CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagåtña, Guam 96932 | (671) 648-3002 | guamccu.org

GUAM WATERWORKS AUTHORITY WORK SESSION

CCU Conference Room
8:30 a.m., Tuesday, April 16, 2024

***AMENDED AGENDA**

1. **CALL TO ORDER**

2. **GWA ISSUES FOR DECISION**
   - **2.1** Resolution No. 07-FY2024 – Relative to the Adoption of the 2022 Market Data for the Guam Waterworks Authority
   - **2.2** Resolution No. 15-FY2024 – Relative to Approval of the Fats, Oil, and Grease Receiving Station Design Services Contract
   - **2.3** Resolution No. 18-FY2024 – Relative to Approval of Additional Funding Increase to the Indefinite Quantity Contract with JMI-Edison for Submersible Pumps and Motors for GWA Deep Wells

3. GWA GM REPORT
   - **3.1** Administration
   - **3.2** Compliance
   - **3.3** Engineering / Capital Improvement Program
   - **3.4** Financial
   - **3.5** Operations
   - **3.6** Other

4. **OTHER DISCUSSION**

5. **ANNOUNCEMENTS**
   - **5.1** **Next CCU Meetings:** **April 18, 2024 - GPA WS at 8:30 a.m.**
     ***April 24, 2024 – CCU Regular Board Meeting at 5:30 p.m.**

6. **ADJOURNMENT**

GUAM WATERWORKS AUTHORITY
Gloria B. Nelson Public Service Building | 688 Route 15 Mangilao, Guam 96913
P.O. Box 3010 Hagåtña, Guam 96932
Tel. No. (671) 300-6846/47 Fax No. (671) 648-3290

Issues for Decision

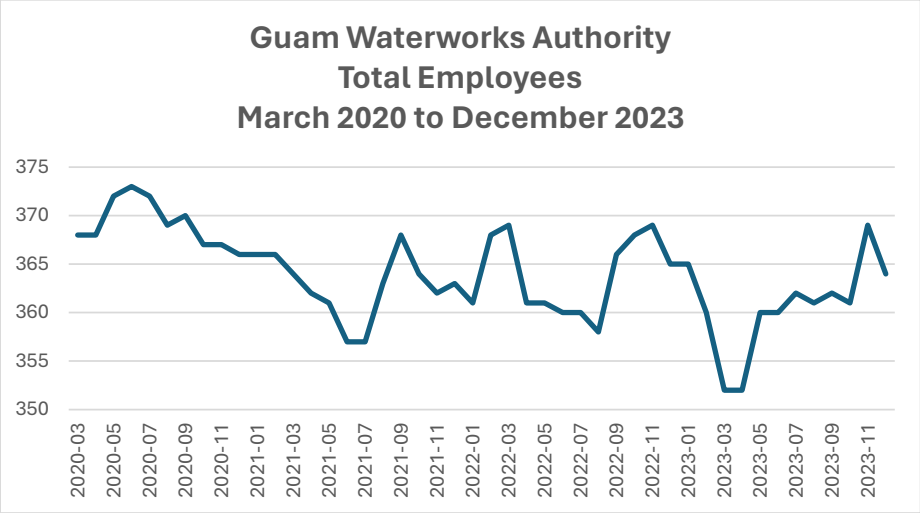
Resolution No. 07- FY2024
Relative to the Adoption of the 2022 Market Update and Strategic Pay Scale for the Guam Waterworks Authority

What is the project's objective and is it necessary and urgent?
In March 2023, Alan Searle and Associates completed a market review study based on U.S. water utility salaries in 2022 that compared the existing GWA 2017 CTP strategic pay scale for all positions (See Exhibit A). The update concluded that the salary levels established in 2017 have regressed on average from the 20th market percentile to the 5th market percentile compared to U.S. water utilities.

The study recommends regular market reviews and subsequent salary migrations until GWA employees reach the prevailing water utility market wage midpoint of 50%. The recommended methodology for salary migrations is to use range maximums which will move salaries closer to the midpoint than if range minimums are used. In addition, for hard to fill positions other tools such as above step recruitment and awarding higher pay for professional certifications should be considered for attracting and retaining personnel.

Additionally, the water sector in the United States is facing notable wage pressure, as highlighted by findings from the 2023 survey conducted by AWWA. Across utilities of varying sizes, compensation rates are rising at levels surpassing initial projections. According to AWWA's Water and Wastewater Utility Compensation Survey, conducted annually, the period from 2022 to 2023 saw significant increases in salaries across the board: 6.7% for large utilities, 3.9% for medium-sized utilities, and 7.9% for small utilities. Moreover, the survey revealed projections for 2024 indicate further salary increases, averaging around 4% for executives, managers, supervisors, and staff. The survey results align with the Alan Searle findings and informally explains what GWA is experiencing with continually higher turnover rates for the last several years.

Since the start of the COVID-19 pandemic in March 2020, GWA staffing levels initially declined due to a hiring freeze implemented in response to a steep decline in revenues caused by a sharp decline in visitor arrivals. From March 2020 to July 2021 (17 months), GWA lost 16 FTEs through attrition. In August 2021, GWA ended the hiring freeze and since that time has struggled to grow its workforce due to high turnover rates.



The main factors contributing to the high turnover rates are a tight job market, the military buildup, and the availability of higher-paying jobs elsewhere. Despite being an essential service provider, GWA faces challenges in retaining employees due to its relatively low pay scale compared to other water utilities and industries on and off-island.

GWA's turnover ratio data for FY2020 to FY2024:

	Separated	Turnover Ratio
FY2020	7	1.89%
FY2021	38	10.47%
FY2022	43	11.79%
FY2023	49	13.56%
FY2024 (projected)	66	18.33%

The high demand for workers, fueled by Guam's economic growth and the expansion of the military presence, has created increased competition for skilled workers. Many employees have left GWA for higher wages and better benefits offered by other employers, primarily the federal government and its contractors.

The COVID-19 pandemic and military build-up have also contributed to an escalation in the cost of living which has been a contributing factor to Guam residents (employees) relocating to the U.S. Mainland where higher paying jobs are available and living expenses are lower.

Guam Waterworks Authority
Employee Separation Data - FY2021 to FY2024

	FY21	FY22	FY23	FY24	Grand Total	Total Percentage
Fed, Fed Contractor	5	9	14	15	43	26.4%
Relocation off-island	1	4	9	2	16	9.8%
Government of Guam	2	7	9	7	25	15.3%
Retirement	9	10	5	4	28	17.2%
Adverse Action	14	5	2	2	23	14.1%
Unknown	5	5	3	2	15	9.2%
Private Sector	1	1	7	1	10	6.1%
Deceased	1	2	0	0	3	1.8%
Grand Total	**38**	**43**	**49**	**33**	**163**	**100.0%**

There's a noticeable upward trend in employees separating in FY23 and FY24 for employment with the Federal Government or its contractors. Transfers to other Government of Guam agencies and off-island relocations also increased significantly in FY23.

On April 1, 2023, the Government of Guam implemented an across the board 22% increase to its General Pay Plan. The primary reason was “to have a more competitive compensation structure to enable recruitment and retention of the best candidates and employees.”[1]

The consistent turnover of employees negatively impacts GWA operations, leading to increased costs and the loss of valuable institutional knowledge regarding GWA's systems, processes, and infrastructure. The employees hired to replace experienced personnel require an extensive amount of training before they are productive and not considered a safety risk. Lack of institutional knowledge also hinders the efficient operation of the utility and impedes decision-making processes.

High turnover also results in increased financial and opportunity costs for recruiting and onboarding new employees. Additionally, turnover leads to higher expenses for overtime pay, temporary staffing and a sense of instability and uncertainty within the workforce. High turnover has also reduced employee morale and decreased employee engagement and motivation.

It is critically important to implement GWA's strategic pay plan to improve the Authority's competitiveness, both locally in Guam and within the broader water utility industry. This initiative aims to not only elevate employee satisfaction but also foster performance excellence, drive higher productivity, and cultivate a deeper sense of loyalty and commitment to GWA's objectives and overall success.

[1] https://governor.guam.gov/wp-content/uploads/2023/02/23.01-31-23-DOA-GPP-1.pdf; page 1, second paragraph.

GWA is requesting approval for its strategic pay plan to adjust salaries over the next six years up to the 50th market percentile to incentivize and retain top-performing employees and reduce turnover rates. The recommended implementation schedule for GWA annual structural pay adjustments for FY2024 is the 25th Market Percentile (MP).

Where is the location?
Not Applicable

How much will it cost?
Estimated cost for salary migration, mandated pay for performance increments and benefits:

25th MP	$1,857,129
35th MP	$4,440,871
40th MP	$833,312
45th MP	$849,659
50th MP	$868,891
Total:	$8,849,961

When will it be completed?
Structural adjustments will be processed beginning FY2024 through FY2029, subject to the availability of funds.

What is the funding source?
Structural pay adjustments will be revenue funded.

The RFP/BID responses (if applicable):
Not Applicable

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Guam Power Authority | Guam Waterworks Authority
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GWA RESOLUTION NO. 07-FY2024

RELATIVE TO THE ADOPTION OF 2022 MARKET UPDATE AND STRATEGIC PAY SCALE FOR THE GUAM WATERWORKS AUTHORITY.

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual, and personnel policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS CCU Resolution 2006-04 and Public Law 28-159 approved the personnel rules and regulations governing the selection, compensation, promotion, performance evaluation, disciplinary action, and terms and conditions of employment for certified, technical, and professional personnel; and

WHEREAS, Public Law 28-159 added a new Chapter 5.200 to GWA's Personnel Rules and Regulations, item 3.0.3, authorizes the CCU to approve, disapprove, or amend, the unified pay scale at any regularly scheduled meeting; and

WHEREAS, in March 2023, Alan Searle and Associates completed a market review study based on U.S. Mainland water utility salaries in 2022 that compared the existing GWA 2017 CTP strategic pay scale for all positions (See Exhibit A, Appendix A). The update concluded that the salary levels established in 2017 have regressed on average from the 20th market percentile to the 5th market percentile compared to U.S. Mainland water utilities.

WHEREAS, GWA has experienced an average turnover rate of 11.9% during the last three fiscal years, primarily due to employees seeking higher pay with other organizations.

However, the current fiscal year's turnover rate is anticipated to be significantly higher, projected to reach 18.33%.

WHEREAS there is a noticeable upward trend in GWA employees separating in FY23 for employment with the federal government or its contractors. Transfers to other government of Guam agencies and off-island relocations also increased significantly in FY23.

WHEREAS the consistent turnover of employees negatively impacts GWA operations, leading to increased costs and the loss of valuable institutional knowledge regarding GWA's systems, processes, and infrastructure.

WHEREAS GWA is requesting approval for its strategic pay plan to implement structural salary adjustments to incentivize and retain top-performing employees and reduce turnover rates. GWA will migrate to the 25th market percentile (MP) in FY2024 and thereafter up to the 50th MP by FY2029.

WHEREAS the implementation of GWA's strategic pay plan aims to enhance the Authority's competitiveness within the water utility industry and elevate employee satisfaction levels, thereby fostering performance excellence, increased productivity, and a stronger sense of loyalty and commitment to GWA's goals and success.

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. To accept the recommendations of the 2022 market review update conducted by Alan Searle and Associates, including implementation of a new and adjusted strategic pay scale for all Certified, Technical, and Professional (CTP) positions. (See Exhibit A, Appendix A).
3. The GWA General Manager shall implement structural pay adjustments using the 2022 pay scale to the 25th market percentile no later than June 2024 and to the 50th market percentile by FY2029 subject to availability of funds.

RESOLVED, that the Chairman certified, and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 24th day of April 2024.

Certified by:	Attested by:
_____	_____
JOSEPH T. DUENAS	**PEDRO ROY MARTINEZ**
Chairperson	Secretary

SECRETARY'S CERTIFICATE

I, Pedro Roy Martinez, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: _____
NAYS: _____
ABSENT: _____
ABSTAIN: _____

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GUAM WATERWORKS AUTHORITY
Gloria B. Nelson Public Service Building | 688 Route 15 Mangilao, Guam 96913
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Issues for Decision

Resolution No. 15-FY2024
Relative to Approval of the Fats, Oil, and Grease Receiving Station Design Services Contract, GWA Project No. 22302

What is the project's objective and is it necessary and urgent?
GWA completed an upgrade and expansion of the Northern District Wastewater Treatment Plant (NDWWTP) from primary to secondary treatment in 2022, which included the installation of a new septage receiving station and an autothermal thermophilic aerobic digestion (ATAD) system with the capability to treat and process Fat Oil and Grease (FOG). The intent of this project is to provide improvements at the NDWWTP consisting of a new FOG Receiving Station to treat and process the FOG through the ATAD system, electrical hardening of the solids treatment system, a backup generator for the solids treatment system, decanting for the aerated sludge basin, and pilot testing to improve polymer usage efficiency.

Although FOG discharge to the public sewer system is prohibited to prevent buildup and potential overflows, it persistently remains in the waste stream influent. Currently, Guam has no proper means of processing FOG. The FOG Receiving station comprises of a receiving system, holding tank with pump system, and heating systems needed to transfer the FOG.

A new emergency generator system for the FOG receiving station is needed to support the ATAD and the solids treatment. The ATAD system is a biological reactor and when the system loses power for an extended period (as it did due to Typhoon Mawar), bacterial growth has to be recultivated to meet operational conditions.

Where is the project located?
The NDWWTP is in Dededo, Guam. The FOG receiving station and FOG treatment will be at NDWWTP.

How much will it cost?
GWA Management seeks CCU approval of DCA's Scope and Fee Proposal for Design Services, for a total of One Million Four Hundred Thirty Thousand Five Hundred Twenty-Seven Dollars and Seventy-Two Cents ($1,430,527.72), plus a five percent (5%) contingency of Seventy-One Thousand Five Hundred Twenty-Six Dollars and Thirty-Nine Cents ($71,526.39), to bring the total authorized funding amount to One Million Five Hundred and Two Thousand Fifty-Four Dollars and Eleven Cents ($1,502,054.11).

Contract Amount:	$1,430,527.72
Contingency (5%):	$71,526.39

Total Authorized Amount: $1,502,054.11

When will it be completed?
The anticipated design will be completed end of 2024, and construction procurement will begin upon completion of the design.

What is the funding source?
United States Environmental Protection Agency grants

The RFP/BID responses (if applicable): NA

Northern District WWTP FOG Receiving Station

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 15-FY2024

RELATIVE TO APPROVAL OF THE FATS, OIL, AND GREASE RECEIVING STATION DESIGN SERVICES CONTRACT

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual, and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS GWA completed an upgrade and expansion of the Northern District Wastewater Treatment Plant (NDWWTP) from primary to secondary treatment in 2022, which included the installation of a new septage receiving station and an autothermal thermophilic aerobic digestion (ATAD) system with the capability to treat and process Fat Oil and Grease (FOG); and

WHEREAS, although FOG discharge to the public sewer system is prohibited to prevent buildup and potential overflows, it persistently remains in the waste stream influent. Currently, Guam has no proper means of processing FOG; and

WHEREAS the NDWWTP with the construction of the ATAD system was designed with future provision for FOG treatment; and

WHEREAS, to treat and process the FOG through the ATAD system, a new FOG receiving station is required with an emergency generator system. The FOG Receiving station comprises of a receiving system, holding tank with pump system, and heating systems needed to transfer the FOG. The ATAD system is a biological reactor, when the system loses power for an extended period, bacterial growth must be recultivated to achieve operation conditions; and

WHEREAS related upgrades such as electrical hardening of the solids treatment system, a backup generator for the solids treatment system, decanting for the aerated sludge basin, and pilot testing to improve polymer usage efficiency are needed to add resiliency to the FOG treatment and solids handling process and harden the solids treatment system to withstand natural disasters like typhoons; and

WHEREAS these enhancements for the FOG treatment and solids treatment system would ensure the proper processing of FOG, including maintaining continuous operation of the ATAD system and solids treatment system during unforeseen storm events and electrical outages, as well as greatly improve operability; and

WHEREAS GWA advertised the Request for Proposal (RFP-05-ENG-2023) soliciting a statement of qualification from experience and qualified engineering firms to provide engineering design services for the FOG Receiving Station Design Services project; and

WHEREAS, Request for Proposal (RFP) packages were downloaded by multiple interested parties, from which GWA received a proposal submittal from one (1) engineering firm before the RFP submittal deadline of June 28, 2023; and

WHEREAS the GWA Selection Committee reviewed and evaluated the submitted proposal, and submitted an Evaluation Summary (see Exhibit A – Evaluation Summary), indicating Duenas, Camacho & Associates, Inc. (DCA) as the highest ranked qualified firm; and

WHEREAS, the GWA Selection Committee submitted for the General Manager's (GM) determination of selection, the ranking of firms evaluated from which GWA could begin scope and fee negotiations with the selected firm (see Exhibit B – GM Determination); and

WHEREAS, after selection, GWA Engineering negotiated with DCA on the Scope and Fee Proposal (see Exhibit C – Scope and Fee Proposal) for the Fats, Oil, and Grease Receiving Station Design Services, for a total of One Million Four Hundred Thirty Thousand Five Hundred Twenty-Seven Dollars and Seventy-Two Cents ($1,430,527.72); and

WHEREAS GWA Management seeks CCU approval of DCA's Scope and Fee Proposal for Design Services, for a total of One Million Four Hundred Thirty Thousand Five Hundred Twenty-Seven Dollars and Seventy-Two Cents ($1,430,527.72), plus a five percent (5%) contingency of Seventy-One Thousand Five Hundred Twenty-Six Dollars and Thirty-Nine Cents ($71,526.39), to bring the total authorized funding amount to One Million Five Hundred Two Thousand Fifty-Four Dollars and Eleven Cents ($1,502,054.11); and

WHEREAS funding for this project will be from United States Environmental Protection Agency (USEPA) grants; and

NOW BE IT THEREFORE RESOLVED; the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the Scope and Fee Proposal as described in Exhibit C are fair and reasonable.
3. The CCU hereby authorizes GWA Management to accept the Scope and Fee Proposal from DCA in the amount of One Million Four Hundred Thirty Thousand Five Hundred Twenty-Seven Dollars and Seventy-Two Cents ($1,430,527.72).
4. The CCU hereby further approves the funding total of One Million Four Hundred Thirty Thousand Five Hundred Twenty-Seven Dollars and Seventy-Two Cents ($1,430,527.72), plus a five percent (5%) contingency of Seventy-One Thousand Five Hundred Twenty-Six Dollars and Thirty-Nine Cents ($71,526.39), to bring the total authorized funding amount to One Million Five Hundred Two Thousand Fifty-Four Dollars and Eleven Cents ($1,502,054.11).
5. The CCU hereby further approves funding for this project to be from USEPA grant funds.

RESOLVED, that the Chairman certified, and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 24th day of April 2024.

Certified by: Attested by:

_____ _____

JOSEPH T. DUENAS **PEDRO ROY MARTINEZ**

Chairperson Secretary

SECRETARY'S CERTIFICATE

I, Pedro Roy Martinez, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: _____

NAYS: _____

ABSENT: _____

ABSTAIN: _____

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EXHIBIT A

GUAM WATERWORKS AUTHORITY

Gloria B. Nelson Public Service Building 688 Route 15 Mangilao, Guam 96913

July 27, 2023

To: Jeanet Babauta Owens, P.E.
Assistant General Manager, Engineering

From: Josephine E. Smith, PMBA
Chairperson, Consultant Selection Board

Subject: RFP-05-ENG-2023
Fats, Oil, and Grease Receiving Station Design Services
GWA Project No. 22302

The following information is intended to document the evaluation process undertaken for the referenced solicitation:

EVALUATION COMMITTEE MEMBERS	
Name	**Title**
George J. Watson	Senior Engineer
Gerald N. Gattoc	Associate Engineer
Rylma Nida A. Carino	Junior Engineer
Ignacio T. Reyes	Water-Sewer Maintenance Worker Leader

Offerors	Evaluation Score				Total	Rank
1. Dueñas, Camacho & Associates, Inc.	90	98	93	83	364	1

Scores were evaluated based on the sum of individual scores. The recommendation of the Evaluation Committee is shown in the ranking above.

For your review and approval. Notification letters will be issued thereafter.

Approved by:

Jeanet Babauta Owens, P.E.

EXHIBIT B

GUAM WATERWORKS AUTHORITY

Gloria B. Nelson Public Service Building 688 Route 15 Mangilao, Guam 96913

MEMORANDUM

To: Miguel C. Bordallo, P.E.
General Manager

From: Jeanet Babauta Owens, P.E.
Assistant General Manager, Engineering

Subject: RFP-05-ENG-2023
Fats, Oil, and Grease Receiving Station Design Services
GWA Project No. 22302

Date: August 3, 2023

The Selection Committee has completed all necessary actions for selecting the most qualified consultant for the referenced solicitation. The proposal was reviewed and scored according to the conditions established in the solicitation. The Evaluation Summary is attached for your information.

The committee recommends the top firm for the project:

1. Dueñas, Camacho & Associates, Inc.

Concurred:

Vincent E. Guerrero
Supply Management Administrator

8/4/23
Date

GENERAL MANAGER'S DETERMINATION

Consultant Firm Selected:

Duenas Camacho & Ass.

Remarks:

Miguel C. Bordallo, P.E
General Manager

2023.8.4
Date

SCOPE OF WORK (April 8, 2024)

FATS, OIL, AND GREASE RECEIVING STATION DESIGN SERVICES

1. INTRODUCTION

The purpose of this project is to complete a design of a Fats, Oil, and Grease (FOG) receiving station to be located at the Northern District Wastewater Treatment Plant (NDWWTP). A FOG treatment facility is needed to support GWA's FOG program, to prevent FOG discharge into the wastewater collection system. Over the past few years, GWA has worked to rehabilitate and upgrade our wastewater treatment plants, with three major upgrades at the Agat-Santa Rita, Umatac-Merizo, and Northern District Wastewater Treatment Plants. The Agat-Santa Rita and Northern District Wastewater Treatment plants included an upgrade from primary to secondary treatment. During the upgrade of the NDWWTP, a new septage receiving station was added to allow GWA to properly receive and treat septage from utility customers, but this station is unable to properly receive FOG. GWA needs a way to properly receive FOG so that it can be treated at the NDWWTP.

The Intent of this project is to provide improvements at the NDWWTP consisting of a FOG Receiving Station, decanting for the aerated sludge basin, and stand-by power, identified during discussions with GWA and described below.

Currently, the entire island has no proper means to process FOG. The new NDWWTP was designed with a future provision for FOG treatment. This provision included the construction of the ATAD system with its capability to treat FOG. When operating, the existing ATAD system will be able to receive FOG at a rate between 5-10% of its processing capacity. This will greatly help the island and GWA sewer collection system.

To process FOG through the ATAD system a new receiving station will be needed. This station is expected to include a receiving system, holding tank and pump system, and heating systems needed to transfer FOG. Related upgrades that will enhance the FOG treatment process include improved solids handling/thickening and improved dewatering have been provided as part of this scope.

The NDWWTP was commissioned in 2022 and has been in operation for 2 years. The plant has been meeting permit limits and operating as designed. During these two years, operators have been able to familiarize themselves with the new treatment plant technologies and Guam has experienced its first significant Typhoon in over 20 years. Feedback from GWA operations and engineering has called attention to the following:

A. Complete FOG Receiving System:

The newly commissioned NDWWTP was designed to accommodate FOG withing the ATAD solids processing system. To properly receive FOG the following upgrades will be designed for:

- New receiving system. This system is expected to be the same or equal to the existing septage receiving station.
- New concrete pad and holding tank. A new concrete pad and coated steel holding tank will be designed for. Consideration will be given to completely enclose the new FOG system.

- Site piping. New site piping and interconnection to the existing ATAD system will be designed for.
- Power and control needs. Permanent and standby power will be provided for in the design. In addition, the control system will be integrated into the existing SCADA system.

The anticipated location for this new FOG systems is provided below. This location will be confirmed by GWA engineering and operations during the preliminary stage of the design.

New FOG Location

An operating ATAD system is needed to assure proper processing of the FOG product. Interviews with GWA engineering and operations have yielded the following needs that will be provided for in this scope.

1. Assessment of the power supply to the existing ATAD mixing and transfer pumps. This will be done by installing a power meter upstream of the main power supply to the ATAD system for a period of no less than two weeks. Results of this monitoring will be analyzed by a profession electrical engineer and provided to GWA in a technical memorandum.

2. In order to properly meter the incoming power repair or replacement of the transfer and mixing pumps will be needed. The design team can provide for the repair of the of existing pumps should GWA require this. This effort does not include the cost of the repair at this time.

3. Review and recommendations to the ATAD cooling system. An essential part of the ATAD system is the cooling system. This system was supplied by the ATAD manufacturer. While it is currently able to provide the cooling needs, there is no redundancy to these recirculating cooling pumps. A shelved spare pump has been offered by the manufacturer, but this will require GWA operators to replace the pump in times of need. A preferred option is to have the design team resize these pumps to provide greater flow allowing for 1-duty and 1-stand-by pump thus providing redundancy. This will provide redundancy the ATAD system that treats for FOG. There is the opportunity for rejecting the heat from the ATAD system. The designed team will evaluate and provided for the design of a heat rejection system that ties to the FOG system.

B. Aerated Sludge Basin Decanter:

The new sludge aeration basin was designed to accommodate and temporarily store peaks and weekend loading of waste activated sludge. Thickening of this sludge is accomplished by the use of gravity belt thickeners. Over the last two years operators have found it to be advantageous to use this basin as an interim settling/thickening tank rather than the intended holding tank. This operational modification has been done using the emergency overflow weir and a portable "trash" pump to remove clarified liquid from this holding tank. The removed liquid is sent directly to the existing side stream pump station.

This operational modification has been working effectively now for over one year and has improved solids processing within the ATAD and thickening systems. It is the intent of this scope to provide for a permeant means to decant this liquid rather than using the overflow weir and trash pump.

At the request of GWA, project team personnel will run a series of jar test at the NDWWTP laboratory. These jar test will include locally available polymer and coagulates as well as polymer and coagulates supplied by local chemical suppliers. Sludge samples will be mixed with these chemicals to ascertain potential improvements to sludge and FOG handling.

~~A. Dewatering system upgrades:~~

Removed from scope at this time.

~~During the design of the new NDWWTP, engineers relied on US mainland and local experience to design the solids handling processes. The main process in this system is the ATAD system, which~~

~~is new to Guam and is key in FOG handling. Part of this ATAD system is advanced treatment of sludge resulting in a uniquely processed solid. Another key part of the solids process is the centrifuge dewatering system. Centrifuges were chosen as the dewatering process largely due to current operators' familiarity. Two of GWA's WWTPs use this centrifuge technology and rely on locally available polymer to aid in the dewatering process. Engineers used this experience and coordination with mainland vendors to determine the best available approach to dewatering.~~

~~During commissioning of the NDWWTP it was observed that the solids capture of the centrifuge was not optimal. Currently a review of differing polymer types is ongoing by GWA operations. To aid in the improvement of solids capture, a pilot trial using the coagulant ACM (Metal salt) together with polymer is proposed. Jar testing of locally available ACH and polymer was performed during ATAD startup, and it was observed to be effective. If confirmed to be effective, this will improve solids dewatering and processing. The new coagulant feed system will be able to serve the dewatering and ATAD systems.~~

~~Coordination with the ATAD manufacturer suggested that a new coagulate feed system upstream of the ATAD will optimize solids handling within the ATAD system.~~

~~B. EQ storage system:~~

Removed from scope at this time.

~~In late 2022 the power was cut to the on-site main sewer pump station (Route 3 pump station). During this emergency condition operators used the dormant clarifier to store the NDWWTP influent while repairs were underway at the Route 3 pump station. Subsequent site visits and interviews with plant operators revealed an interest in having additional EQ capacity for not only raw plant influent but for sludge. The dormant clarifier is favorably located adjacent to the Route 3 pump station and the activated sludge holding tanks.~~

~~Simple modification(s) to the current conditions (piping and structures) may be made to repurpose the dormant clarifier so that it may serve as a proper EQ tank for raw effluent and potentially sludge. This EQ tank will also provide resiliency during storm events.~~

~~C. Electrical hardening:~~

Removed from scope at this time.

~~Typhoon Mawar (mid-2023) highlighted the need for island wide power hardening. Advanced control and monitoring systems are vulnerable to power spikes and surges. Standard engineering practices work well for typical electrical systems, but sensitive controls would benefit from advance system protection. Electrical hardening (power conditioning and lightning protection) for these systems will provide increased reliability during large power fluctuation events. The~~

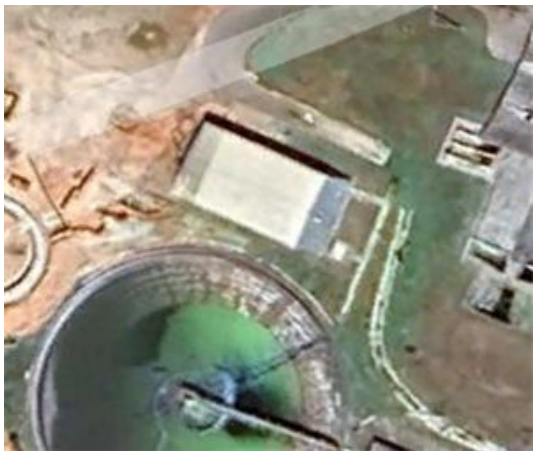
~~main power line will be intercepted at the site entrance for power conditioning. Lightning protection will be provided in accordance with industry standards.~~

D. Solids Process Stand-by Power:

Construction cost for the new NDWWTP was capped. To stay within this cap, during planning and design, engineers focused on providing stand-by power to only the most critical of power needs. This was determined to be the liquid treatment system. Thus, the solids process was not provided with stand-by power. During the times of power outages, the power purveyor typically requests large power users to use stand-by power to have enough power supply to the public. This results in prolonged (generally greater than one week) downtime of the solids process.

Stand-by power to the NDWWTP solids process area, inclusive of the ATAD and FOG systems, will provide redundancy and improved operations during power outage to power shortage events. The main power line will be intercepted at the site entrance for stand-by power.

The anticipated location for this new standby generator is provided below. If requested the project team can evaluate and design for the relocation of the removed existing steel building This location will be confirmed by GWA engineering and operations during the preliminary stage of the design.



Proposed new Generator Building location

~~E. Review and update ATAD Cooling system:~~

Relocated to item A above.

~~An essential part of the ATAD system is the cooling system. This system was supplied by the ATAD manufacturer. While it is currently able to provide the cooling needs, there is no redundancy to these recirculating cooling pumps. A shelved spare pump has been offered by the manufacturer, but this will require GWA operators to replace the pump in times of need. A preferred option is to have the design team resize these pumps to provide greater flow allowing for 1 duty and 1 stand by pump thus providing redundancy. This will provide redundancy the ATAD system that treats for FOG~~

~~F. Evaluate site for typhoon resiliency:~~

Removed from scope at this time.

1. ~~Overall site investigation for typhoon resiliency~~
2. ~~Extend the plant water system to the solids processing area.~~
3. ~~The gravity belt thickeners (GBTs) were damaged during Typhoon Mawar. Storm Protection doors will be added to the GBT building.~~

SCOPE OF SERVICES

The Design Consultant shall comply with the Guam Board of Registration for Professional Engineers, Architects and Land Surveyors ("PEALS") Law and related laws. Additionally, Design Consultant shall provide professional engineering design services consistent with expert qualifications and experience in structural engineering

The scope of consultant services anticipated for this project includes land surveying and archeological investigation, and geotechnical, civil, structural, mechanical, electrical, and instrumentation engineering analysis and design. Contract design drawings shall be completed in Revit and AutoCAD 2024, and be able to translate into an ESRI GIS mapping format. Site investigation is necessary to assess the existing water infrastructure, including water lines and active water wells, and nearby gravity sewer lines and manholes, and related structures and components to achieve high quality design solutions and alternatives.

Due to budgetary constraints, the drawings will be completed such that each component of the project can be constructed separate from the other components. However, it should be noted that there may be circumstances that will not allow each component to completely stand-alone such as back-up generator and building size and slab conduit penetrations necessary for each component.

Development, submittal, and review with GWA of a design development report (DDR) will be included in the design services. A complete design of the project will be provided with conceptual, 30%, 60%, and 90% design review with GWA. Cost estimates will be provided at each design milestone. Construction drawings will be provided for bidding a complete project with deductive alternates to meet budgetary constraints.

The scope of services includes the following areas of work:

A. Evaluate site conditions at the NDWWTP:
    1. Conduct a field investigation and site inspection to determine the optimal locations for a new FOG receiving station and associated equipment and piping.
    2. Review record drawings, site studies, flow data, and reports/studies to identify potential issues and requirements.

3. Review and identify backup power needs.
4. Review any water system needs for process and treatment.
5. Review solids process and conduct activities to determine optimization needs.
6. Interview GWA staff regarding needs, issues, and requested equipment/operation changes for upgrades.
7. Assess existing facility infrastructure related to this project.

B. Complete FOG Receiving Station Design:
1. Review information from site evaluation and record drawings and make recommendation on design.
2. Conduct a design criteria workshop to develop needs, discuss equipment, and review O&M considerations for station design. The Septage Receiving Station will be the basis of conceptual design for the FOG Receiving Station. The FOG receiving Station will be above ground with transfer pumps and tanks. The grinders, pumps, and control system will be the same as the Septage Receiving Station ("Beast" equipment) to accommodate spare parts, O&M , and hauler considerations.
3. Design will include demolition of the old septage receiving station, connection of station piping to the ATAD, and odor control. The septage receiving station will be housed in a building for protection from adverse weather conditions.
4. Review options for improved cooling of ATAD systems.

C. Review the new aeration basin as-built drawings and shop drawings and design a floating decanter for the new aeration basin.
1. Coordinate with the basin aeration system manufacturer for decanter support(s).
2. The decanter discharge piping will connect to the aeration basin drain line to minimize yard piping needs and disruption to adjacent processes.
3. Evaluation of various polymer and coagulates will be done as part of this scope.

~~D. Dewatering system upgrades:~~
~~1. Perform a series of jar testing on available polymer, recommended polymers and coagulants. Various sludge options will be jar tested. DCA together with input from GWA will determine the sludge and polymer mix. Jar testing will take place at GWA's NDWWTP lab. DCA personnel will perform the jar testing and secure the sludge, polymer and coagulant.~~
~~2. Assist GWA with the pilot testing of ACM coagulate and polymer system for possible upgrade using findings from item 1 above. Alfa Laval will provide recommendations for the polymer.~~
~~3. Provide recommendations for coagulant and polymer system improvements to feed both the ATAD and Dewatering systems~~
~~4. If the recommendations are accepted by GWA, prepare construction documents.~~

~~E. EQ storage system:~~
~~1. Investigate options for extended aerated sludge holding tank EQ~~
~~2. Review renovation of the abandoned clarifier for use as an EQ tank. The clarifier size and conduct analysis for additional wall height to increase the volume.~~
~~3. Review available flow data for EQ storage needs.~~

~~4. The EQ tank (renovated clarifier) will fill by gravity using the existing piping and drain via a new duplex (1-duty, 1-stand-by) pump station constructed adjacent to the EQ tank. A passive weir will be used to divert flow from the Route 3 pump station to the EQ tank until the tank is full or the high flow event has subsided. When flow conditions return to normal, the pump station will automatically turn on and drain the EQ tank. The pump station force main will discharge at the Route 3 pump station. A flow meter will be included with the pump station to measure EQ volume returned to the Route 3 pump station. The clarifier mechanism will remain in place for mixing if the EQ tank cannot be emptied within 24 hours.~~

~~5. Odor control will not be provided for the EQ system.~~

~~F. Electrical hardening:~~

~~1. Review site to identify locations for hardening of electrical system.~~

~~2. Review, provide recommendations for, and design (if approved) lightning protection and power conditioning.~~

G. Solids Process and FOG Stand by Power

1. Provide for stand by power to the ATAD systems add all related systems not currently with standby power. The generator will be located where the existing metal building is currently located.
2. Demolition of the existing metal building will be included in the design.

~~H. Review and update ATAD Cooling system~~

~~1. Review options for improved cooling of ATAD systems~~

~~2. Prepare construction documents.~~

~~I. Evaluate site for typhoon resiliency.~~

~~1. Conduct a site assessment/investigation to determine what options can be provided for typhoon resiliency.~~

J. Assist GWA with contract bidding support for construction, as well as engineering support during construction as requested.

TASK 1 - Project Management

Subtask 1.1 - Project Management Plan

Consultant shall prepare a Project Management Plan that includes:

A. Project Description
B. Scope of Work (from contract)
C. Work Plan
D. Quality Assurance and Quality Control Plan
E. Risk Management
F. Scope Change
G. Subcontractors and organizational chart

Subtask 1.2 - Project Schedule

Submit a schedule that meets required milestones for approval. Update schedule at all phases of the project, including monthly meetings, dates for completion of engineering design studies, milestone tasks, monthly invoicing, and dates for review periods. The schedule may include environmental permit approvals and will be based on the proposed target dates.

Subtask 1.3- Progress Reports
Submit monthly progress/status reports to support monthly billings. Reports shall reflect monthly invoices.

Subtask 1.4 – Meetings and Coordination
Lead or attend regularly-scheduled meetings and coordinate with entities within and, as appropriate, outside the project team. Identify and facilitate milestone meetings. Additionally:

A. Coordinate and communicate with local and federal agencies as necessary, including but not limited to the Guam Environmental Protection Agency (GEPA), Department of Public Works (DPW), Department of Parks and Recreation (DPR), Department of Land Management (DLM), CHamoru Land Trust Commission (CLTC), US Fish and Wildlife Services (USFWS) throughout the course of the project to ensure review and permitting process adheres to project schedule.
B. Facilitate and record kickoff and project design review (30%, 60%, 90% and 100%) meetings. The design reviews meeting shall include cost estimates and construction schedule. The kick-off meeting and 60% design review meeting will be a combination of in-person and virtual. The Gresham Smith project manager and design mangers will attend the in-person meetings. All other meetings will be virtual.

Deliverables:
A. Project Management Plan
B. Project Schedule
C. Progress Reports
D. Meeting Minutes

The Task 1 effort is expected to span the entire life of this project, from the contract Notice to Proceed (NTP) date and (if GWA moves forward with repairs/rehabilitation) through post-construction and final commissioning. The task 1 effort is budgeted for 33 consecutive months with an expected completion by December 31, 2026.

TASK 2 – Design Service

Preliminary Review. Selected designer shall conduct a field investigation to identify existing conditions and review available information. Efforts may include, but are not limited to:
A. Record drawings
B. Interviews with GWA staff
C. Discussion and coordination with local and federal agencies as needed
D. Perform assessments and other permitting-related activities, as required by the appropriate archaeological and environmental regulatory agencies
E. Prepare and submit permits as needed

F. Conduct site/field investigations, in particular around the septage receiving station (including the former septage receiving station) and the ATAD and associated systems
G. Review solids process system needs and conduct optimization activities, to include backup power and potable/makeup water needs
H. Conduct utility clearances to confirm location and layout of existing utilities within the proposed locations to avoid utility conflicts

After the preliminary review is completed, the consultant shall make a recommendation on the design of a FOG receiving station, decanting for the aerated sludge basin, ~~dewatering upgrades, influent/sludge flow equalization, electrical and typhoon hardening,~~ solids process and FOG area stand-by power, and miscellaneous typhoon hardening improvements and perform the following tasks to achieve the Design documents. Design shall conform with GWA Design Guidelines.

Subtask 2.1 - Meetings
The Design Consultant shall conduct monthly (or otherwise specified) design review meetings with GWA to review the design process, each design discipline status and issues, and project schedule. Consultant shall conduct design workshops at each milestone of development at 30%, 60%, 90%, and 100%, and prepare and submit all design review meeting agendas and minutes to GWA project team.

Subtask 2.2 - Permitting
The Design Consultant shall obtain the required construction permits signatures and approvals ready for construction. In addition, the consultant shall:

A. Identify all permits required. Assist owner in preparing and obtaining all preconstruction permits from the required local and federal agencies, as needed.
B. Comply with the National Environmental Policy Act (NEPA) in accordance with grant conditions.
C. If required, conduct archival research and preparation of an Archaeological Monitoring and Data Recovery Plan (AMDRP). The Guam State Historic Preservation Office (SHPO) will likely require preparation of an AMDRP prior to any ground disturbance.
D. Coordinate with relevant agencies such as the Guam Environmental Protection Agency (GEPA), Department of Public Works (DPW), etc. at the 30%, 60%, 90%, and 100% submittals. This includes submitting design documents and maintaining communication throughout the duration of the project and incorporating any relevant regulation requirements in the design.

Subtask 2.3 - Final Design Documents
The Design Consultant shall:

A. Coordinate with and incorporate information from the GWA Project Manager.
B. Finalize equipment and instrument list.
C. Coordinate with GWA to ensure the receiving station and associated controls, instrumentation, and software meet cyber security requirements.
D. Prepare progress (30%) plans, specification, Class 4 (AACE) construction cost estimate, and contract documents, conforming to the GWA Design Guidelines as to what should be included in this submittal. Additionally, include profiles, by-pass pumping (if required), and traffic control. Three hard copies of the design documents (11”x17” sized drawings) and a digital copy of the design documents are required.

