,489,172	1,489,172	-
335	Hydrants	732,251	-	732,251	732,251	-
336	Backflow Prevention Devices	1,660	-	1,660	1,660	-
339	Other Plant and Misc. Equip.	-	-	-		-
340	Office Furniture and Fixtures	160,855	-	160,855	160,855	-
340.1	Computers and Software	122,607	-	122,607	122,607	-
341	Transportation Equipment	139,706	-	139,706	139,706	-
342	Stores Equipment	-	-	-		-
343	Tools and Work Equipment	37,840	-	37,840	37,840	-
344	Laboratory Equipment	132	-	132	132	-
345	Power Operated Equipment	-	-	-		-
346	Communications Equipment	577,721	-	577,721	577,721	-
347	Miscellaneous Equipment	695	-	695	695	-
348	Other Tangible Plant	1,002,914	-	1,002,914	1,002,914	-
	Rounding			-	-	-
	TOTALS	$ 27,468,728	$ (39,153)	$ 27,429,576	$ 27,429,576	$ (0)

SUPPORTING SCHEDULE
B-2, pages 3.1 through 3.6
B-2, pages 3.8 through 3.14

Sahuarita Water Company, LLC
Plant Additions and Retirements

Exhibit
Final Schedule B-2
Page 3.8
Witness: Bourassa

Line No.	NARUC Account No.	Description	Allowed Deprec. Rate	Company Plant at 12/31/2008	Order Adopted Adjustments	Order Plant at 12/31/2008	Accum. Deprec. At 12/31/2008	Order Adopted Adjustments	Order A/D at 12/31/2008	Net Plant 12/31/2008	Plant at 12/31/2008	Accum. Deprec. At 12/31/2008
1	301	Organization Cost	0.00%	7,541	-	7,541	-		-	7,541	7,541	-
2	302	Franchise Cost	0.00%	350,861	-	350,861	-		-	350,861	350,861	-
3	303	Land and Land Rights	0.00%	13,636	-	13,636	-		-	13,636	13,636	-
4	304.1	Structures & Improvements	3.33%	171,671	-	171,671	7,678	-	7,678	163,993	171,671	7,678
6	304.2	Structures and Improv - Water Trmnt	3.33%	-	-	-	-	-	-	-	-	-
7	305	Collecting & Impounding Reservoirs	2.50%	-	-	-	-	-	-	-	-	-
8	306	Lake, River, Canal Intakes	2.50%	-	-	-	-	-	-	-	-	-
9	307	Wells & Springs	3.33%	800,396	(251,483)	548,913	126,795	(251,483)	(124,688)	673,601	548,913	(124,688)
10	308	Infiltration Galleries	6.67%	-	-	-			-	-	-	-
11	309	Raw Water Supply Mains	2.00%	-	-	-			-	-	-	-
12	310	Power Generation Equipment	5.00%	335,668	-	335,668	16,317	-	16,317	319,351	335,668	16,317
13	311	Pumping Equipment	12.50%	43,912	-	43,912	9,696	-	9,696	34,216	43,912	9,696
14	311.1	Pumping Equipment - Gas	12.50%	-	-	-	-	-	-	-	-	-
15	320	Water Treatment Equipment	3.33%	-	-	-	-	-	-	-	-	-
16	320.1	Water Treatment Plants	3.33%	18,694	-	18,694	1,552	-	1,552	17,142	18,694	1,552
17	320.2	Solution Chemical Feeders	20.00%	-	-	-	-	-	-	-	-	-
1	320.3	Arsenic Media	67.00%	-	-	-	-	-	-	-	-	-
2	320.4	Original Arsenic Media	6.67%	-	-	-	-	-	-	-	-	-
3	320.5	Arsenic Media Regneration	40.00%	-	-	-	-	-	-	-	-	-
4	330	Distribution Reservoirs & Standpipes	2.22%	-	-	-	-	-	-	-	-	-
5	330.1	Storage Tanks	2.22%	1,811,998	-	1,811,998	132,080	-	132,080	1,679,918	1,811,998	132,080
6	330.2	Pressure Tanks	5.00%	-	-	-	-	-	-	-	-	-
7	331	Transmission & Distribution Mains	2.00%	10,162,557	(30,250)	10,132,307	587,243	(30,250)	556,993	9,575,314	10,132,307	556,993
8	333	Services	3.33%	2,081,553	(30,159)	2,051,394	151,782	(30,159)	121,623	1,929,771	2,051,394	121,623
9	333.1	Fire Taps	3.33%	-	-	-	-	-	-	-	-	-
10	334	Meters	8.33%	1,238,008	(15,673)	1,222,335	422,202	-	422,202	800,133	1,222,335	422,202
11	335	Hydrants	2.00%	656,364	-	656,364	27,628	(15,673)	11,955	644,409	656,364	11,955
12	336	Backflow Prevention Devices	6.67%	816	-	816	102	-	102	714	816	102
13	339	Other Plant & Misc Equipment	6.67%	0	-	0	-	-	-	0	0	-
14	340	Office Furniture & Equipment	6.67%	283,991	-	283,991	40,362	-	40,362	243,629	283,991	40,362
15	340.1	Computers & Software	20.00%	-	-	-	-	-	-	-	-	-
16	341	Transportation Equipment	20.00%	146,129	-	146,129	97,477	-	97,477	48,652	146,129	97,477
18	343	Tools, Shop & Garage Equipment	5.00%	13,856	-	13,856	3,133	-	3,133	10,723	13,856	3,133
19	344	Laboratory Equipment	10.00%	132	-	132	20	-	20	112	132	20
20	345	Power Operated Equipment	5.00%	-	-	-	-	-	-	-	-	-
21	345.1	Power Operated Equipment - Backhoe	5.00%	-	-	-	-	-	-	-	-	-
22	346	Communication Equipment	10.00%	11,818	-	11,818	2,077	-	2,077	9,741	11,818	2,077
23	347	Miscellaneous Equipment	10.00%	695	-	695	104	-	104	591	695	104
24	348	Other Tangible Plant	10.00%	962,974	-	962,974	54,602	-	54,602	908,372	962,974	54,602
25		Rounding			-	-			-	-	-	-
		PTY Plant	0%	1,844,270	2,850,253	4,694,523			-	4,694,523	4,694,523	-
26		CWIP			-	-			-	-	-	-
27		TOTALS		20,957,540	2,522,688	23,480,228	1,680,847	(327,565)	1,353,282	22,126,946	23,480,228	1,353,282

Sahuarita Water Company, LLC
Plant Additions and Retirements

Exhibit
Final Schedule B-2
Page 3.9
Witness: Bourassa

Line No.	NARUC Account No.	Description	Allowed Deprec. Rate	2009 Plant Additions (Per Books)	Plant Adjustments	Adjusted Plant Additions	Plant Retirements (Per Books)	Retirement Adjustments	Adjusted Plant Retirements	Salvage A/D Only	Depreciation (Calculated)	Plant Balance	Accum. Deprec.
1	301	Organization Cost	0.00%			-			-		-	7,541	-
2	302	Franchise Cost	0.00%	1,542		1,542			-		-	352,403	-
3	303	Land and Land Rights	0.00%			-			-		-	13,636	-
4	304.1	Structures & Improvements	3.33%	225,636	-	225,636	-	-	-	-	9,473	397,307	17,152
6	304.2	Structures and Improv - Water Trmnt	3.33%	-	-	-	-	-	-	-	-	-	-
7	305	Collecting & Impounding Reservoirs	2.50%			-			-		-	-	-
8	306	Lake, River, Canal Intakes	2.50%			-			-		-	-	-
9	307	Wells & Springs	3.33%	1,463,988	-	1,463,988	-	-	-	-	42,654	2,012,901	(82,034)
10	308	Infiltration Galleries	6.67%			-			-		-	-	-
11	309	Raw Water Supply Mains	2.00%			-			-		-	-	-
12	310	Power Generation Equipment	5.00%	-	-	-	-	-	-	-	16,783	335,668	33,100
13	311	Pumping Equipment	12.50%	102,189	-	102,189	-	-	-	-	11,876	146,101	21,571
14	311.1	Pumping Equipment - Gas	12.50%	-	-	-	-	-	-	-	-	-	-
15	320	Water Treatment Equipment	3.33%	-	-	-	-	-	-	-	-	-	-
16	320.1	Water Treatment Plants	3.33%	1,842,469	(621,484)	1,220,985	-	-	-	-	20,952	1,239,679	22,504
17	320.2	Solution Chemical Feeders	20.00%	-	46,479	46,479	-	-	-	-	4,648	46,479	4,648
1	320.3	Arsenic Media	67.00%	-	-	-	-	-	-	-	-	-	-
2	320.4	Original Arsenic Media	6.67%	-	575,005	575,005	-	-	-	-	19,176	575,005	19,176
3	320.5	Arsenic Media Regneration	40.00%	-	-	-	-	-	-	-	-	-	-
4	330	Distribution Reservoirs & Standpipes	2.22%	36,874	(36,874)	-	-	-	-	-	-	-	-
5	330.1	Storage Tanks	2.22%	-	-	-	-	-	-	-	40,226	1,811,998	172,306
6	330.2	Pressure Tanks	5.00%	-	36,874	36,874	-	-	-	-	922	36,874	922
7	331	Transmission & Distribution Mains	2.00%	2,381,014	-	2,381,014	-	-	-	-	226,456	12,513,321	783,449
8	333	Services	3.33%	-	-	-	-	-	-	-	68,311	2,051,394	189,934
9	333.1	Fire Taps	3.33%	-	-	-	-	-	-	-	-	-	-
10	334	Meters	8.33%	94,085	-	94,085	-	-	-	-	105,739	1,316,420	527,941
11	335	Hydrants	2.00%	3,050	-	3,050	-	-	-	-	13,158	659,414	25,112
12	336	Backflow Prevention Devices	6.67%	-	-	-	-	-	-	-	54	816	156
13	339	Other Plant & Misc Equipment	6.67%	-	-	-	-	-	-	-	0	0	0
14	340	Office Furniture & Equipment	6.67%	-	-	-	-	-	-	-	14,702	156,860	(72,067)
15	340.1	Computers & Software	20.00%	75,672	-	75,672	127,131	-	127,131	-	7,567	75,672	7,567
16	341	Transportation Equipment	20.00%	-	-	-	-	-	-	-	29,226	146,129	126,702
18	343	Tools, Shop & Garage Equipment	5.00%	6,574	-	6,574	-	-	-	-	857	20,430	3,990
19	344	Laboratory Equipment	10.00%	-	-	-	-	-	-	-	13	132	33
20	345	Power Operated Equipment	5.00%	-	-	-	-	-	-	-	-	-	-
21	345.1	Power Operated Equipment - Backhoe	5.00%	-	-	-	-	-	-	-	-	-	-
22	346	Communication Equipment	10.00%	489,268	-	489,268	-	-	-	-	25,645	501,086	27,722
23	347	Miscellaneous Equipment	10.00%	-	-	-	-	-	-	-	70	695	174
24	348	Other Tangible Plant	10.00%	28	-	28	-	-	-	-	96,299	963,002	150,900
25		Rounding				-			-		-	-	-
		PTY Plant	0%	(4,694,523)		(4,694,523)			-		-	-	-
26		CWIP				-			-		-	-	-
27		TOTALS		2,027,864	-	2,027,864	127,131	-	127,131	-	754,810	25,380,961	1,980,961

Sahuarita Water Company, LLC
Plant Additions and Retirements

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Final Schedule B-2
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Witness: Bourassa

Line No.	NARUC Account No.	Description	Allowed Deprec. Rate	2010 Plant Additions (Per Books)	Plant Adjustments	Adjusted Plant Additions	Plant Retirements (Per Books)	Retirement Adjustments	Adjusted Plant Retirements	Salvage A/D Only	Depreciation (Calculated)	Plant Balance	Accum. Deprec.
1	301	Organization Cost	0.00%			-			-		-	7,541	-
2	302	Franchise Cost	0.00%			-			-		-	352,403	-
3	303	Land and Land Rights	0.00%			-			-		-	13,636	-
4	304.1	Structures & Improvements	3.33%	2,207	-	2,207	-	-	-	-	13,267	399,514	30,419
6	304.2	Structures and Improv - Water Trmnt	3.33%	-	-	-	-	-	-	-	-	-	-
7	305	Collecting & Impounding Reservoirs	2.50%			-			-		-	-	-
8	306	Lake, River, Canal Intakes	2.50%			-			-		-	-	-
9	307	Wells & Springs	3.33%	90,391	-	90,391	440	-	440	-	68,527	2,102,852	(13,947)
10	308	Infiltration Galleries	6.67%			-			-		-	-	-
11	309	Raw Water Supply Mains	2.00%			-			-		-	-	-
12	310	Power Generation Equipment	5.00%	-	-	-	-	-	-	-	16,783	335,668	49,883
13	311	Pumping Equipment	12.50%	719	-	719	-	-	-	-	18,308	146,820	39,879
14	311.1	Pumping Equipment - Gas	12.50%	-	-	-	-	-	-	-	-	-	-
15	320	Water Treatment Equipment	3.33%	-	-	-	-	-	-	-	-	-	-
16	320.1	Water Treatment Plants	3.33%	198,380	-	198,380	-	-	-	-	44,584	1,438,059	67,088
17	320.2	Solution Chemical Feeders	20.00%	-	-	-	-	-	-	-	9,296	46,479	13,944
1	320.3	Arsenic Media	67.00%	-	-	-	-	-	-	-	-	-	-
2	320.4	Original Arsenic Media	6.67%	-	-	-	-	-	-	-	38,353	575,005	57,529
3	320.5	Arsenic Media Regneration	40.00%	-	-	-	-	-	-	-	-	-	-
4	330	Distribution Reservoirs & Standpipes	2.22%	-	-	-	-	-	-	-	-	-	-
5	330.1	Storage Tanks	2.22%	-	-	-	-	-	-	-	40,226	1,811,998	212,533
6	330.2	Pressure Tanks	5.00%	-	-	-	-	-	-	-	1,844	36,874	2,766
7	331	Transmission & Distribution Mains	2.00%	166,451	-	166,451	-	-	-	-	251,931	12,679,772	1,035,380
8	333	Services	3.33%	69,053	-	69,053	-	-	-	-	69,461	2,120,447	259,396
9	333.1	Fire Taps	3.33%	-	-	-	-	-	-	-	-	-	-
10	334	Meters	8.33%	32,986	-	32,986	-	-	-	-	111,032	1,349,406	638,973
11	335	Hydrants	2.00%	18,031	-	18,031	-	-	-	-	13,369	677,445	38,481
12	336	Backflow Prevention Devices	6.67%	-	-	-	-	-	-	-	54	816	211
13	339	Other Plant & Misc Equipment	6.67%	-	-	-	-	-	-	-	0	0	0
14	340	Office Furniture & Equipment	6.67%	-	-	-	-	-	-	-	10,463	156,860	(61,604)
15	340.1	Computers & Software	20.00%	11,844	-	11,844	-	-	-	-	16,319	87,516	23,886
16	341	Transportation Equipment	20.00%	-	-	-	-	-	-	-	19,427	146,129	146,129
18	343	Tools, Shop & Garage Equipment	5.00%	2,232	-	2,232	-	-	-	-	1,077	22,662	5,067
19	344	Laboratory Equipment	10.00%	-	-	-	-	-	-	-	13	132	46
20	345	Power Operated Equipment	5.00%	-	-	-	-	-	-	-	-	-	-
21	345.1	Power Operated Equipment - Backhoe	5.00%	-	-	-	-	-	-	-	-	-	-
22	346	Communication Equipment	10.00%	77,885	-	77,885	-	-	-	-	54,003	578,971	81,725
23	347	Miscellaneous Equipment	10.00%	-	-	-	-	-	-	-	70	695	243
24	348	Other Tangible Plant	10.00%	-	-	-	-	-	-	-	96,300	963,002	247,201
25		Rounding				-			-		-	-	-
		PTY Plant	0%			-			-		-	-	-
26		CWIP				-			-		-	-	-
27		TOTALS		670,179	-	670,179	440	-	440	-	894,706	26,050,701	2,875,227

