

Water is life

08



GUAM WATERWORKS AUTHORITY

- Did You Know?
- Looking Forward
- Messages:
  - The Governor
  - Interim General Manager
  - CCU
  - Consolidated Utility Services
- Production & Treatment
  - Collection & Distribution
  - Safety & Compliance
  - Engineering
  - Communications
  - Human Resources
  - Employees
  - Financial Statements





# Did You Know?

Since 2005 the United States Environmental Protection Agency declared GWA's drinking water to be the safest in years

An 8oz bottle of water costs between \$1.00 and \$1.50, but you can get 3 gallons of water from your tap for only one cent

1/2 gal per minute leak would cost you additional \$70 on top of your monthly water bill

Human use up to 150-160 gallons of water a day

Ugum Treatment Plant, located in Inarajan, produces on the average 2.3 Million gallons of water every day

We store water in tanks to ensure adequate supply and good pressure

Flushing the toilet uses the most water in the home

Guan gets nearly 100 inches of water a year making it one of the wettest places on earth

There are 120 wells in central and northern Guam and produce a combined total output of 40 Million gallons of water daily

GWA processes over 40 million gallons of water daily

Only 1% of the Earth's water can be used for drinking

Water is life.



## Looking Forward

Over the next several years you will not recognize the GWA we have today. In the next 5 to 10 years the GWA of today will be a memory, as every single village will be touched by the over **\$300M** dollar infrastructure improvement projects scheduled to commence in 2010. Exciting but challenging this will prove GWA's commitment to be better than it has ever been. ***We can do it. And we intend to.***

This all in an effort to better serve you! Our Customers, Our Community, Our Home. Here is just some of what we intend to do:

**\$145 million** for water improvements in the ground.

**\$120 million** for waste water improvements system wide.

**\$12 million** in general improvements.

### In the South

- Ugum Water Treatment plant will be finished and able to produce as much as 4 million gallons of water a day with state of the art water processing technology.
- Talofofo gets a complete overhaul of the Baza Gardens waste water treatment plant.
- Agat , Santa Rita, Umatac, and Merizo get waste water improvements.

### In the North

- 5 million dollars for water wells.
- Continued upgrades to the Northern Wastewater Treatment Plant (NWWTP).
- Dededo, Yigo, Barrigada, Maniglao will get pressure zones improved.

### Central Locations

- Tamuning, Asan, Piti, Sinajana, Maniglao, Mongmong Toto Maite, Barrigada, and the Upper parts of Tumon will all get major improvements to the wastewater system.
- Tamuning, Tumon, will get continued improvements on pressure zones.

### Island Wide

- 10 million dollars for water line pipe replacement.
- 6 million dollars for assessment, repair and replacement of all 40 tanks. This will give not only better pressure but increased capacity in the villages.
- Over 1 million dollars to put in an automated tank reading program or Supervisor Control and Data Acquisition (SCADA). What this will mean for you is that when tank levels drop GWA personnel can monitor it and better respond before it completely empties.

### What does this mean for you and your family?

Cleaner environment, protecting our aquifer, water that is safe to drink, more efficient and reliable system, improved pressure to your village, reduce costs.

Providing the island with safe, clean drinking water every single day.

Investing In Better Water, Better Lives.



## Message from the Governor and Lietenant Governor of Guam

Hafa Adai! It is an honor to congratulate the Guam Waterworks Authority for their progressive improvements to our water and wastewater systems and for providing our community with safe and reliable water service.

Throughout 2008, the Guam Waterworks Authority has worked endlessly to contribute to the well-being of Guam's population. Your efforts toward operational advancements are demonstrated through remarkable achievements, including the completion of the Hagatna and Northern Wastewater Treatment Facilities, the Hagatna Main Wastewater Pump Station Renovation, the Route 5 Transmission Line, the Ugum Treatment Plant, the Sinajana Transmission Line, and the Baza Gardens Wastewater Treatment Plant Facility Plan.

The upgrades to your facilities and implementation of new technologies confirm your commitment to improve and safeguard one of our island's most precious commodities - our water.

The progress of our island and quality of life is greatly affected by the work of your organization. We commend you for the excellent work you have done for our community. We are proud of the Guam Waterworks Authority and look forward to the continued progress you bring to the people of our region.

Sinseru yan Magâhet,

Felix P. Camacho  
*I Maga' Lâhen Guåhan*  
Governor

Michael W. Cruz, M.D.  
*I Segundo Na Maga' Lâhen Guåhan*  
Lieutenant Governor



### Newly hired fulltime General Manager

In October of 2008, Dr. Leonard Olive joined the utility having moved here from Washington State. I look forward to working with Dr. Olive as we continue to move the utility forward.

**Increase Staffing:** In order to improve service we have increased staff at all levels of the authority. These increases will not only meet the demand of today, but the growing demand of the projected population growth sure to come in the near future.

### Military Cooperation

In 2008 we continued working with our military partners to ensure seamless flow of information between both the utility and the military. I myself serve as the Chair of the Subcommittee on Infrastructure for the Civilian Military Buildup. We are working hard at the authority to be as prepared as possible for the buildup when it final starts.

### Media Campaign

Continued an aggressive media campaign with the launching of "Guam's Tap Water Delivers" as well as a community celebrity endorsement of our water. We also adopted a new logo as part of the "New GWA". This will help us to better brand our organization and bring professionalism and credibility in all that we do.

### Continued close cooperation with the Village Mayors:

In order to improve delivery to our community it must first begin with a cooperative relationship with our village mayors. We know they are our front line of all that happens in the villages. We began this initiative in 2007 and it continues throughout the authority today.

These are just a few of the many projects that take place at GWA. We have plans for so many more. In the coming month you will hear more about our infrastructure plans in the media and other community forums. We invite you to log on to our website or come to one of our informational meetings GWA plans to do in the next five years. We will also begin consolidating various parts of both utilities in order to provide the best possible service at the lowest rate to you the consumer.

In closing I would like to again extend my personal thanks to the employees and their families who sacrifice every day to routinely bring the public safe and clean drinking water. Thank you for all that you do. It has been a pleasure to serve as your acting General Manager and I look forward to working with each and every one of you in my capacity as General Manger of Consolidated Utilities Services.

Si Yu'os Ma'ase,

John Benavente  
*General Manager Consolidated Utilities Services GMCUS*

## Buenas yan Hafa Adai People of Guam

On behalf of the 300 employees of Guam Waterworks Authority (GWA) and their families we are pleased to submit to you our 2008 Annual Report. There are so many accomplishments that take place at GWA that rarely get reported in the news. I hope to take a moment through this letter to highlight some of them.

In 2008 we continued our commitment to the community by improving service delivery to the people of Guam. It is through the leadership of the Consolidated Commission on Utilities (CCU), the management of GWA and ultimately through our hardworking employees that make the water which flows through your pipes possible.

Here are just a few of the many noteworthy outcomes which we have accomplished this year. Please take the time to read more about our many accomplishments in the following pages from our program managers.

### Hagatna Wastewater Treatment Plant (HWWTP)

HWWTP received a much needed renovation costing over \$10M. For the first time in over ten years the plant is now treating sewage properly and safely. We have improved the knowledge and ability of our HTP staff through training and development.

### Northern Wastewater Treatment Plant (NWWTP)

In addition to the HWWTP facelift NWWTP is also undergoing similar upgrades. This means that sewage will be treated properly and eliminated from the system safely.

### Total between two projects and the Outfalls

Over 32 million dollars was spent improving and overhauling of Hagâtña and Northern Wastewater Systems. We now have two fully functioning treatment plants and outfalls.



(Left to right) Commissioners: Eloy P. Hara, Gloria B. Nelson, Chairman Simon A. Sanchez, Joanna Blas, Benigno Palomo



(Top) Greg P. Cruz, Chief Financial Officer, CCU



(Bottom) Sam Taylor, Attorney, CCU



Danny Santos  
Assistant General Manager  
Consolidated Utility Services

## Message from the Consolidated Commission on Utilities (CCU)

Your Guam Waterworks Authority (GWA) continues to make progress in improving its services and value to all of you, the ratepayers and owners of our GWA.

FY 2008 was another challenging year but a number of accomplishments and steady progress on other projects reflected the talent, effort and commitment of your GWA employees.

This fiscal year was dominated by cost increases in power and Navy water purchases which adversely affected GWA's financial position. Furthermore, the unprecedented demand for new projects spurred by the planned military buildup threatened to overwhelm our wastewater distribution system in central Guam. As a result, GWA issued in June 2008 a temporary moratorium on new sewer hookups in this area. This temporary delay allowed GWA to determine a solution that would last well into the future to handle Guam's growth. The moratorium has since been lifted as scheduled in April 2009.

Despite these challenges, GWA neared completion of the \$32.5 million wastewater upgrade to our largest systems in Hagatna and Tanguisson. Other construction work continued, including the \$8 million upgrade of the Ugum water plant serving the south and for new transmission lines for Santa Rita (\$1.5 million) and Sinajana (\$7.7 million). Design work for the \$4 million Agat wastewater line replacement also was completed.