E. Allow three weeks for GWA to review 30% design. Incorporate adjudicated comments into the design and submit a formal response to each comment.
F. Prepare progress (60%) plans, specifications, Class 2, (AACE) construction cost estimate, and contract documents, conforming to the GWA Design Guidelines as to what should be included in this submittal. Additionally, include profiles, by-pass pumping (if required), and traffic control. Four hard copies of the design documents (1 set of 36"x24" sized drawings and 3 sets of 11"x17" sized drawings) and a digital copy of the design documents in PDF (portable document format) are required.
G. Allow three weeks for GWA to review 60% design. Incorporate adjudicated comments into the design and submit a formal response to each comment.
H. Prepare progress (90%) plans, specification, Class 1 (AACE) construction cost estimate, and contract documents, conforming to the GWA Design Guidelines. Four hard copies of the design documents (1 sets of 36"x24" sized drawings and 3 sets of 11"x17" sized drawings) and a digital copy of the design documents in PDF (portable document format) are required.
I. Allow three weeks for GWA to review 90% design. Incorporate adjudicated comments into the design and submit a formal response to each comment.
J. Prepare final (100%) "Issued for Bid" plans, specifications and contract documents, conforming to GWA Design Guidelines. Five hard copies of the design documents (2 sets of 36"x24" sized drawings and 3 sets of 11"x17" sized drawings) , 2020 GWA GIS Mapping and a digital copy (PDF - portable document format) of the design documents are required.
K. Follow all laws of Guam relative to procurements.
L. Utilize GWA's latest procurement templates and ensure that no conflict exists between the procurement templates and any material or subject in the documents being produced. GWA's templates will control in the event of conflict such as between liquidated damages provisions, payment terms, etc.
M. Prepare permit applications for all local and federal agencies as necessary.
N. Provide digital (pdf – portable document format) copies of the final design documents.
O. All cost estimates shall conform to the guidelines of the Association for the Advancement of Cost Engineering International (AACE). During the design process, Consultant shall immediately notify the GWA when any design decision causes a significant cost increase to the project.
P. Provide deliverables in accordance with GWA Guidelines. One hardcopy set of submittals and an electronic copy (pdf – portable document format) shall be submitted for all deliverables, not previously specified.
Q. Final design drawings shall also be submitted via electronic PDF.

The design will not be considered complete until all comments have been addressed and the design is completed and submitted to GWA for final approval.

It is anticipated that GWA will use a design-bid-build procurement method. Construction documents shall be finalized prior to commencement of the formal bidding process.

TASK 3 - Contract Bidding Support
The Design Consultant shall provide the following services:

A. Pre-Bid Meeting agenda and sign-in sheets, coordinate and facilitate the meeting with GWA, and record meeting minutes.
B. Compile request for clarification, provide input or answer questions, and prepare addenda as needed. Addenda will be limited to two.
C. Attend bid evaluation conference
D. Review, evaluate and certify bid tabulations
E. Provide a letter of recommendation for construction contract award.

TASK 4 - Engineering Support Post Design
The Design Consultant shall:

To be scoped at a later date

~~**Construction Support**~~

~~1. Attend Pre-Construction Conference~~
~~2. Attend construction meetings when requested.~~
~~3. Review shop drawings, design calculations, samples, test results, and other data required to be submitted by the contractor for conformance with contract documents if requested by the Construction Manager (CM), GWA, or as required by specifications.~~
~~4. Evaluate substitution requests to determine acceptability of substitute materials and equipment proposed by contractor if requested by CM or as required by specifications.~~
~~5. If requested, conduct site visit during construction to determine general conformance or ensure compliance with design.~~
~~6. Review contractor submittals, requests for additional information, change orders, schedule of values, and contractor's schedule and provide responses/comments, as necessary.~~
~~7. Perform preliminary and final inspections and submit punch list.~~
~~8. Provide Commissioning and Operator Training.~~
~~9. Provide O&M Manual~~
~~10. Provide Final Record Drawings based on marked-up construction drawings.~~

1. DESIGN PARAMETERS

The design shall be in accordance with the applicable criteria and standards of the American Water Works Association (AWWA), the Guam Waterworks Authority (GWA), the United States Environmental Protection Agency (USEPA), Guam Environmental Protection Agency (GEPA), and all parties which have interest in this project. All standards shall be of the most current edition, unless otherwise specified.

A. American Water Works Association (AWWA)
B. Guam Waterworks Authority (GWA)
C. United States Environmental Protection Agency (USEPA)
D. Guam Environmental Protection Agency (GEPA)
E. Uniform Building Code (UBC)
F. International Building Code (IBC)
G. American National Standard Institution (ANSI)

H. National Sanitation Foundation (NSF)
I. American Society for Testing and Materials (ASTM) International
J. American Concrete Institute (ACI)
K. National Fire Protection Association (NFPA)
L. American Association of State and Highway Transportation Officials (AASHTO)
M. Other relevant standards

1. CONSTRUCTION COST LIMITATIONS

The project shall be designed to permit construction of the complete facility within a construction budget to be provided by the GWA after acceptance of the "Design Criteria". If the consultant during the preliminary cost analysis finds that the improvements cannot be built within the allotted amount, the matter shall be brought to the attention of the General Manager immediately. The General Manager may upon receipt of such notification, authorize a change in scope of materials as required to reduce the estimated construction cost to an amount within the funds available as authorized by law or he may elect to adjust the estimated construction budget. Consultant shall prepare a detailed construction cost estimate for the facility.

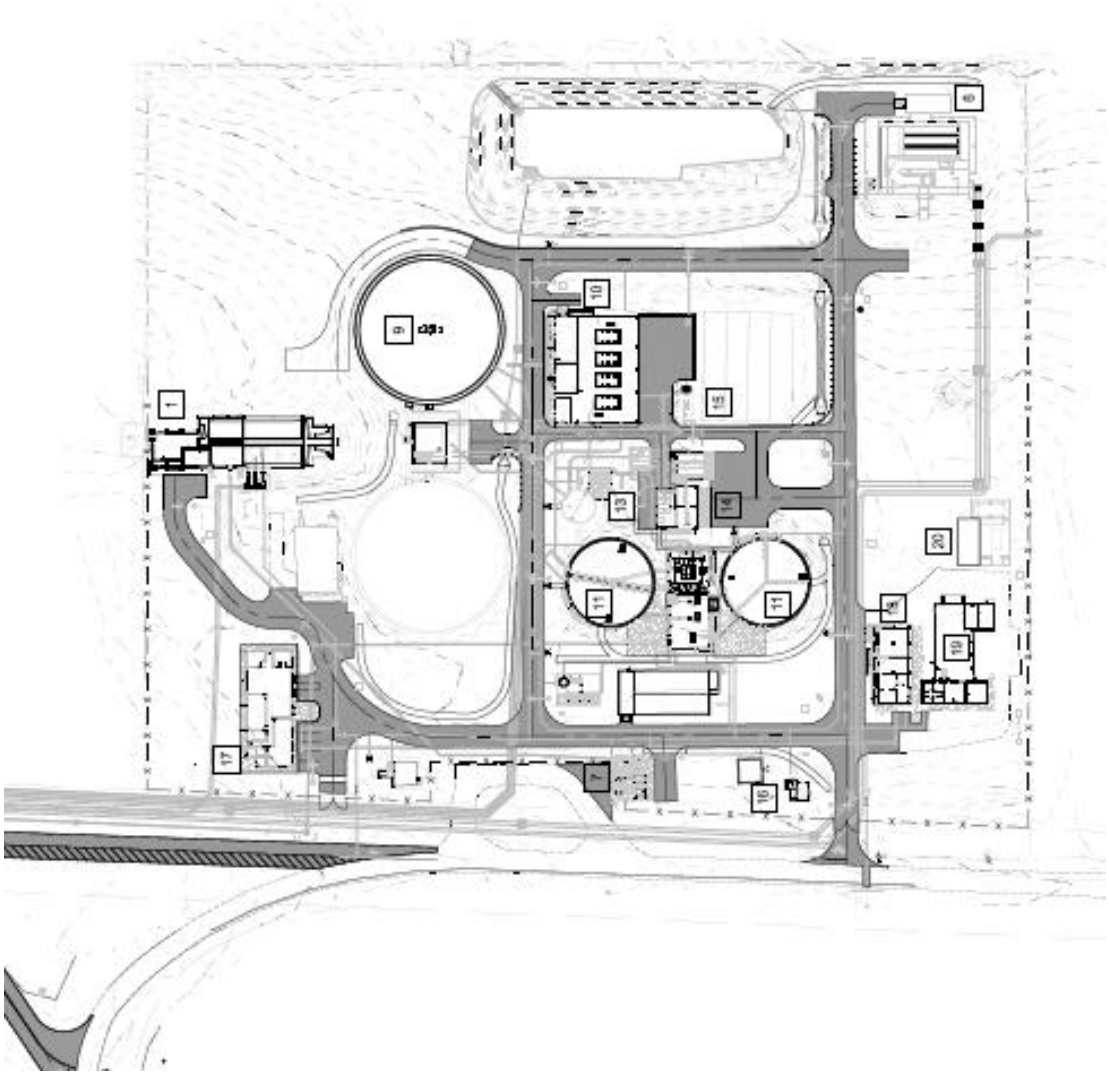
2. DESIGN AND CONSTRUCTION PERIOD

The design consultant shall recommend a construction contract period for this facility based upon required completion dates, actual availability of labor, materials, equipment, and shipping. The following tentative schedule shall be finalized after award of this design services contract.

Action Item	Date
Execution of Design Contract, NTP	3/2024
Complete design	12/2024
GWA issue IFB for construction	1/2025
Open bids, evaluate and select apparent low bidder	3/2025
Award contract	5/2025
Notice-to-Proceed to Contractor	6/2025
Anticipated project completion	6/2026

Note: Actual project dates to be determined based on selected design.

APPENDIX A: LOCATION MAPS



Website: www.dcaguam.com
Email: dca@dcaguam.com

April 9, 2024
Miguel C. Bordallo, P.E.
General Manager, Guam Waterworks Authority
Gloria B. Nelson Public Service Building
688 Route 15
Mangilao, Guam, 96913

Subject: Request for Proposal RFP-05-ENG-2023 Fats, Oil, and Grease Receiving Station Design Services

Reference: Fee Proposal Submission , rev 3

Attn: George Watson, GWA engineering

Hafa Adai,

Duenas, Camacho and Associates (DCA) is pleased to provide the attached fee proposal for the subject project. The revised fees provided were based on scoping meetings conducted with GWA on February 23, March 5 and March 21, 2024. A breakdown of the project fee is presented below.

		Total	Work Hours
1	PM/Design Basis	$ 348,863.00	1598
2	FOG	$ 612,702.70	3169
3	Aerated Sludge/Decanting	$ 101,652.52	362
4	Dewatering upgrades	$ -	0
5	EQ	$ -	0
6	Elec Improvements	$ 269,579.50	1196
7	Misc (ATAD, resiliency, struc works)	$ -	0
8	Expenses (Design)	$ 57,938.00	0
9	Bidding	$ 39,792.00	256
	Total	*$ 1,430,527.72*	6,581

Thank you,

Kenneth M. Rekdahl, PE
Vice President
Duenas, Camacho and Associates, Inc

Att: Fee Breakdown

ENGINEERING * PLANNING * SURVEYING * ENVIRONMENTAL SERVICES * GEOGRAPHIC INFORMATION SYSTEM * CONSTRUCTION MANAGEMENT
GUAM P.O. Box 8900, Tamuning, Guam 96931 / 238 E. Marine Corps Drive, Suite 201 Diamond Plaza, Hagatña, GU 96910 / Tel: (671) 477-7991 / Fax: (671) 479-6315
SAIPAN PMB 164 Box 10000 Saipan, CNMI MP 96950 / Chalan Pale Arnold Rd, Island Commercial Center, Gualo Rai , Saipan 96950 /Tel:(670)234-9017/Fax:(670)234-3842

2023 GWA FOG Fee Proposal 040924.xlsx — Fee Estimate

	Task Description	No. of Days	Principal	Principal Structural	Project Manager	Assistant Project Manager	Professional Structural Engineer	Professional Civil Engineer - Special Projects	Professional Civil Engineer	Project Engineer	Civil Engineer	Structural Engineer	Staff Engineer/Designer	Specification Writer	Quantity Estimator	Engineering Technician	CAD Technician	Chief of Environmental Services	Environmental Scientist	GIS Manager	GIS Tech	Senior Environmental PM	Construction Manager	Project Construction Manager	Construction Inspector	Aerial Drone Operator	ROV (Marine) Operator	Safety Officer	Structural Engineer	Staff Engineer	CAD Technician	Survey Technician	2-Man Crew	3-Man Crew		Total
	Direct Labor Rates >>>>>		$ 229	$ 215	$ 190	$ 108	$ 215	$ 188	$ 188	$ 174	$ 180	$ 185	$ 116	$ 185	$ 170	$ 79	$ 80	$ 126	$ 84	$ 102	$ 90	$ 103	$ 154	$ 156	$ 96	$ 69	$ 69	$ 88	$ 101	$ 78	$ 54	$ 39	$ 84	$ 106		
	Total Sheet Count and Effort >>>>	62	0	10	236	122	248	154	0	364	0	380	706	80	0	0	892	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$	444,130.00
A.	**Design Services**	62	0	10	236	122	248	154	0	364	0	380	706	80	0	0	892	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$	444,130.00
1	**Project Management (Task Management)**																																		$	-
2	Project Management Plan				24	18							12																						$	7,896.00
3	Project Set up				16	16																													$	4,768.00
4	Internal Coordination				16	16	16			16			16																							$	12,848.00
5																																			$	-
6	Kick Off Meeting				24	8	8			8		8	8																							$	10,944.00
7	Progress update/reports				24																														$	4,560.00
8	Meetings and Coordination				80		24			0																										$	20,360.00
9																																			$	-
10	**Site Evaluation**																																		$	-
11	Asbuilt collection and review			6	8					12		12																							$	7,118.00
12	Field investigations			4	8					16		16	16																							$	9,980.00
13	Evaluate back up power needs				4																														$	760.00
14	Evaluate water and WW needs				4			4		12			12																							$	4,992.00
15	Review of current solids process				4			4																												$	1,512.00
16																																				
17	**Complete FOG design**																																		$	-
18	Existing system review																																		$	-
19	Design Services																																		$	-
20	TS	1						2		8			8				12																		$	3,656.00
21	Key notes	2						4		16			16				24																		$	7,312.00
22	Civil							0		0			0				0																		$	-
23	Existing site conditions/Demo	1						2		8			8				12																		$	3,656.00
24	Site Layout	1						2		8			8				12																		$	3,656.00
25	Site Utilities	1						2		8			8				12																		$	3,656.00
26	Pavement/Geometric Plan	1						2		8			8				12																		$	3,656.00
27	Section	2						4		16			16				24																		$	7,312.00
28	Details	4						8		32			32				48																		$	14,624.00
29	Structural																																		$	-
30	General Notes	1					4					8	8				16																		$	4,548.00
31	Gen Layout	4					16					32	32				64																		$	18,192.00
32	Site Plan	4					16					32	32				64																		$	18,192.00
33	Sections	4					16					32	32				64																		$	18,192.00
34	Detail Section	6					24					48	48				96																		$	27,288.00
35	**ATAD Cooling System**																																		$	-
36	DCA Coordination							8		16																									$	4,288.00
37	Pump Replacement							12		12																									$	4,344.00
38	**Decanting Options**																																		$	-
39	Existing system review						4	16		16																									$	6,652.00
40	Design Services																																		$	-
41	Civil																																		$	-
42	Existing site conditions/Demo	1						2		8			8				8																		$	3,336.00
43	Site Layout	1						2		8			8				8																		$	3,336.00
44	Section	2						4		16			16				16																		$	6,672.00
45	Details	2						4		16			16				16																		$	6,672.00
46	Jar testing							16					90																						$	13,448.00
46	**Dewatering Upgrades**																																		$	-
47	Existing system review																																		$	-
48																																			$	-
49	Pilot System Analysis and support																																		$	-
50	Design Services																																		$	-
51	MP Site plan	0						0		0			0				0																		$	-
52	Section	0						0		0			0				0																		$	-
53	Details	0						0		0			0				0																		$	-
54	Civil							0		0			0				0																		$	-
55	Existing site conditions/Demo	0						0		0			0				0																		$	-
56	Site Layout	0						0		0			0				0																		$	-
57	Site Utilities	0						0		0			0				0																		$	-
58	Details	0						0		0			0				0																		$	-
59	**EQ Storage**																																		$	-
60	Existing system review																																		$	-
61	Alternatives analysis																																		$	-
62	System coordination																																		$	-
63	Design Services																																		$	-
64	MP																																		$	-
65	Site Layout	0						0		0			0				0																		$	-
66	Section	0						0		0			0				0																		$	-
67	Details	0						0		0			0				0																		$	-
68	Civil	0						0		0			0				0																		$	-
69	Existing site conditions/Demo	0						0		0			0				0																		$	-

Duenas, Camacho and Assoc. — 1 of 1 — 4/9/24

	Task Description		Principal	Principal Structural	Project Manager	Assistant Project Manager	Professional Structural Engineer	Professional Civil Engineer - Special Projects	Professional Civil Engineer	Project Engineer	Civil Engineer	Structural Engineer	Staff Engineer/Designer	Specification Writer	Quantity Estimator	Engineering Technician	CAD Technician	Chief of Environmental Services	Environmental Scientist	GIS Manager	GIS Tech	Senior Environmental PM	Construction Manager	Project Construction Manager	Construction Inspector	Aerial Drone Operator	ROV (Marine) Operator	Safety Officer	Structural Engineer	Staff Engineer	CAD Technician	Survey Technician	2-Man Crew	3-Man Crew		Total
	Direct Labor Rates >>>>>	No. of Days	$ 229	$ 215	$ 190	$ 108	$ 215	$ 188	$ 188	$ 174	$ 180	$ 185	$ 116	$ 185	$ 170	$ 79	$ 80	$ 126	$ 84	$ 102	$ 90	$ 103	$ 154	$ 156	$ 96	$ 69	$ 69	$ 88	$ 101	$ 78	$ 54	$ 39	$ 84	$ 106		
	Total Sheet Count and Effort >>>>	62	0	10	236	122	248	154	0	364	0	380	706	80	0	0	892	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$ 444,130.00
70	Site Layout	0						0		0			0				0																		$ -
71	Site Utilities	0						0		0			0				0																		$ -
72	Pavement/Geometric Plan	0						0		0			0				0																		$ -
73	Section	0						0		0			0				0																		$ -
74	Details	0						0		0			0				0																		$ -
75	**Electrical Hardening**																																		$ -
76	DCA Coordination							24		24																									$ 8,688.00
77	Solids Process Stand by Power							24		24																									$ 8,688.00
78	DCA Coordination				8		4																												$ 2,380.00
79	Site visits						4	8		16			16																						$ 7,004.00
80	Structural																																		$ -
81	General Notes	2					8					16	16				32																		$ 9,096.00
82	Gen Layout	6					24					48	48				96																		$ 27,288.00
83	Site Plan	6					24					48	48				96																		$ 27,288.00
84	Sections	4					16					32	32				64																		$ 18,192.00
85	Detail Section	6					24					48	48				96																		$ 27,288.00
86	**ATAD Cooling System**																																		$ -
87	DCA Coordination																																		$ -
88	Pump Replacement																																		$ -
89	**Typhoon Resiliency**																																		$ -
90	Site Assessments																																		$ -
91	Interviews																																		$ -
92	Analysis																																		$ -
93	Design Services																																		$ -
94	**Structural**																																		$ -
95	Headworks	0					0					0	0				0																		$ -
96	GBT Building	0					0					0	0				0																		$ -
97	Misc Site	0					0					0	0				0																		$ -
98							0					0	0				0																		$ -
99	**Bid Documents**																																		$ -
100	Front end																																		$ -
101	Specifications													80																					$ 14,800.00
102	Cost Estimate				4	16							40																						$ 7,128.00
103	Construction Schedule				4	16																													$ 2,488.00
104	Coordination				4	16																													$ 2,488.00
105	RFI support				4	16	16			40																										$ 12,888.00
106																																			$ -
107																																			$ -
108																																			$ -
B.		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$ -
1																																			$ -
C	**Post Design Support**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$ -
1	Prepare conform set																																		$ -
2	Meetings and Coordination																																		$ -
3	Shop Drawing																																		$ -
4	RFIs																																		$ -
5	Limited Site Inspections																																		$ -
6	Record Drawings																																		$ -
7																																			$ -
8																																			$ -
9																																			$ -
10																																			$ -
11																																			$ -
12																																			$ -
13																																			$ -
14																																Direct Labor			$ 444,130.00

	Subconsultants	DL	Fee
S.1	Electrical for ATAD Power Metering		$ 15,411.00
S.2	GS Design		$ 790,736.00
S.3	GS Bid		$ -
S.4	GS Expenses		$ 50,000.00
S.5	GS Post		$ -
S.6	GS Expenses		$ -
S.7	M&E		$ 76,000.00
	Subtotal - Subconsultants	$ -	$ 932,147.00
	GRT & Handling @	5.25%	$ 48,937.72
	Subtotal - Subconsultants + DCA Handling		$ 981,084.72

	DCA Expenses	Unit	Quan	Rate	Cost
1	Production	62	5	$ 2.00	$ 620.00
2	Jar testing	1	1	$ 4,000.00	$ 4,000.00
3		1	3		$ -
4		1	2		$ -
5		1	2		$ -
6		1	5		$ -
7		1	1		$ -
8		1	0		$ -
9		1	0		$ -
10					
	Subtotal - Expenses				$ 4,620.00

COST SUMMARY			
LABOR			$ 444,130.00
OVERHEAD @	Included		
SUBCONSULTANTS		Subtotal, Subconsultants+DCA Handling	$ 981,084.72
Subtotal		Row 1 + Row 3	$ 1,425,214.72
PROFIT	Included		
EXPENSES		Expenses X 15%	$ 5,313.00
Subtotal		Row 4 + Row 6	$ 1,430,527.72
GRT	@ 5.25%	Included	
		Total	$ 1,430,527.72
		Say	$ 1,430,528

WORK BREAKDOWN STRUCTURE SUMMARY

CLIENT:	Guam Waterworks Authority (GWA)
PROJECT NAME:	Northern District WWTP FOG Receiving Station and WWTP Improvements
GRESHAM SMITH PROJECT #:	-
RFP #:	-
DATE PREPARED:	Apr-2024
PREPARED BY:	Gresham Smith

Task #	Services	Estimated Hours	Estimated Fee	Comments
	STUDY / DESIGN SERVICES			
1	Project Management/Progress Meetings	602	$145,092	
2	Data Collection / Analysis and Conceptual Design	164	$37,219	
3	Pre-Design / Technical Memorandums (TMs)			
4	Design Development Report (DDR)	332	$67,689	
5	Fats, Oils, and Grease (FOG) Receiving Station (GS Lead)	2,047	$446,680	
6	Aerated Sludge Basin Decanting (GS Lead)	170	$43,056	
7	Dewatering Upgrades (DCA Lead)			
8	Flow Equalization Storage Tank - Renovate Existing Clarifier (DCA)			
9	Electrical Improvements (EMCE Lead)	180	$51,000	
10	Miscellaneous Improvements (DCA Lead)			
	Estimated Study and Design Hours and Fee	3,495	$790,736	
B	Bidding Services			
	Estimated Bid Services Hours and Fee			
C	Post Design			
	Estimated Post Design Services Hours and Fee			
D	EXPENSES			
	Travel Expenses - Study and Design Phase		$50,000	
	Travel Expenses - Post Design Phase			
	Estimated Expenses		$50,000	
	TOTAL ESTIMATED HOURS AND FEE	3,495	$840,736	

GUAM WATERWORKS AUTHORITY
"Better Water, Better Lives."
Gloria B. Nelson Public Service Building| 688 Route 15 | Mangilao, Guam 96913
Tel: (671) 300-6846

Issues for Decision

Resolution No. 18-FY2024
Relative to Approval of Additional Funding Increase to the Indefinite Quantity Contract with JMI-Edison for Submersible Pumps and Motors for GWA Deep Wells

What is the project's objective and is it necessary and urgent?
This request is to seek additional funding authority for the purchase of additional pumps and motors before the current contract expires in May 2024 to help close the window of when stock pump and motors are received from the new contract that is expected to be executed by June 2024. The project is to replenish the inventory of submersible pumps and motors for GWA deep wells to ensure adequate stock is available at all times to quickly bring any wells back into service. The objective is to maintain critical inventory levels for pumps and motors at all times.

Where is the location?
GWA deep well facilities island-wide.

How much will it cost?
The increased funding authorization for the contract with JMI- Edison will be Four Hundred Thousand Dollars ($400,000.00) to bring the total funding authorization to Three Million Six Hundred Ninety-Two Thousand Nine Hundred Seventy-One Dollars and Forty Cents ($3,692,971.40) for the purchases of additional submersible pumps and motors.

When will it be completed?
The indefinite quantity contract will be in place until May 2024 therefore no pump and motors will be procured thereafter.

What is the funding source?
Revenue or Internally Funded CIP.

The RFP/BID responses (if applicable):
N/A

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 18-FY2024

RELATIVE TO APPROVAL OF ADDITIONAL FUNDING INCREASE TO THE INDEFINITE QUANTITY CONTRACT WITH JMI-EDISON FOR SUBMERSIBLE PUMPS AND MOTORS FOR GWA DEEP WELLS

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual, and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, on January 26, 2021, the CCU approved via Resolution 07-FY2021 for GWA management to enter into a multi-year contract with JMI-Edison to provide Deep Well Submersible Pumps and Motors that would ensure GWA has adequate stock replenishment on GWA's warehouse shelf; and

WHEREAS, the CCU approved a funding authorization for the contract with JMI-Edison in the amount of Two Million Seven Hundred Forty-Four Thousand One Hundred Forty-Two Dollars and Eighty-Three Cents ($2,744,142.83) in which One Million Four Hundred Ninety-Six Thousand Eight Hundred Five Dollars and Eighteen Cents ($1,496,805.18) was for the purchase of Submersible Pumps and Motors for GWA Deep Wells for the initial three-year contract term, along with an additional projection of Nine Hundred Ninety-Seven Thousand Eight Hundred Seventy Dollars and Twelve Cents ($997,870.12) for the two (2) one-year options to renew the contract plus a 10% contingency of Two Hundred Forty-Nine Thousand Four Hundred Sixty-Seven Dollars and Fifty-Three Cents ($249,467.53); and

WHERAS, the CCU subsequently approved Resolution 47-FY2023 in September 2023 that increased funding authorization an additional Five Hundred Forty-Eight Thousand Eight Hundred Twenty-Eight Dollars and Fifty-Seven Cents ($548,828.57) to bring the total CCU

funding authorization to Three Million Two Hundred Ninety-Two Thousand Nine Hundred Seventy-One Dollars and Forty Cents ($3,292,971.40); and

WHEREAS the Three Million Two Hundred Ninety-Two Thousand Nine Hundred Seventy-One Dollars and Forty Cents ($3,292,971.40) is also the PUC's approval limit which includes their 20% contingency for the original contract amount GWA had with JMI Edison; and

WHEREAS GWA is currently in the evaluation phase for IFB 2024-04 Submersible Pumps and Motors which will serve as GWA's new Indefinite Quantity contract moving forward however the final approval and execution of this procurement is still at a minimum of three months away with placement of the first order thereafter. GWA Management seeks to order submersible pumps and motors through the existing contract before its expiration in May 2024. This additional request is necessary to expedite the receipt of stock pumps and motors, thereby narrowing the timeframe until the new contract's products become available.: and

WHEREAS GWA management is seeking CCU approval to further increase the funding authorization for the contract with JMI- Edison an additional Four Hundred Thousand Dollars ($400,000.00) to bring the total CCU funding authorization to Three Million Six Hundred Ninety-Two Thousand Nine Hundred Seventy-One Dollars and Forty Cents ($3,692,971.40); and

WHEREAS the source of funding for the Submersible Pumps and Motors is Internally Funded Capital Improvement Projects; and

NOW BE IT THEREFORE RESOLVED; the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The need to have adequate pumps on motors in the GWA warehouse for the water production deep wells which is in the best interest of the territory of Guam and Guam Waterworks Authority.
3. The CCU hereby authorizes the additional funding authorization of Four Hundred Thousand Dollars ($400,000.00) for GWA management to acquire additional pumps and motors for GWA Deep Wells.

4. The CCU hereby further approves the funding total of Three Million Six Hundred Ninety-Two Thousand Nine Hundred Seventy-One Dollars and Forty Cents ($3,692,971.40).
5. GWA Management is hereby authorized to seek PUC approval under the Contract Review Protocol for the additional funding authorization given the total funding is above the PUC approval limits.

RESOLVED, that the Chairman certified, and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 24th day of April 2024.

Certified by: Attested by:

_____ _____

JOSEPH T. DUENAS **PEDRO ROY MARTINEZ**
Chairperson Secretary

SECRETARY'S CERTIFICATE

I, Pedro Roy Martinez, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: _____
NAYS: _____
ABSENT: _____
ABSTAIN: _____

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GUAM CCU

GUAM WATERWORKS AUTHORITY

Presentation To:

Consolidated Commission on Utilities

GWA Work Session
April 16, 2024

1

Issues for Resolution

GWA Work Session
April 16, 2024

2022 Market Update and Strategic Pay Scale

Relative to the Adoption of the 2022 Market Update and Strategic Pay Scale for the Guam Waterworks Authority

GWA Resolution No. 07-FY2024

What is the project's objective and is it necessary and urgent?

- In March 2023, Alan Searle and Associates completed a market review study based on U.S. water utility salaries in 2022 that compared the existing GWA 2017 CTP strategic pay scale for all positions (See Exhibit A). The update concluded that the salary levels established in 2017 have regressed on average from the 20th market percentile to the 5th market percentile compared to U.S. water utilities.

- The study recommends regular market reviews and subsequent salary migrations until GWA employees reach the prevailing water utility market wage midpoint of 50%. The recommended methodology for salary migrations is to use range maximums which will move salaries closer to the midpoint than if range minimums are used. In addition, for hard to fill positions other tools such as above step recruitment and awarding higher pay for professional certifications should be considered for attracting and retaining personnel.

- Additionally, the water sector in the United States is facing notable wage pressure, as highlighted by findings from the 2023 survey conducted by AWWA. Across utilities of varying sizes, compensation rates are rising at levels surpassing initial projections. According to AWWA's Water and Wastewater Utility Compensation Survey, conducted annually, the period from 2022 to 2023 saw significant increases in salaries across the board: 6.7% for large utilities, 3.9% for medium-sized utilities, and 7.9% for small utilities. Moreover, the survey revealed projections for 2024 indicate further salary increases, averaging around 4% for executives, managers, supervisors, and staff. The survey results align with the Alan Searle findings and informally explains what GWA is experiencing with continually higher turnover rates for the last several years.

- Since the start of the COVID-19 pandemic in March 2020, GWA staffing levels initially declined due to a hiring freeze implemented in response to a steep decline in revenues caused by a sharp decline in visitor arrivals. From March 2020 to July 2021 (17 months), GWA lost 16 FTEs through attrition. In August 2021, GWA ended the hiring freeze and since that time has struggled to grow its workforce due to high turnover rates.

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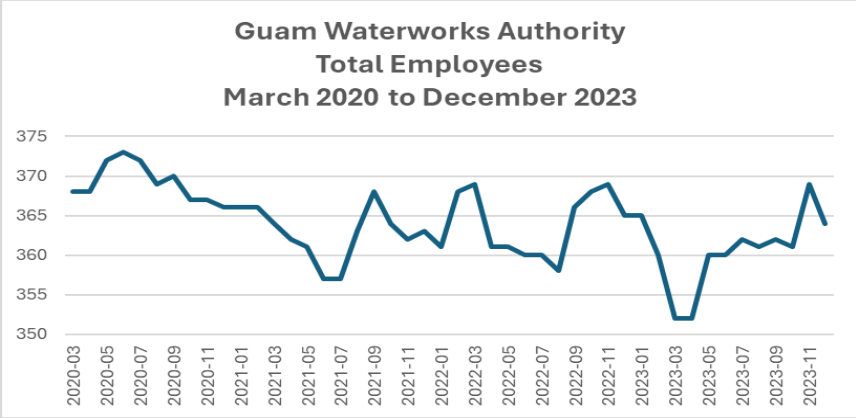
2022 Market Update and Strategic Pay Scale *(continuation)*

Relative to the Adoption of the 2022 Market Update and Strategic Pay Scale for the Guam Waterworks Authority

GWA Resolution No. 07-FY2024

What is the project's objective and is it necessary and urgent?



- The main factors contributing to the high turnover rates are a tight job market, the military buildup, and the availability of higher-paying jobs elsewhere. Despite being an essential service provider, GWA faces challenges in retaining employees due to its relatively low pay scale compared to other water utilities and industries on and off-island.
- GWA's turnover ratio data for FY2020 to FY2024:

	Separated	Turnover Ratio
FY2020	7	1.89%
FY2021	38	10.47%
FY2022	43	11.79%
FY2023	49	13.56%
FY2024 (projected)	66	18.33%

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2022 Market Update and Strategic Pay Scale *(continuation)*

Relative to the Adoption of the 2022 Market Update and Strategic Pay Scale for the Guam Waterworks Authority

GWA Resolution No. 07-FY2024

What is the project's objective and is it necessary and urgent?

- The high demand for workers, fueled by Guam's economic growth and the expansion of the military presence, has created increased competition for skilled workers. Many employees have left GWA for higher wages and better benefits offered by other employers, primarily the federal government and its contractors.

- The COVID-19 pandemic and military build-up have also contributed to an escalation in the cost of living which has been a contributing factor to Guam residents (employees) relocating to the U.S. Mainland where higher paying jobs are available and living expenses are lower.

Guam Waterworks Authority
Employee Separation Data - FY2021 to FY2024

	FY21	FY22	FY23	FY24	Grand Total	Total Percentage
Fed, Fed Contractor	5	9	14	15	43	26.4%
Relocation off-island	1	4	9	2	16	9.8%
Government of Guam	2	7	9	7	25	15.3%
Retirement	9	10	5	4	28	17.2%
Adverse Action	14	5	2	2	23	14.1%
Unknown	5	5	3	2	15	9.2%
Private Sector	1	1	7	1	10	6.1%
Deceased	1	2	0	0	3	1.8%
Grand Total	**38**	**43**	**49**	**33**	**163**	**100.0%**

(continued on next page)

2022 Market Update and Strategic Pay Scale *(continuation)*

Relative to the Adoption of the 2022 Market Update and Strategic Pay Scale for the Guam Waterworks Authority

GWA Resolution No. 07-FY2024

What is the project's objective and is it necessary and urgent?

- There's a noticeable upward trend in employees separating in FY23 and FY24 for employment with the Federal Government or its contractors. Transfers to other Government of Guam agencies and off-island relocations also increased significantly in FY23.

- On April 1, 2023, the Government of Guam implemented an across the board 22% increase to its General Pay Plan. The primary reason was "to have a more competitive compensation structure to enable recruitment and retention of the best candidates and employees."

- The consistent turnover of employees negatively impacts GWA operations, leading to increased costs and the loss of valuable institutional knowledge regarding GWA's systems, processes, and infrastructure. The employees hired to replace experienced personnel require an extensive amount of training before they are productive and not considered a safety risk. Lack of institutional knowledge also hinders the efficient operation of the utility and impedes decision-making processes.

- High turnover also results in increased financial and opportunity costs for recruiting and onboarding new employees. Additionally, turnover leads to higher expenses for overtime pay, temporary staffing and a sense of instability and uncertainty within the workforce. High turnover has also reduced employee morale and decreased employee engagement and motivation.

- It is critically important to implement GWA's strategic pay plan to improve the Authority's competitiveness, both locally in Guam and within the broader water utility industry. This initiative aims to not only elevate employee satisfaction but also foster performance excellence, drive higher productivity, and cultivate a deeper sense of loyalty and commitment to GWA's objectives and overall success.

- GWA is requesting approval for its strategic pay plan to adjust salaries over the next six years up to the 50th market percentile to incentivize and retain top-performing employees and reduce turnover rates. The recommended implementation schedule for GWA annual structural pay adjustments for FY2024 is the 25th Market Percentile (MP).

(continued on next page)

2022 Market Update and Strategic Pay Scale *(continuation)*

Relative to the Adoption of the 2022 Market Update and Strategic Pay Scale for the Guam Waterworks Authority

GWA Resolution No. 07-FY2024

Where is the location?

- Not Applicable

How much will it cost?

- Estimated cost for salary migration, mandated pay for performance increments and benefits:

25th MP	$1,857,129
35th MP	$4,440,871
40th MP	$833,312
45th MP	$849,659
50th MP	$868,891
Total:	$8,849,961

When will it be completed?

- Structural adjustments will be processed beginning FY2024 through FY2029, subject to the availability of funds.

What is the funding source?

- Structural pay adjustments will be revenue funded.

The RFP/BID responses (if applicable):

- Not Applicable

Fats, Oil and Grease Receiving Station

Relative to Approval of the Fats, Oil, and Grease Receiving Station Design Services Contract, GWA Project No. 22302

GWA Resolution No. 15-FY2024

What is the project's objective and is it necessary and urgent?

- GWA completed an upgrade and expansion of the Northern District Wastewater Treatment Plant (NDWWTP) from primary to secondary treatment in 2022, which included the installation of a new septage receiving station and an autothermal thermophilic aerobic digestion (ATAD) system with the capability to treat and process Fat Oil and Grease (FOG). The intent of this project is to provide improvements at the NDWWTP consisting of a new FOG Receiving Station to treat and process the FOG through the ATAD system, electrical hardening of the solids treatment system, a backup generator for the solids treatment system, decanting for the aerated sludge basin, and pilot testing to improve polymer usage efficiency.
- Although FOG discharge to the public sewer system is prohibited to prevent buildup and potential overflows, it persistently remains in the waste stream influent. Currently, Guam has no proper means of processing FOG. The FOG Receiving station compromises of a receiving system, holding tank with pump system, and heating systems needed to transfer the FOG.
- A new emergency generator system for the FOG receiving station is needed to support the ATAD and the solids treatment. The ATAD system is a biological reactor and when the system loses power for an extended period of time (as it did due to Typhoon Mawar), bacterial growth has to be recultivated to meet operational conditions.

Where is the project located?

- The NDWWTP is located in Dededo, Guam. The FOG receiving station and FOG treatment will be at the NDWWTP.

(continued on next page)

Fats, Oil and Grease Receiving Station *(continuation)*

Relative to Approval of the Fats, Oil, and Grease Receiving Station Design Services Contract, GWA Project No. 22302

GWA Resolution No. 15-FY2024

How much will it cost?

- GWA Management seeks CCU approval of DCA's Scope and Fee Proposal for Design Services, for a total of One Million Four Hundred Thirty Thousand Five Hundred Twenty-Seven Dollars and Seventy-Two Cents ($1,430,527.72), plus a five percent (5%) contingency of Seventy-One Thousand Five Hundred Twenty-Six Dollars and Thirty-Nine Cents ($71,526.39), to bring the total authorized funding amount to One Million Five Hundred and Two Thousand Fifty-Four Dollars and Eleven Cents ($1,502,054.11).

- Contract Amount: $1,430,527.72
- Contingency (5%): $71,526.39
- **Total Authorized Amount:** $1,502,054.11

When will it be completed?

- Anticipated design will be completed end of 2024, and construction procurement will begin upon completion of the design.

What is the funding source?

- United States Environmental Protection Agency grants

The RFP/BID responses (if applicable):

- Not Applicable

(continued on next page)

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Fats, Oil and Grease Receiving Station *(continuation)*

Relative to Approval of the Fats, Oil, and Grease Receiving Station Design Services Contract, GWA Project No. 22302

GWA Resolution No. 15-FY2024

Northern District WWTP FOG Receiving Station

Submersible Pumps and Motors

Relative to Approval of Additional Funding Increase to the Indefinite Quantity Contract with JMI-Edison for Submersible Pumps and Motors for GWA Deep Wells

GWA Resolution No. 18-FY2024

What is the project's objective and is it necessary and urgent?

- This request is to seek additional funding authority for the purchase of additional pumps and motors before the current contract expires in May 2024 to help close the window of when stock pump and motors are received from the new contract that is expected to be executed by June 2024. The project is to replenish the inventory of submersible pumps and motors for GWA deep wells to ensure adequate stock is available at all times to quickly bring any wells back into service. The objective is to maintain critical inventory levels for pumps and motors at all times.

Where is the location?

- GWA deep well facilities island-wide.

How much will it cost?

- The increased funding authorization for the contract with JMI- Edison will be Four Hundred Thousand Dollars ($400,000.00) to bring the total funding authorization to Three Million Six Hundred Ninety-Two Thousand Nine Hundred Seventy-One Dollars and Forty Cents ($3,692,971.40) for the purchases of additional submersible pumps and motors.

When will it be completed?

- The indefinite quantity contract will be in place until May 2024 therefore no pump and motors will be procured thereafter.

What is the funding source?

- Revenue or Internally Funded CIP.

