



TABLE OF CONTENTS

- 1 - About GWA
- 2 - Performance
- 3 - Finances
- 4 - Challenges and Outlook

About the Guam Waterworks Authority (GWA)

Guam Waterworks Authority (GWA) is a public authority governed by the Consolidated Commission on Utilities (CCU). They are subject to the regulations of the Guam Public Utilities Commission (PUC). GWA provides water to all of the civilian population of Guam. They also provide sewer service to a large percentage of the civilian population, Andersen Air Force Base and several smaller United States Navy facilities. During FY2019, GWA served an average of 42,538 water customers and 29,332 wastewater customers.

GWA's water supply consists of 120 wells, one active production spring, one "Maui" well, 27 booster pump stations, 23 reservoirs/tanks in service, 586 miles of water distribution lines, and approximately 3,814 fire hydrants, all in the agency's effort to provide more efficient and reliable service to its customers while meeting regulatory requirements.

GWA's wastewater system consists of 310 miles of gravity sewer network, 77 sewer pump stations, approximately 27 miles of force main and five wastewater treatment plants and associated outfalls.

GWA has undergone significant transformation over the last several years by working to improve the management and operations, including decreasing expenditures, decreasing leak repair times, implementing a meter replacement program and launching a computerized maintenance management system, which have all contributed to significantly improved operating results since FY2011.

VISION

To be a world class provider of water and wastewater services.

MISSION

We will provide outstanding customer service by delivering excellent water and wastewater services in a safe, reliable, responsible and cost effective manner.

LOCATIONS

Gloria B. Nelson Public Service Bldg.
688 Route 15 Fadian
Mangilao, Guam 96913
Hours: Mon-Fri | 7:00 a.m. to 5:00 p.m.

Upper Tumon
561 North Marine Corps Drive
Upper Tumon, Guam 96911
Hours: Mon-Fri | 7:30 a.m. to 6:00 p.m.;
Sat | 9:00 a.m. to 1:00 p.m.

Julale Shopping Center
424 West O'Brien Drive
Hagåtña, Guam 96931
Hours: Mon-Fri | 8:00 a.m. to 5:00 p.m.

CONTACT

Customer Service
647-7800/3
Hours: Mon-Fri | 7:30 a.m. to 6:00 p.m.;
Sat | 9:00 a.m. to 1:00 p.m.

Water Outages/Leaks
646-4211
Hours: 24/7

Payment Information
Pay by Phone: 647-4729
Online: PayGWA.com
Mobile App: Pay GPWA

GWA Alerts - Email or Text
Sign up at www.guamwaterworks.org/GWA
Alerts for Outage Information or Road Closures

**Hours subject to change due to Public Health Emergency, Holiday, etc. See website for information.*

LEADERSHIP

Miguel C. Bordallo, P.E.
General Manager

Kelly O. Clark
General Counsel

Taling M. Taitano, C.P.A., CGFM
Chief Financial Officer

Christopher M. Budasi
AGM for Administration & Support

Paul J. Kemp
AGM for Compliance & Safety

Thomas A. Cruz, P.E.
Chief Engineer

Consolidated Commission on Utilities

Joseph (Joey) T. Dueñas
Chairman

Francis E. Santos
Chairman of Finance Committee
Vice Chairman

Michael T. Limtiaco
Chairman of IT and
Cyber Security Committee; Secretary

Judith 'Judi' T. Guthertz
Chairman of Internal Audit Committee
Treasurer

Simon A. Sanchez II
Commissioner



Full-Time Employees

	FY2017	FY2018	FY2019	% Change
- Administration	162	187	183	-2%
- Water Division	106	109	121	10%
- Wastewater Division	62	72	73	1%
Total	330	368	377	

What would you like to see reported on this page? Please let us know by calling us at **(671) 300-6851** or visit our website at **www.guamwaterworks.org**.

Capital Assets

The Authority had about \$617 million invested in broad range of utility capital assets as of September 30, 2019. The investment in capital assets includes building improvements, water treatment plants, water transmission and distribution mains, sewer lines, water reservoirs, pump stations, wastewater treatment facilities, deep wells, meter replacements, fire hydrant replacements, machinery and equipment as shown in **Table** below identified by text color (**Water Projects are in Blue**, **Wastewater in Green** and **all others in Purple**).

