



GUAM WATERWORKS AUTHORITY



2007 ANNUAL REPORT

BEYOND CLEAR

For more than five years, the Guam Waterworks Authority has operated as an autonomous, self-sustaining organization.

In that time, the agency's dedicated and hardworking employees have received valuable training in their fields, enhanced customer service, established satisfactory community relations and made remarkable upgrades to the island's water system to improve water quality, and thereby, Guam's quality of life.

In 2008, GWA anticipates a year of accomplishing the goals it has set for itself and upholding the reputation its diligence has merited: Beyond Clear.



QUALITY

GWA continues to strive for the greatest quality in its methods, technology and product. Investing in Guam's water infrastructure now ensures not only our immediate health and safety, but also the health and safety of our future generations.

The safety and health of every family on Guam is entrusted to GWA—this is our drive and our reward.

SERVICE

As residents of Guam, we are fortunate to have the kind of access to our water resource that GWA provides. In recent years, the agency has worked to build relationships with its consumers through clear communication, improved customer service and greater awareness of the progress made and the goals set.

At GWA, we believe your water is your right and we make every effort to provide an outstanding product through superior service.





SUSTAINABILITY

Surrounded as we are by an ocean of water, it is difficult to imagine not having any. We are blessed with an abundance of fresh water. Guam Waterworks Authority promotes and facilitates the responsible and sustainable consumption of our precious resource.

GWA's water is a part of our lives. From our local farmers' crops to our dining tables, GWA guarantees the safety and availability of our water for the nourishment of our people.



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

Throughout 2007, our water utility made remarkable achievements, among the most notable is the first GWA Apprenticeship Program which will prepare future professionals in this critical field and provide career opportunities while advancing services to the public.

While many upgrades and improvements were made throughout the utility, we are proud to recognize the re-opening of the renovated Hagåtña Wastewater Treatment Plant which alleviates environmental concerns in Hagåtña Bay.

Operational enhancement solved several long-standing issues and will ensure lasting results. GWA is committed to moving forward with the development of our island. We applaud the numerous cost-cutting and revenue building initiatives of our GWA family and we are grateful for the progress you make to improve the quality of life on Guam for all our people.

On behalf of the people of Guam, congratulations and *Un dangkolo'na Si Yu'us Ma'ase!*

Felix P. Camacho
Governor of Guam



TOP ROW PHOTO: (left to right) John Benavente, Acting G.M., Commissioners: Eloy P. Hara, Gloria B. Nelson, Chairman Simon A. Sanchez, Joanna Blas, Benigno Palomo

BOTTOM ROW PHOTO: (left to right) Danny Santos Jr., Assistant General Manager for Administration and Consolidation, Greg P. Cruz, Chief Financial Officer, Sam Taylor, Attorney CCU

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

FY 2007 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.

We continue to complete important projects that will ensure your water is clean and safe and that GWA continues to comply with all local and federal requirements. We’ve completed a master plan that will provide a roadmap for GWA to grow with Guam. We are actively engaged in discussions involving the military buildup to ensure that the military pay for the impact they will create to ensure that we protect our fragile water resources and our surrounding environment. We have instituted an apprenticeship program to ensure GWA always has the best-trained employees to serve you. And we continue to repair and upgrade your system so it may better serve you today and tomorrow.

Our interim general manager, John Benavente, further details a long list of specific improvements that GWA worked on in 2007. And while much has been accomplished, much more remains to be done to ensure 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 sure our monies are not wasted as before. We must build a reliable and sustainable GWA so that you will have “Good Water Always.”

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



Buenas and Hafa Adai People of Guam,

On behalf of the 270 employees of Guam Waterworks Authority and their families, we are pleased to submit to you our 2007/2008 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.

As you know, water is the most precious resource we have. It keeps us alive and healthy, gives us fire protection and encourages community growth. In 2007, we continued our commitment to the community by improving service delivery to the people of Guam. It is the leadership of the Consolidated Commission on Utilities, management of GWA and ultimately, our hardworking employees that have made this possible.

Here are just a few of the many noteworthy outcomes which we have accomplished this year.

- **Reduced leaks and water loss in the system:** Since August of 2007, we have focused primarily in the villages of Santa Rita and Agat to reduce leaks and our dependency on purchased Navy water. As a result of our efforts, we have saved the community over 76 million gallons annually of lost water. This translates into an annual savings of nearly \$500,000. We continue to identify other areas on island with multiple leaks and excessive water loss.
- **Increased water pressure to the village of Barrigada:** Barrigada has been plagued with low water pressure and, in some cases, virtually no water for over 15 years. In 2007, GWA crews worked diligently to address this situation. By July of 2007, our crews had remedied this persistent problem. As a result of this success, we are modeling this process throughout our system. In 2008 and 2009 we will continue to work to address all chronic low water pressure problems.

