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BEFORE THE ARIZONA CORPORATION COMMISSION

8 IN THE MATTER OF THE
9 APPLICATION OF GOLD CANYON
10 SEWER COMPANY, AN ARIZONA
11 CORPORATION, FOR A
12 DETERMINATION OF THE FAIR
13 VALUE OF ITS UTILITY PLANT
14 AND PROPERTY AND FOR
15 INCREASES IN ITS RATES AND
16 CHARGES FOR UTILITY SERVICE
17 BASED THEREON.

DOCKET NO: SW-02519A-06-0015

**NOTICE OF FILING REBUTTAL
TESTIMONY**

13 Gold Canyon Sewer Company ("Gold Canyon") hereby submits this Notice of
14 Filing Rebuttal Testimony in the above-referenced matter. Specifically, filed herewith in
15 Gold Canyon's rebuttal filing are the following testimonies, along with supporting
16 schedules and/or exhibits:

- 17 1. Rebuttal Testimony of Charles Anthony Hernandez; and
- 18 2. Rebuttal Testimony of Thomas J. Bourassa.

19 DATED this 27th day of July, 2006.

FENNEMORE CRAIG, P.C.

By 

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1 ORIGINAL and thirteen (13) copies of the
2 foregoing were delivered
3 this 27th day of July, 2006, to:

3 Docket Control
4 Arizona Corporation Commission
5 1200 W. Washington St.
6 Phoenix, AZ 85007

5 Copy of the foregoing hand delivered
6 this 27th day of July, 2006, to:

7 Dwight D. Nodes
8 Assistant Chief Administrative Law Judge
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18 **REBUTTAL TESTIMONIES OF**
19 **CHARLES ANTHONY HERNANDEZ**
20 **AND**
21 **THOMAS J. BOURASSA**
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Charles A. Hernandez

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19 **CHARLES ANTHONY HERNANDEZ**
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1 **I. INTRODUCTION AND PURPOSE OF TESTIMONY.**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Charles Anthony Hernandez. My office is located at 6520 East
4 Highway 60, Gold Canyon, AZ 85218 and my mailing address is 5301 South
5 Superstition Mountain Drive, Suite 104A, PMB 422, Gold Canyon, AZ 85218.

6 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

7 A. I am employed by Algonquin Water Services ("AWS") as Regional Operations
8 Manager. Like Gold Canyon Sewer Company's ("GCSC" or the "Company"),
9 AWS is owned by Algonquin Water Resources of America ("AWRA"), a wholly-
10 owned subsidiary of the Algonquin Power Income Fund.

11 **Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS**
12 **RATE PROCEEDING?**

13 A. No, however, I will be adopting the direct testimony of Michael D. Weber, which
14 was filed with the Company's application for rate increases.

15 **Q. WHY ARE YOU ADOPTING MR. WEBER'S DIRECT TESTIMONY IN**
16 **THIS PROCEEDING?**

17 A. Mr. Weber is no longer employed by AWS. Mr. Weber's direct testimony deals
18 primarily with recent improvements made to GCSC's wastewater utility facilities,
19 and I am able to testify on those subjects. I will not be adopting Mr. Weber's
20 personal information.

21 **Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES WITH RESPECT TO**
22 **THE COMPANY?**

23 A. I manage and direct the overall operation and maintenance of both the water and
24 wastewater operations on behalf of AWS. This includes oversight of all of
25 AWRA's wastewater treatment plants, collection systems, wastewater reuse
26 facilities, well sites, reservoirs, water treatment facilities and booster stations. I am

1 also responsible for the administration and supervision of programs, activities and
2 functions relating to the operations and maintenance of both water and wastewater
3 treatment facilities. In short, I am responsible on a day-to-day basis to ensure the
4 safe, efficient operation and maintenance of the plants and proper monitoring and
5 reporting of all operations.

6 **Q. DID YOU WORK IN THE UTILITY INDUSTRY BEFORE AWS?**

7 A. Yes, I have 28 years of experience with water and wastewater facilities, including
8 my 25-year tenure working for the City of Phoenix Water Services department.
9 I started with the City as an Operator. When I left the City roughly three years
10 ago, I had been the Plant Manager of the largest wastewater facility in the state, a
11 171 million gallons per day (gpd) facility owned by Glendale, Scottsdale, Tempe,
12 Mesa and Phoenix for 10 years. I am certified as a grade 4 operator of wastewater
13 treatment and wastewater collections by ADEQ.

14 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS**
15 **PROCEEDING?**

16 A. To support GCSC's application for rate relief by (1) adopting Mr. Weber's direct
17 testimony; (2) providing additional information regarding the recent improvements
18 to GCSC's wastewater treatment facility, primarily in response to RUCO's
19 recommendation in this case that nearly 30% of the Company's newly improved
20 wastewater facilities be excluded from rate base; and (3) providing information
21 regarding recent compliance violations and the Company's response to same.

22 **II. GOLD CANYON SEWER COMPANY'S RECENT TREATMENT PLANT**
23 **IMPROVEMENT AND EXPANSION.**

24 **Q. HAVE YOU REVIEWED ANY OF THE DIRECT TESTIMONY FILED BY**
25 **THE OTHER PARTIES TO THIS RATE CASE?**

26 A. I have reviewed the portion of the testimony of Rodney Moore from RUCO setting

1 forth RUCO's recommendation that the Commission exclude just over 28% of the
2 cost of our recent plant improvements from rate base. *See Moore DT at 10-14.*
3 I have also reviewed the testimony of the Staff engineer, Marlin Scott, Jr.

4 **Q. PLEASE SUMMARIZE THE RECENT PLANT IMPROVEMENTS BY**
5 **THE COMPANY?**

6 A. The GCSC treatment plant has been upgraded and expanded to meet the needs of
7 the Company's customers. These plant improvements consisted of (1) adding a
8 new headworks building with odor and sound control, (2) adding a new blower
9 building with sound control and energy saving features; (3) rebuilding the process
10 train tanks with new technology to provide odor and sound control; (4) refurbishing
11 the equalizer tank and the addition of odor control features; (5) installing two new
12 secondary clarifiers with odor control features; (6) replacing the old sand filters
13 with new disk filtration systems; (7) adding a new splitter box to control the
14 activated sludge along with odor control features; (8) replacing the old sludge belt
15 press with a new one that has odor control features; (9) adding a new sludge
16 thickener with odor control features; (10) adding a new chlorine contact basin with
17 a cover for odor control; (11) adding a new two stage wet scrubber for odor
18 control; (12) adding a new operations office and laboratory with testing facilities;
19 (13) improving the reuse water distribution system and added a pumping system
20 for Superstition Mountain Golf Club; (14) upgrading the aerobic digester cover
21 with odor control features; and (15) replacing two old and undersized generators
22 with two new "quiet" generators able to sustain minimal operations during power
23 outages.

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1 Q. IT SOUNDS LIKE MANY OF THE IMPROVEMENTS WERE INTENDED
2 TO MINIMIZE SOUNDS AND ODORS. IS THAT CORRECT?

3 A. Yes, our overall goal was to upgrade, modernize and repair the treatment facility,
4 minimizing or eliminating odors and sounds from the plant to the greatest extent
5 possible, while adding needed treatment capacity at the same time.

6 Q. DO YOU AGREE WITH MR. MOORE'S RECOMMENDED
7 ADJUSTMENT FOR "EXCESS" PLANT CAPACITY?

8 A. No. The GCSC wastewater collection and treatment system does not have
9 "excess" capacity. As Marlin Scott, Jr.'s Engineering Report shows, we had a peak
10 test-year flow of 1.17 million gpd in February 2005 and the facility will reach 80%
11 capacity by mid 2007. Scott DT, Exhibit MSJ at 4 of 12. We have to be prepared
12 to meet customer demands and we are so prepared. One very important factor
13 Mr. Moore ignores is that our flows are seasonal — they increase greatly during
14 the winter months — and the plant has to be sized to handle the peak flow, not just
15 the average flow during the year. Mr. Moore also ignores the fact that many of the
16 plant improvements he disallows had nothing to do with what he calls "excess"
17 capacity. Rather, as I discussed above, many of the recent improvements were
18 intended to address complaints of excess noise and odors and others were simply
19 intended to make the treatment facility more efficient to operate. By way of further
20 illustration, I have estimated that the non-capacity improvements related to sound
21 and odor abatement cost approximately \$1.4 million. This was in addition to the
22 costs associated with refurbishment of existing facilities and the addition of an
23 operations office laboratory. Nearly 30% of the cost of these non-capacity
24 improvements appear to have been removed from rate base by RUCO.
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1 **Q. IS THERE A FORMAL CAPACITY REQUIREMENT?**

2 A. Not that I have been able to discover but, in my experience, regulators expect that
3 engineering planning for new capacity starts when 80% of existing capacity is
4 reached, and construction of new capacity should start before 90% of existing
5 capacity is reached. I think Mr. Scott's Engineering Report confirms this accepted
6 standard.

7 **Q. HOW MUCH NEW CAPACITY WAS ADDED IN THE RECENT PLANT**
8 **IMPROVEMENTS AND EXPANSION?**

9 A. We increased the capacity of the GCSC treatment facility from 1 million gpd to
10 1.9 million gpd, the facility's maximum permitted capacity. Obviously, we were in
11 immediate need of the first 500,000 gpd unit of new capacity with average test year
12 flows at over 80% of the then maximum capacity of 1 million gpd and test year
13 peak flows roughly 17% over the maximum. Moreover, as Mr. Scott correctly
14 found, we will reach 80% capacity of the present maximum capacity of 1.9 million
15 gpd in less than one year. Scott DT, Exhibit MSJ at 4 of 12. That translates into
16 projected flows by mid-2007 of approximately 1.52 million gpd, 80% of
17 1.9 million. This leads me to believe we could experience peak flows in excess of
18 that 1.5 million gpd mark at anytime and, most importantly, not only did we **not**
19 build "excess" capacity, but we are going to need to start planning and building
20 additional capacity next year.

21 **Q. YOU TESTIFIED THAT THE NEXT UNIT OF CAPACITY WOULD HAVE**
22 **BROUGHT THE PLANT TO 1.5 MILLION GPD, HOWEVER,**
23 **MR. WEBER TESTIFIED IN HIS DIRECT THAT THE MINIMUM THAT**
24 **COULD BE ADDED WAS 600,000. CAN YOU EXPLAIN THE APPARENT**
25 **DISCREPANCY?**

26 A. Not really, as I am not exactly sure of the source of Mr. Weber's number. The

1 GCSC wastewater treatment facility was originally designed and permitted for a
2 maximum capacity of 1.9 million gpd and the first 1 million gpd was built in two
3 500,000 gpd units. From the time I started with GCSC, however, the intention was
4 always to complete the facility rather than take two more steps.

5 **Q. WERE THERE COST SAVINGS ACHIEVED BY BUILDING TO**
6 **1.9 MILLION GPD?**

7 A. Yes there were cost savings, although such savings are difficult to quantify. The
8 approach we utilized did not involve adding more equipment or tanks to increase
9 capacity. Instead, we increased the size of the tanks and required equipment in
10 order to increase capacity. There is no question in my mind that it would have cost
11 more to add tanks, equipment and related items later, when expanding from
12 1.5 million gpd (the minimum we could have expanded from 1 million gpd) due, if
13 in no other part, to the increase in materials, shoring up the existing tanks while
14 digging out the new tanks, remobilizing the engineers/contractors, plus more pipe,
15 odor covers and valves that would have been needed for a two-stage expansion.

16 **Q. WERE ALL OF THE NEW FACILITIES IN SERVICE BY OCTOBER 31,**
17 **2005 AND ARE THESE FACILITIES BEING USED TODAY TO SERVE**
18 **GCSC'S RATEPAYERS?**

19 A. Yes.

20 **Q. WHAT ABOUT COMPLAINTS THAT DESPITE THESE PLANT**
21 **IMPROVEMENTS THE TREATMENT FACILITY IS STILL**
22 **EXPERIENCING ODOR AND NOISE PROBLEMS?**

23 A. We continue to hear these complaints, and they have increased by the hundreds
24 since the rate case was filed. This is a difficult situation for me personally. I live
25 in Gold Canyon, less than a mile from the Company's wastewater treatment plant.
26 My office is located at the plant. I am sorry to have to say this, but I believe that

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these complaints have increased due to the fact that residents are being given lists of items to complain about and a list of government people to send them to by the HOA. I am a member of the HOA and I go to the meetings. The HOA is openly encouraging members to send out as many complaints as possible to stop the Company from receiving any rate increases.

Q. BUT MR. HERNANDEZ, DON'T CUSTOMERS HAVE A RIGHT TO COMPLAIN TO REGULATORS IF THEY HAVE A PROBLEM?

A. Yes, customers have a right to complain to regulators and so do my neighbors and fellow HOA members, in this case one and the same. I personally hear many of the complaints. I also understand that no one wants to pay a substantial increase in their sewer rates. I don't really want to pay it either. However, GCSC built plant to serve all of us — noise and odors have been minimized to the greatest extent possible — and now it is time for us, as customers, to pay for that plant.

It would be different if we really had an odor or noise problem with the GCSC facility, but, as I noted above, the complaints started to increase as soon as the Company started the rate case process. Meanwhile, ADEQ, Pinal County and Commission Staff Engineering have been to the plant for inspections and no odors or excessive noise was discovered during the inspections. The last inspection by ADEQ and Pinal County was on May 10, 2006 and it was concluded that no odors or excess noise was found. See ADEQ Inspection Summary, copy attached hereto as Hernandez Rebuttal Exhibit 1. During that inspection, every piece of process equipment was turned on with the odor scrubber turned off and no odors were detected even with the odor scrubber turned off.

1 **III. COMPLIANCE MATTERS.**

2 **Q. IS GCSC IN TOTAL COMPLIANCE WITH ADEQ AND COUNTY**
3 **REGULATIONS?**

4 A. No.

5 **Q. PLEASE IDENTIFY ANY AND ALL INSTANCES OF**
6 **NON-COMPLIANCE?**

7 A. ADEQ issued notices of violation or NOV's on June 13, 2006 from the May 10,
8 2006 inspection. Copies of each NOV are attached hereto as Hernandez Rebuttal
9 Exhibit 2. The NOV's generally fall into two groups.

10 The first set of NOV's arises from the failure to renew the Notice of Intent
11 (NOI) for the Reuse Permit for three of the four golf courses that take effluent
12 generated at GCSC's wastewater treatment plant. These permits are necessary for
13 the golf courses to use our effluent and the individual golf courses are responsible
14 for the Type II permits. However, GCSC does the paperwork and pays the fees.

15 The second set of NOV's is for total nitrogen exceedances from the Point of
16 Compliance well during the first quarter of 2006.

17 **Q. WHAT STEPS ARE BEING TAKEN TO REMEDY THESE VIOLATIONS?**

18 A. To address the first set of NOV's, we have already completed the three NOIs and
19 submitted them to ADEQ. To resolve the total nitrogen NOV's, GCSC is required
20 to conduct extra sampling for another 9 months to meet ADEQ requirements for a
21 year of comparison testing. During the first 3 months of 2006 we were averaging
22 around 9 mg/L with a permit alert level of 8 mg/L, the ground water in the area
23 averages around 70 mg/L. In June, 2006, we measured a level of 7 mg/L, below
24 the 8 mg/L limit.

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1 Q. IN YOUR OPINION, HAVE THESE COMPLIANCE ISSUES POSED A
2 DANGER TO THE PUBLIC HEALTH OR SAFETY?

3 A. Neither of these compliance issues are a danger to the public or the environment,
4 something I take very seriously as both an operator and resident of Gold Canyon.
5 The lack of updated NOIs for the reuse permits to allow the golf courses to use
6 effluent was a paperwork issue, and the permit exceedances for total nitrogen are
7 well below the natural groundwater levels in the area.

8 Q. DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY?

9 A. Yes.

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Charles A. Hernandez

Exhibits

**HERNANDEZ
REBUTTAL
EXHIBIT 1**

**ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
 WATER QUALITY DIVISION - WATER QUALITY COMPLIANCE SECTION
 Field Services Unit**

SUMMARY OF INSPECTION - WASTEWATER

Facility: Gold Canyon Sewer Company

Place ID: 8561

Aquifer Protection Permit (APP) No: P100217

AZPDES Permit No: N/A

Reuse Permit No: R100217

Inventory No: 100217

Inspected by: William J. Hare, E.P.S.

Inspection Date: May 10, 2006

Start Time: 9:00am

End Time: 12Noon

Accompanied by: See List below

Report Date: June 13, 2006

YES NO N/A UNKNOWN

1. WWTF quality meets the following permit requirements:
 - A. Aquifer Protection Permit
 - B. Reuse Permit
 - C. AZPDES Permit
2. A certified operator is employed by the owner per ADEQ regulations.
3. This system meets permit requirements for operation and maintenance.

	X*		
	X**		
		X	
X			
X			

* The facility was found to be non compliance with the contingency requirements in the APP.

** The facility was found to be furnishing reclaimed water to several golf courses with a valid Reclaimed Water General Permit.

Facility Description

The permittee is authorized to operate a 1.9 million gallons per day (MGD) wastewater treatment plant (WWTP), using two treatment trains. The facility has undergone a major expansion and a permit amendment has elevated the design rate and flow limit to 1.9 MGD. The facility has a new headworks with a two staged chemical wet scrubber, two extended aeration treatment trains each consisting of nitrification, clarification and disc filtration. The facility utilizes liquid chlorine for disinfection. Sludge is dewatered in a belt press with a drum thickener and stored onsite in large rolloffs. The sludge from the rolloffs is hauled to an approved disposal facility. Effluent is disposed by reuse and/or recharged. When it is reused, it is pumped to effluent

storage ponds located at the various permitted reuse sites (golf courses), and then used for irrigation under a valid reclaimed water permit. When effluent is recharged, it is disposed in three recharge basins or vadose zone wells. The current APP authorizes disposal of effluent for recharge if the effluent has been denitrified.

Inspection Purpose and Scope:

This was a compliance and odor complaint inspection. ADEQ has recently received numerous odor complaints regarding septic odors near the WWTP in the vicinity of the nearby strip mall which is located west of the WWTP. The inspection was conducted to determine compliance with A.A.C. Title 18-9-B201.J., which requires that the owner of a WWTP shall not operate the facility so that it emits an offensive odor on a persistent basis beyond the setback distances applicable to the sewage plant which is 350 feet at Gold Canyon.

The inspection also entailed an examination of the self monitoring report forms (SMRFs) and compliance with the most recently issued Aquifer Protection Permit and Reuse Permits.

Individuals present during the inspection with titles:

Gary Burkhead-Operator; Charles Hernandez-General Manager; Bill Hare ADEQ Inspector
Scott Hershberger- ADEQ Inspector; Reg Glos, Director, Pinal County Health Department

Summary of Inspection

Permit Status:

On December 1, 2005 ADEQ's Water Permits Section issued an amended APP to the Gold Canyon Sewer Company with LTF No. 32629. The amended permit implemented several changes including elevating the design rate from 1.0 to 1.9 MGD. The effluent was reclassified from B to A+ and monitoring parameters and requirements were changed to A+. The permit also implemented a Compliance Schedule in Section 3.0 which required the construction of an up-gradient monitoring well designated a POC #2. This well was to have been constructed by March 1, 2006 which is 90 days from the signature date of the APP.

The permit also established the AL and AQL in the POC monitoring well No. 1 as 8mg/L and 10 mg/L. Contingency requirements for AL and AQL exceedances were listed in Section 2.62 of the APP.

APP Inspection

Pre-Inspection File Review of the self monitoring report forms (SMRFs):

A review of the SMRFs revealed elevated levels of Total Nitrogen during effluent monitoring regarding the rolling geometric mean for the months of July – October of 2005. This occurred under Permit LTF No. 29699, which has been superseded by LTF No. 32629. The previous permit, LTF No. 29699, did not have a discharge limit (DL) for Total Nitrogen when the old

treatment plant was in use. The values for this parameter varied from 10.91 – 11.96 mg/L during July – October 2005.

Effluent monitoring for the 1st quarter of 2006 was much improved and the rolling geometric mean for Total Nitrogen has ranged from 6-8 mg/L. The DL for Total Nitrogen in Permit LTF No. 32629 is 10 mg/l.

The pre-inspection file review also noted that the facility exceeded the alert level (AL) and the Aquifer Quality Limit (AQL) for Total Nitrogen in the groundwater POC well No. 1 during the 1st Quarter of 2006. The AL is listed in the permit as 8 mg/L and the AQL is 10mg/L. The values varied from 10.9 mg/L in January, 9.71 mg/L in February and 8.2 mg/L in March of 2006. The facility had failed to implement the contingency requirements in the APP for AL and AQL exceedances.

Reuse Permit Status Inspection:

The facility furnished water data regarding the amount of reclaimed water that is being pumped to several golf courses. At the time of the inspection 100% of the effluent was being utilized for irrigation of the golf courses and no recharge projects were underway. The facility continues to furnish reclaimed water to the following golf courses:

Mountain Brooke (one 18 hole golf course) – daily rates vary from 100,000 – 150,000 g.p.d. in the summer months. (R100217-expired on June 15, 2004)

Gold Canyon Resort (two 18 hole golf courses) – daily rates vary from 160,000 – 240,000 g.p.d. in the summer months. (R100217-expired on June 15, 2004)

Gold Canyon RV Resort (one 9 hole golf course) – daily rates vary from 85,000 – 131,000 g.p.d. in the summer months. (R100217-expired on June 15, 2004)

Superstition Mtn. Resort (two 18 hole golf courses) – daily rates vary from 136,000 – 304,000 g.p.d in the summer months. - R105605 was issued on March 8, 2005 and is still valid.

It is noted that Individual Reuse Permit No. R100217 has expired on June 15, 2004. This permit had authorized the discharge of reclaimed water to Mountain Brooke, Gold Canyon Resort and the Gold Canyon RV Resort Golf Courses. The General Manager advised that the utility is in the process of applying for a General Reclaimed Water Permit. The facility was advised that providing reclaimed water to a golf course with a valid Reclaimed Water Permit was a violation of the Arizona Administrative Code, R18-9-704(A).

The Golf Course at the Gold Canyon RV Park was visited at the time of the site visit. The manager advised that about 95% of the water utilized for irrigation of the golf course is furnished by the Gold Canyon Sewer Company. The inspection noted that more signage is needed along the golf course ponds cautioning about the utilization of Reclaimed Water. This particular golf course was inspected because of allegations by golf course employees that reclaimed water was causing a rash on their arms and a related Workers Compensation Claim. The manager stated that he suspected that the use of Copper Sulfate as an algaecide in the pond water might have been a factor in the rash that has occurred on the arms of the employees at the park.

The ADEQ inspector informed the manager that the point of compliance (POC) for effluent monitoring is the effluent wetwell at the WWTP as listed in APP No. P100217 and not the golf course ponds. The manager advised that he had obtained services from a private laboratory to have the golf course pond water tested for various parameters.

Site Inspection of the WWTP Components:

The inspection of the operational components did not reveal any deficiencies. The headworks room was found to be functioning adequately. The aeration in the aerobic units was noted to be uniform. The clarifier(s) and the sand filter(s) were also functioning adequately. The turbidity was noted to be 1.27 NTU at the time of the inspection. The effluent was observed to be very clear.

At the time of the inspection the operator was utilizing the sludge belt press. The device was found to be functioning adequately. No offensive odors were noted during the operation of this device. The operator noted that the belt press is utilized 2 times a week at 4 hours per session. Each 4 hour session generates about 20 cubic yards of filter cake which is 13% solids. The sludge is hauled offsite within 24 hours of the cessation of the belt press process. This is done to minimize odors, although the filter cake did not generate any offensive odors at the time of the inspection.

Compliance Schedule for Construction of POC Monitoring Well No. 2

The inspection noted that POC Well No. 2 had been constructed in January of 2006. The well was constructed at the same depth as POC Well No. 1, which is believed to be > 300 feet below surface (fbs). The operator noted that the facility had been unable to obtain sufficient water from this well to commence groundwater sampling as required in the APP Compliance Schedule. The facility will be preparing a report to ADEQ's WPS regarding this issue and whether or not construct this well at a greater depth.

Odor Inspection:

Within the last 30 – 45 days, ADEQ has received several complaints from Gold Canyon residents regarding septic odors that have been detected near the WWTP. These complaints address septic odors detected in the vicinity of the WWTP. Most of the complaints address septic odor detected at the golf course greens and nearby strip mall during the early morning and late evening hours. These areas are beyond the 350 foot setback requirements in the Arizona Administrative Code (AAC) Title 18-9-B201.I. ADEQ has received several complaints during the last 30 days.

The following areas were inspected during a tour of the WWTP and nearby areas:

- The two stage wet scrubber and headworks areas were inspected along with other operational components at the WWTP. The inspection noted that each component of the WWTP was covered. Negative air pressure was engineered within each component that has allowed septic odors from the referenced components to be piped to a two stage

chemical scrubber. This included all components within the WWTP including the headworks building and sludge processing areas, where most of the septic odors originate. **No septic or otherwise offensive odors were detected during a tour of the WWTP.**

- The inspection noted that even when the door to the headworks building was opened, NO septic odors were detected due to the negative air pressure within the building. The two stage chemical scrubber was found to be operating adequately. In addition, the secondary scrubber which consists of activated charcoal for the sludge processing area, was also found to be functioning adequately. **No septic or otherwise offensive odors were detected during a tour of the WWTP.**
- The gold course greens near and around the WWTP were toured in an effort detect any septic odors. This included the 12th, 13th, 14th and 15th greens. **No septic or otherwise offensive odors were detected during the tour.**
- The strip mall was also inspected including the area immediately in front of Basha's grocery store which was reported to periodically have septic odors. **No Septic or otherwise offensive odors were detected.**
- The Basha's liftstation was inspected. **No septic or otherwise offensive odors were detected during the inspection. However, the operator noted that during the early morning and late evening hours this liftstation can emit septic odors.** The owner of the strip mall has been contacted and is in the process of installing a odor scrubber on the liftstation.
- The area of the De La Cruz restaurant was inspected. Some grease tubs were stored in the back area and were emanating some offensive odors. The manager was contacted who agreed to have the spent grease containers picked up on a more frequent basis.

Findings:

The inspection did not specifically identify the source of septic odors that were reported by Gold Canyon residents during the previous weeks. The odor scrubbing devices at the sewer plant were found to be functioning adequately. In addition, no septic odors were detected during a tour of the various sites near and around the WWTP. A 'musty' or 'earthy' odor was detected on the golf course greens possibly originating from the sludge belt press assembly. However, this odor was not found to be offensive by the inspection team.

Compliance Summary

1. Monitoring and Reporting Requirements. (A) Aquifer Protection Permit - The inspection found that the facility failed to comply with the contingency requirements of the APP which required verification sampling after the occurrence of an exceedance. The facility experienced AQL exceedances of Total Nitrogen from the POC well. **Rating: Non Compliance.**

1.(B) Reclaimed Water General Permit – The inspection found that the facility had furnished reclaimed water to three golf courses without a valid Reclaimed Water General Permit.

Rating: Non Compliance

2. Operator Certification Requirements. The WWTP is classified as a Class 3 WWTP and the collection system is classified as a Class 2 Collection System. Gary Burkhead is the operator and holds a Grade 4 WWT and a Grade 3 WWC license issued by ADEQ.

Rating: Compliance

3. Maintenance (O&M) Requirements. The facility was in compliance with the various O & M requirements of the APP No. P100217. This includes the various treatment plant components including the air scrubber devices within the WWTP. **Rating: Compliance**

End of Report

**HERNANDEZ
REBUTTAL
EXHIBIT 2**



Janet Napolitano
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street Phoenix, Arizona 85007
(602) 771-2300 www.azdeq.gov



Stephen A. Owens
Director

CERTIFIED MAIL
Return Receipt Requested

Case ID #: 41084

June 13, 2006

Gold Canyon Sewer Co
Attention: Charles Hernandez
Po Box 3302
Carefree, AZ 85377-3302

Subject: Gold Canyon Sewer Co - Wwtp, 8561
6520 E. Us 60 / Gold Canyon, AZ 85218

NOTICE OF VIOLATION

The Arizona Department of Environmental Quality (ADEQ), has reason to believe that Gold Canyon Sewer Co as the owner/operator of Gold Canyon Sewer Co - Wwtp, has violated a requirement of the Arizona Revised Statutes (A.R.S.), a rule within the Arizona Administrative Code (A.A.C.), or an applicable permit/license, administrative order or civil judgment. ADEQ discovered the violations alleged below during an inspection completed on May 10, 2006.

I. LEGAL AUTHORITY and NATURE OF ALLEGED VIOLATION(S)

1. **Permit 32629 (P100217) - Section 2.6.2.3.2**

If an Alert Level (AL) has been exceeded for groundwater monitoring, the permittee must conduct verification sampling and implement the contingency requirements set forth in the APP.

The facility exceeded the AL for Total Nitrogen during groundwater monitoring from POC well No. 1 for February and March 2006 and failed to implement the contingency requirements in the APP which require verification sampling.

2. **Permit 32629 (P100217) - Section 2.6.4**

If an Aquifer Quality Limit (AQL) is exceeded during groundwater monitoring the permittee must conduct verification sampling and implement the contingency requirements in the APP.

The facility exceeded the AQL for Total Nitrogen monitoring from POC well No. 1 during January of 2006 and failed to implement the contingency requirements which require verification sampling.

II. DOCUMENTING COMPLIANCE

1. Within 30 calendar days of receipt of this Notice, please submit documentation that the

Northern Regional Office
1801 West Route 66 Suite 117 Flagstaff, AZ 86001
(928) 779-0313

Southern Regional Office
400 West Congress Street Suite 433 Tucson, AZ 85701
(520) 628-6733

violation(s) never occurred, or the results of the verification sampling for Total Nitrogen from POC Well No. 1 and implement the contingency requirements in the APP listed in Section 2.6.2.3.

III. SUBMITTING COMPLIANCE DOCUMENTATION

Please send all compliance documentation and any other written correspondence regarding this Notice to ADEQ at the following address:

Arizona Department of Environmental Quality, Attention: William J. (Bill) Hare, Water Quality Field Service Compliance Unit, 1110 W Washington St, Phoenix, AZ 85007 MC: 5415B-1

IV. STATEMENT OF CONSEQUENCES

1. The time frames within this Notice for achieving and documenting compliance are firm limits. Failure to achieve or document compliance within the time frames established in this Notice will result in an administrative compliance order or civil action requiring compliance within a reasonable time frame, substantial civil penalties, and/or the suspension or revocation of an applicable permit/license. ADEQ will agree to extend the time frames only in a compliance schedule negotiated in the context of an administrative consent order or civil consent judgment.
2. Achieving compliance does not preclude ADEQ from seeking civil penalties, and/or suspending or revoking an applicable permit/license for the violation(s) alleged in this Notice as allowed by law.

V. OFFER TO MEET

ADEQ is willing to meet regarding this Notice. To obtain additional information about this Notice or to schedule a meeting to discuss this Notice, please contact William J. (Bill) Hare at (602) 771-4838.

Henry R. Darwin, Manager
Strategic Enforcement Unit

William J. (Bill) Hare
Water Quality Field Service Compliance Unit



Janet Napolitano
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street Phoenix, Arizona 85007
(602) 771-2300 www.azdeq.gov



Stephen A. Owens
Director

CERTIFIED MAIL
Return Receipt Requested

Case ID #: 41090

June 13, 2006

Gold Canyon Sewer Co
Attention: Charles Hernandez
Po Box 3302
Carefree, AZ 85377-3302

Subject: Gold Canyon Sewer Co - WWTP, 8561
6520 E. Us 60 / Gold Canyon, AZ 85218

NOTICE OF VIOLATION

The Arizona Department of Environmental Quality (ADEQ), has reason to believe that Gold Canyon Sewer Co as the owner/operator of Gold Canyon Sewer Co - WWTP, has violated a requirement of the Arizona Revised Statutes (A.R.S.), a rule within the Arizona Administrative Code (A.A.C.), or an applicable permit/license, administrative order or civil judgment. ADEQ discovered the violations alleged below during an inspection completed on May 10, 2006.

I. LEGAL AUTHORITY and NATURE OF ALLEGED VIOLATION(S)

1. **A.A.C. R18-9-704(E)**

Direct reuse of reclaimed water without a permit

The Gold Canyon Sewer Company is providing reclaimed water to several golf courses without a valid reclaimed water permit. Reuse Permit No. R100217 expired on June 15, 2004. This includes the Gold Canyon RV Resort, Gold Canyon Resort and the Mountain Brooke Resort.

II. DOCUMENTING COMPLIANCE

1. Within 30 calendar days of receipt of this Notice, please submit documentation that the violation(s) never occurred, or submit a Notice of Intent (NOI) for a Reclaimed Water Permit, under A.A.C. R18-9-712, regarding the Gold Canyon RV Resort, Gold Canyon Resort and the Mountain Brooke Resort golf courses.

III. SUBMITTING COMPLIANCE DOCUMENTATION

Please send all compliance documentation and any other written correspondence regarding this Notice to ADEQ at the following address:

Northern Regional Office
1801 West Route 66 Suite 117 Flagstaff, AZ 86001
(928) 779-0313

Southern Regional Office
400 West Congress Street Suite 433 Tucson, AZ 85701
(520) 628-6733

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ADEQ is willing to meet regarding this Notice. To obtain additional information about this Notice or to schedule a meeting to discuss this Notice, please contact William J. (Bill) Hare at (602) 771-4838.

Henry R. Darwin, Manager
Strategic Enforcement Unit

William J. (Bill) Hare
Water Quality Field Service Compliance Unit

Thomas J. Bourassa

1 FENNEMORE CRAIG, P.C.
Jay L. Shapiro
2 Patrick J. Black
3003 N. Central Ave.
3 Suite 2600
Phoenix, Arizona 85012
4 Attorneys for Gold Canyon Sewer Company, Inc.

5 **BEFORE THE ARIZONA CORPORATION COMMISSION**

6
7 IN THE MATTER OF THE
APPLICATION OF GOLD CANYON
8 SEWER COMPANY SEWER
COMPANY, AN ARIZONA
9 CORPORATION, FOR A
DETERMINATION OF THE FAIR
10 VALUE OF ITS UTILITY PLANT
AND PROPERTY AND FOR
11 INCREASES IN ITS RATES AND
CHARGES FOR UTILITY SERVICE
12 BASED THEREON.

DOCKET NO: SW-02519A-06-0015

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18 **REBUTTAL TESTIMONY OF**
19 **THOMAS J. BOURASSA**
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1 **I. INTRODUCTION AND PURPOSE OF TESTIMONY.**

2 **Q. PLEASE STATE YOUR NAME AND ADDRESS?**

3 A. My name is Thomas J. Bourassa and my business address is 139 W. Wood Drive,
4 Phoenix, AZ 85029.

5 **Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THE**
6 **INSTANT CASE?**

7 A. Yes, my direct testimony was submitted in support of the initial application in this
8 docket by Gold Canyon Sewer Company ("GCSC" or "Company").