Sahuarita Water Company, LLC
Plant Additions and Retirements

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Witness: Bourassa

Line No.	NARUC Account No.	Description	Allowed Deprec. Rate	2011 Plant Additions (Per Books)	Plant Adjustments	Adjusted Plant Additions	Plant Retirements (Per Books)	Retirement Adjustments	Adjusted Plant Retirements	Salvage A/D Only	Depreciation (Calculated)	Plant Balance	Accum. Deprec.
1	301	Organization Cost	0.00%			-			-		-	7,541	-
2	302	Franchise Cost	0.00%			-			-		-	352,403	-
3	303	Land and Land Rights	0.00%			-			-		-	13,636	-
4	304.1	Structures & Improvements	3.33%	-	-	-	-	-	-	-	13,304	399,514	43,723
6	304.2	Structures and Improv - Water Trmnt	3.33%	-	-	-	-	-	-	-	-	-	-
7	305	Collecting & Impounding Reservoirs	2.50%			-			-		-	-	-
8	306	Lake, River, Canal Intakes	2.50%			-			-		-	-	-
9	307	Wells & Springs	3.33%	39,792	-	39,792	-	-	-	-	70,687	2,142,644	56,741
10	308	Infiltration Galleries	6.67%			-			-		-	-	-
11	309	Raw Water Supply Mains	2.00%			-			-		-	-	-
12	310	Power Generation Equipment	5.00%	-	-	-	-	-	-	-	16,783	335,668	66,667
13	311	Pumping Equipment	12.50%	-	-	-	-	-	-	-	18,353	146,820	58,232
14	311.1	Pumping Equipment - Gas	12.50%	-	-	-	-	-	-	-	-	-	-
15	320	Water Treatment Equipment	3.33%	-	-	-	-	-	-	-	-	-	-
16	320.1	Water Treatment Plants	3.33%	891	-	891	-	-	-	-	47,902	1,438,950	114,990
17	320.2	Solution Chemical Feeders	20.00%	-	-	-	-	-	-	-	9,296	46,479	23,240
1	320.3	Arsenic Media	67.00%	-	-	-	-	-	-	-	-	-	-
2	320.4	Original Arsenic Media	6.67%	-	-	-	287,503	-	287,503	-	28,765	287,503	(201,209)
3	320.5	Arsenic Media Regneration	40.00%	-	-	-	-	-	-	-	-	-	-
4	330	Distribution Reservoirs & Standpipes	2.22%	-	-	-	-	-	-	-	-	-	-
5	330.1	Storage Tanks	2.22%	-	-	-	-	-	-	-	40,226	1,811,998	252,759
6	330.2	Pressure Tanks	5.00%	-	-	-	-	-	-	-	1,844	36,874	4,609
7	331	Transmission & Distribution Mains	2.00%	134,849	-	134,849	-	-	-	-	254,944	12,814,621	1,290,324
8	333	Services	3.33%	2,300	-	2,300	-	-	-	-	70,649	2,122,747	330,045
9	333.1	Fire Taps	3.33%	-	-	-	-	-	-	-	-	-	-
10	334	Meters	8.33%	26,655	-	26,655	-	-	-	-	113,516	1,376,061	752,488
11	335	Hydrants	2.00%	2,600	-	2,600	-	-	-	-	13,575	680,045	52,056
12	336	Backflow Prevention Devices	6.67%	-	-	-	-	-	-	-	54	816	265
13	339	Other Plant & Misc Equipment	6.67%	-	-	-	-	-	-	-	0	0	0
14	340	Office Furniture & Equipment	6.67%	546	-	546	-	-	-	-	10,481	157,406	(51,124)
15	340.1	Computers & Software	20.00%	2,231	-	2,231	-	-	-	-	17,726	89,747	41,612
16	341	Transportation Equipment	20.00%	-	-	-	-	-	-	-	-	146,129	146,129
18	343	Tools, Shop & Garage Equipment	5.00%	2,208	-	2,208	-	-	-	-	1,188	24,869	6,256
19	344	Laboratory Equipment	10.00%	-	-	-	-	-	-	-	13	132	59
20	345	Power Operated Equipment	5.00%	-	-	-	-	-	-	-	-	-	-
21	345.1	Power Operated Equipment - Backhoe	5.00%	-	-	-	-	-	-	-	-	-	-
22	346	Communication Equipment	10.00%	-	-	-	7,382	-	7,382	-	57,528	571,589	131,871
23	347	Miscellaneous Equipment	10.00%	-	-	-	-	-	-	-	70	695	313
24	348	Other Tangible Plant	10.00%	19,693	-	19,693	-	-	-	-	97,285	982,695	344,485
25		Rounding				-			-		-	-	-
		PTY Plant	0%			-			-		-	-	-
26		CWIP				-			-		-	-	-
27		TOTALS		231,766	-	231,766	294,885	-	294,885	-	884,189	25,987,582	3,464,532

Sahuarita Water Company, LLC
Plant Additions and Retirements

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Final Schedule B-2
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Witness: Bourassa

Line No.	NARUC Account No.	Description	Allowed Deprec. Rate	2012 Plant Additions (Per Books)	Plant Adjustments	Adjusted Plant Additions	Plant Retirements (Per Books)	Retirement Adjustments	Adjusted Plant Retirements	Salvage A/D Only	Depreciation (Calculated)	Plant Balance	Accum. Deprec.
1	301	Organization Cost	0.00%			-			-		-	7,541	-
2	302	Franchise Cost	0.00%			-			-		-	352,403	-
3	303	Land and Land Rights	0.00%			-			-		-	13,636	-
4	304.1	Structures & Improvements	3.33%	-	-	-	-	-	-	-	13,304	399,514	57,027
6	304.2	Structures and Improv - Water Trmnt	3.33%	-	-	-	-	-	-	-	-	-	-
7	305	Collecting & Impounding Reservoirs	2.50%			-			-		-	-	-
8	306	Lake, River, Canal Intakes	2.50%			-			-		-	-	-
9	307	Wells & Springs	3.33%	-	-	-	-	-	-	-	71,350	2,142,644	128,091
10	308	Infiltration Galleries	6.67%			-			-		-	-	-
11	309	Raw Water Supply Mains	2.00%			-			-		-	-	-
12	310	Power Generation Equipment	5.00%	-	-	-	-	-	-	-	16,783	335,668	83,450
13	311	Pumping Equipment	12.50%	-	-	-	-	-	-	-	18,353	146,820	76,584
14	311.1	Pumping Equipment - Gas	12.50%	-	-	-	-	-	-	-	-	-	-
15	320	Water Treatment Equipment	3.33%	-	-	-	-	-	-	-	-	-	-
16	320.1	Water Treatment Plants	3.33%	895	-	895	-	-	-	-	47,932	1,439,845	162,922
17	320.2	Solution Chemical Feeders	20.00%	-	-	-	-	-	-	-	9,296	46,479	32,535
1	320.3	Arsenic Media	67.00%	-	-	-	-	-	-	-	-	-	-
2	320.4	Original Arsenic Media	6.67%	130,000	-	130,000	-	-	-	-	23,512	417,503	(177,697)
3	320.5	Arsenic Media Regneration	40.00%	-	-	-	-	-	-	-	-	-	-
4	330	Distribution Reservoirs & Standpipes	2.22%	-	-	-	-	-	-	-	-	-	-
5	330.1	Storage Tanks	2.22%	-	-	-	-	-	-	-	40,226	1,811,998	292,985
6	330.2	Pressure Tanks	5.00%	-	-	-	-	-	-	-	1,844	36,874	6,453
7	331	Transmission & Distribution Mains	2.00%	229,944	-	229,944	-	-	-	-	258,592	13,044,564	1,548,916
8	333	Services	3.33%	30,159	-	30,159	-	-	-	-	71,190	2,152,906	401,234
9	333.1	Fire Taps	3.33%	-	-	-	-	-	-	-	-	-	-
10	334	Meters	8.33%	64,989	-	64,989	-	-	-	-	117,333	1,441,050	869,821
11	335	Hydrants	2.00%	15,673	-	15,673	-	-	-	-	13,758	695,718	65,814
12	336	Backflow Prevention Devices	6.67%	-	-	-	-	-	-	-	54	816	319
13	339	Other Plant & Misc Equipment	6.67%	-	-	-	-	-	-	-	0	0	0
14	340	Office Furniture & Equipment	6.67%	-	-	-	-	-	-	-	10,499	157,406	(40,625)
15	340.1	Computers & Software	20.00%	5,465	-	5,465	2,991	-	2,991	-	18,197	92,221	56,818
16	341	Transportation Equipment	20.00%	-	-	-	-	-	-	-	-	146,129	146,129
18	343	Tools, Shop & Garage Equipment	5.00%	1,679	-	1,679	-	-	-	-	1,285	26,548	7,541
19	344	Laboratory Equipment	10.00%	-	-	-	-	-	-	-	13	132	73
20	345	Power Operated Equipment	5.00%	-	-	-	-	-	-	-	-	-	-
21	345.1	Power Operated Equipment - Backhoe	5.00%	-	-	-	-	-	-	-	-	-	-
22	346	Communication Equipment	10.00%	-	-	-	-	-	-	-	57,159	571,589	189,030
23	347	Miscellaneous Equipment	10.00%	-	-	-	-	-	-	-	70	695	382
24	348	Other Tangible Plant	10.00%	13,920	-	13,920	-	-	-	-	98,965	996,614	443,451
25		Rounding				-			-		-	-	-
		PTY Plant	0%			-			-		-	-	-
26		CWIP				-			-		-	-	-
27		TOTALS		492,723	-	492,723	2,991	-	2,991	-	889,714	26,477,314	4,351,255

Sahuarita Water Company, LLC
Plant Additions and Retirements

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Final Schedule B-2
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Witness: Bourassa

Line No.	NARUC Account No.	Description	Allowed Deprec. Rate	2013 Plant Additions (Per Books)	Plant Adjustments	Adjusted Plant Additions	Plant Retirements (Per Books)	Retirement Adjustments	Adjusted Plant Retirements	Salvage A/D Only	Depreciation (Calculated)	Plant Balance	Accum. Deprec.
1	301	Organization Cost	0.00%			-			-		-	7,541	-
2	302	Franchise Cost	0.00%			-			-		-	352,403	-
3	303	Land and Land Rights	0.00%			-			-		-	13,636	-
4	304.1	Structures & Improvements	3.33%	2,318	-	2,318	-	-	-	-	13,342	401,832	70,369
6	304.2	Structures and Improv - Water Trmnt	3.33%	-	-	-	-	-	-	-	-	-	-
7	305	Collecting & Impounding Reservoirs	2.50%			-			-		-	-	-
8	306	Lake, River, Canal Intakes	2.50%			-			-		-	-	-
9	307	Wells & Springs	3.33%	-	-	-	-	-	-	-	71,350	2,142,644	199,441
10	308	Infiltration Galleries	6.67%			-			-		-	-	-
11	309	Raw Water Supply Mains	2.00%			-			-		-	-	-
12	310	Power Generation Equipment	5.00%	3,116	-	3,116	-	-	-	-	16,861	338,784	100,312
13	311	Pumping Equipment	12.50%	18,589	-	18,589	-	-	-	-	19,514	165,409	96,098
14	311.1	Pumping Equipment - Gas	12.50%	-	-	-	-	-	-	-	-	-	-
15	320	Water Treatment Equipment	3.33%	-	-	-	-	-	-	-	-	-	-
16	320.1	Water Treatment Plants	3.33%	-	-	-	-	-	-	-	47,947	1,439,845	210,869
17	320.2	Solution Chemical Feeders	20.00%	-	-	-	-	-	-	-	9,296	46,479	41,831
1	320.3	Arsenic Media	67.00%	115,917	-	115,917	-	-	-	-	38,832	115,917	38,832
2	320.4	Original Arsenic Media	6.67%	-	-	-	-	-	-	-	27,847	417,503	(149,849)
3	320.5	Arsenic Media Regneration	40.00%	-	-	-	-	-	-	-	-	-	-
4	330	Distribution Reservoirs & Standpipes	2.22%	-	-	-	-	-	-	-	-	-	-
5	330.1	Storage Tanks	2.22%	-	-	-	-	-	-	-	40,226	1,811,998	333,212
6	330.2	Pressure Tanks	5.00%	-	-	-	-	-	-	-	1,844	36,874	8,297
7	331	Transmission & Distribution Mains	2.00%	139,030	-	139,030	-	-	-	-	262,282	13,183,594	1,811,197
8	333	Services	3.33%	60,501	-	60,501	-	-	-	-	72,699	2,213,407	473,933
9	333.1	Fire Taps	3.33%	-	-	-	-	-	-	-	-	-	-
10	334	Meters	8.33%	30,190	-	30,190	-	-	-	-	121,297	1,471,240	991,118
11	335	Hydrants	2.00%	22,517	-	22,517	-	-	-	-	14,140	718,235	79,953
12	336	Backflow Prevention Devices	6.67%	-	-	-	-	-	-	-	54	816	374
13	339	Other Plant & Misc Equipment	6.67%	-	-	-	-	-	-	-	0	0	0
14	340	Office Furniture & Equipment	6.67%	1,126	-	1,126	-	-	-	-	10,537	158,533	(30,088)
15	340.1	Computers & Software	20.00%	6,101	-	6,101	4,798	-	4,798	-	18,575	93,524	70,594
16	341	Transportation Equipment	20.00%	16,307	-	16,307	22,730	-	22,730	-	1,631	139,706	125,030
18	343	Tools, Shop & Garage Equipment	5.00%	7,777	-	7,777	-	-	-	-	1,522	34,325	9,063
19	344	Laboratory Equipment	10.00%	-	-	-	-	-	-	-	13	132	86
20	345	Power Operated Equipment	5.00%	-	-	-	-	-	-	-	-	-	-
21	345.1	Power Operated Equipment - Backhoe	5.00%	-	-	-	-	-	-	-	-	-	-
22	346	Communication Equipment	10.00%	6,132	-	6,132	-	-	-	-	57,465	577,721	246,496
23	347	Miscellaneous Equipment	10.00%	-	-	-	-	-	-	-	70	695	452
24	348	Other Tangible Plant	10.00%	5,272	-	5,272	-	-	-	-	99,925	1,001,887	543,376
25		Rounding				-			-		-	-	-
		PTY Plant	0%			-			-		-	-	-
26		CWIP				-			-		-	-	-
27		TOTALS		434,893	-	434,893	27,528	-	27,528	-	947,269	26,884,678	5,270,995

Sahuarita Water Company, LLC
Plant Additions and Retirements

Exhibit
Final Schedule B-2
Page 3.14
Witness: Bourassa

Line No.	NARUC Account No.	Description	Allowed Deprec. Rate	2014 Plant Additions (Per Books)	Plant Adjustments	Adjusted Plant Additions	Plant Retirements (Per Books)	Retirement Adjustments	Adjusted Plant Retirements	Salvage A/D Only	Depreciation (Calculated)	PTY Plant	PTY Retirements	Plant Balance	Accum. Deprec.
1	301	Organization Cost	0.00%			-			-		-			7,541	-
2	302	Franchise Cost	0.00%			-			-		-			352,403	-
3	303	Land and Land Rights	0.00%			-			-		-			13,636	-
4	304.1	Structures & Improvements	3.33%	-	-	-	-	-	-	-	13,381			401,832	83,750
6	304.2	Structures and Improv - Water Trmnt	3.33%	-	-	-	-	-	-	-	-			-	-
7	305	Collecting & Impounding Reservoirs	2.50%			-			-		-			-	-
8	306	Lake, River, Canal Intakes	2.50%			-			-		-			-	-
9	307	Wells & Springs	3.33%	-	-	-	-	-	-	-	71,350			2,142,644	270,791
10	308	Infiltration Galleries	6.67%			-			-		-			-	-
11	309	Raw Water Supply Mains	2.00%			-			-		-			-	-
12	310	Power Generation Equipment	5.00%	-	-	-	-	-	-	-	16,939	210,924	-	549,708	117,251
13	311	Pumping Equipment	12.50%	29,998	-	29,998	-	-	-	-	22,551			195,407	118,649
14	311.1	Pumping Equipment - Gas	12.50%	-	-	-	-	-	-	-	-			-	-
15	320	Water Treatment Equipment	3.33%	-	-	-	-	-	-	-	-			-	-
16	320.1	Water Treatment Plants	3.33%	59,724	-	59,724	-	-	-	-	48,941			1,499,569	259,810
17	320.2	Solution Chemical Feeders	20.00%	-	-	-	-	-	-	-	4,648			46,479	46,479
1	320.3	Arsenic Media	67.00%	-	-	-	-	-	-	-	77,085	-	(115,917)	(0)	0
2	320.4	Original Arsenic Media	6.67%	-	-	-	-	-	-	-	27,847	-	-	417,503	(122,002)
3	320.5	Arsenic Media Regneration	40.00%	-	-	-	-	-	-	-	-	150,657	-	150,657	-
4	330	Distribution Reservoirs & Standpipes	2.22%	-	-	-	-	-	-	-	-	-	-	-	-
5	330.1	Storage Tanks	2.22%	-	-	-	-	-	-	-	40,226	-	-	1,811,998	373,438
6	330.2	Pressure Tanks	5.00%	-	-	-	-	-	-	-	1,844	-	-	36,874	10,140
7	331	Transmission & Distribution Mains	2.00%	97,460	-	97,460	-	-	-	-	264,646			13,281,054	2,075,844
8	333	Services	3.33%	43,312	-	43,312	-	-	-	-	74,428			2,256,719	548,361
9	333.1	Fire Taps	3.33%	-	-	-	-	-	-	-	-			-	-
10	334	Meters	8.33%	17,932	-	17,932	-	-	-	-	123,301			1,489,172	1,114,419
11	335	Hydrants	2.00%	14,016	-	14,016	-	-	-	-	14,505			732,251	94,458
12	336	Backflow Prevention Devices	6.67%	844	-	844	-	-	-	-	83			1,660	456
13	339	Other Plant & Misc Equipment	6.67%	-	-	-	-	-	-	-	0			0	0
14	340	Office Furniture & Equipment	6.67%	2,323	-	2,323	-	-	-	-	10,652			160,855	(19,436)
15	340.1	Computers & Software	20.00%	29,083	-	29,083	-	-	-	-	16,982			122,607	87,576
16	341	Transportation Equipment	20.00%	-	-	-	-	-	-	-	3,261			139,706	128,291
18	343	Tools, Shop & Garage Equipment	5.00%	3,515	-	3,515	-	-	-	-	1,804			37,840	10,867
19	344	Laboratory Equipment	10.00%	-	-	-	-	-	-	-	13			132	99
20	345	Power Operated Equipment	5.00%	-	-	-	-	-	-	-	-			-	-
21	345.1	Power Operated Equipment - Backhoe	5.00%	-	-	-	-	-	-	-	-			-	-
22	346	Communication Equipment	10.00%	-	-	-	-	-	-	-	57,772			577,721	304,268
23	347	Miscellaneous Equipment	10.00%	-	-	-	-	-	-	-	70			695	521
24	348	Other Tangible Plant	10.00%	1,028	-	1,028	-	-	-	-	100,240			1,002,914	643,616
25		Rounding				-			-		-			-	-
		PTY Plant	0%			-			-		-			-	-
26		CWIP				-			-		-			-	-
27		TOTALS		299,234	-	299,234	-	-	-	-	992,569	361,581	(115,917)	27,429,576	6,147,648