The RFP/BID responses (if applicable):

- Not Applicable

Management Report

GWA Work Session

April 16, 2024

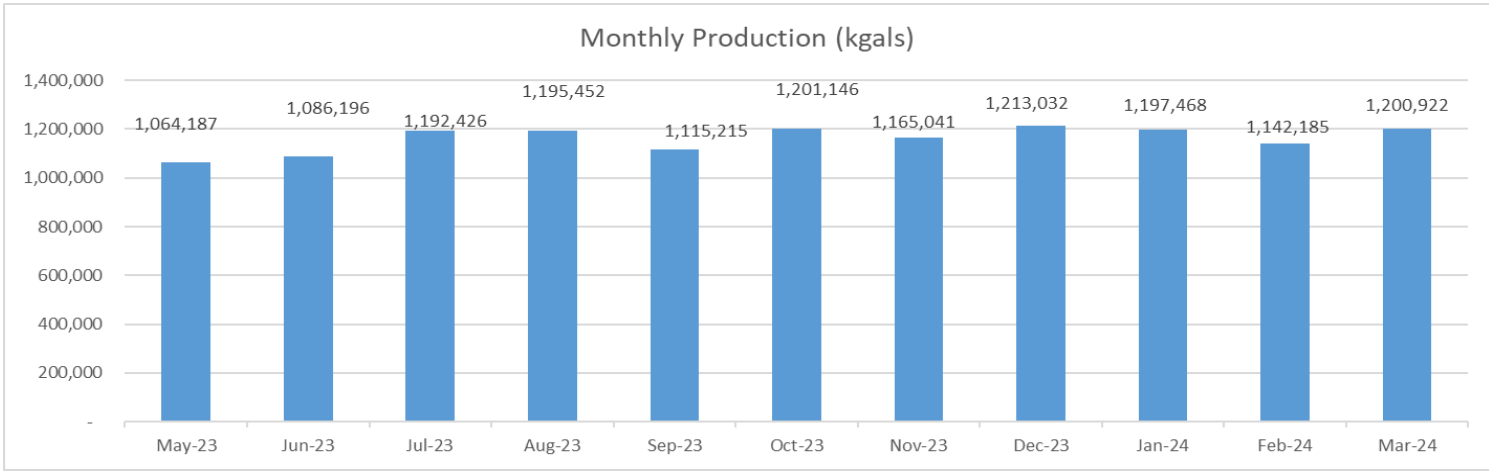
GUAM WATERWORKS AUTHORITY

Operations Update

Water Production (March 2024)

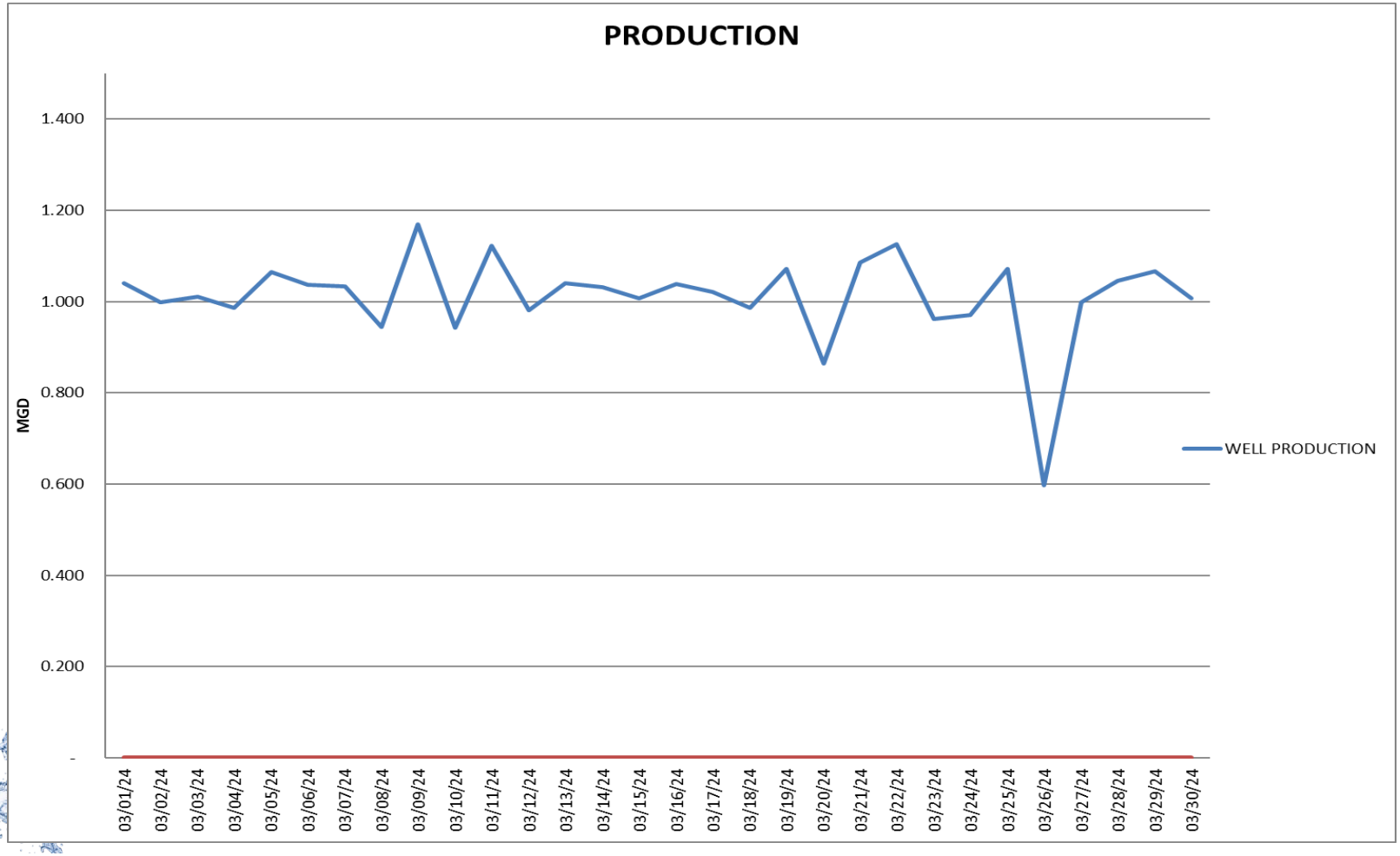
Monthly Production Summary - March 2024					
Deep Wells				35.8	MGD
	Active wells =	96	of 120		
	Avg days in operation =	31	days		
	Total Production =	1,110,425	Kgals		
Springs				0.16	MGD
	Avg days in operation =	31	days		
	Total Production =	4,869	Kgals		
Ugum Surface Water Plant				1.8	MGD
	Avg days in operation =	31	days		
	Total Production =	54,310	Kgals		
Tumon Maui Well				1.01	MGD
	Avg days in operation =	31	days		
	Total Production =	31,318	Kgals		
		1,200,922	Kgals	38.7	MGD

DW Status as of 3/31/2024		REMARKS
Active	96	DW units on line
Standby	1	A29
Grounded Motors, Offline, Mechanical Issue	12	A26-D01-D03-D09-D21-D26-F01-F13-F20-M05-M12-Y16
Out of Commission	9	A02-A07-A28-D05-D13-M01-M14-MJ01-MJ05
Secured - PFO	2	A23 and-A25
TOTAL	120	



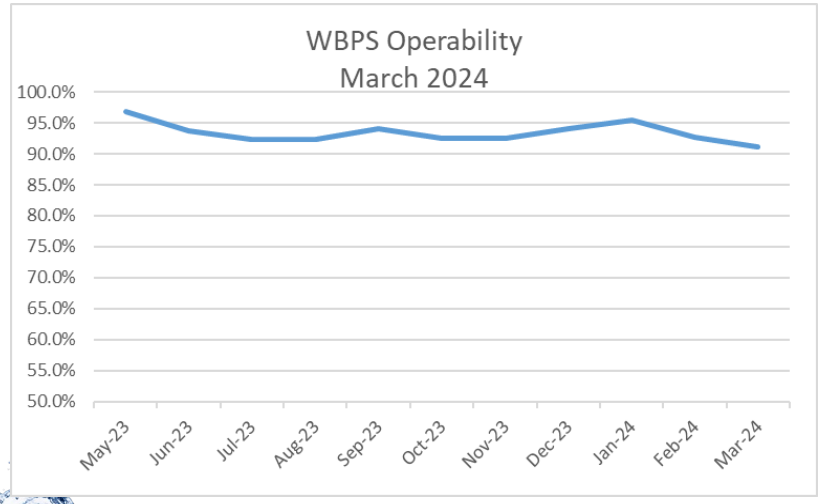
GUAM WATERWORKS AUTHORITY

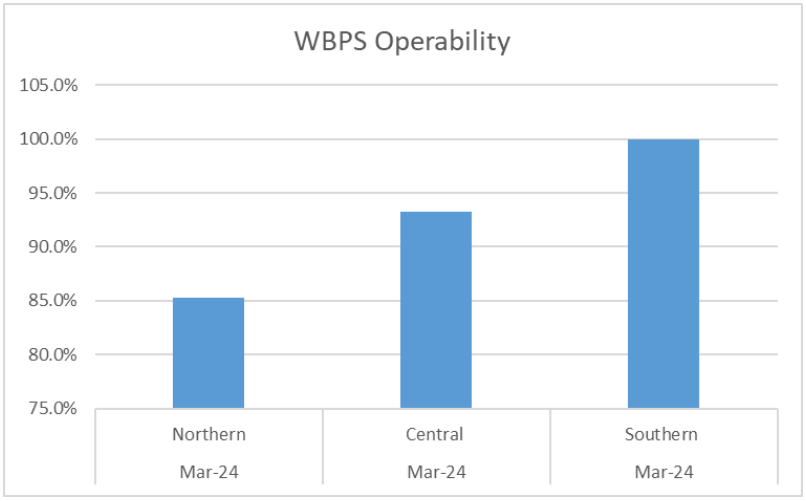
Tumon Maui Well Production (March 2024)



Water Distribution (March 2024)

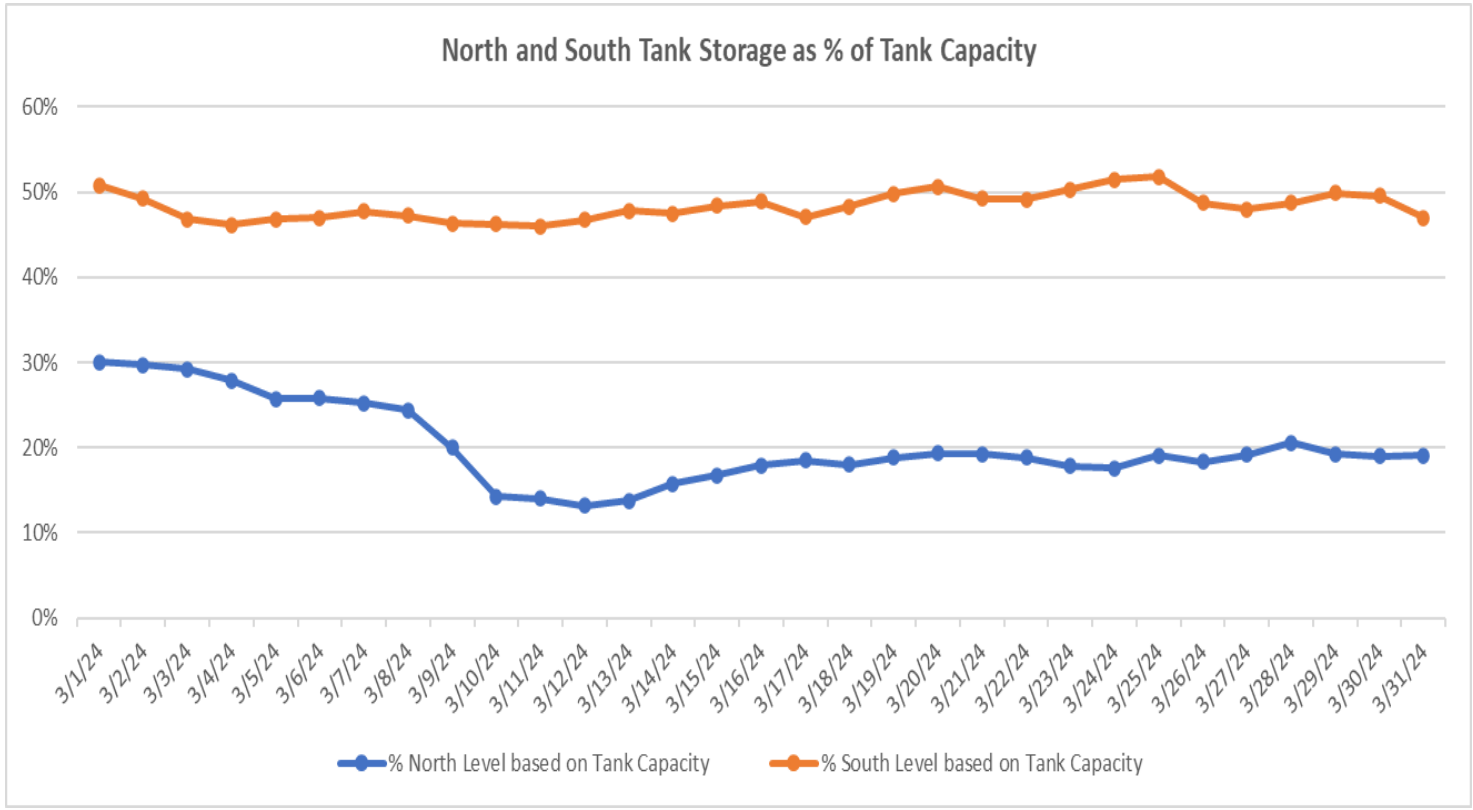
Monthly Distribution Summary - March 2024					
Water Booster Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	15	34	29	85.3%
	Central	7	15	14	93.3%
	Southern	8	19	19	100.0%
		30	68	62	91.2%





GUAM WATERWORKS AUTHORITY

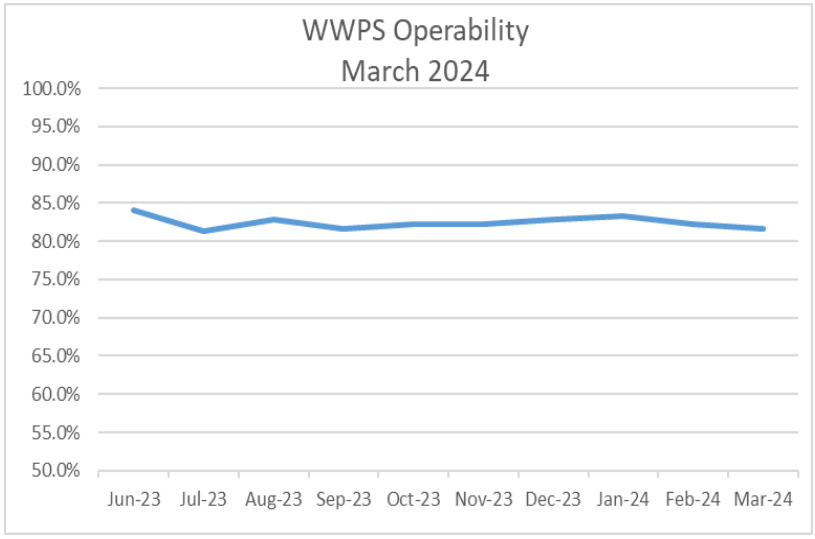
Water Distribution – Tank Levels (March 2024)

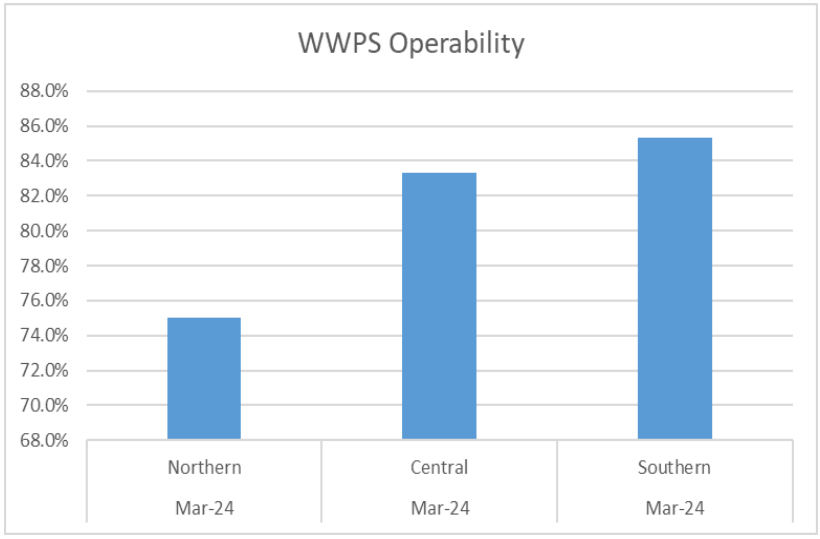


GUAM WATERWORKS AUTHORITY

Wastewater Collections (March 2024)

Monthly Collections Summary - March 2024					
Wastewater Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	22	52	39	75.0%
	Central	30	66	55	83.3%
	Southern	32	68	58	85.3%
		84	186	152	81.7%





17

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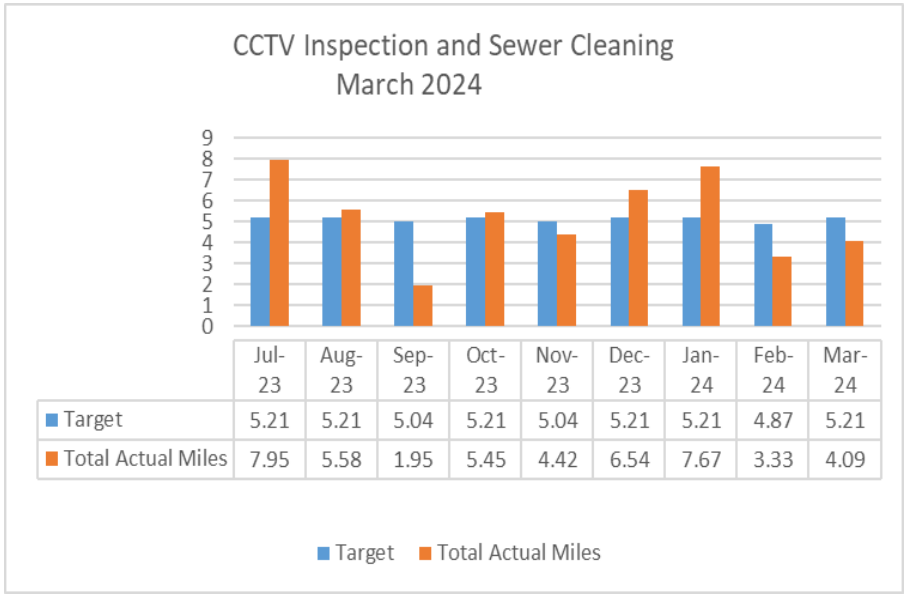
Wastewater Collections – CCTV (March 2024)

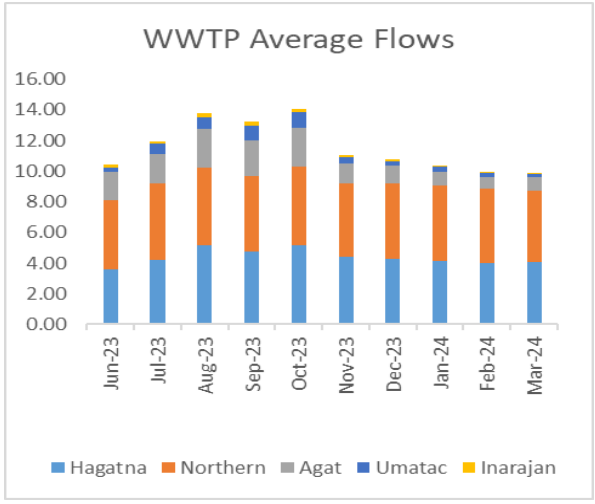


	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
Target	5.21	5.21	5.04	5.21	5.04	5.21	5.21	4.87	5.21
Total Actual Miles	7.95	5.58	1.95	5.45	4.42	6.54	7.67	3.33	4.09

GUAM WATERWORKS AUTHORITY

Wastewater Treatment (March 2024)

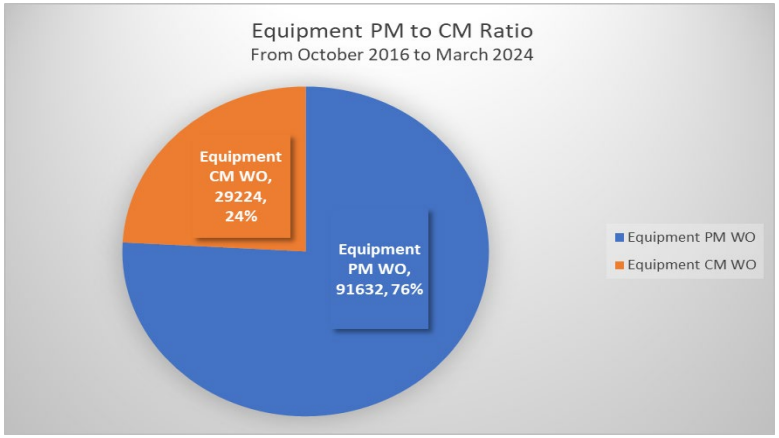
Monthly Wastewater Treatment Summary - March 2024				
WW Treatment Plants - Flows				
	Facility	**Avg. Daily Flows**	**Sludge (lbs)**	**Sludge Disp. ($)**
	Hagatna	4.04	181,780	$ 16,360
	Northern	4.69	866,520	$ 77,987
	Agat	0.88	35,300	$ 3,177
	Umatac	0.18		
	Inarajan	0.06		
		9.85	1,083,600	$ 97,524



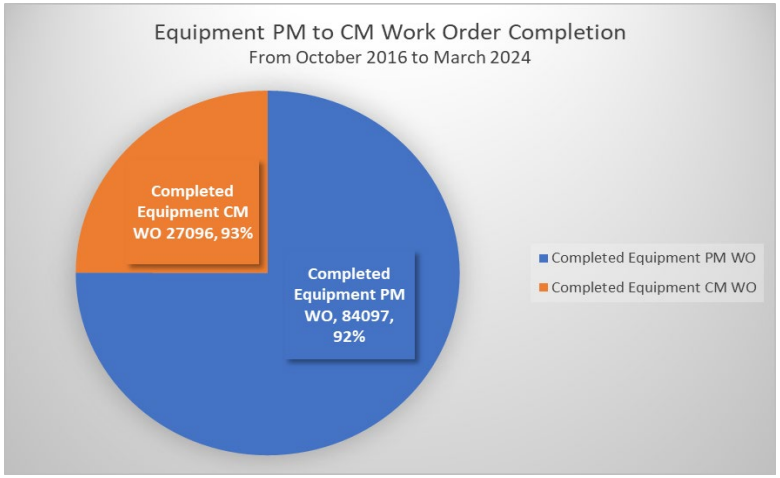
GUAM WATERWORKS AUTHORITY

Asset Management (through March 2024)

I. Equipment Preventive Maintenance to Corrective Maintenance ***Ratio***



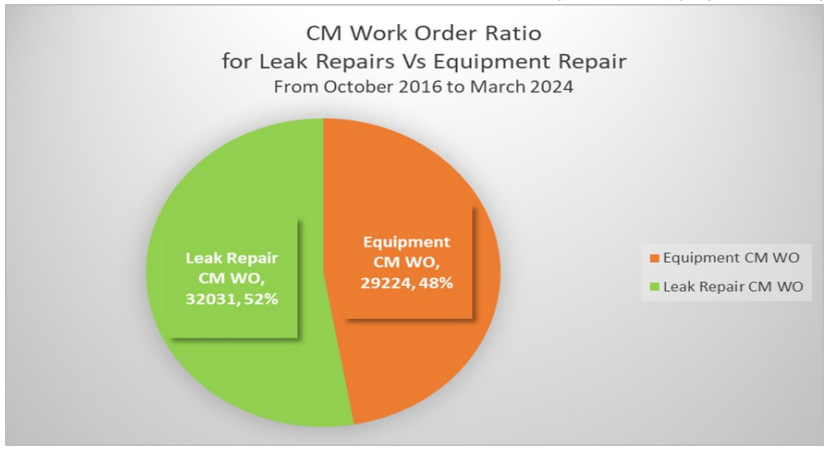
II. Equipment Preventive Maintenance to Corrective Maintenance ***Work Order Completion***



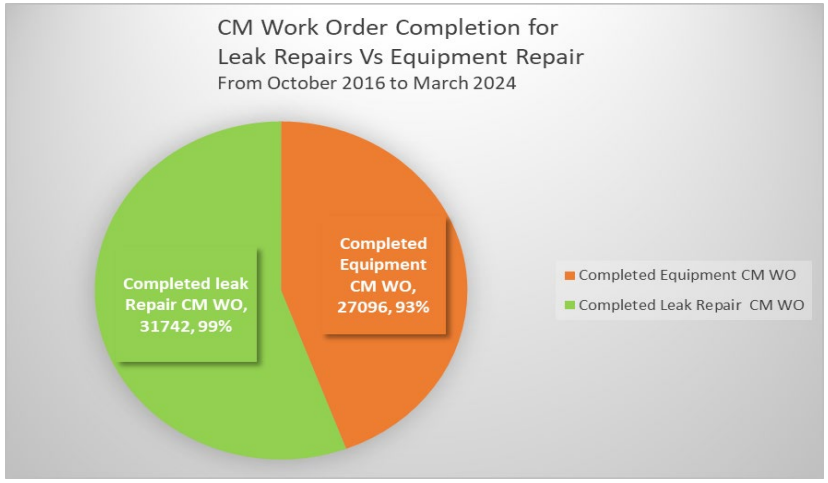
GUAM WATERWORKS AUTHORITY

Asset Management (through March 2024)

III. Corrective Maintenance Work Order ***Ratio*** for Leak Repairs vs. Equipment Repair



IV. Corrective Maintenance Work Order ***Completion*** for Leak Repairs vs. Equipment Repair



GUAM WATERWORKS AUTHORITY

One Guam Update (March 2024)

- Licenses/Leases, Property And Easement issues
  - TMW/AG-1/Tarague Water Line – No update.
  - Murray Road/Schoeffel Heights Easement / Right of Access – No update.
  - Transfer of ACEORP – No update
  - Andersen Water Line – AG-1 to Route 9 – No update.
  - GWA WW Collection System Easement at Marbo/Skaggs – No update

- Route 16 Intertie/Easement
  - DOD asking if GWA has concerns if meter box will be located in an easement believed to be GWAs. Cesar D. can provide a diagram where want to put valve box.
  - DOD's need for water is estimated at 400gpm when the transmission line at Rt. 16 is shut down for replacement. GWA Engineering is working on the modeling the area with new water requirements.
  - GWA is concerned about development on Rt. 8A as things have changed; funding for the putting in the intertie at Rt. 16 water line is planned for FY2026.

- Information Requests
  - GWA Master Plan for DOD Buildup Impact
    - Miguel B. had conversation with B&C on the update of GWA's Water Resources Master Plan. Although there is a discussion on DOD build up projects including the missile defense, it is unknow what the complete impact to GWA's systems will be , not enough information is available on the details of the DOD project. Only impact included is what would have been included in the 2018 Master Plan which is based on supplemental EIS.

- Interagency Billing & Contracts/Agreements
  - Term Sheet/Scope – DOD met with GWA CFO to discuss the Scope and Term Sheet. GWA is reviewing the term.

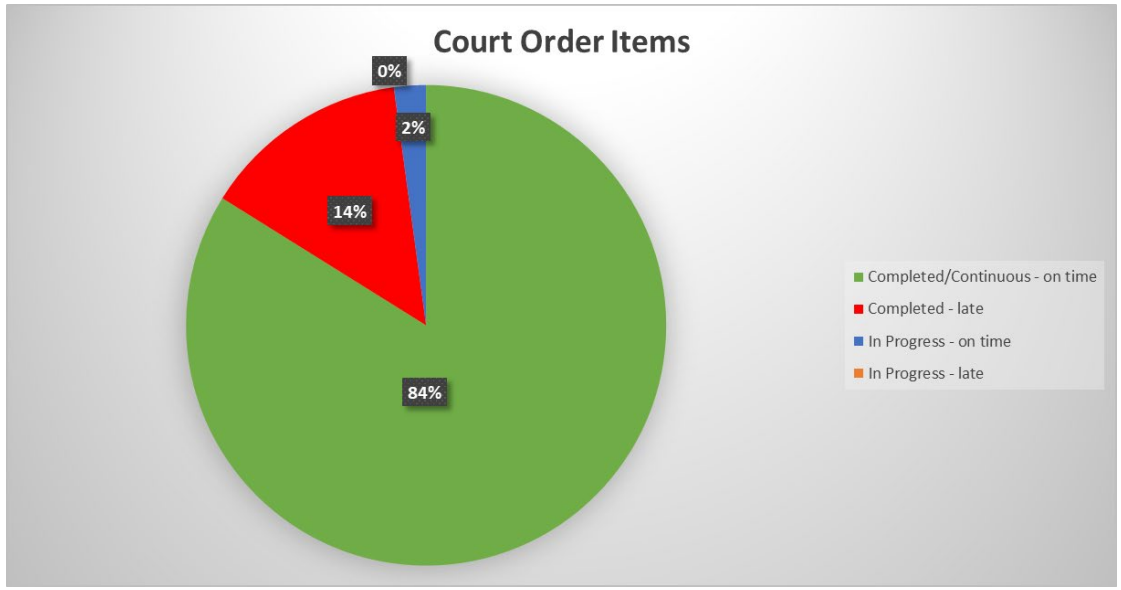
(continued on next page)

One Guam Update (March 2024 - *continuation*)

- Other Issues
  - Water to Navy Meter at Power Substation across Micronesia Mall
    - Vince P. met with DZSP; what thought was main 6" valve, the guy that did the repair work came out and said only 1" valve on shoulder of Rt. 1. Needs to get approval to tie into that service lateral. GWA will still need to open up portion of road, about 3' where valve is to the sidewalk; probably use hydro excavator to minimize damage to asphalt as line is only 2' deep. Maria L. will clear it with PWD.
  - PFAS Study – Allonia
    - Samples for GWA and DOD have been sent to Allonia. Waiting on the results-end of May.
    - Taling Taitano is working with Jennifer C. to get breakdown of cost to ensure invoice for Navy is filled out properly.
  - GWA Pressure Zone Realignment Encroachment – No update; request is with Andersen. GWA will need to provide Andersen with the cost to relocate PRV on Route 15; as part of the justification for the request.
    - Surveyor Errors - GWA is seeing errors in the survey work related to projects. GWA will be requiring them to do a more thorough boundary survey with actual monuments and control points; they will have to submit it before installed and be approved by GWA and GWA doing QA/QC.
  - Interties with Andersen Working Group – Water Sharing Arrangements
    - Andersen is very interested in water sharing arrangements so need to set up working group to talk about things discussed way back, like GWA getting water from Marbo wells. Andersen Inter tie Group will meet in April.

GUAM WATERWORKS AUTHORITY

Court Order Summary (through March 2024 – no changes)



Court Order Summary

	Court Order Items	%	Performance % Completed	Performance (on-time or completed)
Completed/Continuous - on time	78	84%		
Completed - late	13	14%		
In Progress - on time	2	2%		
In Progress - late	0	0%	97.8%	100.0%
Totals	93	100%		

GUAM WATERWORKS AUTHORITY

Court Order – Status Information (March 2024)

The following Overflows or ByPass events were reported for March 2024:

- March 17, 2024, SSO# 1432669: Pale San Vitores, Tumon; Sewer overflow – FOG
- March 24, 2024, SSO# 1434528: Pale San Vitores, Tumon: Sewer overflow – FOG

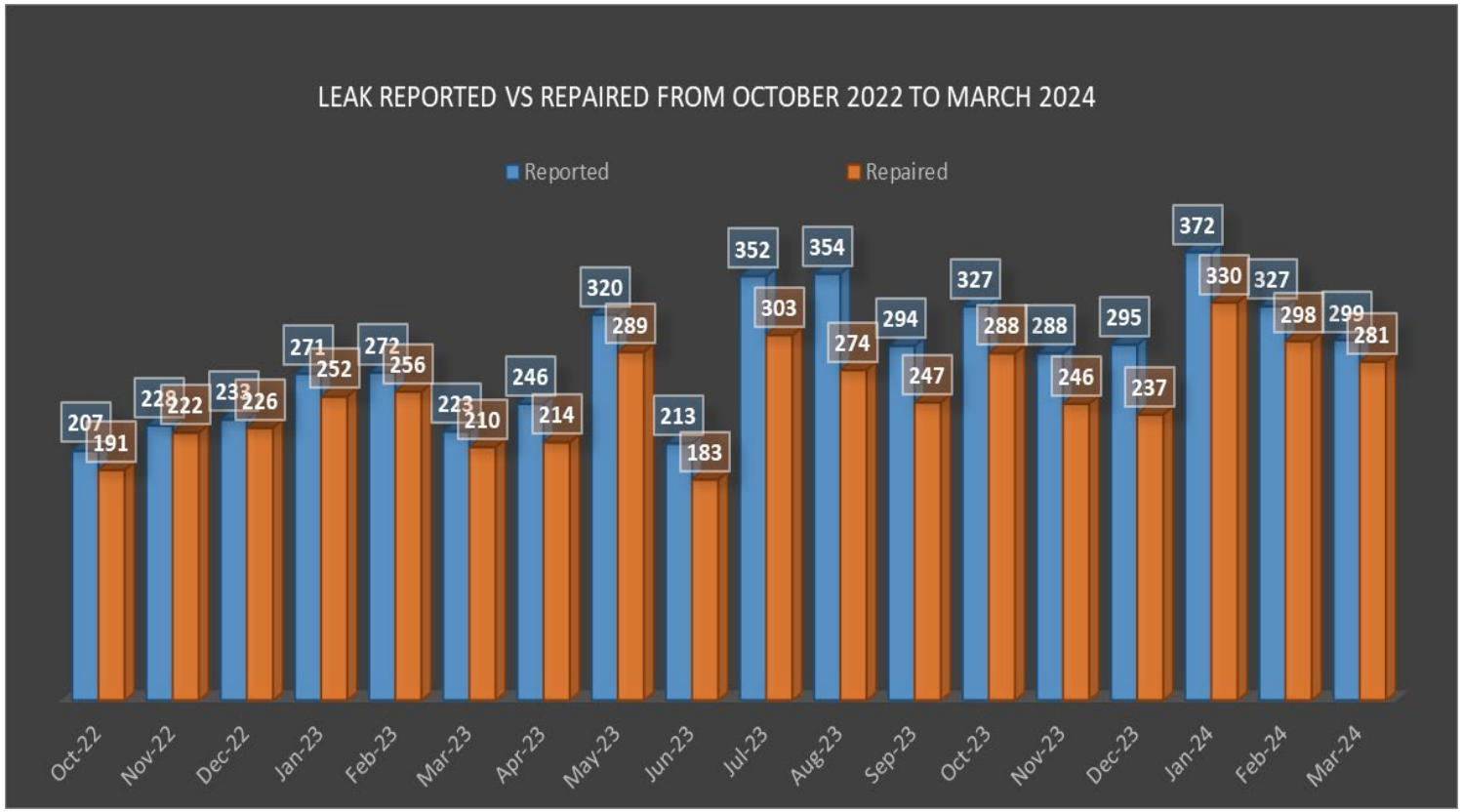
GUAM WATERWORKS AUTHORITY

Land Acquisition Summary (through March 2024)

GWA Facility	Location	Gov. or Private Property	Land Acquisition Status
Tanks	Astumbo-L10164	Gov't. - CLTC	Petition of Land Registration package forwarded to Attorney General by DLM 11/04/19. AG pending court filing 06/30/2021 – Follow up status sent to DLM 10/06/2021; 11/03/2021; 01/27/2022; 03/04/2022; 05/12/2022; 07/07/2022;09/12/2022; 12/27/2022; DLM response 07/11/2023 have not been able to meet with Assignment AG for LR proceedings. Land Agent has followed up and emailed multiple times with Margarita at DLM on meeting with DLM attorney on status of Land Registration proceedings 10/02/2023. This process is crucial for GWA to acquire property for GWA reservoir. 02/01/2024: Follow up sent to Margarita at DLM; 02/09/2024: Response from Margarita at DLM- Because it has almost been 4 years since we requested the assistance of the AG to initiate the Land Registration, I would recommend that a formal letter from GWA requesting the urgency of the registration and indicate the reasoning behind it. This would support our request for immediate processing with the AG.
	Piti-L259	Private/Federal	Received final comments from DoAg. Waiting on the archaeological report before we can submit 299 forms. Waiting for permission from NPS to access the lot and perform the Archeological survey.
	Ugum River Intake/Booster Pump Station	Private	When the UGUM Water treatment plant was built in 1990, no land reservations for the area by the booster pump station, the Ugum river intake and access road. Land Agent currently researching the area under Lot 292, owned by the Aguon Family. GWA would need to secure a Grant of Easement for the access road and booster pump facility along the river intake. 12/19/2023: GWA coordinating with DCA for survey services to perform a boundary retracement survey of the subject lot to establish the limits of the survey; as-built existing facilities, structures, and road, to obtain + 2,376 square meters for the parcel and create the easement for GWA reservation. 03/06/2024: DCA field survey work begins.
Deep Wells	AG-12-L10154-4	Dept. of Agriculture/Manhita Farms	Right of Entry Agreement sent to Manhita Farms for signature 05/24/18. 2nd follow up sent on 04/10/19; 08/03/2021. ROE Agreement information sent to GWA legal counsel for further review and processing 01/28/2022; 08/11/2023 –GM signed and submitted to DCA for final review and processing at DLM; 09/26/2023-Submitted to DCA for final map processing; 03/2024: Re-submitted survey map to DLM last week to change the new acting CLTC Administrative Director.
Booster Pump Station	Agfayan-T3734 B19 L28	Private	TGE working on structural design for pump station area for L28, B19, T3734, Inarajan 11/07/19. Letter of Decision received by CLTC 06/09/2021. CLTC has responded for in-kind service letter 10/08/2021. 1st appraisal report submitted to GWA 05/11/2022. 2nd appraisal submittal to GWA 09/20/2022. Appraisal report sent to GM/legal counsel for review, approval and response 09/22/2022. Garrett stated updated appraisal report cost is $2500 each. Funding needs to be requested 10/02/2023.
Asan Springs	Asan-L501	Federal	• Revised Environmental Assessment report with NPS for review. 1/25/24 • 09/18/2023: The Office of Congressman Moylan has offered assistance to work with the NPS in completing the EA and Finding of No Significant Impact (FONSI) along with the Right of Way agreement to GWA, the EA is a prerequisite of the ROE agreement.