9 **Q. WHAT IS THE PURPOSE OF THIS REBUTTAL TESTIMONY?**

10 A. I will provide rebuttal testimony in response to the direct filings by Arizona
11 Corporation Commission Utilities Division Staff ("Staff") and the Residential
12 Utility Consumer Office ("RUCO") with respect to rate base, revenues and
13 expenses, cost of capital and rate design.

14 **Q. WHAT IS THE REVENUE INCREASE THAT THE COMPANY IS**
15 **PROPOSING IN THIS REBUTTAL TESTIMONY?**

16 A. The Company is proposing a total revenue requirement of \$4,794,212, which
17 constitutes an increase in revenues of \$2,312,003, or 93.14% over test year
18 revenues.

19 **Q. HOW DOES THIS COMPARE WITH THE COMPANY'S DIRECT**
20 **FILING?**

21 A. In the direct filing, the Company requested a total revenue requirement of
22 \$4,971,147, an increase in revenues of \$2,474,767, or 99.13%.

23 **Q. WHY IS THE REQUESTED REVENUE INCREASE LOWER IN GCSC'S**
24 **REBUTTAL FILING?**

25 A. In its rebuttal filing, GCSC has adopted a number of adjustments recommended by
26 Staff and/or RUCO, as well as proposed a number of adjustments of its own. The

1 net result of these adjustments is a \$69,657 decrease in the proposed level of
2 operating expenses compared to the adjusted test year expense and a net decrease
3 in Original Cost Rate Base ("OCRB") and Fair Value Rate Base ("FVRB") of
4 \$364,790 from the direct filing. Notably, the Company continues to propose that
5 its OCRB be used as its FVRB for purposes of setting rates in this proceeding.

6 **Q. TO WHAT DO YOU ATTRIBUTE THE REDUCTION IN RATE BASE**
7 **FROM THE DIRECT FILING TO THIS REBUTTAL FILING?**

8 A. Notably, the Company has accepted Staff's adjustment to deferred income taxes for
9 \$254,681 and to working capital for \$134,672.

10 **Q. PLEASE SUMMARIZE THE PROPOSED REVENUE REQUIREMENTS**
11 **AND RATE INCREASES FOR THE COMPANY, STAFF, AND RUCO AT**
12 **THIS STAGE OF THE PROCEEDING?**

13 A. The proposed revenue requirements and proposed rate increases are as follows:

	<u>Revenue Requirement</u>	<u>Revenue Incr.</u>	<u>% Increase</u>
14 Company-Direct	\$4,971,147	\$2,474,767	99.13%
15 Staff	\$2,501,414	\$5,034	0.20%
16 RUCO	\$3,536,964	\$1,040,595	41.68%
17 Company Rebuttal	\$4,794,212	\$2,312,003	93.14%

18
19 **Q. WHY IS STAFF'S REVENUE REQUIREMENT AND RECOMMENDED**
20 **INCREASE SO MUCH LOWER RELATIVE TO GCSC AND RUCO?**

21 A. This is primarily due to Staff's adjustment to remove over \$7.6 million of plant
22 from rate base due to a lack of supporting documentation; however, supporting
23 documentation for nearly all of such plant has been provided and we fully expect
24 Staff to return that plant to rate base in its surrebuttal filing. This issue is discussed
25 further in the cost section of my rebuttal testimony.

26

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2 operating expenses compared to the adjusted test year expense and a net decrease
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23 documentation for nearly all of such plant has been provided and we fully expect
24 Staff to return that plant to rate base in its surrebuttal filing. This issue is discussed
25 further in the cost section of my rebuttal testimony.

26

1 Q. SO THE COMPANY IS STILL SEEKING A SUBSTANTIAL INCREASE IN
2 ITS RATES IN THIS PROCEEDING?

3 A. Yes, and it remains primarily plant driven. GCSC has invested millions of dollars
4 in its wastewater utility plant to serve ratepayers and it is entitled to a return on and
5 of the fair value of that utility plant.

6 **II. RATE BASE ISSUES IN DISPUTE.**

7 Q. WOULD YOU PLEASE IDENTIFY THE PARTIES' RESPECTIVE RATE
8 BASE RECOMMENDATIONS?

9 A. The rate bases proposed by all parties in the case are as follows:

	<u>OCRB</u>	<u>FVRB</u>
11 Company-Direct	\$ 16,108,688	\$ 16,108,688
12 Staff	\$ 8,260,602	\$ 8,260,602
13 RUCO	\$ 13,368,367	\$ 13,368,387
14 Company Rebuttal	\$ 15,743,898	\$ 15,743,898

15 A. **Unsupported Plant.**

16 Q. DO YOU AGREE WITH STAFF'S ADJUSTMENT FOR "UNSUPPORTED"
17 PLANT AMOUNTS?

18 A. No, I do not agree with Staff's adjustments for "unsupported" plant amounts. Staff
19 removed approximately \$7.6 million of plant in service from the Company's books
20 claiming that the Company had not provided all the supporting documentation at
21 the time of Staff's direct filing. I do not believe that Staff lacked sufficient
22 information to verify the plant costs, however, it is true that certain information
23 asked for by Staff to audit the plant cost was not provided in time for it to all be
24 considered in Staff's direct filing. Rather than fight about the issue at this time,
25 however, GCSC expects Staff to return the plant to rate base in its surrebuttal filing
26

1 now that Staff has the additional supporting data and adequate time to review the
2 data it requested.

3 **B. Disallowance of "Excess" Plant Capacity.**

4 **Q. PLEASE EXPLAIN RUCO'S ADJUSTMENT FOR EXCESS CAPACITY.**

5 A. RUCO has proposed removing approximately 28% of the cost of recent
6 improvements to GCSC's wastewater treatment plant from rate base. Moore DT
7 at 11.

8 **Q. DO YOU AGREE WITH RUCO'S DISALLOWANCE FOR EXCESS
9 PLANT CAPACITY?**

10 A. No, for several reasons. Mr. Moore testifies that GCSC had a 2005 year-end
11 "influent flow rate" of 708,000 gpd. Moore DT at 10. From this, Mr. Moore
12 claims that over 60% of GCSC's capacity was "excess". *Id.* GCSC actually had a
13 peak test-year flow of 1.17 million gpd in 2005, over 600,000 gpd higher than the
14 flow level underpinning RUCO's recommendation. *See* Scott DT, Exhibit MSJ at
15 4 of 12. *See also* Hernandez RB at 2. Like Mr. Moore, I am not an engineer, but I
16 can easily support 1.5 million gpd of capacity as being utilized during the test year.
17 Obviously, GCSC must have capacity to meet peak flows, not only average daily
18 flows, and the minimum level of capacity the Company could have added required
19 an increase from 1 million to 1.5 million gpd. Hernandez RB at 5.

20 Taking the analysis further, the decision to expand the treatment capacity
21 above 1 million gpd was made when the existing treatment plant was at 85%
22 capacity based on average flows. Weber DT at 6. GCSC will reach 80% of the
23 current maximum capacity of 1.9 million by mid-2007. Scott DT, Exhibit MSJ at 4
24 of 12. If GCSC is going to reach flows in excess of 1.5 million gpd by next year,
25 when the rates approved in this case will be in effect, the plant cannot be called
26 "excess". RUCO's recommendation ignores the needs of GCSC to plan for and

1 build treatment capacity ahead of demand. The Company should not be punished
2 for prudently investing capital, especially when those decisions result in significant
3 cost savings.

4 **Q. WHAT COST SAVINGS WERE REALIZED?**

5 A. By increasing the capacity from 1 million gpd to 1.9 million gpd rather than 1.5
6 million gpd, the Company was able to build the additional 400,000 gpd at a
7 significant savings. *See* Hernandez RB at 6. In fact, the entire plant project was
8 planned and built as part of a larger effort to improve the Company's wastewater
9 treatment facility, not to merely add capacity. *Id.* at 3.

10 **Q. HOW DID RUCO ACCOUNT FOR THIS IN ITS ADJUSTMENT?**

11 A. RUCO did not account for this in its adjustment. Approximately \$1.4 million of
12 the plant costs RUCO removes from rate base were related to odor and noise
13 control and have nothing to do with capacity.

14 **Q. WHAT IS THE EFFECT ON RATE BASE AND THE REVENUE
15 REQUIREMENT OF RUCO'S ADJUSTMENT?**

16 A. The net reduction to rate base is \$2,789,016. The reduction to the revenue
17 requirement at the Company's weighted cost of capital is over \$600,000.

18 **C. Plant Retirements.**

19 **Q. HAVE YOU MADE ANY ADJUSTMENTS TO PLANT-IN-SERVICE FOR
20 RETIREMENTS?**

21 A. Yes. The Company has accepted Staff's proposed adjustment for plant retirements
22 related to water treatment and disposal equipment. *See* Brown DT at 9. B-2
23 rebuttal adjustment number 1 reflects the removal from plant-in-service for
24 \$272,191.

1 Q. HAVE YOU ADJUSTED ACCUMULATED DEPRECIATION
2 ACCORDINGLY?

3 A. Yes, I have included the plant retirement adjustment for \$272,191 to accumulated
4 depreciation, along with corrections to the Company's direct filing accumulated
5 depreciation in B-2 adjustment number 4. I will discuss the Company's proposed
6 accumulated depreciation adjustment later in my testimony.

7 D. Deferred Income Taxes.

8 Q. DID THE COMPANY INCLUDE DEFERRED INCOME TAXES IN ITS
9 RATE BASE SCHEDULES?

10 A. No, because as a practical matter, it is simpler to calculate and record the deferred
11 taxes at the same level those taxes will be paid. Since the Company's results are
12 filed as part of its parent's consolidated tax return, the deferred taxes were recorded
13 on the parent's books and were not pushed-down to the Company's books.
14 However, the Company concurs with Staff's reasons for inclusion of deferred
15 income tax in the instant case and, therefore, accepts Staff's deferred income asset
16 tax adjustment. See Brown DT at 14-16. My Rebuttal Schedule B-2, adjustment 2,
17 reflects the increase to deferred tax (liability) in the Company's proposed rebuttal
18 rate base.

19 E. Expensed Plant.

20 Q. HAVE YOU MADE A REBUTTAL ADJUSTMENT CONCERNING
21 CAPITALIZED EXPENSED PLANT?

22 A. Yes. B-2 rebuttal adjustment number 3 reflects the increase to plant-in-service for
23 capitalized expensed plant proposed by RUCO. The Company's accumulated
24 depreciation adjustment includes depreciation during the test year on this plant.

25 Both Staff and RUCO have identified certain operating expenses that each
26 of the respective parties believes should be capitalized. See RUCO Schedule

1 RLM-11 and Staff Schedule CSB-8. The Company agrees with RUCO's
2 adjustment for \$7,045 rather than Staff's adjustment for \$13,809. RUCO and Staff
3 examined the same three Company invoices, one of which was for a microscope
4 costing \$1,648, and the remaining two costing \$12,161 were for engineering
5 inspections. *Id.*

6 Concerning the two engineering invoices, some of the work performed
7 during the engineering inspections included blue staking and certification
8 inspections which the Company agrees should be capitalized. However, other
9 work performed included training, office duties, and research, which are normal
10 recurring period expenses and should not be capitalized. The Company had
11 capitalized 60% of one of the engineering invoices during the test year. RUCO has
12 agreed with the Company's method on this invoice, and its proposed adjustment
13 capitalizes 60% of the remaining engineering invoice. See Moore DT at 15.
14 Staff's proposed adjustment capitalizes 100% of both invoices.

15 **F. Accumulated Depreciation.**

16 **Q. HAVE YOU MADE A REBUTTAL ADJUSTMENT CONCERNING**
17 **ACCUMULATED DEPRECIATION?**

18 **A.** Yes. As discussed previously, accumulated depreciation is adjusted for the
19 proposed 2005 plant retirements of \$272,191 and the proposed 2005 capitalized
20 expensed plant. The Company also has corrected accumulated depreciation to
21 account for the test year ending date of October 31, 2005 rather than December 31,
22 2005. In other words, instead of 12 months of depreciation for 2005 (using half-
23 year convention), the Company's adjustment now accounts for 10/12 of
24 depreciation (using half-year convention).

1 **G. Working Capital.**

2 **Q. HAVE YOU MADE A REBUTTAL ADJUSTMENT CONCERNING**
3 **WORKING CAPITAL?**

4 A. Yes. Rebuttal Schedule B-2, adjustment number 1 reduces working capital to zero.
5 While the Company does not agree with Staff's rationale, it has accepted Staff's
6 adjustment to eliminate issues between the parties. *See* Brown DT at 18. No
7 method of computing working capital, including lead-lag, is precisely correct. The
8 purpose of any working capital computation is to produce an amount of working
9 capital allowance that is reasonable. The cost of the calculation should not exceed
10 the benefit. This is true regardless of the size of the utility. Lead-lag studies are
11 costly to prepare and disagreement between the parties is common. Thus, the costs
12 generally exceed the benefits. The formula method is simple and can readily be
13 adjusted for the effects of pro forma adjustments.

14 **Q. DID RUCO PROPOSE WORKING CAPITAL?**

15 A. Yes, RUCO proposes a working capital allowance using the formula method as did
16 the Company in its direct filing. *See* Moore DT at 9.

17 **H. Staff's removal of "Affiliated Profit".**

18 **Q. STAFF HAS MADE ADJUSTMENTS TO RATE BASE TO REMOVE**
19 **AMOUNTS LABELED "AFFILIATE PROFIT." HOW DOES GCSC**
20 **RESPOND TO THESE ADJUSTMENTS?**

21 A. The Company disagrees with Staff's proposal to remove \$67,499 of capitalized
22 affiliate profit from plant in service. One of Staff's reasons for removing affiliate
23 profits rests on the premise that the Company could have hired workers directly
24 and avoided the mark-up. *See* Brown DT at 10. This is true, but it would be far
25 more costly to hire full-time workers and keep them on the payroll all year
26 regardless of the number of capital projects. Part-time workers or job-by-job

1 contracting might be less expensive, but it would also deprive the utility of a great
2 measure of control over the scheduling and quality of work performed. The
3 Company's arrangement with its affiliate is more efficient than hiring workers
4 directly.

5 Another of Staff's reasons for removing affiliate profit is that "related party
6 transactions *have sometimes* been known to be recorded at inflated costs." See
7 Brown DT at 11, emphasis added. However, Staff offers no evidence of any
8 inflated costs, beyond the inclusion of the amount removed as "profit". The
9 Company was billed by affiliates at standard hourly rates and there is no evidence
10 that these rates were manipulated to maximize the amount of profit earned by the
11 affiliate. Rather, as discussed below, the evidence in this case shows that AWS's
12 rates to GCSC are at or below market. Moreover, AWS is not guaranteed a
13 profit—it places its assets and resources at risk in the Algonquin business model.

14 **Q. WOULD STAFF HAVE REMOVED "PROFIT" IF THE COMPANY HAD**
15 **ENGAGED NON-AFFILIATED COMPANIES TO PERFORM THE SAME**
16 **WORK?**

17 **A.** According to Staff, only the costs of materials, labor and overhead of an affiliate
18 should be included in rate base, from which I conclude that Staff automatically
19 eliminates affiliate profit without any analysis of whether such amounts were
20 prudently incurred but would allow such profit to be included if it was paid to non-
21 affiliated parties. If the profit is found in both cases to be part of a reasonable cost
22 incurred, I see no basis to remove profit in one of them.

23 Instead, Staff and the Commission should look at the reasonableness, not
24 solely the source of the costs incurred. This may result in greater scrutiny when
25 transactions occur between affiliates, but there is simply no basis for Staff's black
26 letter policy that all affiliated profit is evil and must be eliminated.

1 **III. INCOME STATEMENT.**

2 **Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S PROPOSED**
3 **ADJUSTMENTS TO REVENUES AND EXPENSES AND IDENTIFY ANY**
4 **ADJUSTMENTS YOU HAVE ACCEPTED FROM STAFF AND/OR RUCO?**

5 **A.** The Company rebuttal adjustments are detailed on Rebuttal Schedule C-2, pages 1-
6 13. The rebuttal income statement with adjustments is shown on Rebuttal
7 Schedule C-1, page 1-2.

8 In rebuttal adjustment number 1, GCSC proposes to remove capitalized
9 expenses. As I discussed above, the Company's adjustment agrees with RUCO's
10 proposed amount of \$7,045.

11 Rebuttal adjustment 2 removes materials and supplies expenses for late fees
12 and duplicate invoices totaling \$99. This adjustment is in response to Staff's
13 recommendation to remove \$841 of materials and supplies expense. The Company
14 does not agree with the balance of Staff's adjustment. Two invoices totaling \$742
15 (\$627 and \$115) identified by Staff were not affiliate invoices. See Staff Schedule
16 CSB-15. The vendors had confused the accounts to be billed but they were
17 expenses for GCSC. On the first invoice, the goods were shipped to the Gold
18 Canyon facility address and references a Gold Canyon P.O. number. On the
19 second invoice, the goods were picked up by a Gold Canyon employee (Elaine
20 Burkhead) in Mesa, far from the LPSCO facility which is referenced on the
21 invoice. See Material and Supplies invoices attached hereto at Bourassa Rebuttal
22 Exhibit 1.

23 Rebuttal adjustment number 3 removes non-recurring expenses totaling
24 \$87,966. This adjustment includes removing \$22,000 of equipment rental
25 expenses, \$41,820 of effluent hauling and disposal, \$10,235 of "catch-up"
26 expenses, \$13,672 of CC&N expenses, and \$239 of moving expense. The

1 Company is in agreement with both Staff and RUCO on the removal of the
2 equipment rental and effluent disposal expense. The Company is in agreement
3 with Staff to remove the "catch-up" expense, and is in agreement with RUCO to
4 remove the CC&N expenses and moving expenses.

5 Rebuttal adjustment number 4 removes "unnecessary" expenses totaling
6 \$1,334. This adjustment includes removing \$503 of fish restocking costs and \$841
7 of beverage expense. The Company will accept removal of the fish restocking
8 costs and the beverage expense.

9 Rebuttal adjustment number 5 removes ACC assessment charges from
10 miscellaneous expense. The Company is in agreement with Staff to remove these
11 charges. The Company agrees with Staff that these assessments are pass-through
12 costs to customers like sales tax and should not be included in operating expenses
13 or revenues.

14 Rebuttal adjustment number 6 increases property tax expense and reflects
15 the rebuttal proposed revenues. The Company and Staff are in agreement on the
16 method of computing property taxes. This method utilized the ADOR formula and
17 inputs two years of adjusted revenues plus one year of proposed revenues. I
18 computed the property taxes based on the Company's proposed revenues, and then
19 used the property tax rate that was used in the direct filing.

20 The Company is rejecting the RUCO adjustment to property taxes. RUCO
21 computed property taxes at historic revenues for 2002, 2003, and 2004. RUCO's
22 method of computing property tax excludes proposed revenues and is, therefore,
23 inconsistent with recent Commission precedent. *See* RUCO Response to GCSC
24 Data Request 1.6, copy attached hereto as Bourassa Rebuttal Exhibit 2. In fact,
25 RUCO has repeatedly advanced this methodology, and the Commission has
26 consistently rejected this methodology. The Commission should do so again.

1 Rejoinder adjustment 7 annualizes depreciation expense taking into account
2 the changes to plant-in-service and CIAC, as discussed above.

3 **Q. ARE ALL THE PARTIES IN AGREEMENT TO USE ACCOUNT**
4 **SPECIFIC RATES FOR DEPRECIATION RATHER THAN THE**
5 **PREVIOUSLY APPROVED 2.5% COMPOSITE RATE?**

6 A. Yes. See Scott DT at 4; Moore DT at 16.

7 **Q. PLEASE CONTINUE.**

8 A. Rebuttal adjustment 8 adjusts income taxes based on the Company's proposed
9 revenues, operating expense and depreciation.

10 **Q. PLEASE COMMENT ON STAFF PROPOSAL TO REMOVE AFFILIATE**
11 **PROFIT FROM OPERATING EXPENSES.**

12 A. Staff proposes to remove all "affiliate profits" from operating expenses consistent
13 with its adjustment to rate base. The amount of Staff's adjustment is \$78,607 and
14 the Company strongly disagrees with Staff's adjustment. Affiliates provide
15 necessary services at lower costs. This is both prudent and beneficial to ratepayers.
16 Nevertheless, as I testified above, Staff simply skips the question of whether the
17 costs are reasonable and excises "profit" from the income statement because it was
18 earned by an "affiliate".

19 **Q. HOW DOES THE AFFILIATE COST COMPARE TO THAT OF NON-**
20 **AFFILIATES?**

21 A. The Company is not aware of any local firms that provide or have the ability to
22 provide the same services on a contract basis as its affiliates do. The Company
23 attempted to compare its costs for affiliated services with those of a small local
24 firm providing management services, on a per customer bill basis. Staff is also
25 aware that the Arizona Small Utilities Association ("ASUA"), as interim managers
26 for the McClain Systems, charged a management fee of \$10.50 per customer per

1 month. The costs themselves are comparable — the local firm and ASUA are in
2 the range of \$10 to \$12, while the Company's affiliates charge \$8 to \$9 per month.

3 Notably, though, the local firm and ASUA do not provide the same range
4 and level of service as the affiliates including business and financial management,
5 strategic planning, tax, accounting and regulatory compliance services. The local
6 firm can provide certified operators on a limited basis, but does not manage or
7 employ those operators as they themselves are independent contractors. In this
8 way, GCSC and ratepayers benefit from economies of scale achieved by the
9 affiliates. They obtain a broader range of services than they could otherwise afford
10 directly and pay only a proportionate share of the costs.

11 **Q. DID THE COMPANY PREPARE AN ANALYSIS TO COMPARE THE**
12 **COSTS INCURRED BY THE COMPANY FOR AFFILIATE SERVICES**
13 **WITH THE COSTS OF HIRING WORKERS DIRECTLY?**

14 A. Yes. See Company Response to Staff Data Request CSB 2.37, copy attached
15 hereto attached as Bourassa Rebuttal Exhibit 3. The Company's response shows
16 rate payers saving over \$22,000 annually by not having direct employees. Also,
17 explained above, the economies of scale go beyond GCSC.

18 **Q. DID STAFF PREPARE ITS OWN ANALYSIS TO DETERMINE IF THE**
19 **COSTS INCURRED BY THE COMPANY FOR AFFILIATE SERVICES**
20 **WERE REASONABLE?**

21 A. There is nothing in Ms. Brown's testimony to suggest that such an analysis was
22 conducted.

23 **Q. PLEASE COMMENT ON STAFF'S PROPOSAL TO REMOVE CENTRAL**
24 **OFFICE OVERHEAD COSTS.**

25 A. Staff proposes to remove over \$34,000 of the \$48,000 of central office overhead
26 costs allocated to the Company claiming these costs are not needed for the

1 provision of service. *See* Brown DT at 26. The Company disagrees. All of the
2 costs allocated to the Company for central office costs are typical of overheads
3 allocated to subsidiaries. Staff excludes allocated salaries and wages, office rent,
4 legal and travel. All of these are legitimate costs for services the Company incurs
5 to serve customers. Moreover, these are actual costs — not the so-called affiliated
6 profit Staff finds reprehensible.

7 **Q. ARE THE CENTRAL OFFICE COSTS PART OF THE PER BILL COST**
8 **YOU DISCUSSED EARLIER?**

9 A. Yes. The central office costs represent about \$0.75 per bill of the \$8 to \$9 per bill
10 cost the Company incurs for affiliated services.

11 **Q. PLEASE COMMENT ON STAFF'S AND RUCO'S RECOMMENDATIONS**
12 **REGARDING RATE CASE EXPENSE?**

13 A. Staff has not proposed a change to rate case expense at this time. RUCO is
14 proposing rate case expense of \$70,000. *See* Moore DT at 23. RUCO then adopts
15 the Company's 4-year amortization period, so the annual amount included in
16 operating expenses is only \$17,500. This recommendation is unrealistic and unfair.

17 **Q. WHY IS THAT MR. BOURASSA?**

18 A. As discussed in my direct testimony, the Company does not control the process and
19 simply complying with the Commission's ratemaking process results in rate case
20 expense far in excess of RUCO's recommended \$70,000. For example, GCSC is
21 required to prepare and file three rounds of pre-filed testimony, with a large
22 number of different schedules, respond to numerous data requests, and later, attend
23 hearings and file two rounds of closing briefs. Yet, even Mr. Moore admits, at the
24 time of RUCO's filing the Company had spent over \$54,000, which is nearly 80%
25 of his recommended amount of rate case expense. *See* Moore DT at 24. Rate case
26 expense of \$70,000 is simply unreasonable.

1 Q. **DIDN'T RUCO BASE ITS RECOMMENDATION ON THE LEVEL OF**
2 **RATE CASE EXPENSE AUTHORIZED IN OTHER RATE CASES?**

3 A. Yes, almost exclusively. Moreover, RUCO has both selectively chosen the rate
4 cases it uses to compare as well as failed to adequately consider the differences
5 between the proceedings he uses as comparables.

6 Q. **WHAT DO YOU MEAN?**

7 A. I mean, had RUCO chosen different rate cases, it could not have supported its
8 recommendation to reduce rate case expense to \$70,000. For example, in the
9 recent Valley Utility Water Company case, Decision 68309 (November 14, 2005),
10 rate case expense of \$100,000 was approved for a water utility about 1/5th the size
11 of GCSC in a case where no party presented cost of capital analysis. In addition,
12 RUCO was not a party to this case, thus the level of discovery, testimony, and
13 litigation was less than in this rate proceeding.

14 In the recent Chaparral City Water rate case, Decision 68176
15 (September 30, 2005), the Commission authorized \$285,000 of rate case expense
16 amortized over 4 years, or approximately \$71,250 annually. Chaparral City Water
17 is roughly twice the size of GCSC.

18 In the Rio Rico Utilities rate case, Decision No. 67279 (October 5, 2004),
19 the Commission authorized \$175,000. Rio Rico's combined number of water and
20 sewer customers is just a bit more than GCSC's customer number.

21 Q. **WHY WOULD THE RIO RICO, CHAPARRAL CITY AND VALLEY**
22 **UTILITIES RATE CASES PROVIDE BETTER COMPARISONS?**

23 A. For one thing, they all share one thing in common with GCSC that was not
24 considered by RUCO in the cases it looked at — the lack of internal regulatory
25 staff that handles and/or assists with prosecuting rate cases as well as the sharing of
26 certain aspects of the case with multiple divisions. Arizona-American, Arizona

1 Water and Southwest Gas all have internal accounting and regulatory Staff that
2 assisted with and oversaw the entire case. Southwest Gas also has in-house
3 counsel that handles the rate case. In the Arizona-American and Arizona Water
4 cases, a single cost of capital analysis and testimony was prepared for all divisions
5 and there was only one hearing and one set of briefs for all of the districts. Thus,
6 the embedded costs of all rate cases was spread among several divisions, lowering
7 the per division cost, something else RUCO failed to account for in its
8 recommendation. The bottom line is, if RUCO is going to look at comparables,
9 RUCO should select utilities that make better comparisons like the three I have
10 mentioned.

11 **Q. IS COMPARING AUTHORIZED AMOUNTS IN PRIOR CASES THE**
12 **SOLE MEASURE OF WHAT SHOULD BE ALLOWED?**

13 A. No. As I discussed in my direct testimony, rate case expense is primarily driven by
14 three factors: (1) the Commission's ratemaking process; (2) the length of time
15 between rate cases; and (3) the number of parties and issues, and complexity of the
16 proceedings. *See* Bourassa DT at 10-12. The impact on the amount of rate case
17 expense a company incurs can vary on a case-by-case basis. The Company
18 believes its estimate of \$160,000 amortized over 4 years, or \$40,000 per year is
19 reasonable given the circumstances in this case. But remember, this is just an
20 estimate for this stage of the proceeding. The best indicator of reasonable rate case
21 expense is the amount actually incurred.

22 **Q. ARE THERE ANY OTHER ISSUES OR COMMENTS YOU WISH TO**
23 **MAKE?**

24 A. Yes. So that Staff is aware, Staff has a mathematical error contained in its
25 schedule for computing depreciation expense. *See* Staff Schedule CSB-17. The
26 depreciation expense column labeled as column E does not total correctly on line

1 24. By my calculation, the depreciation expense should total \$569,926, not
2 \$404,857.

3 **IV. COST OF CAPITAL.**

4 **A. Overview and Summary.**

5 **Q. PLEASE SUMMARIZE THE COMPANY'S REBUTTAL POSITION**
6 **REGARDING COST OF CAPITAL.**

7 A. The Company continues to recommend 10.5% as its cost of capital and rate of
8 return on original cost rate base, which GCSC accepts as the fair value of its utility
9 property for purposes of this rate case. The 10.5% rate of return is based on a
10 capital structure consisting of 100% common equity.

11 **Q. HAVE YOU UPDATED YOUR COST OF CAPITAL SCHEDULES?**

12 A. Yes. I have updated my cost of capital analysis using more recent data. My
13 updated schedules are attached to this testimony as rebuttal D schedules and the
14 table below summarizes the results.

<u>DCF Analysis</u>	<u>Range</u>	<u>Midpoint</u>
Constant Growth (earnings growth)	7.7% - 12.2%	10.0%
Constant Growth (sustainable growth)	8.9% - 10.6%	9.8%
Two-Stage Growth Model	8.6% - 11.2%	9.9%
<u>Risk Premium Analysis</u>		
Actual Returns	10.2% - 10.3%	10.3%
Authorized Returns	11.0% - 11.4%	11.2%
<u>Comparable Earnings</u>		
Actual Returns	7.5% - 12.1%	9.8%
Authorized Returns	9.9% - 12.7%	11.3%
Value Line Industry Composite (2006)		10.0%
Value Line Industry Composite (2007)		10.5%

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<u>DCF Analysis</u>	<u>Range</u>	<u>Midpoint</u>
Value Line Industry Composite (2009)		11.5%

Based on these results and data, I believe that 10.5% is a reasonable rate of return for GCSC, especially in light of the additional risk associated with an equity investment in GCSC.

Q. HOW DOES THE RETURN OF 10.5% YOU ARE RECOMMENDING COMPARE TO STAFF AND RUCO?

A. The rates of return on equity ("ROE") recommended by Staff and RUCO are 8.40% and 9.04%, respectively. However, in addition to proposing a much lower ROE, RUCO proposes the inclusion of hypothetical debt in the Company's capital structure. As a result, RUCO is effectively recommending an even lower equity return of 8.81%.

Q. BUT MR. BOURASSA, HASN'T THE INDICATED COST OF EQUITY PRODUCED BY YOUR DCF MODELS DECREASED?

A. Yes, relative to my direct testimony. The primary reason is that analysts' projections of earnings growth have decreased by over 60 basis points since the initial filing. See Rebuttal Schedule D-4.6. The earnings growth rate I employ in the DCF model is now 7.10%, compared with a growth rate of 7.71% in the initial filing. The lower growth rate is most likely a reaction to lower than expected earnings results in 2005, in turn caused by several factors, including poor weather conditions, unfavorable and delayed rate relief, and escalating costs. See Value Line (April 28, 2006) (water industry summary).

As I stated in my direct testimony, a return on equity of 10.5% is conservative when the small size and other business risks related to GCSC's sewer operations are considered. See Bourassa DT at 14. This remains true. A 10.5%

1	<u>DCF Analysis</u>	<u>Range</u>	<u>Midpoint</u>
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5 return for GCSC, especially in light of the additional risk associated with an equity
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25 conservative when the small size and other business risks related to GCSC’s sewer
26 operations are considered. *See* Bourassa DT at 14. This remains true. A 10.5%

1 return is still within the ranges of my equity cost estimates and is conservative
2 given those additional risks.

3 **B. Capital Structure.**

4 **Q. WHAT ARE THE PARTIES' PROPOSED CAPITAL STRUCTURES?**

5 A. The Company proposes a capital structure of 100% equity because there is no long-
6 term debt financing any plant included in the rate base. RUCO proposes a
7 hypothetical capital structure consisting of 40% debt and 60% equity, with an
8 assumed debt cost of 8.45%. Based on this hypothetical data, RUCO's weighted
9 cost of capital is 8.81%. *See Rigsby DT at 7.* Staff proposes a capital structure of
10 100% equity, but its 9.2% is adjusted downward to 8.4% for lower financial risk
11 arising from the 100% equity capital structure. *See Irvine DT at 34.*

12 **Q. DO YOU AGREE WITH STAFF'S DOWNWARD ADJUSTMENT?**

13 A. I have reviewed the basis for Mr. Irvine's financial risk adjustment. A beta for
14 GCSC is required to make this adjustment, yet I found no market beta for GCSC in
15 Mr. Irvine's testimony or work papers. As a result, there is no support for this
16 adjustment.

17 **Q. WHAT IS THE BASIS FOR RUCO'S PROPOSED CAPITAL
18 STRUCTURE?**

19 A. RUCO's witness, Mr. Rigsby, argues that the capital structure of the Company is
20 not consistent with the capital structures of his sample group of large, publicly
21 traded water utilities. Rather than proposing a downward adjustment for financial
22 risk, Mr. Rigsby argues for a hypothetical capital structure that is more similar to
23 that of his sample companies. *See Rigsby DT at 50.*

24 **Q. HOW DO YOU RESPOND TO RUCO'S ARGUMENT?**

25 A. Well, for starters, Mr. Rigsby has now eliminated the last utility-specific factor
26 from the cost of capital analysis. Mr. Rigsby has essentially replaced GCSC with

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23 that of his sample companies. *See Rigsby DT at 50.*

24 **Q. HOW DO YOU RESPOND TO RUCO'S ARGUMENT?**

25 A. Well, for starters, Mr. Rigsby has now eliminated the last utility-specific factor
26 from the cost of capital analysis. Mr. Rigsby has essentially replaced GCSC with

1 the sample companies — a one-sized fits all approach that should result in the same
2 cost of capital for virtually every water and sewer utility in the United States.
3 Moreover, while I generally agree with Mr. Rigsby that the lack of debt in the
4 capital structure results in lower financial risk, it is not the only risk that should be
5 considered. The business risk and regulatory risk faced by a company (firm-
6 specific risk) must also be taken into account when developing estimates of the
7 cost of equity.

8 The small size, limited revenues and cash flow, small customer base and
9 lack of diversification of GCSC create significant business risk. As explained in
10 my direct testimony, the market data does not capture all the risks faced by GCSC.
11 *See Bourassa DT at 27.* In addition, since the stock of GCSC is not publicly
12 traded, it is not a liquid investment. This fact alone creates additional risk because
13 the investor may be saddled for an extended period with a poorly-performing
14 investment. An equity investment in a very small business like GCSC is much
15 different from an equity investment in a publicly traded firm, and investors would
16 expect to earn a significantly higher return on their investment as a result.
17 Mr. Rigsby ignores this in his analysis.

18 Nevertheless, the only firm-specific risk RUCO and Staff acknowledge is
19 financial risk, while other risks that would obviously be considered by a rational
20 investor are simply ignored. Would a rational investor really regard an equity
21 investment in GCSC as presenting less risk than an equity investment in Aqua
22 America or in Connecticut Water Services, both of which have AA bond ratings,
23 for example, notwithstanding the lack of debt in GCSC's capital structure? The
24 answer is no.