This is just the beginning of a five year \$350 million plan to rebuild upgrade your system to make it better serve you today and tomorrow. Over the next five years, every village will see improved services as we prepare to handle Guam's growth. We continue to insure your water is clean and safe and that GWA complies with all local and federal requirements. We remain actively engaged with the military buildup to insure that the military pays for its impact on Guam while we protect our fragile water resources and our surrounding environment.

We welcome to GWA new General Manager, Dr. Leonard Olive. And we welcome new commissioner Joseph Duenas and welcome back Commissioner Gloria Nelson after their successful election to the CCU.

And while much has been accomplished, much more remains to be done to insure GWA will always meet your expectations.

Your elected Commission remains committed to serving your needs. We recognize the sacrifices being made by all of us must be invested wisely to make our lives better, today and tomorrow.

We thank you for your continued support and for your constructive input.

## Accomplishments 2008

- Introduced the J.D. Edwards Inventory and Work Module to facilitate accurate and timely inventory of materials and supplies. It also can account for the cost of labor and materials and for each project.
- The inventory module is intended to facilitate accountability of assets in the warehouse and establishing an automatic reorder point for materials frequently used by operation departments. The inventory module provides real time availability of assets in the warehouse inventory. The work module incorporates labor and materials costs traceable to a specific type of project, and allows the manager a true cost for budget purposes that can be validated through the work order module.
- Heavy and light utility trucks were procured to replace aging vehicles for the meter section and operation division. Four (4) mini backhoes with trailers were purchased to facilitate rapid response to leaks and major pipe breaks by operations.
- Merchant banking (Credit and Debit Cards) was finally introduced in keeping with our promise to enhance our services to our customers.
- Worked with GPA to access their automatic telephone call system to deliver messages customers who are in delinquent status. The notification results have been very positive and customers are making payments on their accounts.
- In October, GWA meter technicians commenced the change out of the remaining 14,000 sensus meters to electronic meters. This project is continuing but is plagued with challenges because of the location of the meters and the time and cost associated to change out, remove and install meters correctly.
- GWA continues to improve a friendly and effective customer service support by being proactive with customers in notifying them of leaks detected during the monthly electronic reading of the meters.

## Goals for 2009

- Acquire electronic and manual meter readings on all routes 98% on schedule dates.
- Disconnect 98% of accounts in arrears on schedule dates. Reconnect all accounts disconnect but paid before 3:00PM on same day.
- Process and complete service orders within 48 hours.
- Reduce and resolve estimated billings to no more than 5 accounts per month.
- Investigate and reduce non-registering meters to less than 50 per month.



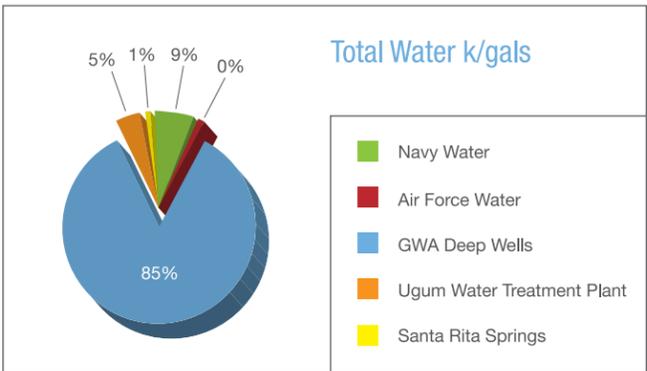
Mark Miller  
Assistant General Manager  
Production & Treatment



Gerald Fitzgibbon  
General Manager  
Veolia Water

FY 2008 Total Water Produced/Purchased

Facility	Total Water k/gals
Navy Water	1,320,014.3
Air Force Water	54,529.1
GWA Deep Wells	13,388,784.0
Ugum Water Treatment Plant	813,200.0
Santa Rita Springs	120,323.0
TOTALS	15,696,850.4



Wastewater

The management of the Wastewater System was undertaken by Veolia Water Guam LLC in 2007, GWA's partner for the Performance Management Contract (PMC). Veolia Water is responsible for operating and maintaining the island wide wastewater system which consists of a gravity sewer network, 74 sewer pump stations, and 7 wastewater treatment plants and associated outfalls.

Veolia Water has restructured the wastewater organization into teams that now include Operations (Collection, Treatment and laboratory), Network Maintenance (Sewer Inspection/Gravity Lines CCTV), and Maintenance (mechanical and electrical maintenance, asset management, MIS, purchasing, warehouse and administrative).

Program Accomplishments

The role out of the major PMC programs occurred this year with the creation of new teams to deliver maintenance and procurement, as well as a strong focus on training and development of operating procedures. A significant improvement in EPA permit compliance and reduction in network spills occurred this year.

Operation & Maintenance Accomplishments

- o Commenced 3 year training program for operations staff, and established an apprenticeship program.
- o Implemented 80 new Standard Operating & Maintenance Procedures, and seven (7) strategy reports prepared.
- o Established the network maintenance team, central maintenance and procurement teams.
- o Commissioned the GAMA computer maintenance management system.
- o Sewer overflows reduced by 19% from 2007, and EPA NPDES discharge license compliance increased to 80%.

Capital Project Accomplishments

- o A 3 years CIP capital program plan report was prepared.
- o Major procurement activities included: Vactor combination pumper trucks; CCTV Vehicle and equipment; and Laboratory Equipment for new WW Lab at Agana treatment plant.
- o Northern STP grit chambers and sludge gallery refurbished and security system at high risk wastewater pump station sites installed.
- o Commenced work on a development strategy for the Moratorium Project.

Program Goals and Objectives for 2009

- o Refine and implement strategies for efficiency savings, human resource development, asset management and operations performance improvement.
- o Continue to up-skill GWA Staff through GEPA Certification Program, further Leadership and management training and more skill based on-the-job training in partnership with suppliers.

Capital Projects Planned for 2009

- o Implement Prioritized CIP / PIP Program.
- o Moratorium Project contract award and project management.



### Accomplishments 2008

- Established an extended hours for a 24/7 dispatch center.
- Hired Dispatch Supervisor.
- Defined a transmission and distribution system zone into reservoirs. This is system wide, and better allows crews and managers to determine more quickly when problems arise in the system, and allows GWA to isolate wells.
- Resolved several low to no water pressure problems throughout the island.
- Reduction of navy water purchase for the villages of Agat and Santa Rita.
- Initiated water distribution, production and treatment team consolidation.
- Hired equipment maintenance superintendent to better manage GWA equipment assets.

### Goals 2009

- Continue to reduce navy water purchases by 200 gallons per minute (gpm).
- Continue to maintain water pressure services.
- Upgrading deep well capacity by 10%.
- Upgrading booster pump capacity to 100%.
- Develop and maintain comprehensive fire hydrant program throughout the island.
- Completion of valve exercising program throughout the island.
- Creation of a construction crew.
- Upgrading booster and well pump annual maintenance program.
- Completion work order system throughout water and equipment maintenance division.
- Continued work on leak detection program island wide. Work to repair all underground leaks.

Jesse Lujan  
*Asistant General Manager  
Collection & Distribution*



## Accomplishments 2008

- Completed (with signed approval) the GWA Employee Safety Manual with Safety SOP's.
- Pilot of Ground Water Under Direct Influence of Surface water (GWUDISW) study in operation (3 of 17 wells).
- Purchase of remaining GWUDISW equipment was made.
- New Deep Ocean Outfalls for Northern District and Hagåtña completed and put into operation.
- Ugum Finished Water Tank repaired.
- Preliminary assessment of GWA water storage tanks was completed.
- CCU approval of GWA's five year Financial Plan (to be presented to the GUAM PUC.)
- Santa Rita Spring booster station and transmission line completed.
- Preliminary basis of design evaluations of Baza Gardens and Agat Sewage Treatment Plants were completed.

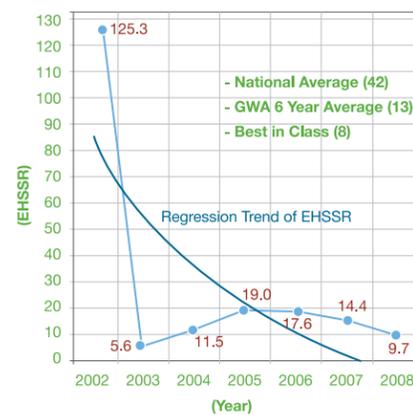
## Goals for 2009

- Print the GWA Employee Safety Manual and SOP book.
- Complete full year data collection for the Ground Water Under Direct Influence of Surface water (GWUDISW) study.
- Complete Standard Operating Procedures for operational activities that include disinfection needs.
- Complete the groundwater disinfection upgrade program.
- Complete GWA equitable water and waste water rate structure assessment for CCU approval and then presentation to the Guam PUC, and Legislature.
- Completer the Sinajana Water Transmission Line project.
- Move up to the enhanced "Leak Detection and Water Line Repair" mode of operation.
- Completer the Route 5 (Sinifa to Santa Rita) water transmission line.
- Move on to detailed water storage tank inspection and repairs.
- Finish the Ugum Surface Water Treatment Plant site and process upgrade.
- Complete the design for the refurbishment of the GWA Dededo Compliance Laboratory.
- Implement the GWA Sewer Hook-Up Revolving Loan Fund program.
- Begin the Agat wastewater collection system upgrade (to manage stormwater intrusion control).
- Implement Supervisory Control and Data Acquisition installation.