GUAM WATERWORKS AUTHORITY

Comparison of Leaks Reported vs. Leaks Repaired (through March 2024)



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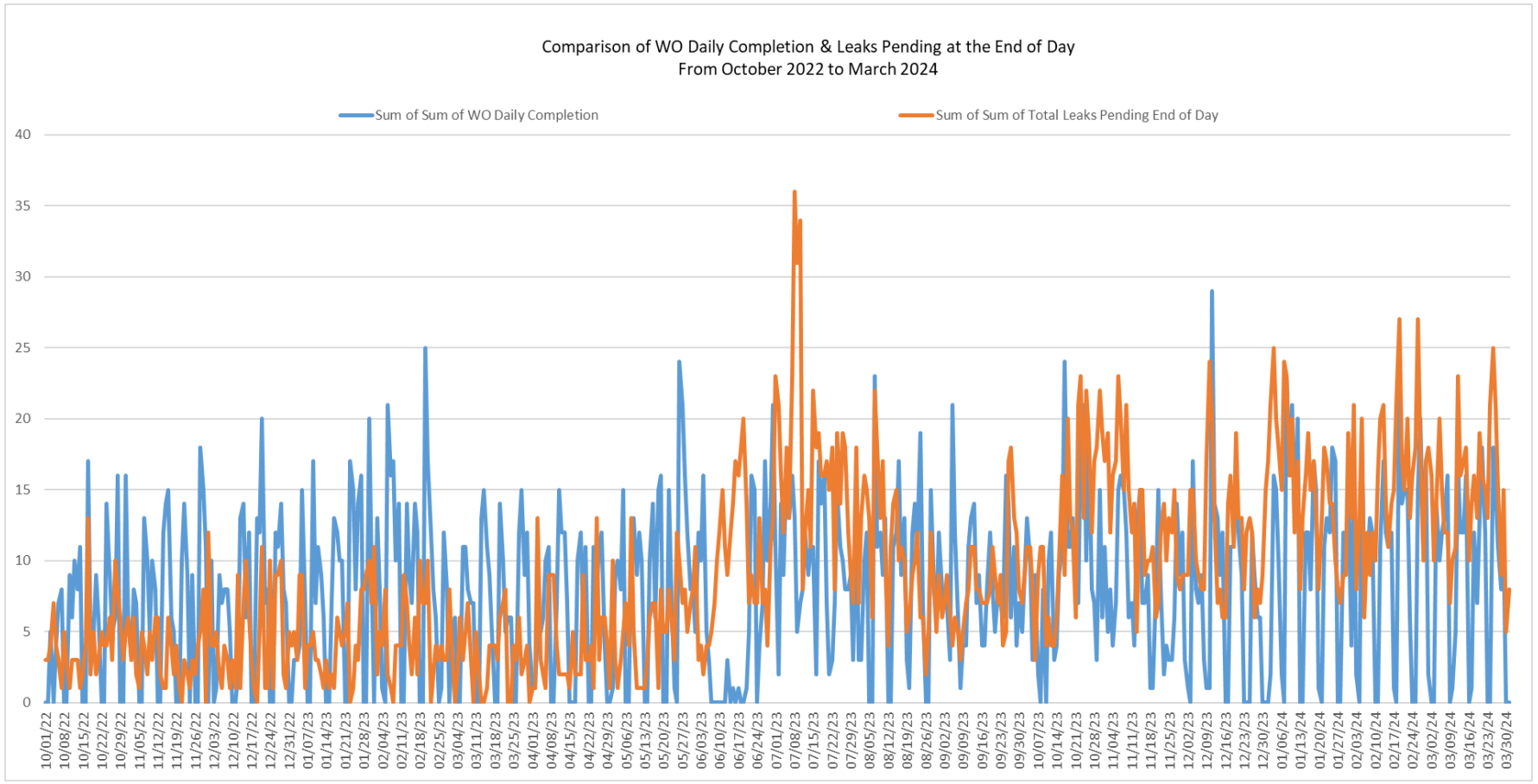
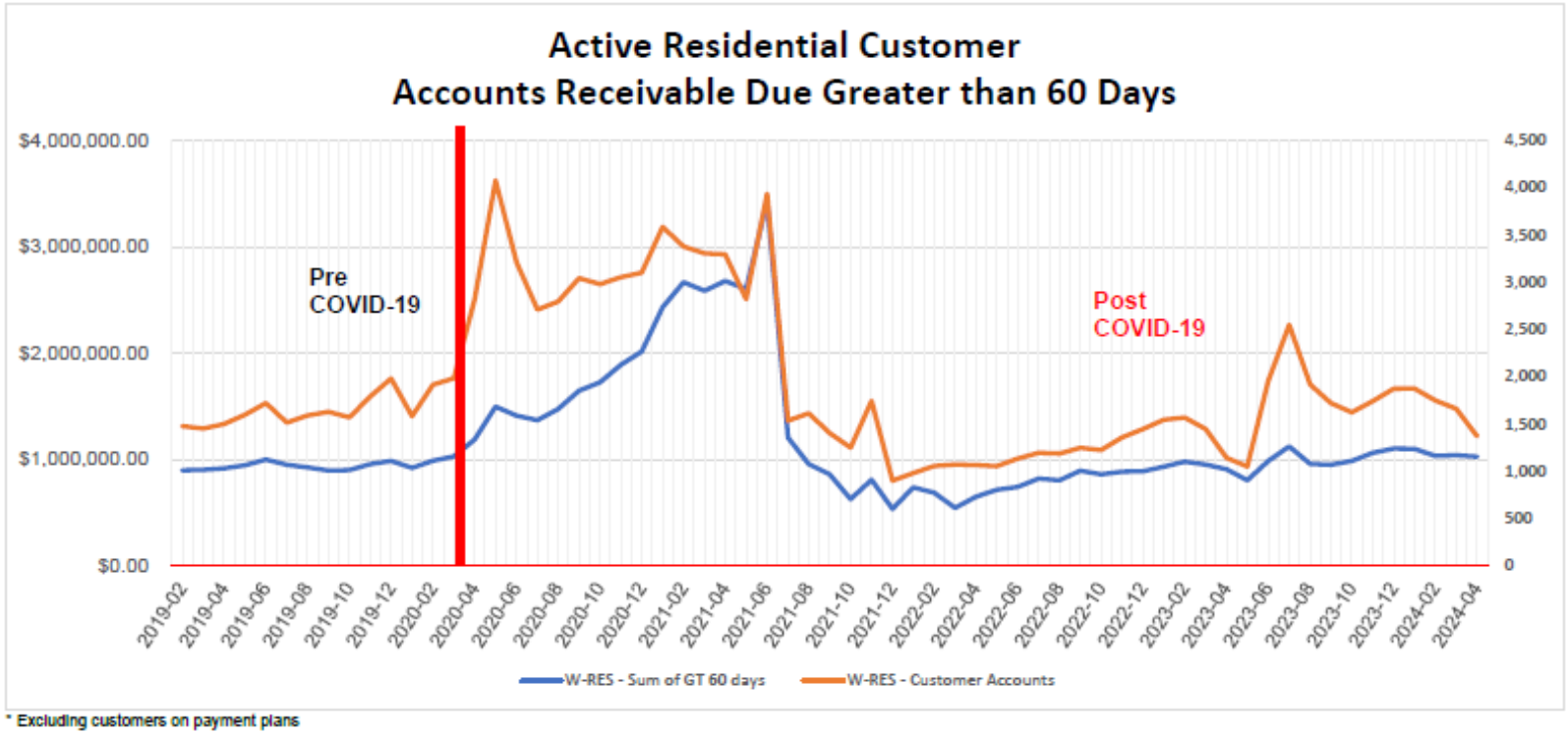
Daily Leak Repairs (through March 2024)



GUAM WATERWORKS AUTHORITY

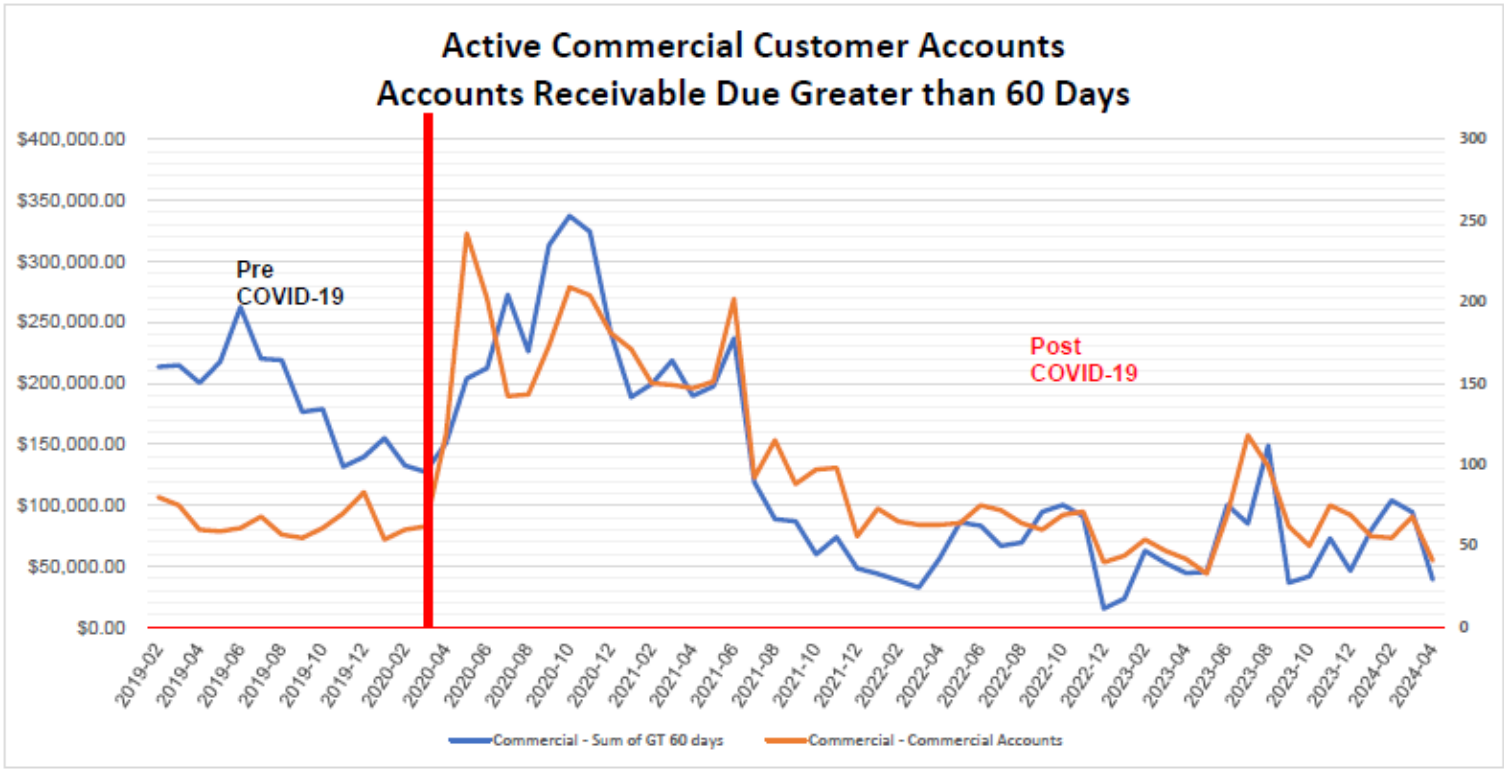
Accounts Receivables – Active Residential Customers (for March 2024)



* Excluding customers on payment plans

GUAM WATERWORKS AUTHORITY

Accounts Receivables – Active Commercial Customers (March 2024)



* Excluding customers on payment plans

GUAM WATERWORKS AUTHORITY

Highlights of Customer Care Section Operations (March 2024)

- The average wait time for all 3 locations is 4 minutes as compared to 3.4 minutes for Feb 2024.
- The number one reason for visit to each GPWA location is identical to Feb 2024
  - Gloria B Nelson Public Service Bldg. Fadian = Apply for water
  - Julale Satellite Office = Copy of bill
  - Upper Tumon Satellite Office = Bill Dispute
- The total number of Facebook visits is 8025 as compared to 5884 for February 2024.
- Instagram profile visits for March 2024 increased to 322 as compared to 261 in Jan 2024.
- March 2024 average number of active pay plans is 396 which compares similarly to Feb 2024 @ 376.
- 525 emails were received in March 2024 as compared to 564 in Feb 2024.
- Meter Reading Unit reported a decrease in the successful electronic read percentage average @ 95.5% as compared to 96.8% in Feb 2024. The decrease is the result of depleting endpoint battery life.
- 12.5% of GWA active customer meters recorded ongoing private side leakages in March 2024 which compares similarly to Feb 2024 @ 12.3%.

GUAM WATERWORKS AUTHORITY

GWA Financial Overview

MARCH 2024

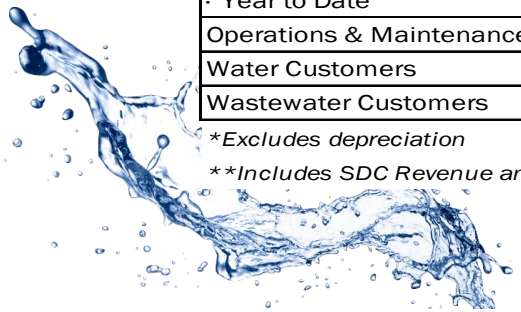
GUAM WATERWORKS AUTHORITY

Key Financial Indicators

Indicator	Target	Jan-24	Feb-24	Mar-24
DSC YTD				
· Per Section 6.12 of Indenture	1.25	1.59	1.58	1.49
· Per PUC / CCU	1.30	1.59	1.58	1.49
Days – Cash on Hand	120 days	278 days	290 days	312 days
Collection Ratio**				
· Month to Date	99%	98%	99%	100%
· Year to Date	99%	87%	89%	91%
Days Billed	30 days	30 days	30 days	30 days
Account Receivable Days	30 days	39 days	39 days	38 days
Account Payable Days	45 days	38 days	38 days	33 days
Employee Count	400 FTE	357 FTE	351 FTE	350 FTE
Water Demand				
· Month to Date	451,933	424,459	418,166	451,256
· Year to Date	2,711,600	1,687,688	2,105,853	2,557,108
Wastewater Flow				
· Month to Date	317,500	309,902	298,261	338,918
· Year to Date	1,905,000	1,236,157	1,534,418	1,873,336
Operations & Maintenance Expense*	$6,567,186	$5,552,981	$5,537,977	$6,311,579
Water Customers	43,978	43,525	43,529	43,517
Wastewater Customers	30,781	30,879	31,216	31,298

**Excludes depreciation*

***Includes SDC Revenue and Collection*



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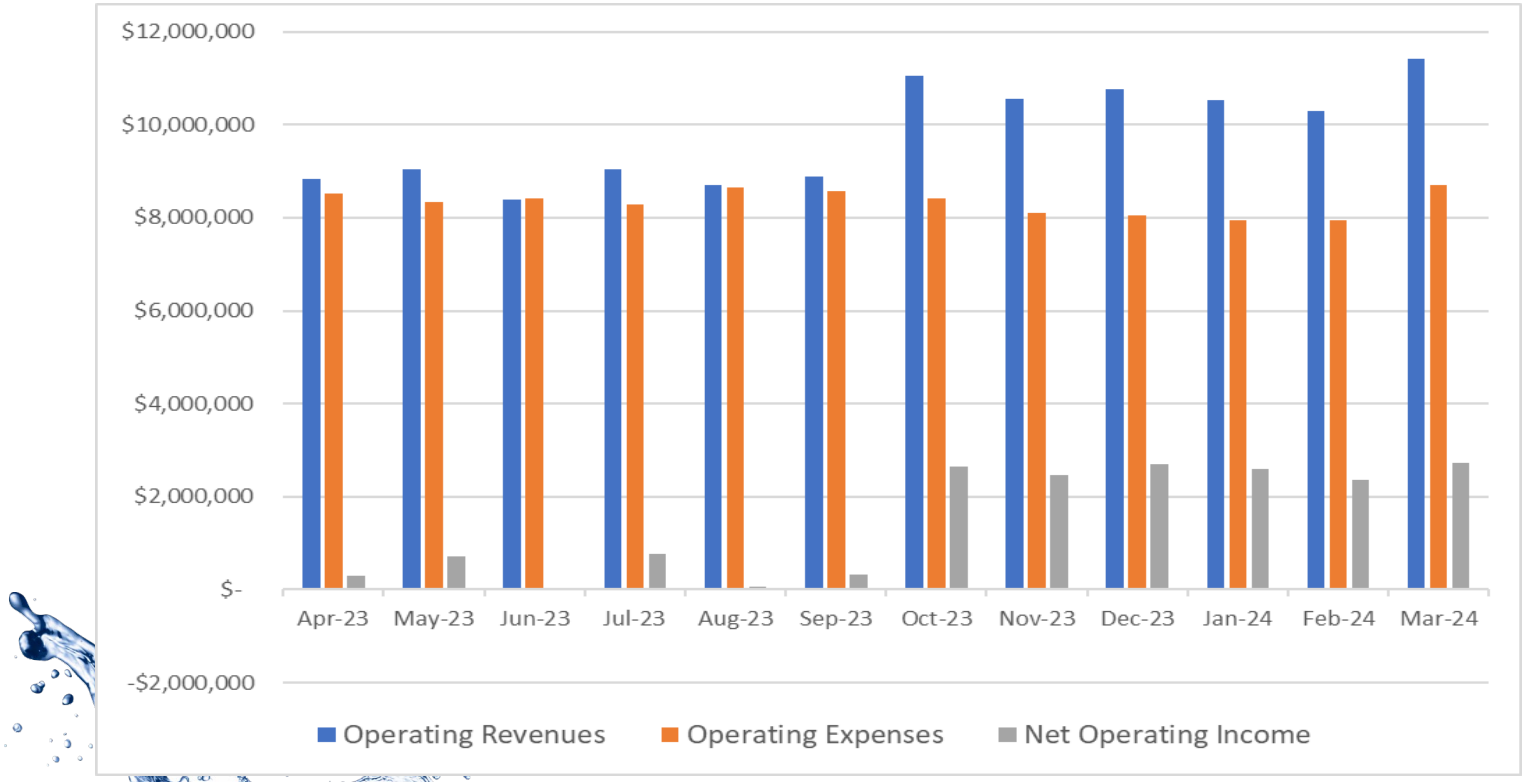
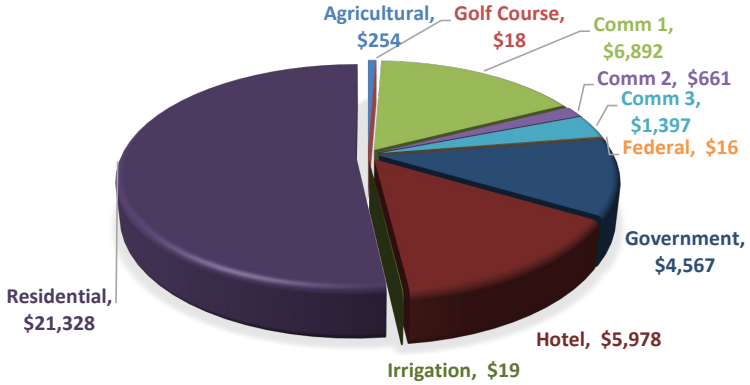
Income Statement



GUAM WATERWORKS AUTHORITY

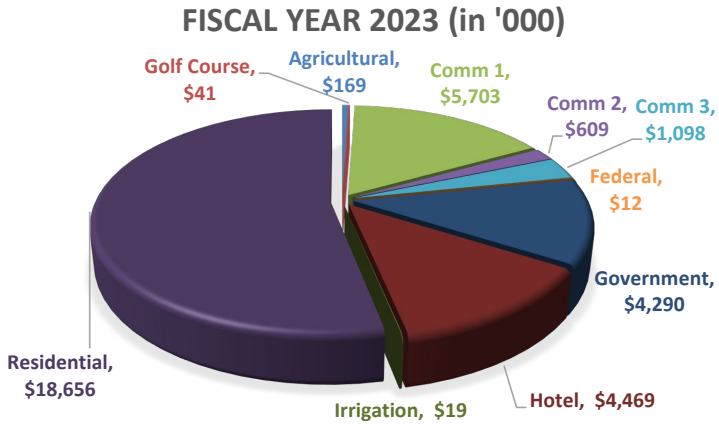
MARCH YTD Water Revenue/Demand by Rate Class

FISCAL YEAR 2024 (in '000)

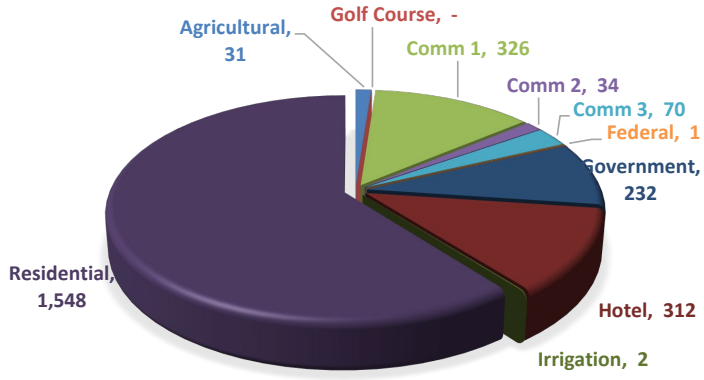


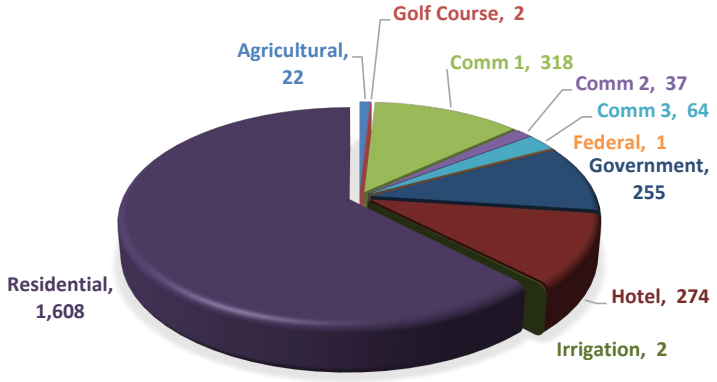
in mGals

FISCAL YEAR 2023 (in '000)



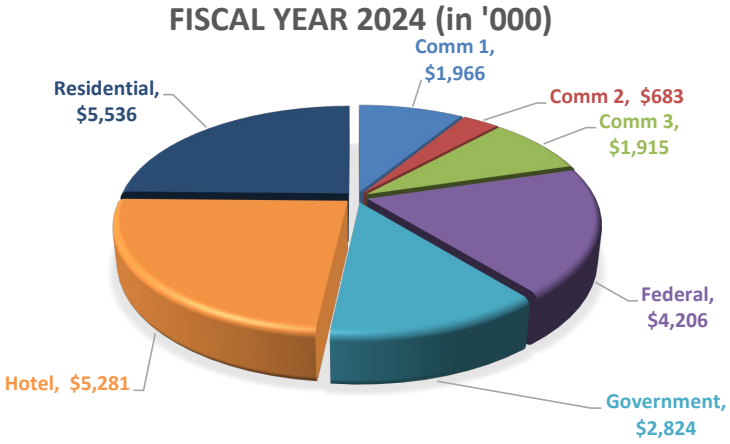
in mGals

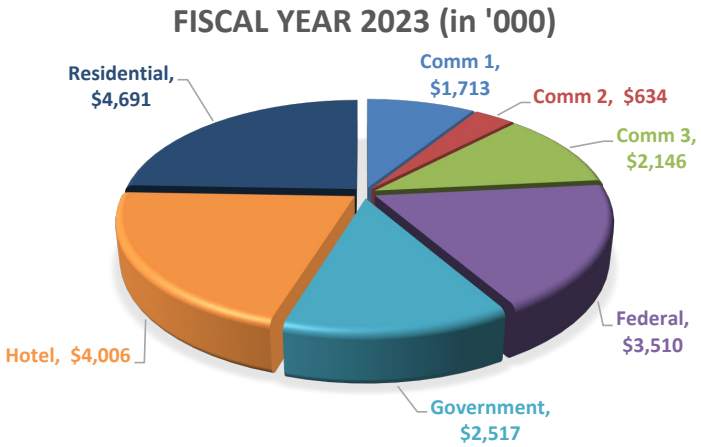


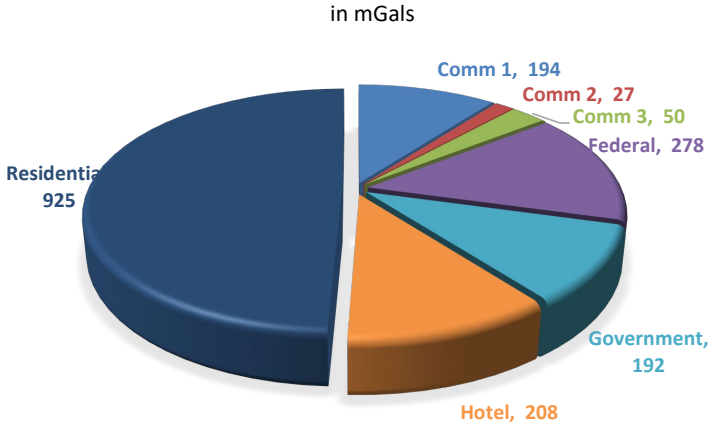


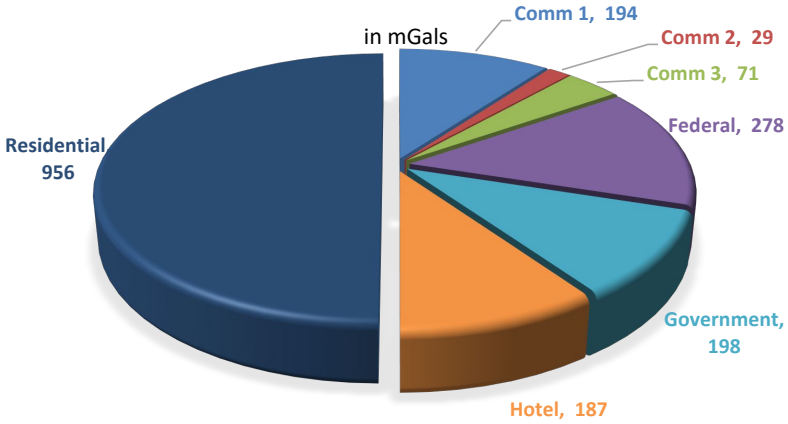
GUAM WATERWORKS AUTHORITY

MARCH YTD Waste Water Revenue/FLOW by Rate Class



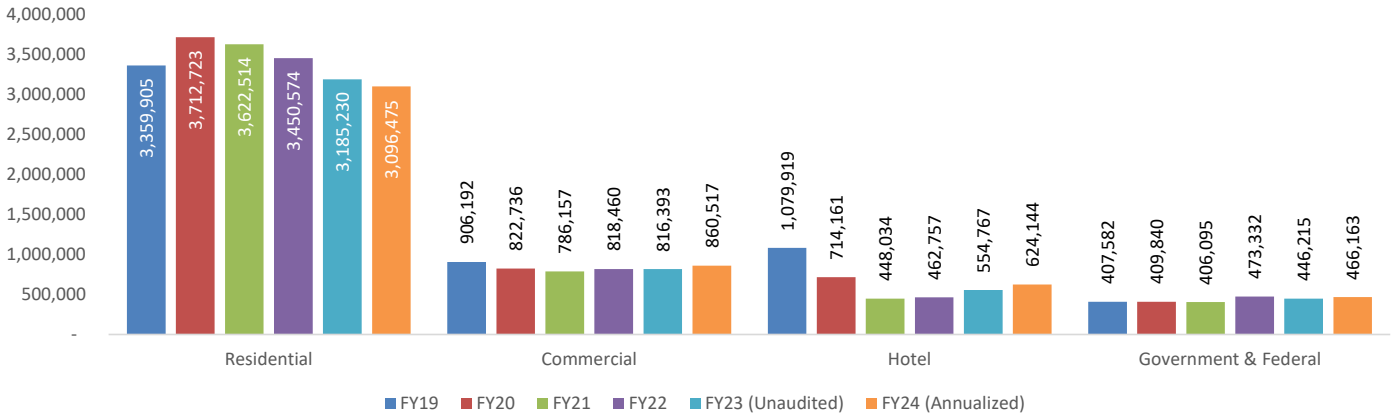


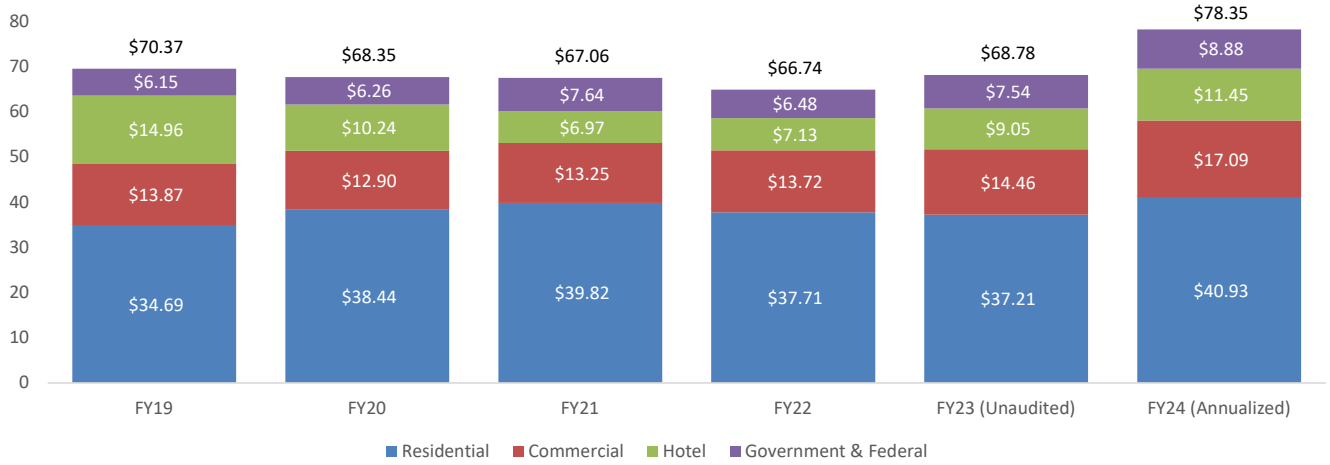




GUAM WATERWORKS AUTHORITY

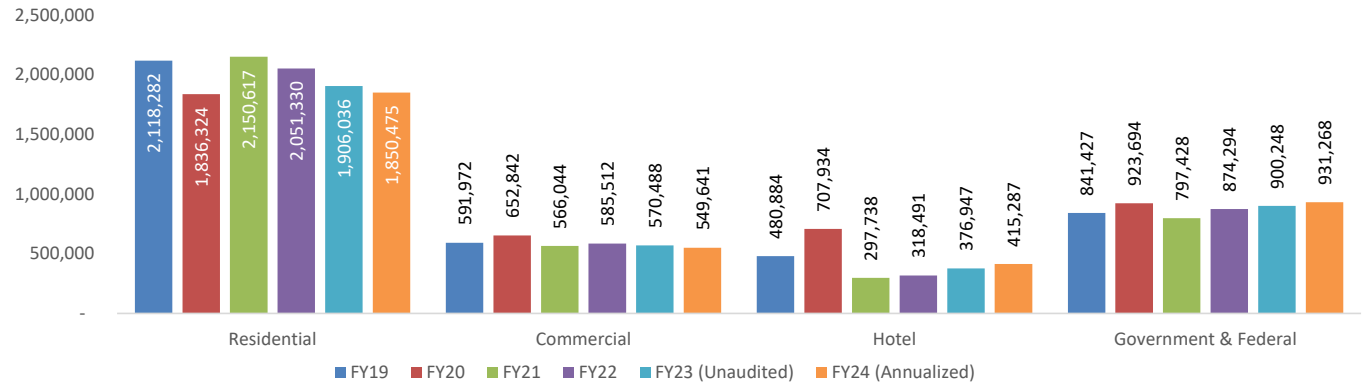
Annual Water Demand and Revenues by Rate Class

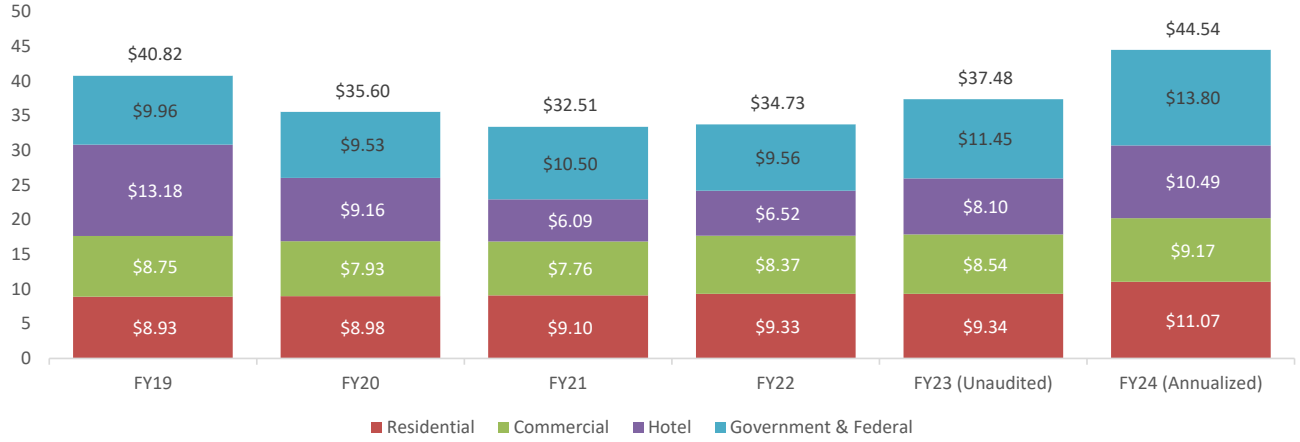




GUAM WATERWORKS AUTHORITY

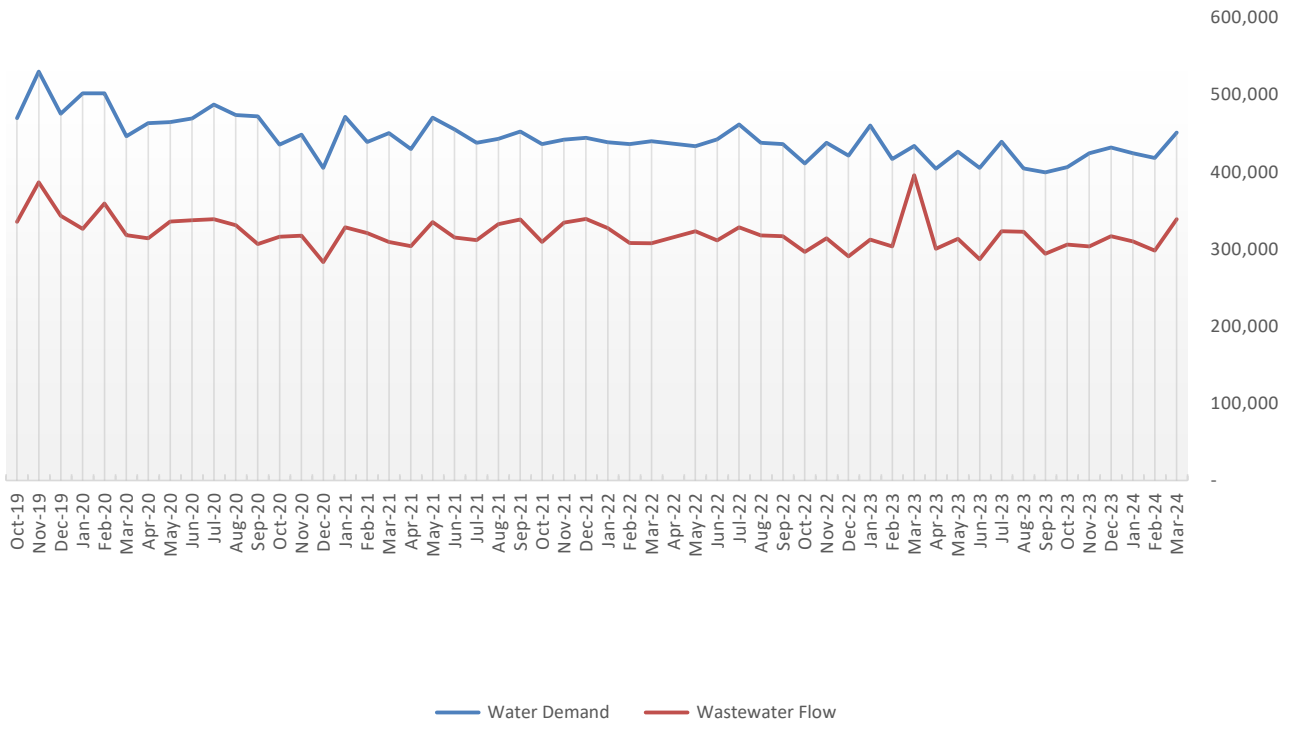
Annual Wastewater Billable Flows and Revenues by Rate Class





GUAM WATERWORKS AUTHORITY

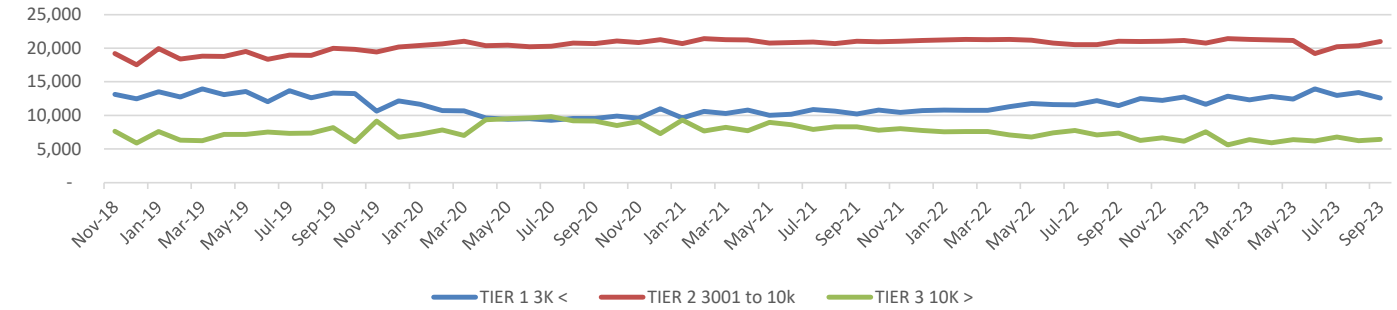
Water Demand & Wastewater Flow – 4 Years



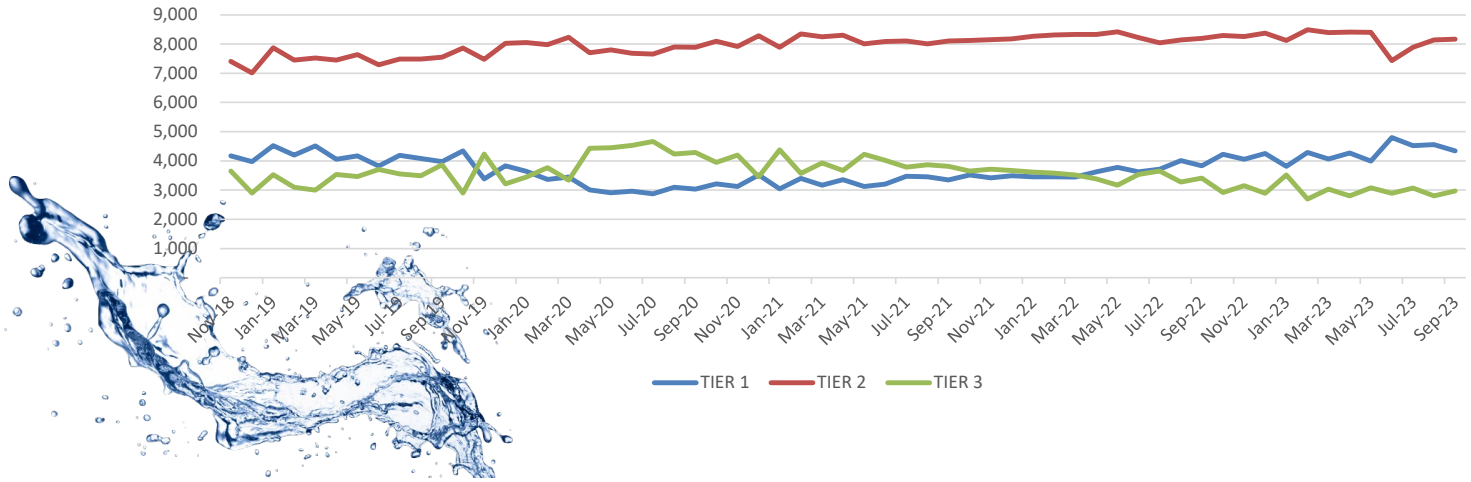
GUAM WATERWORKS AUTHORITY

Residential Customer per Tier

Number of Customers

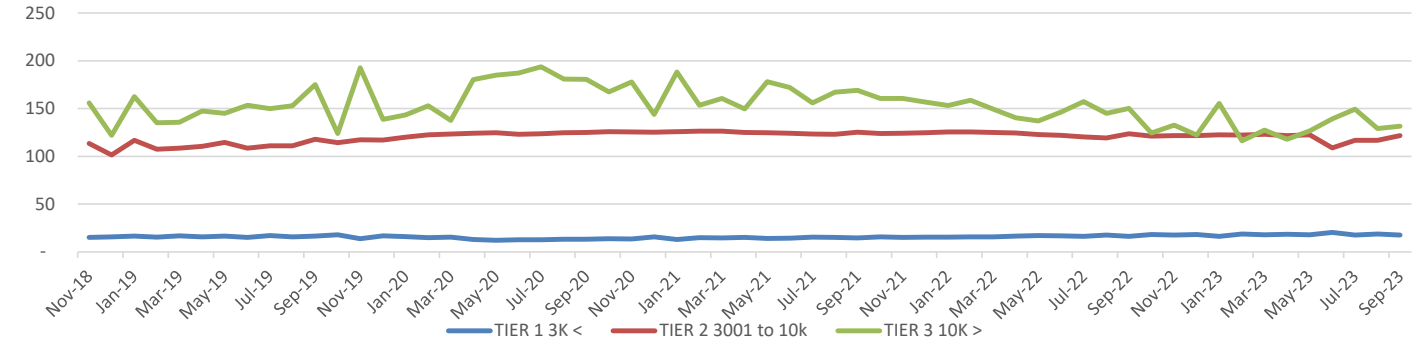


Number of Customers (Water Only)

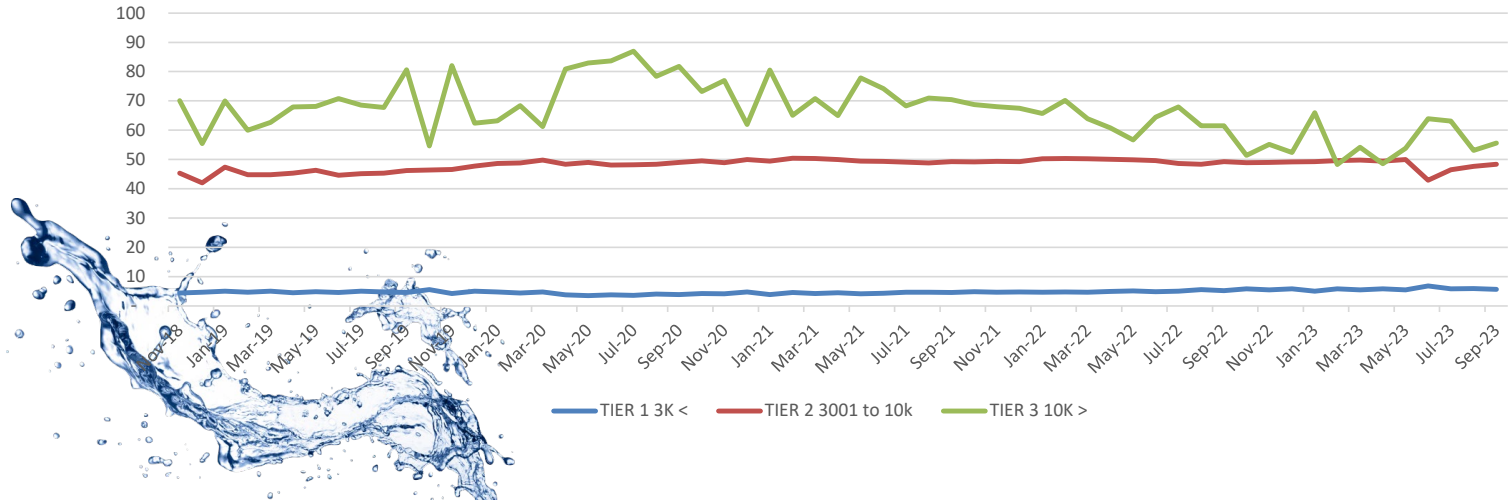


GUAM WATERWORKS AUTHORITY

Residential Demand per Tier (in mGals)