1 Q. HAVE YOU TAKEN GCSC'S FINANCIAL STRUCTURE INTO
2 ACCOUNT IN YOUR RECOMMENDATION?

3 A. Yes. My 10.5% recommendation recognizes that GCSC possesses substantially
4 greater business and regulatory risk than the large publicly traded water utilities
5 used by the parties in their finance models. If GCSC's capital structure included a
6 significant amount of debt, I would have recommended a higher return on equity.

7 C. The Return on Equity GCSC is Entitled to Earn.

8 1. Overview of the Cost of Capital Standard.

9 Q. WHAT RATE OF RETURN IS GCSC ENTITLED TO EARN?

10 A. A fair rate of return should be commensurate with returns expected to be earned by
11 enterprises having comparable risk and adequate for GCSC to be able to attract
12 capital. Staff's and RUCO's recommended returns on equity will do just the
13 opposite — they will discourage investment instead of attracting it and are too low
14 to be comparable to returns expected to be earned by other equally risky
15 investments.

16 As I discussed at some length in my direct testimony, there are two
17 landmark Supreme Court decisions, *Bluefield Water Works* and *Hope Natural Gas*,
18 that established the basic criteria applicable to determining a fair and reasonable
19 rate of return. Bourassa DT at 23-24. In summary, a utility's authorized rate of
20 return should satisfy the following:

- 21 (1) The rate of return should be commensurate with
22 returns on investments in other enterprises having
23 corresponding risk;
- 24 (2) The return should be sufficient to ensure confidence in
25 the financial integrity of the utility and to maintain and
26 support the utility's credit; and
- (3) The return should enable the utility to attract capital
necessary for the proper discharge of its duties.

1 Q. **HOW DOES OPPORTUNITY COST FACTOR IN MR. BOURASSA?**

2 A. I also explained in my direct testimony that the cost of capital is based on the
3 concept of opportunity cost, i.e., the prospective return to investors must be
4 comparable to investments of similar risk. If a utility's return is less than the
5 returns on investments with similar risk, investors can and will invest elsewhere.

6 As explained by Dr. Roger Morin:

7 The concept of cost of capital is firmly anchored in the
8 opportunity cost notion of economics. The cost of a specific
9 source of capital is basically determined by the riskiness of
10 that investment in light of alternative opportunities and equals
11 investor's current opportunity cost of investing in the
12 securities of that utility. A rational investor is maximizing the
13 performance of his or her portfolio only if returns expected on
14 investments of comparable risk are the same. If not, the
15 investor will switch out of those investments yielding low
16 returns at a given risk level in favor of those investments
17 offering higher returns for the same degree of risk. This
18 implies that a utility will be unable to attract capital unless it
19 can offer returns to capital suppliers comparable to those
20 achieved on alternate competing investments of similar risk.

21 Roger A. Morin, Regulatory Finance: Utilities' Cost of Capital 21 (1994)
22 (hereinafter "*Morin*").

23 The *Bluefield Water Works* decision suggests that opportunity cost is an
24 appropriate measure of the actual cost of common equity for a utility. This
25 necessarily involves the direct observation of returns on equity actually earned by
26 firms with comparable risk to ensure that the authorized rate of return is equivalent
to the returns those firms are earning.

27 Q. **DID STAFF CRITICIZE YOU FOR USING ACTUAL, AUTHORIZED AND
28 PROJECTED RETURNS ON EQUITY?**

29 A. Yes. See Irvine DT at 41. Staff contends that actual returns on equity should be
30 ignored, notwithstanding the comparable earnings standard. Instead, Staff asserts
31 that finance models should be the exclusive means of determining the cost of

1 equity. I will address this point in more detail later in my testimony. However, I
2 would like to emphasize that there is no "perfect" model that can be used to
3 estimate a firm's equity cost. Dr. Morin also addresses this point:

4 When measuring equity costs, which essentially deals with
5 the measurement of investor expectations, no single
6 methodology provides a foolproof panacea. Each
7 methodology requires the exercise of considerable judgment
8 on the reasonableness of the assumptions underlying the
9 methodology and on the reasonableness of the proxies used to
10 validate the theory. It follows that more than one
11 methodology should be employed in arriving at a judgment
12 on the cost of equity and that these methodologies should be
13 applied across a series of comparable risk companies.

14 Each methodology possesses its own way of examining
15 investor behavior, in its own premises, and its own set of
16 simplifications of reality. Each method proceeds from
17 different fundamental premises that cannot be validated
18 empirically. Investors do not necessarily subscribe to any one
19 method, nor does the stock price reflect the application of any
20 one single method by the price-setting investor. There is no
21 monopoly as to which method is used by investors. In the
22 absence of any hard evidence as to which method outdoes the
23 other, all relevant evidence should be used and weighted
24 equally, in order to minimize judgmental error, measurement
25 error, and conceptual infirmities.

26 *Morin at 28-29.*

17 **Q. WHAT MODELS DID YOU CHOOSE TO UTILIZE IN THIS CASE?**

18 **A.** I have chosen to use the comparable earnings approach, risk premium approach, as
19 well as the Discounted Cash Flow ("DCF") model. Staff and RUCO have chosen
20 to use the DCF model and another finance model, the Capital Asset Pricing Model
21 ("CAPM"). I will discuss both of these models in more detail below.

22 Two important points should be kept in mind. First, the models must be
23 applied to firms that possess comparable investment risk or, alternatively, the
24 results of the model must be adjusted to take into account the risk differential.
25 Second, the shortcomings of the particular model must be acknowledged and taken
26 into account in arriving at an appropriate equity cost. Again, no model is perfect,

1 and the result produced should not be blindly followed. Unfortunately, the
2 approaches used by Staff and RUCO in this case violate both of these basic
3 principles.

4 **2. Risk Estimation and the Comparable Earnings Test.**

5 **Q. HOW DO YOU ENSURE USE OF FIRMS THAT POSSESS COMPARABLE**
6 **INVESTMENT RISK?**

7 A. There are a number of criteria that can be used to develop a sample group of
8 companies that present comparable investment risk. One widely accepted risk
9 measure is beta, which measures a publicly traded security's volatility in relation to
10 that of the market, and is generally estimated by means of a linear regression
11 analysis based on past realized returns over some past time period. For example,
12 Value Line, which is the largest and most widely circulated independent advisory
13 service, estimates betas for publicly traded companies using a least-squares
14 regression analysis between weekly percent changes in the price of a stock and
15 weekly percent changes in the New York Stock Exchange average over a period of
16 five years.

17 Unfortunately, however, GCSC is not publicly traded, and neither Value
18 Line nor any other investment service publishes an estimated beta for GCSC.
19 Therefore, while beta may be an important concept in finance literature, beta does
20 not assist in identifying comparable risk firms in this particular case.

21 Similarly, many publicly traded companies have bond ratings that are
22 published by Standard & Poor's, Moody's and Duff & Phelps and that are based on
23 a number of qualitative and quantitative factors and reflect the risk of default.
24 Bond ratings and the risk of common stock investment are closely related. Bond
25 ratings and stock ratings can be used as risk screening devices to identify
26 companies of comparable risk. For example, if a utility's bonds are rated A by

1 Standard & Poor's, a reasonable risk filter would eliminate companies that have a
2 different bond rating. Again, however, such ratings do not exist for small water
3 and sewer utilities like GCSC.

4 **Q. CAN YOU PLEASE ELABORATE ON THE USE OF A "RISK FILTER"?**

5 A. In his textbook on regulatory finance, Dr. Morin provides several examples of risk
6 filters used in connection with setting rates. One example was a risk filter used in a
7 US West rate case. The companies had to be industrials listed on the New York
8 Stock Exchange to ensure comparable investment liquidity, i.e., the stock could be
9 sold easily. In addition, the companies had to have the following risk parameters:

- 10 • Value Line Financial Strength Rating of at least A+
- 11 • Value Line Safety Rating of 1 (the highest rating)
- 12 • A beta between 0.75 and 1.00
- 13 • A Price Stability Coefficient of at least 88.0%

14 In addition, all non-dividend paying stocks and all stocks with a Standard & Poor's
15 stock quality rating lower than A- were eliminated, as well as all high-growth
16 stocks. The result was a sample group of 24 publicly traded stocks, the average
17 beta of which was used as a proxy for the US West beta. *Morin* at 85-86.

18 **Q. WAS A SIMILAR APPROACH USED TO DEVELOP AN APPROPRIATE**
19 **GROUP OF COMPARABLE RISK COMPANIES IN THIS CASE?**

20 A. No. Because GCSC is extremely small, has a single shareholder, is not publicly
21 traded, and has no bond rating, it is not possible to develop a set of financial and
22 stock quality criteria to identify public companies possessing comparable
23 investment risk.

24 **Q. WHAT DID YOU DO AS A RESULT, MR. BOURASSA?**

25 A. I used a group of six publicly traded water utilities, generally the same ones
26 utilized by Staff and RUCO. The critical difference is that I recognize and account

1 for the fact that my sample companies do not possess the same degree of risk as
2 GCSC. See Bourassa DT at 25-31.

3 **Q. HOW DOES GCSC'S SIZE COMPARE TO THE SAMPLE GROUP OF**
4 **PUBLICLY TRADED WATER UTILITIES?**

5 A. GCSC is substantially smaller than the publicly traded water utilities. In fact, a
6 review of key financial data clearly demonstrates that GCSC is *not* comparable to
7 those utilities.

8 <u>Company</u>	9 <u>Operating</u> <u>Revenue</u> <u>(\$ Million)</u>	10 <u>Net Plant</u> <u>(\$ Million)</u>	11 <u>S&P Stock</u> <u>Quality</u> <u>Rating</u>	12 <u>S&P</u> <u>Bond</u> <u>Rating</u>
13 Amer. States	14 \$247.0	15 \$665.2	16 B+	17 A-
18 Aqua America	19 500.7	20 2,007.2	21 A-	22 AA-
23 Cal. Water	24 325.6	25 773.9	26 B+	NR
Conn. Water	51.1	303.1	**	AA+
Middlesex	76.1	261.3	B+	A
SJW Corp.	180.5	377.8	**	NR
Group Average	\$230.2	\$731.5		
GCSC	\$2.5	\$19.8	NR	NR

18 Data from AUS Utility Reports (July 2006) and S&P Earnings Guide (July 2006).

20 The foregoing six water utilities are the water utilities that comprise Staff's sample
21 group. As the foregoing data show, the average operating revenue of the sample
22 group is more than **90 times** the Company's operating revenue, while the average
23 net plant of the sample group is nearly **37 times** the Company's original cost plant.

24 As I have testified, the Company is a small business, and the risks
25 associated with an equity investment in the Company are much different from, and
26 substantially greater than, an investment in any of the foregoing publicly traded

1 water utilities. Therefore, an upward adjustment to the authorized return on equity
2 must be made to take into account this additional risk in order to satisfy the
3 comparable earnings standard.

4 **Q. WHY DIDN'T THE PARTIES USE FIRMS THAT ARE EQUIVALENT TO**
5 **THE COMPANY IN PERFORMING THEIR RESPECTIVE ANALYSES?**

6 A. As stated, financial data is simply not available for extremely small businesses that
7 would be comparable to GCSC. Moreover, firms that are not publicly traded
8 cannot be used in the DCF and other finance models, which were developed during
9 the past several decades in connection with analyzing large firms with stocks that
10 are freely traded on national stock exchanges. For this reason, while I selected a
11 group of publicly traded water utilities and examined their actual, authorized and
12 projected returns on equity, and used publicly available information to implement
13 the DCF model, I also took into account the indisputable fact that GCSC possesses
14 different and substantially greater risk than the sample group of water utilities.
15 Because of the substantial difference in operating revenue, net plant, customer
16 base, service territory, growth potential, lack of liquidity, regulatory risk, and other
17 firm-specific factors, it would obviously be a serious mistake to simply assume that
18 these publicly traded water utilities present the same investment risk as GCSC.
19 The results of financial models should not be applied mechanically.

20 **3. Actual and Projected Equity Returns for the Sample Group.**

21 **Q. WHY IS IT APPROPRIATE TO CONSIDER THE RETURNS ON EQUITY**
22 **THAT ARE ACTUALLY EARNED BY THE SAMPLE GROUP OF WATER**
23 **UTILITIES?**

24 A. As I indicated previously, under the applicable criteria established in various court
25 decisions such as *Bluefield Water Works*, the rate of return should be
26 commensurate with returns on investments in other enterprises having

1 corresponding risks. Because it would be extremely difficult to develop a sample
2 group of small businesses that are truly comparable to GCSC, I began with a
3 sample group of publicly traded water utilities, examined the returns the sample
4 group have earned and are projected to earn, and then considered the particular
5 business and financial risks of GCSC to arrive at my final recommended return on
6 equity of 10.5%.

7 In sum, the goal is to authorize a rate of return that is commensurate with
8 the returns being earned by enterprises with corresponding risk. Therefore, the
9 starting point must be to consider the rates of return that are actually being earned.
10 If the authorized rate of return differs substantially from the rates of return that are
11 actually being earned by the sample group, the comparable earnings standard
12 would be violated.

13 **Q. WHAT RETURNS ON EQUITY ARE CURRENTLY BEING PROJECTED**
14 **BY VALUE LINE?**

15 A. Returns on equity currently projected by Value Line are as follows:

<u>Company</u>	<u>2006</u>	<u>2007</u>	<u>2009-11</u>
Amer. States	8.5%	9.0%	9.0%
Aqua America	11.5%	12.0%	13.0%
Cal. Water	8.5%	10.5%	9.0%
Industry Composite	10.0%	10.5%	11.5%

21 Value Line (April 28, 2006).

22
23 **Q. WHY ARE CONNECTICUT WATER SERVICE, MIDDLESEX WATER**
24 **AND SJW CORPORATION EXCLUDED FROM THE FOREGOING**
25 **TABLE?**

26 A. Those companies, although publicly traded, are relatively small and, as a result, are

1 not followed in Value Line's Investment Survey. Instead, they are followed in
2 Value Line's Small and Mid Cap Edition, a separate publication that does not
3 provide the same level of information. In fact, under Value Line's criteria, only
4 Aqua American is regarded as a "mid cap" company — the remaining five
5 companies are regarded as "small cap" companies.

6 **Q. RUCO USES ANOTHER FIRM, SOUTHWEST WATER. WHY DID YOU**
7 **EXCLUDE SOUTHWEST WATER FROM YOUR SAMPLE GROUP?**

8 A. Southwest Water was excluded from my sample group to be consistent with Staff,
9 and because Southwest Water receives less than 40% of its revenues from water
10 services compared to the average for my sample group, which is over 91%.
11 Because a majority of Southwest Water's revenues are derived from non-utility
12 businesses, its risks differ from the other water utilities.

13 **D. Response to Staff and RUCO.**

14 **1. Overview.**

15 **Q. PLEASE SUMMARIZE THE DIFFERENCES BETWEEN THE PARTIES**
16 **REGARDING THEIR RESPECTIVE DCF MODEL ESTIMATES.**

17 A. The primary difference between Staff's approach and the approaches of RUCO and
18 the Company is that the approaches of RUCO and the Company rely on forward
19 looking estimates of growth while Staff gives 50% weight to historic growth.

20 The Company's approach considers estimates of both intrinsic (sustainable)
21 growth and analysts' forecasts of growth. Staff does not present individual equity
22 cost estimates for its sample group of water companies, and uses averages that hide
23 the results produced by its particular inputs. At the time Staff prepared its
24 estimates, the cost of an investment grade (Baa rated) bond was approximately
25 6.4%. It is now 6.7%. Staff's historical growth rates produce results that are
26 below the cost of an investment grade bond. This violates fundamental finance

1 theory.

2 RUCO uses the sustainable growth method to derive its growth estimate.
3 This is a forward looking approach, which combines the growth from future
4 retained earnings and expected future growth from sales of common stock. While
5 the Company does not challenge the basic formula, RUCO's cost of capital witness
6 substitutes his own subjective views in order to depress RUCO's growth estimate
7 and the equity cost produced by the DCF model.

8 **Q. ARE THERE ANY OTHER DIFFERENCES IN THE APPROACHES OF**
9 **THE PARTIES?**

10 A. Yes. The Company's approach uses the risk premium and comparable earnings
11 methods as a check of the DCF results. Neither Staff nor RUCO utilize these
12 methods. They do not compare the results produced by their models with the
13 actual and authorized returns of the water utilities in their samples. In addition,
14 they do not consider the business risks of GCSC relative to the large publicly
15 traded companies and incorporate those considerations into their recommendations.

16 **Q. WHY DIDN'T YOU USE THE CAPM?**

17 A. I used the risk premium approach, which is easier to implement and involves fewer
18 subjective choices. The CAPM, while theoretically interesting, is flawed.
19 Empirical studies have shown that the model is incomplete and does not account
20 for all the factors affecting the cost of equity, including size and other firm specific
21 risks.¹ See Bourassa DT at 30-31. Staff's use of the CAPM in this case is
22 problematic in several respects. The first problem is the application of beta. The
23 second problem concerns the selection of an appropriate risk-free rate. Third, Staff
24 uses an extremely volatile method of estimating the current market risk premium.

25 ¹ Eugene F. Fama and Kenneth R. French, "The Capital Asset Pricing Model: Theory and
26 Evidence," *Journal of Economic Perspectives* (Summer 2004) 25-46.

1 These issues are discussed below.

2 **2. Comparison of Staff and RUCO's Recommendations to the**
3 **Actual and Authorized Returns.**

4 **Q. ARE STAFF AND RUCO'S RECOMMENDATIONS LESS THAN THE**
5 **AUTHORIZED RETURNS OF THE COMPANIES IN ITS SAMPLE**
6 **GROUP?**

7 A. They are significantly lower. Rebuttal schedules D-4.14 reports the authorized
8 returns for the six utilities in Mr. Irvine's water utilities sample. Three of the water
9 utilities Mr. Rigsby relies on to determine his cost of equity estimates are included
10 in that sample. Rebuttal schedule D-4.14 shows that the utilities in Mr. Irvine's
11 sample have authorized returns ranging from 9.9% to 12.7%. The average is
12 10.4% — 130 basis points higher than Mr. Irvine's unadjusted ROE
13 recommendation and 136 basis points above Mr. Rigsby's recommendation. As I
14 have testified, my recommended 10.5% ROE is understated because the Company
15 is more risky.

16 The authorized ROEs are expected to provide a conservative measure of the
17 current cost of equity for the water utility sample. Since 2003 and 2004, when
18 some of those ROEs were set by regulators, interest rates have increased and thus
19 the cost of equity has increased. Some of the authorized ROEs may have been the
20 result of settlements with the parties agreeing to a lower ROE in exchange for the
21 utility prevailing on an issue. Therefore, to some extent, the ROEs reported in
22 rebuttal schedule D-4.14 are conservative and may understate the cost of equity.

23 **Q. ARE THE STAFF AND RUCO RECOMMENDATIONS LESS THAN THE**
24 **ACTUAL RETURNS?**

25 A. Yes, Rebuttal schedule D-4.14 also shows that the ROEs recommended by
26 Mr. Irvine and Mr. Rigsby are significantly lower. On average, actual ROEs

1 should provide an indicator of a fair ROE. The water utilities sample companies
2 have been unable to earn their costs of equity. Rebuttal schedule D-4.14 shows
3 that the utilities in Mr. Irvine's sample have an actual ROE ranging 7.5% to
4 12.15%, which average 10.0%. Because interest rates have increased since 2003
5 and 2004, the water utilities have not earned, on average, their authorized ROEs.
6 Thus, a 10.0% ROE understates the fair rate of return for the Company.
7 Mr. Irvine's recommended unadjusted ROE is 80 basis points below the sample
8 group's average ROE. Mr. Rigsby's is 96 basis points lower than that average.

9 **Q. WHAT DO YOU CONCLUDE FROM THESE DIFFERENCES?**

10 A. Both Mr. Irvine's and Mr. Rigsby's recommended ROEs are well below what the
11 sample utilities are authorized to earn as well as what they have actually earned.
12 Their respective recommendations fail one of the three critical tests of a fair ROE
13 established by the U.S. Supreme Court: the return should be commensurate with
14 returns on investments in other enterprise with corresponding risks.

15 **3. Average Risk Non-Utility Stocks Have Earned Returns That Are**
16 **Substantially Higher than 10%.**

17 **Q. MR. IRVINE TESTIFIES THAT BASED ON HISTORICAL DATA**
18 **INVESTORS SHOULD NOT EXPECT AN AVERAGE RISK STOCK TO**
19 **PROVIDE MORE THAN A 9.7 PERCENT RETURN. HOW DO YOU**
20 **RESPOND?**

21 A. I have two responses to this testimony by Mr. Irvine at page 9 of his direct
22 testimony. Table 1-1 of Professor Siegel's book, which is what Mr. Irvine is
23 relying on, shows average risk common stocks have provided an arithmetic average
24 return of 12.2% for the period 1926 to 2001. Moreover, for more recent periods of
25 1946-2001 and 1982-2001, the average market returns were 12.8% and 15.0% for
26

1 average risk stocks, respectively. These returns are consistent with Ibbotson
2 Associates, the leading producer and supplier of data for the period dating back to
3 1926. Ibbotson Associates' data shows that returns for the 1926-2005 period have
4 averaged 12.3%. *See Bourassa Rebuttal Exhibit 4.*

5 One can make three important observations that put Professor Siegel's data
6 in perspective. First, quality financial data is not available before 1926. Second, in
7 the earlier years, dividends were a much larger component of stock returns than
8 were capital gains. Third, the types of industries and thus investment return
9 expectations were different in the 1800's than in 2005. In the earlier period,
10 generally growth was not the goal of management and earnings were paid out as
11 dividends. As a result, we should give little weight to the earlier data.

12 **Q. CAN YOU COMMENT FURTHER ON THE RETURNS SHOWN IN YOUR**
13 **REBUTTAL EXHIBIT FROM IBBOTSON ASSOCIATES?**

14 **A.** Yes. The average annual return of 12.3% is for large company stocks. Returns for
15 micro-cap, low-cap and mid-cap stocks are 18.8%, 15.7%, and 14.2%, respectively,
16 significantly higher than those for large company stocks. All the companies in the
17 water utilities sample, with the exception of Aqua America, would be considered a
18 micro-cap or low-cap stock. Aqua America would be considered a mid-cap stock.
19 As a result, during the past 80 years, small and mid-size firms have on average
20 earned more than 14% on common stock. When viewed in historical perspective,
21 therefore, an ROE of 10.5% is very conservative.

22 **4. Recent Increases in Interest Rates and Risk Estimated by Beta**
23 **Supports a Much Higher ROE.**

24 **Q. DO INTEREST RATES AFFECT THE COST OF EQUITY?**

25 **A.** Yes, they generally move in the same direction. *See Bourassa DT at 16-17, 20.*
26

1 Q. DO STAFF AND RUCO AGREE THAT INTEREST RATES AFFECT THE
2 COST OF EQUITY?

3 A. Yes. Mr. Irvine testifies that according to the CAPM, the cost of equity rises as
4 interest rates rise. See Irvine DT at 9. RUCO similarly acknowledges the impact
5 of interest rates on the cost of equity. See Rigsby DT at 32-33.

6 Q. WHAT IS THE GENERAL TREND IN INTEREST RATES?

7 A. Interest rates have risen significantly since about mid-2003. In fact, the Federal
8 Reserve has increased the federal funds rate over 17 times since June of 2004.
9 Since the Company's initial filing over six months ago, the Federal Reserve has
10 raised the federal funds rate by 150 basis points from 3.75% to 5.25%. The
11 10-year Treasury has followed suit, rising from 4.5% to 5.1%. Investment grade
12 bonds have also followed suit rising from 6.2% to 6.7%.

13 Q. ARE INTEREST RATES EXPECTED TO RISE IN THE FUTURE?

14 A. It is unclear, but expectations are that they will. Recently, the Federal Reserve
15 ("Fed") raised the federal funds rate to 5.25% (June 19, 2006). The July 2006
16 Blue Chip Financial Forecast recognizes that the economy has showed some signs
17 of weakening, but rising energy prices continue to be a worry of federal officials
18 and core inflation remains a concern. According to the Blue Chip Financial
19 Forecast, the fed funds futures markets currently sees a better than 100%
20 probability of a 5.50% target funds rate by November, and more than a handful of
21 their analysts forecast an eventual peak of 5.75% to 6.0%.

22 Q. DO STAFF'S FINANCE MODELS AND COST OF EQUITY RESULTS
23 BEAR THIS OUT?

24 A. No. Staff's ROE estimates a move in the opposite direction of interest rates. I
25 have prepared the table below, which shows the comparison of the key cost of
26 capital determinants and Staff's cost of equity results since 2003.

**COMPARISON OF KEY COST OF CAPITAL
DETERMINANTS AND STAFF COST OF EQUITY MODEL RESULTS**

Testimony Date	Arizona Water Utility	Average Beta ²	Risk-Free Rate ³	Staff ROE ⁴
7/8/03	Arizona. Water	0.59	3.3%	9.2%
9/5/03	Arizona-American	0.59	3.3%	9.2%
10/31/03	Arizona-American	0.60	3.6%	8.5%
3/11/04	Rio Rico Utilities	0.62	3.5%	8.1%
5/6/04	Rio Rico Utilities	0.63	3.9%	8.6%
3/22/05	Chap. City Water	0.68	4.0%	8.9%
4/18/05	Arizona. Water	0.68	4.5%	9.1%
5/5/05	Chap. City Water	0.68	4.0%	9.3%
5/25/05	Arizona. Water	0.68	4.0%	9.1%
1/16/06	Arizona-American	0.71	4.6%	9.8%
3/6/06	Arizona-American	0.74	4.5%	9.5%
5/04/06	Black Mountain	0.74	5.1%	9.6%
06/13/06	Far West Sewer	0.74	5.1%	9.3%
06/16/06	GCSC	0.74	5.1%	9.2%

Interest rates have risen significantly since mid-2003, and Staff's estimate of the risk free rate has risen by 180 basis points. Nevertheless, Staff's recommended cost of equity, before the downward adjustment for capital structure I discussed earlier, is exactly the same as the ROE produced by Staff's models

² The average Value Line beta of the six publicly traded water utilities in Staff's sample group used in Staff's CAPM. The sample group is the same in each case.

³ Average of 10, 7 and 5-year Treasury notes used in Staff's CAPM in each case.

⁴ The result produced by Staff's DCF and CAPM models in each case, unadjusted for risk.

1 (using the *same* approaches and the *same* sample water utilities) in the Arizona
2 Water and Arizona American rate cases in 2003. A closer look at the data for
3 Arizona-American in 2003 and Rio Rico Utilities in 2004 shows that the cost of
4 equity produced by Staff DCF and CAPM models actually fell while the interest
5 rates were rising.

6 **Q. IF BETA REFLECTS A STOCK'S INVESTMENT RISK, SHOULDN'T**
7 **STAFF'S ROEs INCREASE?**

8 A. Yes. The average beta of Staff's six sample utilities has increased from 0.59 to
9 0.74. Beta is a measure of a stock's riskiness relative to the market as a whole. All
10 the parties agree that as risk increases, so does the cost of equity. *See* Rigby DT at
11 32; Irvine DT at 9. While I have problems with the CAPM and the beta used by
12 both Staff and RUCO, beta itself is a valid measure of the relative riskiness of a
13 stock — a higher beta means more risk. *See Morin* at 63.

14 **Q. SHOULD THE COST OF EQUITY RISE AS THE RELATIVE RISK OF A**
15 **STOCK RISES, AS MEASURED BY BETA?**

16 A. Yes. In my direct testimony, I discussed the Capital Market Line ("CML"). CML,
17 which depicts the allocation of capital in a free market economy, is based on the
18 relative risk of and expected return from an investment. *See Bourassa* DT at 14-15.
19 As risk increases, so does the return required from investors.

20 **Q. WHAT DOES THE DATA IN THE TABLE ABOVE SHOW?**

21 A. Although the average beta of Staff's sample group has increased substantially,
22 Staff's DCF and CAPM models ignore the increased investment risk. Increases in
23 both beta risk and interest rates since 2003 indicate the cost of equity is much
24 higher today. As both interest rates and beta risk increase, so should the cost of
25 equity. Yet, Staff's finance models suggest the opposite. I can only conclude there
26 is something seriously wrong with Staff's models.

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24 higher today. As both interest rates and beta risk increase, so should the cost of
25 equity. Yet, Staff's finance models suggest the opposite. I can only conclude there
26 is something seriously wrong with Staff's models.

1 Q. THE STAFF WITNESS ARGUES THAT HIS MODELS ARE MARKET-
2 BASED AND THEREFORE REFLECT MARKET RISK. HOW DO YOU
3 RESPOND?

4 A. Just because a model is "market-based" doesn't mean it produces reasonable
5 results, as the foregoing data show. As I explained in my direct testimony,
6 estimating the cost of equity is a matter of informed judgment. See Bourassa DT at
7 24. Inputs into the finance models must be evaluated for their reasonableness and
8 rejected, or at least explained, when they do not produce realistic results. The
9 primary problem with Staff's and RUCO's applications of the DCF and CAPM is
10 in the choices of the inputs they employ and the reasonableness of their
11 assumptions. When they are examined in detail, it becomes apparent that their
12 respective choices skew the results of models downward. This explains why, for
13 example, Staff's models produce results that move in the opposite direction when
14 the betas of Staff's sample utilities and interest rates increase.

15 5. The Earnings of the Sample Group Support a Higher Return.

16 Q. STAFF ARGUES THAT ACTUAL, AUTHORIZED AND PROJECTED
17 RETURNS ON EQUITY ARE IRRELEVANT. DO YOU AGREE?

18 A. No, in my opinion, it would be foolish to ignore actual results and rely exclusively
19 on finance models, for the reasons I have explained. Looking at the results
20 produced by the DCF and CAPM, as implemented by Mr. Irvine and Mr. Rigsby in
21 this case, one would expect the returns on equity being earned by their sample
22 groups of water utilities to fall dramatically, leading in turn to a substantial decline
23 in the price of those utilities' stocks. But there is no evidence of this, proving that
24 something is wrong with their application of the models. Again, while finance
25 models are useful, they cannot be used blindly or mechanically and without regard
26 to other financial data that is readily available. When the results produced by the

1 models fail to reflect interest rate increases and other relevant indicators of the cost
2 of capital, it is time to reevaluate the model.

3 **Q. DO INVESTORS CARE ABOUT THE RETURN ON EQUITY THAT A**
4 **COMPANY IS EARNING AND IS PROJECTED TO EARN?**

5 A. Investors care about the return on equity that a company is earning and is projected
6 to earn only if they are looking to make sound investments. Returns on equity,
7 earnings per share, and stock price/earnings ratios are widely followed and reported
8 by investment services, business magazines, and other financial media outlets. A
9 company's earnings play a major role in any investment decision — a far greater
10 role, I believe, than the results of a CAPM or DCF model. The higher the return on
11 equity, the greater the company's earnings and funds available to pay dividends
12 and to reinvest in capital projects.

13 **Q. DO YOU AGREE THAT COMPARABLE EARNINGS ANALYSIS AND**
14 **THE RISK PREMIUM ANALYSIS ARE INVALID BECAUSE THEY ARE**
15 **NOT "MARKET BASED"?**

16 A. No, I disagree with Mr. Irvine on this point. First, as a preliminary matter, there is
17 obviously something very wrong with Staff's "market based" models. If Staff's
18 models worked correctly, their result would move up or down in relation to
19 changes in key interest rates and estimated betas. It appears that other non-market
20 factors are improperly influencing Staff's models.

21 Second, as I have testified, the risk premium approach is founded on directly
22 observable *market* interest rates. This assures that the risk premium estimates of
23 the cost of equity begin with a sound basis and are tied to current capital market
24 costs. *See* Bourassa DT at 40.

25 Third, in the instant case, we are attempting to establish a fair and
26 reasonable return on equity for GCSC, which will in turn be used to establish a rate

1 of return on the fair value of GCSC property devoted to public service. That rate
 2 base is an accounting or book rate base. The rate base has not been adjusted to
 3 reflect the current market value of the utility plant and assets devoted to public
 4 service. In other words, Mr. Irvine is applying a *market* return derived from a
 5 finance model to the Company's *book* equity, which in turn is financing a *book* rate
 6 base. Thus, Mr. Irvine is ignoring the fact that a firm's earnings, whether they are
 7 reported as the return on equity or as earnings per share, are also based on
 8 accounting data, as opposed to market data. For example, earning per share
 9 ("EPS") is calculated by dividing net income into the number of shares
 10 outstanding. The current market price of those shares is irrelevant to that
 11 calculation.

12 **Q. WHAT WOULD BE THE RESULT USING A COMPARABLE EARNINGS**
 13 **ANALYSIS WITH MARKET DATA?**

14 A. Using Mr. Irvine's sample group of publicly traded water utilities, the market rate
 15 of return would be much *higher* than the 10.5% I recommend. From the standpoint
 16 of an investor, a true market rate of return would take into account *both* anticipated
 17 dividends *and* capital gains resulting from future changes in the price of stock. For
 18 example, the following "total" returns, which take into account both dividend
 19 payments and increases in stock price, are reported in Value Line:

<u>Company</u>	<u>5 Years</u>	<u>Annual Average</u>
Amer. States	100.1%	20.0%
Aqua America	173.2%	34.6%
Cal. Water	92.1%	18.42%
Conn. Water	39.4%	7.87%
Middlesex	49.4%	9.9%
<u>SJW Corp.</u>	<u>133.8%</u>	<u>26.76%</u>

1	<u>Company</u>	<u>5 Years</u>	<u>Annual Average</u>
2	Average	98.0%	19.59%

3 Data from Value Line (April 28, 2006).

4

5 The 5-year historical compound annual return for the water utilities sample
6 companies is 14.63%. GCSC would accept a 15%-20% rate of return if Mr. Irvine
7 wishes to use the compound or average market return his sample group of utilities
8 has earned during the past 5 years.

9 **Q. WOULD INVESTORS CONSIDER THE TOTAL MARKET RETURNS OF**
10 **A STOCK?**

11 **A.** Yes. The selection of the growth rate used in the DCF model is a process that is
12 complex and requires judgment. Exactly what prospective measure of growth
13 should be used (trends in earnings per share, dividends per share, book value per
14 share) and how the information contained in these various measures used by
15 investors is important in order to infer the investors' true expected return. Actual
16 market returns are relevant and, whether one chooses to view the historical 5-year
17 average annual total market returns or the historical 5-year compound total market
18 returns, historically investors have received far greater returns than Staff's
19 recommend 9.2%, and greater than my recommendation for GCSC of 10.5%.

20 **6. The Current Market-to-Book Ratios of the Sample Utilities**
21 **Support a Higher ROE for GCSC.**

22 **Q. BOTH STAFF AND RUCO ARGUE THAT THE UTILITIES IN THE**
23 **SAMPLE GROUP ARE EXPECTED TO EARN ACCOUNTING/BOOK**
24 **RETURNS ON EQUITY THAT ARE GREATER THAN THEIR ACTUAL**
25 **COST OF EQUITY. DO YOU AGREE?**

26 **A.** No. Both Staff and RUCO make this argument because the average market-to-

1 book ratio of the sample water utilities is greater than 1.0. See Irvine DT at 26;
2 Rigsby DT at 15. Mr. Rigsby goes so far as to arbitrarily reduce the expected "v"
3 value in his computation of sustainable growth based on the assumption that stock
4 price will fall. See Rigsby DT at 15. Staff and RUCO are wrong for several
5 reasons.