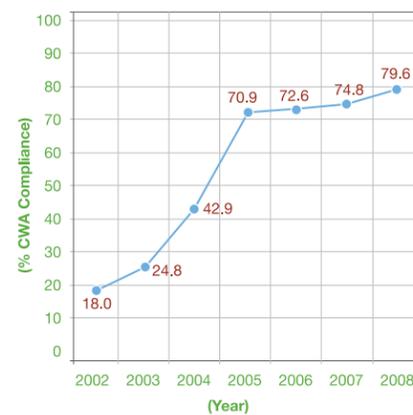
Paul Kemp  
Asistant General Manager  
Safety & Compliance



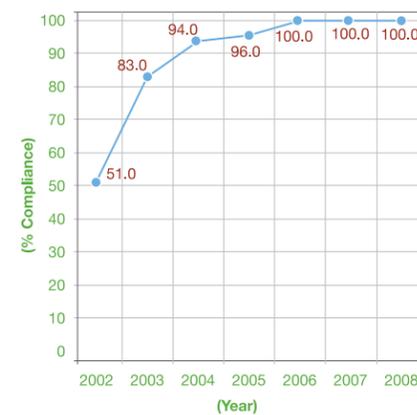
Key Performance Indicator  
Employee Health & Safety Severity Rate



Key Performance Indicator  
Percent Compliance with the Clean Water Act



Key Performance Indicator  
Percent Compliance with SDWA



## Accomplishments 2008

### STAFFING

The engineering department added a full time licensed mechanical engineer who supervises our drinking water section. Mr. Brett Railey joined GWA after several years of work experience with the Navy contractor in Guam. Brett has over 8 years of utility experience on Guam. GWA now boasts 5 licensed (on Guam) professional engineers in 4 disciplines. Junior engineer, Garrett Yeoh, also joined our team in 2008. Garrett returned home to Guam after gaining several years of engineering experience on the west coast of the U.S. Garret will assist senior engineers with project delivery and provide technical support to operations departments.

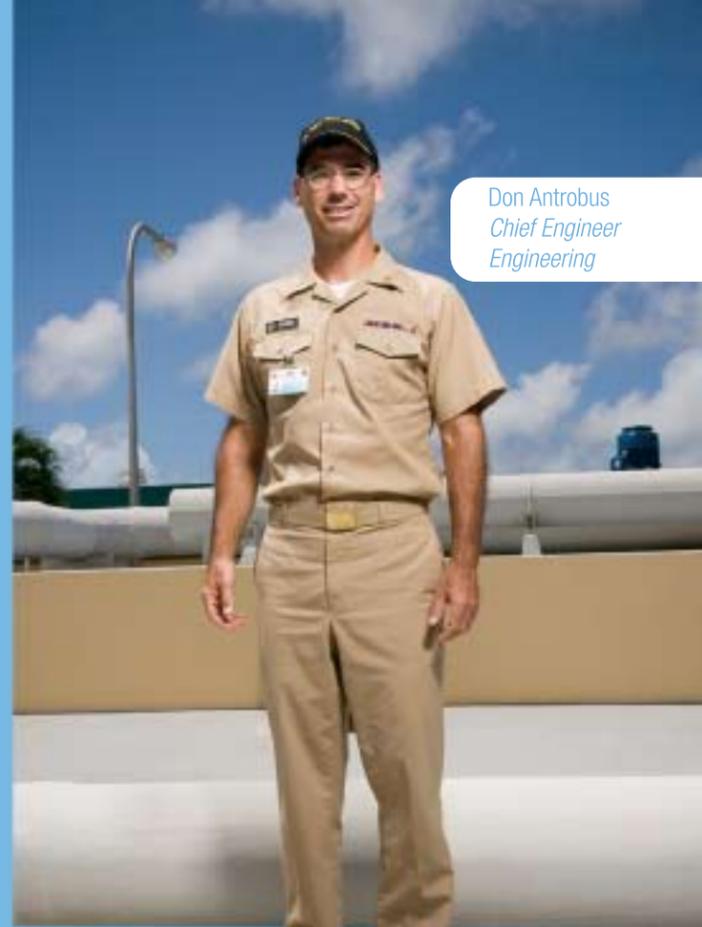
We seek motivated and technically experienced individuals to implement upcoming water and wastewater system improvement projects and to help us steer through pending community growth due to military expansion.

### CIP PROJECTS:

The projects discussed below are primarily funded by the 2005 revenue bond issuance made possible by the support of GWA ratepayers.

## Wastewater System Projects

- **Hagatna Wastewater Treatment Facility (HWWTP):** GWA added laboratory equipment and automatic samplers at the Agana WWTP. These tools allow for onsite operational sampling and analyses that will facilitate maximize treatment efficiency at the plant. This laboratory has sufficient capacity to provide the same operational analyses for our other treatment plants.
- **Northern District Wastewater Treatment Facility (NDWWTP):** Four new sludge/scum pumps were installed at the treatment facility to provide system redundancy and to improve the efficiency of the process. In addition, six new sluice gates were installed to isolate system components to facilitate routine maintenance and repair.
- **Hagatna Wastewater Pump Station (HWWPS):** This \$500,000 pump station project was an extension of the Hagatna Treatment Plant renovation project. The project consisted of structural and electrical improvements to the main wastewater pumping station adjacent to Chamorro Village. The improvements were crucial to the long term safety and sustainability of the station. Work was completed in August 2008.
- **Wastewater Treatment Plant Outfalls:** This is a \$19M project to install new ocean outfalls for the Hagatna and Northern District Wastewater Treatment plants. The new outfalls extend further from the shoreline into deeper water. Major construction for both outfalls began in the summer of 2007. The 42-inch Agana Outfall was successfully completed and activated in December 2008. Installation of the 34-inch pipe for the Northern District Outfall was also completed in December 2008. This new outfall will be put into service in early 2009.
- **Baza Gardens Wastewater Treatment Plant Facility Plan:** This \$282,000 project completed a comprehensive facility plan for the Baza Gardens Wastewater Treatment Plant. The facility plan is a pre-design document that will determined the critical parameters for the new treatment plant including location, size and capacity, treatment technologies, treated wastewater disposal options, and design and construction cost estimates. The facility plan provides a roadmap for the detailed design work to follow. The work was completed in May 2008.
- **Moratorium Project:** Faced with collection systems operating at capacity and periodic wastewater spills coupled with increasing demand for new connections to the system, GWA and the CCU placed a moratorium on wastewater connections in central Guam. Recognizing the negative impacts of this action on the community, GWA expedited development of capacity upgrade projects that will facilitate additional community growth. With the assistance of the Legislature and together with our partner, Veolia Water, a solicitation was developed for a design/build/finance project scope. This effort keeps GWA on track for the April 1, 2009 target for lifting of the moratorium.



Don Antrobus  
Chief Engineer  
Engineering

## Water System Projects

- **Route 5 Transmission Line:** This \$1.5M project funded by the Guam Legislature was designed to install a transmission line on Route 5 from cross island road to the Santa Rita Booster Station and Storage Tank. Project construction was substantially completed in 2008 and the new line will be put into service in early 2009. The completed project will provide a back-up water supply for the higher elevations of Agat and Santa Rita. Together with the Ugum Treatment Plant expansion and cross island road booster station improvements, this project will allow GWA to reduce its dependency on Navy water purchases.
- **Ugum Treatment Plant Renovation:** This \$8.5M project will renovate the Ugum Water Treatment plant to add capacity and improve the reliability of the treatment process during the rainy season. In 2008, structural and architectural improvements were completed to accommodate conversion from a conventional surface water plant to a micro-filtration system. Conversion of the facility to membrane treatment will commence upon approval of the final design concept by regulatory agencies and is scheduled to be completed within the same calendar year.
- **Sinajana Transmission Line:** This \$7.7M water transmission line project between the Chaot and Agana Heights water storage tanks commenced with Phase I along Route 4 in 2007. Phase I was completed and accepted in October 2008. Phase II of this project consists of both pipeline and treatment components. A contract for the construction of the pipeline component was awarded in December 2008. A construction solicitation for the treatment component will be awarded in early 2009. Both Phase II components are scheduled for completion in 2009. Completion of the project will provide for operation via separate transmission and distribution lines and improve the reliability of treatment and storage processes.
- **Storage Tank Inspections and Repair:** The comprehensive inspection of GWA water storage reservoirs commenced in 2008 with a preliminary inspection of all steel tanks. The preliminary inspection was used to prioritize tanks for comprehensive inspection and to develop plans and specifications for minor tank repair items. A contractor will be hired prior to initiation of comprehensive tanks inspections so that inspection and repair can happen concurrently in order to minimize customer impacts. High priority tanks will be inspected in 2009 with the \$500,000 currently available. The inspection, repair, and coating of water tanks will continue over the next several years.
- **Mangilao Tank Replacement:** The effort to replace this tank commenced with the demolition of the damaged structure in April 2008, followed by the construction of a new foundation, and beginning of steel erection. The new tank will be put into service in 2009 following completion of erection, sand blasting and painting, hydrostatic testing, and installation of corrosion protection systems.
- **Land Survey:** A survey contract has been negotiated to complete a boundary survey of all GWA real properties, including the sectioning as required of larger parcels held by the government. Research work for approximately 60 properties has been completed and 30 of these have been surveyed. This work will be continued over the next 2 years to complete the survey of more than 200 parcels. This effort will ultimately benefit our ratepayers as accounting for these properties in our asset database will improve GWA financial benchmarks and lead to more economical borrowing in the future.
- **Well Electrical Protection:** This is an ongoing effort to improve the electrical controls at water well sites around the island. In 2008 a contract was awarded to install variable frequency drives (VFDs), magnetic flow meters, and pressure data recorders at critical wells. The drives will provide additional electrical protections and will provide control over pumping rates for better management of the aquifer. Phase I of this contract installed VFDs at 13 critical wells. GWA will proceed with Phase II of the contract in 2009 to install additional electrical protection and control systems at additional well sites.
- **Upgrade of Groundwater Chlorination:** This \$3.5M has installed new disinfection equipment (chlorine injectors, scales, and controls) at all operating wells. This work was completed by GWA operators. A construction contract has been executed to complete additional support elements such as new structures, health and safety equipment, and emergency shut-off and alarm devices. Due to funding availability, the contract was awarded in two phases. Phase I has been completed. A notice to proceed for Phase II was issued in December 2008 and all work is scheduled for completion in 2009.