- **Apprenticeship and Trades Helper Program:** In October 2007, we successfully brought on 18 trades helpers and 24 apprentices to our staff. It has been noted that in the next several years, over half of our employees will be either retiring or eligible for retirement. It is critical for the growth and success of the utility to begin the training of those who will operate and manage the system later. We are excited about this program and are pleased that the apprentices/trades helpers themselves are excited about being a part of one of Guam’s most important agencies.
- **Initiated first annual General Manager Awards Program:** I am a firm believer that all employees who perform above and beyond should receive recognition and thanks for a job well done. GWA had not had an employee recognition program for many years. This year we reinstituted this program and look forward to its expansion.
- **Hagåtña Treatment Plant:** HTP received a much needed renovation, costing over \$10M. For the first time in over 10 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 Treatment Plant:** In addition to the HTP facelift, NTP is also undergoing similar upgrades. Both plants will have outfalls within 2008 built to follow federal guidelines. This means that sewage will be treated properly and eliminated from the system safely.
- **Media Campaign:** An overwhelming percentage of the GWA stories in the media are negative to the agency. The CCU and I felt it important to tell the untold story of GWA. We have managed to do that by upgrading and improving our website, initiating a thank you campaign and a customer service satisfaction campaign on both television and radio. We have routinely educated the community with our “Did You Know?” campaign, both on radio and in the print media. We regularly send out press releases notifying the public in advance as to when water will be out. We have revised all collateral pieces for each division and created a door hanger for GWA staff to use when working on homes and lines in the area. We have also implemented key community projects such as assisting in the schools, being visible at 5K runs to promote our safe drinking water and sponsoring other community events. “Tap Water Delivers” will be the next series of media outreach to continue to explain to the public not only the importance of water, but also to the inexpensive cost to bring water to our homes.
- **Improved Transmission lines in both Santa Rita and Sinajana:** Both of these projects as mandated by the Stipulated Order will greatly assist in improving the water capacity of these villages. In Santa Rita we are working to be able to bring water from the Navy (where we purchase it) and store it in our own facilities and then send it to the consumer. In Sinajana the transmission line will greatly improve storage capacity so that in times of storms, Sinajana and the surrounding areas will not lose water.
- **Initiated the Certified Technical Program:** As a result of an exhaustive study done on salaries within GWA, in comparison to other water utilities, it was discovered that more than 95 percent of the water utilities nationwide used a higher salary range than GWA. The CCU set a goal of increasing salaries to the fiftieth percentile, however due to a lack of immediate funding to get to that level, it was decided to try and get salaries to the fifth percentile. We did this in October 2007. The plan is to be at the fiftieth percentile within the next five years.
- **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. In 2007 we initiated and completed a series of village meetings. We look forward to the continued development of a strong relationship between the agency and the Village Mayors through this program in 2008.

These are just a few of the many projects that take place at GWA. We have plans for so many more. In light of the projected expansion of our population in the next several years, we know that our utility will go through continued tremendous growth. While we know we can meet the demand for water, we will need our community to support us in this effort.

In closing I would like to 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.

Si Yu’os Ma’ase,

John Benavente
General Manager
Consolidated Utility Services

MARK MILLER
ASSISTANT GENERAL MANAGER:
PRODUCTION AND TREATMENT



ACCOMPLISHMENTS FY 2007

Deep Well Maintenance

Stipulated Order Requirement:

- Implemented automatic start-up of standby generators and wells at more than 95 percent of our operating wells.

Non-Stipulated Order Requirements:

- Water production metered at all operating wells.
- Two Hard Broke wells put back on line after three to five years of inactivity.
- \$151,100 spent on new industrial duty steel doors and jams for 85 percent of GWA well facilities; doors expected on island early January 2008, installation completion by April same year.

Deep Well Operations & Disinfection

Stipulated Order Requirements:

- Installed chlorine automatic switch-over systems with accurate hydraulic chlorine weight scales at all chlorinated well sites.
- Completed well and chlorine motor run/fail interlocks at all GWA wells.
- Standardized chlorine feed system layout and component brands at over 97 percent of operating wells, significantly reducing both chlorine and well system downtime due to disinfection failures.

Non-Stipulated Order Requirements:

- Purchased and constructed chlorine repair and overhaul maintenance shop, equipped with tools, equipment and test benches to fully service and bench test chlorinators, ejectors, booster pumps and motors.
- Installed optimal motor electrical protection—just short of variable frequency drives—at all operating wells, significantly reducing motor failures
- Electrical upgrade of both supply side (GPA) and load side (GWA) completed at 25 of GWA's most critical wells (combined effort of GPA/GWA Deep Well Task Force).
- Completed 18-month variable frequency drive pilot program of solid state VFDs at wells A-31, Y-15 and Pago Bay booster station. Resulted in zero motor failures and consequent savings on labor and inventory costs normally associated with motor repairs.
- GWA anticipates the first 20 VFD units for GWA's 20 most critical wells to be installed April 2008. GWA plans to install VFD units at all GWA wells over the next two to three years.
- GWA's first ever Air Permit applications submitted to Guam EPA for all GWA water booster stations, wells and treatment plant. (GPA/GWA Task Force)
- GWA's first ever SPCC Plan completed. Action items already addressed for all GWA water booster stations, wells and treatment plant. (GPA/GWA Task Force)
- GWA is standardizing all well motors, pumps and submersible electrical cable to improve efficiencies regarding maintenance, inventory and training requirements. \$1.1M bid to be advertised first week of December.

Ugum Wastewater Treatment Plant

Non-Stipulated Order Requirements:

- Ugum water treatment plant meeting Safe Drinking Water Act turbidity requirements 100 percent of the time.
- Recently assigned two additional certified treatment plant operators to the plant.

GOALS FY 2008

- Complete division-wide and multi-agency interaction Standard Operating Procedures and Memoranda of Understanding, a first for GWA.
- Train key division personnel on internal data review, analysis and reporting process.
- Complete Spill Prevention Control and Countermeasures and Air Emissions Permit programs, compliance and reporting actions.
- Complete the remaining inspection punch-list items regarding the installation of the dual chlorine cylinder, auto switchover feed systems at all affected deep wells.
- Establish divisional performance, awards and recognition programs

ANTHONY P. CHARGUALAF
ASSISTANT GENERAL MANAGER:
COLLECTION AND DISTRIBUTION



ACCOMPLISHMENTS FY 2007

- Reduced customer complaint log to less than 100.
- Improved water pressure in Santa Rita, Agat, Barrigada and Jonestown.
- Found and repaired significant leaks in front of Carbullido Elementary School, Dominican Nursery in Chalan Pago and Chalan Sabanan Magas in Mangilao.
- Formed a fire hydrant team, which focuses on the repair, replacement and maintenance of fire hydrants islandwide.
- Each supervisor attended customer services training and other various training, which attributed to better servicing our customers.
- Formed a pump maintenance team to attend to water booster pumps islandwide.
- Reduced the dependency on Fena water by GWA system by more than half a million gallons a day.
- Ensured 100 percent pump availability at all booster stations.