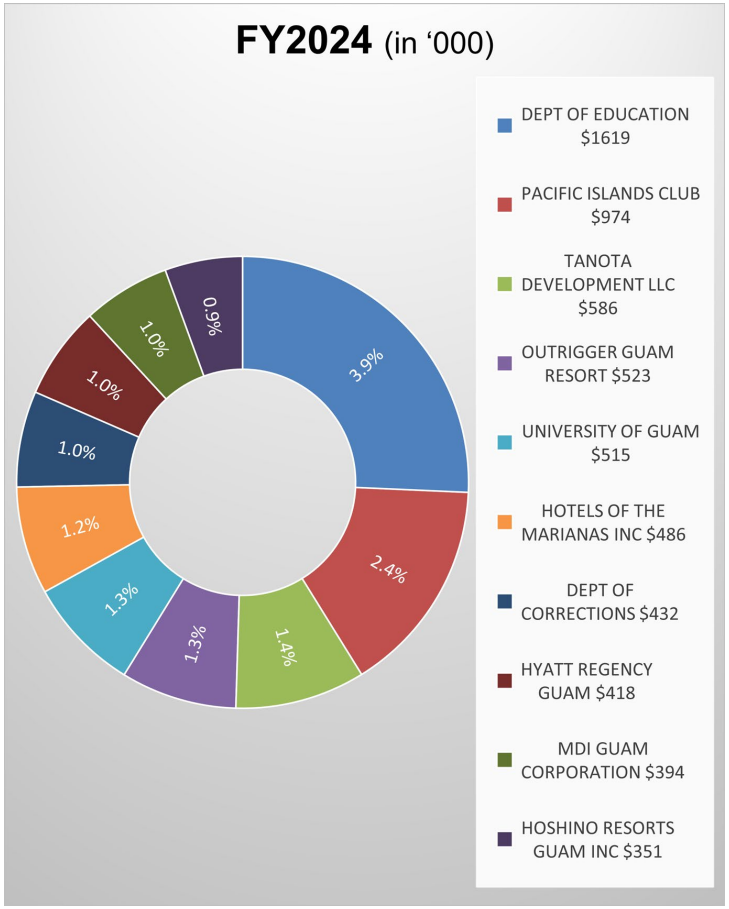


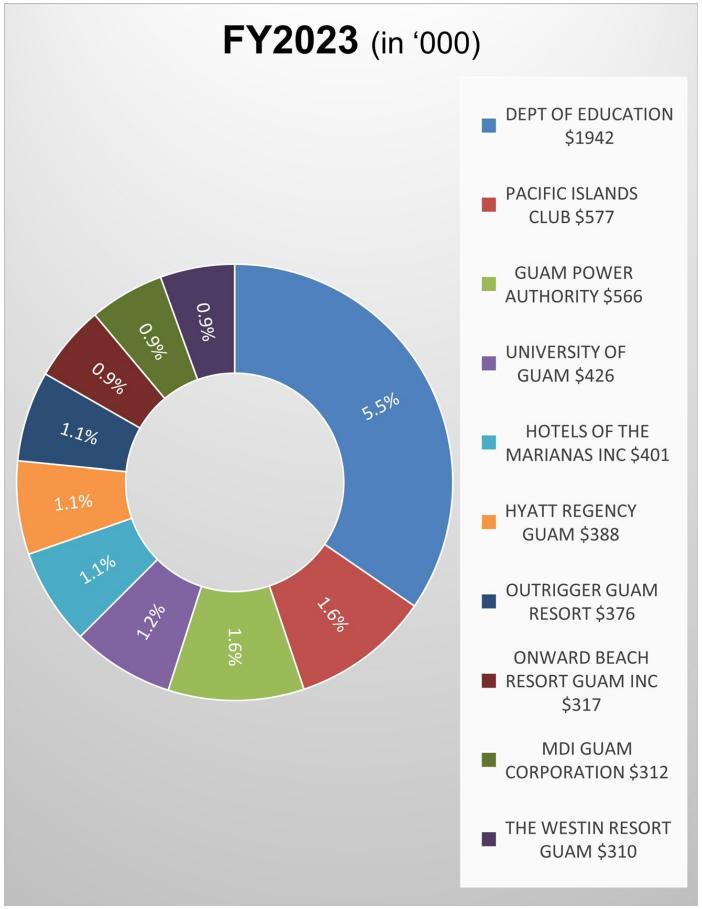
Demand of Customers with Water Service Only



GUAM WATERWORKS AUTHORITY

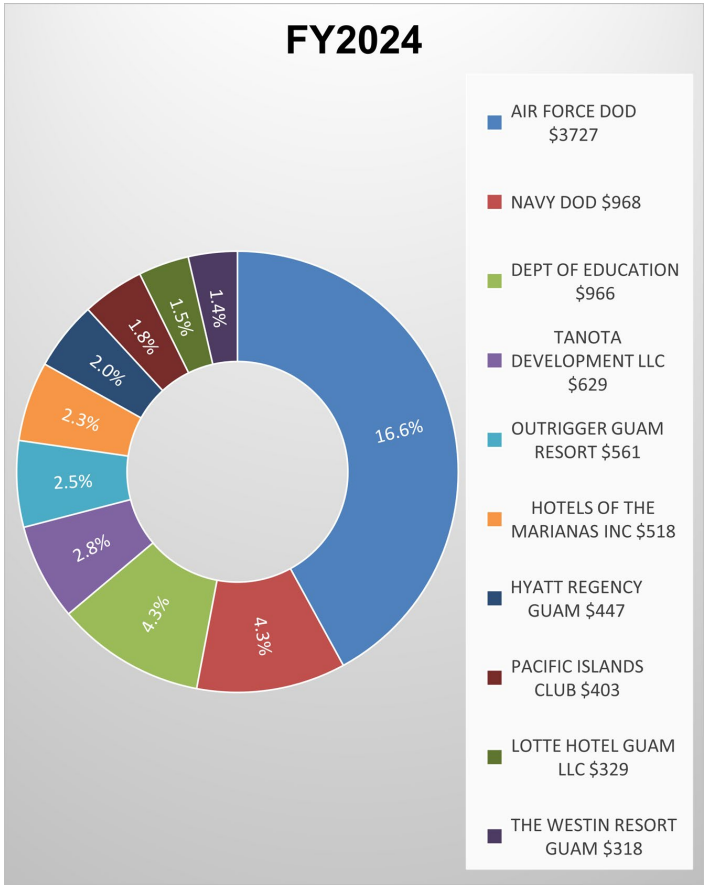
10 Largest Water Customers (MAR YTD)

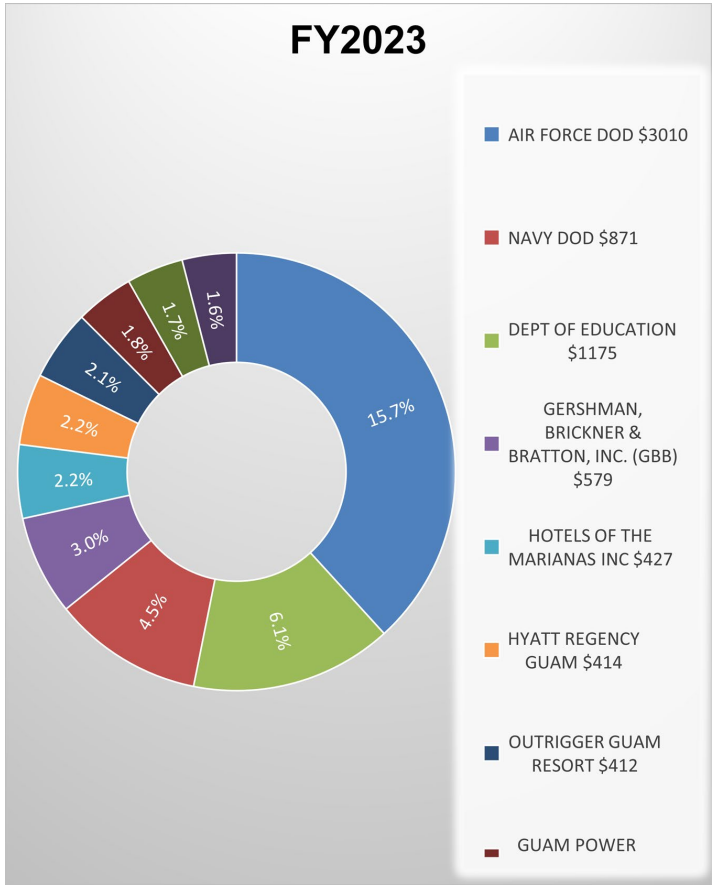




GUAM WATERWORKS AUTHORITY

10 Largest Waste Water Customers (MAR YTD)

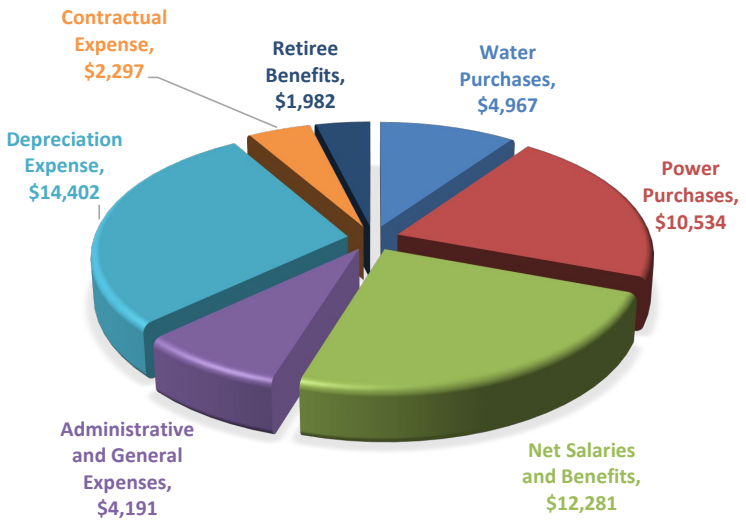




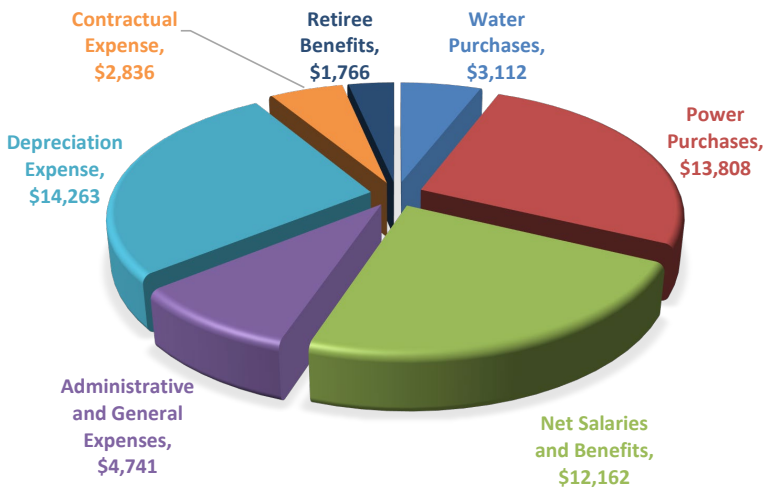
GUAM WATERWORKS AUTHORITY

MARCH YTD Expenses by Categories

FY2024 (IN '000)



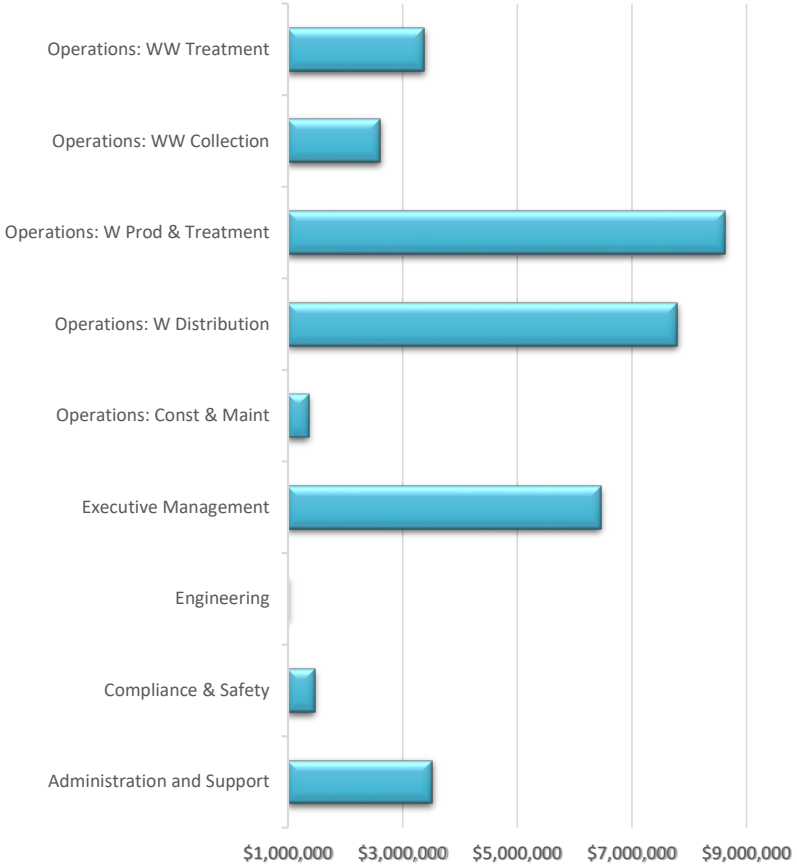
FY2023 (IN '000)

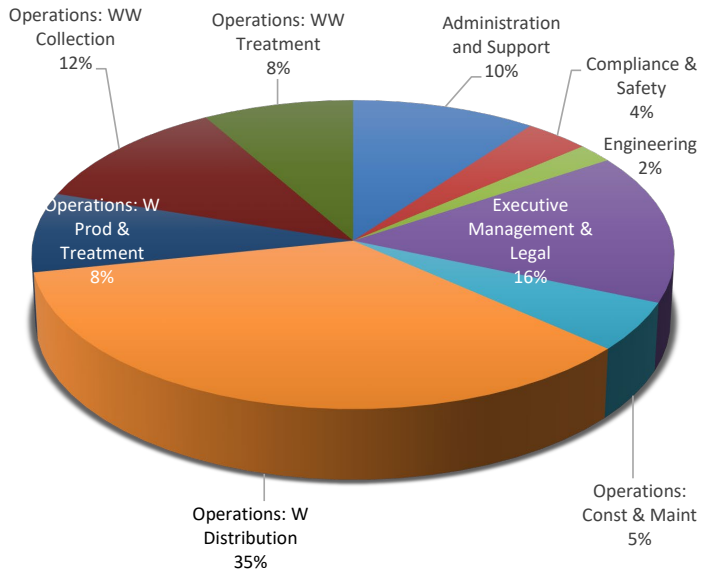


GUAM WATERWORKS AUTHORITY

MARCH 2024 YTD O&M Expenses

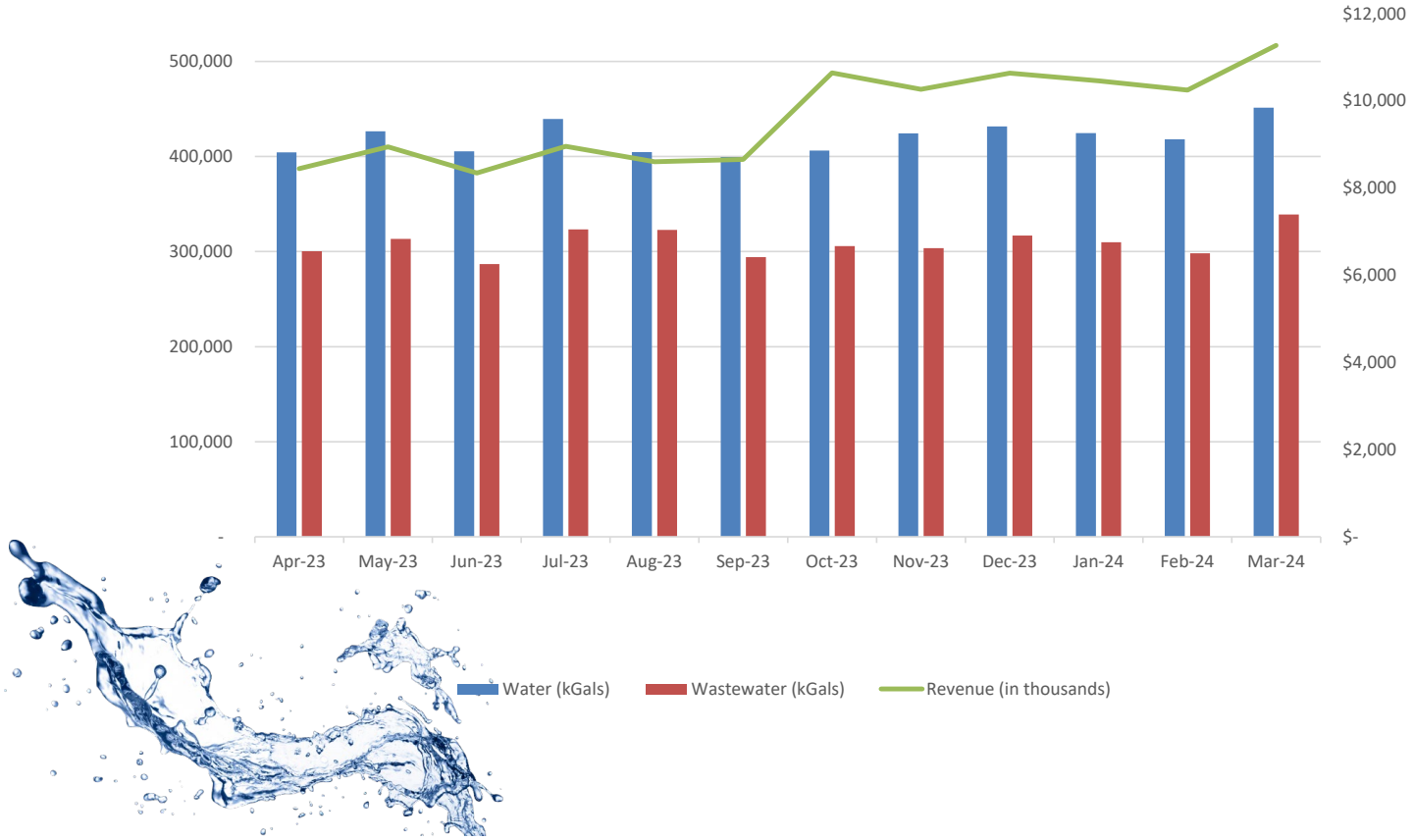
(Excluding Depreciation)





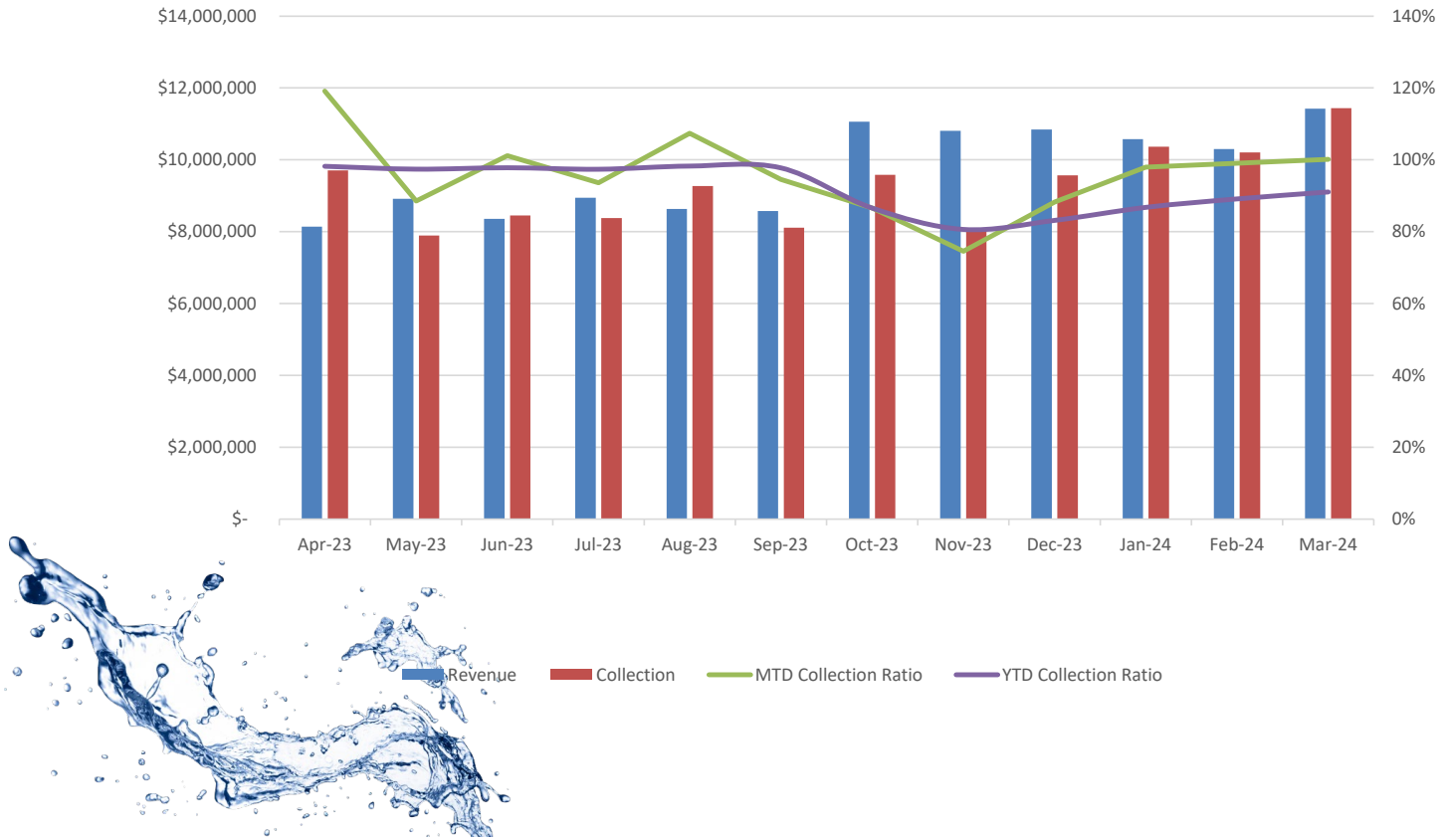
GUAM WATERWORKS AUTHORITY

Overall Revenues and Demand



GUAM WATERWORKS AUTHORITY

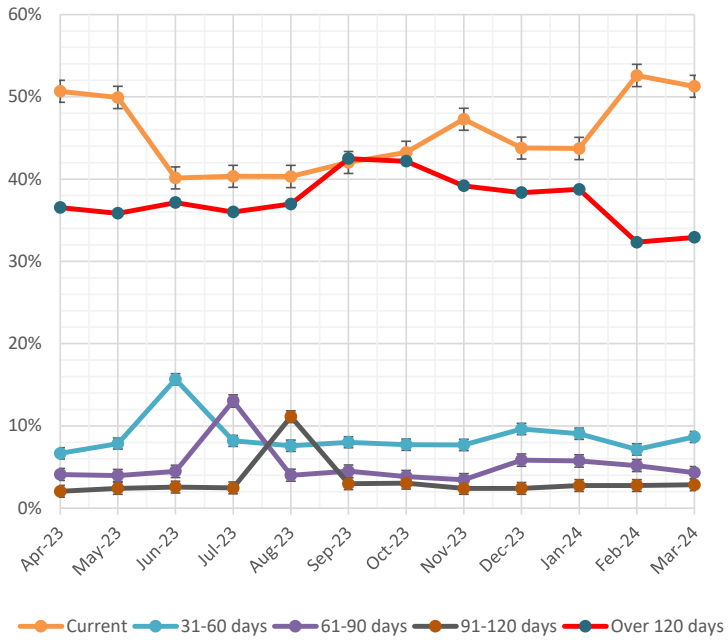
Overall Revenues and Collections



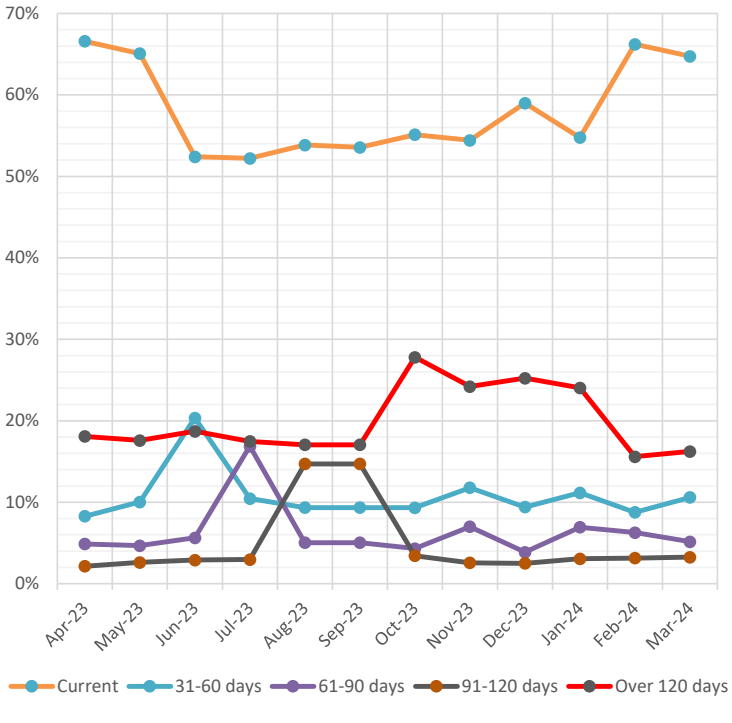
GUAM WATERWORKS AUTHORITY

Overall – AR Aging

% of Aged AR Balance to Total AR Balance

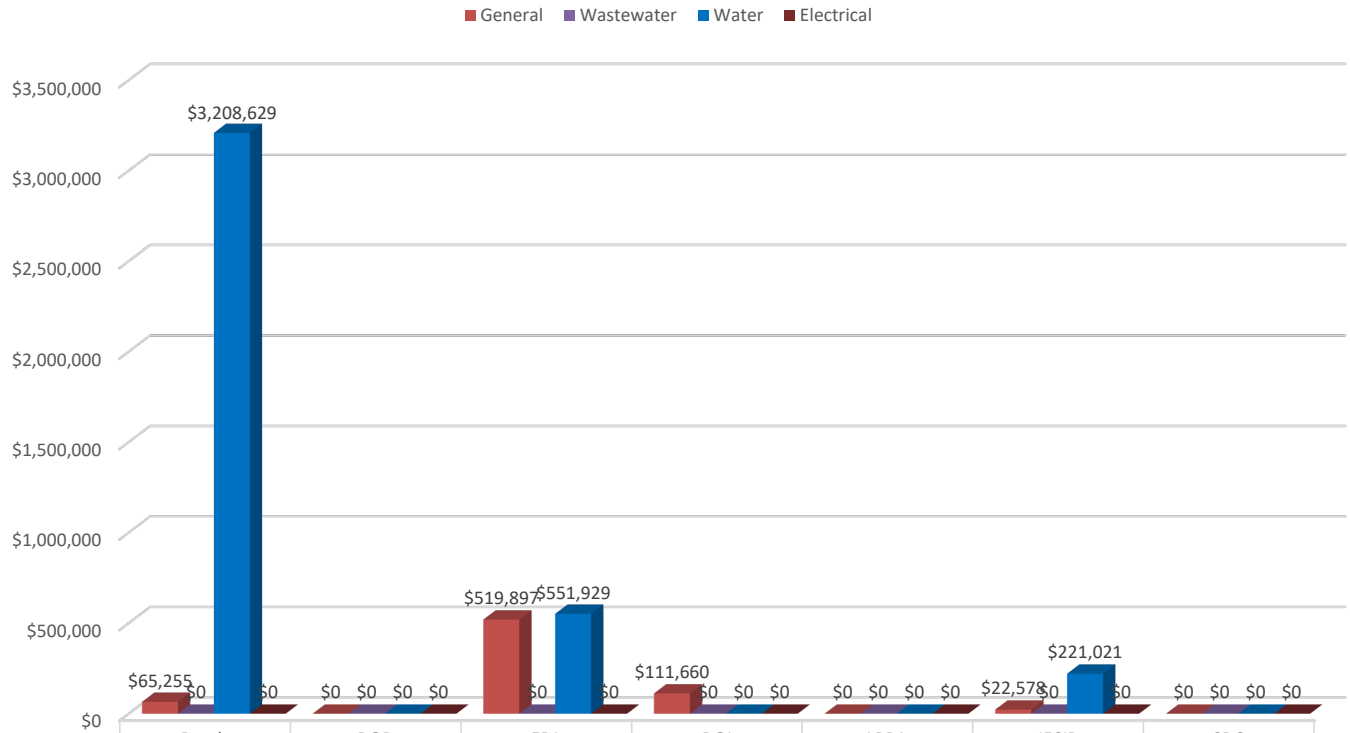


% of Aged AR Balance to Total AR Balance
(without Inactive Accounts)



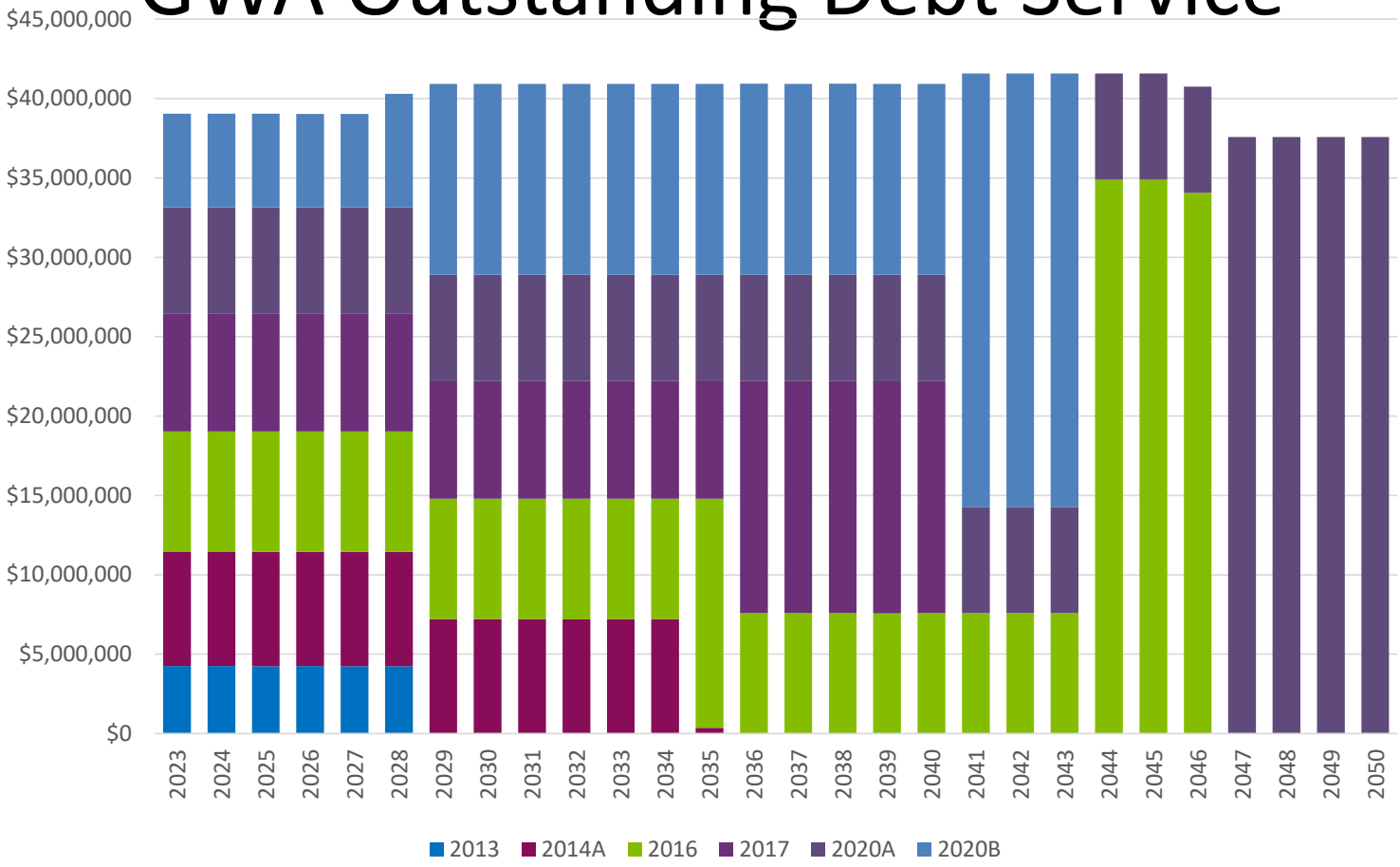
GUAM WATERWORKS AUTHORITY

FY2024 YTD CIP Expenditures



	Bonds	DOD	EPA	DOI	ARPA	IFCIP	SDC
General	$65,255	$0	$519,897	$111,660	$0	$22,578	$0
Wastewater	$0	$0	$0	$0	$0	$0	$0
Water	$3,208,629	$0	$551,929	$0	$0	$221,021	$0
Electrical	$0	$0	$0	$0	$0	$0	$0

GWA Outstanding Debt Service



Source: Guam Waterworks Authority.
Aggregated by Fiscal Year Ending September 30.

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GWA Utility Services Division
Monthly Status Report
Month ending MAR 2024

FY2024 UTILITY SERVICES DIVISION ACTIVITIES	WEEK ENDING: 03/09/24	WEEK ENDING: 03/16/24	WEEK ENDING: 03/23/24	WEEK ENDING: 03/30/24	MAR 2024 MONTHLY TOTAL	WEEKLY AVERAGE MAR 2024	*PREVIOUS MONTH* WEEKLY AVERAGE FEB 2024	*PREVIOUS MONTH* FEB 2024 MONTHLY TOTAL
Collections Activities:								
I. Number of accounts cut for nonpayment:	56	64	71	57	248	62	64	256
II. Number of accounts restored for nonpayment:	54	49	57	45	205	51	54	217
III. Number of No water reports responded to:	0	1	1	1	3	1	1	5
IV. Number of Secure/Unsecure valve reports responded to:	3	5	3	5	16	4	3	12
V. Number of Verify reads responded to:	9	3	10	6	28	7	6	24
VI. Number of new pay plans negotiated for active accounts:	88	110	102	96	396	99	102	408
VII. Number of active pay plans negotiated and ongoing:	343	378	366	388		369	376	
VIII. Number of inactive accounts with a payment arrangement:	16	16	16	16		16	16	
IX. Number of broken payment plans:	89	40	54	41	224	56	47	188
Customer Service Activities (lobby visits):								
A. GBN Public Service Building – Fadian								
i. Total Customers Assisted:	144	171	167	169	651	163	202	809
ii. Total Abandoned Requests:	6	4	3	4	17	4	4	17
iii. Average Wait Time:	7 minutes	3 minutes	3 minutes	5 minutes		4.5 minutes	3.5 minutes	
iv. Average Service Time:	11 minutes	8 minutes	10 minutes	9 minutes		9.5 minutes	9.5 minutes	
v. Purpose of lobby visit:								
1. Apply for water:	42	58	54	55	209	52	56	224
2. Restore water cut for non payment:	13	8	9	13	43	11	9	36
3. Terminate Water:	15	8	10	15	48	12	12	48
4. Copy of Bill:	24	51	26	30	131	33	38	151
5. Billing Dispute:	25	29	44	45	143	36	46	182
6. Billing Dispute follow up:	0	0	0	0	0	0	0	1
7. General Questions & Other:	37	35	34	47	153	38	35	140
8. Report a water leak:	0	0	1	0	1	0	2	8
9. Report water theft:	0	1	0	0	1	0	0	0
10. Payment Arrangement:	14	17	17	14	62	16	13	50
B. Julale Satellite Office – Hagatna								
i. Total Customers Assisted:	145	169	173	158	645	161	216	864
ii. Total Abandoned Requests:	2	2	4	5	13	3	4	17
iii. Average Wait Time:	3 minutes	2 minutes	1 minutes	3 minutes		2.25 minutes	2.5 minutes	
iv. Average Service Time:	9 minutes	9 minutes	9 minutes	10 minutes		9.25 minutes	9.5 minutes	
v. Purpose of lobby visit:								
1. Apply for water:	29	34	38	39	140	35	39	156
2. Restore water cut for non payment:	8	12	8	6	34	9	12	46
3. Terminate Water:	13	14	9	16	52	13	13	52
4. Copy of Bill:	53	57	58	51	219	55	57	227
5. Billing Dispute:	41	45	52	40	178	45	56	224
6. Billing Dispute follow up:	1	0	1	0	2	1	2	7
7. General Questions & Other:	13	24	29	33	99	25	20	80
8. Report a water leak:	0	1	0	0	1	0	1	2
9. Report water theft:	0	0	0	0	0	0	0	0
10. Payment Arrangement:	14	15	8	9	46	12	18	72
C. Upper Tumon Satellite Office – Upper Tumon								
i. Total Customers Assisted:	238	221	233	232	924	231	355	1418
ii. Total Abandoned Requests:	8	9	8	8	33	8	8	31
iii. Average Wait Time:	7 minutes	9 minutes	4 minutes	3 minutes		5.75 minutes	4.25 minutes	
iv. Average Service Time:	13 minutes	16 minutes	13 minutes	13 minutes		13.75 minutes	13.75 minutes	
v. Purpose of lobby visit:								
1. Apply for water:	63	62	66	72	263	66	78	311
2. Restore water cut for non payment:	16	17	19	9	61	15	17	68
3. Terminate Water:	28	27	21	36	112	28	23	93
4. Copy of Bill:	52	56	48	61	217	54	56	222
5. Billing Dispute:	77	86	59	63	285	71	89	355
6. Billing Dispute follow up:	0	0	2	2	4	1	2	6
7. General Questions & Other:	54	52	61	50	217	54	65	259
8. Report a water leak:	0	0	2	1	3	1	0	0
9. Report water theft:	0	0	0	0	0	0	0	0
10. Payment Arrangement:	31	20	20	22	93	23	28	111

GWA Utility Services Division
Monthly Status Report
Month ending MAR 2024

FY2024 UTILITY SERVICES DIVISION ACTIVITIES	WEEK ENDING: 03/09/24	WEEK ENDING: 03/16/24	WEEK ENDING: 03/23/24	WEEK ENDING: 03/30/24	MAR 2024 MONTHLY TOTAL	WEEKLY AVERAGE MAR 2024	*PREVIOUS MONTH* WEEKLY AVERAGE FEB 2024	*PREVIOUS MONTH* FEB 2024 MONTHLY TOTAL
Customer Service Activities (Electronic):								
i. Emails Recieved:								
1. customers@guamwaterworks.org:	134	141	114	114	503	126	141	564
Request type (email):								
a. Apply for water:	11	14	12	14	51	13	11	44
b. Terminate Water:	5	2	3	0	10	3	5	18
c. Copy of Bill:	0	0	0	0	0	0	0	1
d. Billing Dispute & follow up:	1	1	0	0	2	1	1	4
e. General Questions & Other:	111	119	93	92	415	104	115	460
f. Report a water leak:	4	1	2	5	12	3	6	23
g. Report water theft:	0	0	0	0	0	0	0	0
h. Online services inquiry:	2	4	4	3	13	3	4	14
2. gwaservesme@guamwaterworks.org (realtors/prop mgrs):	0	0	0	0	0	0	0	0
ii. Emails Replied (both):	123	139	141	122	525	131	136	544
iii. Online Portal:								
Request type (online portal):								
a. Start Service:	0	2	5	5	12	3	3	10
b. Stop Service:	0	0	1	0	1	0	2	6
c. Payment Plan:	6	4	10	2	22	6	4	17
d. Customer Information Updates:	2	2	0	2	6	2	1	4
e. Service Investigations:	0	1	0	0	1	0	1	2
f. Account Inquiries:	3	8	1	7	19	5	3	13
g. Technical Support:	0	3	1	0	4	1	0	1
h. Outages & Emergencies:	0	0	0	0	0	0	0	0
Call Center Activities:								
i. Calls Recieved:	1256	1441	1619	1541	5857	1464	1505	6018
ii. Calls Immediately Answered:	274	342	394	255	1265	316	356	1424
iii. Calls Abandoned:	69	85	84	102	340	85	94	375
iv. Calls Handled by Voice mail:	847	992	1121	1169	4129	1032	1036	4144
v. Average duration of call:	2 minutes	3 minutes	3 minutes	3 minutes		2.75 minutes	2 minutes	
vi. Breakdown by request type:								
1. Apply/Terminate info:	10	7	10	15	42	11	15	59
2. Automated Telphone Call:	6	20	51	29	106	27	44	174
3. Balance Inquiry:	23	36	34	36	129	32	35	139
4. Call Back:	32	56	58	36	182	46	42	168
5. Dispatch:	0	18	11	12	41	10	13	50
6. Dispute:	1	0	1	1	3	1	1	5
7. Follow-up:	6	9	12	19	46	12	25	99
8. General Questions & Other:	15	34	38	27	114	29	55	221
9. Route Calls to GWA Staff:	24	25	37	9	95	24	35	140
10. No Water:	5	1	1	3	10	3	7	27
11. Online/Phone App Help:	11	8	1	5	25	6	9	34
12. Pay by Phone:	36	38	43	34	151	38	51	205
13. Pay Plan:	15	28	27	27	97	24	45	180
14. Restore Non-payment:	9	21	21	15	66	17	22	89
15. Secure/Unsecure Valve:	2	3	6	6	17	4	6	24
16. Voice Mail:	77	159	154	181	571	143	142	568
17. Water leak:	2	5	3	2	12	3	3	13
vi. Social media responses:								
GWA Facebook Messenger:	3	1	2	10	16	2	3	9
GWA Facebeook Responsive Rate:	80%	100%	100%	64%	3	86%	97%	4
Total number of Facebook visits:	2600	2800	925	1700	8025	2108	1628	5884
Total number of Instagram profile visits:	74	116	48	84	322	79	66	261
Bill Dispute & Resolution Activities:								
i. Dispute Resolution:								
1. Number of disputed accounts resolved:	4	21	12	6	43	13	20	77
2. Number of disputed accounts under review:	837	838	843	845		842	874	
Data Entry of Completed Field work in CIS:								
i. Document Control:								
1. Number of field activities posted:	0	2	24	0	26	7	6	22
2. Number of field activities pending:	0	0	0	0	0	0	0	0

GWA Utility Services Division
Monthly Status Report
Month ending MAR 2024

FY2024 UTILITY SERVICES DIVISION ACTIVITIES	WEEK ENDING: 03/09/24	WEEK ENDING: 03/16/24	WEEK ENDING: 03/23/24	WEEK ENDING: 03/30/24	MAR 2024 MONTHLY TOTAL	WEEKLY AVERAGE MAR 2024	*PREVIOUS MONTH* WEEKLY AVERAGE FEB 2024	*PREVIOUS MONTH* FEB 2024 MONTHLY TOTAL
Field Response Activities:								
I. Number of field activities assigned:	211	192	229	198	830	208	263	1053
II. Number of field activities completed:	277	185	257	240	959	240	256	1023
III. Number of field activities pending field action:	15	13	12	5	45	11	32	128
Meter Reading Activities:								
I. Number of meters read:								
A. Electronically Read Meters:	7372	14070	13468	3865	38775	9694	9284	37137
B. Manually Read Meters:	480	627	480	168	1755	439	374	1495
i. Unread meters (Meters scheduled but not read):	0	2	2	0	4	1	4	14
ii. Number of data logs received:	13	29	39	48	129	32	35	138
iii. Number of data logs retrieved:	16	3	60	55	134	34	35	141
iv. Number of data logs pending field action:	2	27	0	0	29	7	0	0
v. Communication Errors/Reprogramming requests:	3	2	1	4	10	3	4	17
vi. Number of estimated readings (for the week):	2	2	2	3	9	2	3	12
vii. Reasons for Estimations:								
1. Cant locate meter:	0	1	0	0	1	0	1	2
2. Temporary Obstruction:	0	0	0	0	0	0	0	0
3. Vicious Dog:	0	0	0	0	0	0	0	0
4. Flooded meter:	0	0	0	0	0	0	0	1
5. Corrective action to database requested:	2	1	1	3	7	2	2	9
6. Possible changed out meter:	0	0	1	0	1	0	0	0
7. Communication/Programming error (code 03's):	0	0	0	0	0	0	0	0
8. Other:	0	0	0	0	0	0	0	0
a. Leaks detected on customer's private line:	848	1899	1703	397	4847	1212	1196	4785
b. Reverse Flow Detected:	286	212	291	40	829	207	203	810
c. No Usage Detected:	279	448	582	186	1495	374	359	1434
d. Tamper Code:	5	18	12	6	41	10	8	33
C. Electronic Read Percentage:	93.89%	95.73%	96.56%	95.83%		95.50%	96.18%	
Illegal Connection & Unauthorized Use of Water Activities:								
I. Number of Inactive Still Consuming Reports rec'd & investigated:	0	0	1	1	2	1	1	2
II. Number of Illegal Connection reports rec'd & investigated:	1	1	0	0	2	1	0	0

Process for notifying customers with leak alert or high consumption:
-->If a customer registers 24 hours of continuous water usage within 7 days or their meter read then a leak alert is generated.
-->If a customer has a 50% increase in water usage compared to the previous months total volume of water consumed then a high consumption alert is generated.