## Other Initiatives

- **Military Buildup:** The engineering department continues to technically support GWA discussions with the Joint Guam Program Office (JGPO) to ensure that water and wastewater solutions to support military and civilian population growth are coordinated, efficient, and compatible with existing services. Our goal is to ensure that there is no negative impact on our existing customers.
- **Geographical Information System:** Our GIS manager continues to develop and improve the GIS data base while coordinating with other government agencies. New additions to the database include building layers and house numbers, water meters, and power transmission lines. Digital scanning of hardcopy water and sewer record drawings is now 85% complete. Completion of this effort in 2009 will ensure the protection of historical information and improve the efficiency of access and use of the information.
- **Leak Detection and Distribution Line Location:** In calendar year 2008, we developed a scope of work and negotiated a contract for a comprehensive leak detection program. The contract will be executed upon final approval by the Public Utilities Commission. The contractor will be required to reduce water losses by at least 6 million gallons per day by the end of the contract term. The contract also includes provisions for the location of unmapped distribution lines. Completion of this mapping effort will fill a data void due to missing record drawings. Developing complete information regarding the location of all water distribution lines will facilitate better operation of the system and better service to our customers.

## Goals For 2009

### 2009 CIP PROJECTS

Multiple ongoing projects are scheduled for completion in 2009 as noted above. In 2009 the engineering team will also develop a list of new projects to be undertaken in the coming years and to be funded by a proposed bond issuance in late 2009. The new projects will be taken primarily from the water resources master plan.

### Wastewater System Projects

- **Old Agat Wastewater Collection System Upgrade:** This is a \$6.0 million project funded partially by USEPA designed to replace parts of the collection system in old Agat. The completed project will correct stormwater problems that result in wastewater overflows and that negatively impact the performance of the Agat Wastewater Treatment plant. An award was not made after an initial solicitation and a re-solicitation has been completed. A notice to proceed for this work is expected in January 2009.
- **Baza Gardens Wastewater Treatment Plant Test Injection Well:** The objective of this project is to validate the viability of injection wells for the disposal of treated effluent from a proposed new Baza Gardens Wastewater Treatment Plant. In the recently completed facility plan for the new treatment plant, Class I injection wells for disposal of wastewater effluent were determined to be the preferred option. The geology of the area appears to support this option, however, test wells and modeling will be required in order to determine if the option is technically feasible.

## Initiatives

- **301(h) Waiver Program:** USEPA issued tentative denials to renew secondary treatment waivers for our Agana and Northern District wastewater treatment plants (WWTPs). GWA feels strongly that this is not a scientifically based decision and that there are other projects that would have a more significant positive impact on the environment that should receive funding priority. GWA will discuss this issue publicly in 2009 and formally respond to USEPA's tentative determination.
- **Design Standards:** In 2009, GWA engineering will continue ongoing efforts to revise design standards and update standard details.
- **Fats, Oil and Grease (FOG) Elimination:** GWA will continue ongoing efforts to minimize the introduction of FOG into the wastewater collection system in partnership with Guam EPA and the Department of Public Health. In 2009, GWA will hold meetings with commercial entities to share information on the critical nature of this issue, to encourage proper maintenance, and inform dischargers of the penalties for failure to comply.
- **Wastewater Pretreatment Programs:** In 2008, GWA engineering created a draft industrial pretreatment program for commercial wastewater generators (wash-down facilities, municipal landfills (leachate), repair garages etc.). In 2009, the draft will be finalized and the program will be implemented.
- **Cross Connection Control Programs:** A formal cross-connection control program shall be established. The program will define the potential risk of contamination of the GWA water distribution from various types of customer connections to the system and will also establish appropriate measure to be taken in order to protect the system from contamination in each of these cases.
- **Decentralized Wastewater Treatment Facilities:** Decentralized/small wastewater treatment plants are being considered by developers as an alternative to connections to existing GWA collection systems. Our engineering team will coordinate with GEPA to establish guidelines to ensure that any new decentralized wastewater treatment facility or pump stations are designed to be environmentally friendly and operationally sustainable.
- **Operational Support:** The engineering department team will continue to support the operations team by providing technical assistance (design and root cause analyses).
  - **Well Pressure Data Recording:** In coordination with well operators, dynamic (24-hour minimum) pressure data shall be recorded at all active wells. This data will facilitate appropriate well pump and motor selection; and will facilitate sound operational decision making resulting in more reliable service to our customers.



Heidi M. Ballendorf  
Director of Communications & Community Relations

The Communication Department continues to serve the needs of the community and our customers both external and internal. The image of GWA has improved over the last several years partially due to the responsive nature of the Communications Department. Despite lack of resources the Department prevails; working to meet the needs of the community at its most basic level. Working with the village mayors and other community leaders has accomplished just that. This means meeting our customers at their very basic needs. Something as simple as returning a phone call, following up on when a leak will be fixed, or returning an email goes a long way in improving our image. The public expects and demands a level of service that we must strive to meet everyday. When we do this consistently and professionally the public will not hesitate to support us. *Special appreciation goes to those employees who work hard to meet these needs daily.*

## Accomplishments 2008

- Executed print/radio/television "Guam's Tap Water Delivers".
- Conducted "Celebrity" Tap Water Delivers Campaign with key community leaders. Kick-off in October. Honorary Chair for the event included Lt. Governor Mike Cruz.
- Worked to design fall ad campaign for both GPA and GWA and CCU ad campaign.
- Continued community campaign using GWA tap water at community events. Including 5K runs, earth Day and other community venues.
- Continued GWA employee television "Thank you ads" to the community.
- Adoption of new GWA logo. Authority wide.
- Finalized new website. Continuous updates.
- Update to Kids page on website.
- Initiated customer service program by putting Customer Service Reps (CSR) in the villages to better assist our customers in answering billing questions.
- Continued the Did You Know Campaign (DKY) translated in Chamorro and Tagalog.
- Ongoing development to educate the public about the important role water plays in every day life.
- Water month activities planned for May, 2008
- Completion of 2008 Annual Report.
- Completion of 2007 Water Quality Report.
- Other collateral pieces as required by Departments.

## Goals For 2009

- Community wide water conservation program.
- Creation of collateral materials for the conservation program.
- Kick off "Celebrity Campaign" for conservation program.
- Continue use of Tap Water Delivers Campaign.
- Plan, develop and execute comprehensive infrastructure campaign for to begin end of 2009 and into 2010.
- Creation of new infomercial on infrastructure campaign.
- Introduce infrastructure campaign slogan.
- Continued community outreach.
- Assist village grassroots efforts.
- Design and improve internal and external collateral pieces.
- Plan for school based program for water education.

Elaine Cruz  
Manager  
Human Resources

## Accomplishments 2008

The GWA's Human Resources Division (HRD) consists of the following:

- Recruitment
- Records (Database) and Benefits
- Employee Management Relations (GFT Union)
- Position Classification and Compensation
- Annual Training Plan

## In 2008 HR Accomplished the Following

HR Recruited 60 new employees:

- |   |                        |                              |
|---|------------------------|------------------------------|
| ○ 1 General Manager                             | ○ 2 Trouble Dispatcher | ○ 1 Laboratory Technician II |
| ○ 1 Geographic Information Systems/Mapping Tech | ○ 2 Storekeeper II     | ○ 2 Programmer Analyst       |
| ○ 1 Equipment Maintenance Superintendent        | ○ 1 Cashier I          | ○ 2 Engineer Supervisor      |
| ○ 24 Apprentice Trainee                         | ○ 1 Building Custodian | ○ 6 Meter Reader             |
| ○ 1 Plant Instrument Technician Leader          | ○ 7 Trades Helper      | ○ 1 Engineer II              |
| ○ 1 Engineering Intern                          | ○ 1 Secretary I        | ○ 1 Re-Employment            |
| ○ 2 Computer Operator                           | ○ 2 Electrician II     |                              |

Twenty-four apprentices are currently enrolled in the program and are progressing satisfactorily.