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2

Exhibit
Final Schedule B-2
Page 4
Witness: Bourassa

Line No.		Acct. No.	Description	Adjusted Accum. Depr.	A Arsenic Media Retirement Reversal	B Arsenic Media Reclass	C Arsenic Media Reclass	D Arsenic Media Batch #1 Retirement	E Plant Reclass	F Adjustments to Reconcile A/D to Reconstruction	Final Adjusted Accum. Depr.
1	Plant-in-Service										
5		301	Organization Cost	-						-	-
6		302	Franchise Cost	-						-	-
7		303	Land and Land Rights	-						-	-
8		304	Structures and Improvements	83,750						-	83,750
9		305	Collecting and Impounding Res.	-						-	-
10		306	Lake River and Other Intakes	-						-	-
11		307	Wells and Springs	270,791						-	270,791
12		308	Infiltration Galleries and Tunnels	-						-	-
13		309	Supply Mains	-						-	-
14		310	Power Generation Equipment	117,251						-	117,251
15		311	Electric Pumping Equipment	118,649						-	118,649
16		320	Water Treatment Equipment	351,657		21,978	(105,312)		(268,323)	-	-
17		320.1	Water Treatment Plant	-					259,810	-	259,810
18		320.2	Chemical Solution Feeders	-					46,479	0	46,479
19		320.3	Arsenic Media	-	250,000	(250,000)				-	-
20		320.4	Original Arsenic Media	-		21,678	143,823	(287,503)		-	(122,002)
		320.5	Arsenic Media Regneration	-						-	-
21		330	Dist. Reservoirs & Standpipe	377,940					(377,940)	-	0
22		330.1	Storage tanks	-					373,438	-	373,438
23		330.2	Pressure Tanks	-					10,140	-	10,140
24		331	Trans. and Dist. Mains	2,075,844						-	2,075,844
25		333	Services	548,361						-	548,361
26		334	Meters	1,114,419						-	1,114,419
27		335	Hydrants	94,458						-	94,458
28		336	Backflow Prevention Devices	456						-	456
29		339	Other Plant and Misc. Equip.	-						-	-
30		340	Office Furniture and Fixtures	(19,436)						-	(19,436)
31		340.1	Computers and Software	87,576						-	87,576
32		341	Transportation Equipment	128,291						-	128,291
33		342	Stores Equipment	-						-	-
34		343	Tools and Work Equipment	10,867						-	10,867
35		344	Laboratory Equipment	99						-	99
36		345	Power Operated Equipment	-						-	-
37		346	Communications Equipment	304,268						-	304,268
38		347	Miscellaneous Equipment	521						-	521
39		348	Other Tangible Plant	643,616						-	643,616
40			Rounding	1						(1)	-
41			TOTALS	$ 6,309,380	$ 250,000	$ (206,345)	$ 38,511	$ (287,503)	$ 43,604	$ (1)	$ 6,147,647
42											
43	Accumulated Depreciation per Books										$ 6,309,380
44											
45	Increase (decrease) in Plant-in-Service										$ (161,733)
46											
47	Adjustment to Plant-in-Service										$ (161,733)
48											
49	SUPPORTING SCHEDULES										
50	B-2, pages 4.1 to 4.6										
51											

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 - A

Exhibit
Final Schedule B-2
Page 4.1
Witness: Bourassa

Line No.			
1	Reverse Retirement of Arsenic Media A/D		
2			
3			
4	Acct.		Orginal
5	No.	Description	Cost
6	320.3	Arsenic Media	$ 120,000
7	320.3	Arsenic Media	130,000
8			
9		TOTALS	$ 250,000
10			
11			
12			
13			
14			
15			
16			
17			
18			
19	SUPPORTING SCHEDULE		
20	Schedule B-2, page 3.1		
21	Testimony		
22	Workpapers		

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 - B

Exhibit
Final Schedule B-2
Page 4.2
Witness: Bourassa

Line No.									
1	Reclass Arsenic Media A/D								
2									
3									
4									
5	Acct.				Years of Depreciation	Years of Depreciation			Accumulated
6	No.	Description	Original Cost	Year Installed	to 2011	to 2014	Rate		Depreciation (A/D)
7	320.3	Arsenic Media	(250,000)						(250,000)
8	320.0	Water Treatment Equipment	$ 120,000	2009		5.5	3.33%	$	21,978
9	320.4	Original Arsenic Media - Batch 3	130,000	2012		2.5	6.67%		21,678
10		TOTALS						$	(206,345)
11									
12									
13									
14									
15									
16									
17									
18									
19	SUPPORTING SCHEDULE								
20	Schedule B-2, page 3.1								
21	Testimony								
22	Workpapers								

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 - C

Exhibit
Final Schedule B-2
Page 4.3
Witness: Bourassa

Line No.

1 Reclassify Arsenic Media A/D

Acct. No.	Description	Original Cost	Year Installed	Years of Depreciation to 2011	Years of Depreciation to 2014	Rate	Accumulated Depreciation (A/D)
320.0	Water Treatment Equipment	$ (575,005)	2009		5.5	3.33%	$ (105,312)
320.4	Original Arsenic Media Batch 1	287,503	2009	2.0		6.67%	38,353
320.4	Original Arsenic Media Batch 2	287,503	2009		5.5	6.67%	105,470
	TOTALS						$ 38,511

SUPPORTING SCHEDULE
Schedule B-2, page 3.2
Testimony
Workpapers

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 - D

Exhibit
Final Schedule B-2
Page 4.4
Witness: Bourassa

Line No.				
1	Retire Arsenic Media			
2				
3				
4	Acct.			Orginal
5	No.	Description		Cost
6	320.4	Original Arsenic Media - Batch 1	$	(287,503)
7				
8				
9				
10		TOTALS	$	(287,503)
11				
12				
13				
14				
15				
16				
17				
18				
19	SUPPORTING SCHEDULE			
20	Testimony			
21	Workpapers			

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 - E

Exhibit
Final Schedule B-2
Page 4.5
Witness: Bourassa

Line No.

1 Relcass Plant A/D

Acct. No.	Description	Original Cost	Year Installed	Prior A/D	Years to 2014	Rate	Accumulated Depreciation (A/D) 2009 to 2014	Reclass Accumulated Depreciation (A/D)
320	Water Treatment Equipment	$ (18,694)	<=2008	$ (1,552)	6	3.33%	$ (3,735)	$ (5,287)
320	Water Treatment Equipment	(1,267,464)	2009		5.5	3.33%	(232,136)	(232,136)
320	Water Treatment Equipment	(198,380)	2010		4.5	3.33%	(29,727)	(29,727)
320	Water Treatment Equipment	(891)	2011		3.5	3.33%	(104)	(104)
320	Water Treatment Equipment	(895)	2012		2.5	3.33%	(75)	(75)
320	Water Treatment Equipment	(59,724)	2014		0.5	3.33%	(994)	(994)
Subtotal		$ (1,546,048)					$ (266,771)	$ (268,323)
320.1	Water Treatment Plant	$ 18,694	<=2008	$ 1,552	6	3.33%	$ 3,735	$ 5,287
320.1	Water Treatment Equipment	1,220,985	2009		5.5	3.33%	223,623	223,623
320.1	Water Treatment Equipment	198,380	2010		4.5	3.33%	29,727	29,727
320.1	Water Treatment Equipment	891	2011		3.5	3.33%	104	104
320.1	Water Treatment Equipment	895	2012		2.5	3.33%	75	75
320.1	Water Treatment Equipment	59,724	2014		0.5	3.33%	994	994
Subtotal		$ 1,499,569					$ 258,258	$ 259,810
320.2	Chemical Solution Feeders	$ 46,479	2009		5.5	20.00%	$ 46,479	$ 46,479
330	Distribution Reservoirs and Standp	$ (1,811,998)	<=2008	$ (132,080)	6.0	2.22%	$ (241,358)	$ (373,438)
330	Distribution Reservoirs and Standp	(36,874)	2009		5.5	2.22%	(4,502)	(4,502)
Subtotal		$ (1,848,872)					$ (245,860)	$ (377,940)
330.1	Storage Tanks	1,811,998	<=2008	$ 132,080	6.0	2.22%	241,358	373,438
330.2	Pressure Tanks	36,874	2009		5.5	5.00%	10,140	10,140
Total							$ 43,604	$ 43,604

SUPPORTING SCHEDULE
Schedule B-2, page 3.2
Testimony
Workpapers

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 - F

Exhibit
Final Schedule B-2
Page 4.6
Witness: Bourassa

Line No.

1 Reconciliation of A/D to A/D Reconstruction

Acct. No.	Description	Rebuttal Orginal Cost	Rebuttal B-2 Adjustments	Rebuttal Adjusted Orginal Cost	Rebuttal Plant Per Reconstruction	Difference
301	Organization Cost	-	-	-	-	-
302	Franchise Cost	-	-	-	-	-
303	Land and Land Rights	-	-	-	-	-
304	Structures and Improvements	83,750	-	83,750	83,750	-
305	Collecting and Impounding Res.	-	-	-	-	-
306	Lake River and Other Intakes	-	-	-	-	-
307	Wells and Springs	270,791	-	270,791	270,791	-
308	Infiltration Galleries and Tunnels	-	-	-		-
309	Supply Mains	-	-	-		-
310	Power Generation Equipment	117,251	-	117,251	117,251	-
311	Electric Pumping Equipment	118,649	-	118,649	118,649	-
320	Water Treatment Equipment	351,657	(351,657)	-	-	-
320.1	Water Treatment Plant	-	259,810	259,810	259,810	-
320.2	Chemical Solution Feeders	-	46,479	46,479	46,479	0
320.3	Arsenic Media	-	-	-		-
320.4	Original Arsenic Media	-	(122,002)	(122,002)	(122,002)	-
320.5	Arsenic Media Regneration	-	-	-	-	-
330	Dist. Reservoirs & Standpipe	377,940	(377,940)	-	-	-
330.1	Storage tanks	-	373,438	373,438	373,438	-
330.2	Pressure Tanks	-	10,140	10,140	10,140	-
331	Trans. and Dist. Mains	2,075,844	-	2,075,844	2,075,844	-
333	Services	548,361	-	548,361	548,361	-
334	Meters	1,114,419	-	1,114,419	1,114,419	-
335	Hydrants	94,458	-	94,458	94,458	-
336	Backflow Prevention Devices	456	-	456	456	-
339	Other Plant and Misc. Equip.	-	-	-		-
340	Office Furniture and Fixtures	(19,436)	-	(19,436)	(19,436)	-
340.1	Computers and Software	87,576	-	87,576	87,576	-
341	Transportation Equipment	128,291	-	128,291	128,291	-
342	Stores Equipment	-	-	-		-
343	Tools and Work Equipment	10,867	-	10,867	10,867	-
344	Laboratory Equipment	99	-	99	99	-
345	Power Operated Equipment	-	-	-		-
346	Communications Equipment	304,268	-	304,268	304,268	-
347	Miscellaneous Equipment	521	-	521	521	-
348	Other Tangible Plant	643,616	-	643,616	643,616	-
	Rounding	1	-	1	-	(1)
	TOTALS	$ 6,309,380	$ (161,732)	$ 6,147,648	$ 6,147,647	$ (1)

SUPPORTING SCHEDULE
B-2, page 4.1 to 4.6
B-2, pages 3.8 through 3.14

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment 4

Exhibit
Final Schedule B-2
Page 5
Witness: Bourassa

Line No.			
1	CIAC and Accumulated Amortization		
2			
3			
4			
5	Computed balance at end of TY	$ 7,712,719	$ 1,354,681
6			
7	Adjusted balance at end of TY	$ 7,712,717	$ 1,376,852
8			
9	Increase (decrease)	$ 2	$ (22,171)
10			
11			
12	Adjustment to CIAC	$ 2	$ 22,171
13	Label	4a	4b
14			
15			
16			
17			
18			
19	SUPPORTING SCHEDULES		
20	B-2, page 6.1 to 6.5		
21			
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Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Contributions-in-aid of Construction and Amortization
Adjustment 3

Exhibit
Final Schedule B-2
Page 5.1
Witness: Bourassa

Line No.	Description	Vintage	Per Decision 12/31/2008	2009 Activity	Balance at 12/31/2009	2010 Activity	Balance at 12/31/2010	2011 Activity	Balance at 12/31/2011
1	Contributions-in-Aid (CIAC)	<=Sep 2008	4,314,264	-	4,314,264		4,314,264		4,314,264
2	Contributions-in-Aid (CIAC)	>=Oct 2008			-		-		-
3	Contributions-in-Aid (CIAC)	2009		103,954	103,954		103,954		103,954
4	Contributions-in-Aid (CIAC)	2010			-	160,671	160,671		160,671
5	Contributions-in-Aid (CIAC)	2011			-		-	22,679	22,679
6	Contributions-in-Aid (CIAC)	2012			-		-		-
7	Contributions-in-Aid (CIAC)	2013			-		-		-
8	Contributions-in-Aid (CIAC)	2014			-		-		-
9	Total Contributions-in-Aid (CIAC)		4,314,264	103,954	4,418,218	160,671	4,578,889	22,679	4,601,569
10									
11	Amortization Rate			3.06%		3.48%		3.47%	
12									
13	Amortization	<=Sep 2008	251,796	132,194	383,991	150,328	534,319	149,782	684,101
14	Amortization	>=Oct 2008							
15	Amortization	2009		3,185	3,185	3,622	6,808	3,609	10,417
16	Amortization	2010			-	5,599	5,599	5,578	11,177
17	Amortization	2011			-		-	787	787
18	Amortization	2012			-		-		-
19	Amortization	2013			-		-		-
20	Amortization	2014			-		-		-
21	Total Accum Amort.		251,796	135,380	387,176	159,549	546,725	159,756	706,482
22									
23									
24	Net CIAC	<=Sep 2008			3,930,273		3,779,945		3,630,163
25	Net CIAC	>=Oct 2008	-		-		-		-
26	Net CIAC	2009	-		100,769		97,146		93,537
27	Net CIAC	2010	-		-		155,073		149,495
28	Net CIAC	2011	-		-		-		21,892
29	Net CIAC	2012	-		-		-		-
30	Net CIAC	2013	-		-		-		-
31	Net CIAC	2014	-		-		-		-
32									
33	**Total Net CIAC**		-	-	4,031,042	-	4,032,164	-	3,895,087
34									
35									
36									
37									
38									
39									
40									

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Contributions-in-aid of Construction and Amortization
Adjustment 3

