

ORIGINAL



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8 **BEFORE THE PUBLIC UTILITIES COMMISSION OF GUAM**

9 IN RE: REQUEST BY THE GUAM
10 WATERWORKS AUTHORITY FOR
11 THE APPROVAL OF ITS SEWER
12 HOOKUP FUND.

DOCKET NUMBER 05-05
13 **PETITION FOR THE APPROVAL OF**
14 **THE GUAM WATERWORKS**
15 **AUTHORITY'S SEWER HOOKUP FUND**

16
17 Comes now, by and through Samuel J. Taylor, Attorney for Petitioner the Guam
18 Waterworks Authority ("GWA"), does hereby file this Petition for the Approval and of GWA's
19 Proposed Sewer Hookup Fund.
20

21 **I. INTRODUCTION**

22 Under paragraph 34 of the Stipulated Order the Guam Waterworks Authority is required
23 to develop a program that institutes a revolving fund for residents who are not currently required
24 to connect to the wastewater collection system. GWA has developed a proposal for such a fund
25 and is hereby submitting it to the Public Utilities Commission for its approval.
26

27 **II. PETITION**

28 Pursuant to 12 G.C.A. § 12015, The Guam Waterworks Authority is hereby submitting its
29 Petition seeking the approval by the Public Utilities Commission relative to the interest rate
30 and charges contained in the Proposed Sewer Hookup Fund Regulations that are attached
31 hereto as Exhibit A.
32

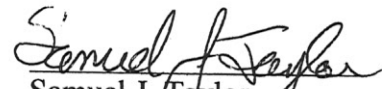
1 GWA believes the proposed terms and conditions are fair to the customer while ensuring that
2 GWA is not financially harmed by a default.

3
4 GWA does not intend to submit any further testimony in support of the program as it
5 believes the terms and conditions are reasonable and the issues are relatively straightforward.
6

7 **III. CONCLUSION**

8 In sum, the Guam Waterworks Authority humbly requests or approval of the proposed
9 Sewer Hookup Development Fund as contained in Exhibit A.
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11 Respectfully Submitted This 13th Day of December, 2005
12

13 
14 Samuel J. Taylor
15 GWA Legal Counsel
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PROPOSED AMENDMENTS TO THE RULES AND REGULATIONS FOR WATER AND SEWER SERVICES FOR THE GUAM WATERWORKS AUTHORITY.

(proposed version current as of 12/13/2005)

SECTION I. GUAM WATERWORKS AUTHORITY WASTEWATER REVOLVING LOAN FUND.

1. Requirement To Qualify For Loans For Service Connections To Public Sewer Lines, Charges Therefore, And Penalties For Non Payment.

This rule allows the Guam Waterworks Authority to loan money for the purpose of installing private service laterals and charging interest for the loan. These loans will be available to an Applicant who currently is not connected to a Guam Waterworks sewer line provided they have been rejected for a conventional loan from at least two commercial banks licensed to do business on Guam. This rule also requires that the Guam Waterworks Authority charge for said loan. The amount for loan charges shall be based on the prime interest rate charged by three Guam banks at the time the loan is entered into. The charges shall be deposited into the "GWA Wastewater Revolving Loan Fund" less GWA administrative costs to administer the loans. The Guam Waterworks Authority shall have full authority to manage the funds deposited into the "Wastewater Revolving Loan Fund." The monies deposited into the account are to be separate and apart from any Government of Guam account and shall be have separate financial records maintained for the fund.

Any person, who pursuant to this rule may be qualified to enter into an revolving credit agreement with Guam Waterworks Authority is required to pay for the cost thereof as provided below. Penalty for failure to repay the loan will result in loss of water service and property may not be transferred until such time as the loan is paid. Any such agreement shall be subject to availability of funds and the sewer lateral must be constructed according to requirements set forth in the Rules and Regulations for Water and Sewer Services ("Service Rules") for the Guam Waterworks Authority.

2. Connection Required Upon Availability Of Public Sewer.

The Guam Waterworks Authority is authorized to install or connect or otherwise cause the installation and connection to the Guam Waterworks Authority sewer system all persons with toilets flushed with water and connected to a cesspool, septic tank or leaching systems when the public sewer is available. All persons or entities required to make connections to Guam Waterworks Authority systems are liable for all installation and connection costs and the repayment of any costs incurred by the Guam Waterworks Authority in making loans for such purpose as provided in this Rule.

Exhibit A

All persons who are required to make a connection to the public sewer system under this Rule shall first cause drawings to be prepared by a registered engineer, obtain the requisite permits pertaining to such connections from the Guam Environmental Protection Agency and the Guam Waterworks Authority prior to applying for this loan program.

3. Loan Application To Be Filed With The Guam Waterworks Authority.

All Applicants qualifying for this loan program shall file an application on the prescribed form with the Guam Waterworks Authority.

4. Connection Procedures.

After the homeowner obtains a permit from the Guam Environmental Protection Agency and the Guam Waterworks Authority, the Guam Waterworks Authority shall issue a permit to make a connection to the public sewer line.

Licensed Contractors may perform work under this rule only after the Guam Waterworks Authority approves connection plans. Guam Waterworks Authority inspectors and employees shall be permitted to enter homeowner's premises for the purposes of inspection, observation and testing pertinent to the sewer installations and connections performed by Guam Waterworks Authority and/or contractors.

5. Revolving Loan Fund.]

(a) There is hereby established a fund to be known as the "GWA Wastewater Revolving Loan Fund," which shall be maintained separate and apart from any other funds of the Government of Guam and independent records shall be maintained in connection therewith.

(b) The GWA Wastewater Revolving Loan Fund may be supplied with monies received from any legal source and shall be only used for lateral connections as defined above until such time as all point sources of waste water discharge are connected to the sewer system at which time the proceeds going into this fund may be deposited to GWA's general fund.

(c) The General Manager of the Guam Waterworks Authority shall yearly render a statement reflecting the financial condition of the GWA Wastewater Revolving Loan Fund to all requiring the statement and it shall be posted on GWA's internet website.

6. Availability of Wastewater Revolving Loan Fund.

This loan is only available to Applicants that own the premises being served and have been refused a loan for a similar purpose by two banks licensed to do business on Guam. Any loan is subject to availability of funds.

7. Installment Contract.

Upon acceptance, an Applicant and the Guam Waterworks Authority shall enter into a contract, which shall provide a loan up to the lowest amount bid by a minimum of three licensed contractors. Funds will be released only to the contractor upon satisfactory inspection by GWA or its agent of the work performed under this rule for the express purpose of providing the Applicant the ability to connect to Guam Waterworks Authority sewer lines. Monthly payments shall commence 30 days after the date of completion of the installation and connection of the service line to the collection system and payment by Guam Waterworks Authority to the contractor.

The contract shall provide at a minimum:

- (a). Monthly installment payments of principle and interest over a period not to exceed ten years for all monies loaned to Applicant.
- (b) Interest shall be based on the prime rate of three Guam banks on the day of the loan agreement is signed.
- (c) Failing to pay the installment for more than (60) days shall constitute default and may require disconnection of water service from whom ever is being provided water service on the property without notice and the remaining balance shall be immediately be due and payable from the Applicant.
- (d) The agreement that the loan shall constitute a lien on the property which shall run with the land and not be subject to discharge by sale, mortgage, judgment or for any other cause and the lien may not be lifted or otherwise be discharged until the full amount due and owing under the agreement is paid.
- (e). The agreement may only be entered into between the true owner(s) of the property with evidence of ownership being provided via a title report from a company acceptable to the Guam Waterworks Authority prepared not more than 24 hours prior to the contract being executed (signed).
- (f) That upon the sale of the property, the Guam Waterworks shall be entitled to receive all unpaid amounts due and owing at the time of the sale from escrow.
- (g) That in the event the property is owned jointly or severally, all named owners must sign.

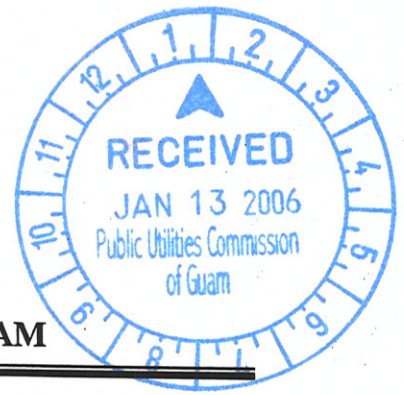
(h). That the interest rate may be increased to 12% per annum upon notice of default given to the Applicant and all other collection costs will be added to the principle.

(i) This agreement may only be assigned or transferred upon the express written consent of the General Manager of the Guam Waterworks Authority.

SECTION II. CHANGES IN THE AGENCY NAME AND RATIFICATION.

1. All references in the current Rules and Regulations for Water and Sewer Services to the "Public Utility Agency of Guam" shall hereafter be changed to read "Guam Waterworks Authority."
2. All rules currently pertaining to the Guam Waterworks Authority are hereby ratified and approved by the Consolidated Commission on Utilities which has plenary authority to create polices on behalf of the Guam Waterworks Authority.

END OF PROPOSED CHANGES



**BEFORE THE
PUBLIC UTILITIES COMMISSION OF GUAM**

GUAM WATERWORKS AUTHORITY)
)
REQUEST FOR INCREASED RATES)
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DOCKET 05-05

GEORGETOWN CONSULTING GROUP, INC., the independent regulatory consultant of the Guam Public Utilities Commission, hereby submits its report in response to the Guam Waterworks Authority's request for increased rates.

DATED this 13th day of January, 2006.

**BLAIR STERLING JOHNSON
MOODY MARTINEZ & LEON GUERRERO
A PROFESSIONAL CORPORATION**

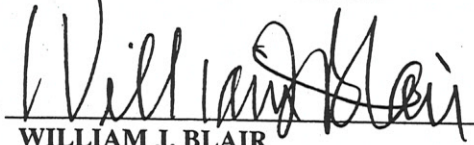
By: 
WILLIAM J. BLAIR
Attorneys for Georgetown Consulting Group, Inc.

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1 I. STATEMENT OF QUALIFICATIONS

2

3

4 Q. WOULD YOU PLEASE STATE YOUR NAME AND ADDRESS?

5

6 A. My name is Jamshed K. Madan and my business address is 716 Danbury Road,
7 Ridgefield, Connecticut.

8

9 Q. BY WHOM ARE YOU EMPLOYED?

10

11 A. I am a principal in the Georgetown Consulting Group, Inc. (GCG), which is a
12 firm specializing in utility regulation.

13

14 Q. WOULD YOU BRIEFLY DESCRIBE YOUR FIRM'S SERVICES?

15

16 A. Georgetown Consulting Group was founded in 1979 and has provided expert
17 representation to various U.S. and international clients with specific concentration
18 in utility regulation. GCG has represented numerous public utility commissions
19 and interveners in several jurisdictions regarding matters involving electric, gas,
20 water, and wastewater and telephone utilities.

21

22 Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?

23

24 A. I graduated from the Massachusetts Institute of Technology (MIT) with a
25 Bachelor of Science Degree in Electrical Engineering. I continued my education
26 at MIT and graduated with an MS degree in Management from the Alfred B.
27 Sloan School of Management.

28

29 Q. HAVE YOU TESTIFIED BEFORE THE GUAM PUBLIC UTILITIES
30 COMMISSION BEFORE?

31

32 A. I have testified and provided other services to this Commission and other
33 regulatory commissions for over thirty years. I have been a witness before the
34 Public Utilities Commission of Guam (PUC) on scores of occasions in matters
35 involving the Guam Power Authority (GPA), Guam Telephone Authority (GTA),
36 Guam Memorial Hospital Authority (GMHA), Guam Municipal Golf d.b.a Guam
37 International Country Club (GICC), Guam Waterworks Authority (GWA) and the
38 Department of Public Works (DPW).

39

40 Q. DID YOU PREPARE THIS TESTIMONY?

41

42 A. Yes I did and was assisted by Edward R. Margerison in matters involving revenue
43 requirements and cost of service. Mr. Margerison has been a member of my firm
44 since 1981. Mr. Margerison has testified before this Commission on several
45 occasions on issues related to regulatory matters.

1 Q. WERE YOU ASSISTED BY ANY OTHER PERSON?

2

3 A. Yes, I was assisted in my testimony by Mr. Larry Gawlik in this proceeding and
4 prior proceedings on matters involving construction, operations and planning.
5 Mr. Gawlik is a former principal of Resource Management International (RMI),
6 and has testified before this Commission in matters involving GPA and GWA.