GOALS FY 2008

- Increase our ability to respond to customers' complaints within three days.
- Implementation of an islandwide leak detection program.
- We anticipate the completion of the Agat and Santa Rita assessment project, which includes the termination of old lines, the repair of leaking lines and the transfer of customer services from the old lines to the new lines.
- In 2008, we plan to address all areas affected with low water pressure by the zoning or upgrading of water lines.
- We will utilize SCADA to monitor booster stations and reservoir levels.
- GWA will continue to engage employees in additional training to promote efficiency in the work place.

PAUL KEMP
ASSISTANT GENERAL MANAGER:
COMPLIANCE AND SAFETY



ACCOMPLISHMENTS FY 2007

- GWA completed and, by CCU resolution, adopted a major planning milestone: The GWA Water Resources Master Plan, 2007, which has identified the island's infrastructure needs for the next 25 years with a tentative schedule laid out for the next five years.
- In the WRMP 2007 are identified \$900M of infrastructure repair and upgrade projects needed to give Guam the quality and reliability of water and wastewater service it needs.
- GWA acquired a Geographical Information Systems/Land Management System manager to operate and maintain the GWA asset GIS system, developed under the WRMP 2007. With his help, GWA has been able to improve its response time for water problems over the entire island.
- GWA acquired a field safety inspector who has been instrumental in supporting our personnel in implementing improved safety procedures.
- The GWA Safety Committee prepared a draft Safety Manual which is being circulated throughout the utility for staff review and buy-in.
- Completed refurbishments of the Hagåtña and Northern districts sewage treatment plants and both plants are showing much improved performance.
- The Hagåtña sewage treatment plant is reliably performing up to its design specifications and its NPDES permit control limits for the first time ever.
- Santa Rita Spring booster station was refurbished and a water transmission line to the Santa Rita storage tank has been installed. These are now helping keep water pressure to upper elevations in the village.
- GWA contracted an adequate water disinfectant reserve to be kept on the island at all times to insure the ability to maintain SDWA quality water in the event of interruptions in receiving supplies from off island.
- GWA's standby generator project has been thoroughly tested and it is now expected that the essential utility services will no longer suffer from storm event interruptions.
- A feasibility study on wastewater management for Baza Gardens and Agat sewage treatment plants has been completed and from this study will come the future plans for enhancing these facilities.
- GWA prepared a sewer hook-up revolving loan program, which has been approved by U.S. EPA and Guam EPA. The program is expected to be implemented in mid-2008.
- Installation of both the Hagåtña and Northern District outfalls was begun and they will both be completed in early 2008.

GOALS FY 2008

- Completion, approval, distribution and implementation of the GWA employee Safety Manual and Safety Standard Operating Procedures.
- Completion of the setup and installation of the Ground Water Under Direct Influence of Surface Water research study monitoring systems at 13 additional GWA source water wells.
- Completion of the Hagåtña and Northern District Wastewater Treatment Plant outfalls.
- Commencement of the Ugum River Surface Water Treatment Facility process refurbishment and upgrade.
- Repair of the Ugum River Surface Water Treatment Facility finished water reservoir (damage done during Typhoon Pongsonga).
- Completion of the design of the GWA Dededo Water Laboratory.
- Implementation of the GWA Sewer Hook Up revolving loan fund.
- Completion of the basis of design for modification and upgrade of the Baza Gardens and the Agat Wastewater Treatment Plants.
- Completion of the Agat wastewater collection system restoration to prevent influx of storm water, causing system overloads during heavy rains.
- Completion of pilot study and design of a Supervisory Controls And Data Acquisition (SCADA) system to help provide better service throughout the water system.
- Begin the island wide condition assessment of all GWA water storage tanks.
- Develop and present for approval to the Guam PUC of equitable water rate structure and system development charge.
- Complete and present for approval to the Guam PUC of the GWA five year plan and Final Financial Plan.



ELAINE CRUZ
HUMAN RESOURCES MANAGER

ACCOMPLISHMENTS FY 2007

- Since January 2007, GWA Human Resources has recruited 74 new employees, of which 24 are trades apprentices, 20 are trades helpers, two are in Engineering, six are in Operations and the remainder were placed in Administrative Support.
- In Records and Benefits, HR has coordinated the fiscal year 2008 Health and Life Insurance Open Enrollments for medical and dental insurance and has provided the Department of Administration with the GASB-45 statistics on life insurance. This division has also processed two rehires, one separation from the Authority and one retirement.
- Employee Management Relations has processed over four employee disciplines for various infractions, 74 pre-employment drug screenings, one random drug screening and two grievances.
- Several position classification and compensation actions have been processed as a result of the implementation of the Alan Searle Compensation and Benefits Wage Study. Pay raises were awarded to 217 employees who hold certified, technical and professional positions.
- A new employee handbook is nearly complete and is pending legal review for compliance with statutes and the Personnel Rules and Regulations covering the CTP positions, Public Law 28-159 and the Alan Searle wage study for GWA's certified, professional and technical employees.
- A quarterly newcomer's orientation and a new employee recognition program (which may be tied in to the new Performance Management System and Appraisal form) are in the works and are slated for summer 2008.

DON ANTROBUS
CHIEF ENGINEER



ACCOMPLISHMENTS FY 2007

STAFFING:

The engineering department added a full time licensed electrical engineer in our technical support section. Ms. Barbara Cruz comes to GWA via GPA and will coordinate our electrical protection and SCADA initiatives. In addition, we added a technician, Mr. Joe Tadeo, to our geographical information systems section to help us improve and maintain our information and data systems.