Exhibit
Final Schedule B-2
Page 5.2
Witness: Bourassa

Line No.	Description	Vintage	2012 Activity	Balance at 12/31/2012	2013 Activity	Balance at 12/31/2013	2014 Activity	Balance at 12/31/2014
1	Contributions-in-Aid (CIAC)	<=Sep 2008		4,314,264		4,314,264		4,314,264
2	Contributions-in-Aid (CIAC)	>=Oct 2008		-		-		-
3	Contributions-in-Aid (CIAC)	2009		103,954		103,954		103,954
4	Contributions-in-Aid (CIAC)	2010		160,671		160,671		160,671
5	Contributions-in-Aid (CIAC)	2011		22,679		22,679		22,679
6	Contributions-in-Aid (CIAC)	2012	900,622	900,622		900,622		900,622
7	Contributions-in-Aid (CIAC)	2013		-	353,213	353,213		353,213
8	Contributions-in-Aid (CIAC)	2014		-		-	1,857,315	1,857,315
9	Total Contributions-in-Aid (CIAC)		900,622	5,502,191	353,213	5,855,404	1,857,315	7,712,719
10								
11	Amortization Rate		3.43%		3.59%		3.70%	
12								
13	Amortization	<=Sep 2008	147,874	831,975	154,874	986,849	123,557	1,110,406
14	Amortization	>=Oct 2008						
15	Amortization	2009	3,563	13,980	3,732	17,711	3,850	21,561
16	Amortization	2010	5,507	16,684	5,768	22,452	5,950	28,402
17	Amortization	2011	777	1,565	814	2,379	840	3,219
18	Amortization	2012	30,869	30,869	32,331	63,200	33,352	96,552
19	Amortization	2013		-	12,680	12,680	13,080	25,760
20	Amortization	2014		-		-	68,781	68,781
21	Total Accum Amort.		188,591	895,073	210,198	1,105,271	249,411	1,354,681
22								
23								
24	Net CIAC	<=Sep 2008		3,482,289		3,327,415		3,203,858
25	Net CIAC	>=Oct 2008		-		-		-
26	Net CIAC	2009		89,974		86,243		82,393
27	Net CIAC	2010		143,987		138,220		132,270
28	Net CIAC	2011		21,114		20,300		19,460
29	Net CIAC	2012		869,753		837,422		804,070
30	Net CIAC	2013		-		340,534		327,453
31	Net CIAC	2014		-		-		1,788,534
32								
33	**Total Net CIAC**		-	4,607,118	-	4,750,134	-	6,358,038
34								
35								
36								
37								
38								
39								
40								

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment 3

Exhibit
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Witness: Bourassa

Deferred Income Tax as of December 31, 2014

Line No.			Water & Sewer Adjusted Book Value	Water & Sewer Tax Value	Probability of Realization of Future Tax Benefit	Deductible TD (Taxable TD) Expected to be Realized	Effective Tax Rate	Future Tax Asset Current	Future Tax Asset Non Current	Future Tax Liability Current	Future Tax Liability Non Current
6		Plant-in-Service	$ 27,415,940 [1]								
7		Accum. Deprec.	(6,147,648) [1]								
8		CIAC	(9,990,684) [3]								
9	Fed.	Fixed Assets	$ 11,277,608	$ 7,737,970 [2]	100.0%	$ (3,539,638)	18.47%		-		(653,806)
11	State	Fixed Assets	$ 11,277,608	$ 11,151,197 [2]	100.0%	$ (126,411)	3.102%		-		(3,922)
13	Fed &State	AIAC		1,556,849 [4]	100.0%	$ 1,556,849 [4]	21.57%		$ 335,865		
16								$ -	$ 335,865	$ -	$ (657,727)
17		Net Asset (Liability)						$ (321,863)			
19		Allocation Factor						1.0000			
21		Net Asset (Liability)						$ (321,863)			
23		DIT Asset (Liability) per Direct						$ (283,078)			
25		Adjustment to DIT						$ 38,785			

Footnotes - See page 6.1

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Original Cost Rate Base Proforma Adjustments
Adjustment 3

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Schedule B-2
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Line No.		FEDERAL			STATE		
1	[1] **Per adjusted book balances, land not included**						
2							
3	[2] **Computation of Net Tax Value December 31, 2014**						
4							
5	Based on 2014 Tax Depreciation report (December 31, 2014).						
6	Unadjusted Cost at December 31, 2014 per federal and state tax depr. report	$ 15,034,019			$ 15,034,019		
7	Reconciling Items not on tax report:						
8	Retirements not Recorded	(115,917)			(115,917)		
9		-			-		
10		-			-		
11					-		
12					-		
13					-		
14		-			-		
15	Net Unadjusted Cost tax Basis at December 31, 2014			$ 14,918,102			$ 14,918,102
16							
17	Reductions						
18	Basis Reduction 2014 and Prior Years per federal and state tax depr. report	$ (3,413,227)			$ -		
19	Accumulated Depreciation 2014 and prior per federal and state tax depr. report	(3,882,822)			(3,882,822)		
20	Retirements not Recorded	115,917			115,917		
21		-			-		
22		-			-		
23							
24							
25							
26	Net Reductions through December 31, 2014			(7,180,132)			(3,766,905)
27	Net tax value of plant-in-service at December 31. 2014			$ 7,737,970			$ 11,151,197
28							
29	[3] **CIAC (including impact of change to probability of realization)**						
30	Gross CIAC per adjusted book balances		$ 7,712,717				
31	CIAC reductions/addtions						
32	A.A per adjusted book balances	$ (1,354,681)					
33		-					
34							
35	Net CIAC before unrealized AIAC		(1,354,681)				
36				$ 6,358,036			
37	Unrealized AIAC Component						
38	AIAC per adjusted book balances		$ 5,189,497				
39	Adjusted Net AIAC (see footnote 5 below)		70.0%				
40	Unrealized AIAC Component % (1-Realized AIAC Component)			$ 3,632,648			
41	Total realizable CIAC			$ 9,990,684			
42							
43							
44	[4] **AIAC (including impact of change in probability of realization)**						
45	AIAC per adjusted book balances			$ 5,189,497			
46	Less: Unrealized AIAC (from Note 3, above)			$ (3,632,648)			
47							
48	Subtotal			$ 1,556,849			
49	Meter and Service Line Installation Charges as Adjusted			-			
50	Total realizable AIAC			$ 1,556,849			
51							

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Computation of Working Capital

Exhibit
Final Schedule B-5
Page 1
Witness: Bourassa

Line No.			
1	Cash Working Capital (1/8 of Allowance		
2	Operation and Maintenance Expense)	$	140,378
3	Pumping Power (1/24 of Pumping Power)		5,789
4	Purchased Water (1/24 of Purchased Water)		219
5	Prepaid Expenses		3,106
6	Meterials and Supplies		53,450
7			
8			
9	Total Working Capital Allowance	$	202,943
10			
11			
12	Working Capital Requested	$	-
13			
14			
15	SUPPORTING SCHEDULES:	RECAP SCHEDULES:	
16	C-1	B-1	
17			

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Income Statement

Exhibit
Schedule C-1
Page 1
Witness: Bourassa

Line No.		Adjusted Results	Adjustment	Final Test Year Adjusted Results	Proposed Rate Increase	Final Adjusted with Rate Increase
1	**Revenues**					
2	Metered Water Revenues	$ 2,843,219	$ -	$ 2,843,219	$ 205,930	$ 3,049,149
3	Unmetered Water Revenues	-	-	-	-	-
4	Other Water Revenues	53,528	-	53,528	-	53,528
5		$ 2,896,746	$ -	$ 2,896,746	$ 205,930	$ 3,102,677
6	**Operating Expenses**					
7	Salaries and Wages	$ -	-	$ -	-	$ -
8	Purchased Water	5,265	-	5,265	-	5,265
9	Purchased Power	138,932	-	138,932	-	138,932
10	Fuel For Power Production	-	-	-	-	-
11	Chemicals	14,734	-	14,734	-	14,734
12	Repairs and Maintenance	102,989	(6,584)	96,405	-	96,405
13	Office Supplies and Expense	-	-	-	-	-
14	Contract Services - Accounting	13,497	-	13,497	-	13,497
15	Contract Services - Legal	10,603	-	10,603	-	10,603
16	Contract Services - Eng	7,968	-	7,968	-	7,968
17	Contract Services - Other	126,034	(11,003)	115,031	-	115,031
18	Management Fees	765,161	(29,194)	735,967	-	735,967
19	Contract Services - Water Testing	5,341	8,634	13,975	-	13,975
20	Rents	1,666	-	1,666	-	1,666
21	Transportation Expenses	20,650	-	20,650	-	20,650
22	Insurance - General Liability	17,137	-	17,137	-	17,137
23	Insurance - Health and Life	-	-	-	-	-
24	Reg. Comm. Exp. - Other	-	-	-	-	-
25	Reg. Comm. Exp. - Rate Case	50,000	(15,000)	35,000	-	35,000
26	Miscellaneous Expense	29,504	-	29,504	-	29,504
27	Bad Debt Expense	541	-	541	-	541
28	Depreciation Expense	721,109	(22,049)	699,060	-	699,060
29	Taxes Other Than Income	10,350	-	10,350	-	10,350
30	Property Taxes	154,562	-	154,562	3,670	158,232
31	Income Tax	102,700	14,963	117,663	43,400	161,063
32	**Total Operating Expenses**	$ 2,298,742	$ (60,233)	$ 2,238,509	$ 47,070	$ 2,285,579
33	**Operating Income**	$ 598,005	$ 60,233	$ 658,238	$ 158,860	$ 817,098
34	**Other Income (Expense)**					
35	Interest Income	8,066	-	8,066	-	8,066
36	Other income (loss)	79,344	-	79,344	-	79,344
37	Interest Expense	(80,324)	(532)	(80,856)	-	(80,856)
38	Other Expense	(17,406)	-	(17,406)	-	(17,406)
39		-	-	-		-
40	**Total Other Income (Expense)**	$ (10,320)	$ (532)	$ (10,852)	$ -	$ (10,852)
41	**Net Profit (Loss)**	$ 587,685	$ 59,701	$ 647,386	$ 158,860	$ 806,245
42						
43	SUPPORTING SCHEDULES:				RECAP SCHEDULES:	
44	C-1, page 2.1 and 2.2					
45						

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Income Statement

Exhibit
Final Schedule C-1
Page 2.1
Witness: Bourassa

Line No.		Adjusted Results	1 Depreciation	2 Property Taxes	3 Rate Case Exp.	4 Expense Reclass	5 Expense Reclass	ADJUSTMENT 6 Management Fees	7 Bonuses
1	**Revenues**								
2	Metered Water Revenues	$ 2,843,219							
3	Unmetered Water Revenues	-							
4	Other Water Revenues	53,528							
5		$ 2,896,746	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6	**Operating Expenses**								
7	Salaries and Wages	$ -							
8	Purchased Water	5,265							
9	Purchased Power	138,932							
10	Fuel For Power Production	-							
11	Chemicals	14,734							
12	Repairs and Maintenance	102,989				(6,584)			
13	Office Supplies and Expense	-							
14	Contract Services - Accounting	13,497							
15	Contract Services - Legal	10,603							
16	Contract Services - Eng	7,968							
17	Contract Services - Other	126,034				(1,020)	(9,983)		
18	Management Fees	765,161					9,983	(17,407)	(21,770)
19	Contract Services - Water Testing	5,341				7,604			
20	Rents	1,666							
21	Transportation Expenses	20,650							
22	Insurance - General Liability	17,137							
23	Insurance - Health and Life	-							
24	Reg. Comm. Exp. - Other	-							
25	Reg. Comm. Exp. - Rate Case	50,000			(15,000)				
26	Miscellaneous Expense	29,504							
27	Bad Debt Expense	541							
28	Depreciation Expense	721,109	(22,049)						
29	Taxes Other Than Income	10,350							
30	Property Taxes	154,562		-					
31	Income Tax	102,700							
32	**Total Operating Expenses**	$ 2,298,742	$ (22,049)	$ -	$ (15,000)	$ -	$ -	$ (17,407)	$ (21,770)
33	**Operating Income**	$ 598,005	$ 22,049	$ -	$ 15,000	$ -	$ -	$ 17,407	$ 21,770
34	**Other Income (Expense)**								
35	Interest Income	8,066							
36	Other income (loss)	79,344							
37	Interest Expense	(80,324)							
38	Other Expense	(17,406)							
39		-							
40	**Total Other Income (Expense)**	$ (10,320)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
41	**Net Profit (Loss)**	$ 587,685	$ 22,049	$ -	$ 15,000	$ -	$ -	$ 17,407	$ 21,770
42									
43	SUPPORTING SCHEDULES:								
44	C-2								
45									

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Income Statement

Exhibit
Final Schedule C-1
Page 2.2
Witness: Bourassa

Line No.		8 Water Testing Expense	9 Intentionally Left Blank	10 Interest Synch.	11 Income Tax	Final Test Year Adjusted Results	Proposed Rate Increase	Final Adjusted with Rate Increase
1	**Revenues**							
2	Metered Water Revenues					$ 2,843,219	$ 205,930	$ 3,049,149
3	Unmetered Water Revenues					-		-
4	Other Water Revenues					53,528		53,528
5		$ -	$ -	$ -	$ -	$ 2,896,746	$ 205,930	$ 3,102,677
6	**Operating Expenses**							
7	Salaries and Wages					$ -		$ -
8	Purchased Water					5,265		5,265
9	Purchased Power					138,932		138,932
10	Fuel For Power Production					-		-
11	Chemicals					14,734		14,734
12	Repairs and Maintenance					96,405		96,405
13	Office Supplies and Expense					-		-
14	Contract Services - Accounting					13,497		13,497
15	Contract Services - Legal					10,603		10,603
16	Contract Services - Eng					7,968		7,968
17	Contract Services - Other					115,031		115,031
18	Management Fees					735,967		735,967
19	Contract Services - Water Testing	1,030				13,975		13,975
20	Rents					1,666		1,666
21	Transportation Expenses					20,650		20,650
22	Insurance - General Liability					17,137		17,137
23	Insurance - Health and Life					-		-
24	Reg. Comm. Exp. - Other					-		-
25	Reg. Comm. Exp. - Rate Case					35,000		35,000
26	Miscellaneous Expense					29,504		29,504
27	Bad Debt Expense					541		541
28	Depreciation Expense					699,060		699,060
29	Taxes Other Than Income					10,350		10,350
30	Property Taxes					154,562	3,670	158,232
31	Income Tax				14,963	117,663	43,400	161,063
32	**Total Operating Expenses**	$ 1,030	$ -	$ -	$ 14,963	$ 2,238,509	$ 47,070	$ 2,285,579
33	**Operating Income**	$ (1,030)	$ -	$ -	$ (14,963)	$ 658,238	$ 158,860	$ 817,098
34	**Other Income (Expense)**							
35	Interest Income					8,066		8,066
36	Other income (loss)					79,344		79,344
37	Interest Expense			(532)		(80,856)		(80,856)
38	Other Expense					(17,406)		(17,406)
39						-		-
40	**Total Other Income (Expense)**	$ -	$ -	$ (532)	$ -	$ (10,852)	$ -	$ (10,852)
41	**Net Profit (Loss)**	$ (1,030)	$ -	$ (532)	$ (14,963)	$ 647,386	$ 158,860	$ 806,245
42								
43	SUPPORTING SCHEDULES:						RECAP SCHEDULES:	
44	C-2						A-1	
45								

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Adjustments to Revenues and/or Expenses

Exhibit
Final Schedule C-2
Page 1
Witness: Bourassa

Adjustments to Revenues and Expenses

Line No.		1 Depreciation	2 Property Taxes	3 Rate Case Exp.	4 Revenue Annualization	5 Usage Normalization	6 Remove CAGRD Rev./Exp.	Subtotal
1								
2								
3								
4	Revenues	-	-	-	-	-	-	-
5								
6	Expenses	(22,049)	-	(15,000)	-	-	(17,407)	(54,456)
7								
8	Operating							
9	Income	22,049	-	15,000	-	-	17,407	54,456
10								
11	Interest							
12	Expense							-
13	Other							
14	Income /							
15	Expense							-
16								
17	Net Income	22,049	-	15,000	-	-	17,407	54,456
18								

Adjustments to Revenues and Expenses

		7 Electric Well Sharing	8 Over-billing Adjustment	9 Management Fees	10 Interest Synch.	11 Income Tax	12 Intentionally Left Blank	Subtotal
19								
20								
21								
22								
23								
24	Revenues	-	-	-	-	-		-
25								
26	Expenses	(21,770)	1,030	-	-	14,963		(60,233)
27								
28	Operating							
29	Income	21,770	(1,030)	-	-	(14,963)	-	60,233
30								
31	Interest							
32	Expense				(532)			(532)
33	Other							
34	Income /							
35	Expense							-
36								
37	Net Income	21,770	(1,030)	-	(532)	(14,963)	-	59,701

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Adjustments to Revenues and Expenses
Adjustment Number 1

Exhibit
Final Schedule C-2
Page 2
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Line No.