1 II. OPENING COMMENTS

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Q. PLEASE DESCRIBE GWA'S FILING?

A. GWA's petition for a rate increase was filed on or about December 13, 2005. In its petition, GWA requests an 8% increase in revenues representing an overall revenue increase of \$3.084 million. GWA is requesting that the rate increase be applied across all non-lifeline rates.

The main points of justification for the rate increase presented by GWA are as follows:

- On December 7, 2005, with the approval of the PUC and other appropriate authorities, and under the auspices of Public Law 28-71, GWA successfully sold bonds to institutional investors in the amount of \$101,175,000, and these bonds have long term revenue requirements.
- The bond issue above is the first installment in a series of financings that will be required to fund a significant number of capital improvement projects. The requirements of the Stipulated Order ("SO") and other projects not related to the SO are estimated by GWA to cost \$225 million over the next 5 years and beyond.
- The PUC has agreed in principle to provide sufficient rates to achieve a 1.75 times debt service coverage ratio given prudent operations.
- GWA has made a projection of the Authority's rate requirements for the next 5 years under various scenarios. The scenario that was chosen as the basis on which to file the requested rate increase was a scenario in which GWA capitalized interest for the first two years of bond issuances.¹ GWA claims that at the end of the five years, using its projections of operations and current income, it would be apparent that GWA would need to increase rates between 35-45%. Based on this projection, the CCU authorized GWA to petition the PUC for the first of what GWA expects to be four or five 8% increases. GWA believes that this approach is consistent with the rate stabilization plan that was adopted by the PUC during the October 2004 rate proceeding. At that time, it was estimated that GWA's costs would increase between 20 and 30% over a 3-year period and that GWA's rates should grow gradually to avoid rate shock.

¹ The December 7, 2005 bond issuance did indeed capitalize the first two years of interest.

1 Q. WHAT INFORMATION HAS GWA FILED IN SUPPORT OF ITS FILING?
2

3 A. GWA has relied on the direct testimony of its Chief Financial Officer, Randall
4 Wiegand, together with certain exhibits that respond to the PUC Minimum Filing
5 Requirements. With the limited time provided for GCG to file a complete
6 response to GWA's petition, GWA has been working collaboratively with GCG
7 to provide information requested by GCG in order to prepare its testimony. In
8 addition, GWA has amended information that was original filed with the PUC in
9 this docket. A summary of the key documents provided by GWA are as follows:

- 10
- 11 • Testimony and exhibits of Randall Wiegand.
 - 12 • Final Offering Statement (FOS) of the December 7, 2005,
13 \$101,175,000 Water and Wastewater System Revenue Bonds.
 - 14 • Response to GCG requests for information.
 - 15 • GWA Fiscal Year 2006 Approved Budget.
 - 16 • Five year Revenue Projections, FY 2006 – FY 2010.
 - 17 • QualServe Peer Review Report.
 - 18 • Government Accounts Receivable FY 2002 – FY 2005
 - 19 • Petition for Service Rule Amendments re: Sewer Hookup
- 20

21 Q. WERE CERTAIN LOGIC PROBLEMS DISCOVERED DURING YOUR
22 EXAMINATION OF THE GWA FILING?
23

24 A. Yes. We noted that the five year projection upon which GWA has based its entire
25 case was inconsistent with the Fiscal Year 2006 data that GWA used as a test year
26 in this docket. After this was corrected, we further determined that the five-year
27 projection has flaws in the financial and spreadsheet logic (particularly in the cash
28 flow presentation through 2010). GWA has very recently provided its corrected
29 five-year forecast which has been used as the basis for this testimony.

30
31 Q. HOW DID YOU HANDLE THE LAST MINUTE ADJUSTMENTS MADE BY
32 GWA?
33

34 A. In this report we present GWA's case as filed and we have summarized the
35 original five year projections on our Schedule 1 (four pages). We have accepted
36 the corrections and include these in our projections for Fiscal 2006 through 2010.
37 We incorporate these corrections in GCG's projections as shown on Schedules 2
38 and 3.
39

1 **III. SUMMARY OF CONCLUSION AND RECOMMENDATIONS**

2
3 **Q. WOULD YOU PLEASE SUMMARIZE YOUR CONCLUSIONS AND**
4 **RECOMMENDATIONS?**

5
6 **A.** The following is a summary of our conclusions and recommendations in this
7 proceeding. We also recommend that the reader of this report be cognizant of the
8 recommendations made in our March 2004 and September 2004 testimonies:
9

10 1. There is a significant amount of information in GWA's filing in this
11 proceeding that has been provided with little or no explanation or backup.
12 This is especially critical in this proceeding because we believe that a
13 significant amount of information has been provided that differs from
14 information provided by GWA as the basis of its last rate application in
15 September 2004. Moreover, the filing contains data that also varies from the
16 information provided in the December 7, 2005 Final Offering Statement
17 (FOS) for \$101 million of bonds, which was issued only one week before the
18 rate petition in this proceeding was filed with the PUC. Some examples of
19 key differences in information provided is as follows:

- 20
21 a. GWA's rate petition assumes that the two first bond financing take
22 place in FY 2006 (\$101.2 million @ par) and FY 2008 (\$114.4 million
23 @ par) while the Final Offering Statement indicates that the second of
24 the two financings would be in FY 2007 (\$107.8 million @ par).
25
26 b. Without explanation, the estimate for additional revenues that results
27 from the comprehensive meter replacement² program currently
28 underway decreases from \$1.5 million for FY 2006 in the September
29 2004 filing to \$800,000 for FY 2006 in the current filing. In the
30 September 2004 filing the additional meter revenues were estimated to
31 increase to \$2.7 million in FY 2007 and then level off. In this filing
32 the estimated additional revenues are projected to increase to \$2
33 million in FY 2008 and then level off. No information or explanation
34 was provided to disclose or substantiate this major adjustment.
35
36 c. The Final Offering Statement shows debt service coverage of 3.29 and
37 2.06 for FY 2008 and FY 2009, while the filing shows debt service
38 coverage of 2.57 and 2.91 for FY 2008 and FY 2009.
39
40 d. The Final Offering Statement and the current filing have significant
41 differences for revenue funded CIPs. In FY 2006 (the test year) the
42 FOS shows revenue funded CIPs of \$5 million while the filing shows
43 revenue funded CIPs of \$6.5 million. When the five year projection in

² In both cases made by GWA GM David Craddick.

1 this docket was later corrected by GWA, the internally funded
2 projects for Fiscal 2006 rose to \$7.6 million with no explanation.
3

- 4 2. There is no clear articulation of the appropriate standard for rate relief put
5 forward in this proceeding. As near as we can tell, the FY2006 filing is
6 suggesting a standard that uses projections of five years of operations to arrive
7 at Fiscal Year 2010 at which time full annual debt service for two bond issues
8 are projected to be required. In the interim, revenues resulting from several
9 rate increases (up to five annual 8% rate increases) over this period are
10 required to result in projected debt service coverage of 1.75 times in Fiscal
11 2010, several years hence. There are a lot of assumptions used to estimate
12 2010 that are predicated for the most part on the years 2006 through 2009.
13 There are too many significant uncertainties with regard to revenue and
14 expense estimates for the five year projected period for this to be an
15 appropriate standard. We believe that the data for 2010 (appropriately
16 adjusted for errors) can be used as a guide to examine what the potential level
17 of rate increases could be. However, it would be imprudent in our opinion to
18 determine the level of revenue and expenses for 2010 until we are closer to
19 that time. It is certainly clear that there will be an increased revenue
20 requirement to support two major bond issues (the December 7, 2005 bond
21 issue and the next issue). However, we believe that GWA has failed to
22 establish that the large initial rate increase of 8% proposed in this docket and
23 the four additional estimated annual 8% increases are unwarranted. A four
24 page summary of GWA's projection of revenues, expenses, debt service and
25 cash flow is attached to this report as Schedule 1.
26
- 27 3. GWA has failed to take into account the current balances in its cash accounts.
28 In the two immediate prior proceedings the PUC took into account the amount
29 of cash balances in the determination of the appropriate rate relief. In this
30 proceeding GWA has provided information that shows that there exists \$1.775
31 million of unrestricted cash on September 30, 2005. As the PUC has done in
32 prior proceedings, we recommend that this balance be a starting point in the
33 revenue requirement determination.
34
- 35 4. GWA's filing also ignores the rate stabilization fund that, as of September 30,
36 2005, had approximately \$2 million in a restricted account pursuant to the
37 PUC Order in the last rate case. GWA has not requested use of these funds
38 from the PUC, but rather has ignored its existence. The revenue increase
39 currently being requested by GWA is approximately \$3 million (before error
40 correction). The unreserved cash and rate stabilization fund balance by
41 themselves are more than sufficient to offset the alleged revenue deficiency in
42 Fiscal 2006.
43
- 44 5. While the FOS provides annual detail of the total for construction broken
45 down by revenue funded, grant funded and bond or loan funded, no equivalent

1 detail has been provided by GWA in the current filing. The outflow for
2 construction dollars is a very significant determinant of the revenue
3 requirement, and we, therefore, believe that detail by project with the
4 appropriate backup should be required of GWA before awarding large
5 increases to GWA. GWA should immediately begin to prepare to provide
6 such detail to the PUC on a continuing basis. We recommend that this detail
7 be continually monitored on a semi-annual basis, as this will be a major
8 determinant of future rate requirements. In the current filing, we are also
9 concerned with the very large requirement for revenue funded projects that
10 seems to be supported only by the testimony of the Chief Financial Officer.
11 For the first time the replacement of distribution lines is identified as a major
12 revenue funded project - \$200 million proposed to be expended in 20 years -
13 and is supported by the single sentence, "GWA is planning to initiate a
14 program of replacing \$10 million of distribution lines per year by FY 2009".
15 No other evidentiary support has been provided for this revenue requirement.

- 16
- 17 6. In its initial filing, GWA requested sufficient cash to internally fund \$6.5
18 million of projects in Fiscal 2006. When the five year forecast was corrected,
19 this amount was increased to \$7.6 million rather than reducing the Fiscal 2006
20 rate request to balance the cash. No explanation or evidence was provided as
21 to why any of the fiscal 2006 programs is more important than reserving any
22 excess cash for future rate stabilization, as we will later recommend, or
23 whether GWA can physically manage large internally funded construction
24 programs in addition to the significant SO requirements.
- 25
- 26 7. In the current filing, for FY 2006 there appears a \$3.5 million revenue
27 funding requirement for the replacement of distribution lines for the first time.
28 Distribution lines have extremely long lives. Attachment C to the October 14,
29 2004 PUC Order is a memorandum from Bank of America Securities (BAS),
30 GWA's Financial Advisor, dated October 3, 2004. In that memorandum BAS
31 states, "It is a prudent practice that the term of the financing matches the
32 useful life of the asset financed". We recommend that GWA be required to
33 provide a memorandum from BAS that reviews and provides
34 recommendations of the Financial Advisor of the appropriateness of the
35 detailed plan which shows construction projects, by project, for each of the
36 next five fiscal years and how GWA proposes to finance them. We do not
37 recommend nor do we believe it prudent that the PUC accept the proposition
38 that in this proceeding \$3.5 million of long life distribution lines be financed
39 from current revenues when there is no supporting testimony or other
40 evidence. This item alone is incrementally greater than the entire revenue
41 increase of \$3.1 million being sought in this proceeding.