Twenty two (22) GWA employees have either obtained their new certifications or obtained higher level of Environmental Protection Agency (EPA) certifications (levels 1, 2, 3 and 4).

- Records (Database) and Benefits: HR has coordinated the Health and Life Insurance Open Enrollment for FY 2009 and the Retirement (401k and 457) orientation.
- Employee Management Relations (GFT Union)
  1. Employee Management Relations has processed over 13 employee disciplines for various infractions, 60 pre-employment drug testing and 60 random testing.
  2. In addition, two hundred twenty (220) compensation actions, migration to the 15th market percentile have been processed.
  3. Four (4) Certified, Professional and Technical employees appeals are currently being heard by the Civil Service Commission.
  4. Workers compensation, employees health and safety severity rate is within the national average (42), GWA six year average (13) for a 9.7 regression trend.
- Position Classification and Compensation: HR has processed several position classification in the form of desk audits and has processed several detail appointments of employees temporary assignment to another position.

## FY 2009 Goals

- Actively recruit for a new Chief Engineer by April 2009.
- Jump start new the employee recognition program.
- Obtain CCU's approval of either the merit bonus (3.5%) or the Superior Performance Pay (\$1,000).
- Implement the Performance Management System, new performance evaluation report form in documenting the pay-for-performance.

# Employees



Stuart Lee Abay  
 Julie C. Adams  
 Anthony L. Aguon  
 Benny T. Aguon  
 Daniel A. Aguon  
 Edward A. Aguon  
 Joseph Anthony C. Aguon  
 Lester JD Aguon  
 Peter F. Aguon  
 Prudencio F. Aguon  
 Steven T. Aguon  
 Efren M. Alano  
 Joseph S. Angoco, II  
 Severin Hilary A. Apiag  
 Wilfred P. Apiag  
 Manuel P. Apuron  
 Elizardo C. Apuya, Jr.  
 Kenneth J. Aquiningoc  
 Bryan J. Arceo  
 Peter J. Arceo  
 Raymond J. Arceo  
 James R. Arriola  
 Norma Marie I. Arriola  
 Jaime B. Asperas.  
 Raymond G. Asuncion  
 Isabel C. Balajadia  
 Ralph V. Balajadia  
 Heidi M. Ballendorf

Benbenido M. Barcinas  
 Raymond LG Baza  
 Henry J. Bell  
 Joseph M. Benavente  
 Linda F. Benavente  
 Gloria P. Bengan  
 John KT Blas  
 Kenneth Q. Blas  
 Eugene J. Bolton  
 Robert M. Borden  
 Ann D. Borja  
 Jeffrey M. Borja  
 Michael C. Borja  
 Peter J. Borja  
 Larry C. Brown  
 Edward Q. Cabrera  
 Geronimo P. Cabuhat Jr.  
 Jude G. Calvo  
 Roque S. Calvo  
 Jerry Cruz Camacho  
 Raul A. Canales  
 Antonio V. Capacacia Jr.  
 Loreta R. Castelo  
 Eddie P. Castro  
 Josephia R. Castro  
 Michael J. Castro  
 Nadine Pilar S. Castro  
 Peter B. Castro

Wilfred D. Castro  
 Ledean L. Celis  
 John C. Cendana  
 Cecille M. Cesa  
 Jonathan A. Charfauros  
 Dean E. Chargualaf  
 Anthony P. Chargualaf Jr.  
 Benny E. Chargualaf  
 Frankie E. Chargualaf  
 Benny G. Cheguina  
 Joseph P. Claveria  
 Shelby Crisostomo  
 Diane T. Crisostomo  
 Alfred B. Cruz  
 Andrew M. Cruz  
 Anthony F. Cruz  
 Barbara Ann C. Cruz  
 Bernie AV Cruz  
 Evelyn G. Cruz  
 Frank T. Cruz  
 Franklin F. Cruz  
 Grace R. Cruz  
 Greg P. Cruz  
 Henry A. Cruz  
 Jesse JW Cruz  
 Joey J. Cruz  
 Jose B. Cruz  
 Leebert JT Cruz

Lola-Elaine W. Cruz  
 Loretta BL Cruz  
 Michelangelo Paul Cruz  
 Patrick M. Cruz  
 Peter T. Cruz  
 Raymond AR Cruz  
 Rose B. Cruz  
 Thomas A. Cruz  
 Vincent B. Cruz  
 Yvonne M. Cruz  
 Teresita S. Dalisay  
 Julian M. Damian  
 Lad B. DeLeon  
 John DesMarais  
 Frank R. Diaz  
 Jeremiah Frank B. Diaz  
 Eliseo Q. Dizon  
 James B. Duenas  
 Jeralte JT Duenas  
 Joseph A. Duenas  
 Ronald M. Duenas  
 Agustin B. Duenas Jr.  
 Danilo I Esguerra  
 Juan S. Evangelista  
 Richard S. Fejerang  
 Teresita D. Finona  
 George V. Flores  
 Jose D. Flores

Ricky H. Flores  
 Michael J. Franquez  
 Gary George P. Gagan  
 Joseph B. Garrido  
 Alicia C. Gaza  
 Angelo N. Gombar  
 Mary C. Gozalo  
 Doris A. Guerrero  
 Eugene A. Guerrero  
 Timothy C. Guerrero  
 Ursula AC Guerrero  
 Vincent Ed Guerrero  
 Gary Allen Guile, Jr.  
 Anthony F. Gumataotao  
 Christopher Q. Gumataotao  
 Elias S. Gumataotao  
 Elizabeth H. Gumataotao  
 Arthur L. Gutierrez  
 N'tasha L. Gutierrez  
 Andrew John Guzman  
 Peter A. Guzman  
 Frances C. Herrero  
 Jonathan James Herrero  
 Matthew E. Hoover  
 Clinton W. Huntington, III  
 James C. Iglesias  
 Charlene Ililau  
 Jose A. Jardel  
 Victor A. Jardel  
 Derek H. Kaneshiro  
 Paul J. Kemp  
 Jerry P. Leal  
 Brian G. Leon Guerrero  
 LeRoy G. Leon Guerrero  
 Jesse L. Leon Guerrero  
 Alejo Leon Guerrero Jr.  
 Anita K. Limtiaco  
 Francis A. Lizama  
 David F. Lujan  
 Francis A. Lujan  
 Jesse C. Lujan  
 Joseph E. Lujan  
 Paul Q. Lujan  
 Curtis Jerome I. Lunod  
 Donnie A. Mafnas  
 Fred B. Mafnas  
 Gilda M. Mafnas  
 Alvin Q. Maguadog  
 Frankie B. Manglona  
 Joseph A. Manglona  
 Myko J. Manglona  
 Benny T. Mansapit  
 James C. Mantanona  
 Anita M. Matanane  
 Bryan R. Mendiola  
 Leilani JU Mendiola  
 Pedro A. Mendiola  
 Melvin P. Mendiola

Victor Cabrera Mendiola, Jr.  
 Frankie R. Meno  
 Jacob V. Meno  
 Johnny B. Meno  
 Michael J. Meno  
 Mercado Mercado  
 Sylvia Y. Mercado  
 Vincent J. Mesa  
 Ignacio C. Mesngon  
 Jacob P. Miller  
 Mark G. Miller  
 Stephen P. Mondina  
 Raymond A. Mundo  
 Janice G. Nagal  
 James C. Nangauta  
 Raymond F. Naputi  
 Orlando O. Natuel  
 Franklin I. Nauta  
 Peter JD Nauta  
 Karen CO Olivares  
 Pauline JS Onedera  
 Marjorie I Ortua  
 Dalisay D. Pacheco  
 Peter J. Padrones  
 Lourdes C. Palomo  
 Jackie RF Pangelinan  
 John U. Pangelinan  
 Patricia D. Pangelinan  
 Richard W. Pangelinan  
 Vincent EC Pangelinan  
 Jeremias I. Paragas  
 Felix O. Parinas  
 James T. Parrish  
 Jocelyn L. Pascua  
 Edward L. Paulino  
 Gerald M. Paulino  
 Joseph M. Paulino  
 Juan S. Paulino  
 Leo Naputi Paulino  
 Patrick L. Paulino  
 Luis LG Paulino Jr.  
 Manuel T. Paulino, Jr.  
 Erdulfo S. Pecson  
 Brannon M. Perez  
 Raymond M. Perez  
 Tina L. Perez  
 Jeffrey John Pinaula  
 Joseph A. Punzalan  
 Bill A. Quenga  
 Melissa Lyn S. Quenga  
 Louvina M. Quenga.  
 Edward M. Quichocho  
 Anthony J. Quidachay  
 Jon U. Quidachay  
 Anthony A. Quinata  
 Frankie T. Quinata  
 Jake Terrance Quinata  
 Pedro A. Quinata