We still have multiple key positions that we were unable to fill in 2007. We will continue to seek motivated and experienced individuals who can help GWA not only to continue but also to expedite the completion of improvement initiatives at the utility.

CIP PROJECTS:

- Hagåtña Wastewater Treatment Facilities: This \$10.5M project completed a comprehensive rehabilitation of the Hagåtña Wastewater Treatment Plant. This work was completed in February 2007. The plant is now in compliance with the water quality parameters in its discharge permits for the first time in over 20 years.
- Santa Rita Spring Transmission Line: This \$1.5M project to construct a transmission line from the Santa Rita booster station to the Santa Rita storage tank and to upgrade the booster station was completed in the summer of 2007. The completed work allows GWA to better manage water levels in the storage tank in order to consistently provide better water pressure to the area. Additional work is planned for the spring impound structure.
- Well Electrical Protection: This is an ongoing effort to improve the electrical controls at water well sites around the island. Work to date includes upgrading existing electrical controls at well sites by a joint GWA/GPA task force. The result has been less frequent pump and motor failures, providing more consistent and reliable water supply. An additional contract to install variable frequency drives at critical wells has been let and will be awarded in early 2008. The drives will provide additional electrical protections and will provide control over pumping rates for better management of the aquifer.
- Wastewater Treatment Plant Outfalls: This is a \$17M project to install new ocean outfalls for the Hagåtña and Northern wastewater treatment plants. The projects will discharge treated wastewater further out and deeper into the ocean while promoting mixing with ocean water. Major construction work began in the summer of 2007 and both projects are projected to be completed in the summer of 2008.
- Upgrade of Groundwater Chlorination: This is a \$3.5M project that is jointly funded by U.S. EPA and 2005 bonds. This project will renovate water well stations with an emphasis on chlorination systems and controls. The installation of primary equipment has been completed by GWA. A construction contract has been executed to complete the remainder of the work over the summer of 2008.

OTHER INITIATIVES:

- Military Buildup: GWA is in ongoing discussions with the Joint Guam Program Office to ensure that

water and wastewater solutions to support military and civilian population growth are coordinated, efficient and compatible with existing services, i.e. no impact on existing customers. This effort includes the development of a Needs Assessment document, delineating GWA water and wastewater needs to support projected populations, and an Environmental Impact Statement Scoping Concerns document delineating potential water and wastewater impacts that we wish to be evaluated in the EIS document. In addition, GWA engineering meets regularly with local Navy counterparts to coordinate on joint water/wastewater issues.

- Geographical Information System: Our new GIS system has been deployed throughout GWA for the use of operations, permits, GM office, laboratory, chlorine, central maintenance and customer service sections. The database makes water and wastewater system information now available on the computer desktop rather than in hard-to-access hard copy file archives. The new system is fully backed up to protect the data into the future.
- Private Developments – Sustainable System Expansion: In 2007, GWA processed over 700 building permit applications for single family, multi-unit dwellings and commercial properties. Design plans for all multi-unit and commercial developments are reviewed by the engineering department for consistency with standards and to ensure no impacts on existing systems. During this same period, we reviewed and commented on 64 applications to the Land Use Commission Application Review Committee, including many new developments and variance requests.
- Grant Procurement: GWA promoted one of our planners to the position of grant administrator. Our new grant administrator will be actively investigating federal grant opportunities for capital projects, operation and maintenance and/or training in order to reduce our dependency on rate increases for utility improvements. Currently, the plan is to review and research possible grants to add to existing grants that GWA receives from the federal government.

GOALS FY 2008

STAFFING:

GWA has established new position descriptions, minimum job requirements and compensation structures for certified technical and professional employees including our engineering positions. We have an ongoing effort to fill the following positions: assistant chief engineer, senior engineer supervisor for water section and senior engineer supervisor for construction management section.

CIP PROJECTS:

- Hagåtña and Northern Wastewater Treatment Facilities: GWA is adding laboratory equipment and autosamplers at the Hagåtña WWTP to allow for process sampling that will maximize treatment efficiency at the plant. The laboratory also has the capacity to complete analysis for the other treatment plants. Northern District will complete grit removal and piping repair in half of the aeration system (the first half was done in 2006) allowing GWA to alternate use of the halves of the system for routine maintenance. Sludge and scum pumps will also be replaced at Northern to ensure that all systems are fully redundant and as efficiently operated as possible.