1 Depreciation Expense

Line	Acct. No.	Description	Original Cost	Non-Depr or Fully Depr Plant	Adjusted Original Cost	Proposed Rates	Depreciation Expense
5	301	Organization Cost	7,541	(7,541)	-	0.00%	-
6	302	Franchise Cost	352,403	(352,403)	-	0.00%	-
7	303	Land and Land Rights	13,636	(13,636)	-	0.00%	-
8	304	Structures and Improvements	401,832	-	401,832	3.33%	13,381
9	305	Collecting and Impounding Res.	-	-	-	2.50%	-
10	306	Lake River and Other Intakes	-	-	-	2.50%	-
11	307	Wells and Springs	2,142,644	-	2,142,644	3.33%	71,350
12	308	Infiltration Galleries and Tunnels	-	-	-	6.67%	-
13	309	Supply Mains	-	-	-	2.00%	-
14	310	Power Generation Equipment	549,708	-	549,708	5.00%	27,485
15	311	Electric Pumping Equipment	195,407	-	195,407	12.50%	24,426
16	320	Water Treatment Equipment	-	-	-	3.33%	-
17	320.1	Water Treatment Plant	1,499,569	-	1,499,569	3.33%	49,936
18	320.2	Chemical Solution Feeders	46,479	(46,479)	-	20.00%	-
19	320.3	Arsenic Media Regeneration	(0)	0	-	67.00%	-
20	320.4	Original Arsenic Media	417,503	0	417,503	6.66%	27,806
21	320.5	Arsenic Media Regneration	150,657		150,657	40.00%	60,263
22	330	Dist. Reservoirs & Standpipe	-	-	-	2.22%	-
23	330.1	Storage tanks	1,811,998	-	1,811,998	2.22%	40,226
24	330.2	Pressure Tanks	36,874	-	36,874	5.00%	1,844
25	331	Trans. and Dist. Mains	13,281,054	-	13,281,054	2.00%	265,621
26	333	Services	2,256,719	-	2,256,719	3.33%	75,149
27	334	Meters	1,489,172	-	1,489,172	8.33%	124,048
28	335	Hydrants	732,251	-	732,251	2.00%	14,645
29	336	Backflow Prevention Devices	1,660	-	1,660	6.67%	111
30	339	Other Plant and Misc. Equip.	-	-	-	6.67%	-
31	340	Office Furniture and Fixtures	160,855	-	160,855	6.67%	10,729
32	340.1	Computers and Software	122,607	(67,883)	54,724	20.00%	10,945
33	341	Transportation Equipment	139,706	(123,399)	16,307	20.00%	3,261
34	342	Stores Equipment	-	-	-	4.00%	-
35	343	Tools and Work Equipment	37,840	-	37,840	5.00%	1,892
36	344	Laboratory Equipment	132	-	132	10.00%	13
37	345	Power Operated Equipment	-	-	-	5.00%	-
38	346	Communications Equipment	577,721	-	577,721	10.00%	57,772
39	347	Miscellaneous Equipment	695	-	695	10.00%	70
40	348	Other Tangible Plant	1,002,914	-	1,002,914	10.00%	100,291
42		TOTALS	$ 27,429,576	$ (611,340)	$ 26,818,236		$ 981,264

Line		Gross CIAC	Rate	
45	Less: Amortization of Contributions	$ 7,712,717	3.6589%	$ (282,204)
49	Total Depreciation Expense			$ 699,060
51	Test Year Depreciation Expense			721,109
53	Increase (decrease) in Depreciation Expense			(22,049)
55	Adjustment to Revenues and/or Expenses			$ (22,049)

57 SUPPORTING SCHEDULE
58 B-2, page 3
59 B-2, page 4

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Adjustment to Revenues and Expenses
Adjustment Number 2

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Page 3
Witness: Bourassa

Property Taxes

Line No.	DESCRIPTION	Test Year as adjusted	Company Recommended
1	Company Adjusted Test Year Revenues	$ 2,896,746	$ 2,896,746
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	5,793,493	5,793,493
4	Company Recommended Revenue	2,896,746	3,102,677
5	Subtotal (Line 4 + Line 5)	8,690,239	8,896,170
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	2,896,746	2,965,390
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	5,793,493	5,930,780
10	Plus: 10% of CWIP (intentionally excluded)	-	-
11	Less: Net Book Value of Licensed Vehicles	11,415	11,415
12	Full Cash Value (Line 9 + Line 10 - Line 11)	5,782,078	5,919,365
13	Assessment Ratio	18.0%	18.0%
14	Assessment Value (Line 12 * Line 13)	1,040,774	1,065,486
15	Composite Property Tax Rate	14.8507%	14.8507%
16	Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 154,562	$ 158,232
17	Tax on Parcels	-	-
18	Total Property Taxes (Line 16 + Line 17)	$ 154,562	
19	Adjusted Test Year Property Taxes	$ 154,562	
20	Adjustment to Test Year Property Taxes (Line 18 - Line 19)	$ -	
21			
22	Property Tax on Company Recommended Revenue (Line 16 + Line 17)		$ 158,232
23	Company Test Year Adjusted Property Tax Expense (Line 18)		$ 154,562
24	Increase in Property Tax Due to Increase in Revenue Requirement		**$ 3,670**
25			
26	Increase in Property Tax Due to Increase in Revenue Requirement (Line 24)		$ 3,670
27	Increase in Revenue Requirement		$ 205,930
28	Increase in Property Tax Per Dollar Increase in Revenue (Line 26 / Line 27)		1.78208%
29			
30			
31			
32			
33			
34			
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36			
37			
38			
39			
40			

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Adjustment to Revenues and/or Expenses
Adjustment Number 3

Exhibit
Final Schedule C-2
Page 4
Witness: Bourassa

RATE CASE EXPENSE

Line No.			
1	Rate Case Expense		
2			
3	Estimated Rate Case Expense	$	175,000
4			
5	Rate Case Expense	$	175,000
6			
7	Estimated Amortization Period (in Years)		5.0
8			
9	Annual Rate Case Expense	$	35,000
10			
11	Test Year Rate Case Expense	$	50,000
12			
13	Increase(decrease) Rate Case Expense	$	(15,000)
14			
15	Adjustment to Revenue and/or Expense	$	(15,000)
16			
17			
18			
19			
20	SUPPORTING SCHEDULES		
21	Testimony		
22			
23			
24			

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Adjustment to Revenues and/or Expenses
Adjustment Number 4

Exhibit
Final Schedule C-2
Page 5
Witness: Bourassa

EXPENSE RECLASSIFICATION

Line No.			
1	Repairs and Maintenance	$	(6,584)
2	Contract Services - Other		(1,020)
3	Contract Services - Water Testing		7,604
4			
5			
6	Increase(decrease) Operating Expenses	$	-
7			
8			
9			
10	Adjustment to Revenue and/or Expense	$	-
11			
12			
13			
14			
15			
16			
17	SUPPORTING SCHEDULES		
18	Staff Adjustment No. 1		
19			
20			

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Adjustment to Revenues and/or Expenses
Adjustment Number 5

Exhibit
Final Schedule C-2
Page 6
Witness: Bourassa

EXPENSE RECLASSIFICATION

Line No.			
1	Contract Services - Other	$	(9,983)
2	Management Fees		9,983
3			
4	Increase(decrease) Operating Expenses	$	-
5			
6			
7			
8	Adjustment to Revenue and/or Expense	$	-
9			
10			
11			
12			
13	SUPPORTING SCHEDULES		
14	Staff Adjustment No. 2		
15			
16			
17			
18			
19			
20			

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Adjustment to Revenues and/or Expenses
Adjustment Number 6

Exhibit
Final Schedule C-2
Page 7
Witness: Bourassa

MANAGEMENT FEES

Line No.			
1	Management Fees	$	(17,407)
2			
3			
4	Increase(decrease) Management Fees	$	(17,407)
5			
6			
7			
8	Adjustment to Revenue and/or Expense	$	(17,407)
9			
10			
11			
12			
13			
14	SUPPORTING SCHEDULES		
15	Testimony		
16			
17			
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19			
20			

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Adjustment to Revenues and/or Expenses
Adjustment Number 7

Exhibit
Final Schedule C-2
Page 8
Witness: Bourassa

MANAGEMENT FEES - BONUSES

Line No.			
1	Bonuses Allowed	$	-
2	Test Year Bonuses Paid		21,770
3			
4	Increase(decrease) Management Fees	$	(21,770)
5			
6			
7			
8	Adjustment to Revenue and/or Expense	$	(21,770)
9			
10			
11			
12			
13			
14	SUPPORTING SCHEDULES		
15	Testimony		
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22			

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Adjustment to Revenues and/or Expenses
Adjustment Number 8

Exhibit
Final Schedule C-2
Page 9
Witness: Bourassa

WATER TESTING

Line No.			
1	Staff Recommended Testing Expense	$	6,371
2	Adjusted Test Year Water Testing Expense		5,341
3			
4	Increase(decrease) Management Fees	$	1,030
5			
6			
7			
8	Adjustment to Revenue and/or Expense	$	1,030
9			
10			
11			
12			
13			
14	SUPPORTING SCHEDULES		
15	Staff Adjustment No. 4		
16			
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Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Adjustment to Revenues and/or Expenses
Adjustment Number 9

Exhibit
Final Schedule C-2
Page 10
Witness: Bourassa

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Line No.
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Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Adjustment to Revenues and Expenses
Adjustment Number 10

Exhibit
Final Schedule C-2
Page 11
Witness: Bourassa

Line No.			
1	Interest Synchronization		
2			
3			
4	Fair Value Rate Base	$ 9,359,656	
5	Weighted Cost of Debt	0.86%	
6	Interest Expense		$ 80,856
7			
8	Test Year Interest Expense		$ 80,324
9			
10	Increase (decrease) in Interest Expense		532
11			
12			
13			
14	Adjustment to Revenue and/or Expense		$ (532)
15			
16			
17	Weighted Cost of Debt Computation		
18			

19		Amount	Percent	Cost	Weighted Cost
20	Debt	$ 2,326,035	20.57%	4.20%	0.86%
21	Equity	$ 8,982,660	79.43%	9.90%	7.86%
22	Total	$ 11,308,695	100.00%		8.73%

23
24

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Adjustment to Revenues and/or Expenses
Adjustment Number 11

Exhibit
Final Schedule C-2
Page 12
Witness: Bourassa

Line No.	Income Taxes	Adjusted Test Year at Present Rates	Test Year at Proposed Rates
1			
2			
3			
4	Computed Income Tax	$ 117,663	$ 161,063
5	Adjusted TY Income Taxes	102,700	117,663
6	Adjustment to Income Tax Expense	$ 14,963	$ 43,400
7			
8			
9			
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21	SUPPORTING SCHEDULE		
22	C-3, page 2		
23			
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Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Computation of Gross Revenue Conversion Factor

Exhibit
Final Schedule C-3
Page 1
Witness: Bourassa

Line No.	Description	Percentage of Incremental Gross Revenues
1	Federal Income Taxes	18.39%
2		
3	State Income Taxes	3.07%
4		
5	Uncollectibles	0%
6		
7	Property Taxes	1.40%
8		
9		
10	Total Tax Percentage	22.86%
11		
12	Operating Income % = 100% - Tax Percentage	77.14%
13		
14		
15		
16		
17	1 = Gross Revenue Conversion Factor	
18	Operating Income %	1.2963
19		
20	SUPPORTING SCHEDULES:	RECAP SCHEDULES:
21		A-1
22		

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014

Exhibit
Final Schedule C-3
Page 2

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)
	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)	22.8573%		
5	Subtotal (L3 - L4)	77.1427%		
6	**Revenue Conversion Factor (L1 / L5)**	1.296298		
	Calculation of Uncollectible Factor:			
7	Unity	100.0000%		
8	Combined Federal and State Tax Rate (Line 17)	21.4576%		
9	One Minus Combined Income Tax Rate (L7 - L8)	78.5424%		
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 (L55 Col [E])	3.0672%		
14	Federal Taxable Income (L12 - L13)	96.9328%		
15	Applicable Federal Income Tax Rate (Line 44)	18.9723%		
16	Effective Federal Income Tax Rate (L14 x L15)	18.3903%		
17	Combined Federal and State Income Tax Rate (L13 +L16)		21.4576%	
	Calculation of Effective Property Tax Factor			
18	Unity	100.0000%		
19	Combined Federal and State Income Tax Rate (L17)	21.4576%		
20	One Minus Combined Income Tax Rate (L18-L19)	78.5424%		
21	Property Tax Factor	1.7821%		
22	Effective Property Tax Factor (L20*L21)		1.3997%	
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			22.8573%
24	Required Operating Income	$ 817,098		
25	AdjustedTest Year Operating Income (Loss)	$ 658,238		
26	Required Increase in Operating Income (L24 - L25)		$ 158,860	
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ 161,063		
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ 117,663		
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 43,400	
30	Recommended Revenue Requirement	$ 2,797,809		
31	Uncollectible Rate (Line 10)	0.0000%		
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -		
33	Adjusted Test Year Uncollectible Expense	$ -		
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -	
35	Property Tax with Recommended Revenue	$ 158,232		
36	Property Tax on Test Year Revenue	$ 154,562		
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ 3,670	
38	Total Required Increase in Revenue (L26 + L29 + L34+L37)		$ 205,930	

		(A)	(B)	(C)	(D)	[E]	[F]
		Test Year			At Proposed Rates		
		Total	Water		Total	Water	
	Calculation of Income Tax:						
39	Revenue	$ 2,896,746	$ 2,896,746		$ 3,102,677	$ 3,102,677	
40	Operating Expenses Excluding Income Taxes	$ 2,120,846	$ 2,120,846		$ 2,124,516	$ 2,124,516	
41	Synchronized Interest (L47)	$ 80,856	$ 80,856		$ 80,856	$ 80,856	
42	Arizona Taxable Income (L39 - L40 - L31)	$ 695,045	$ 695,045		$ 897,306	$ 897,306	
43	Arizona State Income Tax Rate (see Scehdule C-3, page 3 and 4)	2.7709%	2.7709%		2.8377%	2.8377%	
44	Arizona Income Tax (L42 x L43)	$ 19,259	$ 19,259		$ 25,463	$ 25,463	
45	Federal Taxable Income (L42 - L44)	$ 675,786	$ 675,786		$ 871,843	$ 871,843	
46	Federal Tax Rate (see Schedule C-3, page 3 and 4)	14.5614%	14.5614%		15.5533%	15.5533%	
47	Federal Income Taxes (L45xL46)	$ 98,404	$ 98,404		$ 135,600	$ 135,600	
48							
49							
50							
51	Total Federal Income Tax (L47)	$ 98,404	$ 98,404		$ 135,600	$ 135,600	
52	Combined Federal and State Income Tax (L44 + L47)	$ 117,663	$ 117,663	$ -	$ 161,063	$ 161,063	$ -

53	COMBINED Applicable Federal Income Tax Rate [Col. [D], L51 - Col. [A], L51] / [Col. [D], L45 - Col. [A], L45]	18.9723%	
54	Applicable Federal Income Tax Rate [Col. [E], L51 - Col. [B], L51] / [Col. [E], L45 - Col. [B], L45]		18.9723%
55	Applicable State Income Tax Rate [Col. [E], L44 - Col. [B], L44] / [Col. [E], L42 - Col. [B], L42]		3.0672%

		Water	
	Calculation of Interest Synchronization:		
56	Rate Base	$ 9,359,656	
57	Weighted Average Cost of Debt	0.8639%	
58	Synchronized Interest (L56 X L57)	$ 80,856	

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Summary of Cost of Capital

Exhibit
Final Schedule D-1
Page 1
Witness: Bourassa

Line No.	Item of Capital	End of Test Year Dollar Amount	End of Test Year Percent of Total	End of Test Year Cost Rate	End of Test Year Weighted Cost	End of Projected Year Dollar Amount	End of Projected Year Percent of Total	End of Projected Year Cost Rate	End of Projected Year Weighted Cost
1	Long-Term Debt	2,326,035	20.57%	4.20%	0.86%	$ 2,209,677	18.66%	4.20%	0.78%
2									
3	Member Equity	8,982,660	79.43%	9.90%	7.86%	9,630,046	81.34%	9.90%	8.05%
4									
5	Totals	$ 11,308,695	100.00%		8.73%	$ 11,839,722	100.00%		8.84%
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16	SUPPORTING SCHEDULES:								
17	D-1								
18	D-3								
19	D-4								
20									
21									
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RECAP SCHEDULES:
A-1

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Cost of Long Term Debt

Exhibit
Final Schedule D-2
Page 1
Witness: Bourassa

Line No.	Description of Debt	End of Test Year Amount Outstanding	Annual Interest	Interest Rate	Weighted Cost	End of Projected Year Amount Outstanding	Annual Interest	Interest Rate	Weighted Cost
1	WIFA Loan	2,326,035	97,693	4.20%	4.20%	2,209,677	92,806	4.20%	4.20%
2			-	0.00%	0.00%	-	-	0.00%	0.00%
3			-	0.00%	0.00%	-	-	0.00%	0.00%
4			-	0.00%	0.00%	-	-	0.00%	0.00%
5			-	0.00%	0.00%	-	-	0.00%	0.00%
6			-	0.00%	0.00%	-	-	0.00%	0.00%
7			-	0.00%	0.00%	-	-	0.00%	0.00%
8			-	0.00%	0.00%	-	-	0.00%	0.00%
9			-	0.00%	0.00%	-	-	0.00%	0.00%
10			-	0.00%	0.00%	-	-	0.00%	0.00%
11			-	0.00%	0.00%	-	-	0.00%	0.00%
12									
13	Totals	$ 2,326,035	$ 97,693		4.20%	$ 2,209,677	92,806		4.20%
14									
15	SUPPORTING SCHEDULES:								
16	E-1								
17									
18									
19									
20									