Sandra L. Quintanilla  
 George S. Quintanilla  
 Michael PM Quintanilla  
 Raymond C. Quintanilla  
 Rose M. Quintanilla  
 Delfyn S. Quitlong  
 Peter S. Quitugua  
 Eloy S. Quitugua II  
 Brett Eric Railey  
 Charles M. Ramos  
 Clement C. Resurreccion  
 Kathy MT Reyes  
 Albert J. Rios  
 David F. Rivera  
 Frank C. Roberto  
 Demetria G. Robinson  
 Martin T. Roldan  
 Annie Therese H. Sablan  
 Felix D. Sablan  
 Francisco T. Sablan  
 Frank J. Sablan  
 Michael M. Sablan  
 Patrick L Sablan  
 Patrick R. Sablan  
 Willie Sadler  
 Frank G. Salas  
 Henry B. Salas  
 Peter G. Salas  
 William R. Salas  
 Ma. Teogenesa Q. Salayon  
 BerthaLee D. San Agustin  
 Elizabeth M. San Agustin  
 John D. San Miguel  
 Joaquin M. San Nicolas  
 Joseph C. San Nicolas  
 Joseph J. San Nicolas  
 Joseph SA San Nicolas  
 Katherine San Nicolas  
 Kin M. San Nicolas  
 Melvin D. San Nicolas  
 Ronald D. San Nicolas  
 Francisco C. Sanchez  
 Frank A. Sanchez  
 Fred J. Sanchez  
 Lourdes S. Sanchez  
 Patricia C. Sanchez  
 Sanchez Sanchez  
 Tania Marie T. Sanchez  
 Zachery T. Sanchez  
 Glenn G. Santos  
 Jennifer C. Santos  
 Edward M. Santos  
 Jose M. Santos  
 Mancini Liam G. Santos  
 Joseph M. Santos Jr.,  
 Brian JL Saturnio  
 Marcelino F. Saturnio  
 Melissa B. Schaible

Richard D. Scroggs  
 Rudy B. Seballos  
 Lauris Eldon Selleck  
 Kathleen P. Sgambelluri  
 Julie R. Shane  
 Winnie S. Sharma  
 Carmen M. Sian-Denton.  
 Patrick AF Siguenza  
 Peter L. Sourgose  
 Joseph A. Tadeo  
 Dominic Ray M. Taimanglo  
 Eddie T. Taimanglo  
 Frankie Taimanglo  
 Kyle M. Taimanglo  
 Jacalyn M. Taisacan  
 Anthony Earl L. Taitague  
 Danny LG Taitague  
 Frankie Q. Taitague  
 Garrick LG Taitague  
 Diana S. Taitano  
 Joey A. Taitano  
 Zambales R. Tallada  
 Bill Taman  
 Diane M. Tayama  
 Samuel J. Taylor  
 Michael F. Techaira  
 Michael J. Techaira  
 Frankie D. Tedtaotao  
 Vernon E. Tobey  
 Henry S. Topasna  
 Ron S. Topasna  
 Brian K. Torres  
 David A. Torres  
 Victor A. Torres  
 Ely T. Torres, Jr.  
 Antonio James Toves  
 Rodney A. Toves  
 Patrick Trevino  
 Redendo D Trinidad  
 Jason Henry S. Tudela  
 David U. Tuitu'u  
 Peter F. Unchangco  
 Paul C. Untalan  
 Melissa Marie T. Uy  
 Raymond C. Vibar  
 Marietta P. Vicente  
 Rodney J. Villagomez  
 Arnulfo L. Villapando  
 Jerald Lee Wall  
 Carl Wilson, Jr.  
 Berlin E. Yanto  
 Garrett KA Yeoh  
 Claire N. Young  
 Doris J. Young

**GUAM WATERWORKS AUTHORITY**

---

**FINANCIAL STATEMENTS AND  
ADDITIONAL INFORMATION AND  
INDEPENDENT AUDITORS' REPORT**

---

**YEARS ENDED SEPTEMBER 30, 2008 AND 2007**

\*The following nine (9) pages are taken directly from GWA's audited financial statements for FY 2008. These nine pages provide the key financial highlights of GWA's operating performance in FY 2008. However, these pages are only a partial publication of the complete audit.

For a complete publication of the entire "Financial Statements And Additional Information And Independent Auditors' Report", please visit our website at [www.guamwaterworks.org](http://www.guamwaterworks.org) or the Office of The Public Auditor's website at [www.guamopa.com](http://www.guamopa.com).

# **GUAM WATERWORKS AUTHORITY**

## **Management's Discussion and Analysis September 30, 2008 and 2007**

As management of the Guam Waterworks Authority (GWA), we offer readers of GWA's financial statements this narrative overview and analysis for the fiscal year ended September 30, 2008. We encourage readers to consider the information presented here and in our basic financial statements, which begin on page 2.

### **Overview of the Financial Statements**

This discussion and analysis is intended to serve as an introduction to the GWA's basic financial statements. GWA's basic financial statements are for a single proprietary fund and include the financial statements, notes to those financial statements and other supplementary and statistical information.

### **Proprietary Fund Financial Statements**

GWA's operations are accounted for as a single proprietary fund using the full accrual basis of accounting. In this regard, GWA operations are accounted for in a manner similar to a private enterprise. Within this one proprietary fund, GWA segregates revenues and expenses for various purposes such as operations, debt service and capital improvements, but that segregation does not create separate proprietary funds.

### **Notes to the Financial Statements**

The notes provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes to the financial statements can be found beginning on page 12 of this report.

### **Other Information**

In addition to the basic financial statements and accompanying notes, this report also presents supplementary and statistical information. Certain selected supplementary and statistical information can be found beginning on page 30 of this report.

### **Financial Highlights**

- Total assets of GWA exceeded total liabilities at the close of the fiscal year by \$189.4 million (net assets).
- The reduction in net assets was \$.66 million less than (or a 34% change) the net change in fiscal year 2007.
- Total net assets of GWA decreased by \$1.3 million during fiscal year 2008.
- Operating revenues increased by \$5.5 million as compared to fiscal year 2007.
- Net capital assets at September 30, 2008 increased by \$13.3 million as compared to the net balance at September 30, 2007.
- Operating and maintenance expenses increased by \$6.7 million as compared to fiscal year 2007.
- GWA experienced an operating loss of \$3.2 million for the fiscal year ended September 30, 2008 as compared to prior year's operating loss of \$2.0 million, a 61% change.

# GUAM WATERWORKS AUTHORITY

## Management's Discussion and Analysis September 30, 2008 and 2007

### Financial Condition

The Authority's total net assets decreased by \$1.3 million during the fiscal year (see Table 1 below) due to interest expense, inventory write-down, and operating and maintenance expenses.

The decrease in long-term liabilities of \$4.5 million (see Table 1 below) is due to payment of debt service and surcharges.

The Authority's investment in capital assets net, of related debt, represents 109% of total net assets. The amount invested in capital assets, net of debt, decreased by \$4.5 million. The decrease was the result of capital acquisitions, net of depreciation and disposals, and 2005 revenue bonds used in fiscal 2008 to acquire capital assets.

**Table 1**  
**Summary Statement of Net Assets**

	September 30, 2008	September 30, 2007	September 30, 2006	<u>2008 to 2007 Comparison</u>	
				Increase/ (Decrease)	% Change
Current assets	\$ 15,892,616	\$ 17,483,822	\$ 15,466,932	\$ (1,591,206)	(9.10)%
Property, plant and equipment, net	267,744,474	254,399,284	239,602,789	13,345,190	5.25%
Other non-current assets	<u>43,331,071</u>	<u>61,688,758</u>	<u>80,782,409</u>	<u>(18,357,687)</u>	<u>(29.76)%</u>
Total assets	<u>326,968,161</u>	<u>333,571,864</u>	<u>335,852,130</u>	<u>(6,603,703)</u>	<u>(1.98)%</u>
Current liabilities	20,314,496	21,165,672	17,019,403	(851,176)	(4.02)%
Long-term liabilities	<u>117,213,825</u>	<u>121,693,600</u>	<u>126,187,085</u>	<u>(4,479,775)</u>	<u>(3.68)%</u>
Total liabilities	<u>137,528,321</u>	<u>142,859,272</u>	<u>143,206,488</u>	<u>(5,330,951)</u>	<u>(3.73)%</u>
Net assets:					
Invested in capital assets, net of related debt	205,990,597	210,517,277	216,460,775	(4,526,680)	(2.15)%
Restricted	576,243	975,798	3,034,766	(399,555)	(40.95)%
Unrestricted	<u>(17,127,000)</u>	<u>(20,780,483)</u>	<u>(26,849,899)</u>	<u>3,653,483</u>	<u>17.58%</u>
Total net assets	<u>189,439,840</u>	<u>190,712,592</u>	<u>192,645,642</u>	<u>(1,272,752)</u>	<u>(0.67)%</u>
Total liabilities and net assets	\$ <u>326,968,161</u>	\$ <u>333,571,864</u>	\$ <u>335,852,130</u>	\$ <u>(6,603,703)</u>	<u>(1.98)%</u>

Total operating revenues of \$50.8 million increased by \$5.5 million for the current year and operating expenses of \$53.9 million increased by \$6.0 million, resulting in increase in net operating loss of \$446K when compared to the prior year (see Table 2).