- **Agana Main Wastewater Pump Station Renovation:** This \$500K pump station project is an extension of the Hagåtña treatment plant renovation project. The project will conduct structural and electrical improvements and repair grit removal equipment that is important for the continued performance of the treatment plant itself. A contract is in place for the work and active construction will begin upon arrival of pumping equipment necessary to back-up the pump station during construction activities. Work completion is projected for the end of fall 2008.
- **Route 5 Transmission Line:** This \$1.5M project to install a transmission line from Cross Island Road by the Fena treatment plant to the Santa Rita booster station and storage tank. The completed project will provide a backup water supply for Agat and Santa Rita and allow GWA to reduce its dependency on Navy water purchases. A construction contract is in place and active construction will begin in early 2008.
- **Ugum Treatment Plant Renovation:** This is an \$8.5M project that will renovate the Ugum Water Treatment plant to add capacity and improve the reliability of the treatment process during the rainy season. The refurbishment will include the conversion of existing conventional surface water plant to a micro-filtration system; replacement of electrical control systems; replacement of finished water pumps; installation of SCADA equipment; and the refurbishment of the backwash waste handling system. A design build project was awarded in 2007; design work is progressing and construction will take place in 2008.
- **Storage Tank Inspections and Repair:** This project will complete a comprehensive inspection of all GWA water storage reservoirs and complete minor repair work identified during inspection. The project is estimated to cost \$500,000 and will be funded by GWA revenue bonds. A project solicitation was scheduled.
- **Mangilao Tank Replacement:** This is a \$1.25M FEMA-funded project to replace a water storage reservoir damaged in a previous typhoon. A contract has been let and awarded. Demolition activities for this work are expected to commence in April 2008 with construction of the new tank to follow within two months thereafter.
- **Sinajana Transmission Line:** This is a \$7.7M transmission line project, which will construct approximately 24,800 feet of eight, 12 and 24-inch water transmission lines between the Chaot and Agana Heights water storage tanks. It will connect seven existing wells to a dedicated transmission line. The project is being let in two phases. The first phase is under construction and will be completed in early March 2008. The second phase will be let in early 2008 with a scheduled completion date in early 2009.
- **Laboratory Renovation Design:** This project will complete a design for a renovation and expansion of the GWA main laboratory. The laboratory processes water and wastewater samples to insure compliance with SDWA and CWA regulations. Future projects will provide for the construction of the lab. The design solicitation will be let in the spring of 2008.
- **Old Agat Wastewater Collection System Upgrade:** \$4.18M EPA SDWA. This is a \$4.2M EPA-funded project to replace parts of the collection system in old Agat. The completed project will correct problems in the system that result in collection of stormwater and groundwater in the sewer system. It will eliminate wastewater overflows

caused by excess stormwater entering the system and improve the performance of the Agat wastewater treatment plant. The design has been completed and a construction solicitation was let in 2007. Bid prices were significantly higher than anticipated and were rejected. GWA engineering is revising the construction package and will re-solicit in the spring of 2008. Construction is expected to take 12-18 months once a contract has been awarded.

- **Baza Gardens Wastewater Treatment Plant Facility Plan:** This is a \$500K project funded by the 2005 bond to complete a facility plan for this Talofofo wastewater treatment plant. The facility plan is a pre-design document that will determine 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 will provide a roadmap for the detailed design work to follow. The work commenced in 2007 and is scheduled for completion in March 2008.
 - **Land Survey:** This project will complete a boundary survey of all GWA real property requirements. In many cases, the effort will require sectioning of a larger parcel held by the government. Upon completion of the survey work, interest in the property shall be transferred to GWA. These properties are currently not included in an accounting of GWA assets. Accounting for these real property assets will improve GWA financial status and may facilitate more economical borrowing in the future.
- INITIATIVES:**
- **Design Standards:** In 2008, GWA engineering will undertake an effort to revise design standards, update and/or create standard details and revise standard operating procedures.
 - **Fats, Oil and Grease Elimination:** In 2008, GWA will continue our efforts to minimize the introduction of FOG into the wastewater collection system in partnership with Guam EPA and the Department of Public Health. When FOG enters our wastewater collection system, it acts much the same way as it does when it sticks to pots and pans—it collects on the pipe walls and builds up until there is a clog. When sewer lines clog, sewage overflows from manholes and/or backs up into establishments or homes. It currently costs GWA ratepayers nearly \$500,000 annually to deal with FOG that enters the system. In 2008 GWA will develop design standards and minimum sizing and maintenance requirements for grease traps that will be enforced on all new commercial customers, as well as those whose discharges are negatively impacting the sewer system.
 - **Wastewater Pretreatment Programs:** The engineering team will develop a formal industrial pretreatment program for commercial wastewater generators, such as wash-down facilities, municipal landfills (leachate), repair garages, etc.
 - **Sustainable Wastewater Collection System Expansion:** Implementation of the wastewater revolving loan fund will begin in mid-2008. The loan fund is being seeded with grant funding from the U.S. EPA and will provide low interest loans to individuals to help them comply with existing rules and regulations.



HEIDI M. BALLENDORF
COMMUNICATIONS AND
COMMUNITY RELATIONS MANAGER

What's New at the New GWA *Beyond Clear*

Communications and Community Relations Report 2007/2008

The Communication Department over the last two years has worked diligently to improve the image of GWA by educating the public through a creative media and public awareness campaign. However, an improved image also comes from improved community outreach. 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.**

HERE ARE SOME OF THIS PAST YEAR'S ACCOMPLISHMENTS:

- Published and distributed Combined Commission on Utilities (CCU) newsletter to 38,000 utility customers.
- Initiated community campaign for using GWA tap water at community events
- Creation of the first GWA television "Thank you ad's" to the community. This from our employees to the community.
- Completion of the Storyboard project. This is an action poster board concept depicting completion of projects in Guam that were previously problems but no longer are.
- Development and design of new GWA logo.
- Creation of Dvd recording GWA crews in the field making progress for our community. Launch of first ever television ads promoting the awareness of GWA and the testimonials of customer satisfaction with the agency.
- Began work on creation of a print, video, and radio "Tap Water Delivers" Campaign.
- Launch of new website
- Initiated customer service program by putting Customer Service Reps (CSR) in the villages to better assist our customers in answering billing questions.
- Expanded 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, 2007.
- Completion of 2007 Annual Report.