- 1 8. In the sources and uses of the bonds contained in the FOS, there is an
2 additional \$12.6 million³ for similar replacement of distribution lines in the
3 construction fund. While it is not unusual to fund projects both with internal
4 and external funds, it is not clear that GWA has assessed the appropriate
5 funding sources and has a cohesive plan to start and finish the \$200 million
6 project.
7
- 8 9. GWA provides no support for its estimate of capitalized labor for the five year
9 projection. It is also difficult to understand how GWA projects a constant \$1
10 million of capitalized labor costs when the amount of construction funded
11 from bond proceeds varies the next five fiscal years beginning with the FY
12 2005 estimate: \$3.2 million, \$23 million, \$26.2 million, \$43.5 million, \$26.3
13 million and \$31.5 million. As an initial approximation, we have spread the \$5
14 million cumulative capitalized over the cumulative amount of bond funded
15 projects proportionately. This is approximately 2.2 % of the total construction
16 dollars. There is no assumption concerning capitalized labor for internally
17 funded projects. GWA should be required to provide an operative assumption
18 for capitalized labor for internally funded projects and to provide adequate
19 evidentiary support of the proposed capitalization assumption.
20
- 21 10. GWA has also provided a line item for Allowance For Funds Used During
22 Construction (AFUDC). It appears from the calculations provided that
23 AFUDC does not impact on the debt service coverage calculations. We
24 request that GWA confirm this through its bond counsel.⁴ We also request that
25 GWA verify the method of computation of AFUDC after consultation with
26 their auditors. We further recommend that the PUC initiate an investigation as
27 to whether AFUDC should be recorded at all.
28
- 29 11. There appears to be an error in the water purchases expense for the years FY
30 2007 through FY 2010. The water purchases expense drops by approximately
31 one third, from \$6.3 million to \$4.5 million, to reflect the purchase of Earth
32 Tech wells and increased production from GWA. The water purchases drop
33 from 3,155,575 Kgals in FY 2006 to 932,622 Kgals in FY 2007 – a drop of
34 approximately 70% (representing the potential buyout of the Earth Tech
35 contract and the reduction of Navy purchases by approximately 50%). The
36 expense should also drop correspondingly to approximately \$2.2 million in
37 FY 2008. This is an expense reduction of approximately \$2.5 million. This
38 correction is extremely significant because GWA proposes to set the standard
39 in this proceeding by determining the debt service coverage in 2010 to be a
40 minimum of 1.75. Once corrected this cost reduction would significantly
41 increase the coverage in 2010 and significantly increases the cash available.

³ See attached Schedule 4, line 19.

⁴ It also appears that the method for calculating AFUDC is not correct. We recommend that GWA review the calculations with their auditors.

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12. The level of the internally funded construction program is projected to be at a level far in excess of anything GWA has achieved in the past and in addition to a significant construction program for bond funded SO projects. The near term program has not been justified in this rate filing and, without explanation, has been upwardly adjusted in the recent correction of the five year forecast. In addition, the level of funding for reinvestment in the distribution system is far in excess of what has been typically undertaken by the water industry, and even now as the water industry faces increasingly aging infrastructure. There does not appear to be a cohesive plan to support GWA's proposed internally funded construction program. While we recognize that a Master Plan for the water system is underway and may support a more aggressive reinvestment program in the future, no information from that Master Plan has yet been provided to support the internally funded construction program in the GWA filing.

13. There are various other adjustments in GWA's filing that we recommend should be made and are discussed in more detail in the following section:

- a. The impact of new positions should be computed as being filled over the course of the fiscal year resulting in a decrease of expense as compared to a full annual impact of the positions as has been assumed in the Fiscal 2006 budget. Associated with this adjustment would be a corresponding adjustment for benefits and retirement.
- b. The expense for retiree surcharge has been inappropriately calculated and includes retroactive amounts not contemplated by the PUC. Furthermore, GWA recommends embedding the current surcharge into base rates. GCG opposes this roll-in as the legality of this expense had yet to be determined.
- c. Some adjustment for rental of equipment/transportation is appropriate since the actuals decreased from FY 2004 (\$1.27 million) to FY 2005 (\$1.15 million) and is now projected to increase to \$1.25 million in FY 2006. GWA also expects to purchase high velocity pumper trucks for \$540,000 for which it said it expended \$300,000 in pumper truck rental charges in FY 2005. The purchase of new trucks should reduce rental expense.
- d. Public Affairs/ Advertising expenses also show a significant increase from \$39,000 in FY 2005 to \$230,000 projected for FY 2006. While relatively insignificant in the context of overall revenue requirements this is a large increase to put on ratepayers at this time.

- 1 14. It must be recognized that while the first financing has taken place, the
2 projects to be financed are not complete and ratepayers have not yet enjoyed
3 the benefit of improved service. The data provided by GWA in this
4 proceeding in the FOS indicates that the rates charged by GWA for water and
5 waste water services are already higher than the comparables that have been
6 provided. This is before the proposed projected 40-50% rate increase
7 requested by GWA over the next 5 years. We recommend that the PUC should
8 be cautious in increasing rates and do so only to the extent required to
9 appropriately phase in rates. There continues to be a significant amount of
10 uncertainty surrounding the initial projections made by GWA. We strongly
11 recommend that GWA be encouraged to devote significant additional
12 resources to the development of these projections and to address regulatory
13 requirements. At the current time there are not enough resources devoted for
14 GCG to have sufficient confidence in the GWA projections to support the
15 significant rate increase requested by GWA. At this time we would
16 recommend only a 2% across the board increase over revenues at current
17 rates. We do not recommend compression as there is no immediate need for
18 cash. We await final responses and will prepare sample bills showing the
19 impacts of the rate increase recommendation.
20
- 21 15. The recommended increase is for a period of one-year which will give GWA
22 more time to provide the necessary evidentiary support for its construction
23 program and other matters related to cost of service, revenue requirements and
24 rate design. Subsequent increases will be based upon the quality of
25 information and evidence provided by GWA and an indication of the
26 improved service being provided to its customers.
27
- 28 16. The PUC order to deposit monies into the Rate Stabilization Fund (RSF)
29 should continue at least through FY 2006. As shown on Schedule 2, there will
30 be neither a cash nor a coverage problem in FY 2006. This issue should be
31 revisited on an annual basis when GWA makes additional requests to continue
32 to phase in rate increases. When revenues are put into the RSF, the revenues
33 are not available for debt service coverage in that fiscal year. However, when
34 they are withdrawn to be used for utility purposes, they will count for debt
35 service coverage. Rather than estimating receipts from the increases and
36 allowance for bad debt, as GWA currently does, we recommend a constant
37 \$300,000 per month (\$3.6 million annually) be deposited into this account
38 until the PUC orders otherwise.
39
- 40 17. GWA is proposing to recover costs related to retiree benefits. GWA is
41 proposing to include the liability already recorded on its books through
42 September 30, 2005 (\$1.6 million) plus an additional \$525 thousand dollars
43 that is contained in the budget. We recommend that PUC permit recovery of
44 these costs, but only through a separate surcharge until the legality issue is
45 resolved. We have not quantified the percentage surcharge as we await

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GWA's response to a question posed to it regarding its budget. Until such information is supplied, we cannot provide a billing comparison using our overall recommended rate increase and determining the percentage to be applied to all non-lifeline revenues for this retiree cost.

18. Given the complexity of the information involved in this current case and the difficulty GWA has in compiling such information for an adequate rate filing we recommend that the PUC give serious thought to an expanded process to evaluate future rate applications. In the future we believe that the rate application including supporting data and information should integrate the construction and operating requirements of the Master Plan. In addition, GWA still has to meet the (SO) requirement of filing its Final Financial Plan. The size and timing of the second permanent financing still needs to be determined. The decision to use a Performance Management Contractor is still being discussed by the CCU. Implementation of the System Development Charge is still pending. Recommendations from the Financial Advisor regarding the financing plan should also be obtained and evaluated. We recommend that the evaluation of the next GWA rate application take place over two regulatory sessions.

19. Given the longer term of information required to evaluate the phase in of GWA's rate requests, we recommend the form of amended Minimum Filing Requirements (MFRs) include a five year projection in identical format of the MFRs.

1 IV. DISCUSSION OF EXHIBITS AND REVENUE REQUIREMENTS

2
3 Fiscal 2006 Operating Revenues

4
5 Q. PLEASE DESCRIBE THE ADJUSTMENTS MADE TO GWA'S PROJECTION
6 OF OPERATIONS AND REVENUE REQUIREMENTS.

7
8 A. A summary of the adjustments that we recommend to the GWA filing is shown on
9 Schedule 2, pages 1 and 2. The first column of Schedule 2 is a summary of
10 GWA's projection of Fiscal 2006 and the remaining columns are proposed
11 adjustment that we would recommend the PUC consider.

12
13 Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF GWA'S PROJECTION OF
14 REVENUES FOR FISCAL 2006.

15
16 GWA projects revenues for Fiscal 2006 by annualizing the results of Fiscal 2005
17 through May. In its projection, GWA assumes an approximate increase of 1% for
18 Fiscal 2006. GWA relies upon Fiscal 2005 as long-term historic data is not
19 available. While not specifically addressed in testimony, GWA is forecasting
20 recovery of the supplemental insurance for retirees through base rates (as opposed
21 to the current surcharge). GWA has stated that these costs are contained within
22 the Fiscal 2006 budget.

23
24 GWA is proposing an 8% across the board increase. GWA is requesting
25 increased water and wastewater rates, with the exception of lifeline. In order to
26 derive sufficient revenues to result in the 8% revenue increase (without impacting
27 the lifeline rates), GWA has proposed increases in all non-lifeline base rates of
28 9.5%. In other words, with the exception of residential customers the requested
29 increase is actually 9.5%⁵ for all other customers.

30
31 The ALJ has ruled that due to the tardy filing, GWA rate design is not going to be
32 addressed at this time. However these significant rate increases proposed, if
33 enacted, will only result in potential further rate class imbalances between
34 customer costs incurred and revenues received. The following tables show the
35 impact of GWA's request on typical customers with ¾ inch connections:

⁵ See Minimum Filing requirements, J1 (water) and J2 (wastewater).

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**Residential Customer
Bill Comparison**

			<u>Current Rate</u>	<u>Current Bill</u>	<u>Proposed Rate</u>	<u>Proposed Bill</u>	
Water Service Charge/mo.				\$ 7.20		\$ 7.88	
First 5000 GAL per month	5000	X	2.40	12.00	2.40	12.00	
Over 5000 GAL per month	3400	X	3.43	11.66	3.85	13.09	
Sewer Service Charge				22.00		22.00	
GPA/Navy Surcharge	9.51%			1.74	9.20%	1.93	
Legislative Surcharge	2.59%			0.49			
TOTAL BILL				\$ 55.09		\$ 56.90	3.29%

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**Commercial Customer
Bill Comparison**

			<u>Current Rate</u>	<u>Current Bill</u>	<u>Proposed Rate</u>	<u>Proposed Bill</u>	
Water Service Charge/mo.				\$ 7.20		\$ 7.88	
28000 GAL per month	28000	X	4.27	119.56	4.79	134.12	
Sewer Service Charge	22400	X	2.19	49.056	2.48	55.552	
GPA/Navy Surcharge	9.51%			16.72	9.20%	18.17	
Legislative Surcharge	2.59%			4.55			
TOTAL BILL				\$ 189.89		\$ 207.85	9.46%

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GWA is also proposing to recover insurance benefit and other retiree costs related to the cost of living adjustment (COLA) that was enacted by the Legislature. The PUC in the past has requested that GWA oppose such payment. GWA was permitted to temporarily recover the insurance portion retirement benefits through a surcharge. GWA is now proposing to recover other retiree costs related to the cost of living adjustment (COLA) and other supplemental benefits. GWA is now proposing to recover the additional benefits through a charge (as opposed to a surcharge) equal to a 2.47% increase in base rates other than lifeline. While

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requesting this base rate increase, GWA also shows the revenues as a separate revenue line item of \$800 thousand as shown on Schedule 3, line 10.

Although the filing is very silent on justification for recovery of future payments of the additional costs, GWA is proposing to recover its total liability for COLA as of September 30, 2005 as shown in the table below for which it believes it has not been compensated:

	FY	Amount	
1	FY 2002	905,848.00	
2	FY 2003	83,714.00	
3	FY 2004	246,856.00	
4	FY 2005	366,415.76	
5	Total	1,602,833.76	
6	Amortization		5 Years
7	Line 5/Line 6	320,566.75	
8	FY 06 Budget ⁶	525,000.00	
9	Line 7 + Line 8	845,566.75	
10	Rounded	\$ 800,000.00	Amount rolled into base rates

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We inquired whether the budget for Fiscal 06 included both the insurance benefits for retirees as well as the COLA, GWA has not responded. There is a total of \$775 thousand in the Fiscal budget as an expense for "retiree benefits." Since there are legal issues regarding this expense we would recommend that the surcharge continue (as opposed to rolling this into base rates). Quantification of the surcharge awaits final conclusions and response to discovery.

GWA has also included an allowance for an increase in net revenues of \$800 thousand related to the implementation of the meter replacement program that started in October 2005. In the last rate proceeding, GWA estimated that the net revenues from this program would result in increased net revenues of \$1.5 million in Fiscal 2006 and \$2.7 million in each year thereafter. In this filing, GWA has significantly revised downward its estimates and now projects that the net revenue increase resulting from the meter replacement program for Fiscal 2007 will be \$1 million rising only to \$2 million in subsequent years. There is no support for any of these revised estimates although we have requested analytic support.