The major changes in net income from the prior year were from the following:

- Water and wastewater revenues increased by \$5.1 million over the prior fiscal year (see Table 3 below) due to increases in consumption (3.72%) and the number of residential customers (2.8%). The basic water and sewer charges are assessed monthly on residential customers without regard to consumption.
- Operating expenses increased by \$6.0 million. The increase in operating expenses resulted from an increase in electricity of \$2.7 million, water of \$1.6 million, personnel costs of \$2.0 million, and decrease in other expense of \$.3 million.

# GUAM WATERWORKS AUTHORITY

## Management's Discussion and Analysis September 30, 2008 and 2007

**Table 2**  
**Results of Operations/Statement of Revenues, Expenses and Changes in Net Assets**

	September 30, <u>2008</u>	September 30, <u>2007</u>	September 30, <u>2006</u>	<u>2008 to 2007 Comparison</u>	
				<u>Increase/ (Decrease)</u>	<u>% Change</u>
Revenues:					
Water	\$ 33,634,835	\$ 30,170,727	\$ 28,502,723	\$ 3,464,108	11.48%
Wastewater	17,015,790	15,336,312	14,631,593	1,679,478	10.95%
Other operating revenue	990,752	653,098	474,872	337,654	51.70%
Bad debt	<u>(803,609)</u>	<u>(832,515)</u>	<u>(3,188,253)</u>	<u>28,906</u>	<u>3.47%</u>
Total operating revenue	<u>50,837,768</u>	<u>45,327,622</u>	<u>40,420,935</u>	<u>5,510,146</u>	<u>12.16%</u>
Expenses:					
Power purchases	14,631,816	11,914,539	10,521,173	2,717,277	22.81%
Water purchases	4,413,377	2,820,954	5,017,247	1,592,423	56.45%
Salaries, wages and benefits	16,136,063	14,174,003	14,045,039	1,962,060	13.84%
Depreciation	10,677,756	9,748,542	9,375,635	929,214	9.53%
Administrative and general	4,184,736	5,162,451	4,697,858	(977,715)	(18.94)%
Contractual	<u>3,874,734</u>	<u>4,141,397</u>	<u>3,956,433</u>	<u>(266,663)</u>	<u>(6.44)%</u>
Total operating expenses	<u>53,918,482</u>	<u>47,961,886</u>	<u>47,613,385</u>	<u>5,956,596</u>	<u>12.42%</u>
Net operating loss	(3,080,714)	(2,634,264)	(7,192,450)	(446,450)	16.95%
Non-operating revenue	4,662,746	5,310,433	3,532,692	(647,687)	(12.20)%
Less: interest expense	<u>(6,213,246)</u>	<u>(6,266,080)</u>	<u>(5,577,844)</u>	<u>52,834</u>	<u>0.84%</u>
Total non-operating expense	<u>(1,550,500)</u>	<u>(955,647)</u>	<u>(2,054,152)</u>	<u>(594,853)</u>	<u>62.24%</u>
Loss before capital contributions	(4,631,214)	(3,589,911)	(9,246,602)	(1,041,303)	(29.01)%
Capital contributions	<u>3,358,462</u>	<u>1,656,861</u>	<u>1,149,207</u>	<u>1,701,601</u>	<u>102.70%</u>
Change in net assets	(1,272,752)	(1,933,050)	(8,097,395)	660,298	34.16%
Net assets - beginning year	<u>190,712,592</u>	<u>192,645,642</u>	<u>200,743,037</u>	<u>(1,933,050)</u>	<u>(1.00)%</u>
Net assets - end of year	\$ <u>189,439,840</u>	\$ <u>190,712,592</u>	\$ <u>192,645,642</u>	\$ <u>(1,272,752)</u>	<u>(0.67)%</u>

**Table 3**  
**Annual Water Sales**

<u>Class Type</u>	<u>Consumption (in gallons)</u>			<u>2008 to 2007 Comparison</u>	
	<u>FY08</u>	<u>FY07</u>	<u>FY06</u>	<u>Increase/ (Decrease)</u>	<u>% Change</u>
Agricultural	88,298,615	145,494,530	135,037,036	(57,195,915)	(39.31)%
Golf Course	40,847,415	5,402,988	13,154,159	35,444,427	656.02%
Comm 1	887,714,701	803,352,321	847,822,236	84,362,380	10.50%
Comm 2	141,416,157	137,703,436	135,919,138	3,712,721	2.70%
Comm 3	137,264,829	152,347,968	180,014,095	(15,083,139)	(9.90)%
Federal	1,566,960	1,812,835	940,391	(245,875)	(13.56)%
Government	628,634,237	512,157,762	563,437,506	116,476,475	22.74%
Hotel	1,109,885,610	1,044,423,148	1,013,682,600	65,462,462	6.27%
Irrigation	31,351,242	44,185,455	64,669,996	(12,834,213)	(29.05)%
Residential	<u>4,164,947,646</u>	<u>4,125,638,707</u>	<u>3,987,420,390</u>	<u>39,308,939</u>	<u>0.95%</u>
TOTAL	<u>7,231,927,412</u>	<u>6,972,519,150</u>	<u>6,942,097,547</u>	<u>259,408,262</u>	<u>3.72%</u>

# GUAM WATERWORKS AUTHORITY

## Management's Discussion and Analysis September 30, 2008 and 2007

**Table 3**  
**Annual Wastewater Sales**

<u>Class Type</u>	<u>Consumption (in gallons)</u>			<u>2008 to 2007 Comparison</u>	
	<u>FY08</u>	<u>FY07</u>	<u>FY06</u>	<u>Increase/ (Decrease)</u>	<u>% Change</u>
Comm 1	567,057,156	485,604,500	473,213,677	81,452,656	16.77%
Comm 2	115,084,369	107,709,962	105,033,508	7,374,407	6.85%
Comm 3	108,820,482	119,756,129	116,492,489	(10,935,647)	(9.13)%
Federal	1,227,168	448,487,502	570,960,072	(447,260,334)	(99.73)%
Government	336,707,520	345,772,026	343,915,042	(9,064,506)	(2.62)%
Hotel	604,089,902	666,743,562	656,465,126	(62,653,660)	(9.40)%
Residential	<u>2,383,464,084</u>	<u>2,301,717,080</u>	<u>2,282,100,885</u>	<u>81,747,004</u>	<u>3.55%</u>
TOTAL	<u>4,116,450,681</u>	<u>4,475,790,761</u>	<u>4,548,180,799</u>	<u>(359,340,080)</u>	<u>(8.03)%</u>

### Capital Assets, Net of Accumulated Depreciation

The Authority had \$268 million (net of accumulated depreciation) invested in water utility capital assets as of September 30, 2008. The investment in capital assets includes building, improvements, water treatment plants, filter plants, water transmission and distribution mains, water storage facilities, reservoirs, pump stations, machinery, equipment and land. This amount represents an increase of \$13.3 million over the prior fiscal year. See note 2 to the accompanying financial statements for additional information concerning capital assets.

**Table 4**  
**Capital Assets, Net of Accumulated Depreciation**

	September 30, <u>2008</u>	September 30, <u>2007</u>	September 30, <u>2006</u>	<u>2008 to 2007 Comparison</u>	
				<u>Increase/ (Decrease)</u>	<u>% Change</u>
Plant, buildings and equipment, net	\$ 228,257,361	\$ 231,668,972	\$ 212,887,711	\$ (3,411,611)	(1.47)%
Construction in progress	<u>39,487,113</u>	<u>22,730,312</u>	<u>26,715,078</u>	<u>16,756,801</u>	<u>73.72%</u>
Total	\$ <u>267,744,474</u>	\$ <u>254,399,284</u>	\$ <u>239,602,789</u>	\$ <u>13,345,190</u>	<u>5.25%</u>

**Table 5**  
**Long Term Debt, Less Current Maturities**

	September 30, <u>2008</u>	September 30, <u>2007</u>	September 30, <u>2006</u>	<u>2008 to 2007 Comparison</u>	
				<u>Increase/ (Decrease)</u>	<u>% Change</u>
Long-term debt	\$ 100,100,345	\$ 102,204,246	\$ 104,679,397	\$ (2,103,901)	(2.06)%
Guam Power Authority	2,834,193	5,230,111	7,587,764	(2,395,918)	(45.81)%
United States Navy	<u>5,649,098</u>	<u>6,641,023</u>	<u>7,102,685</u>	<u>(991,925)</u>	<u>(14.94)%</u>
Total	\$ <u>108,583,636</u>	\$ <u>114,075,380</u>	\$ <u>119,369,846</u>	\$ <u>5,491,744</u>	<u>(4.81)%</u>

As of September 30, 2008 the Authority had total long-term debt outstanding of \$108.6 million, net of unamortized costs, which is a decrease of \$5.5 million over the prior year. See note 4 to the accompanying financial statements for additional information on long-term debt.