In FY2019, GWA's capital assets increased by \$67.4 million. The increase is attributable to on-going major capital improvement projects associated with a 2011 Federal Court Order, the Authority's five-year Capital Improvement Program (CIP) and the Water Resources Master Plan to reflect long-term planning needs. One of the projects completed in FY2019 was the Agat-Santa Rita Wastewater Treatment Plant. This project will improve the collection and treatment of wastewater in order to protect public health and the environment. The ribbon cutting ceremony was held on June 28, 2019 and was open to the public as shown in the pictures below.

	In Design	In Progress	Completed
Islandwide	<ul style="list-style-type: none"> - Pressure Zone Realignment - Systemwide District Meter Project - Tank Bypass and Repair - Waterline Replacement Program Phase V - Islandwide GWA Facility Survey 	<ul style="list-style-type: none"> - Fire Hydrant Replacement - System Control and Data Acquisition (SCADA) - Phase A1 	<ul style="list-style-type: none"> - Wastewater, Water and Source Water System Master Plan Update
Southern Villages	<ul style="list-style-type: none"> - Inarajan Booster Pump Station - Mannenggon Water Tank (2MG) - Ugum Water Tanks (2MG) 	<ul style="list-style-type: none"> - Brigade II BPS Improvements - Santa Rita Water Tank (1MG) - Sinifa Water Tank (1MG) - Route 2 Agat Sewer Improvements - Southern Sanitary Sewer Evaluation Survey Sewer Rehabilitation - Talofoto Sewer Pump Stations - Umatac-Merizo Wastewater Treatment Plant Improvements 	<ul style="list-style-type: none"> - Southern Water Line Replacement Phase IV - Agat-Santa Rita Wastewater Treatment Plant - Baza Gardens Wastewater Pumping and Conveyance
Northern Villages	<ul style="list-style-type: none"> - Astumbo No. 2 Water Tank (2MG) - Groundwater Production Well Meter Replacement - New Production Well (AG-10, AG-12 and Y-8) - Northern Guam Lens Aquifer (NGLA) Monitoring Wells - Tumon No. 1 (Airport) Water Tank (3MG) - Yigo No. 3 Water Tank (2.5MG) - Yigo Sewer Pump Station Rehabilitation (design completed) 	<ul style="list-style-type: none"> - Northern Water Line Replacement Phase IV - Santa Rosa Water Tank (1MG) - Water Wells Rehabilitation (A-Series) - Northern District Interceptor Sewer Refurbishment - Northern District Wastewater Treatment Plant Outfall Diffuser - Northern District Wastewater Treatment Plant Secondary Upgrades 	<ul style="list-style-type: none"> - Astumbo No. 1 Water Tank (2MG) - Yigo No. 1 Water Tank (2MG) - Yigo No. 2 Water Tank (2MG) - Yigo Booster Pump Station - Critical Sewer Pump Station Repair
Central Villages	<ul style="list-style-type: none"> - Asan Springs Rehabilitation - Piti Water Tank (1MG) - Chalan Pago Sewer Pump Station - Hagåtña Wastewater Treatment Plant Interim Disinfection - Tumon Sewer Hot Spots (design completed) 	<ul style="list-style-type: none"> - Central Water Line Replacement Phase IV - Chaot No. 2 Water Tank (0.5MG) - Hyundai Water Tank (1MG) - Tumon No. 2 (Nissan) Water Tank (1MG) - Bayside Sewer Pump Station Improvements - Route 1 (Asan-Adelup) Sewer Line Improvements - Route 4 Sewer Line Improvement - Tamuning Sewer Hot Spots Repair/Rehabilitation 	<ul style="list-style-type: none"> - Laboratory Water Testing Facility - Water Wells Rehabilitation (D-Series)

Ribbon Cutting Ceremony



Agat-Santa Rita Wastewater Treatment Plant



School Tour



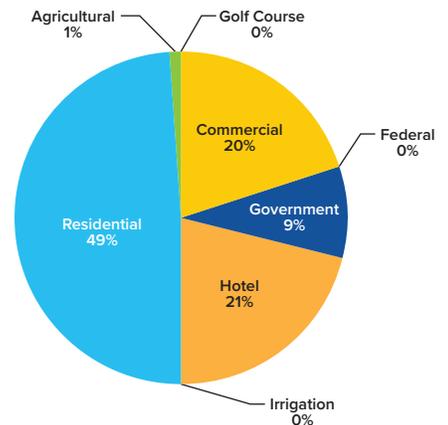
An independent audit was conducted by Deloitte & Touche LLP, resulting in a clean audit opinion. GWA has been classified as low risk auditee since FY2016. The Office of Public Accountability released GWA's audited financial statements on May 15, 2020. More information can be found at our website at www.guamwaterworks.org.