6 First, Mr. Irvine assumes that the only reason the sample water utilities'
7 stocks are trading at prices that are greater than their book cost is because the
8 return on equity is too high, i.e., the utilities are earning too much money. Irvine
9 DT at 21. However, there are many reasons why investors may bid up the price of
10 a stock above the stock's book value other than an expectation that a water utility
11 will earn "more" than its cost of equity. In testimony before the Oregon Public
12 Utilities Commission, John Thornton, who was the Commission's Chief of the
13 Accounting and Rates Section for several years, listed the following six reasons:
14 (1) public utility commissions do not issue orders simultaneously in all
15 jurisdictions; (2) not all of a company's earnings are regulated; (3) regulatory
16 expenses, revenue and rate base adjustments may cause accounting returns to differ
17 from those calculated in a rate case; (4) actual sales do not equal sales assumed in a
18 rate case; (5) market expected returns on equity change frequently while returns on
19 equity authorized in rate cases do not; and (6) regulated subsidiaries constitute only
20 a piece of a holding company pie. (Oregon Public Utility Commission case UM
21 903, testimony dated November 9, 1998.)

22 Moreover, the concept of opportunity cost affects stock prices. Many
23 non-regulated, publicly traded companies have stock that is currently trading at a
24 market-to-book ratio substantially greater than the ratio of the water utility sample.
25 For example, in December 2005, *Business Week* published a special section
26 entitled "Investment Outlook Scoreboard 2004," which provided financial and

1 stock price data on the 900 largest U.S. publicly held companies when measured by
2 revenue and market capitalization. (No water or wastewater utilities appeared in
3 that group of companies.) Notably, the average market-to-book ratio of those 900
4 companies was 3.73 — substantially greater than the 2.6 market-to-book ratio of
5 the sample group of water utilities. In other words, as the market-to-book ratios of
6 the largest publicly traded companies have increased, so has the market-to-book
7 ratio for publicly traded water utilities, but by less. Investors take into account
8 alternative returns that can be made from investing in non-regulated stocks, i.e.,
9 opportunity costs, as well as returns on equity earned by water utilities.

10 **Q. DID BUSINESS WEEK REPORT THE AVERAGE RETURN ON EQUITY**
11 **FOR THE 900 COMPANIES?**

12 A. Yes. The all-industry average return on equity was 15.4%, which is also
13 substantially higher than the returns on equity being earned by the sample group of
14 publicly traded water utilities. Investors have the option of investing in the stocks
15 of those companies, which are earning a higher rate of return and, as a
16 consequence, have higher earnings per share. Applying Mr. Irvine's logic, as set
17 forth on pages 21 and 22 of his direct testimony, investors have driven the price of
18 non-regulated companies' stock substantially above book value because those
19 companies are earning returns that are "greater than" their current cost of equity,
20 i.e., a large number of U.S. companies are making too much money. Presumably,
21 Mr. Irvine would contend that this situation cannot continue and, at some point in
22 the near future, an economy-wide correction will occur, driving corporate profits
23 down to a level deemed appropriate by Mr. Irvine. This would suggest that we are
24 facing a stock market crash of dramatic proportions, perhaps equivalent to the
25 crash that occurred in 1929. I am not aware of any financial analyst or other
26 experts who share Mr. Irvine's extremely bleak view of our economy.

1 Q. ARE THERE ANY OTHER REASONS WHY THE PRICE OF A
2 PUBLICLY TRADED STOCK MAY EXCEED ITS BOOK COST?

3 A. An additional reason, which is applicable to Staff's sample group of water utilities,
4 is that investors have recognized that these companies are possible acquisition
5 targets. Value Line has mentioned industry consolidation as a key factor affecting
6 the water utility industry for a number of years. The latest edition of Value Line
7 contains the following statement:

8 Current infrastructures are currently in excess of 100 years
9 old and need maintenance and, in some cases, significant
10 renovations or rebuilding. Meanwhile, geopolitical concerns
11 are making matters worse, due to the threat of bioterrorism on
12 U.S. water pipelines and reservoirs. As a result the costs are
13 only likely to increase going forward. In all, infrastructure
14 costs are expected to climb into the hundreds of millions of
15 dollars over the next two decades. This is particularly bad for
16 smaller water companies, as they lack the capital to take these
17 initiatives. Instead, many are being forced to sell, resulting in
18 **massive consolidation within the industry.** [Emphasis
19 supplied.]

20 Value Line (April 28, 2006).

21 In short, stocks of both regulated and non-regulated companies may trade
22 above their book value for a variety of different reasons. Each company has its
23 own firm-specific characteristics and risks that influence investor decision-making.
24 Given that many non-regulated companies have stock trading at several multiples
25 (or more) of book value, in addition to earning returns on equity well in excess of
26 10%, it would be naïve to assume that public utilities are earning returns that are
greater than their cost of equity simply because their stock is trading, on average, at
a market-to-book ratio of 2.6.

1 7. **The Comparable Earnings Approach and the Risk Premium**
2 **Method Are Not Inconsistent with Finance Theory.**

3 Q. **MR. IRVINE ARGUES THAT THE COMPARABLE EARNINGS**
4 **APPROACH AND THE RISK PREMIUM METHOD ARE NOT**
5 **CONSISTENT WITH MODERN FINANCIAL THEORY. DO YOU**
6 **AGREE?**

7 A. I am not an attorney, but it seems obvious that college finance textbooks or
8 academic literature do not override United States Supreme Court and Arizona
9 Supreme Court decisions. Nor do Mr. Irvine's finance models appear to be
10 consistent with finance theory, given the anomalous results they produce. Putting
11 aside the lack of any legitimate basis for this argument, the argument clearly makes
12 no sense in this particular case.

13 As I previously discussed, GCSC is a small business. It does not have
14 publicly traded stock, nor is the financial data necessary to apply the DCF model
15 and the CAPM directly to GCSC available. The flaw in both Staff and RUCO's
16 cost of equity analysis is the assumption that GCSC is the same as American
17 States, Aqua America, California Water Service and the other publicly traded water
18 utilities that comprise their respective samples. GCSC is not the same as those
19 companies, and neither Mr. Irvine nor Mr. Rigsby presented any evidence or data
20 demonstrating that GCSC should be treated as if it were the same.

21 Q. **DO YOU RELY ON THE COMPARABLE EARNINGS APPROACH**
22 **BECAUSE IT INDICATES A HIGHER RATE OF RETURN THAN STAFF**
23 **OR RUCO?**

24 A. No. As I have testified, my comparable earnings and risk premium analyses serve
25 as a check of reasonableness for the DCF results. See Bourassa DT at 13. I am
26 placing emphasis on the comparable earnings and risk premium methods in rebuttal

1 to show that the application of finance models and inputs, by both Mr. Irvine and
2 Mr. Rigsby, are producing results that are too low. In this case, the results
3 produced by Staff and RUCO's DCF and CAPM are *less* than the returns on equity
4 actually being earned by the water utilities in their sample group.

5 Regardless of the particular finance model being used, the results of the
6 model should be reasonable and generally consistent with the returns on equity
7 actually being earned. When the application of a finance model produces results
8 that are inconsistent with real world earnings and that move in the opposite
9 direction of interest rates, those results are suspect and, in the absence of a credible
10 explanation for the discrepancy, should be rejected.

11 **Q. ARE THE RESPECTIVE PARTIES APPLYING A MARKET BASED**
12 **RETURN TO A BOOK VALUE EQUITY AND RATE BASE?**

13 A. Yes. If we were to be technically correct, equity and rate base should be stated at
14 market value. That we are applying a market based cost of equity to book value is
15 another reason why actual and authorized returns of the water utilities sample
16 companies are relevant as checks of reasonableness to a cost of capital analysis in
17 this case. Mr. Irvine argues that historical DPS and EPS information is relevant to
18 investors. *See Irvine DT at 35.* Why wouldn't the same apply to actual and
19 authorized earnings? After all, his historical EPS and sustainable growth are based
20 on book results and there is no evidence in this case to suggest that investor
21 expectations do not include consideration of the actual and authorized earnings of
22 the sample water utility companies.

1 8. **Staff's DCF Estimates Are Unreasonably Low Due to Staff's**
2 **Biased Selection of Inputs.**

3 **Q. PLEASE EXPLAIN WHY YOU BELIEVE STAFF'S CONSTANT**
4 **GROWTH DCF MODEL PRODUCES A COST OF EQUITY THAT IS**
5 **UNREALISTICALLY LOW.**

6 **A.** In Staff's constant growth (single growth stage) DCF model, Staff relies on
7 historical DPS and EPS growth. As I explained in my direct testimony, I did not
8 use historical DPS and EPS growth because the indicated cost of equity produced
9 by the DCF model using these growth rates is *less than the current cost of debt*.
10 See Bourassa DT at 37. Staff uses 10-year historical DPS and EPS growth rates.
11 However, the results are not much better than using the 5-year historical data.

12 **Q. WHAT ARE THE GROWTH RATES USED BY STAFF?**

13 **A.** The following table shows the growth rates Mr. Irvine uses in implementing the
14 constant growth DCF model (*see* Staff Schedule SPI-7):

<u>Type of Growth</u>	<u>Historic</u>	<u>Projected</u>
Dividends per Share ("DPS") Growth	2.7%	4.4%
Earning per Share (EPS") Growth	4.3%	7.1%
Intrinsic (Sustainable) Growth	<u>5.8%</u>	<u>8.1%</u>
Average	4.3%	6.5%

15
16
17
18
19
20
21
22 Staff's gives the historical growth rates 50% weight in its model. Staff's historic
23 growth rates produce results that are *less* than or approximately the same as the
24 current cost of investment grade bonds (6.8%). Even using the overall historical
25 average growth rate, the indicated COE is less than the projected cost of Baa bonds
26 (7.2%). As shown below, the historical growth DCF model using Staff's overall

1 average produces an indicated cost of equity of 7.0%:

2 (1) Staff DCF – Historical Growth

3
$$\frac{D_1/P_0}{2.7\%} + g_{4.3\%} = K_{7.0\%}$$

6 **Q. WHAT ARE THE INDICATED COSTS OF EQUITY JUST USING**
7 **STAFF’S HISTORICAL DPS GROWTH?**

8 A. The result is 5.1% as shown below.

9 (2) Staff DCF - Historical DPS growth

10
$$\frac{D_1/P_0}{2.7\%} + g_{2.7\%} = K_{5.4\%}$$

12 **Q. WHAT ARE THE INDICATED COSTS OF EQUITY JUST USING**
13 **STAFF’S HISTORICAL EPS GROWTH?**

14 A. The result is 7.0%, as shown below:

15 (3) Staff DCF - Historical EPS growth

16
$$\frac{D_1/P_0}{2.7\%} + g_{4.3\%} = K_{7.0\%}$$

19 **Q. EXCUSE ME MR. BOURASSA, BUT I DON’T RECALL SEEING**
20 **INDIVIDUAL COMPUTATIONS LIKE THESE IN STAFF’S SCHEDULES**
21 **OR TESTIMONY. WHY IS THAT?**

22 A. Individual computations like there are not in Staff’s schedules because Staff does
23 not show the individual results of their selected growth rates. Staff has “hidden the
24 ball” so to speak. I have prepared exhibits which show that Staff’s individual
25 results for the sample utilities show indicated costs of equity as low as 3.2%!
26 Further, a significant number are below 4.8%, i.e., the current yield on 30-day

1 Treasuries. See Bourassa Rebuttal Exhibit 5, pages 7 and 8. This is truly
2 remarkable.

3 **Q. PLEASE COMMENT ON STAFF'S COMPUTATION OF THE GROWTH**
4 **RATES USED IN THEIR MODELS.**

5 A. Staff growth rates are based on the geometric average annual growth. This applies
6 to both the historical and projected growth rates. Mr. Irvine's choice to use
7 geometric means bias downward the cost of equity estimates. A geometric average
8 annual growth is the correct method to express what has happened in the past. If,
9 however, an investor expects growth and variability in growth that occurred in the
10 past to continue in the future, the required ROE must be based on the arithmetic
11 annual average. If an ROE is set to earn on the geometric average annual growth,
12 the expected growth cannot be achieved if there is any variability in annual growth.

13 **Q. PLEASE RESPOND TO MR. IRVINE'S CRITICISM OF YOUR**
14 **RELIANCE ON PROJECTED INTEREST RATES ON PAGE 41 OF HIS**
15 **DIRECT TESTIMONY?**

16 A. Mr. Irvine correctly points out that it is difficult to predict future interest rates.
17 Irvine DT at 41. However, using current rates to predict future rates, as Staff has
18 apparently done, does not avoid the problem of predicting the interest rate for
19 2007-2009, when GCSC's rates will be in effect. Staff's use of today's interest
20 rates effectively assumes that those interest rates will remain unchanged in the
21 future. The cost of equity should be determined when new rates will be in effect,
22 not a single point in time prior to new rates being established.

23 **Q. IN THIS CASE, IS THE PROJECTED INTEREST RATES ON THE**
24 **10 YEAR U.S. TREASURY MUCH DIFFERENT THAN THE CURRENT**
25 **RATE?**

26 A. Actually, no. The projected rate for the 10 year U.S. Treasury is 5.2%, whereas the

1 current rate is 5.1%.

2 **Q. WOULD USING THE CURRENT INTEREST RATE SIGNIFICANTLY**
3 **CHANGE ANALYSIS AND ULTIMATELY YOUR RECOMMENDATIONS**
4 **IN THIS CASE?**

5 A. No.

6 **Q. WHAT ARE THE PROJECTED DPS AND EPS GROWTH RATES**
7 **REPORTED IN THE APRIL 28, 2006 VALUE LINE?**

8 A. They are as follows:

	Projected DPS Growth	Projected EPS Growth
AmericanStates	1.0%	8.0%
AquaAmerica	10.0%	11.0%
CaliforniaWater	1.0%	4.5%
Average	4.0%	7.83%

14 **Q. HOW DID YOU DERIVE AN ESTIMATE OF 6.79% AS THE GROWTH**
15 **RATE IN YOUR UPDATED DCF MODEL?**

16 A. I used analysts' forecasts of EPS growth from several sources, not just Value Line.
17 I used forecasts published by Zack's Investment Research, Standard & Poor's
18 Earning Guide, and Value Line Investment Survey. *See* Bourassa DT at 35. The
19 data is shown in rebuttal schedule D-4.6. In my opinion, using analysts' forecasts
20 from several reputable sources offsets potentially overly optimistic or overly
21 pessimistic projections from one source.

22 **Q. WHY DIDN'T YOU USE PROJECTIONS OF DPS GROWTH IN YOUR**
23 **ANALYSIS?**

24 A. As I testified in my direct testimony, the constant growth DCF result using
25 projected DPS growth is at or below the cost of debt. *See* Bourassa DT at 37. The
26 constant growth result using updated DPS growth using current data is 6.7%.

1 Again, the current cost of Baa bonds is 6.8%. The Blue Chip projections of Baa
2 bond costs for 2008-09 is 7.2%. This result is not reasonable and would distort the
3 model's result.

4 **Q. ON PAGE 39, MR. IRVINE CRITICIZES YOU FOR NOT USING**
5 **FORECASTS OF DIVIDEND GROWTH IN YOUR GROWTH**
6 **ESTIMATES. DO YOU HAVE A RESPONSE?**

7 A. Yes. Earnings growth provides a more meaningful guide to investors' long-term
8 growth expectations. After all, it is growth in earnings that will support future
9 dividends and share prices. There is an abundance of evidence attesting to the
10 importance of earnings in assessing investor expectations. The sheer volume of
11 earnings forecasts available from the investment community relative to the scarcity
12 of dividend forecasts attests to their importance. Value Line, Zacks, S&P,
13 Thompson First Call, to name a few, all provide comprehensive information on
14 investor's earnings forecasts. Value Line's principle investment rating assigned to
15 individual stocks, Timeliness Rank, is based primarily on earnings. These
16 investment information providers focus on earnings growth rather than dividend
17 growth, which indicates that the investment community places greater importance
18 on earnings as a measure of future long-term growth.

19 **Q. DOESN'T STAFF CRITICIZE YOU FOR RELYING ON ANALYSTS'**
20 **FORECASTS OF EPS GROWTH?**

21 A. Yes. See Irvine DT at 36-40. Mr. Irvine spends a considerable amount of time
22 criticizing my approach. He admits that analysts may have considered historical
23 measures of growth. See Irvine DT at 35. As I testified in my direct testimony, in
24 estimating future growth, financial institutions and analysts have taken into account
25 all relevant historical information on a company as well as other more recent
26 information. Any further recognition of the past will double count what has

1 already occurred. See Bourassa DT at 36.

2 Mr. Irvine's reliance on the study by David Breman is also puzzling. Irvine
3 DT at 37. Even though Mr. Breman has criticized analysts' growth rates as being
4 too optimistic, Mr. Breman also says investors rely on those forecasts.

5 We have also seen that in spite of high error rates being
6 recognized for decades, neither analysts nor investors who
7 religiously depend on them have altered their methods in any
8 way." (David Breman, *Contrarian Investment Strategies:
The Next Generation*. Simon & Schuster. New York page
115-116.)

9 If investors rely on such analysts' growth rate forecasts, those are the forecasts of
10 relevance to the determination of equity costs. Those growth rates influence the
11 prices investors will pay for stocks and thus impact the dividend yields. The
12 dividend yields change until the sum of the dividend yield plus those growth rates
13 equal the investors' perceived cost of equity. Had the growth forecasts been lower,
14 as Mr. Irvine suggests they should be, the stock prices would be lower and
15 dividend yields would be higher but there would not necessarily be any difference
16 in the ultimate estimate of the cost of equity.

17 **Q. DOES THE FACT THAT THE COMMISSION HAS NOT ALLOWED RISK**
18 **ADJUSTMENTS FOR FIRM SIZE FOR REGULATED UTILITIES**
19 **CHANGE YOUR CONCLUSIONS ABOUT GCSC AND THE HIGHER**
20 **RISKS DUE TO SMALL FIRM SIZE?**

21 A. No. The size phenomenon is well documented in the finance literature. Ibbotson
22 Associates' widely used compilation of historical returns from 1926 to the present
23 reinforces the evidence. (See *Stocks, Bonds, Bills and Inflation 2005 Year Book*,
24 Ibbotson Associates, Chicago, 2005) Small companies have very different returns
25 than large ones and, on average, those returns have been higher. The size effect is
26 particularly relevant for smaller utilities. Not only do these small utilities possess

1 higher risks than their larger counterparts, they are subjected to a significant size
2 effect, strongly suggesting that their cost of equity is higher. Dr. Thomas M. Zepp
3 has found studies by others supporting a conclusion that water utility stocks are
4 riskier than larger ones.⁵ In fact, according to Dr. Zepp, the California Public
5 Utilities Commission has found that the smaller water utilities in its study had a
6 cost of equity (“COE”) that, on average, was 99 basis points higher than the costs
7 of equity for larger utilities. *Id.*

8 **Q. ARE THE RISKS INHERENT IN INVESTMENTS IN SMALL PRIVATE**
9 **ARIZONA UTILITIES “UNIQUE RISKS” AS CHARACTERIZED BY**
10 **MR. IRVINE IN HIS SURREBUTTAL TESTIMONY?**

11 A. No. Mr. Irvine relies on the assumption that the systematic risk captured by the
12 market data for the large publicly traded companies is the same for small private
13 Arizona utilities like GCSC. Irvine DT at 10. Based on this assumption,
14 Mr. Irvine then asserts that risks common to small private Arizona utilities are
15 “unique risks” that do not need to be considered. He concludes that use of
16 historical test years is a ‘unique risk’ that can be diversified away from. Irvine DT
17 at 42-43. The fact is, we simply do not have market data for small privately held
18 Arizona utility companies subject exclusively to the use of historical test years and
19 the Commission should exercise care before blindly assuming the market data of
20 the large publicly traded companies and the resulting indicated costs of equity
21 produced by the financial models apply directly to GCSC.

22 **9. RUCO’s DCF Model Estimate.**

23 **Q. PLEASE DISCUSS RUCO’S DCF MODEL AND RUCO’S INPUTS.**

24 A. Mr. Rigsby uses a sample of water companies and gas companies in his DCF

25 ⁵ Zepp, Thomas M. (2002, August). Utility Stocks and the size effect – revisited. *The Quarterly*
26 *Review of Economics and Finance*, 578-582.

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2 effect, strongly suggesting that their cost of equity is higher. Dr. Thomas M. Zepp
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1 analysis. Rigsby DT at 19. He uses only the constant growth DCF and a sample of
2 four publicly traded water companies: American States Water, California Water,
3 Southwest Water, and Aqua America. He uses an estimate of sustainable growth
4 as his growth estimate. Rigsby DT at 17.

5 **Q. WHAT IS MR. RIGSBY'S ESTIMATE OF SUSTAINABLE GROWTH FOR**
6 **HIS WATER SAMPLE?**

7 A. Mr. Rigsby computes an average growth rate of 7.01%. RUCO Schedule WAR-4.
8 However, on pages 17 and 18 of Mr. Rigsby's direct testimony, he describes the
9 formula that he uses to compute sustainable growth. He includes a downward
10 adjustment to the external growth component (sv). Rigsby DT at 18. In essence,
11 he arbitrarily averages downward the market-to-book-ratio based on his subjective
12 view that that the market prices of his utilities' stock will move toward book value.
13 Mr. Rigsby contends this is one of the desired effects of regulation. He also claims
14 that if a firm's market-to-book ratio is greater than 1.0, the firm is earning more
15 than its cost of capital. See Rigsby DT at 18. As I have testified, there are many
16 reasons why investors may bid up the price of a stock above the stock's book value
17 other than an expectation that the firm will earn "more" than its cost of equity.

18 **Q. HAS THE HISTORICAL MARKET-TO BOOK RATIO MOVED TOWARD**
19 **1.0 FOR THE WATER UTILITY SAMPLE?**

20 A. No. Market-to-book ratios for the water utility sample have stayed well above 1.0
21 for at least the past 10 years. The current average market-to-book ratio is 2.6. The
22 10-year historical average price growth has exceeded book growth.

23 **Q. IS RUCO'S ADJUSTMENT CONSISTENT WITH THE COMPARABLE**
24 **EARNINGS TEST?**

25 A. No. For the reasons discussed previously, many stocks are trading at multiples of
26 their book values, including the water utility sample. GCSC is entitled to earn a

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2 four publicly traded water companies: American States Water, California Water,
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22 10-year historical average price growth has exceeded book growth.

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24 **EARNINGS TEST?**

25 A. No. For the reasons discussed previously, many stocks are trading at multiples of
26 their book values, including the water utility sample. GCSC is entitled to earn a

1 return that is comparable to those firms, regardless of the current market price of
2 their stock.

3 **10. Staff's and RUCO's CAPM Estimates Underestimate the**
4 **Current Cost of Equity.**

5 **Q. LET'S MOVE ON TO STAFF'S AND RUCO'S CAPM ESTIMATES.**
6 **WHAT ARE THE ESTIMATED BETAS FOR GCSC EACH PARTY HAS**
7 **USED IN ITS CAPM?**

8 **A.** Both Staff and RUCO used an average of the betas estimated by Value Line for
9 each utility in their respective sample groups to implement the CAPM. Rigsby DT
10 at 31; Irvine DT 32. Staff computed an average beta of 0.74 for the six water
11 utilities in its sample group, and RUCO computed an average beta of 0.74 for the
12 four water utilities in its sample group.

13 Neither Staff nor RUCO has presented any evidence or data suggesting that
14 GCSC, if it were publicly traded, would have a beta equal to that of their utility
15 sample group. They have made no attempt to analyze the particular risks
16 associated with an investment in GCSC and to compare those risks with the
17 publicly traded water utilities in their sample groups. They have simply assumed
18 that all sewer utilities, regardless of a particular utility's size and other
19 firm-specific characteristics, have the same beta as the publicly traded water
20 utilities. For this reason alone, both their CAPM and DCF estimates should be
21 rejected.

22 In addition, there is considerable uncertainty regarding the accuracy of the
23 beta estimates for the particular water utilities in their sample groups. Estimating
24 betas for many publicly traded water utilities is problematic. With the possible
25 exception of Aqua America, all of the water utilities are small companies, and their
26 stock is thinly traded. Because these stocks are thinly traded, as the stock market

1 index changes, the individual utility's stock price remains unchanged due simply to
2 a lack of trading. Because of the method used by Value Line to estimate betas,
3 which analyzes the weekly percent changes in the price of a stock as compared to
4 weekly percent changes in the New York Stock Exchange average, stocks that are
5 infrequently traded appear to have betas lower than would be expected.

6 **Q. ARE YOU AWARE OF ANY DATA INDICATING THAT VALUE LINE'S**
7 **ESTIMATED BETAS FOR THE PUBLICLY TRADED WATER**
8 **UTILITIES ARE BIASED DOWNWARD DUE TO A LACK OF TRADING?**

9 A. Yes. Referring to Staff's sample group of six publicly traded water utilities, Aqua
10 America has the highest estimated beta (0.80) of the group as reported by Value
11 Line (April 28, 2006). Yet, Aqua America is the largest and most geographically
12 diverse water utility in the sample group. Its operating revenue and net plant are
13 substantially greater than any of the other water utilities, as I discussed earlier.
14 Aqua America (along with Connecticut Water Service) has an AA bond rating and
15 an A-stock quality rating. In addition, Value Line gives Aqua America the highest
16 rank in earnings predictability, 100. Consider the following data:

<u>Company</u>	<u>Stock Price Growth</u> <u>Persistence</u>	<u>Earning</u> <u>Predictability</u>	<u>Beta</u>
Amer. States	80	60	0.70
Aqua America	95	100	0.80
Cal. Water	85	65	0.75
Conn. Water	75	95	0.75
Middlesex	75	70	0.75
SJW Corp.	85	75	0.70

Value Line (April 28, 2006).

26 These data suggest that firms with weaker stock price growth and less

1 predictable earnings have betas that are lower (i.e., they have *less* risk) than firms
2 with stronger stock price growth and higher earnings predictability. Of course, the
3 opposite should be true.

4 The reality is that the betas of this particular group of firms are not good
5 measures of their relative risk. It is generally agreed, even among CAPM
6 proponents, that this model fails to capture all of the risks associated with stocks of
7 small companies and stocks with high book values relative to market price.
8 Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance* 210
9 (7th ed. 2003). Viewing the data in the table above, the average beta of Staff's
10 sample group is probably closer to 1.0 at present, and certainly no less than 0.80,
11 the beta of Aqua America.

12 **Q. ARE THERE ANY OTHER REASONS WHY THE CAPM ESTIMATES**
13 **SHOULD NOT BE RELIED ON IN THIS CASE?**

14 A. Yes, there are other reasons why the CAPM estimates should not be relied on in
15 this case. There are serious questions regarding the proxies for the "risk free" rate
16 selected by Staff and RUCO, and regarding Staff's method of computing its
17 "current" market risk premium.

18 Staff determines its risk-free rate by averaging the five, seven and ten-year
19 U.S Treasury securities' spot rates. See Staff Schedule SPI-2. Staff's computed
20 average risk-free rate is 5.07%. RUCO uses a six-week average of the 91-day U.S.
21 Treasury bill ("T-Bill") rate. See Rigsby DT at 31. RUCO's computed average
22 risk free rate is 4.74%. In my opinion, forecasts of interest rates or "forward rates"
23 should be used. The interest rate used should be long-term interest rates. Relying
24 on short-term or intermediate-term market interest rates for early 2006 does not
25 solve the uncertainty about what interest rates will be in 2007 or 2008, when
26 GCSC's new rates will be in effect.

1 **Q. WHY SHOULD LONG-TERM INTEREST RATES BE USED RATHER**
2 **THAN INTERMEDIATE OR SHORT-TERM SECURITIES?**

3 A. Ibbotson Associates provides a very clear explanation of the issue:

4 The horizon of the chosen Treasury security should match the
5 horizon of whatever is being valued. When valuing a
6 business that is being treated as a going concern, the
7 appropriate Treasury security should be that of a long-term
8 Treasury bond. *Note that the horizon is a function of the
9 investment, not the investor.* If the investor plans to hold a
10 stock in a company for only five years, the yield on a five-
11 year Treasury note would not be appropriate since the
12 company will continue to exist beyond those years.

13 ...

14 Companies are entities that generally have no defined life
15 span; when determining a company's value, it is important to
16 use a long-term discount rate because the life of the company
17 is assumed to be infinite.

18 Ibbotson Associates, *SBBI Valuation Edition, 2006 Yearbook*, pages 59 and 75
19 (emphasis added). See Bourassa Rebuttal Exhibit 6.

20 **Q. WHAT INTEREST RATE DO YOU RECOMMEND BE USED?**

21 A. I recommend Blue Chips Financial Forecast's 20 year U.S. Treasury yields forecast
22 for 2007 and 2008. According to the Blue Chip (June 2006), the long-term 30 year
23 U.S. Treasury yield is 5.5% for 2007 and 2008. By comparison, the current (July
24 18, 2006) yield on the 30 year U.S. Treasury is 5.18%.

25 **Q. HOW DO STAFF AND RUCO COMPUTE THEIR MARKET-RISK-**
26 **PREMIUMS?**

27 A. Mr. Rigsby computes two market-risk-premiums ("MRP") and produces two
28 CAPM results. The first MRP is computed using the geometric mean of the
29 historical S&P 500 market returns from 1926 to 2004. The second MRP is
30 computed using the arithmetic mean of the historical S&P 500 market returns from
31 1926 to 2004. See Rigsby DT at 33. Mr. Rigsby's first MRP is 5.56% and second

1 MRP is 7.56%. As I testified previously, the arithmetic mean should be used in
2 estimating the cost of capital. So do the finance experts. Richard A. Brealey and
3 Stewart C. Myers, *Principles of Corporate Finance* 156-157 (7th ed. 2003); *Morin*
4 at 298-300.

5 Staff computes both a historical MRP and a current MRP. Like RUCO,
6 Staff produces two CAPM results using these different risk premiums. Staff's
7 historical MRP is based on the S&P 500 market returns from 1926 to 2004 and is
8 7.2%.⁶ See Irvine DT at 31. Staff's second MRP is derived by solving Staff's
9 equation (8) for the MRP using Staff's derived market based DCF ROE of 10.28%,
10 a 30-year Treasury note of 5.19%, and a beta of 1.0. Staff's current MRP is 5.1%.
11 Unfortunately, this method is extremely unstable. In fact, during the period from
12 January 2002 through January 2006, the MRP using this method has fluctuated
13 *between 5.9% and 19.15%*! In the past six months alone, the MRP has fluctuated
14 *between 8% and 26%*, and the indicated cost of equity has fluctuated between *1%*
15 *and 18%*. Because of the instability of this MRP, Staff's CAPM estimate using
16 that method should be rejected.

17 **Q. HAVE YOU PREPARED DATA TO FURTHER ILLUSTRATE THE**
18 **VOLATILITY OF STAFF'S "CURRENT" MRP CALCULATION?**

19 A. Yes. I have prepared the table that shows the key determinants of Staff's current
20 MRP calculation and the resulting MRP for selected dates from December 2005 to
21 June 2006:

22
23
24
25 ⁶ Staff has provided an update and corrected its historical MRP using the Ibbotson intermediate-
26 term bond risk premium of 7.5% rather than the long-term bond risk premium of 7.2% in order to
be consistent with Staff's use of intermediate-term treasury rates.

<u>Date</u>	<u>Long-Term Treasury Rate</u>	<u>Value Line Dividend Yield</u>	<u>Value Line Appreciation Potential</u>	<u>Current MRP</u>	<u>Indicated Cost of equity</u>
12/22/2005	4.63%	1.6%	40%	5.75%	8.9%
01/24/2006	4.63%	1.6%	35%	4.76%	8.2%
02/24/2006	4.52%	1.6%	35%	4.87%	8.1%
03/24/2006	4.70%	1.6%	35%	4.69%	8.2%
04/24/2006	5.10%	1.6%	40%	5.28%	9.0%
06/16/2006	5.17%	1.7%	50%	7.20%	10.5%

The data show Staff's current MRP has varied over 250 basis points in this short time period, dropping from 5.75% in December to 4.76% in January, then dropping further to 4.69% in March, before increasing over 250 basis points to 7.20% in June. Obviously, this volatility raises serious questions about the use of the cost of equity estimate produced with this input. We are still more than two months away from hearing, and new rates will not go into effect until 2007 – some seven months from now. What will the MRP be at that time using Staff's formula?

As the data show, the most current data indicates a MRP of 7.20% and a COE of 10.5%. Regardless of whether Staff intentionally or unintentionally selects the dates upon which it determines the current MRP and computes a CAPM COE, the fact is that the method is very unstable and a more stable method should be employed. The current cost of equity for purposes of setting rates should be the cost of equity expected when GCSC's new rates will be in effect, not at a single point in time.

Q. DO YOU HAVE ANY OTHER CONCERNS ABOUT THE CURRENT MARKET RISK PREMIUM METHOD USED BY STAFF?

A. Yes. Putting aside the extreme volatility, there is an inconsistency between beta

1 and the capital appreciation potential Staff employs. This inconsistency further
2 detracts from the reliability and usefulness of the methodology. The estimated
3 market appreciation potential used by Staff to compute the current MRP is
4 computed for the 1,700 stocks followed by Value Line, yet, the beta reported by
5 Value Line is measured against the New York Stock Exchange Composite Index
6 ("NYSE Composite Index") consisting of over 3,000 stocks. While a market risk
7 premium can be achieved by applying the DCF methodology to a representative
8 market index, like the Value Line Composite or the Standard and Poor's 500
9 ("S&P 500"), the market index employed should be the same as the market index
10 used to compute the estimates of beta.⁷

11 **Q. DO YOU HAVE ANY ADDITIONAL CONCERNS OVER STAFF'S**
12 **HISTORICAL MARKET PREMIUM CAPM?**

13 A. Yes. Staff's historical MRP CAPM also suffers from an inconsistency between the
14 market index used to compute the MRP and the market index used to compute
15 beta. The MRP published by Ibbotson are computed against the S&P 500 while
16 the Value Line beta is measured against the NYSE Composite Index.

17 **Q. DOES RUCO'S CAPM SUFFER FROM THE SAME INCONSISTENCY**
18 **BETWEEN THE MARKET INDEX USED TO COMPUTE THE MRP AND**
19 **THE MARKET INDEX USED TO COMPUTE BETA?**

20 A. Yes. RUCO uses historical market returns on the S&P 500 to compute the market
21 risk premiums while using betas measured against the NYSE Composite Index.
22 See Rigsby DT at 33.

23
24
25
26 ⁷ Roger A. Morin, *Regulatory Finance: Utilities' Cost of Capital* (1984). Page 202.

1 Q. DID THE COMPANY REQUEST THAT STAFF PROVIDE CURRENT
2 MARKET RISK PREMIUMS FOR THE DATES IN YOUR TABLE FOR
3 COMPARISON PURPOSES?