Included in Fiscal 2006 revenues is GWA estimate that its proposed rate changes will be approved and will result in an additional \$3.084 million on an annual

⁶ We have been told that the \$775,000 of "Retiree Benefits" in the FY06 budget relates only to the insurance benefit and not COLA. In the limited time available we have been unable to verify.

1 basis. The amount appears to be a proposed interim step increase without
2 requisite evidentiary support for the timing and the percentage requested for this
3 year.
4

5 Q. WHAT ADJUSTMENTS DO YOU PROPOSE FOR THE PROJECTION OF
6 FISCAL 2006 REVENUES?
7

8 A. We have accepted GWA's projection of revenues at current rates. The only
9 adjustment that we have made is to increase the revenues for the meter installation
10 program to the level originally proposed by GWA in the last rate case. In
11 addition, we have proposed an increase of only 2% as an interim increase. This
12 increase is based upon further assumptions in expense and cash flow as will be
13 described below. We would point out that the implementation of the delayed
14 System Development Charge could add to revenues when implemented.
15

16 Projected Five Year Revenues

17

18 Q. IN ADDITION TO SEVERAL RATE INCREASES AND ADDITIONAL
19 REVENUES FROM THE METER PROGRAM, WHAT DID GWA ASSUME
20 REGARDING REVENUE GROWTH?
21

22 A. GWA assumes a very modest 1% growth in base revenues for each year after
23 2006. It calculates this increase by increasing the base revenues for water and
24 wastewater at current rates, but does not apply this growth to the annual increases
25 that it forecasts.
26

27 Q. WHAT DO YOU ASSUME IN YOUR PROJECTION OF GROWTH IN BASE
28 REVENUES?
29

30 A. While we believe that the 1% growth assumption is conservative, especially with
31 the proposed direct military and supporting expansion anticipated over the next
32 five years, we have accepted this increase for the purposes of this report. We
33 anticipate that the master plan will contain a more statistical basis for revenue
34 growth. In addition to accepting the percentage base revenue growth assumptions
35 we have applied this increase to the cumulative rate increases.
36

37 Q. WHAT ARE THE PROJECTED INCREASES THAT YOU SHOW USING
38 YOUR ASSUMPTIONS?
39

40 A. For reasons stated herein, the projected increases that would result in sufficient
41 cash for projects as well as to meet the coverage requirement of 1.75x in 2010 are
42 much smaller than GWA has projected. The following table shows the rate
43 increase forecasts:

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Table 1
Cumulative Increases

	FY 06	FY 07	FY 08	FY 09	FY 10
GWA	8%	16%	24%	33%	50%
GCG	2%	6%	10%	14%	18%

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6

Operating Expenses

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Q. HOW DOES GWA PROJECT OPERATING EXPENSES FOR THE FIVE YEAR PROJECTIONS?

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11

A. GWA starts with the assumption that it will expend its entire Fiscal 2006 budget for the twelve months ending September 30, 2006. As described in the testimony on Mr. Wiegand, this budget for Fiscal 2006 is significantly higher than the level of expense that GWA has experienced for years. Much of this increase is labor-related due in part to new positions that GWA has created in order to comply with the Stipulated Order. In addition, GWA is including increments for its employees for the first time in several years. Not only is labor increasing, but other operating income items are also increasing. The following table compares prior years' expenses with the fiscal 2006 budget:

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Table 2
Operating Expense Growth⁷

	FY2004	FY2005	FY2006 ⁸
Water Purchases	\$ 5,127,204	\$ 6,297,774	\$ 6,424,587
Power Purchases – GPA	8,688,115	8,745,015	10,000,000
Salaries and Wages	12,918,917	12,485,205	15,091,058
Administrative & General	4,560,287	4,020,445	5,141,779
Depreciation	9,425,878	9,365,984	9,800,000
Contractual	1,527,997	1,300,628	1,805,000
Total Operating Expenses	\$ 42,248,398	\$ 42,215,051	\$ 48,262,424

24

⁷ Minimum Filing Requirements, Schedule C

⁸ Includes \$1,000,000 of capitalized labor.

1 Q. DO YOU BELIEVE THAT THIS BUDGET IS SOMEWHAT AGGRESSIVE?
2

3 A. Yes, I do. However, given the limited time we have had to investigate this filing,
4 we made only three adjustments to the budget.
5

6 Q. PLEASE DESCRIBE YOUR ADJUSTMENTS TO THE FY2006 BUDGET.
7

8 A. GWA budgeted its labor expense assuming that the entire 280 positions were on
9 board effective October 1, 2006 and that there would be no lapses during the
10 twelve months ending September 2006. At the time that the budget was prepared,
11 GWA had 22 vacant positions.
12

13 GWA is required to submit to the PUC labor statistics every quarter. It has not
14 complied with the PUC order requiring this submission. We have assumed that
15 these 22 positions were unfilled as of October 1, 2005 but would be filled as of
16 September 30, 2006. To estimate the cost of 22 employees, we used GWA's
17 response in this rate case regarding the costs of 22 new employees as a surrogate
18 to the 22 vacant positions in the budget. GWA's response indicates that the cost
19 of 22 employees is \$913 thousand, with \$649 thousand as wages and \$264
20 thousand as benefits. To estimate the cost savings of filling these positions over
21 the twelve months ending September 30, 2006 we took one-half of the annual
22 costs and reduced the labor budget accordingly.
23

24 In addition to this small adjustment to the labor expense we also decreased
25 contract expense by \$330,000. According to the testimony of Mr. Wiegand, he
26 indicates that GWA expended \$330 thousand in pumper truck rentals in FY05.
27 The contractual budget shown in the table above shows a large increase in
28 contractual expense. We have assumed that the purchase of these pumper trucks
29 will reduce the contractual expense by the amount suggested in Mr. Wiegand's
30 testimony.
31

32 We also reduced the advertising expense back to Fiscal 2005 levels.
33

34 **Projection of Five Years of Operating Expenses**
35

36 Q. HOW DID GWA PROJECT EXPENSES AFTER THE USING FISCAL 2006
37 AS ITS STARTING POINT?
38

39 A. GWA assumed 2% decreases in power purchases and assumed a reduction in
40 water purchase costs related to the buyout of the Earthtech contract. GWA also
41 assumed a 2% annual increase in each year after 2006 to all other expense
42 categories. Finally, it assumed that the capitalized labor related to its construction
43 program would be a constant \$1 million per year.

1 Q. DID YOU ACCEPT GWA'S PROJECTION OF EXPENSES?
2

3 A. For the most part, yes. However there are two important adjustments that we felt
4 were necessary to make in GWA's projection of expense. One of these is related
5 to the expense associated with water purchases from the Navy and the second
6 relates to the amount of capitalized labor in each year.
7

8 Q. PLEASE DESCRIBE YOUR NAVY PURCHASE COST ADJUSTMENTS.
9

10 A. Table 9 of the Engineers Report attached to the Final Offering Statement for the
11 recently issued bonds shows a significant reduction in purchase of water by
12 GWA. The following table shows this reduction:
13

14 **Table 3**
15 **Water Purchases**
16

17

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Purchases					
Navy	1,949,711	1,852,225	900,000	900,000	900,000
Earth Tech	1,269,846	1,269,846	-	-	-
Air Force	35,267	33,504	32,622	31,740	31,740
Total Purchases	3,254,824	3,155,575	932,622	931,740	931,740

18
19 As can be seen, not only is there cessation of purchases under the Earthtech
20 contract, there is also a dramatic drop-off in purchases from the Navy supply.
21 This forecast should result in a significant decrease in the cost of purchased water.
22

23 As can be seen on Schedule 1, page 1, line 18 there is a drop in the cost of
24 purchased water of \$1.7 million as a result of the Earthtech buyout in FY2007, but
25 the cost of purchases do not reflect the decreases in Navy purchases as shown
26 above. For the purposes of our projects, we have assumed a decrease of 50% in
27 the Navy purchase cost. This cost decrease is consistent with the 50% reduction
28 in volumes contained in the Final Official Statement provided in support to this
29 filing. We have adjusted our projection of purchase water costs for FY2008, 2009
30 and 2010.
31

32 Q. DID YOU MAKE ANY OTHER ADJUSTMENT TO GWA'S OPERATING
33 EXPENSE PROJECTION?
34

35 A. Yes. GWA is beginning to undertake an ambitious capital program. It would be
36 anticipated that a portion of GWA labor would be capitalized over the next five

1 years. GWA estimates that the capitalized labor will be \$5 million over the next
2 five years. There is no evidentiary support for this amount. While the level of
3 capitalized labor has no overall cash impact, it does impact the measurement of
4 earnings and thereby coverage.
5

6 GWA assumes a constant annual capitalization level of \$1 million. We have
7 adjusted the annual amounts to by using the drawdown of construction projects
8 from the bond funds as a measure of the amount of labor to be capitalized. We
9 have accepted at this point the total capitalized amount of \$5 million, but we
10 apportion the annual amount based upon the construction program as measured by
11 the drawdown of both series of bonds which we believe to be more reflective of
12 the actual use of internal labor required to support GWA's capital program.
13

14 Interest, Debt Service and Coverage

15
16 Q. HOW DID GPA PROJECT DEBT SERVICE, INTEREST AND COVERAGE
17 IN ITS FIVE YEAR FORECAST?
18

19 A. The terms and conditions of the recently issued bonds are known. For the
20 purpose of estimating costs associated with the FY06 bond, GPA used the
21 amortization table including in the Final Offering Statement. This amortization
22 table is summarized on Schedule 1, page 2 attached to this testimony. In addition,
23 GWA is assuming a second issuance of bonds in 2008. GWA will pay only
24 interest on these bonds until 2008 and has borrowed the requisite amount of
25 interest through the bonds. Therefore there is no near-term impact on cash flow
26 for the first two years of the amortization of this bond.
27

28 Q. DO YOU HAVE ANY OBSERVATIONS AND COMMENTS RELATED TO
29 THE ISSUANCE OF THE 2005 BOND AND ITS IMPACT ON THIS RATE
30 REQUEST?
31

32 A. Yes. As is shown on Schedule 1, page 2, the uses of the proceeds consist of
33 construction costs of \$70.4 million, inclusive of the temporary loan to GWA by
34 GPA of \$4.7 million. This loan has been repaid from the proceeds of the bond.
35 The \$70.4 million is larger than the PUC had authorized and GWA is required to
36 put the excess into the contingency fund, until PUC approval of additional
37 projects or costs are approved.
38

39 As is shown in Attached Schedule 4, the additional amounts are shown as
40 increases in projects 19 and 20, plus an inflation allowance on all other projects.
41

42 Q. ARE THERE OTHER INTEREST ITEMS CONTAINED IN THE
43 PROJECTIONS?
44

1 A. Yes. GWA calculates interest expense on the USDA loan, the bridge loan from
2 GPA and the interest on the unpaid balances owed to Navy and GPA. These
3 balances are being reduced from the revenue stream established by this
4 Commission. GWA separates the payments between interest expense and
5 principal payments as shown on page 4 of Schedule 1.
6

7 Q. WHAT IMPACT DO THIS OTHER INTEREST ITEMS HAVE ON GWA'S
8 PROJECTION?
9

10 A. The expense reduces earnings, but the debt service used to compute the coverage
11 ratio does not include these items.
12

13 Cash Flow
14

15 Q. WHAT IS THE IMPORTANCE OF CASH FLOW IN THE FIVE YEAR
16 PROJECTION?
17

18 A. There is no coverage issue in the first two years of the five year projection, since
19 there is interest only and the resulting coverage is temporarily very large. The
20 third and fourth year, however do have the full annual effect of the 2005 series
21 bonds and the last year (2010) contains the full annual impact of the 2005 bonds
22 as well as the 2008 bonds. GWA's debt service will have increased from \$0 as of
23 today to \$16 million in 2008. The PUC has stated that it will regulate GWA with
24 a target coverage ratio of 1.75 times. In 2008, rates will not only have to cover
25 the \$16 million of debt service, but the increased allowance for coverage will
26 produce another \$12 million of cash. Therefore careful planning for rates and
27 operations is imperative.
28

29 Q. DID YOU MAKE ADJUSTMENTS TO THE CASH FLOW PROJECTION OF
30 GWA FOR THE PERIOD 2005 THROUGH 2010?
31

32 A. Yes, several. First of all I incorporate a correction to the errors in the cash flow
33 schedules that were only recently uncovered. In addition, I included the opening
34 balance of unrestricted cash as of September 30, 2005. According to GWA, there
35 was \$1.775 million of unrestricted cash at the beginning of the test year. GWA
36 had failed to recognize this cash balance in its projections. In all subsequent
37 years, I incorporate any unrestricted ("left over") cash as a source of cash for the
38 following year.⁹
39

40 Q. WHAT OTHER ADJUSTMENT DID YOU MAKE TO THE CASH FLOW
41 PROJECTION?
42

⁹ Schedule 3, line 89.