Total water revenues increased by \$1.6 million or about 2% while total wastewater revenues increased by \$1.4 million or about 4% over the prior fiscal year. Hotel customers accounted for most of the increase in FY2019. Total operating expenses decreased by \$1.7 million or about -2% over the prior fiscal year. In comparison to the previous fiscal year, contractual showed the largest increase at 18%, followed by salaries and wages at 13%. However such increases were offset by savings from water purchases which declined by about 28% compared to the prior fiscal year.

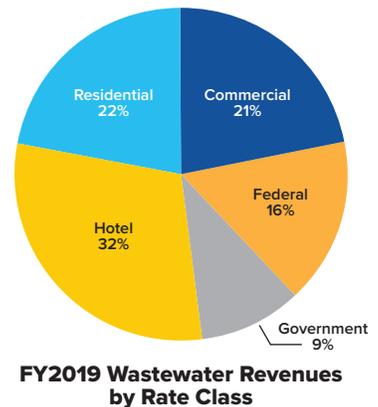
A comparative analysis of Revenues, Expenses and Changes in Percentages, FY2018 – FY2019, as well as FY2017 amounts, are illustrated in the Table below:

Operating Revenues

Water Revenues	FY2017	FY2018	FY2019	FY 2018-2019 % Change
- Agricultural	\$395,449	\$460,076	\$496,399	8%
- Golf Course	80,243	48,567	49,903	3%
- Commercial	13,962,171	13,667,485	13,868,755	1%
- Federal	39,532	31,502	23,137	-27%
- Government	6,297,642	6,572,048	6,233,660	-5%
- Hotel	13,499,695	13,802,981	14,955,990	8%
- Irrigation	60,821	49,457	51,409	4%
- Residential	31,807,344	34,100,450	34,689,848	2%
Total Water Revenue	\$66,142,897	\$68,732,566	\$70,369,101	2%

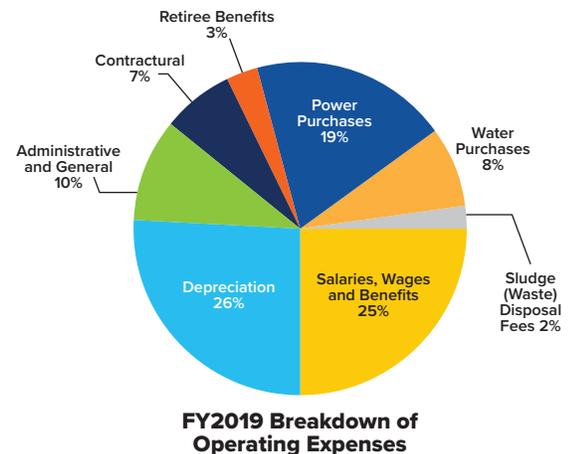


Wastewater Revenues	FY2017	FY2018	FY2019	% Trend
- Commercial	\$8,588,060	\$8,735,533	\$8,753,399	0%
- Federal	5,610,218	6,322,371	6,388,022	1%
- Government	3,533,788	3,800,155	3,569,358	-6%
- Hotel	11,684,107	11,937,462	13,178,157	10%
- Residential	8,819,329	8,619,390	8,934,371	4%
Total Wastewater Revenues	\$38,235,502	\$39,414,911	\$40,823,307	4%



Operating Expenses

	FY2017	FY2018	FY2019	% Trend
- Power Purchases	\$12,076,262	\$14,686,486	\$16,150,781	10%
- Water Purchases	7,309,125	8,684,974	6,277,864	-28%
- Sludge (Waste) Disposal Fees	1,685,842	1,507,654	1,333,887	-12%
- Salaries, Wages and Benefits	19,697,917	18,534,508	21,030,363	13%
- Depreciation	16,824,455	19,280,249	21,174,220	10%
- Administrative and General	7,300,127	8,072,979	8,510,862	5%
- Contractual	4,087,429	5,036,651	5,945,478	18%
- Retiree Benefits	11,187,439	8,548,967	2,267,681	-73%
Total Operating Expenses	\$80,168,596	\$84,352,468	\$82,691,136	-2%