If an alert is generated for a customer then an SMS, E-mail and automated phone call it sent to customers with valid mobile, land line number and E-mail address.
If the customer does not have a valid mobile, land line number or E-mail address then a letter is genertated and sent to the billing address.

Customer Leaks and High Usage Alert Notifications:								
High Use Alert Only Total:	**406**	**1304**	**2197**	**1745**	**5652**	**1413**	**803**	**3212**
SMS	90	207	305	101	703	**176**	183	733
EMAIL	91	193	268	91	643	**161**	174	695
DIALER	112	248	362	127	849	**212**	222	888
LETTER	113	250	364	127	854	**214**	224	896
Leak Alerts Only Total:	**1503**	**3456**	**4642**	**1938**	**11539**	**2885**	**2968**	**11873**
SMS	447	1112	1482	606	3647	**912**	939	3755
EMAIL	452	1006	1329	580	3367	**842**	861	3443
DIALER	599	1336	1819	750	4504	**1126**	1162	4647
LETTER	5	2	12	2	21	**5**	7	28
Leak & High Use Alerts Only Total:	**215**	**631**	**699**	**327**	**1872**	**468**	**459**	**1835**
SMS	46	147	164	75	432	**108**	104	415
EMAIL	45	131	143	70	389	**97**	96	382
DIALER	61	176	195	91	523	**131**	129	517
LETTER	63	177	197	91	528	**132**	130	521

Highlights of Customer Care Section Operations – March 2024:

- The average wait time for all 3 locations is 4 minutes as compared to 3.4 minutes for Feb 2024.
- The number one reason for visit to each GPWA location is identical to Feb 2024
    - Gloria B Nelson Public Service Bldg. Fadian = Apply for water
    - Julale Satellite Office = Copy of bill
    - Upper Tumon Satellite Office = Bill Dispute
- The total number of Facebook visits is 8025 as compared to 5884 for February 2024.
- Instagram profile visits for March 2024 increased to 322 as compared to 261 in Jan 2024.
- March 2024 average number of active pay plans is 396 which compares similarly to Feb 2024 @ 376.
- 525 emails were received in March 2024 as compared to 564 in Feb 2024.
- Meter Reading Unit reported a decrease in the successful electronic read percentage average @ 95.5% as compared to 96.8% in Feb 2024. The decrease is the result of depleting endpoint battery life.
- 12.5% of GWA active customer meters recorded ongoing private side leakages in March 2024 which compares similarly to Feb 2024 @ 12.3%.

2011 Court Order Performance Report Card / Dashboard as of 12/30/2023

GUAM WATERWORKS AUTHORITY

Court Order Performance Report Card

	Items	On-time Items Completed/Continuous	Items Delayed	Completed Late	Items on Schedule	Performance % Competed	Performance % Compliance
Court order total	93	78	0	13	2	97.8	100%

Legend in detail section below.

Fill Color	Meaning
Lime green	Done/Completed
Yellow	On Schedule
Blue	Behind Schedule
Violet	Completed Behind Schedule
Yellow Green	Ongoing and Continuous Counted under Completed

2011 Court Order Performance Report Card / Dashboard as of 12/30/2023

Name	SO #	No	Project	GWA CO Timeline as extended	Due to EPA	Status
Northern District WWTP Primary Treatment Upgrades.	2	1	Interim Primary Treatment Improvements Complete	09/30/2012	@EPA	**Done** Construction completed 12/13/2012
	3(a)	2	Interim Effluent to meet Table 1	09/30/2012 monitoring started	@EPA	**Done** Table 1 compliance beginning January 9, 2013.
	3(a)(1)	3	PE Review (Application for 7.5 MGD pending)	3 months after compliance with 3(a)	@EPA	**Done** 3(a)(1) Application to increase to 7.5 MGD **Approved 08/13/2017**
	3(a)(2)	4	(Application for 9 MGD)	3 months after compliance with 3(a)(1)	**N/A**	**Not considered necessary** because of OEA Upgrade of NDWWTP to Secondary
	3(c)	5	Effluent monitoring (calendar-year quarter)	**Completed**	@EPA	**Done. Full year completed 01/08/2012**
	4(a)	6	Sludge & Biosolids Management Plan	12/31/2011	@EPA	**Done.** Biosolids to Landfill EPA Approval 08/17/2014
	4(a)	7	Adequate stabilization and dewatering	9/30/2012	@EPA	**Done.** By Design-Build contract.
	4(b)	8	Biosolids Management, Quarterly Report	Quarterly Report	@EPA	**Ongoing** Routine Monitoring Report, **Repeats Quarterly**
	4(c)	9	Biosolids Management, repair & replace facilities	09/30/2012	@EPA	**Done** Construction Complete 12/13/2012. Biosolids to Landfill
	4(d)	10	Biosolids Management, implement plan	9/30/2012	@EPA	**Done** - Biosolids to Landfill
Agaña WWTP Interim Measures.	5	11	Primary Treatment Plant Upgrades	06/30/2013	@EPA	**Done.** CEPT is operational and routine.
	5(a)	12	Scope and schedule	09/30/2011	@EPA	**Done.** CEPT is operational and routine.
	5(b)	13	Septage Handling Complete	06/30/2013	@EPA	**Done.** Septage Receiving at the NDWWTP (location option) reported 06/26/2013.
	5(b) 1	14	Septage handling design contract signed	12/31/2011	@EPA	**Done.** Septage Receiving at the NDWWTP (location option) reported 06/26/2013.
	5(b) 2	15	Septage handling construction notice to proceed	06/30/2012	@EPA	**Done.** Septage Receiving at the NDWWTP (location option) reported 06/26/2013.
	5(c)	16	Grit and FOG Complete	06/30/2013	@EPA	**Done** Phase III CEPT is in operations.)
	5(c) 1	17	Grit and FOG design contract signed	12/31/2011	@EPA	**Done** Grit and FOG reported 06/06/2013
	5(c) 2	18	Grit and FOG construction notice to proceed	06/30/2012	@EPA	**Done** Submitted 11/17/2011
	5(d)	19	Repair Solids handling	11/17/2011	@EPA	**Done** Submitted 11/17/2011
	5(e)	20	O & M Plan	05/31/2013	@EPA	**Done** O & M Plan reported 05/31/2012
	5(f)	21	Effluent monitoring (calendar-year quarter)	**Completed**	@EPA	**Done - Completed Full year as of 01/08/2012**
	6	22	Prevent Effluent Back Surge	06/30/2013	@EPA	**Done** Old outfall decommissioned (plugged) 06/25/2013
	6	23	Effluent Back Surge Plan	12/30/2011	@EPA	**Done** Old outfall decommissioned (plugged) 06/25/2013
I&I SSES	7	24	Collection System SSES and I/I evaluation	**Done**.	@EPA	**Done**.
SSES Work Plan	8	25	Work Plan	180 days	@EPA	**Done** Reported 08/13/2012
	8(a)	26	Flow and rainfall data	N/A	@EPA	**Done** Reported 04/25/2013
	8(b)	27	I/I Southern	540 days	@EPA	**Done** Reported 04/25/2013
	8(c)	28	I/I Central	900 days	@EPA	**Done** Reported 04/28/2014
	8(d)	29	SSES Southern	540 days	@EPA	**Done** Reported 04/30/2013 – update 04/29.2016
	8(e)	30	SSES Central	900 days 09/15/2015 EPA Disap. Ltr.	@EPA	**Done Late** – Completed June 2, 2017
	8(e) 2	31	SSES Central Report	09/15/2015 EPA Disapproval Letter	@EPA	**Done Late** – Completed June 2, 2017
Agat / Santa Rita,	9(a)	32	By Pass Report	60 days	@EPA	**Done** Reported 01/04/2012
	9(b)	33	Flow Meter	180 days	@EPA	**Done** Reported 07/26/2012
	9(c)1,2,3	34	Report evaluating near term measures	180 days response sent 09/29/2014	@EPA	**Done** Reported 05/07/2012 GWA response 09/292014.
	9(d)	35	Implement near term measures d - Disinfection	03/23/2016	@EPA	**Done Late** EPA specifications of 9(c), 9(d) and 9(f) on 09/24/2015.
	9(e)	36	Implement near term measures e – sludge mgmt.	03/23/2016	@EPA	**Done** Reported 03/23/2016
	9(f)	37	Implement near term measures f – 75% Bypass Red.	03/23/2016	@EPA	**Done** Reported 03/23/2016
	10	38	System Evaluation	12/31/2013 response sent 09/29/2014	@EPA	**Done** Reported 12/28/2013 GWA response 09/29/2014.- update 04/29/2016
	11	39	System Upgrades	03/14/2017 Plant became operational.	@EPA	**Done Late** New Agat WWTP on line 03/14/2017
	11(a)	40	System Upgrades design	06/30/2014-NTP 10/13/2014	@EPA	**Done Late** CCU approval 08/26/2014. NTP was issued on 10/13/2014
	11(b)	41	System Upgrades notice to proceed	06/30/2015-NTP 10/02/2015	@EPA	**Done Late** NTP Ph.1 issued 10/02/2015 - NTP Ph.2 due 01/04/2016
Baza Gardens	12(a)	42	Interim Measures Evaluation (Independent PE)	180 days	@EPA	**Done** Reported 05/07/2012, PMO task
	12(b)	43	Interim Measures Complete	540 days	@EPA	**Done** Reported 05/01/2013 PMO task
	12(c)	44	Evaluation Bio Solids Report	180 days	@EPA	**Done**-EPA Approval 08/28/2014
	12(d)	45	Complete Bio Solids	360 days	@EPA	**Done** Reported 03/21/2013
	13	46	System Evaluation	04/30/2014	@EPA	**Done** Reported 04/30/2014 GWA response 10/02/2014
	14	47	System Upgrades	04/31/2018	@EPA	**Done** Critical path need to complete I&I/SSES
	14(a)	48	System Upgrades, Design Starts	10/31/2015 NTP DCA 02/05/2016	@EPA	**Done Late** Linked to new Agat WWTP NTP DCA 02/05/2016
	14(b)	49	System Upgrades Construction (started on time)	10/31/2016	@EPA	**Done Late Finished 12/31/2018.**

2011 Court Order Performance Report Card / Dashboard as of 12/30/2023

Name	SO #	No	Project	GWA CO Timeline as extended	Due to EPA	Status
Umatac-Merizo	15	50	Complete Evaluation	12/31/2013	@EPA	**Done** Reported 12/31/2013 -- Critical path, completed I&I/SSES
	16	51	System Upgrades	12/31/2018	@EPA	**Delayed** by US Fish and Wildlife issues – **completed November 13, 2019**
	16(a)	52	System Upgrades, Design Starts	06/30/2016	@EPA	**Done** Design Build contract executed 06/29/2017
	16(b)	53	System Upgrades, Notice to Proceed	06/30/2017	@EPA	**Done** NTP Issued 06/30/2017
Sewer Cleaning	17	54	Sewer Cleaning (in annual and quarterly reports)	2017-2022 Goal set: Complete Every 5 years	@EPA	**Ongoing --** 1st round completed **–** Second cycle under way
Hot Spot Plan	18	55	Hot Spot Plan	EPA Revision letter o9/08/2015	@EPA	**Done** Last Revision submitted 10/23/2015 GWA WW Ops
CCTV	19	56	CCTV (in annual and quarterly reports)	Done- 2016	@EPA	**Done** Whole System, 2016 Continues as indicated by cleaning work.
Sewer Hook-Up	20	57	Sewer Hook-Up Revolving Loan Support	In Operation	@EPA	**Done –** available on GWA web site or at GWA Customer Service
GW Disinfection	21	58	Groundwater Chlorination	540 days	@EPA	**Done** Reported 04/29/2013
Chlorine Residual Monitors	22	59	Plan	180 days	@EPA	**Done** Reported 09/94/2012
	22(a)	60	High Risk Wells	540 days	@EPA	**Done** Reported 05/02/2013
	22(b)	61	Moderate Risk Wells	2 years	@EPA	**Done** Reported 07/31/2013
	22(c)	62	All Other Wells	Completed 07/31/2017	@EPA	**Done Late** – Completed 07/31/2017
Water Metering `	23(a)	63	Plan & schedule	180 days	@EPA	**Done Late** - Reported 05/08/2012
	23(a)	64	All connections are metered and mapped	2 years	@EPA	**Done Late** – completed 11/15/2018
	23(b)	65	Plan repair & maintain	180 days	@EPA	**Done** GWA Test facility operational 06/28/2013
Ugum Surface Water Treatment Plant	24	66	Construction complete	One year	@EPA	**Done** Reported 11/09/2012
	24	67	PE Inspection	60 days before start-up	@EPA	**Done** EPA Approval 08/26/2014
	25	68	PE Performance Operation Assessment	60 days before start-up	@EPA	**Done** EPA Approval 08/26/2014
	26	69	O&M Plan and Procedures	90 days before start-up	@EPA	**Done** Reported 08/10/2012 EPA Approval 08/17/2014
	27	70	Plant compliance	365 days	@EPA	**Done** Reported 02/07/2013
Sinajana Water Transmission Line	28(a)	71	Existing Construction Complete	180 days	@EPA	**Done** Reported 12/23/2011
	28(b)	72	Hydraulic Evaluation	180 days	@EPA	**Done** EPA No Further Comment 08/26/2014
	28(c)	73	Construction Complete (2 tanks)	540 days from 11/21/2013	@EPA	**Done Late** GEPA Delays Tank Constr. Completed August 2015: In Service July 2016.
	28(d) 1	74	Monitoring Plan	90 days prior	@EPA	**Done** Reported 09/07/2012
	28(d) 1	75	Implement- Monitoring Plan	For one year after start up	@EPA	**Done** GWA Compliance - **Start 09/01/2015 – end 08/31/2016**
	28(d) 2	76	Monitoring Plan	180 days prior	@EPA	**Done** EPA Approval 08/26/2014
	28(e)	77	Implement- Monitoring Plan	For one year after start up	@EPA	**Done - Start 09/01/2015 – end 08/31/2016**
Storage Tank/Reservoir Rehabilitation and Replacement Program.	29(a) 1	78	Plan hydraulic analysis	90 days	@EPA	**Done** Reported 11/09/2012
	29(a) 2	79	Hydraulic analysis	540 days	@EPA	**Done** EPA No Further Comment 08/26/2014
	29(b) 1	80	Plan minimize service interruptions	90 days after approval	@EPA	**Done** EPA approval 08/26/2014
	29(b) 2	81	Tank inspection schedule	540 days	@EPA	**Done** EPA approval 08/26/2014
	29(b) 3	82	Complete Barrigada (1 @ 2 MG tank)	540 days	@EPA	**Done**
	29(b) 4	83	Assess additional 7 tanks	5 years (11/10/2016)	@EPA	**Done** DCA contract task
	29(b) 5	84	RRRR 7 additional tanks	5 years (11/10/2016)	@EPA	**Done** PMO executed procurement
	29(b) 6 i	85	RRRR 10 additional tanks	**12/31/2025**	@EPA	In Progress, expected to meet the 02/11/2021 Court Order Extension 12/31/2025
	29(b) 6 ii	86	RRRR remaining tanks	**12/31/2025**	@EPA	In Progress, expected to meet the 02/11/2021 Court Order Extension12/31/2025
	29(c)	87	In Quarterly / Annual Report	Quarterly / Annual Report	@EPA	**Ongoing** GWA Compliance Repeats Quarterly
Section III REPORTING REQUIREMENTS	31(a)(1)	88	Quarterly Report	Jan., April, July, Sept. Continuous	@EPA	**Ongoing** Due by the 30th of the specified months
	31(a)(2)	89	Reports on Non Compliance	Within 30 days from determination of delay	@EPA	**Ongoing** As determined by GWA
	31(b)	90	SSO and Bypass Report	Jan., April, July, Sept. Continuous	@EPA	**Ongoing** Due by the 30th of the specified months
	31(c)	91	Annual Report	January each year	@EPA	**Ongoing** Included with 31(a) each Year
Section IV NOTICES	35	92	CO contacts		@EPA	**Ongoing** GWA Compliance report 06/29/2016
	36	93	Formal notices of change in CO contacts	Whenever specified staffing changes	@EPA	**Ongoing** GWA Compliance report 06/29/2016

GUAM WATERWORKS AUTHORITY

Engineering Monthly Report
April 2024

Prepared by:

Jeanet Babauta Owens, P.E.
Assistant General Manager of Engineering

TABLE OF CONTENTS

This Engineering Report summarizes activities for the month of March 2024.

A. Capital Improvement Projects (CIP)

TOTAL NO. OF CIP PROJECTS: 54

ALL CIP SECTIONS

No. of Projects (All CIP Sections): **2**

There are a total of 2 CIP projects that applies to all CIP projects.

EXHIBIT NO.	PROJECT TITLE	STATUS
B-1	ID/IQ – Professional Civil and Structural Design Services	Active
B-2	ID/IQ – Professional Project-Construction Management Services	Active

WATER / WASTEWATER

No. of Projects (Water/Wastewater): **2**

Currently, there are two water and wastewater CIP projects with one in planning and the other in 60% design phase.

EXHIBIT NO.	PROJECT TITLE	STATUS
B-3	Gill Breeze Subdivision Water and Sewer Design RFP	Procurement
B-4	Adacao Water and Sewer Infrastructure Design Services	Design, In Progress

WATER

No. of Projects: 18 projects

There are six (6) water CIP currently in construction and the remaining projects in planning, design or procurement phases. The six (6) water CIP projects consists of multiple reservoir construction and rehabilitation, waterline replacement, and pressure zone realignment. Under the Court Order projects, there are currently four (4) active steel tank major repairs in progress with another three (3) steel tank major repair and three (3) new concrete tank construction slated to start in the coming months.

EXHIBIT NO.	PROJECT TITLE	STATUS
B-5**	Well Abandonment	Planning**

B-6**	Well Rehab A-28, D-15, M-14, F-07	Planning**
B-7	Central Guam Reservoirs	**Construction,**
		In Progress
B-8	Design and CM Services for Waterline Replacement of Various Bridges	Assessment/Design in Progress
B-9	Pressure Zone Realignment	**Construction,**
		In Progress
B-10	Fire Hydrant Replacement Phase 1	**Construction,**
		Completed for Phase I
B-11	Tai Rd./ S-13 and Canada-Toto Lp./Blas St. Waterline Replacement	**Construction,**
		In Progress
B-12	Asan Springs Rehabilitation	EA in process, Design is complete, ROW agreement being negotiated with NPS
B-13	Groundwater Wells A-02, A-07, A-12, D-05, and F-03 Rehabilitation (Re-bid No. 3)	Design completed and IFB Construction issued [insert dates] but no bids received;
B-14	ID/IQ - Design and CM Asbestos Concrete Pipe for Waterline Replacement	Procurement
B-15	ID/IQ - Design and CM for Waterline Replacement and Upgrades	Procurement
B-16	ID/IQ - Design and CM Implementation of District Meter Areas	Procurement
B-17	ID/IQ - Design and CM Undersized Waterline Replacement	Procurement
B-18	Santa Rita Springs Rehabilitation	Procurement
B-19	Brigade II Booster Pump Station	Design completed
		Seeking grants for additional funding
B-20	New Well Construction (AG-10, AG-12, Y-08)	Design Completed
		CM on hold pending funding availability for construction
B-21	Northern and Southern Guam Reservoirs	**Design/CM/Construction**
		In Progress
B-22	Tank Repair/Bypass	**Design/CM/Construction**
		In Progress

****** No project worksheets.

WASTEWATER
No. of Projects: **16**

There are fourteen (14) active wastewater CIPs, one (1) drainage/roadway improvement project in construction procurement and one (1) study or the Hagatna Wastewater Treatment Plant Interim Disinfection Project. Five (5) wastewater CIPs are substantially complete and in operation. Four (4) projects out of 16 wastewater CIPs will meet consent decree conditions for gravity main, force main, and sewer pump station rehabilitation/replacement.

EXHIBIT NO.	PROJECT TITLE	STATUS
B-23	Asan-Adelup-Hagatna Route 1 Sewer Rehabilitation and Replacement Phase II	Construction Completed
		Close-Out In Progress
B-24	Southern SSES Sewer Rehabilitation Phase II (Baza Gardens-Santa Rita-Talofofo)	CM/Construction Completed
		Close-Out In Progress
B-25	Talofofo Sewer Improvement	Construction Completed
		Project is closed-out
B-26	Tamuning Hot Spots Sewer Line Rehabilitation and Replacement	Construction Completed
		Close-Out In Progress
B-27	Bayside Sewer Pump Station Rehabilitation	Construction Completed
		Design Close-out in progress
B-28	Yigo Sewer Pump Station Flood Mitigation & Facility Rehabilitation	Construction,
		In Progress
B-29**	Southern Drainage Sewer Line Survey will be incorporated in Route 2 Gravity Sewer Rehab	Planning
B-30	Fats, Oil, Grease Receiving Station	Procurement**
B-31	Tumon Hot Spots	Design Completed**
B-32	Dungca Beach Sewer Line Relocation	Design, In Progress**
B-33	Fujita Sewage Pump Station Redundant Force Main	Design, In Progress

B-34	Hagatna Main Sewage Pump Station Redundant Force Main	Design, In Progress
B-35	Hagatna Wastewater Treatment Plant Causeway and Facility Structural Analysis	Design, In Progress
B-36	Hagatna Wastewater Treatment Plant Interim Disinfection	Design, Close-Out In Progress
B-37	Aplacho Drainage and Roadway Improvements Construction	Procurement
B-38	Indefinite Delivery-Indefinite Quantity Islandwide Sewer Collection/Transmission System Repair, Rehabilitation, and Replacement Design	Procurement

****** No project worksheets.

ELECTRICAL & CAPITAL IMPROVEMENTS

No. of Projects: 14

Two (2) water projects have completed construction: Casimiru Waterline Replacement and Reifsnider Street Waterline. One (1) IDIQ task order assessment and design being processed for approval. One (1) water project, two (2) electrical projects, two (2) facility projects and three (3) SCADA projects in planning. The remaining three (3) projects are in construction phase.

EXHIBIT NO.	PROJECT TITLE	STATUS
B-1	IDIQ Task Order No. 2 – Structural Assessment and Rehabilitation Design at Commercial Port and Chaot Sewer Pump Stations	Design (HDR), Process TO approval
B-39	Casimiru Waterline Replacement	Construction Completed
B-40	Reifsnider Street Waterline	Construction Completed
B-41	Temporary Booster Pump Station Consolacion Street, Asan	Construction, In Progress
B-42	Groundwater Production Meter Replacement	Construction, In Progress
B-43	Ugum Water Treatment Plant Rehabilitation	PM/CM, In Progress Construction, In Progress
B-44	Design-Build of Pago Bay 12-inch Waterline Replacement	Planning
B-45	Current Balancing Unit for Deep Well A-09	Planning

B-46	Deep Well Power Line Conditioner Pilot Project	Planning
B-47	GWA Upper Tumon Warehouse Renovation	Planning
B48	GWA Upper Tumon Campus Improvements	Planning
B-50**	SCADA Control Center Phases 1 and 2	** Planning
B-51**	SCADA Water Phase 3	** Planning
B-52**	SCADA Wastewater Phase 4	** Planning

****** No project worksheets.

OTHER:

No. of projects: 1

1 stormwater project is in the design phase and involves solving the stormwater issue in Harmon which directly affects GWA's Harmon Sewer pump station.

B-49	Rojas Harmon Stormwater Drainage Improvement Design	Procurement

B. Permits

The Completed Permits table below lists the number of work orders completed by Permits inspectors/engineers for customer requests related to certain permits or utility services. It also summarizes the total work orders completed 'year to date' up to December. The table is updated in this Monthly Engineering Report for March 2024.

COMPLETED PERMITS

	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Year to date total
Building Permit	30	12	12										54
Occupancy Permit	6	26	9										41
New Installation	27	24	23										74
Sewer Application	2	3	3										8
Sewer Inspection	2	3	2										7
Private Utility Acceptance	0	0	0										0
Relocation of Water Meter	3	5	3										11
Tapping-Water	5	3	3										11
Tapping-Sewer	2	4	0										6
Clearance-Water	14	10	14										38
Clearance-Sewer	13	8	2										23
Highway Encroachment	12	2	17										31
Verification of Utilities	11	9	10										30
Fire Flow Test	16	3	6										25
Schedule Water Outage	2	1	1										4
GPA Utility Clearances	12	3	5										20
GTA Utility Clearances	12	16	6										34

AVERAGE PROCESSING TIME FOR COMPLETIONS (DAYS) FOR THE CALENDAR MONTH OF MARCH

The Average Processing Time for Completions (Days) for the Calendar Month table below summarizes the average time of days it took to complete each type of work order for certain permits or utility services. For example, the average processing time for Building Permits in March 2024 was 25 days. To calculate the average processing time for Building Permits in March 2024, we refer to the Completed Permits table for March 2024, where we find that there were 12 Building permits completed. Each of the 12 building permits ranged from 3 to 46 days to complete. We calculate the average by adding up the total number of days it took to complete each building permit (307 days in total) and then dividing the total by 12, resulting in an average processing time of 26 days. If the average processing time for the month greatly deviates from the previous monthly averages, an explanation is provided.

	2024											
Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Building Permit	29	17	26									
Occupancy Permit	0	0	0									
New Installation	163	80	98									
Sewer Application	0	0	0									
Sewer Inspection	0	0	0									
Private Utility Acceptance	0	0	0									
Relocation of Water Meter	30	30	14									
Tapping-Water	0	0	0									
Tapping-Sewer	0	0	0									
Clearance-Water	0	0	6									
Clearance-Sewer	0	0	0									
Highway Encroachment	0	0	0									
Verification of Utilities	25	17	17									
Fire Flow Test	0	0	1									
Schedule Water Outage	0	0	0									

C. Geographic Information System (GIS)

During the month of March 2024, the GIS Section concentrated its efforts on Sewer and Water System updates, map request, GIS assistance for Consent Decrees, updating the GIS, GIS Help Desk continues, field work to validate inverts and locate manholes, assisted in the ESRI Global consulting project, request for drone photos, and worked with Prius Intelli to obtain new 6-inch pixel imagery.

Sewer System Updates

Five new sewer lines were created ranging from 8, and 36 inches. This added 994 linear feet, which equates to 0.19 miles. 35 sewer lines were edited ranging from 4,8,12,14,24, and 36 inches, for a total of 13031.78 linear feet which equates to 2.5 miles.

Water System Updates

15 new water lines were created ranging from 2, 6, and 10 inches. This added 9,413 linear feet, which equates to 1.8 miles. No lines were edited during this month.

Map Requests

The GIS Section receives request for maps in various forms. The Engineering sections request maps for field work and for customers. The AGMO and Compliance offices requested maps during this period. The Sewer Section of Engineering needed maps plotted and PDF maps combined.

a. Grid maps for gravity sewer lines were created.
b. Grid maps for the 2024 Sanitary Survey of the Water System were requested by Guam EPA.

GIS Assistance for Consent Decrees

The two Consent Decree projects needing GIS help was the Sewer Force Main rating and Inspection, and the proper updating of the Sewer Gravity Mains.

- The GIS Section updated the gravity lines from Lea Brantly's spread sheet.
- Grid maps are being produced for the Compliance Section.
- Acquiring the manhole Asset ID and X Y locations for terminating manholes.

Updating the GIS

In March the Water and Sewer geodatabases were updated and uploaded to the GWA Portal.

GIS Help Desk Assistance

The GIS Section is constantly sought after to answer simple and challenging questions about the usage of the GIS. We are more than willing to assist. Below were the sections that were helped:

a. Electrical
b. Permits
c. Waste Water
d. Water
e. Planning
f. GWA Dispatch
g. Compliance

h. Asset Management

Field work to validate inverts and locate manholes

Field work was conducted in the following areas:

a. Chalan Pago – Ordot: Most of February's field work was dedicated to the verification of top of manhole and invert elevations. One day was spent on verifying the existence and connection of more manholes on the Cost-U-Less to Homai Restaurant side of Route 4. Using Google Street View and our new GIS metal locator (crow bar) we found five manholes that were covered by grass and soil.

Assisted with ESRI Global Consulting Project

The GIS Section assisted with the write-up of a sole source justification for the ESRI Global Project Consulting Project.

Request for drone photos

Roque assisted the Compliance Section and Guam EPA by taking aerial photos of Ugum and Malojloj water tanks. The photos were used for inspection of the condition of the tanks.

Working Prius Intelli to obtain new 6-inch pixel imagery.

The GIS Section is working with Paul Vignati, Prius Intelli, to obtain new imagery at a 6-inch pixel resolution. The last imagery with 6-inch pixel resolution for GIS was in 2012, which we still use to this day.

We have acquired a firm commitment from GPA to help pay for this project.

D. Land Management

GWA Facility	Location	Gov. or Private Property	Land Acquisition Status
Tanks	Astumbo-L10164	Gov't. - CLTC	Petition of Land Registration package forwarded to Attorney General by DLM 11/04/19. AG pending court filing 06/30/2021 – Follow up status sent to DLM 10/06/2021; 11/03/2021; 01/27/2022; 03/04/2022; 05/12/2022; 07/07/2022;09/12/2022; 12/27/2022; DLM response 07/11/2023 have not been able to meet with Assignment AG for LR proceedings. Land Agent has followed up and emailed multiple times with Margarita at DLM on meeting with DLM attorney on status of Land Registration proceedings 10/02/2023. This process is crucial for GWA to acquire property for GWA reservoir. 02/01/2024: Follow up sent to Margarita at DLM; 02/09/2024: Response from Margarita at DLM- Because it has almost been 4 years since we requested the assistance of the AG to initiate the Land Registration, I would recommend that a formal letter from GWA requesting the urgency of the registration and indicate the reasoning behind it. This would support our request for immediate processing with the AG.
	Piti-L259	Private/Federal	Received final comments from DoAg. Waiting on the archaeological report before we can submit 299 forms. Waiting for permission from NPS to access the lot and perform the Archeological survey.
	Ugum River Intake/Booster Pump Station	Private	When the UGUM Water treatment plant was built in 1990, no land reservations for the area by the booster pump station, the Ugum river intake and access road. Land Agent currently researching the area under Lot 292, owned by the Aguon Family. GWA would need to secure a Grant of Easement for the access road and booster pump facility along the river intake. 12/19/2023: GWA coordinating with DCA for survey services to perform a boundary retracement survey of the subject lot to establish the limits of the survey; as-built existing facilities, structures, and road, to obtain + 2,376 square meters for the parcel and create the easement for GWA reservation. 03/06/2024: DCA field survey work begins.
Deep Wells	AG-12-L10154-4	Dept. of Agriculture/Manhita Farms	Right of Entry Agreement sent to Manhita Farms for signature 05/24/18. 2nd follow up sent on 04/10/19; 08/03/2021. ROE Agreement information sent to GWA legal counsel for further review and processing

			01/28/2022; 08/11/2023 –GM signed and submitted to DCA for final review and processing at DLM; 09/26/2023-Submitted to DCA for final map processing. 01/02/2024: sent update status email to DCA. 03/2024: Re-submitted survey map to DLM last week to change the new acting CLTC Administrative Director.
Booster Pump Station	Agfayan-T3734 B19 L28	Private	TGE working on structural design for pump station area for L28, B19, T3734, Inarajan 11/07/19. Letter of Decision received by CLTC 06/09/2021. CLTC has responded for in-kind service letter 10/08/2021. 1st appraisal report submitted to GWA 05/11/2022. 2nd appraisal submittal to GWA 09/20/2022. Appraisal report sent to GM/legal counsel for review, approval and response 09/22/2022. Request for updated Appraisal report sent to TG Engineers for cost estimate 09/28/2023. Garrett stated updated appraisal report cost is $2500 each. Funding needs to be requested. 10/02/2023
Asan Springs	Asan-L501	Federal	• Revised Environmental Assessment report with NPS for review. 1/25/24 • 09/18/2023: The Office of Congressman Moylan has offered assistance to work with the NPS in completing the EA and Finding of No Significant Impact (FONSI) along with the Right of Way agreement to GWA, the EA is a prerequisite of the ROE agreement.

E. Planning & Support Services

Planning Activities for the March 2024

1. USEPA Tom Konner visit to GWA
    a. USEPA Project Officer Tom Konner visited GWA to conduct site visits for ongoing projects as well as participate in in-person meetings to discuss status of all SRF funded projects and future projects to come
2. New Grant Proposals – Planning section is drafting and preparing 2 grant proposals due in May as described below:
    a. USEPA Climate Pollution Reduction Grant 2024 – Guam Anaerobic Digestion Waste Initiative Project
    b. USEPA Climate Pollution Reduction Grant 2024 – Electric Vehicle and Charging Stations Project
3. Successful Grant Application Uploads – Planning section successfully submitted the following grant applications in March 2024
    a. DOI MAP 2024 – GWA Training
    b. DOI MAP 2024 – SCADA technical training
    c. Overflow and Stormwater Grant 2024 – Additional funding to support Rojas Harmon Stormwater Construction Project
4. FEMA Preliminary Damage Assessments – Planning is responsible for the coordination, preparation and submission of Preliminary Damage Assessments for Typhoon Mawar
    a. Weekly meetings with GWA Management and support staff in order to report updates, communicate challenges and coordinate the execution of work.
    b. Documentation and FEMA claims – Planning is Project Manager for putting gathering documentation to support FEMA claims and ensuring reimbursements. Planning successfully submitted for $1.4M claim for CAT B Emergency Protective Measures
5. Engineering Project Management –Due to the number of CIPs and to further support the Engineering CIP. Planning is also serving as the Project Manager or Deputy Project Manager for the following design/construction projects:
    a. Rojas Harmon Stormwater Drainage Improvements Design RFP
    b. Aplacho Roadway and Drainage Improvements Construction – IFB
    c. GAC Filter Construction Project
6. Department of Interior Grant Training – Planning is also assisting GWA Operations and GWA HR Training in order to execute the following grant funded training related projects
    a. Department of Interior Maintenance Assistance Program (MAP) 2020 – lead and coordinate the training and equipment purchases for operation comprising of the following: Sewer audit and training, mobile sewer inspection equipment, GPS equipment and reference materials
    b. Department of Interior Maintenance Assistance Program (MAP) 2022 – responsible for reporting to Grantor the execution of procuring training for Operations which consists of welding, pump and motor, electrician, and SCADA
    c. Department of Interior Technical Assistance Program (TAP) 2023 – responsible for reporting to the grantor status of the execution of the purchase of drone and sewer equipment for Engineering and Operations
7. Administrative – Planning also provides administrative support by leading the following tasks:
    a. Monthly Engineering Report – gathers information and prepares report for review
    b. Engineering Project Tracking – tracks project status and updates
    c. Engineering Project Procurement and Payments – facilitates procurement process and prepares payments to vendors
    d. NEPA and Section 106 Consultation Letters, Maps and Pictures – prepares letters and maps to various agencies
    e. USEPA Grant Funding Tracking and meetings – tracks USEPA grant funds and hosts meetings
    f. Application Review Committee response letters and meetings – researches and prepares response letters for development

8. **Special Projects are assigned to the Planning Section to verify the following:**
    a. Ordot Leachate Dye Testing -three day field testing to verify connection; pending
    b. Pipe Locating and Ground Penetrating Radar – conducts various pipe locating missions in order to verify utility locations
    c.
9. **Active Engineering Procurement Projects**
    a. IFB-07-ENG-2023, Aplacho Drainage and Roadway Improvements
        i. Fund Source: Bond 2016 WW 11-03
        ii. Status: Awaiting Legal's disposition re Insurance.
    b. IFB-02-ENG-2024, Pressure Zone Realignment Phase II Construction
        i. Fund Source: USEPA Grant
        ii. Status: Issued Addendum No. 2.
    c. RFP-01-ENG-2022, Indefinite Delivery/Indefinite Quantity (ID/IQ) for Engineering Design and CM Services for Undersized Waterline Replacement
        i. Fund Source: USEPA Grants, Bonds, Revenue
        ii. Status: Pending fee negotiation.
    d. RFP-03-ENG-2022, Indefinite Delivery/Indefinite Quantity (ID/IQ) for Engineering Design and CM Services for Waterline Replacement and Upgrades
        i. Fund Source: USEPA Grant
        ii. Status: Funding source to be identified for TO No. 1 prior to contractor's signature.
    e. RFP-04-ENG-2022, Indefinite Delivery/Indefinite Quantity (ID/IQ) for Engineering Design and CM Services for Asbestos Concrete Pipes (ACP) Waterline Replacement
        i. Fund Source: USEPA Grant
        ii. Status: Contractor-signed Agreement and TO No. 1 forwarded by PM.
    f. RFP-05-ENG-2022, Construction Management Services for Pressure Zone Realignment Construction Phase II
        i. Fund Source: USEPA Grant
        ii. Status: Status quo. Next step: NTP will be issued once construction contract is in place. IFB PZR Ph II Construction is on Solicitation and Bidding Phase (2).
    g. RFP-06-ENG-2022, Indefinite Delivery/Indefinite Quantity (ID/IQ) Professional Project/Construction Management for Islandwide Sewer Collection/Transmission System Repair, Rehabilitation, and Replacement
        i. Fund Source: GWA Bond, USEPA Grant, SDC
        ii. Status: Hold off in sending Phases 1-4 to the OAG per Legal.
    h. RFP-07-ENG-2022, Indefinite Delivery/Indefinite Quantity (ID/IQ) for Engineering Design and Construction Management Services for the Implementation of District Metered Areas (DMA)
        i. Fund Source: USEPA Grant
        ii. Status: PM is working on TO No. 1.
    i. RFP-02-ENG-2023, Indefinite Delivery/Indefinite Quantity (ID/IQ) for Water and Wastewater Hydraulic Modeling Services
        i. Fund Source:
        ii. Status: AGME to schedule a meeting to address comments on SOW.
    j. RFP-05-ENG-2023, Fats, Oil, and Grease Receiving Station Design Services
        i. Fund Source: USEPA Grant
        ii. Status: Designer sent the fee proposal on 04/08/2024 (M). Pending review by AGME and PM.
    k. RFP-07-ENG-2023, Rojas-Harmon Stormwater Drainage Improvements Design
        i. Fund Source: USEPA Grant
        ii. Status: Legal confirmed the transmittal of Agreement to the OAG on 04/04/2024 (Th).
    l. RFP-01-ENG-2024 Gill Breeze Subdivision Water and Wastewater Infrastructure
        i. Fund Source: USEPA Grant
        ii. Status: Pending completed score sheets from the selection committee.