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Cost of Preferred Stock

Exhibit
Final Schedule D-3
Page 1
Witness: Bourassa

Line No.	Description of Issue	End of Test Year Shares Outstanding	End of Test Year Amount	End of Test Year Dividend Requirement	End of Projected Year Shares Outstanding	End of Projected Year Amount	End of Projected Year Dividend Requirement
1							
2							
3	NOT APPLICABLE, NO PREFERRED STOCK ISSUED OR OUTSTANDING						
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17	SUPPORTING SCHEDULES:			RECAP SCHEDULES:			
18	E-1			D-1			
19							
20							

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Cost of Common Equity

Exhibit
Final Schedule D-4
Page 1
Witness: Bourassa

Line No.		
1		
2	The Company is proposing a cost of common equity of	9.90% .
3		
4		
5		
6		
7		
8		
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12		
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14		
15		
16		
17	SUPPORTING SCHEDULES:	RECAP SCHEDULES:
18	D-4.1 to D-4.15	D-1
19		
20		

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Revenue Summary
With Annualized Revenues to Year End Number of Customers

Exhibit
Final Schedule H-1
Page 1
Witness: Bourassa

Line No.	Meter Size	Class	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1	5/8x3/4 Inch	Residential	$ 1,754,351	$ 1,889,450	$ 135,099	7.70%	60.56%	60.90%
2	3/4 Inch	Residential	374,310	393,631	19,321	5.16%	12.92%	12.69%
3	1 Inch	Residential	56,962	61,104	4,143	7.27%	1.97%	1.97%
4								
5		Subtotal	2,185,623	2,344,186	158,563	7.25%	75.45%	75.55%
6								
7	1 Inch	Commercial	635	680	45	7.14%	0.02%	0.02%
8	1 1/2 Inch	Commercial	2,774	2,979	204	7.37%	0.10%	0.10%
9	2 Inch	Commercial	78,061	83,853	5,792	7.42%	2.69%	2.70%
10	3 Inch	Commercial	8,473	9,105	631	7.45%	0.29%	0.29%
11								
12		Subtotal	$ 89,943	$ 96,616	$ 6,673	7.42%	3.10%	3.11%
13								
14	1 1/2 Inch	Public Authority	$ 10,908	$ 11,709	$ 801	7.35%	0.38%	0.38%
15	2 Inch	Public Authority	19,539	20,941	1,402	7.18%	0.67%	0.67%
16	4 Inch	Public Authority	35,006	37,651	2,644	7.55%	1.21%	1.21%
17		Subtotal	65,453	70,301	4,848	7.41%	2.26%	2.27%
18								
19	5/8x3/4 Inch	Irrigation	$ 14,044	$ 15,095	$ 1,051	7.48%	0.48%	0.49%
20	3/4 Inch	Irrigation	5,122	5,464	342	6.68%	0.18%	0.18%
21	1 Inch	Irrigation	76,839	82,538	5,700	7.42%	2.65%	2.66%
22	1 1/2 Inch	Irrigation	40,234	43,229	2,995	7.44%	1.39%	1.39%
23	2 Inch	Irrigation	383,182	411,924	28,742	7.50%	13.23%	13.28%
24	3 Inch	Irrigation	-	-	-	0.00%	0.00%	0.00%
25								
26		Subtotal	519,420	558,250	38,830	7.48%	17.93%	17.99%
27								
28								
29	3 Inch	Construction	32,933	35,357	2,424	7.36%	1.14%	1.14%
30								
31		Subtotal	32,933	35,357	2,424	7.36%	1.14%	1.14%
32								
33	Total Revenues Before Annualization		$ 2,893,372	$ 3,104,710	$ 211,338	7.30%	99.88%	100.07%
34								
35								

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Revenue Summary
With Annualized Revenues to Year End Number of Customers

Exhibit
Final Schedule H-1
Page 2
Witness: Bourassa

Line No.	Meter Size	Class	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Additional Bills	Additional Gallons to be Pumped (In 1,000's)
			Revenue Annualization					
1	5/8x3/4 Inch	Residential	$ 8,339	$ 8,988	649	7.78%	267	1,270
2	3/4 Inch	Residential	6,717	7,064	347	5.16%	143	912
3	1 Inch	Residential	2,190	2,349	159	7.27%	32	218
4								
5		Subtotal	$ 17,246	$ 18,401	$ 1,155	6.70%	442	2,400
6								
7	1 Inch	Commercial	-	-	-	0.00%	-	-
8	1 1/2 Inch	Commercial	1,627	1,748	121	7.42%	8	249
9	2 Inch	Commercial	4,302	4,622	321	7.45%	12	708
10	3 Inch	Commercial	-	-	-	0.00%	-	-
11								
12		Subtotal	$ 5,929	$ 6,370	$ 441	7.44%	20	957
13								
14	1 1/2 Inch	Public Authority	-	-	-	0.00%	-	-
15	2 Inch	Public Authority	-	-	-	0.00%	-	-
16	4 Inch	Public Authority	-	-	-	0.00%	-	-
17		Subtotal	$ -	$ -	$ -	0.00%	-	-
18								
19	5/8x3/4 Inch	Irrigation	$ 73	$ 78	5	7.51%	1	-
20	3/4 Inch	Irrigation	-	-	-	0.00%	-	-
21	1 Inch	Irrigation	917	985	68	7.45%	8	151
22	1 1/2 Inch	Irrigation	-	-	-	0.00%	-	-
23	2 Inch	Irrigation	-	-	-	0.00%	-	-
24	3 Inch	Irrigation	-	-	-	0.00%	-	-
25								
26		Subtotal	990	1,063	74	7.46%	9	151
27								
28								
29	3 Inch	Construction	-	-	-	0.00%	-	-
30								
31		Subtotal	-	-	-	0.00%	-	-
32								
33								
34	Total Revenue Annualization		$ 24,165	$ 25,835	$ 1,670	6.91%	$ 471	3,509
35								

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Revenue Summary
With Annualized Revenues to Year End Number of Customers

Exhibit
Final Schedule H-1
Page 3
Witness: Bourassa

Line No.		Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1	Subtotal Metered Revenues	$ 2,893,372	$ 3,104,710	$ 211,338	7.30%	99.88%	100.07%
2	Revenue Normalization	(73,316)	(81,190)	(7,874)	10.74%	-2.53%	-2.62%
3	Subtotal Revenue Annualization	24,165	25,835	1,670	6.91%	0.83%	0.83%
4	Total Metered Revenues	$ 2,844,220	$ 3,049,355	$ 205,134	7.21%	98.19%	98.28%
5							
6	Misc. Revenues	$ 53,528	$ 53,528	-	0.00%	1.85%	1.73%
7	Reconciling Amount to GL/C-1	(1,001)	(206)	795	-79.42%	-0.03%	-0.01%
8	Total Water Revenues	$ 2,896,747	$ 3,102,676	$ 205,929	7.11%	100.00%	100.00%
9							
10							
11							
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Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Customer Summary

Exhibit
Final Schedule H-2
Page 1
Witness: Bourassa

Line No.	Meter Size, Class		(a) Average Number of Customers at 12/31/2014	Average Consumption	Average Bill Present Rates	Average Bill Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	5/8x3/4 Inch	Residential	4,604	4,677	$ 30.94	$ 33.35	2.41	7.78%
2	3/4 Inch	Residential	655	6,316	46.73	49.14	2.41	5.15%
3	1 Inch	Residential	69	6,796	68.36	73.33	4.97	7.27%
4								
5		Subtotal	5,328					
6								
7	1 Inch	Commercial	1	2,667	52.88	56.65	3.77	7.14%
8	1 1/2 Inch	Commercial	1	23,251	172.94	185.68	12.75	7.37%
9	2 Inch	Commercial	18	56,638	349.59	375.62	26.03	7.45%
10	3 Inch	Commercial	1	115,126	706.12	758.72	52.59	7.45%
11								
12		Subtotal	21					
13								
14	1 1/2 Inch	Public Authority	5	23,727	174.73	187.61	12.88	7.37%
15	2 Inch	Public Authority	9	11,658	180.92	193.90	12.98	7.18%
16	4 Inch	Public Authority	1	611,322	2,917.20	3,137.56	220.36	7.55%
17		Subtotal	15					
18								
19	5/8x3/4 Inch	Irrigation	13	17,095	$ 87.33	$ 93.89	6.56	7.52%
20	3/4 Inch	Irrigation	3	26,972	141.42	150.87	9.45	6.68%
21	1 Inch	Irrigation	50	20,313	119.28	128.19	8.91	7.47%
22	1 1/2 Inch	Irrigation	12	47,160	262.60	282.28	19.68	7.49%
23	2 Inch	Irrigation	48	127,321	642.64	691.04	48.39	7.53%
24	3 Inch	Irrigation	-					
25								
26		Subtotal	126					
27								
28								
29	3 Inch	Construction	4	113,269	784.11	841.83	57.72	7.36%
30								
31		Subtotal	4					
32								
33		Total	5,494					
34								

35 (a) Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Customer Summary

Exhibit
Final Schedule H-2
Page 2
Witness: Bourassa

Line No.	Meter Size, Class		(a) Average Number of Customers at 12/31/2014	Median Consumption	Median Bill Present Rates	Median Bill Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	5/8x3/4 Inch	Residential	4,604	4,500	$ 30.28	$ 32.63	2.36	7.78%
2	3/4 Inch	Residential	655	5,500	43.68	45.85	2.17	4.97%
3	1 Inch	Residential	69	5,500	63.50	68.10	4.60	7.24%
4								
5								
6		Subtotal	5,328					
7								
8	1 Inch	Commercial	1	2,500	52.25	55.98	3.73	7.13%
9	1 1/2 Inch	Commercial	1	17,000	149.50	160.43	10.93	7.31%
10	2 Inch	Commercial	18	32,500	259.08	278.10	19.03	7.34%
11	3 Inch	Commercial	1	106,890	675.24	725.44	50.21	7.44%
12								
13		Subtotal	21					
14								
15	1 1/2 Inch	Public Authority	5	25,370	110.13	118.01	7.89	7.16%
16	2 Inch	Public Authority	9	10,501	170.95	183.16	12.21	7.14%
17	4 Inch	Public Authority	1	493,780	2,768.96	2,978.12	209.16	7.55%
18		Subtotal	15					
19								
20	5/8x3/4 Inch	Irrigation	13	4,500	$ 34.03	$ 36.53	2.51	7.36%
21	3/4 Inch	Irrigation	3	9,500	62.80	66.31	3.51	5.58%
22	1 Inch	Irrigation	50	7,500	71.00	76.18	5.18	7.29%
23	1 1/2 Inch	Irrigation	12	20,500	162.63	174.57	11.95	7.35%
24	2 Inch	Irrigation	48	87,000	463.45	498.28	34.83	7.52%
25	3 Inch	Irrigation	-					
26								
27		Subtotal	126					
28								
29								
30	3 Inch	Construction	4	6,000	301.40	322.65	21.25	7.05%
31								
32		Subtotal	4					
33								
34		Total	5,494					
35								

36 **(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.
37

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Present and Proposed Rates
Typical Rate Design

Exhibit
Final Schedule H-3
Page 1
Witness: Bourassa

Line No.	Monthly Usage Charge for:	Present Rates	Proposed Rates	Change	Percent Change
1	Meter Size (All Classes):				
2	5/8x3/4Inch	$ 17.15	$ 18.35	$ 1.20	7.00%
2	3/4 Inch	26.80	27.53	0.73	2.71%
3	1 Inch	42.88	45.88	3.00	7.00%
4	1 1/2 Inch	85.75	91.75	6.00	7.00%
5	2 Inch	137.20	146.80	9.60	7.00%
6	3 Inch	274.40	293.61	19.21	7.00%
7	4 Inch	428.75	458.76	30.01	7.00%
8	6 Inch	857.50	917.53	60.03	7.00%
9					
10					
11					
12	Gallons In Minimum (All Classes)	-	-		
13					
14					
15			(Per 1,000 gallons)		
16	**Commodity Rates**	**Block**	**Present Rate**	**Proposed Rate**	
17	5/8x3/4 Inch - Residential	0 gallons to 3,000 gallons	$ 2.500	$ 2.740	
18		3,001 to 9,000 gallons	$ 3.750	$ 4.040	
19		over 9,000 gallons	$ 4.500	$ 4.840	
20					
21	5/8x3/4 Inch - Non-residential	0 gallons to 9,000 gallons	$ 3.750	$ 4.040	
22		Over 9,000 gallons	$ 4.500	$ 4.840	
23					
24	3/4 Inch Meter Residential	0 gallons to 3,000 gallons	$ 2.500	$ 2.740	
		3,001 to 9,000 gallons	$ 3.750	$ 4.040	
25		over 9,000 gallons	$ 4.500	$ 4.840	
26					
27	3/4 Inch Meter - Non-residential	0 gallons to 9,000 gallons	$ 3.750	$ 4.040	
28		Over 9,000 gallons	$ 4.500	$ 4.840	
29					
30					
31	1 Inch - All classes	0 gallons to 20,000 gallons	$ 3.750	$ 4.040	
32		Over 20,000 gallons	$ 4.500	$ 4.840	
33					
34	1 1/2 Inch - All classes	0 gallons to 55,000 gallons	$ 3.750	$ 4.040	
35		Over 55,000 gallons	$ 4.500	$ 4.840	
36					
37	2 Inch - All classes	0 gallons to 90,000 gallons	$ 3.750	$ 4.040	
38		Over 90,000 gallons	$ 4.500	$ 4.840	
39					
40	3 Inch - All classes	0 gallons to 200,000 gallons	$ 3.750	$ 4.040	
41		Over 200,000 gallons	$ 4.500	$ 4.840	
42					
43	4 Inch - All classes	0 gallons to 350,000 gallons	$ 3.750	$ 4.040	
44		Over 350,000 gallons	$ 4.500	$ 4.840	
45					

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Present and Proposed Rates
Typical Rate Design

Exhibit
Final Schedule H-3
Page 2
Witness: Bourassa

Line No.	Commodity Rates	Block	(Per 1,000 gallons) Present Rate	Proposed Rate
4	6 Inch - All classes	0 gallons to 750,000 gallons	$ 3.750	$ 4.040
5		Over 750,000 gallons	$ 4.500	$ 4.840
9	Construction/Bulk	All gallons	$ 4.500	$ 4.840

Sahuarita Water Company, LLC
Changes in Representative Rate Schedules
Test Year Ended December 31, 2014

Exhibit
Final Schedule H-3
Page 3
Witness: Bourassa

Meter and Service Line Charges[1]

	Present Service Line Charge	Present Meter Install-ation Charge	Total Present Charge	Proposed Service Line Charge	Proposed Meter Install-ation Charge	Total Proposed Charge
5/8 x 3/4 Inch	$ 445	$ 155	$ 600.00	$ 445	$ 155	$ 600.00
3/4 Inch	445	255	700.00	445	255	700.00
1 Inch	495	315	810.00	495	315	810.00
1 1/2 Inch	550	525	1,075.00	550	525	1,075.00
2 Inch Turbo	830	1,045	1,875.00	830	1,045	1,875.00
2 Inch, Compound	830	1,890	2,720.00	830	1,890	2,720.00
3 Inch Turbo	1,045	1,670	2,715.00	1,045	1,670	2,715.00
3 Inch, compound	1,165	2,545	3,710.00	1,165	2,545	3,710.00
4 Inch Turbo	1,490	2,670	4,160.00	1,490	2,670	4,160.00
4 Inch, compound	1,670	3,645	5,315.00	1,670	3,645	5,315.00
6 Inch Turbo	2,210	5,025	7,235.00	2,210	5,025	7,235.00
6 Inch, compound	2,330	6,920	9,250.00	2,330	6,920	9,250.00
Over 6"	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost

[1] Based on ACC Staff Engineering Memo dated Feburary 21, 2008
NT = No Tariff

Other Charges:

	Present	Proposed
Establishment	$ 25.00	$ 25.00
Establishment (After Hours)	$ 40.00	Remove
Reestablishment (within 12 months)	*	*
Reconnection (Deliquent)	$ 25.00	$ 25.00
Reconnection (Deliquent and After Hours)	$ 40.00	Remove
Meter Test (if correct)	$ 25.00	$ 25.00
Meter Re-read (if correct)	NT	$ 25.00
Deposit	**	**
Deposit Interest**	6%	6%
NSF Check	$ 15.00	$ 15.00
Deferred Payment, per month	1.5%	1.5%
Late Payment Fee (per month)	Min. $ 5.00 or 1.5% per month	Min. $ 5.00 or 1.5% per month
Moving Meter at Customer Request	At Cost	At Cost
After hours service charge	NT	$ 50.00
Main Extension and Additional Facilities	At Cost	At Cost