- 1 A. Since we have adjusted both revenue and expense projections our earnings
2 forecast varies from that projected by GWA. More importantly, we have
3 recommended that the rate stabilization fund be continued. As of September 30,
4 2005, GWA had approximately \$2 million in this fund. We do not see an
5 immediate need for cash using our assumptions and believe that the additional
6 proposed rate increase for FY 2006 of about \$1.6 million should also be reserved.
7 This would raise the amount of annual contributions into this fund be GWA to
8 \$3.6 million in FY 2006. To simplify this process we recommend that a constant
9 monthly amount of cash (\$300 thousand) be deposited in FY 2006 and until
10 further Order of the PUC, rather than estimating the amount of "rate increase"
11 revenues and an allowance for collection each month.
12
- 13 Q. YOUR CASH PROJECTIONS SHOW DEPOSITS OF \$3.6 MILLION INTO
14 THIS FUND THROUGH FISCAL 2007. WHAT HAPPENS AFTER THAT?
15
- 16 A. Assuming that GWA makes these deposits the rate stabilization fund until
17 FY2008, it will have \$12.2 million in this fund plus accrued interest (\$2 million at
18 year-end 2005 plus two years of \$3.6 million and one year of \$3 million). At that
19 point, our estimate is that GWA will cease deposits into this fund in Fiscal 2009
20 and withdrawn cash from the fund in Fiscal 2010 to both have sufficient cash in
21 each year and to meet the target coverage ratio in Fiscal 2010. Our projections
22 show that GWA will need about \$7.7 million of this fund for these requirements
23 in Fiscal 2010.
24
- 25 Q. HOW DOES THE STABALIZATION FUND IMPACT COVERAGE?
26
- 27 A. Bond counsel has indicated that the covenant does not include rate stabilization
28 revenues in the debt service coverage calculation if those revenues are reserved
29 into a fund. When the funds are released the amount of the released funds are
30 then included in the measurement of coverage ratio (Schedule 3, line 61).
31
- 32 Q. WHAT IS THE LAST ADJUSTMENT THAT YOU MADE REGARDING
33 CASH FLOW?
34
- 35 A. The last adjustment made relates to the level of internally funded cash proposed
36 for use over the 5-year period. There is little detail or justification of the
37 numerous projects that are to be internally funded. This is a major flaw in the
38 presentation of this rate case.
39
- 40 Q. BASED UPON THE INFORMATION THAT HAS BEEN PROVIDED CAN
41 YOU DESCRIBE THE PROPOSED INTERNALLY FUNDED CIP's?
42
- 43 A. There are several types of projects contained in the proposed 5-year internally
44 funded CIP. These include various general plant, wastewater collection, and
45 water distribution system related projects. The general plant projects consist of

1 facility improvements, vehicle purchases, and billing system upgrades. All fall
2 below the \$1.0 million threshold for review under the Commission's contract
3 approval protocol for GWA. For the most part these expenditures are routine and
4 reoccurring over the 5-year period.
5

6 The proposed internally funded wastewater collection system projects include lift
7 station and collection line upgrades during the period FY 2008-2010. Both of
8 these projects meet the requirement for Commission contract review and
9 approval. No information was provided concerning these two projects nor did
10 the GWA filing request Commission approval of these projects pursuant to the
11 Commission's contract approval protocol. The proposed internally funded water
12 distribution system projects contain one project (secure taps for water sampling)
13 that falls below the Commission's contract review and approval protocol and four
14 projects that require contract review and approval. These four projects include:
15 SCADA system upgrades, water system booster station upgrades, the first phase
16 of the proposed water transmission line project—a project ultimately forecast to
17 cost \$100 million—and a proposed major water distribution line replacement
18 project. These projects all meet the requirement for Commission contract review
19 and approval. Little or no information was provided concerning these four
20 projects nor did the GWA filing request Commission approval of these projects
21 pursuant to the Commission's contract approval protocol.
22

23 Q. WAS ANY SPECIFIC INFORMATION PROVIDED CONCERNING ANY OF
24 THE WASTEWATER COLLECTION OR WATER DISTRIBUTION SYSTEM
25 PROJECTS?
26

27 A. The only specific project described in the testimony of Mr. Wiegand is that GWA
28 plans on instituting a replacement program for what appears to be all of the water
29 system's buried pipes over a period of 20 years at an estimated cost of \$200
30 million. This is the justification for inclusion of \$3.5 million of the \$6.5 million
31 of internally funded projects in Fiscal 2006 and \$40 million of the internally
32 funded projects over the period FY 2006-2010. No other supporting information
33 has been provided and GWA did not request Commission approval of this project
34 pursuant to the Commission's contract approval protocol. The replacement of
35 GWA's existing buried pipes is proposed to consume \$40 million of its proposed
36 \$55 million internally funded capital program over the period FY 2006-2010,
37 essentially consuming all of the internally generated capital.
38

39 Q. DO YOU HAVE CONCERNS ABOUT THE PROPOSED BURIED PIPE
40 REPLACEMENT PROGRAM?
41

42 A. Yes. Not only are we concerned about GWA's lack of project justification in this
43 filing; we are also concerned that the project may be overly aggressive. In fact, it
44 almost appears that GWA is simply looking in its filing for some place to put the

1 considerable coverage related cash that will be generated over the course of the
2 next five years. It appears to have chosen this project to allocate that cash.
3

4 Q. COULD YOU DESCRIBE THE NATURE OF A PROJECT THAT WOULD
5 INVOLVE THE REINVESTMENT BY GWA IN BURIED PIPE
6 INFRASTRUCTURE?
7

8 A. Water utilities like GWA face the need to constantly upgrade and replace their
9 infrastructure. Buried pipes, as typically used in water utilities, have useful
10 economic life expectancies of 100 years; however, depending on pipe materials
11 and environmental issues economic life expectancies can be shorter, in some
12 cases substantially shorter. As buried pipes approach the end of their useful
13 economic life they become subject to increasing failures (breaks) and increased
14 costs associated with their operations and maintenance.
15

16 Q. HOW WOULD YOU DESCRIBE THE NEED FOR REINVESTMENT IN
17 GWA'S BURIED PIPE INFRASTRUCTURE?
18

19 A. On Guam there are hundreds of miles of buried pipes that deliver water to
20 ratepayers. Some of these buried pipes are 50 years or older, but few, if any, of
21 these pipes are approaching 100 years of age. In the Guam water system there are
22 types of buried pipe that exist that have shorter economic life expectancies
23 (generally the result of poor design engineering decisions concerning the selection
24 of pipe type for the environmental conditions found—soil and/or water quality).
25 Many of these pipes are experiencing premature failures resulting in service
26 interruptions to ratepayers and increased repair costs to GWA. Some of these
27 pipes should be replaced.
28

29 Q. ON WHAT BASIS SHOULD BURIED PIPES BE REPLACED?
30

31 A. There should exist in GWA a comprehensive program that will identify the
32 criteria for replacement. Currently, such a program does not exist. GWA is
33 currently in the process of developing a Master Plan that will identify its long-
34 term expansion strategy and, as we understand, a plan for replacement of aging
35 infrastructure (i.e., a comprehensive buried pipe replacement program). However,
36 in spite of these ongoing and future efforts, no formal program exist at GWA at
37 the present time for the replacement of such pipes, nor has any evidence been
38 presented in this proceeding to justify the aggressive internally funded capital
39 improvement program for the replacement of buried pipe as proposed by GWA.
40

41 Q. COULD YOU BRIEFLY COMMENT ON HOW THE WATER INDUSTRY
42 LOOKS AT THE ISSUE OF REINVESTMENT IN AGING BURIED PIPES?
43

44 A. Typically, water utilities have historically budgeted on average the replacement of
45 about 0.6 percent of their buried pipes on an annual basis. Recently there has

1 been considerable attention focused on the future rate of reinvestment by water
2 utilities in their buried pipe infrastructure. The Water Infrastructure Network
3 (WIN) in conjunction with the American Water Works Association (AWWA)
4 recently prepared a study and report on the future infrastructure needs of the water
5 industry. WIN, a broad-based coalition of local elected officials, drinking water
6 and wastewater service providers, state environmental and health administrators,
7 engineers and environmentalists, is dedicated to preserving and protecting public
8 health, the environment and the financial health of America's drinking water and
9 wastewater utilities. AWWA is the primary technical support and advocacy
10 organization representing the water industry in the US. In this recent study and
11 report presented to Congress, WIN and the AWWA indicated that water utilities
12 needed to base their future reinvestment plans on the basis of replacing 1.0
13 percent of their buried pipes on an annual basis—a distinct increase in the level of
14 reinvestment historically undertaken by water utilities. Likewise an independent
15 report prepared by the Congressional Budget Office (CBO) found that for the
16 purpose of planning water utilities should plan on replacing between 0.6 (the
17 historical level of replacement) and 1.0 percent of their buried pipes on an annual
18 basis.

19
20 Q. HOW WOULD YOU CONTRAST GWA'S REQUEST IN THIS FILING WITH
21 TYPICAL REINVESTMENT RATES FOUND IN THE WATER INDUSTRY
22 FOR BURIED PIPES?
23

24 A. The current GWA filing speaks to replacing 5.0 percent of its buried pipe on an
25 annual basis, a program five to eight times more intensive than the planning level
26 supported by AWWA, WIN, or CBO in their recent studies on the issue of
27 reinvestment in buried pipe infrastructure. The undertaking of such a program by
28 GWA would be extremely aggressive, unquestionably costly to ratepayers, and
29 potentially of diminishing value. Further, GWA has provided no support for this
30 proposed aggressive reinvestment program. For instance, it provided no
31 indication of the miles of buried pipe to be replaced, which pipes that it would
32 replace or even the criteria for determining which pipes to replace, how it would
33 go about such an aggressive replacement program, it plans to strengthen its
34 internal capability to even manage and undertake such as program, and the cost
35 effectiveness of such a program (i.e., from a ratepayer perspective do the benefits
36 outweigh the costs of such a program). The absence of detailed answers to these
37 important considerations calls into question the very prudence of such a program.
38

39 Q. WHAT REINVESTMENT RATE FOR BURIED PIPE REPLACEMENT DO
40 YOU RECOMMEND FOR USE IN THE FILING?
41

42 A. Absent underlying support for its proposed aggressive reinvestment program,
43 GWA's pipe replacement CIP should be restricted to a level no greater than the
44 norm found in the water industry. Accordingly, for the purpose of this filing only,
45 this would mean a rate of between 0.8% and 1.0 percent. We are prepared to

1 support the more aggressive rate of 1.0 percent for the buried pipe replacement
2 program for FY 2006 (\$2 million). Once GWA has completed its Master Plan
3 and developed a comprehensive replacement program the 1.0 percent level should
4 be reviewed for potential downward or upward adjustment.
5

6 Q. GIVEN THE SIZE OF THIS PROJECT AND THE PRINCIPLE OF
7 MATCHING PROJECT LIFE TO FUNDING SOURCE IS THERE ANY
8 JUSTIFICATION IN THIS FILING AS TO THE FUNDING SOURCE OF THIS
9 REPLACEMENT?