F. CIP Exhibits (COVER PAGE)

B-1 ID/IQ – Professional Civil and Structural Design Services M19-001-BND

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 03/11/2024	Asst. GM of Engineering	See Activities	Water/WW/Support
Indefinite Delivery/Indefinite Quantity for professional civil and structural design services for various type of water and wastewater utility projects.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-02-ENG-2019	6/17/2019	6/17/2024	AECOM Technical Services, Inc.
Design	RFP-02-ENG-2019	7/17/2019	7/17/2024	HDR, Inc.

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design (AECOM)	PW 05-06, MP-PW-Pipe-07	$1,000,000.00	
Design (HDR)	PW 09-03	$750,000.00	

ACTIVITIES

AECOM

- Task Order No. 1 Mataguac Booster Pump Station Rehabilitation Design: 90% design phase.
    a. Project Engineer: Garrett K.A. Yeoh, William F. Esteves
    b. TO cost: $250,000.00
- Task Order No. 2 Miscellaneous Booster Pump Station Improvements: Upgrade design for Adawag, Chalan Palauan, Pale Kieran, Ulloa/Untalan, Camacho, Manuel Tenorio, Santa Ana, Geus, Ija, Pigua, Umatac No. 1, and Umatac No. 2 booster pump stations. Kick off meeting scheduled for April 2024.
    a. Project Engineer: William F. Esteves, Garrett K.A. Yeoh
    b. TO cost: $750,000.00

HDR

- Task Order No. 1 Tai Road/S-13 and Toto Canada Road/Blas Street Waterline Replacement Design: 100% design completed. Under construction. See Tai Road/S-13 and Toto Canada Road/Blas Street Waterline Replacement construction project update sheet for details.
    a. Project Engineer: Jessey A. Mendiola
    b. TO cost: $164,310.00
- Task Order No. 2 – Structural Assessment and Rehabilitation Design at Commercial Port and Chaot Sewer Pump Stations. This involves the structural assessment of structural system failures at Commercial Port and Chaot SPSs, and design of structural modifications to entry/exit for removal/reinstallation of pumps at Chaot SPS. On 7/25/23 Task order no. 2 draft was submitted. On 08/01/23 AGME approved to proceed on processing approval. 10/05/23 Attorney approved and returned TO no. 2 with her initials. On 2/3/24 AGME signed the budget request and the task order for E1 processing.
    a. Project Engineer: Ernie Villarin
    b. TO cost: $61,547
    c. Proposed funding source: MP-WW-Pump-01 Lift Station Rehabilitation/Replacement Program

B-2 ID/IQ – Professional Project-Construction Management Services M19-003-BND

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 03/11/2024	Asst. GM of Engineering	See Activities	Water/WW/Support
Indefinite delivery/Indefinite quantity for professional project and construction management services for various types of water and wastewater utility projects.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
PM-CM	RFP-04-ENG-2019	06/19/2019	06/19/2024	Brown and Caldwell
PM-CM	RFP-04-ENG-2019	06/17/2019	06/14/2024	Duenas, Camacho & Associates, Inc.

ACTIVITIES

Brown and Caldwell Task Orders:

1. Bond Report
2. Route 4 Sewer CIP (completed)
3. Asan-Adelup-Hagatna Sewer Rehabilitation CIP (completed)
4. Southern SSES CIP (completed)
5. Cost of Services Study
6. Water Meter Technical Assistance
7. Wastewater Hydraulic Model
8. Master Plan Update
9. Modeling

Duenas, Camacho, and Associates Task Orders:

1. Tank Repair Bypass CIP
2. Tai-Toto-Canada Water CIP
3. Ugum Water Treatment Plant Rehabilitation CIP
4. Yigo Sewer Pump Station CIP
5. Tank Inspection and Repairs CIP
6. District Metered Areas and Pressure Zone Realignment CIP
7. Wells A-23, A-25 remediation (see B-8 Central Guam Reservoirs project)
8. Groundwater Wells Treatment Design CIP for Dieldrin
9. Waterline Replacement/Tank Repair CIP

B-3 Gill Breeze Subdivision Water and Sewer RFP-09-ENG-2022

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/3/2024	Mauryn Q. McDonald, P.E.	Rylma Carino	Wastewater CIP
Design and construct a water system, conduct a study to determine the most appropriate wastewater disposal system (private onsite systems or public sewer system), and design and construct the wastewater disposal system.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-09-ENG-2022	In Procurement		TBD
Construction Management				
Construction				

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	USEPA grants	USEPA M98T80423	
Construction Management			
Construction			

ACTIVITIES

1. USEPA confirmed that grant funds can be used for construction on private lots (for private laterals).
1. The Notification of procurement submitted to Attorney's General Office on 1/22/2024 and received reply on 2/19/2024.
2. The request for proposals for design was published on1/23/2024.
3. Bid proposal opened on 3/22/2024. Four (4) Designers submitted their RFP.
4. RFP selection committee reviews due 4/5/2024.

B-4 Adacao Water and Sewer Infrastructure Design Services S22-004-ARP

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/5/2024	Mauryn Q. McDonald, P.E.	George J. Watson	Wastewater CIP
Evaluate and design water and sewer infrastructure to upgrade water and bring property owners off of septic and onto sewer for the Adacao area in Mangilao, where GWA is observing high Nitrates at 5 production deep wells.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-09-ENG-2022	3/1/2023	12/31/2026	Duenas, Camacho & Associates
Construction Management				
Construction				

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	American Rescue Plan Act (ARPA) Grant	$1,164,322.48	40%
Construction Management			
Construction			

ACTIVITIES

- MOA between GWA and CLTC is signed (5/18/23)
- Designer (DCA) submitted Final Basis of Design and 60% plans and specs (11/21/23)
- Met with BME owners to discuss potential SPS on a portion of their property (9/15/23); Confirmed interest, and signed Right of Entry agreement with BME to survey lot. GM signed ROE (9/25/23)
- Met again w/ BME (1/26/24) to confirm interests and move forward with appraisal. Designer sent survey of BME site for property appraisal; appraisal conducted on 1/30/24; received appraisal report on 3/13/24.
- Working with Bobbie and DCA to produce letter and proposal for SPS property on BME lot; estimated value from appraisal of SPS property at $59k, but property has a bank lien on it.
- Will schedule another meeting with Mangilao Mayor Allan soon to update and plan for town hall meeting for Adacao residents; need to consider the impact of emerging contaminants in wells and upcoming EPA enforcement on contaminants.
- Potential for centralized granular activated carbon (GAC) treatment for wells in Adacao, especially M-4; considering location and wells in the area that need it. Property size needed for centralized GAC treatment system estimated at a ¼ acre lot, but preferred ½ acre.
- Working on time extension request letter for funding.

Total ARPA funding from Governor's Office: $8.7M

B-7 Central Guam Reservoirs W14-006-BND

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
03/11/2024	Brett E. Railey, P.E.	Garrett K. A. Yeoh	Water

The work to be performed consist of designing and constructing new reservoirs, pipes, vaults, instrumentation, electrical, SCADA system, booster pump stations, pressure reducing valves, and general system upgrades. Sites include Tumon No. 1, Chaot No. 2, Barrigada Hgts (Hyundai), Tamuning (Airport), and Manenggon (Pulantat) Reservoirs, and Barrigada Res BPS, Barrigada Heights BPS, St. John's PRV, St. Vitores Road PRV, A-23 DW, and A-25 DW.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-09-ENG-2014	5/23/2015	12/2024	GHD, Inc.
Construction Management (Tumon, Chaot, Barrigada)	RFP-02-ENG-2017	12/13/2017	Complete	TG Engineers, PC
Construction Management (Tamuning, Manenggon)	RFP-01-ENG-2023	07/07/2023	06/2025	Duenas, Camacho & Associates, Inc.
Construction (Tumon, Chaot, Barrigada)	IFB-09-ENG-2017	02/02/2018	05/2023	AIC International
Construction (Tamuning, Manenggon)	IFB-01-ENG-2023	1/22/2024	06/2025	Core Tech Intl.

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	PW 09-11, PW 12-04, PW 12-06	$3,644,279.00	95%
Construction Management (Tumon, Chaot, Barrigada)	PW 09-11, PW 12-04, PW12-06	$3,171,745.23	100%
Construction Management (Tamuning, Manenggon)	PW 09-11	$1,840,912.95	0%
Construction (Tumon, Chaot, Barrigada)	PW 09-03, PW 09-04, PW 09-11, PW 12-04, PW 12-06, SDC	$22,860,219.00	96%
Construction (Tamuning, Manenggon)	PW 09-11, PW 12-04, PW 12-06	$34,429,555.00	0%

ACTIVITIES

Design:
•Tumon, Chaot, Barrigada, Tamuning, Manenggon 100% design 08/2022.
• A23/A25 GAC system bid documents under preparation. USDOI and USEPA funded. Engineering working on updating plans to include damage repairs to A-25, which include modifications for A-23. Designer revising plans and specifications to include various upgrades.

Construction Management:
• RFP-01-ENG-2023 Tamuning and Manenggon Reservoirs: Contract signed 07/07/23. Partial NTP issued 09/19/23 to begin project file management set up. Full NTP issued 02/19/2024. Work ongoing.

Construction:
• Tumon, Chaot, Barrigada: All tanks completed and in service. Contractor troubleshooting RTUs at PRV and tank sites. Installation of new valve near Holiday Towers and capping of distribution line at A29/A30 is pending GWA operations schedule.
• IFB-01-ENG-2023 Tamuning and Manenggon Reservoirs: Full NTP issued 02/19/2024. Contractor has received clearing/grading and building permit. Contractor mobilized at both sites. Site preparation.

B-8 Design and CM Services for Waterline Replacement of Various Bridges W22-08-BND

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
04/04/2024	Brett E. Railey, P.E.	Ernesto L. Villarin	Water
Work will involve design, construction management, and construction/repair of water and sewer lines crossing various bridges.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design/Construction Management	RFP-03-ENG-2023	02/22/2024		GHD Inc.
Construction				

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design/Construction Management	MP-PW-Pipe 12	$1,356,199.90	
Construction			

ACTIVITIES

01/31/24 - Design and CM Services contract under processing.
02/02/24 - Letter of award was send to GHD
02/22/24 - Design and CM Services contract was executed.
02/26/24 - Notice to Proceed was issued, kick-off meeting was conducted.
03/06/24 - Consultation meeting with WSP/DPW Engineers, GHD and GWA. Lynden Kobayashi of WSP recommends adding back Aplacho Bridge and Ajayan Bridge to the list of bridges for assessment. These bridges were bid out 3 times the past 10 years but no one responded to the solicitation.
03/26/24 - GHD completed assessment of Agana 1, Asan Inland 2, and Asan Inland 3 bridges.

B-9 Pressure Zone Realignment W18-001-BND

UPDATE	SUPERVISOR	PROJECT ENGINEERS	SECTION
04/08/2024	Brett E. Railey, P.E.	Garrett K. A. Yeoh, Jessey A. Mendiola, Jacob Miller	Water

The work to be performed involves designing, construction managing, and constructing pressure zones, which consists of pressure reducing valves, flow meters, vaults, pipeline, electrical, instrumentation, and SCADA. Design and construction shall be in 5 phases.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design CM (Phase 1)	RFP-03-ENG-2018	08/16/2018	12/2024	GHD, Inc.
CM (Phase 2)	RFP-05-ENG-2022	06/21/2023		AmOrient Engineering
Construction (Phase 1)	IFB-07-ENG-2019	04/21/2020	1/2024	Sumitomo Mitsui Construction
Construction (Phase 2)	IFB-02-ENG-2024			

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design CM (Phase 1)	PW 09-04, PW 09-10, PW 09-11, PW 12-01	$3,366,996.00	75%
CM (Phase 2)	USEPA-SRF Grant	$1,688,925.00	0%
Construction (Phase 1)	USEPA-SRF Grant, PW 05-16, PW 12-01	$6,046,179.63	95%
Construction (Phase 2)	USEPA-SRF Grant		0%

ACTIVITIES

Design: Phase 3 design at 75%

Construction:

- Phase 1: Punch list items and in discussions with property owners to finalize property acquisition and/or easements. Change Order No. 07 in process of approval to address additional valves needed for Okkodu and Terao sites. In discussion with Contractor on resolution for Terao property issues. Federal government has been notified on Terao vault/control panel being on federal property. Awaiting federal government response.
- Phase 2: 100% design completed 03/23. IFB advertisement date: 02/14/24. IFB due date extended to: 05/20/24. Designer is preparing Revision A to include items, such as fencing, fiber connection for SCADA communication, and other details.

B-10 Fire Hydrant Replacement Phase 1 W-19-002-BND

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 8/30/2023	Brian W. Hess, P.E.	Sylvia Y. Mercado	Water
Replacement of 72 each existing old dry barrel fire hydrant with new wet barrel type hydrant at locations in several villages around the island.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	GWA In-House	N/A	N/A	N/A
Construction Management	GWA In-House	N/A	N/A	N/A
Construction	IFB-03-ENG-2019	9/30/2019	02/17/2024 (Tentative)	Mega United, Inc.

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	N/A	N/A	100%
Construction Management	N/A	N/A	In- House
Construction	Bond 2016 PW 14-01	$1,300,645.92	100%

ACTIVITIES

Scope of Work:
The Fire Hydrant Replacement Phase 1 was bid under an Owner Furnished Contractor Installed (OFCI) contract. GWA will supply the hydrant body, gasket, bolts and nuts to contractor.

Change Order:
Mega United Change Order No. 05 in the amount of $78,277.92 was processed and approved on 12/19/23.

Project Status:
Mega United completed the replacement of 72 ea. fire hydrants on 2/17/24. The project was substantially completed on 2/12/24. Correction of the punch list items was completed final inspection is on-going. Negotiation of the deductive change order is on-going. Project acceptance and closure will follow.

B-11 Tai Rd./ S-13 and Canada-Toto Lp./Blas St. Waterline Replacement M19-001BND

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
04/08/2024	Brett E. Railey, PE	Jessey A. Mendiola	Water

Replacement of old waterlines and reconnection of all customer service laterals along Tai Rd., S-13 (a short street off of Tai Rd.) Toto Canada Loop, and Blas Street. Replacement/ reconnection of WL on Taison Rd, off of Toto Canada Loop, has also been added into the project as of CO no. 2.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	Civil/ Structural IDIQ- TO No. 1	1/20/2020	10/2021	HDR Engineering, Inc.
Construction Management	PM/CM Services IDIQ- TO No. 2	5/6/2021	5/2023	Duenas, Camacho & Associates, Inc.
Construction	IFB-02-ENG-2021	5/12/2021	5/22/2023	Giant Construction Corporation

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	Bond 2013 PW 09-03	$164,310.00	100%
Construction Management	Bond 2020 PW 09-03	$189,729.00	65%
Construction	Bond 2020 PW 09-03, Bond 2020 MP-PW-Pipe-12, Grant, IFCIP	$2,966,350.21	86%

ACTIVITIES

Tai Rd.: Installations complete, road repair complete.

Toto Canada Loop: All connections in original scope complete. Pending final work needed for Okso Ashley.

Taison Rd.: Complete.

Change Order No. 6 pending. Additional street (Okso Ashley Rd.) needs to be connected to the new 12” on Toto-Canada Loop. Pending amendment to HDR’s task order to complete new design and then will need estimates from contractor.

B-12 Asan Springs Rehabilitation W11-003-BND

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
04/08/2024	Brett E. Railey, P.E.	Jessey Mendiola, Ryan Diaz	Water
The work involves designing and modifying the existing spring impoundment, constructing a new chlorination building, installing a new generator and new pumps, and other site improvements.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-11-ENG-2015	8/23/2016	12/2026	HDR

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	USDOI Grant, PW 05-15	$712,263.00	85.8%

ACTIVITIES

Design:
The office of Congressman Moylan will assist GWA by sending letter to NPS seeking assistance to resolve property issues.

Environmental assessment report made available for public comment by NPS 3/26/24.

Discussion of design scope modification to include treatment for PFAS ongoing. Awaiting cost from designer.

B-13 Groundwater Wells A-02, A-07, A-12, D-05, and F-03 Rehabilitation (Re-bid No. 3) W16-001-EPA

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
04/08/2024	Brett Railey, P.E.	Ryan Diaz, Garrett Yeoh	Water
The work involves rehabilitating two existing production wells; A-12 and F-03. Existing Wells, A-02 and D-05, are currently not in production, and are included in the work as an additive bid. Other major work involves installing a new standby generator, a new chlorination building, new well equipment, and other site improvements.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-02-ENG-2016	5/26/2016	6/18/2024	AECOM
Construction Management	RFP-06-ENG-2019	12/01/2020	6/18/2024	DCA
Construction	IFB-02-ENG-2023			

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	USEPA – SRF	$1,758,247.00	91%
Construction Management	USEPA – SRF	$640,248.00	
Construction	USEPA - SRF		

Design: 100% design completed (revision 3) 07/2022.

Construction: IFB-02-ENG-2023 Groundwater Wells A-02, A-07, A-12, D-05, and F-03 Rehabilitation (Re-bid No. 3)

- 11/17/23: IFB issued.
- 02/15/23: No bids received.
- 02/23/23: Post bid surveys sent out to registered bidders. Three firms responded.

Under discussion to re-package bid to include additional wells and well abandonment.

Project on hold until further decision by AGME.

B-14 ID/IQ - Design and CM Asbestos Concrete Pipe for Waterline Replacement W22-05-BND

UPDATE	SUPERVISOR	PROJECT ENGINEERS	SECTION
04/04/2024	Brett E. Railey, P.E.	Garrett Yeoh, Jacob Miller	Water
The work to be performed consists of design and construction management of asbestos concrete pipe (ACP) waterline replacement island-wide. Work will include development of ACP waterline replacement priority list and water line designs for selected sites. Site prioritization shall be guided by the Water Resource Master Plan, operation and engineering input and data.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-04-ENG-2022			GHD, Inc.

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	USEPA-SRF Grant	$1,500,000.00	0%

ACTIVITIES

CCU Resolution No. 17-FY2023 approved contract fee proposal for $5,427,000.00. Contract and Task Order No. 1 signed by A/E. With Contract Admins for processing.

B-15 ID/IQ - Design and CM for Waterline Replacement and Upgrades W22-04-BND

UPDATE	SUPERVISOR	PROJECT ENGINEERS	SECTION
04/04/2024	Brett E. Railey, P.E.	Garrett Yeoh, Jacob Miller	Water
The work to be performed consist of design and construction management of miscellaneous waterline island-wide. Work will include development of waterline replacement priority list and water line designs for selected sites. Site prioritization shall be guided by the Water Resource Master Plan, operation and engineering input and data.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design/Construction Management	RFP-03-ENG-2022			Duenas, Camacho & Associates, Inc.

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	USEPA-SRF Grant	$1,500,000.00	0%

ACTIVITIES

CCU Resolution No. 19-FY2023 approved contract fee proposal for $5,973,682.00.

Contract and Task Order No. 1 ready for processing. Pending A/E signature.

B-16 ID/IQ - Design and CM Implementation of District Meter Areas W22-06-BND

UPDATE	SUPERVISOR	PROJECT ENGINEERS	SECTION
04/04/2024	Brett E. Railey, P.E.	Garrett Yeoh, Jacob Miller	Water
The work to be performed consists of design and construction management of District Meter Areas (DMA). Work will include development of DMA priority list and designs for selected sites. Site prioritization shall be guided by the DMA Implementation plan, operation and engineering input and data.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-07-ENG-2022			Duenas, Camacho & Associates, Inc.

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	USEPA-SRF Grant	$1,500,000.00	0%

ACTIVITIES

CCU Resolution No. 20-FY2023 approved contract fee proposal for $3,119,377.00.

A/E finalizing Task Order No. 1.

B-17 ID/IQ - Design and CM Undersized Waterline Replacement — W22-03-BND

UPDATE	SUPERVISOR	PROJECT ENGINEERS	SECTION
04/04/2024	Brett E. Railey, P.E.	Garrett Yeoh, Jacob Miller	Water

The work to be performed consist of design and construction management of undersized waterline replacement island-wide. Work will include development of ACP waterline replacement priority list and water line designs for selected sites. Site prioritization shall be guided by the Water Resource Master Plan, operation and engineering input and data.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-01-ENG-2022			Brown and Caldwell

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	USEPA-SRF Grant		0%

ACTIVITIES

CCU Resolution No. 18-FY2023 approved contract fee proposal for $2,600,498.00.

A/E finalizing Task Order No. 1.

B-18 Santa Rita Springs Rehabilitation

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
03/11/2024	Brett E. Railey, P.E.	Garrett Yeoh	Water

The work to be performed consist of design of the Santa Rita Springs Rehabilitation. Work will include increasing the impoundment, new impoundment roof, chlorination system, pump system and all other site upgrades.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design				
Construction Management				
Construction				

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design			
Construction Management			
Construction			

ACTIVITIES

RFP package is under preparation.

Revised scope of work includes PFAS treatment, Santa Rita tank relocation evaluation, and addressing sanitary survey issues. Scope/RFP package completed and under review by AGME.

B-19 Brigade II Booster Pump Station W11-004-BND

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
04/08/2024	Brett E. Railey, P.E.	Jessey A. Mendiola	Water
Design/ construction of a new booster pump station, to include a new building structure, pump system, electrical system piping instrumentations, SCADA, general site upgrades, and off-site improvements such as new PRV's, valves, and vaults.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-02-ENG-2011	4/5/2012	8/2022	E.M. Chen & Associates
Construction Management	RFP-02-ENG-2022			Duenas, Camacho & Associates, Inc.
Construction				

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	PW 05-12	$245,863.20	98%
Construction Management			
Construction			

ACTIVITIES

Design:
100% design completed 8/2022.

Construction:
Pending funding availability. Funding was reallocated to CO projects.

CM:
Pending funding availability. Funding was reallocated to CO projects.

B-20 New Well Construction (AG-10, AG-12, Y-08)

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
04/04/2024	Brett E. Railey, P.E.	Jessey A. Mendiola	Water
Design and construction of three new production wells (AG-10, AG-12, Y-08).			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-01-ENG-2010	5/5/2011		GHD, Inc. (Formerly Winzler Kelly)
Construction Management	PM/CM Services ID/IQ			Duenas, Camacho & Associates, Inc.
Construction				

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	PW 05-13, PW 05-14, Bond 2016 PW 09-02	$1,203,308.00	86%
Construction Management			
Construction			

ACTIVITIES

Design: Design in progress to be consistent with Groundwater Wells A-02, A-07, A-12, D-05, and F-05 Rehabilitation (Project B-12). Pending decision on Rehab Well project on next steps for well projects due to no construction bidders.

Pending further decision by the AGME.

B-21 Northern and Southern Guam Reservoirs W14-007-BND

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
01/04/2024	Brett Railey, P.E.	Garrett Yeoh	Water

The work to be performed consist of designing and constructing new reservoirs, pipes, vaults, instrumentation, electrical, SCADA system, booster pump stations, pressure reducing valves, and general system upgrades. Sites include Santa Rosa No. 2 (SR), Santa Rita (SRI), Sinifa No. 2 (SIN), Inarajan, and Ugum No. 2 Reservoirs, and Santa Rosa, Agfayan, and Inarajan BPS's, and miscellaneous pressure zones pipeline work.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-09-ENG-2014	05/23/2015	06/2024	TG Engineers, P.C.
CM (SR, SRI, SIN)	RFP-06-ENG-2017	04/02/2018	04/2023	GHD, Inc.
CM (Ugum No. 2)	RFP-04-ENG-2023	12/01/2023		GHD, Inc.
Construction (SR, SRI, SIN)	IFB-01-ENG-2019	09/30/2019	12/2023	AIC, International
Construction (Ugum No. 2)	IFB-06-ENG-2023	02/03/2024	07/2025	AIC, International

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	PW 09-11	$3,992,595.20	79%
CM (SR, SRI, SIN)	PW 09-11	$6,387,678.96	94%
CM (Ugum No. 2)	PW 09-11		0%
Construction (SR, SRI, SIN)	PW 09-03, PW 09-04, PW 09-11	$27,356.044.61	66%
Construction (Ugum No. 2)	PW 09-11, PW 11-02	$22,834,768.00	0%

ACTIVITIES

Design:
- Santa Rosa, Santa Rita, Sinifa, and Ugum No. 2 100% design completed. Inarajan and Agfayan BPS design ongoing (pending property acquisition for Agfayan).

Construction:
- Santa Rosa, Sinifa, Santa Rita: Santa Rosa No. 2 and Sinifa No. 2 reservoirs completed and in service. Santa Rita tank work halted due to uncertainty of the slope failure and high cost for slope stabilization and waterline, electrical, earthwork, roadway realignment. Santa Rita storage will move to Sinifa site. Hydraulic report prepared by B&C validated storage requirements. Santa Rosa Reservoir: Contractor is working on the booster pump station and generator building. Sinifa Reservoir: Contractor is finalizing punch list, preparing close out documents for Substantial Completion.

- Santa Rosa No. 1and Sinifa No. 1 steel tanks inspected. Santa Rosa No. 1 repair change order issued to the contractor. Contractor to submit Sinifa No. 1 repair change order week of April 8, 2024.

- Ugum No. 2 Reservoir: Full NTP issued on 02/19/2024 for both Contractor and Construction Manager. Permitting phase. Pre-construction meeting was held on 03/22/24 attended by GWA, GHD, AIC, and subcontractors. A meeting was held at DLM office on 3/29/24 regarding building permit issue. DLM looking for

documentation that agricultural land purchased by GWA from private individuals were converted to public land use through legislation.

B-22 Tank Repair/Bypass W19-003-BND

UPDATE	SUPERVISOR	PROJECT ENGINEERS	SECTION
03/11/2024	Brett E. Railey, P.E.	Calvin Yam, Garrett Yeoh	Water
The work to be performed consists of installing bypass piping, valves, etc. ahead of tank inspection. The operation of the bypass will allow the API inspectors and structural engineer to determine appropriate repairs after which the contractor will proceed to repair the tanks.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-03-ENG-2008	8/1/2008	12/2023	Duenas, Camacho & Associates, Inc.
Construction Management	RFP-04-ENG-2019	6/17/2019	10/2023	Duenas, Camacho & Associates, Inc.
Construction	IFB-06-ENG-2019	4/21/2020	10/2023	AIC International

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	Bond 2005, Bond 2010	$1,291,799.91	100%
Construction Management	PW 09-11, MP-PW-Tank-22, MP-PW-Tank-23	$897,077.00	40%
Construction	PW 09-09, PW 09-11, PW 12-05, SDC	$14,022,773.57	68.0%

ACTIVITIES

- Agat Umatac: 07/18/22 in service.
- Yigo No. 3: 08/08/22 in service.
- Windward Hills: 05/17/23 in service.
- Astumbo No. 1: Interior coating.
- Malojloj: Bypass completed. Tank will be taken offline for inspection/repair after Pigua repair.
- Umatac Subdivision: Contractor has submitted repair fee. Cost is $1.5M. AIC to resubmit cost in the $1.2M range.
- Santa Ana: 11/21/2023 in service.
- Upper and Lower Nimitz: Lower Nimitz tank foundation preparation. Tank foundation layout was revised due to property encroachment.
- Pigua: Interior coating. Contractor has found cracks on a lower shell plate. API has inspected the tank after sand blasting. API has recommended to replace course 1, 2 and portions of course 3 tank shell walls. Structural engineer will present an option to repair the shell wall with patch plates in lieu of replacement. Contractor to submit cost for the two options.
- Kaiser: Floor welding complete and under testing.

B-23 Asan-Adelup-Hagatna Route 1 Sewer Rehabilitation and Replacement Phase II — S15-002-EPA

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/5/2024	Mauryn Q. McDonald, P.E.	Brown and Caldwell	Wastewater CIP

The gravity sewer main between Asan and Hagatna had deteriorated and required rehabilitation and replacement. The project involves the rehabilitation, repair, or replacement of approximately 1,700 linear feet of gravity sewer along Route 1 by Adelup and over 6,900 linear feet of gravity sewer in Hagatna. Wherever possible, cured-in-place-pipe was used to avoid trenching, which minimizes impacts to motorists and reduces construction timeframes.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-02-ENG-2015	12/10/2015	12/2023	HDR Inc.
Construction Management	RFP-04-ENG-2017	7/31/2018	12/2023	Duenas, Camacho & Associates, Inc.
Project Management	PM/CM Services ID/IQ - TO No. 3	1/17/2020	12/2023	Brown and Caldwell
Construction	IFB-06-ENG-2020	1/22/2021	12/2022	Core Tech – Hawaiian Dredging, LLC

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	SRF Grant	$1,999,246.38	100%
Construction Management	SRF Grant, M 96902617-3 & M 96902619	$1,557,671.45	100%
Project Management	SRF Grant, M 96902619 & M 96902621	$617,485.00	100%
Construction	SRF Grant, M 96902619	$8,631,013.16	100%

ACTIVITIES

Construction completed. Project manager to submit final records to GWA.

A draft archaeological report was submitted to SHPO on 11/3/2022. SHPO comments dated 2/9/2024 were received. Project Manager to submit final report and GIS files to SHPO.

B-24 Southern SSES Sewer Rehabilitation Phase II (Baza Gardens – Santa Rita – Talofofo) S15-001-EPA

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/5/2024	Mauryn Q. McDonald, P.E.	Brown and Caldwell	Wastewater CIP
Rehab and/or replacement of old sewer lines to resolve I/I issues in the Southern wastewater collections system, in particular in Baza Gardens, Talofofo, and Santa Rita.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Construction Management	PM/CM Services ID/IQ- TO No. 4	1/17/2020	12/2023	Brown and Caldwell
Construction	IFB-04-ENG-2016	7/29/2016	12/2023	ProPacific

PHASE	FUNDING SOURCES	COST	% COMPLETE
Construction Management	SRF Grant, M 96902619	$546,618.00	100%
Construction	SRF Grant, M 96902617-3	$1,189,815.00	100%

ACTIVITIES

Construction completed. Project manager to submit final records.

B-25 Talofofo Sewer Improvement S16-004-EPA

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/5/2024	Mauryn Q. McDonald, P.E.	Gerald N. Gattoc	Wastewater
Design and Construction of 4 Sewer Lift Stations in the Talofofo village where sewer lines are installed but never completed.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-07-ENG-2016	8/12/2016	5/2020	EMPSCO Engineering Consultants
Construction Management	In-house	n/a	5/2020	GWA
Construction	IFB-07-ENG-2018	12/26/2018	5/2020	Giant Construction Corporation

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	SRF Grant	$501,092.86	100%
Construction Management	n/a	n/a	100%
Construction	SRF Grant, M 96902617-2	$2,384,251.28	100%

ACTIVITIES
Construction is complete and the project is closed.

B-26 Tamuning Hot Spots Sewer Line Rehabilitation and Replacement (Base Contract) S16-003-EPA

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/8/2024	Mauryn Q. McDonald, P.E.	Gerald N. Gattoc	Wastewater
Sewer rehabilitation for lines at Winner Apartments, Segundo Leon Guerrero, and New Plaza Market behind GPO.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-06-ENG-2016	9/8/2016	10/2017	TG Engineers
Construction Management	RFP-04-ENG-2018	2/8/2019	12/2020	AmOrient Engineering
Construction	IFB-06-ENG-2018	1/10/2020	12/2020	Ian Corporation

PHASE	UNDING SOURCES	COST	% COMPLETE
Design	SRF Grant, M 96902611-5	$663,629.00	90%
Construction Management	SRF Grant, M 96902617-2	$386,521.80	100%
Construction	SRF Grant, M 96902617-2	$1,183,786.08	100%

ACTIVITIES

All construction for the base contract has been completed and final invoices have been processed. A design contract change order will be drafted to identify an active funding source (USEPA grant) to cover construction support for the construction additives that were not included in construction contract. A CM change order will be drafted to close the CM contract.

B-27 Bayside Sewer Pump Station Rehabilitation S15-007-BND

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/3/2024	Mauryn Q. McDonald, P.E.	Rylma Nida A. Carino (CM)	Wastewater
The Bayside Sewer Pump station was operating with a single pump in a manhole, no backup power, and no dial-out or SCADA for real-time reporting of pump or power issues. Rehabilitation includes refurbishment of the wet well, two new pumps with soft starters, a new generator, dial-out capability, and fence repairs.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-10-ENG-2016	7/28/2016	3/2024	EMPSCO Engineering Consultants
Construction Management	Internal CM			
Construction	IFB-03-ENG-2020	6/11/2020	12/2023	Sumitomo-Mitsui Construction Co., Ltd.

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	WW 09-01	$241,125.41	100%
Construction Management	N/A		
Construction	WW 09-01	$931,516.74	100.00%

ACTIVITIES

For Construction

- The project completion on 04/06/2022 was extended to 05/19/2023 due to additional work order (CO#3).
- The commissioning of generator was on 01/04/2022.
- Testing and commissioning of the piping system was on 08/17/2022.
- Substantial Completion certificate issued on 10/25/2022.
- Punchlist completed on 6/2023.
- DPW approved the occupancy permit on 10/4/23.
- Final Change Order executed 12/5/2023 and final invoice paid 12/21/2023
- Acceptability of work accepted and was signed.

For Design Services

- A final Change Order (time extension) was executed on 12/26/2023
- The final invoice paid on 2/28/2024.
- GWA/EMPSCO submitted the final documents to SHPO on 3/19/2024, this should close out the project.

B-28 Yigo Sewer Pump Station Flood Mitigation and Facility Rehabilitation S18-001-BND

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/5/2024	Mauryn Q. McDonald, P.E.	George J. Watson	Wastewater
Evaluate and design flood mitigation and rehab needs for Yigo SPS, and install/construct design per plans and specs.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-01-ENG-2018	07/31/2018	03/2024	AECOM
Construction Management	RFP-04-ENG-2019	07/20/2021	03/2024	Duenas, Camacho & Associates, Inc.
Construction	IFB-01-ENG-2021	04/26/2021	03/2024	IAN Corporation

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	Bond 2016 WW 09-01	$247,252.63	98%
Construction Management	Bond 2016 WW 09-01	$96,754.00	70%
Construction	Bond 2020 MP-WW-Pump-01	$1,128,129.50	85%

ACTIVITIES

CO#1 negotiated time extension (479 days) w/ Contractor’s special damages ($8,360.00) due to delays (110 days). CO#2 for time extension approved (6/20/23).

CO#3 for work and time from Typhoon Mawar ($14,753.48 and 30 days) signed by Legal (9/7/23) and pending Finance approval. CO#4 to include materials to repair High Level Alarm Panel, which is required for the SCADA. Awaiting the cost of replacing High Level Alarm Panel. SCADA programming will be scheduled when high level alarm panel parts are received (the subcontractor is based in Hawaii). CCU approved the contract cost increase for CO#3 and 4 (11/28/2023). CO#3 signed by GM and forwarded to Contractor (1/17/24).

Considering closing out project after reviewing costs for CO#4. Initial cost for CO#4 came in at $272K (1/16/24) and discussed with CM (1/17/24) numbers and reasons for cost. Asked contractor to provide a detailed cost breakdown, and JMI estimate came in at $174,504.00 before any main contractor markup or labor is included (2/20/24). Met with IAN (4/4/24) and latest proposal is $78,823, but still needs additional refining and encouraging IAN to contact MCS for programing. Possible closeout project with remaining work the Contractor can complete and moving SCADA/Alarm Panel work to a future contract if can’t agree to costs.

Contractor remaining work: Punch list items, float controls, and safety painting of toe-kicks and overhead beams. Note, punch list electrical items will require contractor to replace fixtures that do not meet requirements. The punch list item replacements could possibly delay final closeout if materials are not available.

B-30 Fats, Oil, Grease Receiving Station S23-01-EPA

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/5/2024	Mauryn Q. McDonald, P.E.	George J. Watson	Wastewater
Design of a Fats, Oil, and Grease (FOG) receiving station to be located at the Northern District Wastewater Treatment Plant (NDWWTP). A FOG treatment facility is needed to support GWA's FOG program, to prevent FOG discharge into the wastewater collection system.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-05-ENG-2023			
Construction Management				
Construction				

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	USEPA grants		
Construction Management			
Construction			

ACTIVITIES

The Request For Proposals was issued on April 28, 2023 and closed on May 30, 2023. It is currently under negotiations.

B-31 Tumon Hot Spots S16-001-EPA

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/5/2024	Mauryn Q. McDonald, P.E.	George J. Watson	Wastewater
Evaluate and design flood mitigation and rehab needs for Yigo SPS, and install/construct design per plans and specs.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-01-ENG-2016	6/24/2016		TGE
Construction Management	RFP-04-ENG-2019			.
Construction				

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	USEPA grants	$572,089.00	Design 100%, construction support pending
Construction Management	USEPA grants		

ACTIVITIES

The design has been completed.

Construction Management is being handled through the Indefinite Delivery-Indefinite Quantity Islandwide Sewer Collection/Transmission System Repair, Rehabilitation, and Replacement.

B-32 Dungca Beach Sewer Line Relocation S20-001-EPA

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/3/2024	Mauryn Q. McDonald, P.E.	Rylma Nida A. Carino (PM)	Wastewater

The existing 8-inch diameter Asbestos Cement Pipe (ACP) Sewer along Dungca Beach is among the oldest in GWA's wastewater collection system. GWA Operations conducted CCTV investigations on a limited number of existing sewer lines in the Dungca Beach area. CCTV records showed substantial deterioration in the ACP sewer line which may have reached the end of its service life. A new sewer line along the right of way will be installed and customers will be connected to the new line.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-01-ENG-2020	4/26/2021	7/2024	GHD
Construction Management (CM)				AECOM (ID/IQ)
Construction			4/2026	

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	USEPA Grant	$633,625.75	90%
Construction Management			
Construction			

ACTIVITIES

The design services (including engineering support) original completion date of 6/27/2023 was extended to 2/16/2024 under Change Order #1, which also separates the project into Phase 1 & Phase II.

Phase I- Trankilo Street

a) 90% submittal on hold, pending CM contract and task order approval to finalize the constructability review (the contract and task order were forwarded to CM for signature).

b) Signature of budget transfer of Task Order (1 on hold, waiting for the approved agreement and Task Order.

c) GWA and GHD visited Bayside SPS on 2/7/2024 and evaluate the upcoming change order for: 1) Erosion control along the river, 2) Magnetic Flow meter with recorder, 3) New Force main and telecom line along the driveway of Bayside,4) Time extension due to the delays.

Phase II Lagoon Drive

a) 60% design accomplished.

b) GWA is pursuing purchase of an easement along Lagoon Drive, which is pending discussions with lot owners.

c) GWA is pursuing a lot acquisitions for a new lift station. A Letter of Interest was sent to the Lot Owner and a response was not received. GWA Engineering prepared a follow up letter.

B-33 Fujita Sewage Pump Station Redundant Force Main S20-003-EPA

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/5/2024	Mauryn Q. McDonald, P.E.	George J. Watson	Wastewater CIP
Designer to identify redundant force main options for the Fujita SPS and provide design for selected option.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-03-ENG-2020	10/5/2022	12/2024	AECOM
Construction Management				
Construction				

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	USEPA Grant Nos. M 96902619 & M96902621	$1,601,599.29	17%
Construction Management			
Construction			

ACTIVITIES

Designer's force main (FM) assessment expert conducted corrosion assessment on exposed locations of FM (4/25/23) as part of the first step in assessing the existing FM; Draft assessment report submitted to GWA for review (9/15/23) and final FM Assessment report to be submitted (3/10/24).