* Per Commissin Rule A.A.C. R-14-2-403(D). Number of months off the system times the monthly minimum.
** Per Commission Rule Rule R14-2-403(B)

NT = No Tariff

Sahuarita Water Company, LLC
Test Year Ended December 31, 2014
Hook-Up Fees

Exhibit
Final Schedule H-3
Page 4
Witness: Bourassa

Line No.		Present Charge	Proposed Charge
1			
2	**Off-site Facilities Hook-up Fee**		
3			
4			
5			
6	5/8 x 3/4 Inch	$ 350	$ 350
7	3/4 Inch	420	420
8	1 Inch	700	700
9	1 1/2 Inch	1,400	1,400
10	2 Inch	2,240	2,240
11	3 Inch	4,200	4,200
12	4 Inch	7,000	7,000
13	6 Inch or larger	14,000	14,000
14			
15			
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Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 5/8 Inch Residential

Exhibit
Final Schedule H-4
Page 1
Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 17.15	$ 18.35	$ 1.20	7.00%
1,000	19.65	21.09	1.44	7.33%
2,000	22.15	23.83	1.68	7.59%
3,000	24.65	26.57	1.92	7.79%
4,000	28.40	30.61	2.21	7.78%
5,000	32.15	34.65	2.50	7.78%
6,000	35.90	38.69	2.79	7.77%
7,000	39.65	42.73	3.08	7.77%
8,000	43.40	46.77	3.37	7.77%
9,000	47.15	50.81	3.66	7.76%
10,000	51.65	55.65	4.00	7.75%
12,000	60.65	65.33	4.68	7.72%
14,000	69.65	75.01	5.36	7.70%
16,000	78.65	84.69	6.04	7.68%
18,000	87.65	94.37	6.72	7.67%
20,000	96.65	104.05	7.40	7.66%
25,000	119.15	128.25	9.10	7.64%
30,000	141.65	152.45	10.80	7.62%
35,000	164.15	176.65	12.50	7.62%
40,000	186.65	200.85	14.20	7.61%
45,000	209.15	225.05	15.90	7.60%
50,000	231.65	249.25	17.60	7.60%
60,000	276.65	297.65	21.00	7.59%
70,000	321.65	346.05	24.40	7.59%
80,000	366.65	394.45	27.80	7.58%
90,000	411.65	442.85	31.20	7.58%
100,000	456.65	491.25	34.60	7.58%
Average Usage 4,677	$ 30.94	$ 33.35	$ 2.41	7.78%
Median Usage 4,500	$ 30.28	$ 32.63	$ 2.36	7.78%

Present Rates:			
Monthly Minimum:		$	17.15
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	3,000	$	2.500
Up to	9,000	$	3.750
Over	9,000	$	4.500
Proposed Rates:			
Monthly Minimum:		$	18.35
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	3,000	$	2.740
Up to	9,000	$	4.040
Over	9,000	$	4.840

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 3/4 Inch Residential

Exhibit
Final Schedule H-4
Page 2
Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 26.80	$ 27.53	$ 0.73	2.71%
1,000	29.30	30.27	0.97	3.30%
2,000	31.80	33.01	1.21	3.79%
3,000	34.30	35.75	1.45	4.22%
4,000	38.05	39.79	1.74	4.56%
5,000	41.80	43.83	2.03	4.85%
6,000	45.55	47.87	2.32	5.08%
7,000	49.30	51.91	2.61	5.29%
8,000	53.05	55.95	2.90	5.46%
9,000	56.80	59.99	3.19	5.61%
10,000	61.30	64.83	3.53	5.75%
12,000	70.30	74.51	4.21	5.98%
14,000	79.30	84.19	4.89	6.16%
16,000	88.30	93.87	5.57	6.30%
18,000	97.30	103.55	6.25	6.42%
20,000	106.30	113.23	6.93	6.52%
25,000	128.80	137.43	8.63	6.70%
30,000	151.30	161.63	10.33	6.82%
35,000	173.80	185.83	12.03	6.92%
40,000	196.30	210.03	13.73	6.99%
45,000	218.80	234.23	15.43	7.05%
50,000	241.30	258.43	17.13	7.10%
60,000	286.30	306.83	20.53	7.17%
70,000	331.30	355.23	23.93	7.22%
80,000	376.30	403.63	27.33	7.26%
90,000	421.30	452.03	30.73	7.29%
100,000	466.30	500.43	34.13	7.32%
Average Usage				
6,316	$ 46.73	$ 49.14	$ 2.41	5.15%
Median Usage				
5,500	$ 43.68	$ 45.85	$ 2.17	4.97%

Present Rates:			
Monthly Minimum:		$	26.80
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	3,000	$	2.500
Up to	9,000	$	3.750
Over	9,000		
Proposed Rates:			
Monthly Minimum:		$	27.53
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	3,000	$	2.740
Up to	9,000	$	4.040
Over	9,000	$	4.840

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 1 Inch Residential

Exhibit
Final Schedule H-4
Page 3
Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 42.88	$ 45.88	$ 3.00	7.00%
1,000	46.63	49.92	3.29	7.06%
2,000	50.38	53.96	3.58	7.11%
3,000	54.13	58.00	3.87	7.15%
4,000	57.88	62.04	4.16	7.19%
5,000	61.63	66.08	4.45	7.22%
6,000	65.38	70.12	4.74	7.25%
7,000	69.13	74.16	5.03	7.28%
8,000	72.88	78.20	5.32	7.30%
9,000	76.63	82.24	5.61	7.32%
10,000	80.38	86.28	5.90	7.34%
12,000	87.88	94.36	6.48	7.38%
14,000	95.38	102.44	7.06	7.40%
16,000	102.88	110.52	7.64	7.43%
18,000	110.38	118.60	8.22	7.45%
20,000	117.88	126.68	8.80	7.47%
25,000	140.38	150.88	10.50	7.48%
30,000	162.88	175.08	12.20	7.49%
35,000	185.38	199.28	13.90	7.50%
40,000	207.88	223.48	15.60	7.51%
45,000	230.38	247.68	17.30	7.51%
50,000	252.88	271.88	19.00	7.51%
60,000	297.88	320.28	22.40	7.52%
70,000	342.88	368.68	25.80	7.52%
80,000	387.88	417.08	29.20	7.53%
90,000	432.88	465.48	32.60	7.53%
100,000	477.88	513.88	36.00	7.53%
Average Usage 6,796	$ 68.36	$ 73.33	$ 4.97	7.27%
Median Usage 5,500	$ 63.50	$ 68.10	$ 4.60	7.24%

Present Rates:			
Monthly Minimum:		$	42.88
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	20,000	$	3.750
Over	20,000	$	4.500
Proposed Rates:			
Monthly Minimum:		$	45.88
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	20,000	$	4.040
Over	20,000	$	4.840

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 1 Inch Commercial

Exhibit
Final Schedule H-4
Page 4
Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 42.88	$ 45.88	$ 3.00	7.00%
1,000	46.63	49.92	3.29	7.06%
2,000	50.38	53.96	3.58	7.11%
3,000	54.13	58.00	3.87	7.15%
4,000	57.88	62.04	4.16	7.19%
5,000	61.63	66.08	4.45	7.22%
6,000	65.38	70.12	4.74	7.25%
7,000	69.13	74.16	5.03	7.28%
8,000	72.88	78.20	5.32	7.30%
9,000	76.63	82.24	5.61	7.32%
10,000	80.38	86.28	5.90	7.34%
12,000	87.88	94.36	6.48	7.38%
14,000	95.38	102.44	7.06	7.40%
16,000	102.88	110.52	7.64	7.43%
18,000	110.38	118.60	8.22	7.45%
20,000	117.88	126.68	8.80	7.47%
25,000	140.38	150.88	10.50	7.48%
30,000	162.88	175.08	12.20	7.49%
35,000	185.38	199.28	13.90	7.50%
40,000	207.88	223.48	15.60	7.51%
45,000	230.38	247.68	17.30	7.51%
50,000	252.88	271.88	19.00	7.51%
60,000	297.88	320.28	22.40	7.52%
70,000	342.88	368.68	25.80	7.52%
80,000	387.88	417.08	29.20	7.53%
90,000	432.88	465.48	32.60	7.53%
100,000	477.88	513.88	36.00	7.53%
Average Usage 2,667	$ 52.88	$ 56.65	$ 3.77	7.14%
Median Usage 2,500	$ 52.25	$ 55.98	$ 3.73	7.13%

Present Rates:			
Monthly Minimum:		$	42.88
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	20,000	$	3.750
Over	20,000	$	4.500
Proposed Rates:			
Monthly Minimum:		$	45.88
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	20,000	$	4.040
Over	20,000	$	4.840

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 1 1/2 Inch Commercial

Exhibit
Final Schedule H-4
Page 5
Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 85.75	$ 91.75	$ 6.00	7.00%
1,000	89.50	95.79	6.29	7.03%
2,000	93.25	99.83	6.58	7.06%
3,000	97.00	103.87	6.87	7.09%
4,000	100.75	107.91	7.16	7.11%
5,000	104.50	111.95	7.45	7.13%
6,000	108.25	115.99	7.74	7.15%
7,000	112.00	120.03	8.03	7.17%
8,000	115.75	124.07	8.32	7.19%
9,000	119.50	128.11	8.61	7.21%
10,000	123.25	132.15	8.90	7.22%
12,000	130.75	140.23	9.48	7.25%
14,000	138.25	148.31	10.06	7.28%
16,000	145.75	156.39	10.64	7.30%
18,000	153.25	164.47	11.22	7.32%
20,000	160.75	172.55	11.80	7.34%
25,000	179.50	192.75	13.25	7.38%
30,000	198.25	212.95	14.70	7.42%
35,000	217.00	233.15	16.15	7.44%
40,000	235.75	253.35	17.60	7.47%
45,000	254.50	273.55	19.05	7.49%
50,000	273.25	293.75	20.50	7.50%
60,000	314.50	338.15	23.65	7.52%
70,000	359.50	386.55	27.05	7.53%
80,000	404.50	434.95	30.45	7.53%
90,000	449.50	483.35	33.85	7.53%
100,000	494.50	531.75	37.25	7.53%
Average Usage 23,251	$ 172.94	$ 185.68	$ 12.75	7.37%
Median Usage 17,000	$ 149.50	$ 160.43	$ 10.93	7.31%

Present Rates:

Monthly Minimum:		$	85.75
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	55,000	$	3.750
Over	55,000	$	4.500

Proposed Rates:

Monthly Minimum:		$	91.75
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	55,000	$	4.040
Over	55,000	$	4.840

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 2 Inch Commercial

Exhibit
Final Schedule H-4
Page 6
Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 137.20	$ 146.80	$ 9.60	7.00%
1,000	140.95	150.84	9.89	7.02%
2,000	144.70	154.88	10.18	7.04%
3,000	148.45	158.92	10.47	7.06%
4,000	152.20	162.96	10.76	7.07%
5,000	155.95	167.00	11.05	7.09%
6,000	159.70	171.04	11.34	7.10%
7,000	163.45	175.08	11.63	7.12%
8,000	167.20	179.12	11.92	7.13%
9,000	170.95	183.16	12.21	7.14%
10,000	174.70	187.20	12.50	7.16%
12,000	182.20	195.28	13.08	7.18%
14,000	189.70	203.36	13.66	7.20%
16,000	197.20	211.44	14.24	7.22%
18,000	204.70	219.52	14.82	7.24%
20,000	212.20	227.60	15.40	7.26%
25,000	230.95	247.80	16.85	7.30%
30,000	249.70	268.00	18.30	7.33%
35,000	268.45	288.20	19.75	7.36%
40,000	287.20	308.40	21.20	7.38%
45,000	305.95	328.60	22.65	7.40%
50,000	324.70	348.80	24.10	7.42%
60,000	362.20	389.20	27.00	7.46%
70,000	399.70	429.60	29.90	7.48%
80,000	437.20	470.00	32.80	7.50%
90,000	474.70	510.40	35.70	7.52%
100,000	519.70	558.80	39.10	7.52%
Average Usage				
56,638	$ 349.59	$ 375.62	$ 26.03	7.45%
Median Usage				
32,500	$ 259.08	$ 278.10	$ 19.03	7.34%

Present Rates:

Monthly Minimum:		$	137.20
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	90,000	$	3.750
Over	90,000	$	4.500

Proposed Rates:

Monthly Minimum:		$	146.80
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	90,000	$	4.040
Over	90,000	$	4.840

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 3 Inch Commercial

Exhibit
Final Schedule H-4
Page 7
Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 274.40	$ 293.61	$ 19.21	7.00%
1,000	278.15	297.65	19.50	7.01%
2,000	281.90	301.69	19.79	7.02%
3,000	285.65	305.73	20.08	7.03%
4,000	289.40	309.77	20.37	7.04%
5,000	293.15	313.81	20.66	7.05%
6,000	296.90	317.85	20.95	7.06%
7,000	300.65	321.89	21.24	7.06%
8,000	304.40	325.93	21.53	7.07%
9,000	308.15	329.97	21.82	7.08%
10,000	311.90	334.01	22.11	7.09%
12,000	319.40	342.09	22.69	7.10%
14,000	326.90	350.17	23.27	7.12%
16,000	334.40	358.25	23.85	7.13%
18,000	341.90	366.33	24.43	7.14%
20,000	349.40	374.41	25.01	7.16%
25,000	368.15	394.61	26.46	7.19%
30,000	386.90	414.81	27.91	7.21%
35,000	405.65	435.01	29.36	7.24%
40,000	424.40	455.21	30.81	7.26%
45,000	443.15	475.41	32.26	7.28%
50,000	461.90	495.61	33.71	7.30%
60,000	499.40	536.01	36.61	7.33%
70,000	536.90	576.41	39.51	7.36%
80,000	574.40	616.81	42.41	7.38%
90,000	611.90	657.21	45.31	7.40%
100,000	649.40	697.61	48.21	7.42%
Average Usage				
115,126	$ 706.12	$ 758.72	$ 52.59	7.45%
Median Usage				
106,890	$ 675.24	$ 725.44	$ 50.21	7.44%

Present Rates:			
Monthly Minimum:		$	274.40
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	200,000	$	3.750
Over	200,000	$	4.500

Proposed Rates:			
Monthly Minimum:		$	293.61
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	200,000	$	4.040
Over	200,000	$	4.840

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 1 1/2 Inch Public Authority

Exhibit
Final Schedule H-4
Page 8
Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 85.75	$ 91.75	$ 6.00	7.00%
1,000	89.50	95.79	6.29	7.03%
2,000	93.25	99.83	6.58	7.06%
3,000	97.00	103.87	6.87	7.09%
4,000	100.75	107.91	7.16	7.11%
5,000	104.50	111.95	7.45	7.13%
6,000	108.25	115.99	7.74	7.15%
7,000	112.00	120.03	8.03	7.17%
8,000	115.75	124.07	8.32	7.19%
9,000	119.50	128.11	8.61	7.21%
10,000	123.25	132.15	8.90	7.22%
12,000	130.75	140.23	9.48	7.25%
14,000	138.25	148.31	10.06	7.28%
16,000	145.75	156.39	10.64	7.30%
18,000	153.25	164.47	11.22	7.32%
20,000	160.75	172.55	11.80	7.34%
25,000	179.50	192.75	13.25	7.38%
30,000	198.25	212.95	14.70	7.42%
35,000	217.00	233.15	16.15	7.44%
40,000	235.75	253.35	17.60	7.47%
45,000	254.50	273.55	19.05	7.49%
50,000	273.25	293.75	20.50	7.50%
60,000	314.50	338.15	23.65	7.52%
70,000	359.50	386.55	27.05	7.53%
80,000	404.50	434.95	30.45	7.53%
90,000	449.50	483.35	33.85	7.53%
100,000	494.50	531.75	37.25	7.53%
Average Usage				
23,727	$ 174.73	$ 187.61	$ 12.88	7.37%
Median Usage				
6,500	$ 110.13	$ 118.01	$ 7.89	7.16%

Present Rates:			
Monthly Minimum:		$	85.75
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	55,000	$	3.750
Over	55,000	$	4.500
Proposed Rates:			
Monthly Minimum:		$	91.75
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	55,000	$	4.040
Over	55,000	$	4.840