10
11 A. No. There is no clear analysis showing the appropriate funding source or sources
12 (bond versus revenues).
13

14 Q. IS THERE ANY OTHER JUSTIFICATIONS FOR OTHER INTERNALLY
15 FUNDED PROJECTS?
16

17 A. No. We did receive a listing of projects late in this proceeding, but none was filed
18 with the testimony and exhibits.
19

20 Q. WHAT PROJECTION OF INTERNALLY FUNDED CAPITAL PROJECTS
21 DID YOU USE IN YOUR DETERINATION OF REVENUE
22 REQUIREMENTS?
23

24 A. We continue to be very concerned of the ability of GWA to manage such a large
25 increase in the overall construction program. We also observe that by the time
26 that this proceeding is adjudicated and rates are in place, a third of FY 2006 will
27 be over and therefore the amounts shown for FY 2006 will have to be expended in
28 eight months. For the purposes of this proceeding I have recommended a more
29 gradual approach to projecting internally funded projects as shown in the
30 following table until detailed justification from the Master Plan and other sources
31 are provided as well as appropriate filings by GWA for approval of those projects
32 meeting the Commission's contract review protocol requirements:
33

34 **Table 4**
35 **Internally Funded Projects**
36 **(\$000,000)**
37
38

	<u>FY06</u>	<u>FY 07</u>	<u>FY 08</u>	<u>FY 09</u>	<u>FY 10</u>
As Originally Filed	6.50	11.00	12.10	14.00	18.85
As Corrected by GWA	7.60	10.00	10.00	12.60	11.85
As Recommended by GCG	3.50	6.00	7.00	8.00	8.00

1 Q. DOES YOUR RECOMMENDATIONS LIMIT GWA'S CONSTRUCTION
2 PROGRAM TO THE LEVELS IN THE ABOVE TABLE?
3

4 A. Not necessarily. We are recommending deposits into the rate stabilization fund
5 that may be used for construction and other items. GWA has the right to petition
6 the Commission for use of these funds that are already in excess of \$2 million.
7 Moreover in our projection of financial results and revenue requirement there is
8 residual cash in all years.
9

10 As we stated earlier, the construction fund that has been deposited by GWA from
11 the recent bond issuance contains \$12.5 million for replacement. Upon requisite
12 PUC approvals and a Master Plan, this project has sufficient funds to at least
13 begin the replacement process.
14

15 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
16

17 A. Yes, it does.
18
19
20
21
22
23
24
25

26 Attachments:
27 Schedules 1 - 5
28

29 G49\24931-94\120-GCG TESTIMONY

GUAM WATERWORKS AUTHORITY
Five Year Operational Projects

Row #	Description	FY 06	FY 07	FY 08	FY 09	FY 10
1	Proforma Income Statement					
2	Water Revenues	8%	16%	24%	33%	50%
3	Wastewater Revenues	\$ 24,785,620	\$ 25,033,476	\$ 25,283,811	\$ 25,536,649	\$ 25,792,016
4	Meter Replacement Revenues	13,783,321	13,921,154	14,060,366	14,200,969	14,342,979
5	GPA/Navy Surcharge	800,000	1,000,000	2,000,000	2,000,000	2,000,000
6	Retiree Surcharge	3,053,677	3,053,677	3,053,677	3,053,677	3,053,677
7	Fire Hydrant Rate	-	-	-	-	-
8	Other Revenues	260,000	260,000	260,000	260,000	260,000
9	Revenue from Allowed Rate Change	278,895	287,262	295,880	304,756	313,899
10	Revenue From Allowed Supplemental Change	3,084,171	6,232,741	9,442,602	12,716,038	19,264,797
11	Total Revenues	800,084	800,084	800,084	800,084	800,084
12		\$ 46,845,768	\$ 50,588,394	\$ 55,196,420	\$ 58,872,173	\$ 65,827,452
13	Salaries and Wages	\$ 10,839,495	\$ 11,056,285	\$ 11,277,411	\$ 11,502,959	\$ 11,733,018
14	Benefits & Retirement	4,251,663	4,336,696	4,423,430	4,511,899	4,602,137
15	Total Labor	\$ 15,091,158	\$ 15,392,981	\$ 15,700,841	\$ 16,014,858	\$ 16,335,155
17	Power Purchases	\$ 10,000,000	\$ 9,700,000	\$ 9,409,000	\$ 9,126,730	\$ 8,852,928
18	Water Purchases	6,424,587	6,296,095	4,504,173	4,414,090	4,325,808
19	Earth Tech Adjustment	-	(1,700,000)	-	-	-
20	Communications	138,963	141,742	144,577	147,469	150,418
21	Total Utility Purchases	\$ 16,563,550	\$ 14,437,838	\$ 14,057,750	\$ 13,688,289	\$ 13,329,154
22						
23	Contractual Services Other	1,100,000	1,122,000	1,144,440	1,167,329	1,190,675
24	Contractual Services Lab	400,000	408,000	416,160	424,483	432,973
25	Contractual Services Legal	25,000	25,500	26,010	26,530	27,061
26	Contractual Services Audit/Acctg.	280,000	285,600	291,312	297,138	303,081
27	Contractual Services Engineering	-	-	-	-	-
28	Equipment Rental/Transp. Expense	1,250,000	1,275,000	1,300,500	1,326,510	1,353,040
29	Regulatory Expense	300,000	306,000	312,120	318,362	324,730
30	Insurance/Claims	250,000	255,000	260,100	265,302	270,608
31	Public Affairs/Advertising Expenses	230,000	234,600	239,292	244,078	248,959
32	Building Rental	-	-	-	-	-
33	Bad Debts Expense	650,000	663,000	676,260	689,785	703,581
34	Materials and Supplies	1,000,000	1,020,000	1,040,400	1,061,208	1,082,432
35	Chemicals	724,616	739,108	753,890	768,968	784,348
36	Training	450,000	459,000	468,180	477,544	487,094
37	Miscellaneous	148,200	151,164	154,187	157,271	160,416
38	Depreciation	9,800,000	9,996,000	10,195,920	10,399,838	10,607,835
39	Less: Capitalized Labor	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)
40	Total O&M Expenses	\$ 47,262,524	\$ 45,770,791	\$ 46,037,363	\$ 46,327,493	\$ 46,641,143
41						
42	Earnings From Operations	\$ (416,756)	\$ 4,817,603	\$ 9,159,057	\$ 12,544,680	\$ 19,186,309
43						
44	Investment Income (Bond Funds)	(2,064,093)	(1,491,184)	(3,493,693)	(2,532,285)	(1,271,264)
45	Grants	(4,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
46	Other Expenses	-	-	-	-	-
47	Privatization Study	-	-	-	-	-
48	Recoveries of Bad Debts	-	-	-	-	-
49	AFUDC	(1,155,918)	(854,297)	(1,979,913)	(1,261,022)	(630,511)
50	Interest Expense - GPA Bridge Loan	57,750	-	-	-	-
51	Interest Expense - Meters	-	-	-	-	-
52	Interest Expense - 2005 Bonds	3,309,216	5,839,794	5,839,794	5,746,544	5,648,544
53	Interest Expense - Future Bonds	-	-	6,292,000	6,864,000	6,842,294
54	Interest Expense - GPA/Navy	627,091	538,048	445,596	349,509	249,619
55						
56	Net Earnings	\$ 2,809,197	\$ 2,785,242	\$ 4,055,273	\$ 5,377,934	\$ 10,347,627
57						
58	Debt Service Coverage Calculation					
59	Earnings From Operations	\$ (416,756)	\$ 4,817,603	\$ 9,159,057	\$ 12,544,680	\$ 19,186,309
60	Investment Income	2,064,093	1,491,184	3,493,693	2,532,285	1,271,264
61	GPA/Navy Surcharge	(3,053,677)	(3,053,677)	(3,053,677)	(3,053,677)	(3,053,677)
62	Depreciation	9,800,000	9,996,000	10,195,920	10,399,838	10,607,835
63	Balance Available for Debt Service	\$ 8,393,659	\$ 13,251,110	\$ 19,794,992	\$ 22,423,127	\$ 28,011,731
64						
65	Debt Service					
66	Interest	\$ -	\$ -	\$ 5,839,794	\$ 5,746,544	\$ 5,648,544
67	Principal	-	-	1,865,000	1,960,000	3,523,741
68	Total Debt Service	\$ -	\$ -	\$ 7,704,794	\$ 7,706,544	\$ 16,014,579
69						
70	Debt Service Coverage (DSC)	-	-	2.57	2.91	1.75
71						
72	Internal Cashflow Statement					
73	Net Income (Loss)	\$ 2,809,197	\$ 2,785,242	\$ 4,055,273	\$ 5,377,934	\$ 10,347,627
74	Add: Depreciation	9,800,000	9,996,000	10,195,920	10,399,838	10,607,835
75	Deduct: AFUDC & Capitalized Labor	(2,155,918)	(1,854,297)	(2,979,913)	(2,261,022)	(1,630,511)
76	Transfer from (to) restricted fund	-	-	-	-	-
77	Subtract: Principal Payments (Bonds&USDA)	(11,772)	(14,559)	-	-	-
78	Working Capital Change (Increase)Decrease/Other	2,075,630	1,768,855	(1,882,217)	(1,979,751)	(3,545,910)
79	Capital Improvement Projects [Internal]	(6,500,000)	(11,000,000)	(12,100,000)	(14,000,000)	(11,850,000)
80	Capital Improvement Projects [Grants]	(4,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
81	CAP I Fund	3,309,216	5,839,794	6,292,000	6,864,000	-
82	Long Term Debt Proceeds	65,715,130	-	90,072,965	-	-
83	Construction Fund (LT Debt)	(65,715,130)	-	(90,072,965)	-	-
84	Inventory Purchases	(1,000,000)	(1,000,000)	-	-	-
85	O&M, Renovation, Replacement Reserve	(2,000,000)	(2,000,000)	-	-	-
86	Principal Payments (Navy/GPA)	(2,287,071)	(2,373,262)	(2,463,056)	(2,556,609)	(2,654,082)
87	Cash Surplus (Deficit)	\$ 39,282	\$ 147,773	\$ 15,136	\$ 25,164	\$ 827,639
88						

GUAM WATERWORKS AUTHORITY
2005 Bond Source and Uses
Debt Service

Sources and Uses of Funds

Sources

Bonds @ Par	\$ 101,175,000
Net Original Issue Premium	3,604,522
Transfer of Funds	1,399,930
Total Sources	\$ 106,179,452

Uses

Construction Fund	\$ (65,715,130)
Repay GPA Loan	\$ (4,736,289)
Defeasance of MSG Loan	\$ (16,190,775)
Debt Service Reserve	(7,707,794)
Capitalized Interest	(9,149,010)
Cost of Issuance/Underwriter's Disc	(2,680,454)
Total Uses	(106,179,452)

FY Ending September 30	Principal	Interest	Total Debt Service
2006		3,309,216	3,309,216
2007		5,839,794	5,839,794
2008	1,865,000	5,839,794	7,704,794
2009	1,960,000	5,746,544	7,706,544
2010	2,055,000	5,648,544	7,703,544
2011	2,160,000	5,545,794	7,705,794
2012	2,270,000	5,437,794	7,707,794
2013	2,380,000	5,324,294	7,704,294
2014	2,500,000	5,205,294	7,705,294
2015	2,635,000	5,067,794	7,702,794
2016	2,285,000	4,922,869	7,207,869
2017	2,410,000	4,797,194	7,207,194
2018	2,555,000	4,652,594	7,207,594
2019	2,710,000	4,499,294	7,209,294
2020	2,870,000	4,336,694	7,206,694
2021	3,045,000	4,164,494	7,209,494
2022	3,225,000	3,981,794	7,206,794
2023	3,420,000	3,788,294	7,208,294
2024	3,625,000	3,583,094	7,208,094
2025	3,840,000	3,365,594	7,205,594
2026	4,070,000	3,135,194	7,205,194
2027	4,310,000	2,896,081	7,206,081
2028	4,565,000	2,642,869	7,207,869
2029	4,835,000	2,374,675	7,209,675
2030	5,115,000	2,090,619	7,205,619
2031	5,420,000	1,790,113	7,210,113
2032	5,735,000	1,471,688	7,206,688
2033	6,075,000	1,134,756	7,209,756
2034	6,430,000	777,850	7,207,850
2035	6,810,000	400,088	7,210,088
Total	101,175,000	113,770,704	214,945,704

	FY06	FY07	FY08	FY09	FY10	FY11	FY12
Debt Service							
Principal	\$ -	\$ -	\$ 1,865,000	\$ 1,960,000	\$ 2,055,000	\$ 2,160,000	\$ 2,270,000
Interest	3,309,216	5,839,794	5,839,794	5,746,544	5,648,544	5,545,794	5,437,794
Total	\$ 3,309,216	\$ 5,839,794	\$ 7,704,794	\$ 7,706,544	\$ 7,703,544	\$ 7,705,794	\$ 7,707,794
Interest Income:							
Debt Service Reserve	\$ 256,926	\$ 308,312	\$ 308,312	\$ 308,312	\$ 308,312	\$ 308,312	\$ 308,312
Construction Fund	1,807,166	1,182,872	328,576	-	-	-	-
Total	\$ 2,064,093	\$ 1,491,184	\$ 636,888	\$ 308,312	\$ 308,312	\$ 308,312	\$ 308,312