# GUAM WATERWORKS AUTHORITY

## Management's Discussion and Analysis September 30, 2008 and 2007

The Authority is required by bond covenants to maintain principal, interest, and reserve funds for the bond issue outstanding. In addition, the Authority is required to set rates and charges to yield revenues equal to at least 125% of the current annual debt service requirements of the outstanding 2005 revenue bonds. The payments applied to the Guam Power Authority and United States Navy is derived from assessed surcharges from current customers.

### **Looking Forward**

#### Outlook, Challenges, and Opportunities

In today's economic recession, people will be cutting back on buying things at the mall, taking expensive trips or going out for dinner, but they probably won't cut back much on their use of water or aren't likely to run the tap any less while they're brushing their teeth. People who buy bottled water because of safety issue may now decide not to buy as much bottled water and instead put a filter on their tap. GWA is going to get hit hard by the economic downturn in many of the same way other companies will be hit, however, we strongly believe the water industry is counter-recessionary.

GWA's marginal performance in FY2008 was largely attributable to the beating it experienced from increases in its power and water costs. Roughly 1/3 of GWA's operating costs are energy and water purchases related and in those two categories alone, GWA experienced increases of 23% and 59%, respectively, from the prior year. While at the onset GWA and the CCU never anticipated the higher energy and water costs, its impact on GWA's operating result and debt service coverage was enough for the Public Utilities Commission (PUC) to adjudge a 6.6% interim rate increase in February 2009.

GWA continues to move forward and in March 2009 petitioned the PUC to approve its five (5) year financial plan. The Plan requests a combined rate increase of over thirty-three percent (33%) over a period of five (5) years that includes among others, future borrowing of approximately \$300 million for system related upgrades and efficiencies, investing in a SCADA system, power monitoring systems, automation system upgrades and employing new technology in the conduct of fieldwork. In addition, GWA recently negotiated a leak detection contract with which potentially can translate into millions in water loss cost savings and it is not inconceivable GWA will be turning to more public-private partnerships to gain additional and much-needed operating efficiencies.

The recently passed federal stimulus bill will translate into estimated grants to GWA of \$5 million. The projects are currently being finalized with EPA and will be earmarked towards CWA and SDWA related projects.

GWA has developed its own estimates on the potential costs to address the impending growth associated with the buildup from the DOD relocation from Japan. Engineering estimates have come in at around \$200 million to build 16 new wells, along with water storage, transmission and distribution lines along with associated water storage and wastewater collection line. The majority of this increase will also take place in the northern half of Guam and GWA is working very closely with DOD in addressing the funding required to accommodate the build-up.

Looking beyond 2009, GWA will be facing tough, but not insurmountable, challenges. Unfortunately we are not immune to the economic pressures and every day are challenged with managing our limited resources in light of rising prices. Costs will inevitably continue to rise and operational efficiencies will undoubtedly dictate the future impact of rising costs on GWA's financial resources.

# **GUAM WATERWORKS AUTHORITY**

## **Management's Discussion and Analysis September 30, 2008 and 2007**

The key to efficiently managing our financial resources is to employ creative water and wastewater management methods to meet growing demands and ensuring that water quality meets regulatory requirements.

### **Request for Information**

This financial report is to provide interested parties with a general overview of the Authority's finances. If you have any questions about this report or need additional information, you may submit a request in writing to: Chief Financial Officer, Guam Waterworks Authority, 578 N. Marine Corp Drive, Tamuning, GU 96913, or telephone (671) 647-2583.

Management's Discussion and Analysis for the years ended September 30, 2007 and 2006, is set forth in GWA's report on the audit of the financial statements, which is dated April 29, 2008, and that Discussion and Analysis explains the major factors impacting the 2007 and 2006 financial statements and can be viewed at the Office of the Public Auditor's website at [www.guamopa.com](http://www.guamopa.com).

**GUAM WATERWORKS AUTHORITY**

Statements of Net Assets  
September 30, 2008 and 2007

<u>ASSETS</u>	<u>2008</u>	<u>2007</u>
Current assets:		
Cash:		
Unrestricted	\$ 5,064,363	\$ 6,286,905
Restricted	576,243	975,798
Accounts receivable, net	7,835,564	8,013,418
Materials and supplies inventory, net of allowance for obsolescence of \$339,745 at September 30, 2008 and 2007	2,416,446	2,207,701
Total current assets	15,892,616	17,483,822
Property, plant and equipment:		
Land	64,288	-
Utility plant in service:		
Water system	226,342,207	232,312,800
Wastewater system	190,645,544	178,658,425
Non-utility property	16,697,191	15,511,860
Construction work in progress	39,487,113	22,730,312
	473,236,343	449,213,397
Less accumulated depreciation	(205,491,869)	(194,814,113)
Property, plant and equipment, net	267,744,474	254,399,284
Other noncurrent assets:		
Restricted cash	30,896,722	49,132,976
Investments	9,600,888	9,618,008
Other assets	2,833,461	2,937,774
Total other non current assets	43,331,071	61,688,758
	\$ 326,968,161	\$ 333,571,864

See accompanying notes to financial statements.

**GUAM WATERWORKS AUTHORITY**

Statements of Net Assets, Continued  
September 30, 2008 and 2007

<u>LIABILITIES AND NET ASSETS</u>	<u>2008</u>	<u>2007</u>
Current liabilities:		
Current maturities of long-term debt	\$ 5,838,845	\$ 5,092,182
Accounts payable:		
United States Navy	457,867	238,020
Guam Power Authority	2,215,931	3,256,848
Trade	3,675,502	3,515,500
Accrued payroll and employee benefits	571,701	593,965
Current portion of employee annual leave	409,193	333,437
Accrued supplemental/COLA annuities	804,358	1,696,208
Deferred revenue	1,214,976	1,214,976
Payable to contractors	2,921,496	2,758,597
Customer deposits	1,802,715	1,973,100
Other liabilities	401,912	492,839
	<u>20,314,496</u>	<u>21,165,672</u>
Long-term debt, less current maturities:		
Long-term debt	100,100,345	102,204,246
Guam Power Authority	2,834,193	5,230,111
United States Navy	5,649,098	6,641,023
Employee annual leave, less current portion	743,047	689,382
Retirement fund deferred contributions	7,076,388	6,226,388
DCRS sick leave liability	642,987	535,641
Advances for construction	167,767	166,809
	<u>137,528,321</u>	<u>142,859,272</u>
Commitments and contingencies		
Net assets:		
Invested in capital assets, net of related debt	205,990,597	210,517,277
Restricted	576,243	975,798
Unrestricted	<u>(17,127,000)</u>	<u>(20,780,483)</u>
	<u>189,439,840</u>	<u>190,712,592</u>
	<u>\$ 326,968,161</u>	<u>\$ 333,571,864</u>

See accompanying notes to financial statements.

**GUAM WATERWORKS AUTHORITY**

Statements of Revenues, Expenses and Changes in Net Assets  
Years Ended September 30, 2008 and 2007

	2008	2007
Operating revenues:		
Water:		
Private	\$ 30,631,429	\$ 27,391,045
Government	3,003,406	2,779,682
	33,634,835	30,170,727
Wastewater:		
Private	13,543,187	12,548,076
Government	3,472,603	2,788,236
	17,015,790	15,336,312
Other	990,752	653,098
Bad debts, net of recoveries	(803,609)	(832,515)
Total operating revenues	50,837,768	45,327,622
Operating and maintenance expenses:		
Power purchases	14,631,816	11,914,539
Water purchases	4,413,377	2,820,954
	19,045,193	14,735,493
Salaries, wages and benefits	16,136,063	14,174,003
Depreciation	10,677,756	9,748,542
Administrative and general	4,184,736	5,162,451
Contractual	3,874,734	4,141,397
Total operating and maintenance expenses	53,918,482	47,961,886
Operating loss	(3,080,714)	(2,634,264)
Nonoperating revenues (expenses):		
Allowance for funds used during construction	2,120,806	2,136,807
Interest income	1,763,570	3,225,083
Interest expense	(6,213,246)	(6,266,080)
COLA/supplemental annuities, net	(112,405)	646,442
Other expense	-	(68,262)
Other income	890,775	-
Loss on asset disposal	-	(15,476)
Loss on inventory write-down	-	(614,161)
Total nonoperating revenues (expenses), net	(1,550,500)	(955,647)
Loss before capital contributions	(4,631,214)	(3,589,911)
Capital contributions:		
Grants from U.S. Government	2,398,111	1,656,861
Other contributions	960,351	-
Total capital contributions	3,358,462	1,656,861
Change in net assets	(1,272,752)	(1,933,050)
Net assets at beginning of year	190,712,592	192,645,642
Net assets at end of year	\$ 189,439,840	\$ 190,712,592

See accompanying notes to financial statements.

Water is life <sup>0</sup>08



GUAM WATERWORKS AUTHORITY

P.O. Box 3010  
Hagatña, GU 96913  
T: (671) 647-2603  
[www.guamwaterworks.org](http://www.guamwaterworks.org)