4 A. Yes, the Company asked Staff to provide current MRPs for each of these dates
5 using the formula described in Mr. Irvine's testimony. However, Staff's answer
6 was non-responsive. No calculations were provided. See Staff Response to
7 Company Data Request 1.19, copy attached hereto as Bourassa Rebuttal Exhibit 7.

8 Q. WHAT ARE STAFF'S AND RUCO'S INDICATED COSTS OF EQUITY
9 BASED ON THEIR RESPECTIVE VERSIONS OF THE CAPM?

10 A. Staff's CAPM result using historical MRP is 10.3%⁸ and its CAPM result using its
11 current MRP is only 9.0%. See Irvine DT at 30-31. The average of these two
12 results is 9.6%. For the reasons explained previously, however, the latter estimate
13 should be disregarded as unreliable and unsupported.

14 RUCO's CAPM result using its historical MRP-arithmetic mean is 10.32%
15 and its historical MRP-geometric mean is 8.92%. See Rigsby DT at 35. The
16 average of these two is 9.6%. For the reasons explained previously, however, the
17 latter estimate should also be disregarded as unreliable and unsupported.

18 Q. WHAT WOULD BE THE RESULT OF THE CAPM USING YOUR
19 RECOMMENDATIONS ON THE RISK-FREE RATE AND THE LONG-
20 TERM MRP?

21 A. The result would be 10.8%. To minimize disputes, I am using the average beta of
22 the utility sample, which Staff and RUCO assume is the beta for GCSC. First, as I
23 discussed previously, I would use the forecasted long-term Treasury rate for 2007-
24 2008. Second, I would use the long-horizon MRP for the S&P 500 (1926-2005),

25 ⁸ Staff provided an updated cost of capital schedules which shows the historical MRP CAPM
26 result of 10.6%.

1 which is 7.2% (Ibbotson Associates, 2006 SBBI Yearbook). My results are as
2 follows:

3 Equity cost = RF + β x MRP
4 10.8% = 5.5% + .74 x 7.2%

5 **Q. WHAT WOULD STAFF'S AND RUCO'S CAPM ESTIMATES BE IF THEY**
6 **CORRECTED THE PROBLEMS YOU PREVIOUSLY DESCRIBED?**

7 A. The results would again be similar to GCSC's recommended ROE of 10.5%. First,
8 if Staff's highly volatile current MRP were not used, with current (July 18, 2006)
9 intermediate term Treasury rates, the result would be:

10 Equity cost = RF + β x MRP
11 10.4% = 5.1% + .74 x 7.2%

12 Second, if RUCO correctly used the arithmetic mean market return, with the
13 current (July 18, 2006) 91-day T-Bill rate, the result would be:

14 Equity cost = RF + β x MRP
15 10.3% = 4.7% + .74 x 7.56%

16 **V. RATE DESIGN.**

17 **Q. PLEASE SUMMARIZE THE POSITIONS OF THE PARTIES WITH**
18 **RESPECT TO THE RATE DESIGN.**

19 A. Both Staff and RUCO propose the same rate design as the Company. Like the
20 Company, Staff and RUCO apply their respective recommended rate increase
21 equally across all classes of customers to produce their respective revenue
22 requirements.

23 **Q. WHAT ARE THE COMPANY'S PROPOSED REBUTTAL RATES?**

24 A. The proposed rates are:

25 Residential Charge:	\$67.62
26 Residential (<700 S.F.), per dwelling	\$36.88

1 Residential (Home Owner's Association), per dwelling \$61.48
2 RV Park, per occupied space* \$36.88
3 Commercial Rate (Per gallon per day)⁹: \$0.338

4 In addition, the price for reclaimed (non-potable) water is \$246.34 per acre-foot.

5 * The Company is proposing a separate rate for RV parks which are currently charged under the residential (<700 S.F.).

6 **Q. ARE THERE ANY PROPOSED CHANGES TO THE COMPANY'S**
7 **MISCELLANEOUS SERVICE CHARGES?**

8 A. No.

9 **Q. ARE THERE ANY PROPOSED CHANGES TO THE COMPANY'S HOOK-**
10 **UP FEES?**

11 A. No.

12 **Q. DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY?**

13 A. Yes.

14

15

16

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⁹ Commercial wastewater flows are based on the average daily flows based monthly water usage provided by Arizona Water Company.

Thomas J. Bourassa
Exhibits

**BOURASSA
REBUTTAL
EXHIBIT 1**

Gold Canyon Sewer Company
To: Grainger (8200GRAING)

Check Number: 000840
Date: January 7, 2005

Invoice No.	Date	Description
934-383926-3	12/13/2004	MATERIAL & SUPPLIES
TOTALS:		

Amount	Discount	Paid Amount
US\$627.13	US\$.00	US\$627.13
US\$627.13	US\$.00	US\$627.13

VDF103

Gold Canyon Sewer Company

SUPPLIER NAME: Grainger G/L POSTING PERIOD: _____
SUPPLIER ID: 8200- BATCH #: _____
INVOICE DATE: 12-13-04 PO #: _____
INVOICE #: 934-383926-3 DATE ENTERED: 12-23
INVOICE AMOUNT: \$627.13
DESCRIPTION: Material & Supplies

OPS# / FW0#	COST CODE	\$ AMOUNT
<u>8200-0200-OPS</u>	<u>2-5520-2062-0000</u>	<u>\$627.13</u>

POSTED

MANAGER APPROVAL

Chad [Signature] 12/22/04

TOTAL

\$627.13

ACCOUNTING APPROVAL

Michael [Signature]

A/P WRITE UP

PH

GRAINGER

PAGE 1 OF 1

ORIGINAL INVOICE

2223 S WILSON ST
TEMPE, AZ 85282-2000

GRAINGER ACCOUNT NUMBER 600 826128209
INVOICE NUMBER 934-383926-3
INVOICE DATE 12/13/2004
DUE DATE 01/12/2005
AMOUNT DUE \$627.13

SHIP TO
BOULDERS CAREFREE SEWER
6520 E HWY 60
GOLD CANYON, AZ 85218

PO NUMBER: GSC1399
CALLER: GARY BURKHEAD
CUSTOMER PHONE: (480)575-7303
DELIVERY NUMBER: 6146812428

BILL TO
MDG2003 00040930 1 MB 0309 01



ATTN: ACCOUNTS PAYABLE
BOULDERS CAREFREE SEWER
PO BOX 459
LITCHFIELD PK, AZ 85340

040930

THANK YOU!

FEI NUMBER 36-1150280

FOR QUESTIONS ABOUT THIS INVOICE OR ACCOUNT CALL (480)966-9797

PO LINE #	ITEM #	DESCRIPTION	QUANTITY	BACK ORDERED	UNIT PRICE	TOTAL
	3LX54-3	ADAPTER, MALE, 3 IN	2		22.51	45.02
	3LX46-9	COUPLER, FEMALE, 3 IN	2		32.95	65.90
	3LX42-8	ADAPTER, MALE, 3 IN	2		18.68	37.36
	3LX48-5	COUPLER, FEMALE, 3 IN	2		34.35	68.70
	4XV58-2	HOSE, SUCTION, 3 IN	1		307.50	307.50
	4XZ76-5	CLAMP, HOSE, PK10	1		27.90	27.90

RECEIVED
DEC 20 2004

NUMBER OF PIECES: 10 WEIGHT: 139 DATE SHIPPED: 12/13/04
CARRIER: CON-WAY WESTERN

INVOICE SUB TOTAL 552.38
TAX 44.75
SHIPPING CHARGE 30.00

PAYMENT TERMS NET 30 DAYS. PAY THIS INVOICE NO STATEMENT SENT. PAYABLE IN U.S. DOLLARS.

AMOUNT DUE \$627.13

Gold Canyon Sewer Company
 To: Home Depot (8200HOMEDEPOT)

Check Number: 001158
 Date: September 12, 2005

Invoice No.	Date	Description
7015744	8/7/2005	SUPPLIES
4071656	8/10/2005	SUPPLIES

Amount	Discount	Paid Amount
US\$14.62	US\$.00	US\$14.62
US\$114.97	US\$.00	US\$114.97
US\$129.59	US\$.00	US\$129.59

TOTALS:

89110V

Gold Canyon Sewer Company

SUPPLIER NAME:	<u>Home Depot</u>	G/L POSTING PERIOD:	_____
SUPPLIER ID:	<u>8200-</u>	BATCH #:	_____
INVOICE DATE:	<u>8-10-05</u>	PO #:	<u>10512</u>
INVOICE #:	<u>4071656</u>	DATE ENTERED:	<u>SEP 07 2005</u>
INVOICE AMOUNT:	<u>\$114.97</u>		
DESCRIPTION:	<u>Supplies</u>		

OPS# / FWO#	COST CODE	\$ AMOUNT
<u>8200-0200-OPS</u>	<u>2-5520-2062-0000</u>	<u>114.97</u>
	<u>Material & Supplies</u>	

MANAGER APPROVAL	<u> alilos</u>	TOTAL	<u>114.97</u>
ACCOUNTING APPROVAL	_____	A/P WRITE UP	<u>QH</u>

THE HOME DEPOT 0404
1545 S CRISHON RD
MESA, AZ 85208 (480)380-1821

SALE 0404 00007 48137 08/10/05
11 ARG343 11:04 AM



086876019162 WASTEBASKET	
6 @ 6.74	40.44
086876012538 WASTEBASKET	4.83
028905750622 PLNGR/CADDY	9.98
071798003153 BOWL BRUSH	
2 @ 5.87	11.74
086876156225 LBBYDSTPNBLK	11.98
098991002868 24" PUSHBROOM	19.77
046500214592 PLEDGEMULTI	3.97
049223215273 CLEANER	3.94
SUBTOTAL	106.65
SALES TAX	8.32
TOTAL	\$114.97
XXXXXXXXXXXX9129 HOME DEPOT	114.97
AUTH CODE 010623/4071656	TA
P.O.#/JOB NAME: LIPCO	

NEW SPRING WATER LLC
BURKHEAD ELAINE PO # 10512



0404 07 48137 08/10/2005 2405

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APPLY TODAY IN-STORE OR ON-LINE AT:
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ENTER FOR A CHANCE
TO WIN A \$5,000
HOME DEPOT GIFT
CARD!

Your Opinion Counts! We would like to
hear about your shopping experience.
Enter to win a \$5,000 Home Depot Gift
Card by completing a brief survey about
your store visit at:

www.HomeDepot.com

RECEIVED
SEP 01 2005

**BOURASSA
REBUTTAL
EXHIBIT 2**

FIRST SET OF DATA REQUESTS
FROM THE SOUTHWEST WATER AND SEWER COMPANY
TO THE RESIDENTIAL UTILITY CONSUMER OFFICE
(Docket No. SW-03478A-05-0801)

- 1.6 Please explain how RUCO's recommended property tax methodology differs from the methodology advanced by RUCO and rejected by the Commission in each of the following decisions: Chaparral City Water Company, Docket No. W-02113A-04-0616, Decision No. 68176 (September 30, 2005); Rio Rico Utilities, Inc., Decision No. 67279 (October 5, 2004); Arizona Water Company, Decision No. 68302 (November 14, 2005), Decision No. 66849 (March 22, 2004) and Decision No. 64282 (Dec. 28, 2002); Bella Vista Water Company, Decision No. 65350 (Nov. 1, 2002).

Response: Rodney Moore

RUCO's recommendation does not differ. The basis for RUCO's recommended property tax methodology is explained in my direct testimony on page 17, lines 16 through 20. RUCO has consistently recommended its methodology since the issuance of the ADOR's memo of January 3, 2001.

**BOURASSA
REBUTTAL
EXHIBIT 3**

GOLD CANYON SEWER COMPANY, INC.
DOCKET NO. SW-02519A-06-0015
RESPONSE TO STAFF'S SECOND SET OF DATA REQUESTS

Response provided by: Greg Sorensen

Title: Controller – Algonquin Water

Company Name: Gold Canyon Sewer Company, Inc.
Address: 12725 W. Indian School Rd., Suite D-101
Avondale, AZ 85323

Company Response Number: CSB 2.37

- Q. Contract Employee Fee Information – Please provide the following for the years 2002, 2003, and 2004:
- a. Copies of all labor agreements that are reflected in the Test Year labor expenses and any related payroll adjustments. If contracts are not in writing, please provide a narrative explaining the terms of the contract.
 - b. A detailed schedule of the names, titles, duties performed, billing rate and all contract employees actual fee expenses by month and by account charged, for the Test Year and on an annual basis for the two prior calendar years.
 - c. A detailed schedule of actual contract employee levels vs. budgeted contract employee levels by month for the Test Year and the two prior calendar years along with supporting documentation.
 - d. A detailed schedule of actual hours worked vs. budgeted hours worked for contract employees for the Test Year and for the two prior calendar years.
 - e. Whether or not bids were sent out for the contract services. If no bids were sent out, please explain why having no bids was better or more prudent for the rate payers.
 - f. Provide invoices for the Test Year
- A.
- a. Please see Company response to RUCO data request 1.18, which was previously provided to Staff, for AWS/GCSC Operating Agreement.
 - b. Please see the attached file which includes names, titles, rates for personnel comprising AWS Operating Fee and Accounting/billing/Customer Service Fee. Charges by month are in the General Ledger and schedule of affiliate transactions. See Company's response to Staff data request CSB 2.38.

- c. Please see the attached documents.
- d. There are no documents responsive to this data request.
- e. Services provided to GCSC are very reasonable. There are few outside service providers and none that can provide all of the essential services and management expertise required by GCSC. The services necessary for proper and efficient continuing operations of the Company as well as the long-term financial and strategic development of the business provided by Algonquin include:
- Managing (planning, organizing, and directing) the business affairs and financial activities including monitoring financial performance, negotiation of contracts, managing and preparing regulatory and tax filing requirements, managing and preparing budgets, and assuring compliance with orders issued by governmental agencies;
 - Provide overall strategic direction and ensuring business and performance targets are met;
 - Developing and executing business plans that include financial, growth and operational objectives;
 - Establishing and maintaining a positive image regarding policies, programs, and services with community stakeholders, government agencies, and customer groups and employees;
 - Maintaining compliance with all federal, state, and local regulatory and statutory requirements;
 - Directing the day-to-day development, management and operations of the plants and personnel engaged in the functional areas involving the collection and treatment of wastewater and the disposal of effluent;
 - Establishing and maintaining programs to manage efficient, safe, and reliable operations, maintenance, protection, and appearance of property and facilities;
 - Providing wastewater utility planning and engineering work as well as technical assistance and administration regarding engineering issues to staff, outside consultants, developers, regulatory agencies, commissions, and city councils;
 - Provide assistance in the management of consulting and construction contracts including plan review and construction implementation;
 - Assisting in determining and negotiating both on-site and off-site infrastructure requirements; and
 - Establishing and maintaining processes, policies, procedures, and tracking mechanisms to ensure all aspects and requirements of development processes and development agreements are met.

The Company is not aware of any local firms that provide this range of services on a contract basis. However, First National Management ("FNM"), for example, provides billing and collection services to small water and wastewater utilities, but would not be able to provide all of the services management believes is necessary and essential for GCSC and would provide the greatest benefit and

lowest cost to ratepayers. However, as a comparison, FNM's lowest rate for customer billing and limited accounting services to small water and wastewater utilities on a per bill basis is \$4.50. Compare that to GCSC charge of \$3 per bill. If a certified operator is required by the client, FNM's minimum cost per bill is approximately \$10.40 per bill. There are FNM's clients approaching \$12.00 cost per bill. These figures do not include any additional services as described above. The contact for First National Management contact is Ted Wilkenson, 480-677-6080.

Another small firm providing customer billing and limited accounting services to small water and wastewater utilities is YL Technology ("YLT"). YLT per bill fees vary from \$7.00 per bill to \$7.75 which do not include certified operators nor any management services. The contact for YL Technology is Karen Hartwell at 520-625-1671.

Based on test year, the billing and operations cost for the Company on a per bill basis is approximately \$8.65. The benefit to the Company and to ratepayers is that economies of scale are achieved by allocating the costs over several utilities Algonquin owns and operates. Additionally, if the Company employed these individuals directly, the cost to the rate payer would be higher as no economies of scale would be achieved.

- f. *Please see the attached invoices from AWS for Operating Services and Accounting/Billing/Customer Service for the Test Year.*
-

CSB 2.37

Price for Affiliated Transactions - 2002
CSB 2.37

Algonquin Power Systems Inc.:

Type of Transaction	Transaction Detail	Determined Price	Categories	Typical Rates	Margin %	3rd Party Information
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Work Order Activity:
Material Cost 0.00%

Algonquin Water Services LLC:

Type of Transaction	Transaction Detail	Determined Price	Categories	Typical Rates
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Operating Costs:
Operator Wages/Non direct related costs \$12,000/Month 6.60%
Repair & Maintenance Fee \$12,000/Month 6.60%
Accounting and Customer Service: \$5,000/Month 6.60%
Labour/Postage/Misc C

Work Order Activity:
Material Cost 0.00%
Labour Typical Rates 6.60%
General Manager 150/Hour 6.60%
Operator III & IV 70/Hour 6.60%
Operator I & II 50/Hour 6.60%
Technician II 80/Hour 6.60%
Technician I 50/Hour 6.60%
Senior Engineer 100/Hour 6.60%
Junior Engineer 90/Hour 6.60%
Project Engineer 90/Hour 6.60%
A
A
A

Algonquin Power Trust:

Type of Transaction	Determined Price	Cost
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Central Office Costs:
Non Site Related Costs Cost \$1,020/Month 0.00%
Labour services-Corporate Accounting/HR/IT Cost Cost/hour 0.00%

A - Third party quote on rates from Carollo to LPSCO (also managed by AWS)
C - See 1998 Quote for billing/bookkeeping services from Western Environmental Technologies, Inc. (3rd party)

Algonquin Power Systems Inc.:

Type of Transaction	Transaction Detail	Determined Price	Categories	Typical Rates	Margin %	3rd Party Information
Work Order Activity:	Material	Cost			0.00%	
	Labour	Typical Rates	Division Manager	80/Hour	1.84%	B
			Team Leader	80/Hour	1.84%	B
			Regional Supervisor	60/Hour	1.84%	B
			Senior Project Manager	50/Hour	1.84%	B

Algonquin Water Services LLC:

Type of Transaction	Transaction Detail	Determined Price	Categories	Typical Rates
Operating Costs:	Operator Wages/Non direct related costs	Cost Plus		\$15,000/Month
	Repair & Maintenance Fee	Cost Plus		\$15,000/Month
	Accounting and Customer Service:	Cost Plus		\$5,000/Month
Work Order Activity:	Material	Cost		0.00%
	Labour	Typical Rates	General Manager	150/Hour
			Operator III & IV	70/Hour
			Operator I & II	50/Hour
			Technician II	90/Hour
			Technician I	50/Hour
			Senior Engineer	100/Hour
			Junior Engineer	90/Hour
			Project Engineer	90/Hour

Algonquin Power Trust:

Type of Transaction	Transaction Detail	Determined Price	Cost
Central Office Costs:	Non Site Related Costs	Cost	\$0/Month
	Labour services-Corporate Accounting/HR/IT	Cost	Cost/hour

A - Third party quote on rates from Carollo to LPSCO (also managed by AWS)

B - Summary of 3rd party rates received by APS

C - See 1998 Quote for billing/bookkeeping services from Western Environmental Technologies, Inc. (3rd party)

Price for Affiliated Transactions - 2004
CSB 2.37

Algonquin Power Systems Inc.:

Type of Transaction	Transaction Detail	Determined Price	Categories	Typical Rates	Margin %	3rd Party Information
Work Order Activity:		Cost				
Material		Typical Rates	Division Manager	80/Hour	0.00%	B
Labour			Team Leader	80/Hour	5.24%	B
			Regional Supervisor	60/Hour	5.24%	B
			Senior Project Manager	50/Hour	5.24%	B

Algonquin Water Services LLC:

Type of Transaction	Transaction Detail	Determined Price	Categories	Typical Rates	Margin %	3rd Party Information
Operating Costs:		Cost Plus				
	Operator Wages/Non direct related costs			\$26,141/Month	14.01%	
Accounting and Customer Service:		Cost Plus				
	Labour/Postage/Misc			\$3/Bill	14.01%	C
Work Order Activity:		Cost				
Material		Typical Rates	General Manager	150/Hour	0.00%	
Labour			Operator III & IV	70/Hour	14.01%	A
			Operator I & II	50/Hour	14.01%	
			Technician II	80/Hour	14.01%	
			Technician I	50/Hour	14.01%	
			Senior Engineer	100/Hour	14.01%	A
			Junior Engineer	90/Hour	14.01%	A
			Project Engineer	90/Hour	14.01%	A

Algonquin Power Trust:

Type of Transaction	Transaction Detail	Determined Price	Categories	Typical Rates	Margin %	3rd Party Information
Central Office Costs:		Cost				
	Non Site Related Costs			\$4,000/Month	0.00%	
	Labour services-Corporate Accounting/HR/IT			Cost/hour	0.00%	

A - Third party quote on rates from Carollo to LPSCO (also managed by AWS)

B - Summary of 3rd party rates received by APS

C - See 1998 Quote for billing/bookkeeping services from Western Environmental Technologies, Inc. (3rd party)

Price for Affiliated Transactions - 2005
CSB 2.37

Algonquin Power Systems Inc.:

Type of Transaction	Transaction Detail	Determined Price	Categories	Typical Rates	Margin %	3rd Party Information
Work Order Activity:	Material	Cost			0.00%	
	Labour	Typical Rates	Division Manager	80/Hour	7.72%	B
			Team Leader	80/Hour	7.72%	B
			Regional Supervisor	60/Hour	7.72%	B
			Senior Project Manager	50/Hour	7.72%	B

Algonquin Water Services LLC:

Type of Transaction	Transaction Detail	Determined Price	Categories	Typical Rates	Margin %	3rd Party Information
Operating Costs:	Operator Wages/Non direct related costs	Cost Plus		\$26,926/Month	15.64%	
	Accounting and Customer Service: Labour/Postage/Misc	Cost Plus		\$3/Bill	15.64%	C
Work Order Activity:	Material	Cost			0.00%	
	Labour	Typical Rates	General Manager	150/Hour	15.64%	A
			Operator III & IV	70/Hour	15.64%	
			Operator I & II	50/Hour	15.64%	
			Technician II	80/Hour	15.64%	
			Technician I	50/Hour	15.64%	
			Senior Engineer	100/Hour	15.64%	A
		Junior Engineer	90/Hour	15.64%	A	
			Project Engineer	90/Hour	15.64%	A

Algonquin Power Trust:

Type of Transaction	Transaction Detail	Determined Price	Categories	Typical Rates	Margin %	3rd Party Information
Central Office Costs:	Non Site Related Costs	Cost			0.00%	
	Labour services-Corporate Accounting/HR/IT	Cost		\$4,000/Month	0.00%	

A - Third party quote on rates from Carollo to LPSCO (also managed by AWS)
B - Summary of 3rd party rates received by APS
C - See 1998 Quote for billing/bookkeeping services from Western Environmental Technologies, Inc. (3rd party)

Schedule B

2004

Salaries for Admin at AWS

	GC	BM	TT	WM	BV	LP	Total
	4,534 13%	1,633 5%	1,125 3%	970 3%	-	25,864 76%	34,126.00 100%
Patty Nielsen	936.06	337.14	232.26	200.26	-	5,339.69	7,045.41
Amy Sears	1,023.03	368.46	253.84	218.87	-	5,835.80	7,700.00
Bundy	930.02	334.96	230.76	198.97	-	5,305.28	7,000.00
Bob Keen	564.99	203.49	140.19	120.87	-	3,222.95	4,252.49
Suzanne Wagner	585.78	210.98	145.35	125.32	-	3,341.57	4,409.00
Barbara Ridsen	549.30	197.84	136.29	117.52	-	3,133.43	4,134.37
Brenda Bowman	558.79	201.26	138.65	119.55	-	3,187.59	4,205.84
	<u>5,147.96</u>	<u>1,854.13</u>	<u>1,277.34</u>	<u>1,101.35</u>	<u>-</u>	<u>29,366.32</u>	<u>38,747.10</u>

Salaries for Ops

Charlie Hernandez	1,300.19	564.51	388.90	335.32	-	8,940.83	11,529.73
Mike Weber	1,735.88	625.21	430.72	371.37	2,684.60	9,902.24	15,750.01
Joel Wade	1,472.54	530.36	365.37	315.03	-	8,400.04	11,083.35
	<u>4,508.60</u>	<u>1,720.07</u>	<u>1,184.99</u>	<u>1,021.72</u>	<u>2,684.60</u>	<u>27,243.10</u>	<u>38,363.09</u>

Schedule B

2005

Central Office Overhead Costs for Management Fee Allocation

	GC	BM	TT	WM	BV	LP	Total
Budgeted Customers	4,766	1,900	1,026	969	7,300	24,107	40,068
1.20%	12%	5%	3%	2%	18%	60%	100%
Central office Costs	3,878.08	1,546.02	834.85	788.47	5,939.98	19,615.77	32,603.18
	3,878.08	1,546.02	834.85	788.47	5,939.98	19,615.77	32,603.18

Ed

Salaries for Admin at AWS

Bowman, Brenda	Accounting Assistant	4,237.19	108.50	102.47	771.98	2,549.32	4,237.19
Bundy, Shawn	Senior Accountant	5,685.60	145.59	137.50	1,035.86	3,420.75	5,685.60
Byrd, Linda	Customer Service Manager	7,699.25	197.15	186.20	1,402.73	4,632.27	7,699.25
Heinisch, Annette	Accounts Payable	3,810.48	97.57	92.15	694.23	2,292.58	3,810.48
Medlin, Kathy	New Accounts	4,341.43	111.17	104.99	790.97	2,612.03	4,341.43
Sears, Amy	Financial Analyst	7,817.70	200.18	189.06	1,424.31	4,703.54	7,817.70
Ware, Melissa	Customer Service Rep I	2,710.14	84.86	80.14	-	1,993.81	2,710.14
Watts, C.J.	Customer Service II	3,276.53	102.59	96.89	-	2,410.50	3,276.53
Wagner, Suzanne	Customer Service Rep	4,432.67	138.79	131.08	-	3,261.06	4,432.67
		5,511.11	1,186.40	1,120.49	6,120.07	27,875.86	44,010.98

Salaries for Ops

Charlie Hernandez	Operations Manager	11,796.89	302.08	285.29	2,149.28	7,097.62	11,796.89
Mike Weber	Division/General Manager	15,990.75	409.47	386.72	2,913.36	9,620.87	15,990.75
Joel Wade	Engineering and Construction Mgr	11,252.75	288.14	272.14	2,050.14	6,770.24	11,252.75
		4,643.77	1,851.27	999.69	7,112.78	23,488.73	39,040.39

Schedule A

**Postage Expense Envelopes/! Total Cost
0.1**

Gold Canyon	4534	\$	1,450.88	\$	453.40	\$	1,904.28
	0.32						
Black Mountain	1633	\$	522.56	\$	163.30	\$	685.86
	0.32						
Tall Timbers	1125	\$	360.00	\$	112.50	\$	472.50
	0.32						
Woodmark	970	\$	310.40	\$	97.00	\$	407.40
	0.32						
LPSCO	25864	\$	7,759.20	\$	2,586.40	\$	10,345.60
\$	0.30						
Bella	7012	\$	2,103.60	\$	701.20	\$	2,804.80
\$	0.30						

Postage and envelope build up

Postage	0.30
Statements	0.03
Outgoing Envelope	0.03
Return	0.03
	<hr/>
Total per bill	0.38

Schedule A

**Postage Expense Envelopes/ Total Cost
0.1**

Gold Canyon	4534 \$	1,450.88	\$ 453.40	\$ 1,904.28
	0.32			
Black Mountain	1633 \$	522.56	\$ 163.30	\$ 685.86
	0.32			
Tall Timbers	1125 \$	360.00	\$ 112.50	\$ 472.50
	0.32			
Woodmark	970 \$	310.40	\$ 97.00	\$ 407.40
	0.32			
LPSCO	25864 \$	7,759.20	\$ 2,586.40	\$ 10,345.60
\$	0.30			
Bella	7012 \$	2,103.60	\$ 701.20	\$ 2,804.80
\$	0.30			

Postage and envelope build up

Postage	0.30
Statements	0.03
Outgoing Envelope	0.03
Return	0.03
Total per bill	0.38

Algonquin Water Services, LLC
 Gold Canyon Sewer Company Pricing
 2004 Budget
 CSB 2.37c

		BUDGET	
		Monthly	Annual
OPERATOR FEE:		\$ 26,141.00	\$ 313,692.00
BILLING FEE:			
	Test Year Budgeted Bills per Month	4,534	
	Fee per Bill	\$ 3.00	\$ 13,602.00
TOTAL FEE:		<u>\$ 39,743.00</u>	<u>\$ 476,916.00</u>
COSTS:			
	Cost of Wages, Benefits & Related		
	Waste water Operator	\$ 3,713.31	
	Administrative/Lab work	\$ 3,923.52	
	Waste water Operator III/Chief Operator	\$ 7,460.25	
	Waste water Operator	<u>\$ 3,921.52</u>	<u>\$ 19,018.60</u>
	Shared Ops Wages, Benefits & Related	4,508.60	54,103.25
	Total Operations Wage/Related	<u>\$ 23,527.21</u>	<u>\$ 282,326.46</u>
	Shared Admin Wages (Accounting/Billing/Cust. Svcs)	\$ 5,147.96	\$ 61,775.54
	Total Wages, Benefits & Related	<u>\$ 28,675.17</u>	<u>\$ 344,102.00</u>
	Postage	\$ 0.42	1,904.28
	Overhead	10.0%	3,974.30
	Total Costs	<u>\$ 34,553.75</u>	<u>\$ 414,644.96</u>
	Operating Margin	13.1%	\$ 5,189.25
	Estimated Tax	40.0%	\$ (2,075.70)
	Planned Operating Margin - Post Tax	<u>7.8%</u>	<u>\$ 3,113.55</u>
	Actual Operating Margin 2004 - Post Tax	<u>14.01%</u>	

Algonquin Water Services, LLC
 Gold Canyon Sewer Company Pricing
 2005 Budget
 CSB 2.37c

		BUDGET	
		Monthly	Annual
OPERATOR FEE:		\$ 26,926.00	\$ 323,112.00
BILLING FEE:			
	Test Year Budgeted Bills per Month	4,766	
	Fee per Bill	\$ 3.00	\$ 171,576.00
TOTAL FEE:		<u>\$ 41,224.00</u>	<u>\$ 494,688.00</u>
COSTS:			
	Cost of Wages, Benefits & Related		
	Waste water Operator	\$ 3,726.79	
	Administrative/Lab work	\$ 4,098.57	
	Waste water Operator III/Chief Operator	\$ 7,242.48	
	Waste water Operator	<u>\$ 4,414.14</u>	\$ 19,481.97
			<u>\$ 233,783.60</u>
	Shared Ops Wages, Benefits & Related	4,643.77	55,725.21
	Total Operations Wage/Related	<u>\$ 24,125.73</u>	<u>\$ 289,508.81</u>
	Shared Admin Wages (Accounting/Billing/Cust. Svcs)	\$ 5,511.11	\$ 66,133.33
	Total Wages, Benefits & Related	<u>\$ 29,636.85</u>	<u>\$ 355,642.14</u>
	Postage	\$ 0.42	2,001.72
	Overhead	10.0%	4,122.40
	Total Costs	<u>\$ 35,760.97</u>	<u>\$ 429,131.58</u>
	Operating Margin	13.3%	\$ 5,463.03
	Estimated Tax	40.0%	\$ (2,185.21)
	Planned Operating Margin - Post Tax	<u>8.0%</u>	<u>\$ 3,277.82</u>
	Actual Operating Margin 2005 - Post Tax	<u>15.64%</u>	

Gold Canyon Sewer Company
 Projected Stand-alone Operator and Billing Cost

	Monthly	Monthly	Annual
Wastewater Manager	\$ 11,796.89		
Waste water Operator	3,726.79		
Administrative/Lab work	4,098.57		
Waste water Operator III/Chief Operator	7,242.48		
Waste water Operator	<u>4,414.14</u>	\$ 31,278.86	
Customer Service	\$ 3,640.00		
Customer Service	3,640.00		
Blue-staking/Inspections (part time)	<u>2,426.67</u>	9,706.67	
Senior Accountant (salary \$60k plus benefits/taxes, etc.)		<u>7,000.00</u>	
Overhead of 2.5% (postage, etc.)		\$ 47,985.52	\$ 575,826.27
Number of Test Year Bills			<u>14,395.66</u>
Cost per Bill			590,221.92
			<u>65,638</u>
			\$ 8.99
Operator Fee - AWS	\$ 323,112.00		\$26,926 per month
Billing Fee - AWS	196,914.00		\$3 per bill
APT Fee	<u>48,000.00</u>	\$ 568,026.00	\$4,000 per month
Number of Test Year Bills		<u>65,638</u>	
Cost per Bill		\$ 8.65	
Savings to GCSC due to AWS and Economy of Scale			<u>22,195.92</u>

WESTERN ENVIRONMENTAL TECHNOLOGIES, INC.

P. O. Box 4752 • Cave Creek, Arizona 85331
(602) 488-1385

September 9, 1998

Mr. Don Reilly, CFO
Grandbay Resorts
11811 N. Tatum Boulevard Suite 1060
Phoenix, Arizona 85028

RE: CONTRACT FOR BILLING AND BOOKKEEPING SERVICES

Dear Marianne,

Thank you for the opportunity to present the following proposal and contract for Monthly Sewer Billing and Bookkeeping for the Boulders Carefree Sewer Corporations.

Agreement

This agreement is entered into this _____ day of _____, 1998 by and between Grandbay Resorts (hereinafter owner) and Western Environmental Technologies, Inc. (hereinafter WET)

WET will provide for \$4750.00 /month:

Expenses

Covered by WET:

- MAS90 software program
- Modem access with separate line
- Zip Drive
- 1 phone line for customer access
- Postage
- Sewer bills (Same as current)

Scope of Work

Bill monthly sewer customers up to 1400 accounts

Including:

- Tracking all accounts
- Generating all sewer bills
- Mailing bills
- Opening mail daily
- Making copies of all checks for deposit
- Depositing checks daily
- Customer interaction
- Monthly Reporting

Monthly Bookkeeping of the Boulders Carefree Sewer Corporation.

Including:

Tracking accounts receivables and payables

Generating all checks for signatures

Printing out non audited accounting reported monthly for owner's review

Correcting all accounting errors as determined by owner's accounting staff or auditors

Additional services

All additional sewer bills (over 1400) will be billed to owner at \$ 3.00 per bill.

WET would spend up to 10 hours a month to field verify properties make sure that all properties that are connected are billed. Billed to owner at \$40.00 an hour.

Provisions

If at any time owner requires different software, sewer bills or requires additional unforeseen capital outlay or changes the original scope of work or responsibilities ie. WET is required to perform accounting task above and beyond simple bookkeeping, the parties shall attempt to agree on appropriate adjustments to the compensation to be paid to WET there after. If the parties are unable to agree on appropriate adjustments within sixty days from the commencement of negotiations, this agreement shall terminate without further actions of the parties.