4.00%
4.00%

GUAM WATERWORKS AUTHORITY
Future Bond Information

Without Cap I (Interest Only)

Bonds @ Par	\$ 114,400,000	
Interest Rate	6.00%	
Term (yrs)	30	
Annual Debt Service	\$ 8,311,035	
Semi_Annual Payment	\$ 4,155,518	
Uses		
Construction Fund	\$ (90,072,965)	
MSG Defeasance		
Debt Service Reserve	(8,311,035)	
Capitalized Interest	(13,156,000)	
Cost of Issuance	(1,716,000)	1.50%
Underwriter's Discount	(1,144,000)	1.00% \$10 per Bond
Insurance	-	1.40% 140 bp

Period Ending	Payment	Principal	Interest	Balance
April 1, 2008				\$ 114,400,000
October 1, 2008			2,860,000	114,400,000
April 1, 2009			3,432,000	114,400,000
October 1, 2009			3,432,000	114,400,000
April 2, 2010	4,155,518	723,518	3,432,000	114,400,000
October 2, 2010	4,155,518	745,223	3,410,294	113,676,482
April 2, 2011	4,155,518	767,580	3,387,938	112,931,259
October 2, 2011	4,155,518	790,607	3,364,910	112,163,679
April 1, 2012	4,155,518	814,326	3,341,192	111,373,072
October 1, 2012	4,155,518	838,755	3,316,762	110,558,746
April 1, 2013	4,155,518	863,918	3,291,600	109,719,991
October 1, 2013	4,155,518	889,836	3,265,682	108,856,073
April 2, 2014	4,155,518	916,531	3,238,987	107,966,237
October 2, 2014	4,155,518	944,027	3,211,491	107,049,707
April 2, 2015	4,155,518	972,347	3,183,170	106,105,680
October 2, 2015	4,155,518	1,001,518	3,154,000	105,133,333
April 1, 2016	4,155,518	1,031,563	3,123,954	104,131,815
October 1, 2016	4,155,518	1,062,510	3,093,008	103,100,252
April 1, 2017	4,155,518	1,094,385	3,061,132	102,037,741
October 1, 2017	4,155,518	1,127,217	3,028,301	100,943,356
April 2, 2018	4,155,518	1,161,034	2,994,484	99,816,139
October 2, 2018	4,155,518	1,195,865	2,959,653	98,655,105
April 2, 2019	4,155,518	1,231,741	2,923,777	97,459,241
October 2, 2019	4,155,518	1,268,693	2,886,825	96,227,500
April 1, 2020	4,155,518	1,306,754	2,848,764	94,958,807
October 1, 2020	4,155,518	1,345,956	2,809,562	93,652,054
April 1, 2021	4,155,518	1,386,335	2,769,183	92,306,098
				90,919,763

	FY08	FY09	FY10	FY11	FY12
Debt Service					
Principal	\$ -	\$ -	\$ 4	\$ 1,558,187	\$ 1,653,081
Interest	6,292,000	6,864,000	6,842,294	6,752,848	6,657,955
Total	\$ 6,292,000	\$ 6,864,000	\$ 6,842,298	\$ 8,311,035	\$ 8,311,035
Interest Income:					
Debt Service Reserve	\$ 304,738	\$ 332,441	\$ 332,441	\$ 332,441	\$ 332,441
Construction Fund	2,552,067	1,891,532	630,511	-	-
Total	\$ 2,856,805	\$ 2,223,974	\$ 962,952	\$ 332,441	\$ 332,441

GUAM WATERWORKS AUTHORITY
Forecasted Debt Service

Without Cap I (Interest Only)	FY06	FY07	FY08	FY09	FY10
MSG Financing					
Principal	-	-	-	-	-
Interest	-	-	-	-	-
Total	-	-	-	-	-
USDA Loan					
Principal	11,772	14,559	17,217	19,751	22,169
Interest	60,190	57,403	54,745	52,211	49,793
Total	71,962	71,962	71,962	71,962	71,962
GPA Bridge Loan					
Principal	-	-	-	-	-
Interest	57,750	-	-	-	-
Total	57,750	-	-	-	-
2005 Bond					
Principal	-	-	1,865,000	1,960,000	2,055,000
Interest	3,309,216	5,839,794	5,839,794	5,746,544	5,648,544
Total	3,309,216	5,839,794	7,704,794	7,706,544	7,703,544
Future Bond					
Principal	-	-	-	-	1,468,741
Interest	-	-	6,292,000	6,864,000	6,842,294
Total	-	-	6,292,000	6,864,000	8,311,035
GPA Loan (Surcharge)					
Principal	1,835,927	1,916,446	2,000,497	2,088,234	2,179,820
Interest	467,984	387,465	303,414	215,677	124,092
Total	2,303,911	2,303,911	2,303,911	2,303,911	2,303,911
Navy Loan (Surcharge)					
Principal	451,144	456,816	462,559	468,374	474,263
Interest	98,917	93,180	87,437	81,622	75,733
Total	550,061	549,996	549,996	549,996	549,996
TOTAL					
Principal	2,298,843	2,387,821	4,345,273	4,536,360	6,199,992
Interest	3,994,058	6,377,842	12,577,390	12,960,053	12,740,457
Total	6,292,901	8,765,663	16,922,663	17,496,413	18,940,449
TOTAL GPA & NAVY					
Principal	2,287,071	2,373,262	2,463,056	2,556,609	2,654,082
Interest	566,901	480,645	390,851	297,299	199,825
Total	2,853,973	2,853,907	2,853,907	2,853,907	2,853,907
TOTAL BONDS					
Principal	-	-	1,865,000	1,960,000	3,523,741
Interest	3,309,216	5,839,794	12,131,794	12,610,544	12,490,838
Total	3,309,216	5,839,794	13,996,794	14,570,544	16,014,579

GUAM WATERWORKS AUTHORITY
Adjustments to Test Year and Forecasts

Row #	Description	FY 16	Meter Revenue	Rate Increase	Labor Adjustment	Vehicle	Capitalized Labor	Public Affairs	Internal CIPs	Rate/Stabal. Fund	Operating Cash	Adjusted FY16
1	Proforma Income Statement											
2	Water Revenues	\$ 24,785,620										\$ 24,785,620
3	Wastewater Revenues	13,783,321										13,783,321
4	Meter Replacement Revenues	800,000	700,000									1,500,000
5	GPA/Navy Surcharge	3,053,677										3,053,677
6	Retiree Surcharge	-										-
7	Fire Hydrant Rate	260,000										260,000
8	Other Revenues	278,895										278,895
9	Revenue from Allowed Rate Change	3,084,171		(2,312,792)								771,379
10	Revenue From Allowed Supplemental Change	800,084										800,084
11	Total Revenues	\$ 46,845,768										\$ 45,232,976
12					(324,726)							
13	Salaries and Wages	\$ 10,839,495			(131,955)							\$ 10,514,769
14	Benefits & Retirement	4,251,663			(456,682)							4,119,708
15	Total Labor	\$ 15,091,158			\$							\$ 14,634,476
16												
17	Power Purchases	\$ 10,000,000										\$ 10,000,000
18	Water Purchases	6,424,587										6,424,587
19	Earth Tech Adjustment	-										-
20	Communications	138,963										138,963
21	Total Utility Purchases	\$ 16,563,550										\$ 16,563,550
22												
23	Contractual Services Other	\$ 1,100,000										\$ 1,100,000
24	Contractual Services Lab	400,000										400,000
25	Contractual Services Legal	25,000										25,000
26	Contractual Services Audit/Actg.	280,000										280,000
27	Contractual Services Engineering	-										-
28	Equipment Rental/Transp. Expense	1,250,000			(330,000)							920,000
29	Regulatory Expense	300,000										300,000
30	Insurance/Claims	250,000										250,000
31	Public Affairs/Advertising Expenses	230,000						(190,000)				40,000
32	Building Rental	-										-
33	Bad Debts Expense	650,000										650,000
34	Materials and Supplies	1,000,000										1,000,000
35	Chemicals	724,616										724,616
36	Training	450,000										450,000
37	Miscellaneous	148,200										148,200
38	Depreciation	9,800,000										9,800,000
39	Less: Capitalized Labor	(1,000,000)					236,117					(763,883)
40	Total O&M Expenses	\$ 47,262,524										\$ 46,521,959
41												
42	Earnings From Operations	\$ (416,756)										\$ (1,288,984)
43												
44	Investment Income (Bond Funds)	(2,064,093)										(2,064,093)
45	Grants	(4,000,000)										(4,000,000)
46	Other Expenses	-										-
47	Privatization Study	-										-
48	Recoveries of Bad Debts	-										-
49	AFUDC	(1,155,918)										(1,155,918)
50	Interest Expense - GPA Bridge Loan	57,750										57,750
51	Interest Expense - USDA	60,190										60,190
52	Interest Expense - 2005 Bonds	3,309,216										3,309,216
53	Interest Expense - Future Bonds	-										-
54	Interest Expense - GPA/Navy	566,901										566,901
55												
56	Net Earnings	\$ 2,809,197										\$ 1,936,969
57												

GUAM WATERWORKS AUTHORITY
Adjustments to Test Year and Forecasts

Row #	Description	FY 06	Meter Revenue	Rate Increase	Labor Adjustment	Vehicle	Capitalized Labor	Public Affairs	Internal CIPs	Rate Stabil. Fund	Opening Cash	Adjusted FY06
58	Debt Service Coverage Calculation											
59	Earnings From Operations	\$ (416,756)										\$ (1,288,984)
60	Investment Income	2,064,093										2,064,093
61	GPA/Navy Surcharge	(3,053,677)										(3,053,677)
62	Depreciation	9,800,000										9,800,000
63	Balance Available for Debt Service	\$ 8,393,659										\$ 7,521,432
64												
65	Debt Service											
66	Interest											
67	Principal											
68	Total Debt Service											
69												
70	Debt Service Coverage (DSC)											
71												
72	Internal Cashflow Statement											
74	Net Income (Loss)	\$ 2,809,197										\$ 1,936,969
75	Add: Depreciation	9,800,000										9,800,000
76	Deduct: AFUDC	(1,155,918)										(1,155,918)
77	Transfer from (to) restricted fund											(3,600,000)
78	Subtract: Principal Payments (Bonds&USDA)	(11,772)										(11,772)
79	Working Capital Change (Increase)Decrease/Other	2,075,630										2,075,630
80	Capital Improvement Projects [Internal]	(6,500,000)								(3,600,000)		(3,500,000)
81	Capital Improvement Projects [Grants]	(4,000,000)							3,000,000			(4,000,000)
82	CAP I Fund	3,309,216										3,309,216
83	Long Term Debt Proceeds	65,715,130										65,715,130
84	Construction Fund (LT Debt)	(65,715,130)										(65,715,130)
85	Inventory Purchases	(1,000,000)										(1,000,000)
86	O&M, Renovation, Replacement Reserve	(2,000,000)										(2,000,000)
87	Navy/GPA Payments	(2,186,776)										(2,186,776)
88	Opening Unrestricted Cash Balance										1,775,000	1,775,000
89	Cash Surplus (Deficit)	\$ 1,139,578										\$ 1,442,350