EMPLOYEE ROSTER



Abay, Stuart Lee	Apprentice Trainee	Chargualaf, Frankie E.	Equipment Operator II	Guerrero, Ursula A.C.	Accounting Technician I	Ramos, Charles M.	Meter Reader
Adams, Julie C.	Personnel Specialist II	Cheguina, Benny G	Trades Helper	Guerrero, Vincent Ed	Buyer Supervisor II	Resurreccion, Clement C.	Trades Helper
Aguon, Anthony L.	Water-sewer Maint Worker II	Claveria, Joseph P.	Asst Cfo	Guile Jr., Gary	Apprentice Trainee	Reyes, Kathy Mt.	Accounting Tech III
Aguon, Benny T.	Sewer Plant Operator I	Clement, Resurreccion C.	Trades Helper	Gumataotao, Anthony F.	Sewer Plant Leader	Rios, Albert J.	Trades Helper
Aguon, Daniel A.	Sewer Plant Operator II	Crisostomo, Diane T.	Customer Service Rep	Gumataotao, Christopher Q	Apprentice Trainee	Rivera, David F.	Water-sewer Maint Worker II
Aguon, Edward A.	Pumping Station Supervisor	Cruz, Alfred B.	Automotive Mechanic II	Gumataotao, Elias S.	Electrician Leader	Roberto, Frank C.	Empl Dev Spec III
Aguon, Joseph Anthony C.	Apprentice Trainee	Cruz, Andrew M	Trades Helper	Gutierrez, Arthur L.	Sewer Plant Operator I	Robinson, Demetria G.	Accountant III
Aguon, Lester D.	Meter Reader	Cruz, Anthony F.	Pumping Station Leader	Guzman, Andrew J.	Biologist I	Roldan, Martin T.	Planner II
Aguon, Peter F.	Water-sewer Maint Worker I	Cruz, Barbara Ann	Sr. Engineer Supv	Guzman, Peter A.	Apprentice Trainee	Sablan, Annie Theresese	Apprentice Trainee
Aguon, Prudencio F.	Program Coordinator III	Cruz, Bernie Antonitte Velas	Administrative Aide	Herrero, Frances C.	Water-sewer Maint Worker II	Sablan, Felix D.	Const Insp II
Aguon, Steven T.	Wastewater Maint Mechanic II	Cruz, Evelyn G.	Secretary I (Typist)	Hoover, Matthew E.	Customer Service Rep	Sablan, Francisco T.	Water-sewer Maint Worker I
Alano, Efren M.	Wastewater Const/maint Supt	Cruz, Frank T.	Water-sewer Maint Leader	Huntington II, Clinton W.	Apprentice Trainee	Sablan, Frank J.	Water-sewer Maint Worker I
Angoco II, Joseph S.	Apprentice Trainee	Cruz, Franklin F.	Pumping Station Leader	Jardel, Jose	Sewer Plant Supv	Sablan, Ledean L.	Cashier I
Apiag, Severin Hilary	Apprentice Trainee	Cruz, Grace R	Pumping Station Leader	Jardel, Victor A.	Meter Reader	Sablan, Michael M.	Equipment Operator II
Apiag, Wilfred P.	Pumping Station Leader	Cruz, Greg P.	Chief Financial Officer	Kaneshiro, Derek H.	Electrician I	Sablan, Patrick L.	Automotive Mechanic I
Apuron, Manuel P.	Programmer Analyst II	Cruz, Henry A.	Water-sewer Maint Worker II	Kemp, Paul J	Sewer Plant Leader	Sablan, Patrick R.	Collection Agent
Aquiningoc, Kenneth J.	Water-sewer Maint Worker I	Cruz, Jesse Joseph Wusstig	Storekeeper II	Leal, Jerry P.	Assistant Gm Compliance/safety	Sadler, Willie (Berney) Jr.	Sewer Plant Supv
Arceo, Bryan J.	Meter Reader Leader	Cruz, Joey J.	Trades Helper	Leon Guerrero Jr., Alejo B.	Meter Reader	Salas, Frank G.	Water-sewer Maint Worker II
Arceo, Peter J.	Water-sewer Maint Worker I	Cruz, Jose B.	Heavy Equip Mechanic II	Leon Guerrero, Brian G.	Construction Inspector II	Salas, Henry B.	Storekeeper II
Arceo, Raymond J.	Welder II	Cruz, Lola-elaine W.	Personnel Svc Administrator	Leon Guerrero, Jesse L.	Apprentice Trainee	Salas, Peter G.	Buyer II
Arriola, James R.	Trades Helper	Cruz, Loretta B.I.	Customer Service Rep	Leon Guerrero, Leroy G.	Sewer Plant Leader	Salas, William R.	Water-sewer Maint Worker II
Arriola, Norma Marie I.	Customer Service Rep	Cruz, Michelangelo Paul A.	Customer Service Rep	Limtiaco, Anita K.	Wastewater Maint Mechanic I	Salayon, Ma. Teogenesa Q.	Customer Service Supervisor
Asperas, Jaime B.	Buyer II	Cruz, Patrick M.	Pumping Station Operator II	Lizama, Francis A.	Buyer I	San Agustin, Berthalee Duena	Customer Service Rep
Asuncion, Raymond G.	Trouble Dispatcher	Cruz, Peter T.	Meter Reader	Lujan, David F.	Lab Tech Supervisor	San Agustin, Elizabeth M.	Customer Service Rep
Balajadia, Isabel C.	Collection Agent Supervisor	Cruz, Raymond Ar	Water-sewer Maint Worker I	Lujan, Francis A.	Water-sewer Maint Worker II	San Miguel, John D.	Water-sewer Maint Worker II
Ballendorf, Heidi M.	Communications Manager	Cruz, Rose B.	Trades Helper	Lujan, Jesse C.	Pumping Station Operator II	San Nicolas, Joaquin M.	Water Dist Sys Manager
Barcinas, Benbenido M.	Sewer Plant Operator II	Cruz, Thomas Franklin A.	Customer Service Rep	Lujan, Joseph E.	Pumping Station Supervisor	San Nicolas, Joseph C.	Water Plant Operator II