Term

The contract shall commence the first day of _____ and shall expire five years thereafter. Both parties, at their discretion, after the first year, shall have the right to terminate this agreement with a ninety day written notice. In the event of a default by a party, the non-defaulting party shall provide written notice of such default to the other party. If such default is not cured within ten days of the receipt of the default, then the non-defaulting party, in its discretion may terminate the agreement by providing written notice.

Grandbay Resorts.

By _____
CFO, Grandbay Resorts

Western Environmental Technologies, Inc.

By _____
President, WET Inc.

Sales Invoices	SALES000000000774
Date	11/29/2004

Customer:

Gold Canyon Sewer Company P.O. Box 3572 Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
	400GCSC		AR	Net 30
Description: OPERATING FEE NOV.04				Amount US\$26,141.34

Subtotal	US\$26,141.34
Misc	US\$0.00
Tax	US\$0.00
Freight	US\$0.00
Trade Discount	US\$0.00
Payment	US\$0.00
Total Due	US\$26,141.34



Sales Invoices	SALES000000000780
Date	11/30/2004

Customer:

Gold Canyon Sewer Company P.O. Box 3572 Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID	Amount
Description: ACCOUNTING BILLING - NOV. 2004	400GCSC		AR	Net 30	US\$14,490.00
				Subtotal	US\$14,490.00
				Misc.	US\$0.00
				Tax	US\$0.00
				Freight	US\$0.00
				Trade Discount	US\$0.00
				Payment	US\$0.00
				Total Due	US\$14,490.00

Algonquin Water Services LLC

HISTORICAL

Sales Invoices	SALES000000000786
Date	12/14/2004

Customer:

Gold Canyon Sewer Company
P.O. Box 3572
Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
Description: OPERATING FEE DEC.04	400GCSC		AR	Net 30
				Amount US\$26,141.34
Subtotal				US\$26,141.34
Misc				US\$0.00
Tax				US\$0.00
Freight				US\$0.00
Trade Discount				US\$0.00
Payment				US\$0.00
Total Due				US\$26,141.34

Sales/Invoices	SALES000000000792
Date	12/14/2004

Customer:

Gold Canyon Sewer Company P.O. Box 3572 Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
	400GCSC		AR	Net 30
Description: ACCOUNTING/BILLING DEC.2004				Amount US\$14,490.00

Subtotal	US\$14,490.00
Misc	US\$0.00
Tax	US\$0.00
Freight	US\$0.00
Trade Discount	US\$0.00
Payment	US\$0.00
Total Due	US\$14,490.00

Sales/Invoices	SALES000000000803
Date	1/20/2005

Customer:

Gold Canyon Sewer Company P.O. Box 3572 Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
	400GCSC		AR	Net 30
Description: OPERATING FEE - GOLD CANYON				Amount US\$26,926.00

Subtotal	US\$26,926.00
Misc	US\$0.00
Tax	US\$0.00
Freight	US\$0.00
Trade Discount	US\$0.00
Payment	US\$0.00
Total Due	US\$26,926.00

Algonquin Water Services LLC

HISTORICAL

Sales Invoices	JC328
Date	1/28/2005

Customer:

Gold Canyon Sewer Company
P.O. Box 3572
Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
GOLD CANYON Description: Job 8200-0200-ACT	400GCSC			Net 30 Amount US\$14,745.00
Subtotal				US\$14,745.00
Misc				US\$0.00
Tax				US\$0.00
Freight				US\$0.00
Trade Discount				US\$0.00
Payment				US\$0.00
Total Due				US\$14,745.00

Sales Invoices	SALES000000000805
Date	2/17/2005

Customer:

Gold Canyon Sewer Company P.O. Box 3572 Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
	400GCSC		AR	Net 30
Description: OPERATING FEE FEB05				Amount US\$26,926.00

Subtotal	US\$26,926.00
Misc	US\$0.00
Tax	US\$0.00
Freight	US\$0.00
Trade Discount	US\$0.00
Payment	US\$0.00
Total Due	US\$26,926.00

Algonquin Water Services LLC

HISTORICAL

Sales Invoices	JC385
Date	3/29/2005

Customer:

Gold Canyon Sewer Company
P.O. Box 3572
Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
GOLD CANYON	400GCSC			Net 30
Description: Job 8200-0200-ACT				Amount US\$14,802.00

Subtotal	US\$14,802.00
Misc	US\$0.00
Tax	US\$0.00
Freight	US\$0.00
Trade Discount	US\$0.00
Payment	US\$0.00
Total Due	US\$14,802.00

Algonquin Water Services LLC

HISTORICAL

Sales Invoices	SALES000000000811
Date	3/29/2005

Customer:

Gold Canyon Sewer Company
P.O. Box 3572
Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID	Amount
Description: OPERATING FEE MARCH 2005	400GCSC		AR	Net 30	US\$26,926.00
Subtotal					US\$26,926.00
Misc					US\$0.00
Tax					US\$0.00
Freight					US\$0.00
Trade Discount					US\$0.00
Payment					US\$0.00
Total Due					US\$26,926.00

Algonquin Water Services LLC

HISTORICAL

Sales Invoices	JC445
Date	4/12/2005

Customer:

Gold Canyon Sewer Company
P.O. Box 3572
Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
GOLD CANYON Description: Job 8200-0200-ACT	400GCSC			Net 30 Amount US\$14,892.00

Subtotal	US\$14,892.00
Misc	US\$0.00
Tax	US\$0.00
Freight	US\$0.00
Trade Discount	US\$0.00
Payment	US\$0.00
Total Due	US\$14,892.00

Sales/Invoices	SALES000000000823
Date	4/12/2005

Customer:

Gold Canyon Sewer Company P.O. Box 3572 Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
Description: OPERATING FEE APRIL 2005	400GCSC		AR	Net 30
				Amount US\$26,926.00
Subtotal				US\$26,926.00
Misc				US\$0.00
Tax				US\$0.00
Freight				US\$0.00
Trade Discount				US\$0.00
Payment				US\$0.00
Total Due				US\$26,926.00

Algonquin Water Services LLC

HISTORICAL

Sales/Invoices	SALES000000000835
Date	5/10/2005

Customer:

Gold Canyon Sewer Company
P.O. Box 3572
Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
Description: OPERATING FEE FOR MAY 2005	400GCSC		AR	Net 30

Amount
US\$26,926.00

Subtotal	US\$26,926.00
Misc	US\$0.00
Tax	US\$0.00
Freight	US\$0.00
Trade Discount	US\$0.00
Payment	US\$0.00
Total Due	US\$26,926.00

Sales Invoices	JC505
Date	5/13/2005

Customer:

Gold Canyon Sewer Company P.O. Box 3572 Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
GOLD CANYON	400GCSC			Net 30
Description: Job 8200-0200-ACT				Amount US\$14,904.00

Subtotal	US\$14,904.00
Misc	US\$0.00
Tax	US\$0.00
Freight	US\$0.00
Trade Discount	US\$0.00
Payment	US\$0.00
Total Due	US\$14,904.00

Sales Invoices	JC558
Date	6/10/2005

Customer:

Gold Canyon Sewer Company P.O. Box 3572 Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Term ID
GOLD GANYON	400GCSC			Net 30
Description: Job 8200-0200-ACT				Amount US\$15,186.00
				Subtotal
				US\$15,186.00
				Misc
				US\$0.00
				Tax
				US\$0.00
				Freight
				US\$0.00
				Trade Discount
				US\$0.00
				Payment
				US\$0.00
				Total Due
				US\$15,186.00

Algonquin Water Services LLC

HISTORICAL

Sales Invoices	SALES000000000847
Date	6/10/2005

Customer:

Gold Canyon Sewer Company
P.O. Box 3572
Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID	Amount
Description: OPERATING FEE FOR JUNE 2005	400GCSC		AR	Net 30	US\$26,926.00
Subtotal					US\$26,926.00
Misc					US\$0.00
Tax					US\$0.00
Freight					US\$0.00
Trade Discoun					US\$0.00
Payment					US\$0.00
Total Due					US\$26,926.00

Sales Invoices	JC630
Date	7/26/2005

Customer:

Gold Canyon Sewer Company P.O. Box 3572 Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
GOLD CANYON	400GCSC			Net 30
Description: Job 8200-0200-ACT				Amount US\$15,267.00

Subtotal	US\$15,267.00
Misc	US\$0.00
Tax	US\$0.00
Freight	US\$0.00
Trade Discount	US\$0.00
Payment	US\$0.00
Total Due	US\$15,267.00

Algonquin Water Services LLC

HISTORICAL

Sales Invoices	SALES000000000859
Date	7/26/2005

Customer:

Gold Canyon Sewer Company
P.O. Box 3572
Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
Description: OPERATING FEE FOR JULY 2005	400GCSC		AR	Net 30
				Amount US\$26,926.00

Subtotal	US\$26,926.00
Misc	US\$0.00
Tax	US\$0.00
Freight	US\$0.00
Trade Discount	US\$0.00
Payment	US\$0.00
Total Due	US\$26,926.00

Algonquin Water Services LLC

HISTORICAL

Sales Invoices	JC706
Date	8/9/2005

Customer:

Gold Canyon Sewer Company
P.O. Box 3572
Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
GOLD CANYON	400GCSC			Net 30
Description: Job 8200-0200-ACT				Amount US\$15,345.00

Subtotal	US\$15,345.00
Misc	US\$0.00
Tax	US\$0.00
Freight	US\$0.00
Trade Discount	US\$0.00
Payment	US\$0.00
Total Due	US\$15,345.00

Algonquin Water Services LLC

HISTORICAL

Sales Invoices	SALES000000000866
Date:	8/9/2005

Customer:

Gold Canyon Sewer Company
P.O. Box 3572
Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID	Amount
Description: OPERATING FEE/AUGUST 2005	400GCSC		AR	Net 30	US\$26,926.00
Subtotal					US\$26,926.00
Misc					US\$0.00
Tax					US\$0.00
Freight					US\$0.00
Trade Discount					US\$0.00
Payment					US\$0.00
Total Due					US\$26,926.00

Algonquin Water Services LLC

HISTORICAL

Sales Invoices	JC759
Date	9/12/2005

Customer:

Gold Canyon Sewer Company
P.O. Box 3572
Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
GOLD GANYON	400GCSC			Net 30
Description: Job 8200-0200-ACT				Amount US\$15,501.00

Subtotal	US\$15,501.00
Misc	US\$0.00
Tax	US\$0.00
Freight	US\$0.00
Trade Discount	US\$0.00
Payment	US\$0.00
Total Due	US\$15,501.00

Algonquin Water Services LLC

HISTORICAL

Sales Invoices	SALES000000000873
Date	9/12/2005

Customer:

Gold Canyon Sewer Company
P.O. Box 3572
Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID	Amount
Description: OPERATING FEE FOR SEPT 2005	400GCSC		AR	Net 30	US\$26,926.00
Subtotal					US\$26,926.00
Misc					US\$0.00
Tax					US\$0.00
Freight					US\$0.00
Trade Discount					US\$0.00
Payment					US\$0.00
Total Due					US\$26,926.00

Algonquin Water Services LLC

HISTORICAL

Sales/Invoices	JC850
Date	10/18/2005

Customer:

Gold Canyon Sewer Company
P.O. Box 3572
Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
GOLD CANYON	400GCSC			Net 30
Description: Job 8200-0200-ACT				Amount US\$15,630.00

Subtotal	US\$15,630.00
Misc	US\$0.00
Tax	US\$0.00
Freight	US\$0.00
Trade Discount	US\$0.00
Payment	US\$0.00
Total Due	US\$15,630.00

Algonquin Water Services LLC

HISTORICAL

Sales/Invoicing	SALES000000000880
Date	10/18/2005

Customer:

Gold Canyon Sewer Company
P.O. Box 3572
Carefree AZ 85377

Purchase Order	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
Description: OPERATING FEE-OCTOBER 2005	400GCSC		AR	Net 30
				Amount US\$26,926.00
Subtotal				US\$26,926.00
Misc				US\$0.00
Tax				US\$0.00
Freight				US\$0.00
Trade Discount				US\$0.00
Payment				US\$0.00
Total Due				US\$26,926.00

**BOURASSA
REBUTTAL
EXHIBIT 4**

Table 2-1

Total Returns, Income Returns, and Capital Appreciation of the Basic Asset Classes
Summary Statistics of Annual Returns

from 1926 to 2005

Series	Geometric Mean	Arithmetic Mean	Standard Deviation	Serial Correlation
Large Company Stocks				
Total Returns	10.4%	12.3%	20.2%	0.03
Income	4.2	4.2	1.5	0.89
Capital Appreciation	5.9	7.8	19.5	0.03
Ibbotson Small Company Stocks				
Total Returns	12.6	17.4	32.9	0.06
Mid-Cap Stocks*				
Total Returns	11.4	14.2	24.7	-0.02
Income	4.1	4.1	1.7	0.89
Capital Appreciation	7.1	9.8	24.1	-0.02
Low-Cap Stocks*				
Total Returns	11.7	15.7	29.5	0.03
Income	3.7	3.7	2.0	0.89
Capital Appreciation	7.9	11.7	28.9	0.03
Micro-Cap Stocks*				
Total Returns	12.7	18.8	39.2	0.08
Income	2.6	2.6	1.8	0.91
Capital Appreciation	10.1	16.1	38.6	0.08
Long-Term Corporate Bonds				
Total Returns	5.9	6.2	8.5	0.08
Long-Term Government Bonds				
Total Returns	5.5	5.8	9.2	-0.08
Income	5.2	5.2	2.7	0.96
Capital Appreciation	0.1	0.4	8.1	-0.22
Intermediate-Term Government Bonds				
Total Returns	5.3	5.5	5.7	0.15
Income	4.7	4.8	2.9	0.96
Capital Appreciation	0.4	0.5	4.4	-0.19
Treasury Bills				
Total Returns	3.7	3.8	3.1	0.91
Inflation	3.0	3.1	4.3	0.65

Total return is equal to the sum of three component returns; income return, capital appreciation return, and reinvestment return.

*Source: Center for Research in Security Prices, University of Chicago. See Chapter 7 for details on decile construction.

Table 7-3 (continued)

Size-Decile Portfolios of the NYSE/AMEX/NASDAQ
 Largest and Smallest Company by Size Group

from 1966 to 2005

Date (Sept 30)	Capitalization of Largest Company (in thousands)			Capitalization of Smallest Company (in thousands)		
	Mid-Cap 3-5	Low-Cap 6-8	Micro-Cap 9-10	Mid-Cap 3-5	Low-Cap 6-8	Micro-Cap 9-10
1966	\$399,455	\$99,578	\$34,884	\$99,935	\$34,966	\$381
1967	\$459,170	\$117,985	\$42,267	\$118,329	\$42,313	\$381
1968	\$528,326	\$149,261	\$60,351	\$150,128	\$60,397	\$592
1969	\$517,452	\$144,770	\$54,273	\$145,684	\$54,280	\$2,119
1970	\$380,246	\$94,025	\$29,910	\$94,047	\$29,916	\$822
1971	\$542,517	\$145,340	\$45,571	\$145,673	\$45,589	\$865
1972	\$545,211	\$139,647	\$46,728	\$139,710	\$46,757	\$1,031
1973	\$424,584	\$94,809	\$29,601	\$95,378	\$29,606	\$561
1974	\$344,013	\$75,272	\$22,475	\$75,853	\$22,481	\$444
1975	\$465,763	\$96,954	\$28,140	\$97,266	\$28,144	\$540
1976	\$551,071	\$116,184	\$31,987	\$116,212	\$32,002	\$584
1977	\$573,084	\$135,804	\$39,192	\$137,323	\$39,254	\$513
1978	\$572,967	\$159,778	\$46,621	\$160,524	\$46,629	\$830
1979	\$661,336	\$174,480	\$49,088	\$174,517	\$49,172	\$948
1980	\$754,562	\$194,012	\$48,671	\$194,241	\$48,953	\$549
1981	\$954,665	\$259,028	\$71,276	\$261,059	\$71,289	\$1,446
1982	\$762,028	\$205,590	\$54,675	\$206,536	\$54,883	\$1,060
1983	\$1,200,680	\$352,698	\$103,443	\$352,944	\$103,530	\$2,025
1984	\$1,068,972	\$314,650	\$90,419	\$315,214	\$90,659	\$2,093
1985	\$1,432,342	\$367,413	\$93,810	\$368,249	\$94,000	\$760
1986	\$1,857,621	\$444,827	\$109,956	\$445,648	\$109,975	\$706
1987	\$2,059,143	\$467,430	\$112,035	\$468,948	\$112,125	\$1,277
1988	\$1,957,926	\$420,257	\$94,268	\$421,340	\$94,302	\$696
1989	\$2,147,608	\$480,975	\$100,285	\$483,623	\$100,384	\$96
1990	\$2,164,185	\$472,003	\$93,627	\$474,065	\$93,750	\$132
1991	\$2,129,863	\$457,958	\$87,586	\$458,853	\$87,733	\$278
1992	\$2,428,671	\$500,346	\$103,352	\$501,050	\$103,500	\$510
1993	\$2,711,068	\$608,520	\$137,945	\$608,825	\$137,987	\$602
1994	\$2,497,073	\$601,552	\$149,435	\$602,552	\$149,532	\$598
1995	\$2,793,761	\$653,178	\$158,011	\$654,019	\$158,063	\$89
1996	\$3,150,685	\$763,377	\$195,188	\$763,812	\$195,326	\$1,043
1997	\$3,511,132	\$818,299	\$230,472	\$821,028	\$230,554	\$480
1998	\$4,216,707	\$934,264	\$253,329	\$936,727	\$253,336	\$1,671
1999	\$4,251,741	\$875,309	\$218,336	\$875,582	\$218,368	\$1,502
2000	\$4,143,902	\$840,000	\$192,598	\$840,730	\$192,721	\$1,462
2001	\$5,252,083	\$1,114,792	\$269,275	\$1,115,200	\$270,391	\$443
2002	\$5,012,705	\$1,143,845	\$314,042	\$1,144,452	\$314,174	\$501
2003	\$4,794,027	\$1,166,799	\$330,608	\$1,167,040	\$330,797	\$332
2004	\$6,241,953	\$1,607,854	\$505,437	\$1,607,931	\$506,410	\$1,393
2005	\$7,187,244	\$1,728,888	\$586,393	\$1,729,364	\$587,243	\$1,079

Source: Center for Research in Security Prices, University of Chicago.

Table 7-3

Size-Decile Portfolios of the NYSE/AMEX/NASDAQ
Largest and Smallest Company by Size Group

from 1926 to 1965

Date (Sept 30)	Capitalization of Largest Company (in thousands)			Capitalization of Smallest Company (in thousands)		
	Mid-Cap 3-5	Low-Cap 6-8	Micro-Cap 9-10	Mid-Cap 3-5	Low-Cap 6-8	Micro-Cap 9-10
1926	\$61,490	\$14,040	\$4,305	\$14,100	\$4,325	\$43
1927	\$65,281	\$14,746	\$4,450	\$15,311	\$4,496	\$72
1928	\$81,998	\$18,975	\$5,074	\$19,050	\$5,119	\$135
1929	\$107,085	\$24,328	\$5,875	\$24,480	\$5,915	\$126
1930	\$67,808	\$13,050	\$3,219	\$13,068	\$3,264	\$30
1931	\$42,807	\$8,142	\$1,905	\$8,222	\$1,927	\$15
1932	\$12,431	\$2,170	\$473	\$2,196	\$477	\$19
1933	\$40,298	\$7,210	\$1,830	\$7,280	\$1,875	\$100
1934	\$38,129	\$6,669	\$1,669	\$6,734	\$1,673	\$68
1935	\$37,631	\$6,519	\$1,350	\$6,549	\$1,383	\$38
1936	\$46,920	\$11,505	\$2,660	\$11,526	\$2,668	\$98
1937	\$51,750	\$13,601	\$3,500	\$13,635	\$3,539	\$68
1938	\$36,102	\$8,325	\$2,125	\$8,372	\$2,145	\$60
1939	\$35,784	\$7,367	\$1,697	\$7,389	\$1,800	\$75
1940	\$31,050	\$7,990	\$1,861	\$8,007	\$1,872	\$51
1941	\$31,744	\$8,316	\$2,086	\$8,336	\$2,087	\$72
1942	\$26,135	\$6,870	\$1,779	\$6,875	\$1,788	\$82
1943	\$43,218	\$11,475	\$3,847	\$11,480	\$3,903	\$395
1944	\$46,621	\$13,066	\$4,800	\$13,068	\$4,812	\$309
1945	\$55,268	\$17,325	\$6,413	\$17,575	\$6,428	\$225
1946	\$79,158	\$24,192	\$10,013	\$24,199	\$10,051	\$829
1947	\$57,830	\$17,735	\$6,373	\$17,872	\$6,380	\$747
1948	\$67,238	\$19,575	\$7,313	\$19,651	\$7,329	\$784
1949	\$55,506	\$14,549	\$5,037	\$14,577	\$5,108	\$379
1950	\$65,881	\$18,675	\$6,176	\$18,750	\$6,201	\$303
1951	\$82,517	\$22,750	\$7,587	\$22,860	\$7,598	\$668
1952	\$97,936	\$25,452	\$8,428	\$25,532	\$8,480	\$480
1953	\$98,595	\$25,374	\$8,156	\$25,395	\$8,168	\$459
1954	\$125,834	\$29,645	\$8,484	\$29,707	\$8,488	\$463
1955	\$170,829	\$41,445	\$12,353	\$41,681	\$12,366	\$553
1956	\$183,434	\$46,805	\$13,481	\$46,886	\$13,524	\$1,122
1957	\$192,861	\$47,658	\$13,844	\$48,509	\$13,848	\$925
1958	\$195,083	\$46,774	\$13,789	\$46,871	\$13,816	\$550
1959	\$253,644	\$64,221	\$19,500	\$64,372	\$19,548	\$1,804
1960	\$246,202	\$61,485	\$19,344	\$61,529	\$19,385	\$931
1961	\$296,261	\$79,058	\$23,562	\$79,422	\$23,613	\$2,455
1962	\$250,433	\$58,866	\$18,952	\$59,143	\$18,968	\$1,018
1963	\$308,438	\$71,846	\$23,819	\$71,971	\$23,822	\$296
1964	\$344,033	\$79,343	\$25,594	\$79,508	\$25,595	\$223
1965	\$363,759	\$84,479	\$28,365	\$84,600	\$28,375	\$250

Source: Center for Research in Security Prices, University of Chicago.

**BOURASSA
REBUTTAL
EXHIBIT 5**

Gold Canyon Sewer Company
 Discounted Cash Flow Analysis (Water)
 Market Price

Line No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
		2006 Div	5 Year Historical Average Div. Growth	Recent Price	5 Year Historical Average Price Growth	Year 5 Price	Recent Price	Year 1 Div	Year 2 Div	Year 3 Div	Year 4 Div	Year 5 Div + Price	Implied ROE = Internal Rate of Return (Cols 7-12)
1.	American States	\$ 0.92	1.06%	\$ 38.20	7.30%	\$ 54.34	\$ (39.20)	\$ 0.92	\$ 0.93	\$ 0.94	\$ 0.95	\$ 61.94	11.9%
2.	Aqua America	0.46	6.18%	21.97	16.33%	46.81	(21.97)	0.46	0.49	0.52	0.55	51.76	20.1%
3.	California Water	1.16	0.92%	37.14	10.42%	60.96	(37.14)	1.16	1.23	1.31	1.39	74.84	17.3%
4.	Connecticut Water	0.87	1.27%	22.88	5.38%	29.75	(22.88)	0.87	0.92	0.98	1.04	41.21	15.3%
5.	Middlesex	0.69	2.18%	18.09	4.31%	22.34	(18.09)	0.69	0.73	0.78	0.83	32.25	15.1%
6.	SJW Corp.	0.59	3.95%	26.47	7.17%	37.42	(26.47)	0.59	0.63	0.67	0.71	46.60	13.6%
13													
14	GROUP AVERAGE												15.6%
15	GROUP MEDIAN												15.2%

Sources:
 Value Line Investment Survey Dated April 28, 2006
 Zacks Investment Research April 25, 2006
 Yahoo Finance

Gold Canyon Sewer Company
 Historical Compound Annual Total Market Returns

<u>Company</u>	3 Yr.** <u>Return</u>	5 Yr.** <u>Return</u>	10 Yr.*** <u>Return</u>
1. American States	17.05%	11.14%	21.33%
2. Aqua America	34.55%	22.63%	28.45%
3. California Water	24.57%	15.70%	16.58%
4. Connecticut Water	5.40%	11.04%	14.91%
5. Middlesex	9.89%	9.01%	15.01%
6. SJW Corp.	26.37%	11.34%	19.86%
Average	19.64%	13.48%	19.36%

* 2003-2005

** 2001-2005

*** 1996-2005

Sources:

Value Line Data
 Yahoo Finance

Gold Canyon Sewer Company
 Historical Compound Annual Capital Appreciation Returns

Company	3 Yr.* Return	5 Yr.** Return	10 Yr.*** Return
1. American States	13.90%	8.19%	13.25%
2. Aqua America	32.99%	21.12%	27.11%
3. California Water	21.10%	12.54%	13.65%
4. Connecticut Water	2.09%	7.61%	11.68%
5. Middlesex	6.11%	5.32%	11.55%
6. SJW Corp.	23.91%	9.11%	17.76%
Average	16.68%	10.65%	15.83%

* 2003-2005
 ** 2001-2005
 *** 1996-2005

Sources:
 Value Line Data
 Yahoo Finance

Gold Canyon Sewer Company
Discounted Cash Flow Analysis (Water)
Constant Growth DCF Model
Using Analyst Estimates of DPS Growth

Exhibit 4
 Rebuttal
 Witness: Bourassa

Line No.	(1)	(2)	(3)	(4)	(5)
	Company	Spot Price (Po)	Next Year's Div (D1)	Dividend Yield	Div. Growth
1.	American States	38.20	0.91	2.38%	1.00%
2.	Aqua America	21.97	0.49	2.23%	10.00%
3.	California Water	37.14	1.16	3.12%	1.00%
4.	Connecticut Water	22.88	0.86	3.76%	Not Available
5.	Middlesex	18.09	0.68	3.76%	Not Available
6.	SJW Corp.	26.47	0.56	2.12%	Not Available
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.	GROUP AVERAGE				
16.	GROUP MEDIAN				
17.					
18.	Current Baa interest rate				
19.					
20.	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Top 10				6.6%
21.	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Bottom 10				4.1%
22.	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Consensus				6.8%
23.					
24.					
25.					
26.	Value Line data reported on April 28, 2006				8.0%
27.	Zacks Investment Research July 18, 2006				6.2%
28.	Yahoo Finance				7.2%
29.	Federal Reserve July 18, 2006				
30.	Blue Chip Financial Forecast June 2006				

Indicated
 Equity Cost
 $k = \text{Div Yld} + G$
 (Cols 1+4)

Sources:

- Value Line data reported on April 28, 2006
- Zacks Investment Research July 18, 2006
- Yahoo Finance
- Federal Reserve July 18, 2006
- Blue Chip Financial Forecast June 2006

Gold Canyon Sewer Company
Discounted Cash Flow Analysis (Water)
Constant Growth DCF Model - Historical
Using 5 Year Historical Dividend Growth

Exhibit 5
 Rebuttal
 Witness: Bourassa

Line No.	(1)	(2)	(3)	(4)	(5)	
	Company	Spot Price (Po)	Next Year's Div (D1)	Dividend Yield	Historical Div. Growth*	Indicated Equity Cost k=Div Yld + G (Cols 1+4)
1.	American States	38.20	0.91	2.38%	0.92%	3.3%
2.	Aqua America	21.97	0.49	2.23%	7.40%	9.6%
3.	California Water	37.14	1.16	3.12%	0.72%	3.8%
4.	Connecticut Water	22.88	0.85	3.72%	1.49%	5.2%
5.	Middlesex	18.09	0.67	3.70%	1.90%	5.6%
6.	SJW Corp.	26.47	0.53	2.00%	5.27%	7.3%
13						
14						
15	GROUP AVERAGE					5.8%
16	GROUP MEDIAN					5.4%
17						
18	Current Baa interest rate					6.8%
19						
20	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Top 10					8.0%
21	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Bottom 10					6.2%
22	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Consensus					7.2%
23						
24	* Indicated Equity Cost Below Cost of Debt					
25						
26	Sources:					
27	Value Line data reported on April 28, 2006					
28	Zacks Investment Research July 18, 2006					
29	Yahoo Finance					
30	Federal Reserve July 18, 2006					
31	Blue Chip Financial Forecast June 2006					
32	*Arithmetic Mean					
33						

Far West Sewer Company
Discounted Cash Flow Analysis (Water)
Constant Growth DCF Model - Historical
Using Staff Historical Dividend Growth

Exhibit 7
 Rebuttal
 Witness: Bourassa

Line No.	(1)	(2)	(3)	(4)	(5)
	Spot Price (Po)	Next Year's Div (D1)	Dividend Yield	10 Yr. Historical Div. Growth	Indicated Equity Cost k=Div Yld + G (Cols 1+4)
1.	American States	42.39	0.92	2.18%	3.2%
2.	Aqua America	23.02	0.44	1.93%	8.1%
3.	California Water	40.06	1.17	2.91%	4.0%
4.	Connecticut Water	25.68	0.89	3.45%	4.7%
5.	Middlesex	19.06	0.70	3.66%	5.8%
6.	SJW Corp.	25.11	0.57	2.28%	6.5%
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.	GROUP AVERAGE				5.4%
16.	GROUP MEDIAN				5.3%
17.					
18.	Current Baa interest rate				6.8%
19.					
20.	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Top 10				8.0%
21.	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Bottom 10				6.2%
22.	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Consensus				7.2%
23.					
24.	* Indicated Equity Cost Below Cost of Debt				
25.					
26.	Sources:				
27.	Staff Workpapers				
28.	Federal Reserve July 18, 2006				
29.	Blue Chip Financial Forecast June 2006				
30.					
31.					

Far West Sewer Company
Discounted Cash Flow Analysis (Water)
Constant Growth DCF Model - Historical
Using Staff Historical Dividend Growth

Exhibit 8
 Rebuttal
 Witness: Bourassa

Line No.	(1)	(2)	(3)	(4)	(5)	
	Spot Price (Po)	Next Year's Div (D1)	Dividend Yield	10 Yr. Historical EPS Growth	Indicated Equity Cost k=Div Yld + G (Cols 1+4)	
1.	American States	42.39	0.92	2.18%	2.59%	4.8%
2.	Aqua America	23.02	0.44	1.93%	9.37%	11.3%
3.	California Water	40.06	1.17	2.91%	-0.87%	2.0%
4.	Connecticut Water	25.68	0.89	3.45%	0.40%	3.8%
5.	Middlesex	19.06	0.70	3.66%	6.62%	10.3%
6.	SJW Corp.	25.11	0.57	2.28%	3.40%	5.7%
13						
14						
15	GROUP AVERAGE					6.3%
16	GROUP MEDIAN					5.2%
17						
18	Current Baa interest rate					6.8%
19						
20	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Top 10					8.0%
21	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Bottom 10					6.2%
22	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Consensus					7.2%
23						
24	* Indicated Equity Cost Below Cost of Debt					
25						
26	Sources:					
27	Staff Workpapers					
28	Federal Reserve July 18, 2006					
29	Blue Chip Financial Forecast June 2006					
30						
31						

**BOURASSA
REBUTTAL
EXHIBIT 6**

However, an estimate of each of the above three variables must be formed. Like all components of the cost of capital, these variables should be measured on a forward-looking basis. Chapters 5 and 6 are devoted to estimating the equity risk premium and beta, respectively. Factors to consider in estimating the riskless rate are covered below.

Risk-Free Rate

The CAPM implicitly assumes the presence of a single riskless asset, that is, an asset perceived by all investors as having no risk. A common choice for the nominal riskless rate is the yield on a U.S. Treasury security. The ability of the U.S. government to create money to fulfill its debt obligations under virtually any scenario makes U.S. Treasury securities practically default-free. While interest rate changes cause government obligations to fluctuate in price, investors face essentially no default risk as to either coupon payment or return of principal.

The horizon of the chosen Treasury security should match the horizon of whatever is being valued. When valuing a business that is being treated as a going concern, the appropriate Treasury yield should be that of a long-term Treasury bond. Note that the horizon is a function of the investment, not the investor. If an investor plans to hold stock in a company for only five years, the yield on a five-year Treasury note would not be appropriate since the company will continue to exist beyond those five years.

In February of 1977 the Treasury began to issue 30-year Treasury securities. Prior to this date, the longest-term Treasury security was 20 years, which was the standard Ibbotson used for its data series. To remain consistent with Ibbotson's historical data series, the *Stocks, Bonds, Bills, and Inflation Yearbook* continued to base the yield for its long-term government bond on one with close to 20 years to maturity. Bonds with at least 20 years to maturity continued to trade and, therefore, a proxy for the yield on 20-year Treasury securities was readily available. In October of 2001 the U.S. Treasury announced that it would no longer issue 30-year Treasury bonds, and the 10-year bond became the longest term Treasury security offered. It would have been a number of years before a lack of data became an issue, and Ibbotson Associates continued to use the 20-year yield for data-consistency purposes. This point is now moot, as the U.S. Treasury is scheduled to resume sales of 30-year Treasury bonds in early 2006. Differences in the yields of the currently available long-term instruments tend to be very small. Therefore, it would be appropriate to use either maturity bond to represent a long-term riskless rate. Table 4-1 shows the current yields for several different horizons.

Table 4-1
Current Yields or Expected Riskless Rates
December 31, 2005

	Yield (Riskless Rate)*
Long-Term (20-year) U.S. Treasury Coupon Bond Yield	4.6%
Long-Term (10-year) U.S. Treasury Coupon Bond Yield	4.4%
Intermediate-Term (5-year) U.S. Treasury Coupon Note Yield	4.3%
Short-term (30-day) U.S. Treasury Bill Yield	4.0%

*Maturities are approximate.

Should the yield on a Treasury bond or a Treasury strip be used to represent the riskless rate? In most cases the yield on a Treasury coupon bond is most appropriate. If the asset being measured spins off cash periodically, the Treasury bond most closely replicates this characteristic. On the other hand, if the asset being measured provides a single payoff at the end of a specified term, the yield on a Treasury Strip would be more appropriate.

The Market Benchmark and Firm Size

Although not restricted to include only the 500 largest companies, the S&P 500 is considered a large company index. The returns of the S&P 500 are capitalization weighted, which means that the weight of each stock in the index, for a given month, is proportionate to its market capitalization (price times number of shares outstanding) at the beginning of that month. The larger companies in the index therefore receive the majority of the weight. The use of the NYSE "Deciles 1-2" series results in an even purer large company index. Yet many valuation professionals are faced with valuing small companies, which historically have had different risk and return characteristics than large companies. If using a large stock index to calculate the equity risk premium, an adjustment is usually needed to account for the different risk and return characteristics of small stocks. This will be discussed further in Chapter 7 on the size premium.