Challenges and Outlook

For FY2020, GWA Management will begin to implement its *Five-Year Financial Plan (FY20-FY24) and Capital Improvement Program*, which finally received action by the Public Utilities Commission in February of 2020. This five-year \$342M plan is the third such plan GWA has issued. GWA has demonstrated improvement in performance through the successful implementation of Capital Projects planning and execution. With the completion of two 5-year plans and the recently-approved CIP for FY2020-FY2024, the Authority has laid-out its on-going significant investments required by a 2011 Federal Court Order, regulatory mandates and CCU policy as reflected in the adoption of the 2018 Water Resource Master Plan. Although intended to be a wide-ranging program of improvements, our outlook will focus on

- Completing 2011 Court Order projects (water storage reservoirs)
- Addressing upcoming regulatory compliance priorities in wastewater collection and treatment
- Reducing water losses and non-revenue water

Court Order Compliance

The 2011 Court Order established deadlines for completing outstanding projects that were identified in a previous Stipulated Order originally issued in 2003 and subsequently amended in 2004 and 2006. The CCU and Authority remain focused on meeting the requirements of the 2011 Federal Court Order and have nearly completed the execution of mandatory rehabilitation, repair and construction projects, with only one element remaining of the 93 compliance items – the repair, rehabilitation and replacement of water storage reservoirs. With GWA's recent and successful issuance of \$134M in revenue bonds for capital projects financing, the remaining Court Order projects can now move forward.

Wastewater Collection

GWA is also addressing long-standing issues in its aged collection system through the Route 1 (Asan-Adelup-Hagatña) Sewer Line Improvements and Route 4 Sewer Line Improvements projects, which are slated for completion in 2020. In addition, GWA is almost done with the rehabilitation of 9-miles of sewer interceptor piping along Route 3/Route 9 originally installed in the late 1970s. A second phase of construction for the Route 1 project will begin in 2020, along with design projects addressing upgrades to sewer pump stations and force mains at critical locations within our wastewater collection system.

Wastewater Treatment - Secondary Upgrades

With the completion of a GWA's first new secondary wastewater treatment

plant (WWTP) in Agat-Santa Rita in 2019, the Authority reached a major compliance milestone in addressing regulator requirements. For FY2020, GWA is moving quickly to continue that progress at its largest facility, the Northern District WWTP. Beginning in the fall of 2016, the Department of Defense (DOD), through the Office of Economic Adjustment (OEA), awarded the Authority grants totaling \$173 million for construction of wastewater improvements related to the military build-up. In July of 2019, GWA issued a notice-to-proceed to the contractor selected for the construction of secondary treatment upgrades to the Northern District WWTP. The construction is underway and is on schedule for completion by December 2021.

Water Loss Control Program

The Authority continues to address the longstanding issue of Non-Revenue Water (NRW). According to the latest water audit figures, approximately 56% of water produced annually is not consumed or contributing to GWA's revenue, due to either water losses (leaks, breaks) and unauthorized or unbilled consumption. GWA recognizes that NRW is a perennial and expensive challenge that compromises its financial integrity and sustainability. Therefore, GWA launched several initiatives intended to address water loss control on several levels, including satellite-based leak detection, pressure-zone realignment with the distribution system and improved system metering. Most recently, GWA engaged a water loss management consultant to pilot-test District Metered Areas (DMA). The resulting analysis and focused repair efforts within each DMA showed significant reductions in water loss. These encouraging results underpin GWA's decision to incorporate several initiatives identified into a comprehensive Water Loss Control Program, which will provide for and document a long-term, sustainable and holistic approach to monitoring and managing water losses. As part of this program, a formal written Water Loss Control Plan is slated for completion in FY2020.

Metering Challenges

The Authority has effectively addressed the short-term impacts of a defective meter issue for a limited number of GWA's residential meter inventory. The Authority has stepped up meter testing and replacement efforts, and has nearly completed phasing out the problematic meter model from its distribution system. GWA has seen recent rebounds in revenues due to the correction of the meter issue, and will focus in the coming year on improving metering infrastructure to provide enhanced customer experience with improved data and software availability.



WE WANT TO HEAR FROM YOU!

Do you like this report? Do you believe it should include different or additional information? Please let us know by contacting our general manager at mcbordallo@guamwaterworks.org. More information is available on GWA's website, www.guamwaterworks.org or www.guamccu.org.