GUAM WATERWORKS AUTHORITY
Adjusted Five Year Projection

Row #	Description	Gr.	Adjusted FY06	FY 07	FY 08	FY 09	FY 10
1	Proforma Income Statement						
2	Water Revenues		2%	4%	4%	4%	4%
3	Wastewater Revenues	1%	\$ 24,785,620	\$ 25,033,476	\$ 25,283,811	\$ 25,536,649	\$ 25,792,016
4	Meter Replacement Revenues	1%	13,783,321	13,921,154	14,060,366	14,200,969	14,342,979
5	GPA/Navy Surcharge		1,500,000	2,700,000	2,700,000	2,700,000	2,700,000
6	Retiree Surcharge		3,053,677	3,053,677	3,053,677	3,053,677	3,053,677
7	Fire Hydrant Rate		-	-	-	-	-
8	Other Revenues		260,000	260,000	260,000	260,000	260,000
9	Revenue from Allowed Rate Change	3%	278,895	287,262	295,880	304,756	313,899
10	Revenue From Allowed Supplemental Change		771,379	2,360,419	4,028,603	5,779,252	7,615,822
11	Total Revenues		800,084	800,084	800,084	800,084	800,084
12			\$ 45,232,976	\$ 48,416,072	\$ 50,482,420	\$ 52,635,387	\$ 54,878,476
13	Salaries and Wages	2%	\$ 10,514,769	\$ 10,725,064	\$ 10,939,565	\$ 11,158,357	\$ 11,381,524
14	Benefits & Retirement	2%	4,119,708	4,202,102	4,286,144	4,371,867	4,459,304
15	Total Labor		\$ 14,634,476	\$ 14,927,166	\$ 15,225,709	\$ 15,530,223	\$ 15,840,828
16							
17	Power Purchases	-3%	\$ 10,000,000	\$ 9,700,000	\$ 9,409,000	\$ 9,126,730	\$ 8,852,928
18	Water Purchases	-2%	6,424,587	6,296,095	2,252,087	2,207,045	2,162,904
19	Earth Tech Adjustment			(1,700,000)			
20	Communications		138,963	141,742	144,577	147,469	150,418
21	Total Utility Purchases		\$ 16,563,550	\$ 14,437,838	\$ 11,805,664	\$ 11,481,244	\$ 11,166,250
22							
23	Contractual Services Other	2%	\$ 1,100,000	\$ 1,122,000	\$ 1,144,440	\$ 1,167,329	\$ 1,190,675
24	Contractual Services Lab	2%	400,000	408,000	416,160	424,483	432,973
25	Contractual Services Legal	2%	25,000	25,500	26,010	26,530	27,061
26	Contractual Services Audit/Acctg.	2%	280,000	285,600	291,312	297,138	303,081
27	Contractual Services Engineering	2%	-	-	-	-	-
28	Equipment Rental/Transp. Expense	2%	920,000	938,400	957,168	976,311	995,838
29	Regulatory Expense	2%	300,000	306,000	312,120	318,362	324,730
30	Insurance/Claims	2%	250,000	255,000	260,100	265,302	270,608
31	Public Affairs/Advertising Expenses	2%	40,000	40,800	41,616	42,448	43,297
32	Building Rental	2%	-	-	-	-	-
33	Bad Debts Expense	2%	650,000	663,000	676,260	689,785	703,581
34	Materials and Supplies	2%	1,000,000	1,020,000	1,040,400	1,061,208	1,082,432
35	Chemicals	2%	724,616	739,108	753,890	768,968	784,348
36	Training	2%	450,000	459,000	468,180	477,544	487,094
37	Miscellaneous	2%	148,200	151,164	154,187	157,271	160,416
38	Depreciation	2%	9,800,000	9,996,000	10,195,920	10,399,838	10,607,835
39	Less: Capitalized Labor		(763,883)	(873,009)	(1,443,078)	(873,009)	(1,047,022)
40	Total O&M Expenses		\$ 46,521,959	\$ 44,901,567	\$ 42,326,059	\$ 43,210,977	\$ 43,374,025
41							
42	Earnings From Operations		\$ (1,288,984)	\$ 3,514,506	\$ 8,156,362	\$ 9,424,410	\$ 11,504,451
43							
44	Investment Income (Bond Funds)		\$ (2,064,093)	\$ (1,491,184)	\$ (3,493,693)	\$ (2,532,285)	\$ (1,271,264)
45	Grants		(4,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
46	Other Expenses		-	-	-	-	-
47	Privatization Study		-	-	-	-	-
48	Recoveries of Bad Debts		-	-	-	-	-
49	AFUDC		(1,155,918)	(854,297)	(1,979,913)	(1,261,022)	(630,511)
50	Interest Expense - GPA Bridge Loan		57,750	-	-	-	-
51	Interest Expense - USDA		60,190	57,403	54,745	52,211	49,793
52	Interest Expense - 2005 Bonds		3,309,216	5,839,794	5,839,794	5,746,544	5,648,544
53	Interest Expense - Future Bonds		-	-	6,292,000	6,864,000	6,842,294
54	Interest Expense - GPA/Navy		566,901	480,645	390,851	297,299	199,825
55							
56	Net Earnings		\$ 1,936,969	\$ 1,482,145	\$ 3,052,577	\$ 2,257,664	\$ 2,665,769
57							

GUAM WATERWORKS AUTHORITY
Adjusted Five Year Projection

Row #	Description	Gr.	Adjusted FY06	FY 07	FY 08	FY 09	FY 10
58	Debt Service Coverage Calculation						
59	Earnings From Operations						
60	Investment Income	\$	(1,288,984)	\$ 3,514,506	\$ 8,156,362	\$ 9,424,410	\$ 11,504,451
61	Transfer from (to) restricted fund		2,064,093	1,491,184	3,493,693	2,532,285	1,271,264
62	GPA/Navy Surcharge		(3,600,000)	(3,600,000)	(3,000,000)	-	7,700,000
63	Depreciation		(3,053,677)	(3,053,677)	(3,053,677)	(3,053,677)	(3,053,677)
64	Balance Available for Debt Service		9,800,000	9,996,000	10,195,920	10,399,838	10,607,835
65		\$	3,921,432	\$ 8,348,013	\$ 15,792,297	\$ 19,302,857	\$ 28,029,873
66	Debt Service						
67	Interest						
68	Principal	\$	-	\$ -	\$ 5,839,794	\$ 5,746,544	\$ 12,490,838
69	Total Debt Service				1,865,000	1,960,000	3,523,741
70		\$	-	\$ -	\$ 7,704,794	\$ 7,706,544	\$ 16,014,579
71	Debt Service Coverage (DSC)						
72					2.05	2.50	1.75
74	Internal Cashflow Statement						
75	Net Income (Loss)						
76	Add: Depreciation	\$	1,936,969	\$ 1,482,145	\$ 3,052,577	\$ 2,257,664	\$ 2,665,769
77	Deduct: AFUDC		9,800,000	9,996,000	10,195,920	10,399,838	10,607,835
78	Transfer from (to) restricted fund		(1,155,918)	(854,297)	(1,979,913)	(1,261,022)	(630,511)
79	Subtract: Principal Payments (Bonds&USDA)		(3,600,000)	(3,600,000)	(3,000,000)	-	7,700,000
80	Working Capital Change (Increase)Decrease/Other		(11,772)	(14,559)	(1,882,217)	(1,979,751)	(3,545,910)
81	Capital Improvement Projects [Internal]		2,075,630				
82	Capital Improvement Projects [Grants]		(3,500,000)	(6,000,000)	(7,000,000)	(8,000,000)	(8,000,000)
83	CAP I Fund		(4,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
84	Long Term Debt Proceeds		3,309,216	5,839,794	6,292,000	6,864,000	-
85	Construction Fund (LT Debt)		65,715,130	-	90,072,965	-	-
86	Inventory Purchases		(65,715,130)	-	(90,072,965)	-	-
87	O&M, Renovation, Replacement Reserve		(1,000,000)	(1,000,000)	-	-	-
88	Principal Payments (Navy/GPA)		(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	-
89	Opening Balance of Unrestricted Cash		(2,186,776)	(2,267,032)	(2,350,706)	(2,438,016)	(2,529,122)
90	Cash Surplus (Deficit)		1,775,000	1,442,350	1,024,401	352,062	2,194,776
		\$	1,442,350	\$ 1,024,401	\$ 352,062	\$ 2,194,776	\$ 6,462,837
88	Payments: (GPA/Navy)						
	Surcharge Revenues						
	Less: Regulatory Expense	\$	3,053,677	\$ 3,053,677	\$ 3,053,677	\$ 3,053,677	\$ 3,053,677
	Less: Interest Payments		(300,000)	(306,000)	(312,120)	(318,362)	(324,730)
	Total Payments		(566,901)	(480,645)	(390,851)	(297,299)	(199,825)
		\$	2,186,776	\$ 2,267,032	\$ 2,350,706	\$ 2,438,016	\$ 2,529,122

Report Number	PROJECT DESCRIPTION	Amount
Wastewater Treatment Facilities		
1	Agana Wastewater Treatment Plant Rehabilitation	\$ 10,475,000
2	Agana WTP Ocean Outfall	\$ 5,030,000
3	Northern District WTP Ocean Outfall	\$ 4,700,000
4	Baza Gardens Wastewater Treatment Plant Upgrade	\$ 500,000
	Subtotals	\$ 20,705,000
Wastewater Collection Facilities		
7	Old Agat Wastewater Collection (I&I Reduction)	\$ 2,154,900
8	Chaoz 36-inch Wastewater Collector Line	\$ 410,000
9	Lift Station Upgrades	\$ 230,000
10	Collection Line Upgrades	\$ 200,000
	Subtotals	\$ 2,994,900
Ground Water Production/Disinfection		
15	Deep Well Disinfection	\$ 581,300
16	Well Electrical Protection	\$ 1,000,000
17	Well Vulnerability Protection	\$ 600,000
	Subtotals	\$ 2,181,300
Water Distribution and Storage		
19	Distribution Line Replacement	\$ 8,200,000
20	A Series Wells Transmission Line	\$ 2,413,031
21	Santa Rita Booster and Transmission Line	\$ 647,876
23	Storage Additions	\$ 950,000
24	Booster Station Upgrades	\$ 390,000
25	Mangilao Tank Repair	\$ 800,000
26	Ugum Tank Replacement and Repair	\$ 2,500,000
27	Barrigada Tank Replacement	\$ 3,000,000
	Subtotals	\$ 18,900,907
Efficiency Upgrades		
31	Earthtech Buyout	\$ 5,000,000
32	Water Resources Master Plan	\$ 4,900,000
33	Generators/Equipment/Vehicles	\$ 1,800,000
	Lab Modernization	\$ 840,000
	Subtotals	\$ 12,540,000
Miscellaneous		
39	Survey	\$ 800,000
41	Contingency	\$ 5,000,000
	Subtotals	\$ 5,800,000
	TOTALS	\$ 63,122,107

Report Number	PROJECT DESCRIPTION	2005 Bonds in Dollars	2005 Bonds in Future Dollars	SO #	Non-SO
Wastewater Treatment Facilities					
1	Agana Wastewater Treatment Plant Rehabilitation	10,475,000	10,634,075	42	
2	Agana WTP Ocean Outfall	5,030,000	5,135,630	35	
3	Northern District WTP Ocean Outfall	4,700,000	4,798,700	36	
4	Baza Gardens Wastewater Treatment Plant Upgrade	500,000	510,500	43	
	Subtotals	\$ 20,705,000	\$ 21,078,905		
Wastewater Collection Facilities					
7	Old Agat Wastewater Collection (I&I Reduction)	2,154,900	2,200,153		X
8	Chaoz 36-inch Wastewater Collector Line	410,000	416,458	37	
9	Lift Station Upgrades	230,000	234,830	42	
10	Collection Line Upgrades	200,000	208,488		X
	Subtotals	\$ 2,994,900	\$ 3,059,929		
Ground Water Production/Disinfection					
15	Deep Well Disinfection	581,300	593,507	11	
16	Well Electrical Protection	1,000,000	1,031,721		X
17	Well Vulnerability Protection	600,000	619,032	24	
	Subtotals	\$ 2,181,300	\$ 2,244,260		
Water Distribution and Storage					
19	Distribution Line Replacement	12,600,000	12,951,050		X
20	A Series Wells Transmission Line	3,713,031	3,806,927	38	
21	Santa Rita Booster and Transmission Line	647,876	661,481	44	
23	Storage Additions	950,000	988,282		X
24	Booster Station Upgrades	390,000	405,716		X
25	Mangilao Tank Repair	800,000	816,800		X
26	Ugum Tank Replacement and Repair	2,500,000	2,600,742		X
27	Barrigada Tank Replacement	3,000,000	3,120,891		X
	Subtotals	\$ 24,600,907	\$ 25,351,989		
Efficiency Upgrades					
31	Earthtech Buyout	5,000,000	5,105,000		X
32	Water Resources Master Plan	4,900,000	4,967,101	10	
	Equipment	1,800,000	1,800,000		X
	Lab Modernization	840,000	856,229		X
	Subtotals	\$ 12,540,000	\$ 12,728,330		
Miscellaneous					
39	Survey	800,000	825,376		X
41	Contingency	5,000,000	5,126,441		X
	Subtotals	\$ 5,800,000	\$ 5,951,817		
	TOTALS	\$ 68,822,107	\$ 70,415,130		