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 2 Inch Public Authority

Exhibit
Final Schedule H-4
Page 9
Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 137.20	$ 146.80	$ 9.60	7.00%
1,000	140.95	150.84	9.89	7.02%
2,000	144.70	154.88	10.18	7.04%
3,000	148.45	158.92	10.47	7.06%
4,000	152.20	162.96	10.76	7.07%
5,000	155.95	167.00	11.05	7.09%
6,000	159.70	171.04	11.34	7.10%
7,000	163.45	175.08	11.63	7.12%
8,000	167.20	179.12	11.92	7.13%
9,000	170.95	183.16	12.21	7.14%
10,000	174.70	187.20	12.50	7.16%
12,000	182.20	195.28	13.08	7.18%
14,000	189.70	203.36	13.66	7.20%
16,000	197.20	211.44	14.24	7.22%
18,000	204.70	219.52	14.82	7.24%
20,000	212.20	227.60	15.40	7.26%
25,000	230.95	247.80	16.85	7.30%
30,000	249.70	268.00	18.30	7.33%
35,000	268.45	288.20	19.75	7.36%
40,000	287.20	308.40	21.20	7.38%
45,000	305.95	328.60	22.65	7.40%
50,000	324.70	348.80	24.10	7.42%
60,000	362.20	389.20	27.00	7.46%
70,000	399.70	429.60	29.90	7.48%
80,000	437.20	470.00	32.80	7.50%
90,000	474.70	510.40	35.70	7.52%
100,000	519.70	558.80	39.10	7.52%
Average Usage				
11,658	$ 180.92	$ 193.90	$ 12.98	7.18%
Median Usage				
9,000	$ 170.95	$ 183.16	$ 12.21	7.14%

Present Rates:			
Monthly Minimum:		$	137.20
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	90,000	$	3.750
Over	90,000	$	4.500

Proposed Rates:			
Monthly Minimum:		$	146.80
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	90,000	$	4.040
Over	90,000	$	4.840

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 4 Inch Commercial

Exhibit
Final Schedule H-4
Page 10
Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 428.75	$ 458.76	$ 30.01	7.00%
1,000	432.50	462.80	30.30	7.01%
2,000	436.25	466.84	30.59	7.01%
3,000	440.00	470.88	30.88	7.02%
4,000	443.75	474.92	31.17	7.02%
5,000	447.50	478.96	31.46	7.03%
6,000	451.25	483.00	31.75	7.04%
7,000	455.00	487.04	32.04	7.04%
8,000	458.75	491.08	32.33	7.05%
9,000	462.50	495.12	32.62	7.05%
10,000	466.25	499.16	32.91	7.06%
12,000	473.75	507.24	33.49	7.07%
14,000	481.25	515.32	34.07	7.08%
16,000	488.75	523.40	34.65	7.09%
18,000	496.25	531.48	35.23	7.10%
20,000	503.75	539.56	35.81	7.11%
25,000	522.50	559.76	37.26	7.13%
30,000	541.25	579.96	38.71	7.15%
35,000	560.00	600.16	40.16	7.17%
40,000	578.75	620.36	41.61	7.19%
45,000	597.50	640.56	43.06	7.21%
50,000	616.25	660.76	44.51	7.22%
60,000	653.75	701.16	47.41	7.25%
70,000	691.25	741.56	50.31	7.28%
80,000	728.75	781.96	53.21	7.30%
90,000	766.25	822.36	56.11	7.32%
100,000	803.75	862.76	59.01	7.34%
Average Usage				
611,322	$ 2,917.20	$ 3,137.56	$ 220.36	7.55%
Median Usage				
578,380	$ 2,768.96	$ 2,978.12	$ 209.16	7.55%

Present Rates:

Monthly Minimum:		$	428.75
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	350,000	$	3.750
Over	350,000	$	4.500

Proposed Rates:

Monthly Minimum:		$	458.76
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	350,000	$	4.040
Over	350,000	$	4.840

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 5/8 Inch Irrigation

Exhibit
Final Schedule H-4
Page 11
Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 17.15	$ 18.35	$ 1.20	7.00%
1,000	20.90	22.39	1.49	7.13%
2,000	24.65	26.43	1.78	7.22%
3,000	28.40	30.47	2.07	7.29%
4,000	32.15	34.51	2.36	7.34%
5,000	35.90	38.55	2.65	7.38%
6,000	39.65	42.59	2.94	7.42%
7,000	43.40	46.63	3.23	7.44%
8,000	47.15	50.67	3.52	7.47%
9,000	50.90	54.71	3.81	7.49%
10,000	55.40	59.55	4.15	7.49%
12,000	64.40	69.23	4.83	7.50%
14,000	73.40	78.91	5.51	7.51%
16,000	82.40	88.59	6.19	7.51%
18,000	91.40	98.27	6.87	7.52%
20,000	100.40	107.95	7.55	7.52%
25,000	122.90	132.15	9.25	7.53%
30,000	145.40	156.35	10.95	7.53%
35,000	167.90	180.55	12.65	7.53%
40,000	190.40	204.75	14.35	7.54%
45,000	212.90	228.95	16.05	7.54%
50,000	235.40	253.15	17.75	7.54%
60,000	280.40	301.55	21.15	7.54%
70,000	325.40	349.95	24.55	7.54%
80,000	370.40	398.35	27.95	7.55%
90,000	415.40	446.75	31.35	7.55%
100,000	460.40	495.15	34.75	7.55%
Average Usage				
17,095	$ 87.33	$ 93.89	$ 6.56	7.52%
Median Usage				
4,500	$ 34.03	$ 36.53	$ 2.51	7.36%

Present Rates:			
Monthly Minimum:		$	17.15
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	9,000	$	3.750
Over	9,000	$	4.500

Proposed Rates:			
Monthly Minimum:		$	18.35
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	9,000	$	4.040
Over	9,000	$	4.840

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 3/4 Inch Irrigation

Exhibit
RejoinderSchedule H-4
Page 12
Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 26.80	$ 27.53	$ 0.73	2.71%
1,000	30.55	31.57	1.02	3.32%
2,000	34.30	35.61	1.31	3.81%
3,000	38.05	39.65	1.60	4.19%
4,000	41.80	43.69	1.89	4.51%
5,000	45.55	47.73	2.18	4.78%
6,000	49.30	51.77	2.47	5.00%
7,000	53.05	55.81	2.76	5.19%
8,000	56.80	59.85	3.05	5.36%
9,000	60.55	63.89	3.34	5.51%
10,000	65.05	68.73	3.68	5.65%
12,000	74.05	78.41	4.36	5.88%
14,000	83.05	88.09	5.04	6.06%
16,000	92.05	97.77	5.72	6.21%
18,000	101.05	107.45	6.40	6.33%
20,000	110.05	117.13	7.08	6.43%
25,000	132.55	141.33	8.78	6.62%
30,000	155.05	165.53	10.48	6.76%
35,000	177.55	189.73	12.18	6.86%
40,000	200.05	213.93	13.88	6.94%
45,000	222.55	238.13	15.58	7.00%
50,000	245.05	262.33	17.28	7.05%
60,000	290.05	310.73	20.68	7.13%
70,000	335.05	359.13	24.08	7.19%
80,000	380.05	407.53	27.48	7.23%
90,000	425.05	455.93	30.88	7.26%
100,000	470.05	504.33	34.28	7.29%
Average Usage				
26,972	$ 141.42	$ 150.87	$ 9.45	6.68%
Median Usage				
9,500	$ 62.80	$ 66.31	$ 3.51	5.58%

Present Rates:			
Monthly Minimum:		$	26.80
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	9,000	$	3.75
Over	9,000	$	4.50

Proposed Rates:			
Monthly Minimum:		$	27.53
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	9,000	$	4.04
Over	9,000	$	4.84

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 1 Inch Commercial

Exhibit
RejoinderSchedule H-4
Page 13
Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 42.88	$ 45.88	$ 3.00	7.00%
1,000	46.63	49.92	3.29	7.06%
2,000	50.38	53.96	3.58	7.11%
3,000	54.13	58.00	3.87	7.15%
4,000	57.88	62.04	4.16	7.19%
5,000	61.63	66.08	4.45	7.22%
6,000	65.38	70.12	4.74	7.25%
7,000	69.13	74.16	5.03	7.28%
8,000	72.88	78.20	5.32	7.30%
9,000	76.63	82.24	5.61	7.32%
10,000	80.38	86.28	5.90	7.34%
12,000	87.88	94.36	6.48	7.38%
14,000	95.38	102.44	7.06	7.40%
16,000	102.88	110.52	7.64	7.43%
18,000	110.38	118.60	8.22	7.45%
20,000	117.88	126.68	8.80	7.47%
25,000	140.38	150.88	10.50	7.48%
30,000	162.88	175.08	12.20	7.49%
35,000	185.38	199.28	13.90	7.50%
40,000	207.88	223.48	15.60	7.51%
45,000	230.38	247.68	17.30	7.51%
50,000	252.88	271.88	19.00	7.51%
60,000	297.88	320.28	22.40	7.52%
70,000	342.88	368.68	25.80	7.52%
80,000	387.88	417.08	29.20	7.53%
90,000	432.88	465.48	32.60	7.53%
100,000	477.88	513.88	36.00	7.53%
Average Usage 20,313	$ 119.28	$ 128.19	$ 8.91	7.47%
Median Usage 7,500	$ 71.00	$ 76.18	$ 5.18	7.29%

Present Rates:			
Monthly Minimum:		$	42.88
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	20,000	$	3.750
Over	20,000	$	4.500
Proposed Rates:			
Monthly Minimum:		$	45.88
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	20,000	$	4.040
Over	20,000	$	4.840

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 1 1/2 Inch Irrigation

Exhibit
RejoinderSchedule H-4
Page 14
Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 85.75	$ 91.75	$ 6.00	7.00%
1,000	89.50	95.79	6.29	7.03%
2,000	93.25	99.83	6.58	7.06%
3,000	97.00	103.87	6.87	7.09%
4,000	100.75	107.91	7.16	7.11%
5,000	104.50	111.95	7.45	7.13%
6,000	108.25	115.99	7.74	7.15%
7,000	112.00	120.03	8.03	7.17%
8,000	115.75	124.07	8.32	7.19%
9,000	119.50	128.11	8.61	7.21%
10,000	123.25	132.15	8.90	7.22%
12,000	130.75	140.23	9.48	7.25%
14,000	138.25	148.31	10.06	7.28%
16,000	145.75	156.39	10.64	7.30%
18,000	153.25	164.47	11.22	7.32%
20,000	160.75	172.55	11.80	7.34%
25,000	179.50	192.75	13.25	7.38%
30,000	198.25	212.95	14.70	7.42%
35,000	217.00	233.15	16.15	7.44%
40,000	235.75	253.35	17.60	7.47%
45,000	254.50	273.55	19.05	7.49%
50,000	273.25	293.75	20.50	7.50%
60,000	314.50	338.15	23.65	7.52%
70,000	359.50	386.55	27.05	7.53%
80,000	404.50	434.95	30.45	7.53%
90,000	449.50	483.35	33.85	7.53%
100,000	494.50	531.75	37.25	7.53%
Average Usage				
47,160	$ 262.60	$ 282.28	$ 19.68	7.49%
Median Usage				
20,500	$ 162.63	$ 174.57	$ 11.95	7.35%

Present Rates:			
Monthly Minimum:		$	85.75
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	55,000	$	3.750
Over	55,000	$	4.500
Proposed Rates:			
Monthly Minimum:		$	91.75
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	55,000	$	4.040
Over	55,000	$	4.840

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 2 Inch Irrigation

Exhibit
RejoinderSchedule H-4
Page 15
Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 137.20	$ 146.80	$ 9.60	7.00%
1,000	140.95	150.84	9.89	7.02%
2,000	144.70	154.88	10.18	7.04%
3,000	148.45	158.92	10.47	7.06%
4,000	152.20	162.96	10.76	7.07%
5,000	155.95	167.00	11.05	7.09%
6,000	159.70	171.04	11.34	7.10%
7,000	163.45	175.08	11.63	7.12%
8,000	167.20	179.12	11.92	7.13%
9,000	170.95	183.16	12.21	7.14%
10,000	174.70	187.20	12.50	7.16%
12,000	182.20	195.28	13.08	7.18%
14,000	189.70	203.36	13.66	7.20%
16,000	197.20	211.44	14.24	7.22%
18,000	204.70	219.52	14.82	7.24%
20,000	212.20	227.60	15.40	7.26%
25,000	230.95	247.80	16.85	7.30%
30,000	249.70	268.00	18.30	7.33%
35,000	268.45	288.20	19.75	7.36%
40,000	287.20	308.40	21.20	7.38%
45,000	305.95	328.60	22.65	7.40%
50,000	324.70	348.80	24.10	7.42%
60,000	362.20	389.20	27.00	7.46%
70,000	399.70	429.60	29.90	7.48%
80,000	437.20	470.00	32.80	7.50%
90,000	474.70	510.40	35.70	7.52%
100,000	519.70	558.80	39.10	7.52%
Average Usage				
127,321	$ 642.64	$ 691.04	$ 48.39	7.53%
Median Usage				
87,000	$ 463.45	$ 498.28	$ 34.83	7.52%

Present Rates:			
Monthly Minimum:		$	137.20
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	90,000	$	3.750
Over	90,000	$	4.500

Proposed Rates:			
Monthly Minimum:		$	146.80
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	90,000	$	4.040
Over	90,000	$	4.840

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 3 Inch Irrigation

Exhibit
RejoinderSchedule H-4
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Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 274.40	$ 293.61	$ 19.21	7.00%
1,000	278.15	297.65	19.50	7.01%
2,000	281.90	301.69	19.79	7.02%
3,000	285.65	305.73	20.08	7.03%
4,000	289.40	309.77	20.37	7.04%
5,000	293.15	313.81	20.66	7.05%
6,000	296.90	317.85	20.95	7.06%
7,000	300.65	321.89	21.24	7.06%
8,000	304.40	325.93	21.53	7.07%
9,000	308.15	329.97	21.82	7.08%
10,000	311.90	334.01	22.11	7.09%
12,000	319.40	342.09	22.69	7.10%
14,000	326.90	350.17	23.27	7.12%
16,000	334.40	358.25	23.85	7.13%
18,000	341.90	366.33	24.43	7.14%
20,000	349.40	374.41	25.01	7.16%
25,000	368.15	394.61	26.46	7.19%
30,000	386.90	414.81	27.91	7.21%
35,000	405.65	435.01	29.36	7.24%
40,000	424.40	455.21	30.81	7.26%
45,000	443.15	475.41	32.26	7.28%
50,000	461.90	495.61	33.71	7.30%
60,000	499.40	536.01	36.61	7.33%
70,000	536.90	576.41	39.51	7.36%
80,000	574.40	616.81	42.41	7.38%
90,000	611.90	657.21	45.31	7.40%
100,000	649.40	697.61	48.21	7.42%
Average Usage				
-	$ 274.40	$ 293.61	$ 19.21	7.00%
Median Usage				
-	$ 274.40	$ 293.61	$ 19.21	7.00%

Present Rates:

Monthly Minimum:		$	274.40
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	200,000	$	3.750
Over	200,000	$	4.500

Proposed Rates:

Monthly Minimum:		$	293.61
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	200,000	$	4.040
Over	200,000	$	4.840

Sahuarita Water Company, LLC
Bill Comparison Present and Proposed Rates
Meter Size: 3 Inch Construction

Exhibit
RejoinderSchedule H-4
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Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 274.40	$ 293.61	$ 19.21	7.00%
1,000	278.90	298.45	19.55	7.01%
2,000	283.40	303.29	19.89	7.02%
3,000	287.90	308.13	20.23	7.03%
4,000	292.40	312.97	20.57	7.03%
5,000	296.90	317.81	20.91	7.04%
6,000	301.40	322.65	21.25	7.05%
7,000	305.90	327.49	21.59	7.06%
8,000	310.40	332.33	21.93	7.06%
9,000	314.90	337.17	22.27	7.07%
10,000	319.40	342.01	22.61	7.08%
12,000	328.40	351.69	23.29	7.09%
14,000	337.40	361.37	23.97	7.10%
16,000	346.40	371.05	24.65	7.12%
18,000	355.40	380.73	25.33	7.13%
20,000	364.40	390.41	26.01	7.14%
25,000	386.90	414.61	27.71	7.16%
30,000	409.40	438.81	29.41	7.18%
35,000	431.90	463.01	31.11	7.20%
40,000	454.40	487.21	32.81	7.22%
45,000	476.90	511.41	34.51	7.24%
50,000	499.40	535.61	36.21	7.25%
60,000	544.40	584.01	39.61	7.28%
70,000	589.40	632.41	43.01	7.30%
80,000	634.40	680.81	46.41	7.32%
90,000	679.40	729.21	49.81	7.33%
100,000	724.40	777.61	53.21	7.35%
Average Usage				
113,269	$ 784.11	$ 841.83	$ 57.72	7.36%
Median Usage				
6,000	$ 301.40	$ 322.65	$ 21.25	7.05%

Present Rates:

Monthly Minimum:	$	274.40
Gallons in Minimum		-
Charge Per 1,000 Gallons		
All gallons	$	4.500

Proposed Rates:

Monthly Minimum:	$	293.61
Gallons in Minimum		-
Charge Per 1,000 Gallons		
All Gallons	$	4.840