Bell, Henry J.	Construction Inspector III	Cruz, Vincent B.	Engineer Supervisor	Mafnas, Donnie A.	Welder II	San Nicolas, Joseph J.	Apprentice Trainee
Benavente, Joseph M.	Water-sewer Maint Worker I	Cruz, Yvonne M.	Water Construction/maint Supt	Mafnas, Fred B.	Construction Inspector I	San Nicolas, Joseph S.A.	Accountant I
Benavente, Linda Frances	Cust Svs Rep	Dalisay, Teresita S.	Management Analyst Iv	Mafnas, Gilda M.	Water-sewer Maint Worker I	San Nicolas, Katherine L.	Word Processing Secretary II
Bensan, Gloria P.	Engineer III	Damian, Julian M.	Accountant I	Maguadog, Alvin Q.	Controller	San Nicolas, Kin M.	Water-sewer Maint Worker II
Blas, John K.T.	Engineer III	De Leon, Lad B.	Electrician II	Manglona, Frankie B.	Pumping Station Operator II	San Nicolas, Melvin D.	Water-sewer Maint Worker II
Blas, Kenneth Q.	Water-sewer Maint Worker I	Diaz, Frank R.	Trades Helper	Manglona, Jesse C.	Apprentice Trainee	San Nicolas, Ronald D.	Water-sewer Maint Worker II
Bolton, Eugene J.	Trades Helper	Diaz, Jeremiah Frank	Personnel Specialist Iv	Manglona, Myko J.	Lab Tech II	Sanchez, Francisco C.	Sewer Plant Operator I
Borden, Robert M.	Water-sewer Maint Leader	Dizon, Eliseo Q.	Apprentice Trainee	Mansapit, Benny T.	Lab Tech II	Sanchez, Frank A.	Heavy Equip Mechanic I
Borja, Ann D.	Lab Tech II	Duenas Jr., Agustin B.	Construction Inspector III	Mantanona, James C.	Water-sewer Maint Worker I	Sanchez, Fred J.	Trades Helper
Borja, Jeffrey M.	Legal Secretary II	Duenas, James B.	Lab Tech II	Matanane, Anita M.	Water-sewer Maint Worker II	Sanchez, John A.	Pumping Station Operator I
Borja, Michael C.	Sewer Plant Operator II	Duenas, Joseph A.	Sewer Plant Operator II	Mendiola Jr., Victor	Apprentice Trainee	Sanchez, Lourdes S.	Administrative Assistant
Borja, Peter J.	Meter Reader	Duenas, Ronald M	Administrative Assistant	Mendiola, Bryan R.	Apprentice Trainee	Sanchez, Patricia C.	Cashier II
Brown, Larry C.	Heavy Equip Mech Leader	Esguerra, Danilo I	Water-sewer Maint Worker I	Mendiola, Leilani J.U.	Administrative Assistant	Sanchez, Tania Marie	Trades Helper
Brown, Larry C.	Trades Helper	Evangelista, Josephfa C.	Accountant III	Mendiola, Melvin P.	Equipment Operator II	Sanchez, Zachery T.	Wastewater Maint Mechanic I
Cabrera, Edward Q.	Water-sewer Maint Worker II	Evangelista, Juan S.	Personnel Specialist II	Mendiola, Pedro A.	Refrigeration Mech Leader	Santos, Jennifer C.	Administrative Aide
Calvo, Jude G.	Planner II	Fejerang, Richard S.	Trouble Dispatcher	Meno, Frankie R.	Wastewater Maint. Mech. Supv.	Santos Jr, Joseph M.	Water-sewer Maint Worker I
Calvo, Roque S.	Sewer Plant Leader	Finona, Teresita D.	Water-sewer Maint Leader	Meno, Jacob V.	Trades Helper	Santos Jr., Joaquin Siguenza	Asst Gen Mgr Consolidated Adm
Camacho, Jerry C.	Storekeeper II	Flores, George V.	Administrative Aide	Meno, Johnny B.	Trades Helper	Santos, Glenn G.	Water-sewer Maint Worker I
Canales, Raul A.	Maintenance Worker	Flores, Jose D.	Pumping Station Leader	Meno, Michael J.	Meter Reader	Santos, Jose M.	Water-sewer Maint Worker I
Capacia Jr., Antonio V.	Electrician II	Flores, Ricky H	Inventory Mgmt Officer	Mercado, Sylvia Y.	Meter Reader	Santos, Mancini Liam	Apprentice Trainee
Castelo, Loretta R.	Admin Aide	Franquez, Michael J	Water-sewer Maint Worker II	Mesa, Vincent J.	Engineer II	Saturnio, Brian J.I.	Trades Helper
Castro, Eddie P.	Wastewater Maint Mechanic II	Gagan, Gary P.	Pumping Station Operator I	Mesngon, Ignacio C.	Lab Tech II	Saturnio, Marcelino F.	Water-sewer Maint Worker II
Castro, Michael J.	Trades Helper	Garrido, Joseph B.	Pumping Station Operator I	Miller, Mark G.	Pumping Station Supervisor	Schiable, Melissa B.	Laboratory Tech Supervisor
Castro, Peter B.	Sewer Plant Operator I	Gaza, Alicia C.	Apprentice Trainee	Mondina, Stephen P.	Asst Gen Mgr Prod-treat	Scroggs, Richard Daniel	Wastewater Plant Supt
Castro, Wilfred D.	Water-sewer Maint Supervisor	Gombar, Angelo N.	Planner III	Mundo, Raymond A.	Buyer II	Seballos, Rudy B.	Sewer Plant Operator II
Cendana, John C.	Trades Helper	Gozalo, Mary C.	Cashier I	Nagal, Janice G.	Water-sewer Maint Supervisor	Shane, Julie R.	Trades Helper
Charfauros, Jonathan A.	Trades Helper	Guerrero, Doris A.	Cashier I	Nangauta, James C.	Collection Agent	Sharma, Winnie S.	Trouble Dispatcher