The Risk-Free Asset

The equity risk premium can be calculated for a variety of time horizons when given the choice of risk-free asset to be used in the calculation. The *Stocks, Bonds, Bills, and Inflation Yearbook* provides equity risk premia calculations for short-, intermediate-, and long-term horizons. The short-, intermediate-, and long-horizon equity risk premia are calculated using the income return from a 30-day Treasury bill, a 5-year Treasury bond, and a 20-year Treasury bond, respectively.

Although the equity risk premia of several horizons are available, the long-horizon equity risk premium is preferable for use in most business-valuation settings, even if an investor has a shorter time horizon. Companies are entities that generally have no defined life span; when determining a company's value, it is important to use a long-term discount rate because the life of the company is assumed to be infinite. For this reason, it is appropriate in most cases to use the long-horizon equity risk premium for business valuation.

20-Year versus 30-Year Treasuries

Our methodology for estimating the long-horizon equity risk premium makes use of the income return on a 20-year Treasury bond; however, the Treasury currently does not issue a 20-year bond. The 30-year bond that the Treasury recently began issuing again is theoretically more correct due to the long-term nature of business valuation, yet Ibbotson Associates instead creates a series of returns using bonds on the market with approximately 20 years to maturity. The reason for the use of a 20-year maturity bond is that 30-year Treasury securities have only been issued over the relatively recent past, starting in February of 1977, and were not issued at all through the early 2000s.

The same reason exists for why Ibbotson does not use the 10-year Treasury bond; that is, a long enough history of market data is not available for 10-year bonds. Ibbotson Associates has persisted in using a 20-year bond to keep the basis of the time series consistent.

Income Return

Another point to keep in mind when calculating the equity risk premium is that the income return on the appropriate-horizon Treasury security, rather than the total return, is used in the calculation. The total return is comprised of three return components: the income return, the capital appreciation return, and the reinvestment return. The income return is defined as the portion of the total return

**BOURASSA
REBUTTAL
EXHIBIT 7**

**ARIZONA CORPORATION COMMISSION STAFF'S
RESPONSE TO GOLD CANYON SEWER COMPANY
FIRST SET OF DATA REQUESTS
DOCKET NO. SW-02519A-06-0015
July 5, 2006**

1.19 Using the formula and inputs described on page 29 of Mr. Irvine's direct testimony, provide the current market risk premium on each of the following dates:

- (a) December 22, 2005
- (b) January 24, 2006
- (c) February 24, 2006
- (d) March 24, 2006
- (e) April 24, 2006
- (f) June 23, 2006

Response:

**Response by Steve Irvine, Utilities Division:
Staff's Analysis did not include such calculations.**

Thomas J. Bourassa
Schedules

BOURASSA SCHEDULES

Gold Canyon Sewer Company
 Test Year Ended October 31, 2005
 Computation of Increase in Gross Revenue
 Requirements As Adjusted

Exhibit
 Rebuttal Schedule A-1
 Page 1
 Witness: Bourassa

Line
 No.

1	Fair Value Rate Base			\$	15,743,898	
2						
3	Adjusted Operating Income				233,514	
4						
5	Current Rate of Return				1.48%	
6						
7	Required Operating Income			\$	1,653,109	
8						
9	Required Rate of Return on Fair Value Rate Base				10.50%	
10						
11	Operating Income Deficiency			\$	1,419,596	
12						
13	Gross Revenue Conversion Factor				1.6286	
14						
15	Increase in Gross Revenue Requirement			\$	2,312,003	
16						
17						
18	% Increase				93.14%	
19						
20	Customer	Present	Proposed	Dollar		Percent
21	Classification	Rates	Rates	Increase		Increase
22	(Residential Commercial, Irrigation)					
23						
24	Residential	\$ 2,055,375	\$ 3,970,985	\$ 1,915,610		93.20%
25	Residential (<700 SF) per dwelling	86,535	167,177	80,642		93.19%
26	Residential (Homeowner's Association)	75,732	146,322	70,591		93.21%
27	Commercial	178,185	344,267	166,083		93.21%
28	Effluent Sales	31,699	61,245	29,546		
29				-		0.00%
30	Revenue Annualization	52,745	101,904	49,159		93.20%
31	Subtotal	\$ 2,480,271	\$ 4,791,900	\$ 2,311,630		93.20%
32						
33	Other Wastewater Revenues	44,804	44,804	-		0.00%
34				-		0.00%
35				-		0.00%
36	Total of Water Revenues (a)	\$ 2,525,075	\$ 4,836,704	\$ 2,311,630		91.55%

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SUPPORTING SCHEDULES:

Rebuttal B-1
 Rebuttal C-1
 Rebuttal C-3
 Rebuttal H-1

Gold Canyon Sewer Company
 Test Year Ended October 31, 2005
 Summary of Rate Base

Exhibit
 Rebuttal Schedule B-1
 Page 1
 Witness: Bourassa

Line No.		<u>Original Cost</u> <u>Rate base</u>	<u>Fair Value</u> <u>Rate Base</u>
1			
2	Gross Utility Plant in Service	\$ 21,094,247	\$ 21,094,247
3	Less: Accumulated Depreciation	1,318,581	1,318,581
4			
5	Net Utility Plant in Service	\$ 19,775,666	\$ 19,775,666
6			
7	<u>Less:</u>		
8	Advances in Aid of		
9	Construction	2,064,125	2,064,125
10	Contributions in Aid of		
11	Construction	1,827,557	1,827,557
12	Accumulated Amortization of CIAC	(145,364)	(145,364)
13			
14	Customer Meter Deposits	30,769	30,769
15	Deferred Income Taxes & Credits	254,681	254,681
16	Deferred Assets	-	-
17			
18			
19	<u>Plus:</u>		
20	Unamortized Finance		
21	Charges	-	-
22	Prepays	-	-
23	Deferred Assets	(0)	(0)
24	Allowance for Working Capital	-	-
25			
26			
27	Total Rate Base	\$ 15,743,898	\$ 15,743,898

31 SUPPORTING SCHEDULES:

32 Rebuttal B-2

33 Rebuttal B-5

34

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Gold Canyon Sewer Company
 Test Year Ended October 31, 2005
 Original Cost Rate Base Proforma Adjustments

Exhibit
 Rebuttal Schedule B-2
 Page 1
 Witness: Bourassa

Line No.		Adjusted at End of <u>Test Year</u>	<u>Adjustments</u>	Rebuttal Adjusted at end of <u>Test Year</u>
1	Gross Utility			
2	Plant in Service	\$ 8,464,745	(265,146)	\$ 8,199,599
3				
4	Less:			
5	Accumulated			
6	Depreciation	4,366,379	(289,709)	4,076,670
7				
8				
9	Net Utility Plant			
10	in Service	\$ 4,098,366	\$ 24,563	\$ 4,122,929
11				
12	Less:			
13	Advances in Aid of			
14	Construction	1,315,900	-	1,315,900
15				
16	Contributions in Aid of			
17	Construction (CIAC)	5,346,615	-	5,346,615
18				
19				
20	Accum. Amortization of CIAC	(3,308,578)	-	(3,308,578)
21				
22				
23	Customer Meter Deposits	(3,000)	0	(3,000)
24	Deferred Income Taxes	-	254,681	254,681
25	Investment Tax Credits	-	-	-
26				
27				
28	Plus:			
29	Unamortized Finance			
30	Charges	-	0	-
31	Prepays	9,512	-	9,512
32	Deferred Tax Asset	-	(134,672)	(134,672)
33	Allowance for Working Capital	130,508	-	130,508
34				
35	Total	<u>\$ 887,449</u>	<u>\$ (364,790)</u>	<u>\$ 522,659</u>

41 **SUPPORTING SCHEDULES:**
 42 Rebuttal B-2, pages 2

43
 44
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Gold Canyon Sewer Company
 Test Year Ended October 31, 2005
 Original Cost Rate Base Proforma Adjustments

Line No.	ADJUSTMENT LABEL-->	1	2	3	4	5	Rebuttal Adjusted at end of Test Year
	Adjusted at End of Test Year	Plant Retirements	Deferred Income Tax	Expensed Plant	Accumulated Depreciation	Working Capital	
1	Gross Utility Plant in Service	(272,191)		7,045			\$ 21,094,247
2							
3	Less:						
4	Accumulated Depreciation	1,608,290			(289,709)		1,318,581
5							
6							
7							
8							
9	Net Utility Plant in Service	(272,191)	-	7,045	289,709	-	\$ 19,775,666
10							
11	Less:						
12	Advances in Aid of Construction	2,064,125					2,064,125
13							
14	Contributions in Aid of Construction (CIAC)	1,827,557					1,827,557
15							
16							
17							
18							
19	Accum. Amortization of CIAC	(145,364)					(145,364)
20							
21							
22	Customer Meter Deposits	30,769					30,769
23	Deferred Income Taxes	-	254,681				254,681
24	Investment Tax Credits	-					-
25							
26							
27	Plus:						
28	Unamortized Finance Charges					(134,672)	-
29							-
30							(0)
31	Allowance for Working Capital	134,672					
32							
33							
34							
35	Total	(272,191)	(254,681)	7,045	289,709	(134,672)	\$ 15,743,898
36							
37							
38							
39							
40							
41							
42							
43							

SUPPORTING SCHEDULES:
 Rebuttal B-2, pages 3-7

Gold Canyon Sewer Company
Test Year Ended October 31, 2005
Original Cost Rate Base Proforma Adjustments
Adjustment 1

Exhibit
Rebuttal Schedule B-2
Page 3
Witness: Bourassa

Line
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<u>Retirement of Water Treatment Equipment - Adjustment to Plant-in-Service and Accumulated Depreciation</u>		
Staff Adjustment #3 (CSB-6) for water treatment equipment (Account 380)	\$	(272,191)
Increase (Decrease) to Plant-in-Service	\$	<u>(272,191)</u>

Gold Canyon Sewer Company
Test Year Ended October 31, 2005
Original Cost Rate Base Proforma Adjustments
Adjustment 2

Exhibit
Rebuttal Schedule B-2
Page 4
Witness: Bourassa

Line

No.

1	<u>Accumulated Deferred Income Tax</u>		
2			
3	Staff Adjustment #6 (CSB-10) Accumulated Deferred Income Tax	\$	254,681
4			
5			
6	Adjustment to Deferred Income Tax	\$	<u>254,681</u>
7			
8			
9			
10			
11			
12			
13			
14			
15			
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17			
18			
19			
20			

Gold Canyon Sewer Company
Test Year Ended October 31, 2005
Original Cost Rate Base Proforma Adjustments
Adjustment 3

Exhibit
Rebuttal Schedule B-2
Page 5
Witness: Bourassa

Line
No.

1	<u>Expensed Plant</u>		
2			
3	Adjustment per RUCO Adj.#5		
4			
5	354 Structure and Improvements	\$	-
6	380 Treatment and Disposal		5,397
7	394 Laboratory Equipment		1,648
8			
9	Total	\$	<u>7,045</u>
10			
11			
12	Increase (Decrease) to Plant-in-Service	\$	<u>7,045</u>
13			
14			
15			
16			
17			
18			
19			
20			

Gold Canyon Sewer Company
Test Year Ended October 31, 2005
Original Cost Rate Base Proforma Adjustments
Adjustment 4

Exhibit
Rebuttal Schedule B-2
Page 6
Witness: Bourassa

Line
No.

1	<u>Accumulated Depreciation</u>	
2		
3		
4	Accumulated Depreciation per Rebuttal Filing	\$ 1,318,581
5	Adjusted Accumulated Depreciation per Direct Filing	<u>1,608,290</u>
6		
7	Difference	\$ (289,709)
8		
9		
10	Increase (Decrease) to Accumulated Dpreciation	<u>\$ (289,709)</u>
11		
12		
13	<u>SUPPORTING SCHEDULES</u>	
14	Rebuttal B-2, page 6a-6q	
15		
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Account No.	Description	Deprec. Rate Thru Nov-01	Deprec. Rate After Nov-01	Staff Plant At 3/31/2000	Allocated Staff Mar-00 Accum. Depr. (a)	2000 Plant Additions	2000 Plant Adjustments	2000 Adjusted Plant Additions	2000 Plant Retirements	2000 Plant Balance	Apr-Dec 2000 Depr.
351	Organization	0.00%	0.00%	25,000	-	-	-	-	-	25,000	-
352	Franchises	0.00%	0.00%	25,000	-	-	-	-	-	25,000	-
353	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	-	-	-
354	Structures and Improvements	2.50%	2.50%	-	-	-	-	-	-	-	-
355	Power Generation Equipment	2.50%	2.50%	-	-	-	-	-	-	-	-
360	Collection Sewers - Force	2.50%	2.50%	-	-	-	-	-	-	-	-
361	Collection Sewers - Gravity	2.50%	2.50%	1,450,256	227,260	-	-	-	-	1,450,256	27,192
362	Special Collecting Structures	2.50%	2.50%	-	-	-	-	-	-	-	-
363	Services to Customers	2.50%	2.50%	-	-	-	-	-	-	-	-
364	Flow Measuring Devices	2.50%	2.50%	-	-	-	-	-	-	-	-
365	Flow Measuring Installations	2.50%	2.50%	-	-	-	-	-	-	-	-
370	Receiving Wells	2.50%	2.50%	-	-	-	-	-	-	-	-
371	Pumping Equipment	2.50%	2.50%	-	-	-	-	-	-	-	-
380	Treatment and Disposal Equipment	2.50%	2.50%	1,674,389	262,383	-	-	-	-	1,674,389	31,395
381	Plant Sewers	2.50%	2.50%	-	-	-	-	-	-	-	-
382	Outfall Sewer Lines	2.50%	2.50%	-	-	-	-	-	-	-	-
389	Other Plant and Misc. Equipment	2.50%	2.50%	-	-	-	-	-	-	-	-
390	Office Furniture and Equipment	2.50%	2.50%	-	-	-	-	-	-	-	-
391	Transportation Equipment	2.50%	2.50%	-	-	-	-	-	-	-	-
393	Tools, Shop and Garage Equipment	2.50%	2.50%	-	-	-	-	-	-	-	-
394	Laboratory Equipment	2.50%	2.50%	-	-	-	-	-	-	-	-
395	Power Operated Equipment	2.50%	2.50%	-	-	-	-	-	-	-	-
398	Other Tangible Plant	2.50%	2.50%	-	-	-	-	-	-	-	-
Plant Held for Future Use											
TOTAL WATER PLANT											
3,174,645											
489,643											
3,174,645											
58,587											

Gold Canyon Sewer Company
Plant Additions and Retirements

Exhibit
 Rebuttal Schedule B-2
 Page 6b
 Witness: Bourassa

Account No.	Description	2001 Plant Additions	2001 Plant Adjustments	2001 Adjusted Additions	2001 Plant Retirements	2001 Plant Balance	2001 Deprec.
351	Organization	-	-	-	-	25,000	-
352	Franchises	-	-	-	-	25,000	-
353	Land and Land Rights	-	-	-	-	-	-
354	Structures and Improvements	-	-	-	-	-	-
355	Power Generation Equipment	-	-	-	-	-	-
360	Collection Sewers - Force	-	-	-	-	1,450,256	36,256
361	Collection Sewers - Gravity	-	-	-	-	-	-
362	Special Collecting Structures	1,025	-	1,025	-	1,025	13
363	Services to Customers	-	-	-	-	-	-
364	Flow Measuring Devices	-	-	-	-	-	-
365	Flow Measuring Installations	-	-	-	-	-	-
370	Receiving Wells	-	-	-	-	-	-
371	Pumping Equipment	1,810	-	1,810	-	1,810	23
380	Treatment and Disposal Equipment	1,194,011	810,000	2,004,011	-	3,678,400	86,910
381	Plant Saws	-	-	-	-	-	-
382	Outfall Sewer Lines	-	-	-	-	-	-
389	Other Plant and Misc. Equipment	37,764	-	37,764	-	37,764	472
390	Office Furniture and Equipment	6,174	-	6,174	-	6,174	77
391	Transportation Equipment	-	-	-	-	-	-
393	Tools, Shop and Garage Equipment	-	-	-	-	-	-
394	Laboratory Equipment	-	-	-	-	-	-
395	Power Operated Equipment	-	-	-	-	-	-
398	Other Tangible Plant	-	-	-	-	-	-
Plant Held for Future Use		-	-	-	-	-	-
TOTAL WATER PLANT		1,240,784	810,000	2,050,784	-	5,225,429	103,751

Gold Canyon Sewer Company
Plant Additions and Retirements

Exhibit
Rebuttal Schedule B-2
Page 6c
Witness: Bourassa

Account No.	Description	2002 Plant Additions	2002 Plant Adjustments	2002 Adjusted Plant Additions	2002 Plant Retirements	2002 Plant Balance	2002 Deprec.
351	Organization	-	-	-	-	25,000	-
352	Franchises	-	-	-	-	25,000	-
353	Land and Land Rights	-	-	-	-	-	-
354	Structures and Improvements	243,447	-	243,447	-	243,447	3,043
355	Power Generation Equipment	-	-	-	-	-	-
360	Collection Sewers - Force	1,683	-	1,683	-	1,683	21
361	Collection Sewers - Gravity	834	-	834	-	1,451,090	36,267
362	Special Collecting Structures	19,067	-	19,067	-	19,067	238
363	Services to Customers	8,358	-	8,358	-	9,383	130
364	Flow Measuring Devices	45	-	45	-	45	1
365	Flow Measuring Installations	59,894	-	59,894	-	59,894	749
370	Receiving Wells	-	-	-	-	-	-
371	Pumping Equipment	6,999	-	6,999	-	8,809	133
380	Treatment and Disposal Equipment	-	-	-	-	3,678,400	91,960
381	Plant Sewers	-	-	-	-	-	-
382	Outfall Sewer Lines	-	-	-	-	-	-
389	Other Plant and Misc. Equipment	507,277	-	507,277	-	545,041	7,285
390	Office Furniture and Equipment	4,600	-	4,600	-	10,774	212
391	Transportation Equipment	-	-	-	-	-	-
393	Tools, Shop and Garage Equipment	-	-	-	-	-	-
394	Laboratory Equipment	7,560	-	7,560	-	7,560	95
395	Power Operated Equipment	-	-	-	-	-	-
398	Other Tangible Plant	-	-	-	-	-	-
Plant Held for Future Use		-	-	-	-	-	-
TOTAL WATER PLANT		859,764	-	859,764	-	6,085,193	140,133

Account No.	Description	2003 Plant Additions	2003 Plant Adjustments	2003 Adjusted Plant Additions	2003 Plant Retirements	2003 Plant Balance	2003 Deprec.
351	Organization	-	-	-	-	25,000	-
352	Franchises	-	-	-	-	25,000	-
353	Land and Land Rights	-	-	-	-	-	-
354	Structures and Improvements	111,404	-	111,404	-	354,851	7,479
355	Power Generation Equipment	-	-	-	-	-	-
360	Collection Sewers - Force	36,633	-	36,633	-	38,316	500
361	Collection Sewers - Gravity	840	-	840	-	1,451,930	36,288
362	Special Collecting Structures	-	-	-	-	19,067	477
363	Services to Customers	9,545	-	9,545	-	18,928	354
364	Flow Measuring Devices	3,663	-	3,663	-	3,708	47
365	Flow Measuring Installations	98,864	(3,200)	95,664	-	155,558	2,693
370	Receiving Wells	-	-	-	-	-	-
371	Pumping Equipment	26,785	-	26,785	-	35,594	555
380	Treatment and Disposal Equipment	-	-	-	-	3,678,400	91,960
381	Plant Sewers	-	945	-	945	-	12
382	Outfall Sewer Lines	-	-	-	-	-	-
389	Other Plant and Misc. Equipment	2,767,546	(1,674)	2,765,872	-	3,310,913	48,199
390	Office Furniture and Equipment	-	-	-	-	10,774	269
391	Transportation Equipment	-	-	-	-	-	-
393	Tools, Shop and Garage Equipment	-	-	-	-	-	-
394	Laboratory Equipment	7,236	-	7,236	-	14,796	279
395	Power Operated Equipment	-	-	-	-	-	-
398	Other Tangible Plant	-	-	-	-	-	-
Plant Held for Future Use		-	-	-	-	-	-
TOTAL WATER PLANT		3,062,516	(3,929)	3,058,587	-	9,143,780	189,112

Account No.	Description	2004 Plant Additions	2004 Plant Adjustments	2004 Adjusted Plant Additions	2004 Plant Retirements	2004 Plant Balance	2004 Deprec.
351	Organization	-	-	-	-	25,000	-
352	Franchises	-	-	-	-	25,000	-
353	Land and Land Rights	-	-	-	-	-	-
354	Structures and Improvements	784,571	-	784,571	-	1,139,422	18,678
355	Power Generation Equipment	-	-	-	-	-	-
360	Collection Sewers - Force	34,398	-	34,398	-	72,714	1,388
361	Collection Sewers - Gravity	27,188	-	27,188	-	1,479,118	36,638
362	Special Collecting Structures	-	-	-	-	19,067	477
363	Services to Customers	-	-	-	-	18,928	473
364	Flow Measuring Devices	-	-	-	-	3,708	93
365	Flow Measuring Installations	-	-	-	-	155,558	3,889
370	Receiving Wells	-	-	-	-	-	-
371	Pumping Equipment	17,073	-	17,073	-	52,667	1,103
380	Treatment and Disposal Equipment	-	-	-	-	3,678,400	91,960
381	Plant Sewers	-	-	-	-	945	24
382	Outfall Sewer Lines	-	-	-	-	-	-
389	Other Plant and Misc. Equipment	55,145	-	55,145	-	3,368,058	83,462
390	Office Furniture and Equipment	3,814	-	3,814	-	14,588	317
391	Transportation Equipment	-	-	-	-	-	-
393	Tools, Shop and Garage Equipment	-	-	-	-	-	-
394	Laboratory Equipment	-	-	-	-	14,795	370
395	Power Operated Equipment	-	-	-	-	-	-
398	Other Tangible Plant	-	-	-	-	-	-
Plant Held for Future Use		-	-	-	-	-	-
TOTAL WATER PLANT		922,189	-	922,189	-	10,065,969	238,872

Account No.	Description	10 Months Ended				
		2005 Plant Additions	2005 Plant Adjustments	2005 Adjusted Plant Additions	2005 Plant Retirements	October 31 2005 Plant Balance
351	Organization	-	-	-	-	25,000
352	Franchises	-	-	-	-	25,000
353	Land and Land Rights	-	-	-	-	-
354	Structures and Improvements	3,849,732	-	3,849,732	-	4,989,154
355	Power Generation Equipment	-	-	-	-	-
360	Collection Sewers - Force	6,713	-	6,713	-	79,427
361	Collection Sewers - Gravity	89,952	1,422	91,374	-	1,570,492
362	Special Collecting Structures	-	-	-	-	19,067
363	Services to Customers	2,570	-	2,570	-	21,498
364	Flow Measuring Devices	-	-	-	-	3,708
365	Flow Measuring Installations	4,015	-	4,015	-	159,573
370	Receiving Wells	-	-	-	-	-
371	Pumping Equipment	13,465	-	13,465	-	66,132
380	Treatment and Disposal Equipment	7,260,433	-	7,260,433	(266,794)	10,672,039
381	Plant Sewers	-	-	-	-	945
382	Outfall Sewer Lines	-	-	-	-	-
388	Other Plant and Misc. Equipment	42,034	-	42,034	-	3,408,092
390	Office Furniture and Equipment	22,121	-	22,121	-	36,709
391	Transportation Equipment	-	-	-	-	-
393	Tools, Shop and Garage Equipment	-	-	-	-	-
394	Laboratory Equipment	969	1,648	2,617	-	17,413
395	Power Operated Equipment	-	-	-	-	-
398	Other Tangible Plant	-	-	-	-	-
Plant Held for Future Use		-	-	-	-	-
TOTAL WATER PLANT		11,292,004	3,070	11,295,074	(266,794)	21,094,249
						365,277

Account No.	Description	Year End Accumulated Depreciation by Account					Dec-05 2005	
		Mar-00 2000	Dec-00 2000	Dec-01 2001	Dec-02 2002	Dec-03 2003		Dec-04 2004
351	Organization	-	-	-	-	-	-	-
352	Franchises	-	-	-	-	-	-	-
353	Land and Land Rights	-	-	-	-	-	-	-
354	Structures and Improvements	-	3,043	-	10,522	-	29,200	97,787
355	Power Generation Equipment	-	-	-	-	-	-	-
360	Collection Sewers - Force	-	21	-	521	-	1,909	3,797
361	Collection Sewers - Gravity	227,260	254,453	290,709	326,976	363,264	389,902	437,831
362	Special Collecting Structures	-	-	13	238	715	1,192	1,668
363	Services to Customers	-	-	-	143	497	970	1,470
364	Flow Measuring Devices	-	-	-	1	47	140	233
365	Flow Measuring Installations	-	-	-	749	3,442	7,331	11,262
370	Receiving Wells	-	-	-	-	-	-	-
371	Pumping Equipment	-	-	23	155	710	1,814	3,271
380	Treatment and Disposal Equipment	262,383	293,778	360,687	452,647	544,607	636,567	534,584
381	Plant Sewers	-	-	-	-	12	35	59
382	Outfall Sewer Lines	-	-	-	-	-	-	-
389	Other Plant and Misc. Equipment	-	-	472	7,757	55,957	139,419	224,008
390	Office Furniture and Equipment	-	-	77	289	558	875	1,471
391	Transportation Equipment	-	-	-	-	-	-	-
393	Tools, Shop and Garage Equipment	-	-	-	-	-	-	-
394	Laboratory Equipment	-	-	-	95	374	744	1,141
395	Power Operated Equipment	-	-	-	-	-	-	-
398	Other Tangible Plant	-	-	-	-	-	-	-
Plant Held for Future Use		-	-	-	-	-	-	-
TOTAL WATER PLANT		489,643	548,230	651,981	792,114	981,226	1,220,098	1,318,581

Gold Canyon Sewer Company
Test Year Ended October 31, 2005
Original Cost Rate Base Proforma Adjustments
Adjustment #5

Exhibit
Rebuttal Schedule B-2
Page 7
Witness: Bourassa

Line

No.

1	<u>Working Capital</u>	
2		
3	Staff Adjustment #7 (CSB-11) for Working Capital	\$ (134,672)
4		
5		
6		
7	Increase (Decrease) to Working Capital	<u>\$ (134,672)</u>
8		
9		
10		
11		
12		
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16		
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20		

Gold Canyon Sewer Company
Test Year Ended October 31, 2005
Computation of Working Capital

Exhibit
Rebuttal Schedule B-5
Page 1
Witness: Bourassa

Line
No.

1	Cash Working Capital (1/8 of Allowance		
2	Operation and Maintenance Expense)	\$	103,796
3	Pumping Power (1/24 of Pumping Power)		4,460
4	Purchased Water Treatment (1/24 of Purchased Water)		257
5			
6			
7			
8			
9	Total Working Capital Allowance	<u>\$</u>	<u>108,512</u>
10			
11			
12	Working Capital Requested	<u>\$</u>	<u>-</u>
13			
14			
15	<u>SUPPORTING SCHEDULES:</u>	<u>RECAP SCHEDULES:</u>	
16		Rebuttal B-1	
17			

Gold Canyon Sewer Company
 Test Year Ended October 31, 2005
 Income Statement

Exhibit
 Schedule C-1
 Page 1
 Witness: Bourassa

Line No.		Adjusted Book Results	Adjustments	Rebuttal Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
1	Revenues					
2	Flat Rate Revenues	\$ 2,437,405	\$ -	\$ 2,437,405	\$ 2,312,003	\$ 4,749,408
3	Measured Revenues	-	-	-		-
4	Other Wastewater Revenues	44,804	-	44,804		44,804
5		<u>\$ 2,482,209</u>	<u>\$ -</u>	<u>\$ 2,482,209</u>	<u>\$ 2,312,003</u>	<u>\$ 4,794,212</u>
6	Operating Expenses					
7	Salaries and Wages	\$ -	-	\$ -		\$ -
8	Purchased Wastewater Treatment	6,159	-	6,159		6,159
9	Sludge Removal Expense	44,737	-	44,737		44,737
10	Purchased Power	107,040	-	107,040		107,040
11	Fuel for Power Production	-	-	-		-
12	Chemicals	63,590	-	63,590		63,590
13	Materials and Supplies	13,042	(1,747)	11,295		11,295
14	Contractual Services - Professional	22,068	-	22,068		22,068
15	Contractual Services - Testing	11,655	-	11,655		11,655
16	Contractual Services - Other	599,919	(71,955)	527,964		527,964
17	Rents	-	-	-		-
18	Transportation Expenses	35,925	(22,000)	13,925		13,925
19	Insurance - General Liability	6,293	-	6,293		6,293
20	Regulatory Commission Expense	18,680	-	18,680		18,680
21	Miscellaneous Expense	40,000	-	40,000		40,000
22	Scottsdale Capacity- Lease	75,936	(5,778)	70,158		70,158
23	Depreciation	917,428	(13,472)	903,956		903,956
24	Taxes Other Than Income	-	-	-		-
25	Property Taxes	252,874	1,506	254,380		254,380
26	Income Tax	103,006	43,789	146,795	892,407	1,039,202
27						
28	Total Operating Expenses	<u>\$ 2,318,352</u>	<u>\$ (69,657)</u>	<u>\$ 2,248,695</u>	<u>\$ 892,407</u>	<u>\$ 3,141,102</u>
29	Operating Income	<u>\$ 163,857</u>	<u>\$ 69,657</u>	<u>\$ 233,514</u>	<u>\$ 1,419,596</u>	<u>\$ 1,653,109</u>
30	Other Income (Expense)					
31	Interest Income	-	-	-		-
32	Other income	-	-	-		-
33	Interest Expense	-	-	-		-
34	Other Expense	-	-	-		-
35						
36	Total Other Income (Expense)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
37	Net Profit (Loss)	<u>\$ 163,857</u>	<u>\$ 69,657</u>	<u>\$ 233,514</u>	<u>\$ 1,419,596</u>	<u>\$ 1,653,109</u>

41 SUPPORTING SCHEDULES:
 42 Rebuttal C-1, Page 2
 43 Rebuttal C-2

RECAP SCHEDULES:
Rebuttal A-1

Gold Canyon Sewer Company
 Test Year Ended October 31, 2005
 Income Statement

Exhibit
 Rebuttal Schedule C-1
 Page 2
 Witness: Bourassa

Line No.	ADJUSTMENT LABEL-->	1	2	3	4	5	6	7	8	Rebuttal Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
		Expensed Plant	Materials and Supplies	Non-recurring Expenses	Unnecessary Expenses	ACC Assessment	Property Taxes	Depreciation Expense	Income Tax			
7	Revenues											
2	Flat Rate Revenues	\$ 2,437,405								\$ 2,437,405	\$ 2,312,003	\$ 4,749,408
3	Measured Revenues											
4	Other Wastewater Revenues											
5		\$ 44,804								\$ 44,804		\$ 44,804
6	Operating Expenses											
7	Salaries and Wages											
8	Purchased Wastewater Treatment	6,159								6,159		6,159
9	Sludge Removal Expense	44,737								44,737		44,737
10	Purchased Power	107,040								107,040		107,040
11	Fuel for Power Production											
12	Chemicals											
13	Materials and Supplies	63,590								63,590		63,590
14	Contractual Services - Professional	13,042	(99)							11,295		11,295
15	Contractual Services - Testing	22,068								22,068		22,068
16	Contractual Services - Other	11,655								11,655		11,655
17	Repairs and Maintenance	599,919		(65,727)						527,964		527,964
18	Rents											
19	Transportation Expenses	35,925		(22,000)						13,925		13,925
20	Insurance	6,293								6,293		6,293
21	Regulatory Commission Expense - Rate Case	18,680								18,680		18,680
22	Miscellaneous Expense	40,000								40,000		40,000
23	Depreciation Expense	75,936		(238)	(503)	(5,036)		(13,472)		70,158		70,158
24	Taxes Other Than Income	917,428								903,956		903,956
25	Property Taxes						1,506			254,380	892,407	1,039,202
26	Income Tax	252,874							43,789	146,795		
27		103,006										
28	Total Operating Expenses	\$ 2,318,352	\$ (7,045)	\$ (87,966)	\$ (1,334)	\$ (5,036)	\$ 1,506	\$ (13,472)	\$ (43,789)	\$ 2,248,595	\$ 892,407	\$ 3,141,102
29	Operating Income	\$ 163,857	\$ 7,045	\$ 87,966	\$ 1,334	\$ 5,036	\$ (1,506)	\$ 13,472	\$ (43,789)	\$ 233,514	\$ 1,419,596	\$ 1,653,109
30	Other Income (Expense)											
31	Interest Income											
32	Other Income											
33	Interest Expense											
34	Other Expense											
35												
36	Total Other Income (Expense)											
37	Net Profit (Loss)	\$ 163,857	\$ 7,045	\$ 87,966	\$ 1,334	\$ 5,036	\$ (1,506)	\$ 13,472	\$ (43,789)	\$ 233,514	\$ 1,419,596	\$ 1,653,109

SUPPORTING SCHEDULES:
 Rebuttal C-2

RECAP SCHEDULES:
 Rebuttal A-1

Gold Canyon Sewer Company
Test Year Ended October 31, 2005
Adjustment to Revenues and Expenses
Adjustment Number 1

Exhibit
Rebuttal Schedule C-2
Page 2
Witness: Bourassa

Line
No.

1 Remove Expensed Plant

2

3

4 Materials and Supplies (per RUCO Adj.#5)

Label
(1,648) 1a

5 Contractual Services - Other (per RUCO Adj.#5)

(5,397) 1b

6

7

8 *Total*

\$ (7,045)

9

10

11

12 Adjustment to Revenues/Expenses

\$ (7,045)

13

14

15 SUPPORTING SCHEDULE

16 Rebuttal B-2, Page 5

17

18

19

20

Gold Canyon Sewer Company
Test Year Ended October 31, 2005
Adjustment to Revenues and Expenses
Adjustment Number 2

Exhibit
Rebuttal Schedule C-2
Page 3
Witness: Bourassa

Line

No.

1	<u>Remove Materials and Supplies Expenses</u>		
2			
3			
4	Late Fees (per Staff Adj. # 2 CSB-15)	\$	(60)
5	Duplicate Expense (per Staff Adj. # 2 CSB-15)		(39)
6			
7			
8	Total	\$	<u>(99)</u>
9			
10			
11	Adjustment to Revenues/Expenses	\$	<u>(99)</u>
12			
13			
14			
15			
16			
17			
18			
19			
20			

Gold Canyon Sewer Company
Test Year Ended October 31, 2005
Adjustment to Revenues and Expenses
Adjustment Number 3

Exhibit
Rebuttal Schedule C-2
Page 4
Witness: Bourassa

Line
No.