Chargualaf Jr, Anthony P.	Asst Gen Mgr Coll-dist	Guerrero, Eugene A.	Administrative Assistant	Naputi, Raymond F.	Wastewater Maint Mech Leader	Sian-denton, Carmen M.	Asstgenmgrchiefengrpe,(Asstto)
Chargualaf, Benny E.	Equipment Operator Iv	Guerrero, Timothy C.	Trouble Dispatcher	Natuel, Orlando O.	Water-sewer Maint Worker I	Siguenza, Patrick A.F.	Accountant II
Chargualaf, Dean E.	Meter Reader		Pumping Station Operator I	Nauta, Franklin I.	Construction Inspector III	Sorgose, Peter L.	Monitoring Lab Svc Adm
				Nauta, Peter J.d.	Water-sewer Maint Worker I	Tadeo, Joseph A.	Pumping Station Operator I
				Olivares, Karen C	Water-sewer Maint Worker I	Taimanglo, Dominic Ray	Pumping Station Operator II
				Onedera, Pauline J.S.	Comp Oper II	Taimanglo, Eddie T.	Gis/mapping Tech
				Ortua, Marjorie I	Customer Service Rep	Taimanglo, Frankie C.	Trades Helper
				Pacheco, Dalisay D.	Cust Svs Rep	Taimanglo, Kyle M.	Water-sewer Maint Supervisor
				Padrones, Peter J.	Accountant I	Taisacan, Jacalyn M	Water-sewer Maint Worker II
				Palomo, Lourdes C.	Wastewater Maint Mechanic II	Taitague, Anthony Earl L.G.	Wastewater Maint Mechanic I
				Pangelinan, Jackie RF	Prgorammer Analyst I	Taitague, Earl L.G.	Collection Agent
				Pangelinan, John U.	Wastewater Maint Mechanic I	Taitague, Frankie O.	Water-sewer Maint Worker I
				Pangelinan, Patricia D.	Water Construction/maint Supt	Taitague, Garrick L.G.	Water-sewer Maint Worker II
				Pangelinan, Richard W.	Admin Aide	Taitano, Diana S.	Secretary II (Typist)
				Pangelinan, Vincent E.C.	Wastewater Maint Mechanic I	Taitano, Joey A.	Apprentice Trainee
				Paragas, Jeremias	Pumping Station Supervisor	Tallada, Zambales R.	Sewer Plant Leader
				Parrish, James T	Trades Helper	Tayama, Diane M.	Accounting Tech III
				Pascua, Jocelyn L	Equipment Operator Iv	Taylor, Samuel J	Staff Attorney
				Paulino Jr., Luis L.G.	Accountant II	Techaira, Michael F.	Water-sewer Maint Worker II
				Paulino, Edward L.	Water-sewer Maint Leader	Techaira, Michael J.	Trades Helper
				Paulino, Gerald M.	Wastewater Maint Mechanic II	Tedttaotao, Frankie D	Apprentice Trainee
				Paulino, Joseph M.	Water-sewer Maint Supervisor	Tobey, Vernon E.	Engineer Supervisor
				Paulino, Juan S.	Water-sewer Maint Leader	Topasna, Henry S.	Engineer Supervisor
				Paulino, Manuel T Jr.	Water Plant Operator Leader	Topasna, Ron S.	Sewer Plant Operator II
				Paulino, Patrick L.	Trades Helper	Torres Jr., Ely T.	Pumping Station Supervisor
				Perez, Brannon M.	Water-sewer Maint Worker II	Torres, Brian K.	Computer Operator III
				Perez, Raymond M.	Apprentice Trainee	Torres, David A.	Pumping Station Operator II
				Perez, Tina L.	Water-sewer Maint Worker II	Torres, Victor A.	Sewer Plant Supv
				Punzalan, Joseph A.	Secretary I (Typist)	Torres, Victor A.	Sys/programmer Administrator
				Quenga, Bill A.	Right Of Way Supervisor	Toves, Antonio James	Apprentice Trainee
				Quenga, Louvina M.	Equipment Operator II	Toves, Rodney A.	Apprentice Trainee
				Quichocho, Edward M.	Collection Agent	Trinidad, Redondo D.	Accountant I
				Quidachay, Anthony J.	Electrician Leader	Tudela, Jason Henry	Apprentice Trainee
				Quidachay, Jon U.	Safety Inspector II	Tuitu'u, David U.	Pumping Station Operator I
				Quinata, Anthony A.	Pumping Station Leader	Unchangco, Peter F.	Water-sewer Maint Worker I
				Quinata, Frankie T.	Pumping Station Supervisor	Untalan, Paul C.	Sewer Plant Leader
				Quinata, Jake Terrance	Pumping Station Leader	Uy, Melissa Marie T.	Programmer Analyst I
				Quinata, Pedro A.	Apprentice Trainee	Vibar, Raymond C.	Pumping Station Operator II
				Quintanilla, George S	Trades Helper	Vicente, Marietta P.	Payroll Supervisor
				Quintanilla, Michael P.M.	Trades Helper	Villagomez, Rodney J.	Lab Tech I
				Quintanilla, Raymond C	Water-sewer Maint Worker II	Wall, Jerald Lee	Meter Reader Leader
				Quintanilla, Rose M.	Water Plant Operator Leader	Wilson Jr., Carl	Water-sewer Maint Worker I
				Quintanilla, Sandra L.	Administrative Assistant	Yanto, Berlin E.	Accounting Tech III
				Quitlong, Delfyn S.	Customer Service Rep	Young, Claire N.	Plant Instrument Tech II
				Quitugua II, Eloy S.	Engineer II	Young, Doris J.	Administrative Officer
				Quitugua, Peter S.	Trades Helper		
					Trades Helper		