1	<u>Remove Non-recurring Expenses</u>		
2			
3	Backhoe Rental (per Staff Adj. #3 CSB-16 and RUCO Adj. #12 RLM-12)	\$	(22,000) Rents
4	Effluent hauling (per Staff Adj. #5 CSB-18 and RUCO Adj. #12 RLM-12)		(41,820) Contract Services-Other
5	Catch-up Expense (per Staff Adj. #5 CSB-18)		(10,235) Contract Services-Other
6	CC&N Expenses (per RUCO Adj. #12 RLM-12)		(13,672) Contract Services-Other
7	Moving Equipment (per RUCO Adj. #12 RLM-12)		(239) Misc. Expense
8	Total	\$	<u>(87,966)</u>
9			
10			
11	Adjustment to Revenues/Expenses	\$	<u>(87,966)</u>
12			
13			
14			
15			
16			
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19			
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21			
22			
23			
24			

Gold Canyon Sewer Company
Test Year Ended October 31, 2005
Adjustment to Revenues and Expenses
Adjustment Number 4

Exhibit
Rebuttal Schedule C-2
Page 5
Witness: Bourassa

Line
No.

1	<u>Remove 'Unnecessary' Expenses</u>	
2		
3	Gold Canyon Gold Resort - Fish restocking (per Staff Adj.#9 CSB-22 and RUCO Adj.#10 RLM-10)	\$ (503) Misc. Expense
4	Beverages (per RUCO Adj.#10 RLM-10)	<u>(831) Contract Services - Other</u>
5		
6	Total	<u>\$ (1,334)</u>
7		
8		
9		
10		
11	Adjustment to Revenues/Expenses	<u>\$ (1,334)</u>
12		
13		
14		
15		
16		
17		
18		
19		
20		

Gold Canyon Sewer Company
Test Year Ended October 31, 2005
Adjustment to Revenues and Expenses
Adjustment Number 5

Exhibit
Rebuttal Schedule C-2
Page 6
Witness: Bourassa

Line
No.

1	<u>Remove ACC Assessment</u>		
2			
3	Miscellaneous Expense (per Staff Adj #9 CSB -22)	\$	(5,036)
4			
5			
6			
7			
8			
9			
10			
11	Adjustment to Revenues/Expenses	\$	<u>(5,036)</u>
12			
13			
14			
15			
16			
17			
18			
19			
20			

Test Year Ended October 31, 2005
 Adjustment to Revenues and Expenses
 Adjustment Number 6

Schedule C-2
 Page 7
 Witness: Bourassa

Line No.			
1	<u>Adjust Property Taxes to Reflect Proposed Revenues:</u>		
2			
3	Adjusted Revenues in year ended 12/31/04	\$	2,482,209
4	Adjusted Revenues in year ended 12/31/04		2,482,209
5	Proposed Revenues		<u>4,794,212</u>
6	Average of three year's of revenue	\$	3,252,876
7	Average of three year's of revenue, times 2	\$	6,505,753
8	Add:		
9	Construction Work in Progress at 10%	\$	-
10	Deduct:		
11	Book Value of Transportation Equipment		<u>-</u>
12			
13	Full Cash Value	\$	6,505,753
14	Assessment Ratio		<u>24%</u>
15	Assessed Value		1,561,381
16	Property Tax Rate		16.2920%
17			
18	Property Tax		254,380
19	Tax on Parcels		0
20			
21	Total Property Tax at Proposed Rates	\$	<u>254,380</u>
22	Property Taxes per Direct Filing		<u>252,874</u>
23	Change in Property Taxes	\$	<u><u>1,506</u></u>
24			
25			
26	Adjustment to Revenues and/or Expenses	\$	<u><u>1,506</u></u>
27			
28			

Gold Canyon Sewer Company
 Test Year Ended October 31, 2005
 Adjustments to Revenues and Expenses
 Adjustment Number 7

Exhibit
 Rebuttal Schedule C-2
 Page 8
 Witness: Bourassa

Line No.	Depreciation Expense	Direct Adjusted Original Cost	From B-2 Adj. #1 PTY Plant	From B-2 Adj. #3 Capitalised Expenses	Rebuttal Adjusted Original Cost	Proposed Rates	Depreciation Expense
1							
2							
3							
4							
5		25,000			25,000	0.00%	-
6		25,000			25,000	0.00%	-
7		-			-	0.00%	-
8		4,989,153			4,989,153	3.33%	166,139
9		-			-	5.00%	-
10		79,427			79,427	2.00%	1,589
11		1,570,491			1,570,491	2.00%	31,410
12		19,057			19,057	2.00%	381
13		21,498			21,498	2.00%	430
14		3,708			3,708	10.00%	371
15		159,573			159,573	10.00%	15,957
16		-			-	3.33%	-
17		66,132			66,132	12.50%	8,267
18		10,938,833	(272,191)	5,397	10,672,039	5.00%	533,602
19		945			945	5.00%	47
20		-			-	3.33%	-
21		3,408,092			3,408,092	6.67%	227,320
22		36,709			36,709	6.67%	2,448
23		-			-	20.00%	-
24		-			-	5.00%	-
25		15,765		1,848	17,413	10.00%	1,741
26		-			-	5.00%	-
27		-			-	10.00%	-
28							
29							
30		\$ 21,359,393	\$ (272,191)	\$ 7,045	\$ 21,094,247		\$ 989,702
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
37						4.692%	\$ (65,745)
41							\$ 903,956
43							917,428
44							(13,472)
47							\$ (13,472)
37							\$ 1,827,557
38							\$ (65,745)
41							\$ 903,956
43							917,428
44							(13,472)
47							\$ (13,472)

Less: Amortization of Contributions - Balance End of TY (net) \$ 1,827,557

Total Depreciation Expense

Adjusted Test Year Depreciation Expense Direct Filing

Increase (decrease) in Depreciation Expense

Adjustment to Revenues and/or Expenses

Gold Canyon Sewer Company
 Test Year Ended October 31, 2005
 Adjustment to Revenues and Expenses
 Income Tax Calculation
 Adjustment 8

Exhibit
 Schedule C-2
 Page 9
 Witness: Bourassa

Line No.	Test Year Book Results	Test Year Adjusted Results	Adjusted with Rate Increase
1			
2	Net Income	\$ 241,534	\$ 1,661,130
3	Plus:		
4	Income Taxes	\$ 151,837	\$ 1,044,244
5	Operating Lease	\$ -	\$ -
6	Synchronized Interest with Rate Base	\$ -	\$ -
7	Taxable Income	<u>\$ 393,371</u>	<u>\$ 2,705,374</u>
8			
9			
10			
11	Income Before Taxes	<u>279,926</u>	<u>2,705,374</u>
12	Arizona Income Before Taxes	<u>279,926</u>	<u>2,705,374</u>
13			
14	Less Arizona Income Tax	19,505	188,510
15	Rate 6.97%		
16			
17	Arizona Taxable Income	<u>260,421</u>	<u>2,516,864</u>
18	Arizona Income Taxes	<u>19,505</u>	<u>188,510</u>
19			
20	Federal Income Before Taxes	279,926	2,705,374
21			
22	Less Arizona Income Taxes	<u>19,505</u>	<u>188,510</u>
23			
24	Federal Taxable Income	<u>260,421</u>	<u>2,516,864</u>
25			
26			
27			
28	FEDERAL INCOME TAXES:		
29	15% BRACKET	7,500	7,500
30	25% BRACKET	6,250	6,250
31	34% BRACKET	8,500	8,500
32	39% BRACKET	62,564	91,650
33	34% BRACKET	-	10,527
34			
35	Federal Income Taxes	<u>84,814</u>	<u>124,427</u>
36			
37			
38	Total Income Tax	<u>104,319</u>	<u>1,044,244</u>
39			
40	Overall Tax Rate	<u>37.27%</u>	<u>38.60%</u>
41			
42	Income Tax at Proposed Rates Effective Rate	<u>151,837</u>	
43			
44			
45			

Gold Canyon Sewer Company
 Test Year Ended October 31, 2005
 Computation of Gross Revenue Conversion Factor

Exhibit
 Rebuttal Schedule C-3
 Page 1
 Witness: Bourassa

Line No.	<u>Description</u>	Percentage of Incremental Gross <u>Revenues</u>
1	Federal Income Taxes	31.63%
2		
3	State Income Taxes	6.97%
4		
5	Other Taxes and Expenses	<u>0.00%</u>
6		
7		
8	Total Tax Percentage	38.60%
9		
10	Operating Income % = 100% - Tax Percentage	61.40%
11		
12		
13		
14		
15	<u>1</u> = Gross Revenue Conversion Factor	
16	Operating Income %	1.6286
17		
18	<u>SUPPORTING SCHEDULES:</u>	<u>RECAP SCHEDULES:</u>
19		Rebuttal A-1
20		

Gold Canyon Sewer Company
 Test Year Ended October 31, 2005
 Summary of Cost of Capital

Exhibit
 Rebuttal Schedule D-1
 Page 1
 Witness: Bourassa

Line No.	Item of Capital	End of Test Year			Adjusted End of Test Year				
		Dollar Amount	Percent of Total	(e) Cost Rate	Weighted Cost	Dollar Amount	Percent of Total	(e) Cost Rate	Weighted Cost
1	Long-Term Debt	-	0.00%	0.00%	0.00%	-	0.00%	0.00%	0.00%
2									
3	Stockholder's Equity (1)(2)	14,443,665	100.00%	10.50%	10.50%	14,443,665	100.00%	10.50%	10.50%
4									
5	Totals	14,443,665	100.00%		10.50%	14,443,665	100.00%		10.50%
6									
7	(1) Adjusted for accum. depreciation from Direct B-2			\$ (195,634)					
8	(2) Adjusted for accum. amortization from Direct B-2			\$ 75,381					
9									
10									

SUPPORTING SCHEDULES:

RECAP SCHEDULES:

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Gold Canyon Sewer Company
Selected Characteristics of Water Utilities

Exhibit
Rebuttal Schedule D-4.1
Witness: Bourassa

No.		% Water Revenues	Operating Revenues (millions)	Net Plant (millions)	S&P Bond Rating	Moody's Bond Rating
1	American States	87%	\$ 247.0	\$ 665.5	A-	A2
2	Aqua America	88%	\$ 500.7	\$ 2,007.2	AA-	NR
3	California Water	96%	\$ 325.6	\$ 773.9	NR	A2
4	Connecticut Water	91%	\$ 51.1	\$ 303.1	AA+	NR
5	Middlesex	89%	\$ 76.1	\$ 261.3	A	NR
6	SJW Corp.	97%	\$ 180.5	\$ 377.8	NR	NR
10						
11	Average	91%	\$ 230.2	\$ 731.5		
12						
13	Gold Canyon Sewer Company	0%	\$ 2.5	\$ 19.8		
14						
15						

Source: AUS Utility Reports (July 2006)

Gold Canyon Sewer Company
 Capital Structures of Water Utilities December 2005

Exhibit
 Rebuttal Schedule D-4.2
 Witness: Bourassa

No.		Book Value		Market Value	
		Long-Term Debt	Common Equity	Long-Term Debt	Common Equity
1.	American States	50.4%	49.6%	29.1%	70.9%
2.	Aqua America	52.0%	48.0%	23.8%	76.2%
3.	California Water	48.3%	51.7%	28.5%	71.5%
4.	Connecticut Water	40.6%	59.4%	25.7%	74.3%
5.	Middlesex	56.3%	43.7%	38.0%	62.0%
6.	SJW Corp.	42.6%	57.4%	23.1%	76.9%
10					
11	Average	48.3%	51.7%	28.0%	72.0%
12					
13	Gold Canyon Sewer Company	0.0%	100.0%	N/A	N/A
14					
15					

Sources:
 Zacks Investment Research

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 17
 18
 19
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Gold Canyon Sewer Company
 Comparisons of Past and Future Estimates of Growth

Line No.	Company	<u>Five-year historical compound annual changes</u>					Average Future Growth*
		Price	Book Value	DPS	EPS		
1	American States	8.19%	4.66%	0.91%	1.29%	6.33%	
2	Aqua America	21.12%	10.35%	7.39%	8.60%	10.00%	
3	California Water	12.54%	5.30%	0.72%	2.33%	6.83%	
4	Connecticut Water	7.61%	5.25%	1.48%	-4.19%	4.00%	
5	Middlesex	5.32%	4.26%	1.89%	6.84%		
6	SJW Corp.	9.11%	6.30%	5.27%	14.07%		
7							
8							
9							
10							
11							
12							
13							
14							
15	GROUP AVERAGE	10.65%	6.02%	2.95%	4.82%	6.79%	
16	GROUP MEDIAN	8.65%	5.27%	1.69%	4.59%	6.58%	
17							
18	* See Schedule D-4.7						
19	Sources:						
20	Value Line Data						
21	Yahoo Finance						
22							

Gold Canyon Sewer Company

Exhibit
 Rebuttal Schedule D-4.4
 Page 1
 Witness: Bourassa

Comparisons of Past and Future Estimates of Growth

Line No.	Company	Price	Book Value	DPS	EPS	Average Future Growth*
1	American States	13.25%	4.51%	1.06%	3.42%	6.33%
2	Aqua America	27.11%	9.86%	6.16%	9.37%	10.00%
3	California Water	13.65%	3.60%	0.92%	2.31%	6.83%
4	Connecticut Water	11.68%	4.03%	1.26%	-0.87%	4.00%
5	Middlesex	11.55%	3.93%	2.18%	0.43%	
6	SJW Corp.	17.76%	5.44%	3.94%	2.38%	
	GROUP AVERAGE	15.83%	5.23%	2.59%	2.84%	6.79%
	GROUP MEDIAN	13.45%	4.27%	1.72%	2.35%	6.58%

* See Schedule D-4.7
 Sources:
 Value Line Data
 Yahoo Finance

Gold Canyon Sewer Company
Stock Price Comparison

Exhibit
Rebuttal Schedule D-4.5
Witness: Bourassa

Line No.	Company	Price at 7/18/2005	Spot Price 7/18/2006	Difference Spot Price	Percent Increase
1	American States (AWR)	\$ 30.41	\$ 38.20	7.79	25.62%
2	Aqua America (WTR)	27.06	21.97	(5.09)	-18.81%
3	California Water (CWT)	37.71	37.14	(0.57)	-1.51%
4	Connecticut Water (CTWS)	24.09	22.88	(1.21)	-5.02%
5	Middlesex (MSEX)	17.03	18.09	1.06	6.22%
6	SJW Corp. (SJW)	22.50	26.47	3.97	17.64%
7					
8				\$ 0.99	4.02%
9					

Sources:

Yahoo Finance
Zacks Investment Research

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**Gold Canyon Sewer Company
Analysts Forecasts of Earnings Per Share Growth**

Exhibit
Rebuttal Schedule D-4.6
Witness: Bourassa

Line No.	(1)	(2)	(3)	(4)	EPS GROWTH			Average Growth (G) (Cols 1-3)
					Zacks	S&P	Value Line	
1.	American States	6.00%	5.00%	8.00%	6.33%			
2.	Aqua America	9.00%	10.00%	11.00%	10.00%			
3.	California Water	9.00%	7.00%	4.50%	6.83%			
4.	Connecticut Water	4.00%	4.00%		7.72%			
5.	Middlesex*				4.00%			
6.	SJW Corp.				7.72%			
	GROUP AVERAGE	7.00%	6.50%	7.83%	7.10%			
	GROUP MEDIAN				7.28%			

Sources:

- Value Line Investment Survey Dated April 28, 2006
- Zacks Investment Research Site July 21, 2006
- S&P Earnings Guide July 2006

**Gold Canyon Sewer Company
Estimates of Sustainable Growth**

**Exhibit
Rebuttal Schedule D-4.7
Witness: Bourassa**

Line No.	(1)	(2)	(3)	(4)	(5)
	Retention Ratio	Rate of Return	br Growth	sv Growth	Average Sustainable Growth (Cols 3+4)
1.	0.47	9.00%	4.20%	2.67%	6.87%
2.	0.45	13.00%	5.85%	1.10%	6.95%
3.	0.32	9.00%	2.90%	4.00%	6.90%
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.	0.41	10.33%	4.32%	2.59%	6.91%
16.	0.45	9.00%	4.20%	2.67%	6.90%
17.					
18.					
19.					
20.					
21.					
22.					
23.					

Sources:
Value Line Data Reported April 28, 2006

Exhibit
 Rebuttal Schedule D-4.8
 Witness: Bourassa

Gold Canyon Sewer Company
 Estimates of sv Growth

Line No.	(1)	(2)	(3)	(4)
	Stock Financing Rate	Current Market to Book Ratio	$\frac{v}{y}$	sv Growth
1.	American States	2.43	0.59	2.67%
2.	Aqua America	3.49	0.71	1.10%
3.	California Water	2.32	0.57	4.00%
4.	Connecticut Water			na
5.	Middlesex			na
6.	SJW Corp.			na
	GROUP AVERAGE	2.75	0.62	2.59%
	GROUP MEDIAN	2.43	0.59	2.67%

Sources:
 Value Line data reported April 28, 2006

Line No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

Gold Canyon Sewer Company
Discounted Cash Flow Analysis (Water)
Constant Growth DCF Model
Using Projected EPS Growth

Exhibit
 Rebuttal Schedule D-4.9
 Witness: Bourassa

Line No.	(1)	(2)	(3)	(4)	(5)
	Spot Price (Po)	Next Year's Div (D1)	Dividend Yield	EPS Growth (g)	Indicated Cost of Equity k=Div Yld + g (Cols 3+4)
1.	American States	38.20	0.91	2.38%	8.7%
2.	Aqua America	21.97	0.49	2.23%	12.2%
3.	California Water	37.14	1.16	3.12%	10.0%
4.	Connecticut Water	22.88	0.85	3.72%	11.4%
5.	Middlesex	18.09	0.67	3.70%	7.7%
6.	SJW Corp.	26.47	0.53	2.00%	9.7%
13					
14					
15	GROUP AVERAGE				10.0%
16	GROUP MEDIAN				9.8%
17					
18	(a)	See Schedules D-4.5			
19					
20	Sources:				
21		Value Line Data April 28, 2006			
22		Yahoo Finance			
23					

Gold Canyon Sewer Company
Discounted Cash Flow Analysis (Water)
Constant Growth DCF Model - Sustainable Growth

Exhibit
Rebuttal Schedule D-4.10
Witness: Bourassa

Line No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Company	Spot Price (Po)	Next Year's Div (D1)	Dividend Yield	br	vs Growth (g)	Indicated Cost of Equity
					br	br+sv	k=Div Yld + g
					br	Growth (g)	(Cols.3+6)
1.	American States	38.20	0.91	2.38%	4.20%	6.87%	9.3%
2.	Aqua America	21.97	0.49	2.23%	5.85%	6.95%	9.2%
3.	California Water	37.14	1.16	3.12%	2.90%	6.90%	10.0%
4.	Connecticut Water	22.88	0.85	3.72%		6.91%	10.6%
5.	Middlesex	18.09	0.67	3.70%		6.91%	10.6%
6.	SJW Corp.	26.47	0.53	2.00%		6.91%	8.9%
13							
14							
15	GROUP AVERAGE						9.8%
16	GROUP MEDIAN						9.6%
17							
18	(a) See Schedule D-4.6 and D-4.7						
19							
20	Sources:						
21	Value Line Data April 28, 2006						
22	Yahoo Finance						
23							
24							

Gold Canyon Sewer Company
 Discounted Cash Flow Analysis (Water)
 Two-Stage Growth - Projected

Line No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Spot Price(P ₀)	Next Year's Div (D ₁)	Yield (D ₁ /P ₀)	Near Term (a)	Long Term (GDP)	Average (b)	Indicated Cost of Equity
1.	38.20	0.91	2.38%	6.33%	6.80%	6.49%	8.9%
2.	21.97	0.49	2.23%	10.00%	6.80%	8.94%	11.2%
3.	37.14	1.16	3.12%	6.83%	6.80%	6.82%	9.9%
4.	22.88	0.85	3.72%	7.72%	6.80%	7.42%	11.1%
5.	18.09	0.67	3.70%	4.00%	6.80%	4.92%	8.6%
6.	26.47	0.53	2.00%	7.72%	6.80%	7.42%	9.4%
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							

(a) See Schedule D-4.5
 (b) Near term growth given weighting of .67

Sources:
 Value Line Data April 28, 2006
 Yahoo Finance

GROUP AVERAGE
 GROUP MEDIAN

9.9%
 9.7%

Gold Canyon Sewer Company
 Risk Premium Equity Cost Analysis
 Average Equity Returns of Sample Water Companies

Line No.	Actual Returns on Equity	Annual Average 10 Year Treasury	Risk Premium 10 Year Treasury
1	2005 9.80%	4.34%	5.46%
2	2004 9.00%	4.27%	4.73%
3	2003 8.75%	4.01%	4.74%
4	2002 10.25%	4.61%	5.64%
5	2001 10.05%	5.02%	5.03%
6	2000 9.62%	6.03%	3.59%
7	1999 11.20%	5.65%	5.55%
8	1998 10.62%	5.26%	5.36%
9	1997 11.52%	6.35%	5.17%
10	1996 11.67%	6.44%	5.23%
11	1995 10.93%	6.57%	4.36%

10 Year Average Premium
 5 Year Average Premium

Forecasted Interest Rates for 2007-2008

Projected Returns on Equity
 10 Year Average
 5 Year Average

Sources:

- Value Line data reported April 28, 2006
- Ibbotson Associates S&P Valuation Edition 2006 Yearbook
- Blue Chip Forecast Interest Rates - 10 year Treas. June 2006
- Federal Reserve

Line No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

5.05%
 5.12%
 5.20%
 10.2%
 10.3%

Gold Canyon Sewer Company
 Risk Premium Equity Cost Analysis
 Authorized Equity Returns of Sample Water Companies

Line No.	Authorized Returns on Equity	Average Annual 10 Year Treasury	Risk Premium 10 Year Treasury
1	2005	4.34%	6.13%
2	2004	10.47%	6.13%
3	2003	10.40%	6.47%
4	2002	10.48%	6.01%
5	2001	10.62%	5.84%
6	2000	10.86%	5.09%
7	1999	11.12%	5.47%
8	1998	11.12%	5.80%
9	1997	11.06%	4.83%
10	1996	11.18%	5.14%
11	1995	11.58%	4.94%
12		11.51%	
13			
14	10 Year Average Premium		5.69%
15	5 Year Average Premium		6.12%
16			
17			
18	Consensus Forecast Interest Rates for 2007-2008		5.30%
19			
20	Projected Returns on Equity		
21	10 Year Average		11.0%
22	5 Year Average		11.4%
23			
24			

Sources:
 AUS Utility Reports, issues for December various years
 Ibbotson Associates S&P Valuation Edition 2006 Yearbook
 Blue Chip Forecast Interest Rates - 10 year Treas. June 2006
 Federal Reserve

Test Year Ended October 31, 2005
 Returns on Equity of Nationally Traded Water
 Utilities as Reported in AUS Utility Reports
 July 2006

Line No.	Company	Authorized Rate of Return	Current Rate of Return
1	American States Water Co.	9.9%	11.1%
2	Aqua America	10.1%	11.0%
3	California Water	10.1%	9.5%
4	Connecticut Water Service	12.7%	7.5%
5	Middlesex Water Co.	10.0%	8.9%
6	SJW Corp.	9.9%	12.1%
7			
8			
9	Averages	10.4%	10.0%
10			
11			
12			
13			
14			
15			

Gold Canyon Sewer Company
Revenue Summary

Exhibit
 Rebuttal Schedule H1
 Witness: Bourassa

With Annualized Revenues to Year End Number of Customers
 And Estimated Customer Growth
 Test Year Ended October 31, 2005

Line No.	Customer Classification and/or Meter Size	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Present Sewer Revenues	Percent of Present Sewer Revenues	Proposed Sewer Revenues	Percent of Proposed Sewer Revenues
1	Residential	\$ 2,055,375	\$ 3,970,985	\$ 1,915,610	93.20%	82,87%	82.87%	82,87%	82.87%
2	Residential (<700 SF) per dwelling	86,535	167,177	80,642	93.19%	3.49%	3.49%	3,49%	3.49%
3	Residential (Homeowner's Association)	75,732	146,322	70,591	93.21%	3.05%	3.05%	3,05%	3.05%
4	Commercial	178,185	344,267	166,083	93.21%	7.18%	7.18%	7,18%	7.18%
5	Effluent Sales	31,699	61,245	29,546	93.21%	1.28%	1.28%	1,28%	1.28%
6	Subtotal	\$ 2,427,526	\$ 4,689,997	\$ 2,262,471	93.20%	97.87%	97.87%	97,87%	97.87%
7									
8	<i>Residential customer revenue</i>								
9	<i>annualized to end of year, based on</i>								
10	<i>year end number of customers</i>								
11	Residential	51,345	99,199	47,854	93.20%	2.07%	2.07%	2,07%	2.07%
12	Residential (<700 SF) per dwelling	-	-	-	0.00%	0.00%	0.00%	0,00%	0.00%
13	Residential (Homeowner's Association)	1,400	2,705	1,305	93.21%	0.06%	0.06%	0,06%	0.06%
14	Commercial	-	-	-	0.00%	0.00%	0.00%	0,00%	0.00%
15	Subtotal	\$ 52,745	\$ 101,904	\$ 49,159	93.20%	2.13%	2.13%	2,13%	2.13%
16									
17	Subtotal Revenues from Bill Count	2,480,271	4,791,900	2,311,630	93.20%	200.00%	200.00%	200,00%	200.00%
18	Misc Revenues	44,804	44,804	-	0.00%	0.00%	0.00%	0,00%	0.00%
19	Totals	\$ 2,525,075	\$ 4,836,704	\$ 2,311,630	91.55%	200.00%	200.00%	200,00%	200.00%

Gold Canyon Sewer Company
 Test Year Ended October 31, 2005
 Analysis of Revenue by Detailed Class

Rebuttal Schedule H-2
 Page 1
 Witness: Bourassa

Line No.	Customer Classification	Average Number of Customers at 10/31/2005	Average Effluent	Revenues		Proposed Increase	
				Present Rates	Proposed Rates	Dollar Amount	Percent Amount
1	Residential	5,016	N/A	\$ 35.00	\$ 67.62	\$ 32.62	93.20%
2	Residential (<700 S.F.)	259	N/A	19.09	36.88	17.79	93.19%
3	Residential (Homeowners Association)*	1	N/A	31.82	61.48	29.66	93.21%
4	Commercial	20	N/A	0.18	0.34	0.16	93.21%
5	Effluent	3	2,382,750	0.39	0.76	0.36	93.21%
6							
7	Total	<u>5,299</u>					

* Shown on H5 schedule as number of occupied units billed, but only one customer is billed.

10
11

Gold Canyon Sewer Company
 Present and Proposed Rates
 Test Year Ended October 31, 2005

Exhibit
 Rebuttal Schedule H3
 Page 1
 Witness: Bourassa

Line No.	Customer Classification and Meter Size	Present Rates	Proposed Rates	Percent Change
1				
2				
3				
4				
5	Monthly Charge for:			
6	Residential	\$ 35.00	\$ 67.62	93.2000%
7	Commercial, per gallon per day	0.175	0.338	93.2080%
8	Effluent Sales (per 1,000 gallons)	0.391	0.756	93.2080%
9	Residential charge for dwelling less than 700 SF	19.09	36.88	93.1902%
10	Homeowner's Associations, per dwelling	31.82	61.48	93.2118%
11	Recalimed non-potable water per A.F. (See Effluent Sales per 1,000 gallons)	127.50	246.34	93.2078%

Gold Canyon Sewer Company
 Present and Proposed Rates
 Test Year Ended October 31, 2005

Exhibit
 Rebuttal Schedule H3
 Page 2
 Witness: Bourassa

Line No.	Other Service Charges	Present Rates	Proposed Rates
1	Establishment	\$ 25.00	\$ 25.00
2	Establishment (After Hours)	50.00	50.00
3	Re-Establishment (With-in 12 Months)	(b)	(b)
4	Re-Establishment (After Hours)(b) plus	40.00	40.00
5	Reconnection (Delinquent)	(c)	(c)
6	Reconnection (Delinquent and After Hours)(c) plus	30.00	30.00
7	Min Deposit Requirement (Residential)	(a)	(a)
8	Min Deposit Requirement (Non-Residential)	(a)	(a)
9	Deposit Interest	6.00%	6.00%
10	NSF Check	10.00	10.00
11	Deferred Payment finance charge, Per Month	1.50%	1.50%
12	Late Payment Charge, Per Month	1.50%	1.50%
13			
14	Main Extension Tariff, per Rule	Cost	Cost
15			
16	<u>Hook-Up Fee for New Service</u>		
17	4 Inch service line	\$ 900	\$ 900
18	6 Inch service line	\$ 2,025	\$ 2,025
19	8 Inch service line	\$ 3,600	\$ 3,600
20	larger than 8 Inch service line	\$ 5,625	\$ 5,625
21			

(a) Residential - two times the average bill. Non-residential - two and one-half times the average bill.

(b) Minimum charge times number of full months disconnected.

(c) Actual cost of physical disconnection and reconnection (if same customer) and there shall be no charge if there is no physical work performed.

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE TAX, PER COMMISSION RULE
 ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES.
 COST TO INCLUDE LABOR, MATERIALS AND PARTS, OVERHEADS AND ALL APPLICABLE TAXES.

Gold Canyon Sewer Company
 Representative Rate Schedule
 Test Year Ended October 31, 2005

Line No.					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					

Hook-up Fee to charged Builders, Developers, and or New Homeowner's

All Builders, Developers, and/or New Homeowners are required to pay a Hook-up Fee for connection to the sewer system.

	<u>Present Rates</u>	<u>Proposed Rates</u>
<u>Service Line Size</u>		
4 Inch service line	\$ 900	\$ 900
6 Inch service line	\$ 2,025	\$ 2,025
8 Inch service line	\$ 3,600	\$ 3,600
larger than 8 Inch service line	\$ 5,625	\$ 5,625

Gold Canyon Sewer Company
Bill Comparison
Customer Classification
Residential

Exhibit
Rebuttal Schedule H4
Page 1
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
\$ 35.00	\$ 67.62	\$ 32.62	93.20%

Present Rates:
Monthly Charge: \$ 35.00
Proposed Rates:
Monthly Charge: \$ 67.62

Gold Canyon Sewer Company
 Bill Comparison
 Customer Classification
 Residential (<700 S.F.)
 RV/Mobile Home

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
\$ 19.09	\$ 36.88	\$ 17.79	93.19%

Exhibit
 Rebuttal Schedule H4
 Page 2
 Witness: Bourassa

Present Rates:
 Monthly Charge per Dwelling: \$ 19.09

Proposed Rates:
 Monthly Charge per Dwelling: \$ 36.88

Gold Canyon Sewer Company

Bill Comparison

Customer Classification
Residential Units (Home Owners Association)

	Present	Proposed	Dollar	Percent
Bill	31.82	61.48	Increase \$ 29.66	Increase 93.21%

Exhibit
Rebuttal Schedule H4

Page 3

Witness: Bourassa

Present Rates:
Monthly Charge per Dwelling: \$ 31.82

Proposed Rates:
Monthly Charge per Dwelling: \$ 61.48

Gold Canyon Sewer Company
 Bill Comparison
 Customer Classification
 Commercial

Exhibit
 Rebuttal Schedule H4
 Page 4
 Witness: Bourassa

Average GPD	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	\$ -	\$ -	\$ -	0.00%
50	8.75	16.91	8.16	93.21%
150	26.25	50.72	24.47	93.21%
250	43.75	84.53	40.78	93.21%
350	61.25	118.34	57.09	93.21%
450	78.75	152.15	73.40	93.21%
550	96.25	185.96	89.71	93.21%
650	113.75	219.77	106.02	93.21%
750	131.25	253.59	122.34	93.21%
850	148.75	287.40	138.65	93.21%
950	166.25	321.21	154.96	93.21%
1,050	183.75	355.02	171.27	93.21%
2,050	358.75	693.13	334.38	93.21%
3,050	533.75	1,031.25	497.50	93.21%
4,050	708.75	1,369.36	660.61	93.21%
5,050	883.75	1,707.48	823.73	93.21%
6,050	1,058.75	2,045.59	986.84	93.21%
7,050	1,233.75	2,383.70	1,149.95	93.21%
8,050	1,408.75	2,721.82	1,313.07	93.21%
9,050	1,583.75	3,059.93	1,476.18	93.21%
10,000	1,750.00	3,381.14	1,631.14	93.21%
15,000	2,625.00	5,071.71	2,446.71	93.21%
20,000	3,500.00	6,762.28	3,262.28	93.21%
25,000	4,375.00	8,452.85	4,077.85	93.21%
30,000	5,250.00	10,143.42	4,893.42	93.21%
35,000	6,125.00	11,833.99	5,708.99	93.21%
40,000	7,000.00	13,524.56	6,524.56	93.21%
45,000	7,875.00	15,215.13	7,340.13	93.21%
50,000	8,750.00	16,905.70	8,155.70	93.21%
60,000	10,500.00	20,286.84	9,786.84	93.21%
70,000	12,250.00	23,667.98	11,417.98	93.21%
80,000	14,000.00	27,049.12	13,049.12	93.21%
90,000	15,750.00	30,430.26	14,680.26	93.21%
100,000	17,500.00	33,811.40	16,311.40	93.21%
Average Usage				
2,805	\$ 0.18	\$ 0.34	\$ 0.16	93.21%
Median Usage				
3,070	\$ 0.18	\$ 0.34	\$ 0.16	93.21%

Present Rates:
 Charge Per Gallon per Day \$ 0.1750

Proposed Rates:
 Charge Per Gallon per Day \$ 0.3381

Gold Canyon Sewer Company
 Bill Comparison
 Customer Classification
 Effluent Sales

MidPoint Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
500,000	\$ 195.64	\$ 378.00	\$ 182.35	93.21%
1,000,000	391.28	755.99	365	93.21%
2,000,000	782.57	1,511.98	729	93.21%
3,000,000	1,173.85	2,267.97	1,094	93.21%
4,000,000	1,565.13	3,023.96	1,459	93.21%
5,000,000	1,956.42	3,779.95	1,824	93.21%
6,000,000	2,347.70	4,535.94	2,188	93.21%
7,000,000	2,738.98	5,291.93	2,553	93.21%
8,000,000	3,130.27	6,047.92	2,918	93.21%
9,000,000	3,521.55	6,803.91	3,282	93.21%
10,000,000	3,912.83	7,559.90	3,647	93.21%
11,000,000	4,304.11	8,315.89	4,012	93.21%
12,000,000	4,695.40	9,071.88	4,376	93.21%
13,000,000	5,086.68	9,827.87	4,741	93.21%
14,000,000	5,477.96	10,583.86	5,106	93.21%
15,000,000	5,869.25	11,339.85	5,471	93.21%
16,000,000	6,260.53	12,095.85	5,835	93.21%
17,000,000	6,651.81	12,851.84	6,200	93.21%
18,000,000	7,043.10	13,607.83	6,565	93.21%
19,000,000	7,434.38	14,363.82	6,929	93.21%

Present Rates:

Charge per 1,000 gals \$ 0.391

Proposed Rates:

Charge per 1,000 gals \$ 0.756

Average Usage	2,382,750	\$ 932.33	\$ 1,801.34	\$ 869.01	93.21%
Median Usage	1,500,000	\$ 586.92	\$ 1,133.99	\$ 547.06	93.21%