Geotech to complete 13 borings along FM route in preparation of new FM design. Archeological monitoring required for boring locations submitted to SPHO (2/12/24); SHPO acceptance response received (2/20/24). Final revised AMDP to be submitted to SHPO by week of 4/8/24. Boring to be conducted once final permitting completed; estimated to start end of April or beginning May.

Expanded SOW to include Fujita SPS rehab work to Designer for review (3/27/23). Designer submitted cost proposal for expanded scope (11/9/23). The final scope and fee approved by CCU (11/28/23). CO#1 (expanded SOW) submitted by Designer (12/12/23) and executed on 1/2/2024. SPS Structural and Electrical assessment team arrived on island for SPS assessment on 2/19 – 2/22/24 and completed the initial assessment for structural and electrical; Civil and mechanical team conducted assessment week of 3/18/24. Designer working on RFI after assessment, to be submitted by 4/22/24 and report to follow after RFI responses.

B-34 Hagatna Main Sewage Pump Station Redundant Force Main — S20-002-EPA

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/5/2024	Mauryn Q. McDonald, P.E.	George J. Watson	Wastewater CIP
Designer to identify redundant force main options for the Hagatna Main SPS and provide design for selected option and pump station rehabilitation.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-02-ENG-2020	4/7/2021	12/2024	GHD
Construction Management				
Construction				

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	USEPA Grant No. M 96902619, M96902623-1	$1,359,089.79	31%
Construction Management			
Construction			

ACTIVITIES

Initial design intention: single redundant force main (FM) design using directional drilling and subsequent assessment/rehabilitation of existing FM. 30% design level 2 cost estimate was $32M to $35M, more than $20M from previous estimates. The General Manager (GM) directed to pivot design to rehabilitate the existing FM, potentially using pipe bursting or lining to reduce costs. 60% design cost estimates for a single FM ranged from $17.7 to 20.6M. 60% design received (6/19/23) and met with GM to discuss cost and potential alternatives (7/6/23). Met with Designer to discuss and direct pivot to look at rehabilitation methods of current FM (7/7/23) and met again (9/1/23) to further refine expectations. Met with Designer (10/3/23) to discuss revised pivot scope and fee, in addition to SPS scope and fee. Final revised scope and fee received (11/8/23).

GWA Engineering drafting letter to request utility easements through Government properties. GM signed letter to Port Authority (6/30/23).

Submitted expanded scope of work of Hagatna Main SPS rehabilitation work to Designer for cost proposal on 3/27/23 and negotiated costs. Final scope and fee for the FM design pivot and SPS assessment received (11/8/23); CCU approved scope and fee (11/28/23). CO#1 (revised scope and fee) submitted by Designer (12/12/23), signed by Legal (12/27/23, approved by GM and forwarded to Designer (1/8/24). SPS assessment team conducted assessment week of 2/5/24; completed an initial structural, civil, electrical assessment of SPS, and now working on a report and gathering additional information for design. Designer submitted Flow Analysis TM (3/8/24) discussing initial thoughts; met with Consent Decree team (4/2/24) to discuss options. Forwarding TM with description on discussions to AGME for discussion with GM by week of 4/8/24.

B-35 Hagatna Wastewater Treatment Plant Causeway and Facility Structural Analysis S20-004-BND

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/5/2024	Mauryn Q. McDonald, P.E.	George J. Watson	Wastewater CIP
Analysis and evaluation of Hagatna WWTP causeway bridge and facility structural integrity.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-08-ENG-2021	4/2/2021	12/2024	Duenas, Camacho & Associates, Inc.
Construction Management				
Construction				

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	Bond 2020 MP-Gen-Misc-05	$114,820.00	30%
Construction Management			
Construction			

ACTIVITIES

- DCA submitted subcontractor cost proposal for $86K for structural analysis for mechanical, electrical, and architectural assessment (01/06/23); Change Order (CO) 1 signed by DCA and GWA Engineering, and routed for GM signature (3/14/23).
- GM directed to exclude mechanical assessments; DCA resubmitted proposal w/out mechanical (4/26/23) for total cost of $65.7K.
- Updated CO1 sent to DCA for signature (4/27/23), and received revised CO back from DCA for processing (5/15/23); received comments from Legal (7/24/23), and signed by Legal (7/28/23), Finance (8/17/23), and approved by GM (8/18/23).
- Met with DCA on to discuss project path forward on causeway, CO work, and additional scope for to include potential assessment on clarifiers, and bypass on causeway for Hagatna Main SPS. New scope and fee proposal received (2/5/24) at $150K (not including the abovementioned 65.7K), now waiting on final proposal writeup for CO2.
- Additional discussion with DCA on a SCADA assessment and design for the WWTP to help with alarms and alerts, and site visit (2/13/24) to walk with DCA and review current system. DCA submitted draft SOW for SCADA (3/5/24) for review.
- GWA, DCA (Designer), and GHD (Hagatna force main designer) met to discuss causeway and bypass force main design (2/7/24); both designers working on respective designs and DCA working to develop options for bypass FM on causeway.

Considering options for causeway rehabilitation.

B-36 Hagatna Wastewater Treatment Plant Interim Disinfection S19-001-BND

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/8/2024	Mauryn Q. McDonald, P.E.		Wastewater CIP

The project is a feasibility and pilot study for the use of an interim disinfection process including development of a proposed feasibility and pilot study work plan, wastewater characterization analysis and effluent quality analysis, dosing and concentration analysis, bench and pilot scale testing, chemical sourcing, transport and storage analysis, and development of detailed technical report documenting the findings and recommendations on the implementation of peracetic acid (PAA) interim disinfection.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-01-ENG-2019	7/25/2019	2/15/2021	Duenas, Camacho & Associates, Inc.

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	IFCIP	$736,265.92	75%

ACTIVITIES

Chemical enhanced primary treatment (CEPT) optimization and PAA disinfection bench scale study was completed in 2019 and documented through a 7/12/2019 technical memo (TM). The TM identified repairs necessary to implement a full-scale PAA pilot project.

Contract amendment #1 was to include a life cycle analysis on PAA and UV disinfection options covering a 20-year life cycle cost, repair of flocculation tank mixers, coagulant manifold, influent flow meter, effluent isolation gate, digester, and clarifier. The repairs are needed for full-scale plant bench testing for a 1-week period.

Contract amendment #2 was to include parts for clarifier repairs, as proper clarifier operations were needed for the pilot project.

The full-scale plant bench testing was completed in 2021 and a meeting with GWA and DCA was held on 3/9/2022. GWA was to determine long-term plans for the HWWTP, which includes considerations for climate change impacts. A Water and Environmental Research Institute's 4/30/2022 "Impact of Climate Change on Guam Waterworks Authority Infrastructure" advisory paper projected a 1-foot sea level rise by the year 2050. The long-term plans for the HWWTP will be addressed under a study.

The technical memo for the interim disinfection project will be finalized and the project 1st quarter of 2024.

B-37 Aplacho Drainage and Roadway Improvements

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/3/2024	Mauryn McDonald, P.E.	Rylma Carino	Wastewater

The Aplacho Drainage and Roadway Improvements project will provide subterranean drainage along the crossroad extend the drain to daylight and harden with concrete headwall. The roadway will be rehabilitated due to the seepage of water during the rainy season.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Conceptual Design	N/A	03/2022	08/2022	DPW
Construction Management	N/A			GWA/Internal CM
Construction	IFB -07-ENG-2023	TBD	TBD	GWA

PHASE	FUNDING SOURCES	COST	% COMPLETE
Conceptual Design			N/A
Construction Management			N/A
Construction	WW 11-03 2016 Bond and MP-WW-Pump-01	$1,053,819.91	0%

ACTIVITIES

The project is a joint project between GWA and DPW. DPW will provide design services and GWA will be responsible for the construction and construction management of this project. Upon completion of the project, the drainage system will be turned over to DPW.

1. Bid opened on 11/20/2023.
2. Notice of Intent to awarded to A & R Pacific on January 2, 2024.
3. CCU was approved on 1/23/2024
4. The procurement including the contract was forwarded to the AG's office for review and comments based on the legality and form and due on 2/17/2024.
5. Sent the advance copy of plans on 2/21/2024 to GEPA for permit review.
6. The MOA between DPW and GWA was approved on 2/22/2024.
7. Construction plans signed.
8. Budget transfer forwarded to Finance on 3/5/2024 for processing.
9. SHPO responded Section 106 Consultation and concurred “No historical properties affected”.
10. Insurance was reviewed by Engineering and forwarded to Legal for action.

B-38 Indefinite Delivery-Indefinite Quantity Islandwide Sewer Collection/Transmission System Repair, Rehabilitation, and Replacement — S22-002-BND

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 4/5/2024	Mauryn Q. McDonald, P.E.	George J. Watson	Wastewater CIP
IDIQ to provide GWA with ability to design, manage, and address wastewater repairs, rehabilitation, and replacements within our sewer collection/transmission system.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Construction Management	RFP-06-ENG-2022	In Procurement	n/a	
Design/Build Construction				

PHASE	FUNDING SOURCES	COST	% COMPLETE
Construction Management	GWA Bonds, USEPA SRF Grants, SDC	In Procurement	
Design/Build Construction			

ACTIVITIES

- Completed selection of two A/E firms for PM/CM (AECOM and BC) on 11/10/22; completed negotiation with AECOM and BC on respective TO No. 1.
- Submitted AECOM signed contract agreement to Finance (Legal signed on 3/14/23) for approval, along with TO No. 1 (Legal signed 5/10/23) for approved; both currently processing in Finance.
- Submitted BC signed contract agreement to Legal (6/26/23) for approval, with TO No. 1 in review before sending to BC for signature.
- Both IDIQ Contract Agreements were pending approval of E-505 template to replace the current agreement (E-500). New draft E-505 templates were sent to A/E firms, with comments for review.
- TO No. 1 proposal costs with 2024 fees for BC being completed. BC sent updated fees (4/4/24); reviewing and will produce final TO No.1 to be forwarded with agreement to BC for signature; AECOM signed the agreement and TO No.1 on 3/8/24; routed for GWA processing. AECOM agreement sent to AG's office for review (4/4/24); giving two-week review time. No CCU approval needed.
- Working on scope for TO No. 2 for both AECOM and BC for CCTV work, and design of high priority gravity mains per CD.

GWA Engineering producing ID/IQ RFP for Design-Build (DB) Contractor(s); looking to advertise for ID/IQ DB RFP before end of year, pending execution of ID/IQ PM/CM agreements and supporting task orders.

B-39 Casimiru Waterline Replacement W20-003-BND

REPORT	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 9/08/2023	Barbara Ann C. Cruz, P.E.	Ernesto L. Villarin	Engineering Support

The work to be performed consists of replacing 2,560 linear feet of existing 6-inch asbestos cement pipe along Casimiru Street and Duenas Street with 6-inch PVC pipes. The scope includes installation of fire hydrants, reconnection of existing serve laterals from the old to new waterline, pressure testing and disinfection of new waterline, reconnection of existing PRV from old to new waterline, and asphalt pavement restoration.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design-Build (Construction)	IFB-07-ENG-2020	2/13/2021	5/30/2022	Giant Construction Inc./ WB Flores Engineers
Construction Management			6/30/2023	GWA

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design-Build (Construction)	Bond 2013 PW 09-03 Bond 2020 PW 09-03	$644,480.00	100%
Construction Management	In-house		100%

ACTIVITIES

06/15/2023	Received from Giant as-built drawings both cad file and pdf.
06/28/2023	Received from Giant Invoice No. 5 (Final) for $35,074.00. Prepared final COP no. 5 and Memo to Acting AGME with information to support approval of final payment. Late submission of acceptable as-built drawings was considered to have little to no impact to the project and commissioning of the waterline replacements.
06/30/2023	Acting AGME signed and submitted the final COP no. 5 to Finance to process payment and project close-out. Construction Project Completed

B-40 Reifsnider Street Waterline

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 9/08/2023	Barbara Ann C. Cruz, P.E.	Ernesto L. Villarin	Engineering Support
The work to be performed includes installation of 760 feet of 2-inch PVC waterline along Reifsnider Street and 160 feet of 6-inch PVC waterline crossing Murray Street and connecting to existing 6-inch waterline along Saltan Street.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design-Build (Construction)			4/2023	GWA
Construction Management			4/2023	GWA

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design-Build (Construction)	Internally Funded CIP	$45,799.56	100%
Construction Management			100%

ACTIVITIES

02/28/2023	Installation of 6-inch waterline crossing Murray Street was completed, including tie-in to existing 6-inch waterline at Saltan street. Remaining work are 2-inch waterline connection to new 6-inch waterline, pressure testing and disinfection of new waterline, installation of water meter for the complaining resident(s), and asphalt pavement restoration.
03/30/2023	The 2-inch waterline connection to 6-inch waterline and the remaining 2-inch waterline crossing the pavement to location of new water meter were completed. Pressure testing and disinfection of new waterline expected to be completed 4/15/2023.
04/03/2023	Permit section needs to notify Mr. Cruz to apply for water meter connection.
04/15/2023	Disinfection and testing of new waterlines completed.
05/10/2023	Restoration of road a.c. pavement at Reifsnider Street was completed. Restoration road a.c. pavement at Murray Street is still pending.
08/12/2023	Restoration of road a.c. pavement at Murray Street completed. In-house construction completed.

B-41 Temporary Booster Pump Station Consolacion Street, Asan WOP-01-2022

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 02/02/2024	Barbara Ann C. Cruz, P.E.	Ernesto L. Villarin	Engineering Support
This project intends to provide, in the interim, a temporary booster station that will supply adequate water pressure to customers located in the upper elevations of Consolacion Street, Asan. The ongoing CIP projects that will address this water pressure problem will take a couple of years to complete.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design-Build (Construction)			03/29/2024	GWA
Construction (Electrical)			9/30/2023	R&E Builders, LLC
Construction Management			12/31/2023	GWA

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design-Build (Construction)	Internally Funded CIP	$38,771.89 24,950.00	85% 50%
Construction (Electrical)		$49,999.00	100%
Construction Management			

ACTIVITIES

Activities leading up to 01/02/2024 are briefly described in prior monthly reports.

01/02/2024	Supplier inform GWA that the duplex booster pump system is ready to be shipped from the factory. However, he noticed the influent/effluent piping did not appear correct. Supplier will contact the manufacturer.
01/03/2024	Manufacturer made corrections to address the flow orientation issue. GWA Engineer reminded the Supplier to include a 26-gallon tank in the shipment. Supplier acknowledged and will contact the manufacturer to include the tank and dome light accessories. ETA is 4 to 6 weeks or not later than the week of February 19, 2024. Replacement of the temporary booster pump with the new packaged duplex pump system will be performed by GWA. The revised expected completion date is March 29, 2024.
01/12/2024	Supplier sent revised schedule, package booster pump will arrive at Supplier's warehouse on February 3, 2024.
02/05/2024	Package booster pump was delivered by vendor to GWA Warehouse.
02/27/2024	Ops gave tentative schedule of package booster pump installation for first week of March 2024.

B-42 Groundwater Production Meter Replacement — W19-001-BND

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 04/04/2024	Barbara Ann C. Cruz, P.E.	Ernesto L. Villarin	Engineering Support
The project will replace the above-ground discharge piping and meters at 30 existing deep wells located in different parts of the island. An additional 15 deep wells will be added through an executed change order.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	PMO Facility Plan 2016	9/22/2017	10/2018	Brown and Caldwell
Construction Management			3/2023	GWA
Construction	IFB-05-ENG-2019	4/29/2020	3/2023	Giant Construction Inc.

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design			100%
Construction Management			100%
Construction	Bond 2013 PW 05-07	$ 142,053.65	100%
	Bond 2016 PW 05-07	$1,250,000.00	100%
	Bond 2020 MP-PW-MISC-02	$ 641,896.46	100%
	SDC	$ 151,207.27	100%

ACTIVITIES

Activities leading up to December 30, 2023 are briefly described in prior monthly reports.

12/30/2023 Ordered batteries has not arrived as scheduled. Contractor following-up.
01/31/2024 Contractor advised that ordered batteries arriving 02/03/2024.
02/16/2024 Contractor checked the following deep wells:
D-24 – Battery voltage was very low. Found water inside meter housing caused by condensation. After cleaning and replacing the old batteries with new batteries, the meter worked.
D-19, Battery voltage readings were normal but found water inside the meter housing. After replacing electronic module, the meter worked.
M-17B – Battery voltage was very low. Batteries, electronic module, and display module were all replaced and the meter worked.
A-08 – Meter was not working. Battery voltage was normal. After replacing the electronic module, the meter worked.
02/20/24 Contractor ordered 4 battery sets for replacement to dead batteries. These batteries will come from Switzerland shipped to US and then Guam. Because on restrictions on shipping of lithium batteries, arrival is estimated by May 2024.

B-43 Ugum Water Treatment Plant Rehabilitation W22-10-BND

UPDATE	SUPERVISOR	PROJECT ENGINEERS	SECTION
As of 04/04/2024	Barbara Ann C. Cruz, P.E.	Ernesto L. Villarin	Engineering Support

The project involves the rehabilitation or upgrades to the raw water pumps at the river intake, settling basins, membranes, pipe gallery, generator room, backwash, neutralization tank, sludge tank, thickening system, operations and chemical building, and administration building to improve plant capacity, treatment performance, and provide reliable operation of the water treatment plant.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Assessment of WTP	Task Order No. 3 IDIQ PM/CM	7/6/2021	4/2022	Duenas, Camacho and Associates, Inc.
Construction Management	Task Order No. 3 IDIQ PM/CM			Duenas, Camacho and Associates, Inc.
Construction	IFB-05-ENG-2023			

PHASE	FUNDING SOURCES	COST	% COMPLETE
Assessment of WTP	MP-PW-SWTP-03	$173,490.00	100%
Construction Management	MP-PW-SWTP-03	$ 89,114.00	0%
Construction	2010/2013/2020 PW 09-01 2016 WW 11-03 2020 MP-PW-SWTP-02 2020 MP-PW-SWTP-03 EPA Grant M96902621	766,129.23 1,798,477.47 1,174,000.00 887,396.00 3,847,050.00	0%

ACTIVITIES

Activities leading up to 01/31/2024 are described in prior monthly reports.

01/31/2024	Contract was fully executed. Notification of award to be posted to GWA website before issuance of NTP.
02/05/2024	Notice to Proceed with 425 calendar days to complete substantial completion.
02/08/2024	Pre-construction conference was conducted. Contractor submitted preliminary Construction Schedule for the first 60 days, preliminary Schedule of Submittals, preliminary Schedule of Values, and preliminary Critical path and Sequencing.
02/15/2024	Meeting with CM and Contractor. Discussed additional items requested by Operations and Electrical.
02/20/2024	Contractor visited the project site to assess the additional items requested by Operations to be included to the project as possible change order.
03/2024	Contractor submitted building permit to DPW but the application was not accepted. DPW requested PE stamped drawings despite the project called for replacement of parts only.
03/06/2024	CM was requested to submit fee proposal for PE stamped drawings as required by DPW.

03/21/2024	CM submitted the requested fee proposal. It involves the scope of work for dredging the river intake and the hardening of access road adjacent to riverbank, PE stamped drawings and permit support.

B-44 Design-Build of Pago Bay 12-inch Waterline Replacement 12303

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 04/04/2024	Barbara Ann C. Cruz, P.E.	Ernesto L. Villarin	Engineering Support

The project will complete the conceptual design prepared by GWA Engineering, structural integrity assessment of the bridge wall that will support the replacement waterline, installation of 12-inch ductile iron waterline including pipe supports, pressure testing and disinfection of new waterline, reconnection to existing waterlines, asphalt pavement restoration, disposal of existing damaged 12-inch waterline, and condition assessment of existing 16-inch waterline hanging under the Bridge.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design-Build (Construction)				
Construction Management				

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design-Build (Construction)	Bond 2010 PW 11-01 Bond 2010 PW 09-06 Bond 2020 MP-PW-Pipe-10 Bond 2020 MP-PW-Pipe-11 Bond 2020 MP-PW-Pipe-12	$25,114.00 $62,498.00 $200,000.00 $200,000.00 $12,388.00	
Construction Management			

ACTIVITIES

02/28/2023	Engineering sent a follow-up email to Finance inquiring the status of budget transfer request.
03/15/2023	Received message from Finance that budget certification is under review.
04/06/2023	Funding certification was approved and signed by GM.
04/17/2023	Updated Front End Documents was transmitted to Josephine for transmittal to Legal.
6/30/2023	Updating Front End Documents based on feedback from Legal Office.
08/02/2023	Review and edits of the technical specifications, conceptual plans and front end documents are work in progress.
08/28/2023	Routed the project Front End Documents to Engineering/Planning Section for review.
09/29/2023	Engineering and Legal discussed the front-end documents for a Design-Build solicitation. The documents are with Legal for review.
10/29/2023	Review and apply the EJCDC D-520 Owner-Design Builder Agreement for this design-

	build project is in progress.
12/30/2023	Review of EJCDC D-520 Owner-Design Builder Agreement still pending.
03/25/2024	Reviewed with AGME and Barbara the General Conditions – Design Builder, EJCDC D-700.

B-45 Current Balancing Unit for Deep Well A-09

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 01/05/2024	Barbara Ann C. Cruz, P.E.	William F. Esteves	Engineering Support

The project is a pilot project to install and evaluate the effectiveness of a Current Balancing Unit (CBU) for a GWA deep well. Current imbalances on the power supply to a 3-phase electric motor can cause the motor to overheat and shorted its life expectancy. The wells are operated by 3-phase electric motors. In its product literature, the CBU will monitor and automatically adjust the 3-phase currents to minimize the current imbalance to 3% or less. The CBU is also expected to accommodate wide fluctuations of voltages, so that even if the voltages from the utility are shifting up or down, the current stays balanced. There are other factors that can cause motor overheating but current imbalance is a condition that can happen frequently.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Conceptual Design				GWA
Construction Management				GWA
Design-Build (Construction)				

PHASE	FUNDING SOURCES	COST	% COMPLETE
Conceptual Design			75%
Construction Management			0%
Design-Build (Construction)		$200,000.00 (estimate)	0%

ACTIVITIES

08/02/2023	Water Production Manager submitted a Memo to request for funds to purchase and install a Current Balancer Unit (CBU) at Well Y-15 in the amount of $154,048.21. Estimated cost includes electrical and concrete materials, crane rental and CBU installation/commissioning services. Y-15 has an estimated expenditure cost of $394,677.55 from 2008 to 2023. The purchase and installation of current balancer unit will be expected to reduce motor failures and well pull outs.
08/10/2023	GM requested AGME to prepare and submit a technical memo to document the power issues and reference manufacturer information on power imbalances to be used to discuss with GPA on proposed resolution and possible reimbursement of pump/motor replacement costs.
11/03/2023	AGME submitted the technical memo that covered a comprehensive analysis of the

	power issues at Y-15.
11/22/2023	AGME signed and forwarded the Memo from Water Production Manager to CFO and GM recommending approval to use bond funds. CFO acknowledged to route the Memo to budget and then to the GM.
01/05/2024	GWA Operations will install and Engineering will perform the study. The revised project site is Well Y-15. Engineering will meet and coordinate with Operations.

B-46 Deep Well Power Line Conditioner Pilot Project

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 11/09/2023	Barbara Ann C. Cruz, P.E.	William F. Esteves	Engineering Support

The project is a pilot project to install and evaluate the effectiveness of a power line conditioner for providing “clean” incoming power for a GWA deep well. Evaluation includes transient and surge protection and suppression, under/over voltage correction and protection, phase imbalance correction and protection, and capital and operation costs/savings.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Conceptual Design				GWA
Construction Management				GWA
Design-Build (Construction)				

PHASE	FUNDING SOURCES	COST	% COMPLETE
Conceptual Design			75%
Construction Management			0%
Design-Build (Construction)	EE -9-02, EE 09-05, MP-PW-WELL-06	$200,000.00 (estimated)	0%

ACTIVITIES

08/02/2023	This project is on hold. Changing direction to perform a Sustainable Green Energy pilot project for deep wells.

B-47 GWA Upper Tumon Warehouse Renovation 42102

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 03/05/2024	Barbara Ann C. Cruz, P.E.	Ernesto L. Villarin	Engineering Support
The basic bid scope of work involves the design and construction of the replacement of existing warehouse roofing, sidings, exterior metal stairs, metal door, roll-up doors, and installation of ventilation system. The additive bid scope of work involves the demolition and replacement of existing office walls, ceilings, doors and windows, floor paving, painting, and electrical works.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Construction	IFB-03-ENG-2023			
Construction Management				GWA

PHASE	FUNDING SOURCES	COST	% COMPLETE
Construction	Internally Funded CIP		
Construction Management			

ACTIVITIES

Activities leading up to 01/19/2024 are described in prior monthly reports.

01/19/2024 Meeting with GM, AGME, AGMO, CFO and Engineering staff was held to discuss Design-Build of GWA Upper Tumon Campus Improvements. Design-Build of GWA Upper Tumon Campus Improvements will be comprised of Phase I and Phase II. Phase I includes Upper Tumon Warehouse Rehabilitation and Meter Testing Facility Repair while Phase II will involve Customer Service Center Renovation and Laboratory Equipment Replacement.

02/27/2024 Refer to “Upper Tumon Campus Improvements, Phases 1 and 2”.

Note: In future monthly reports, the Upper Tumon Warehouse Renovation project will be replaced by and reported under the “Upper Tumon Campus Improvements, Phase 1”.

B-48 Upper Tumon Campus Improvements

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 03/08/2024	Barbara Ann C. Cruz, P.E.	Ernesto L. Villarin	Engineering Support

This project involves the following:

1. Phase I - Upper Tumon Warehouse Renovation and Meter Testing Facility Repair
2. Phase II – Upper Tumon Customer Service Center Renovation and Laboratory Equipment Replacement

Phase 1: Warehouse renovation involves the replacement of existing warehouse exterior structure, stairs, doors and ventilation system. May include replacement of office walls, ceilings, doors, windows and floors, and electrical rehab. Meter Testing Facility repairs of structural and water damages caused by Super Typhoon Mawar.

Phase 2: Renovation of the Upper Tumon Customer Service Center including the Information Technology and Laboratory Office areas. Replacement of Laboratory's dedicated outdoor air units.

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Construction				
Construction Management				GWA

PHASE	FUNDING SOURCES	COST	% COMPLETE
Construction			
Construction Management			

ACTIVITIES

02/27/2024	CCU approved GWA Resolution No. 10-FY2024, Relative to Requesting Approval to Procure Design-Build of GWA Upper Tumon Campus Improvements. The approved total amount for Phases 1 and 2 is $8,248,400.00.
03/12/2024	Filed a petition to the Guam PUC for approval of the procurement

B-49 Rojas Harmon Stormwater Drainage 42306

UPDATE	SUPERVISOR	PROJECT ENGINEER	SECTION
As of 03/08/2023	Prudencio F. Aguon	Vincent Edward T. Laguana	Planning
For design of stormwater infrastructure in Harmon Rojas Street to alleviate flooding issues. Mutually beneficial project for GWA and DPW.			

PHASE	PROCUREMENT NO.	CONTRACT DATE	EXPECTED COMPLETION	FIRM
Design	RFP-07-ENG-2023	pending	n/a	n/a

PHASE	FUNDING SOURCES	COST	% COMPLETE
Design	SO-98T45501-01	$1,000,000.00	0%

ACTIVITIES

Advertised 09/22/2023. Due date is 10/22/2023.
Bid opening was on 10/31/2023. Proposals were evaluated and scored.
GHD was selected proposer.
MOU was signed by DPW director and coordination with DPW is ongoing.
GWA reached an agreement to a scope of work and fee with selected firm.
Contract was drafted and approved by GWA Management. Contract was sent to AG for review.
Contract reviewal period estimated at 2 weeks.

GUAM WATERWORKS AUTHORITY

"Better Water. Better Lives"

Financial Statement Overview
March 2024

Key Financial Indicators

Indicator	Target	January 2024	February 2024	March 2024
DSC YTD				
• Per Section 6.12 of Indenture	1.25	1.59	1.58	1.49
• Per PUC / CCU	1.30	1.59	1.58	1.49
Days – Cash on Hand	120 days	278 days	290 days	312 days
Collection Ratio**				
• Month to Date	99%	98%	99%	100%
• Year to Date	99%	87%	89%	91%
Days Billed	30 days	30 days	30 days	30 days
Account Receivable Days	30 days	39 days	39 days	38 days
Account Payable Days	45 days	38 days	38 days	33 days
Employee Count	400 FTE	357 FTE	351 FTE	350 FTE
Water Demand				
• Month to Date	451,933	424,459	418,166	451,256
• Year to Date	2,711,600	1,687,688	2,105,853	2,557,110
Wastewater Flow				
• Month to Date	317,500	309,902	298,261	338,918
• Year to Date	1,905,000	1,236,157	1,534,418	1,873,336
Operations & Maintenance Expense*	$6,567,186	$5,552,981	$5,537,977	$6,311,579
Water Customers	43,978	43,525	43,529	43,517
Wastewater Customers	30,781	30,879	31,216	31,298

**Excludes Depreciation*
*** Includes SDC Revenue and Collection*

Water and Wastewater Consumption

Water consumption for March 2024 is 4% higher than March 2023. Increases in Government of Guam consumption largely drove the increase. Wastewater flows are 14% less for the month of March compared to last year. Wastewater flow decreases in the Federal Government class were a significant reason for the decrease. Note that billing days in March 2024 and March 2023 were both 30 days.

Year-to-date water consumption as of March 2024 was 1% below prior year and wastewater flows were 2% below prior year. Decreases in water consumption for the Government of Guam and Residential customer classes were the main reasons for the decrease in water consumption. Decreases in wastewater flows from Commercial and Residential customer classes were the prime reasons for the decrease in flows. Note that we are investigating large increases in consumption the recent Navy billings to determine how much of those billings will be passed on to GPA for the MEC facility.

Year-to-date average daily water consumption (ADC) as of March 2024 of 14,206 kgals is 2% less than the prior year's 14,509 kgals. Decreases in the Government of Guam and Residential customer classes largely drove the reduction in ADC. Year-to-date billing days at 180 days are two days more than the prior year.

GUAM WATERWORKS AUTHORITY
"Better Water. Better Lives"

Balance Sheet (Schedule A)

- Total Assets & Deferred Outflows of Resources of $1.220B in September 2023 increased by $9.2M or 1% to $1.229B in March 2024. Current Assets increased by $12.1M primarily due to increases in internally restricted cash and accounts receivable. Property, Plant and Equipment decreased by $5.1M due to increases in depreciation. Other Noncurrent Assets increased by $3.2M due to increases in investments.
- Liabilities & Deferred Inflow of Resources of $886.3M in September 2023 decreased by $1.0M or less than 1% to $887.3M in March 2024 as increases in Trades Accounts Payable were offset by decreases in Contractors Payable. Note that the bond refunding transactions have not been posted as information is still being analyzed and the advance payment of $1M from the insurance company for Mawar has been booked as deferred revenue.
- Accounts Receivable days in March 2024 were 38 days and in February 2024 were 39 days. Accounts Payable days In March 2024 were 33 days and in February 2024 were 38 days. Schedule I presents Accounts Receivable Aging by Customer Class and Schedule H contains a breakdown of Government Receivables. Schedule J reports Accounts Payable Aging.

Statement of Operations and Retained Earnings (Schedules B-E)

- Total Operating Revenues for March 2024 of $11.4M is $595.0K or 5% more than the budget of $10.8M March 2024 Total Operating Revenues are 13% or $1.3M more than March 2023's $10.1M. Note there was a rate increase of 16.7% effective October 2023.
- Year-to-date Operating Revenues as of March 2024 of $64.6M were $323.1K less than budget and $9.4M or 17% more than Year-to-date Operating Revenues as of March 2023 of $55.3M.
- Below are the percentages of operating revenues (water and wastewater) contributed by GWA's customer classes for FY2024 and FY2023 as well as the revenue totals:

	Customer Class	FY2024		FY2023	
○	Residential	$26,863,629	42.28%	$23,347,082	43.01%
○	Commercial	13,514,454	21.27%	11,903,199	21.93%
○	Hotel	11,258,503	17.72%	8,474,653	15.61%
○	Government of Guam	7,390,605	11.63%	6,807,127	12.54%
○	Federal Government	4,222,535	6.65%	3,522,174	6.49%
○	Agriculture, Golf Course, Irrigation	291,475	0.46%	228,442	0.42%
	TOTALS	$63,541,201	100.00%	$54,282,676	100.00%

- Total Operating Expenses for March 2024 of $8.7M were $192.5K or 2% less than budget of $8.9M. March 2024 Total Operating Expenses were 3% or $227.8K less than March 2023's $8.9M. Note the Navy billing for water is being analyze due to large increases in consumption as well as a substantial increase in the Navy rates.
- Year-to-date Operating Expenses as of March 2024 of $50.7M were 5% or $2.7M less than the budget of $53.3M and 4% or $2.0M less than March 2023's $52.7M. Water Purchases, Salaries and Benefits, Depreciation, and Retiree Benefits increased year over year while Power Purchases, Administrative & General Expense, and Contractual Expense decreased.

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- Earnings from Operations for March 2024 of $2.7M were 41% or $787.5K more than the budget of $1.9M and $1.5M more than March 2023's $1.2M. Change in Net Assets for March 2024 of $1.9M was 4% or $68.3K more than the $1.8M budget and $1.3M more than March 2023's $627.9K. The increase in the Change in Net Assets year over year was mostly due to the Earnings from Operation.
- Year to Date Earnings from Operations as of March 2024 of $14.0M is 20% or $2.4M more than the budget of $11.6M and $11.4M more than prior year's $2.6M. Year-to-date Change in Net Assets as of March 2024 of $8.1M is $2.9M or 26% less than budget of $11.0M and $402.0K or 5% more than prior year's $7.7M.
- No Rate Stabilization Funds were used in March 2024. There is a balance of $950.0K in the RSF at the end of March 2024.

Cash Flow (Schedule F)

- FY2024 cash flows from operating activities were $26.7M, $21.2M in cash used in capital and financing activities and cash used in investing activities was $4.9M resulting in an increase in cash of $650.3K. Days Cash on Hand for March 2024 was calculated at 312 days compared to February 2024's 290 days. Schedule G contains a schedule of restricted and unrestricted cash and investments.

Customer Payments

While only 7% of payments are made in cash, more than a third of payments continue to be made in person. The Upper Tumon drive through continues to remain open.

On April 28, 2020, CCU Resolution 24-FY2020 granted the lifting of credit card limits on payments for non-residential accounts. In FY2024, approximately 53% of payments were made with credit cards. Below is a summary of non-residential credit card payments and related fees.

Month	Customer Count	Amount Paid	Fees	% Of Fees to Payments
May – September 2020	140	$241,335	$4,952	2.05%
October 2020–September 2021	526	$1,119,286	$22,505	2.01%
October 2021– September 2022	738	$3,076,971	$61,588	2.00%
October 2022 -September 2023	783	$3,420,468	$66,158	1.93%
October – December 2023	192	$1,035,322	$20,816	2.01%
January 2024	80	$323,378	$6,502	2.01%
February 2024	80	$344,642	$6,929	2.01%
March 2024	74	$434,922	$8,745	2.01%

The new vendor for the recent merchant services procurement has been selected and details are being finalized for the transition in May.

The Upper Tumon office is open for payments on Saturdays. For the four Saturdays in March, 446 payments totaling $100,460 were made towards GWA billings and 684 payments totaling $159,802 were made for GPA.

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For the month of March, Finance posted $24,511 in utility payments from the Department of Administration (DOA) for eligible renters as part of the Guam Emergency Rental Assistance Program (GERAP). There were $6,615 in payments received for eligible homeowners as part of the Guam Homeowners Assistance Fund (GHAFP).

Guam Solid Waste (GSW) Customer Payments

GPWA began to accept GSW payments on June 6, 2022. For the month of March 2024, GWA accepted $68,898 in GSW payments at the Upper Tumon Office. GWA will bill $1,240 to GSW for processing fees.

CIP Update

Below is a table providing a summary of the various sources of funding available for GWA CIPs. The expenditures are life to date. Note that Department of Interior Grants also include funding for training and the USEPA balances include a grant that expired in September 2023.

Funding Source	Available Funds	Expenditures as of 3/31/2024	Outstanding Encumbrances	Funding Request	Total Expenditures, Encumbrances, & Funding Requests	Unobligated Project Costs 3/31/2024	% Unobligated
B2016	$ 142,564,447	$ 118,796,317	$ 18,491,188	$ 1,093,129	$ 138,380,634	$ 4,183,813	2.93%
B2017	$ 87,884,360	$ 84,200,440	$ 546,009	$ 443,214	$ 85,189,663	$ 2,694,697	3.07%
B2020A	$ 131,303,953	$ 19,185,991	$ 70,098,268	$ 5,379,449	$ 94,663,707	$ 36,640,246	27.90%
B2020B	$ 140,464,317	$ 137,278,571	$ 1,417,344	$ 1,468,808	$ 140,164,724	$ 299,594	0.21%
Construction Fund	$ 4,828,344		$ 1,798,477		$ 1,798,477	$ 3,029,867	62.75%
SDC	$ 18,530,727	$ 12,185,510	$ 260,303	$ 1,094,000	$ 13,539,814	$ 4,990,913	26.93%
DOI	$ 2,133,783	$ 212,679	$ 46,324		$ 259,003	$ 1,874,781	87.86%
USEPA	$ 120,828,094	$ 33,324,378	$ 10,207,421		$ 43,531,799	$ 77,296,295	63.97%
ARPA	$ 8,904,346	$ 478,035	$ 686,287		$ 1,164,322	$ 7,740,024	86.92%
IFCIP	$ 22,163,049	$ 14,143,836	$ 1,558,217	$ 6,470,326	$ 22,172,380	$ (9,330)	-0.04%
Totals	$ 679,605,422	$ 418,768,815	$ 105,824,768	$ 15,465,847	$ 540,864,523	$ 138,740,899	20.41%

FY2025-FY2029 Financial Plan

Virtual meetings with the PUC consultants on the rate petition have been scheduled for the beginning of May. Presentations to various professional and community groups will be scheduled in April and May.

The PUC approved the proposed rate design in principal at their March meeting. The rate design will be rolled out in FY2026 at the earliest.

Refunding Update

The Series 2024A Bonds closed on March 14 and the Series 2024B Bonds closed on April 2, 2024. The GWA Finance team is working with the Trustee to ensure all the appropriate accounts have been set up.

GEDA posted the notice of defeasance related to the bonds that were refunded on EMMA.

Invest Guam Symposium

GEDA is hosting a 2-day InvestGuam Symposium on May 14 &15 in New York City. All the Government of Guam credits, including GWA have been invited to participate in the presentation to potential investors.

Tourism

Visitor arrivals in March 2024 were 66,753 compared to March 2023 arrivals of 61,388, an increase of 8.7%. Fiscal Year to Date arrivals at March FY2024 were 412,259 up 33.4% for March FY2023's YTD 309,086. Calendar Year to Date arrivals at March FY2024 were 223,577 up 28.3% from March CY2023's YTD 174,328.

GUAM WATERWORKS AUTHORITY
March 31, 2024
FINANCIAL AND RELATED REPORTS
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GUAM WATERWORKS AUTHORITY
Balance Sheet
March 31, 2024

SCHEDULE A

ASSETS AND DEFERRED OUTFLOWS of RESOURCES	Unaudited March 31, 2024	Unaudited September 30, 2023	Increase (Decrease)
Current Assets			
Cash			
Unrestricted (Schedule G)	50,975,203	50,324,888	650,316
Restricted Funds (Schedule G)	41,406,784	32,707,733	8,699,052
Accounts Receivable Trade, Net of Allowance for Doubtful Receivables of $9,582,684 at Mar 31, 2024 and $10,894,003 at Sep 30, 2023	14,917,788	11,484,716	3,433,072
Federal Receivable	859,464	2,191,346	(1,331,882)
Other Receivable	5,848,811	4,831,548	1,017,263
Prepaid Expenses	845,579	1,206,948	(361,369)
Materials & Supplies Inventory, Net of Allowance for Obsolescence of $122,856 at Mar 31, 2024 and $122,856 at Sep 30, 2023	5,058,350	5,096,658	(38,307)
Total Current Assets	119,911,981	107,843,836	12,068,145
Property, Plant and Equipment			
Utility plant in service			
Water system	445,503,779	444,848,078	655,701
Wastewater system	683,275,301	679,249,470	4,025,831
Non-utility property	34,167,148	33,683,228	483,920
Total property	1,162,946,229	1,157,780,776	5,165,453
Less: Accumulated Depreciation	(439,047,285)	(424,928,727)	(14,118,558)
Land	5,287,305	5,287,305	-
Construction Work in Progress	78,000,481	74,149,217	3,851,263
Property, Plant and Equipment, net	807,186,729	812,288,571	(5,101,842)
Lease and subscription IT assets	614,418	614,418	-
Noncurrent assets			
Restricted cash (Schedule G)	147,859,109	150,366,788	(2,507,679)
Investments (Schedule G)	75,950,414	70,239,665	5,710,749
Total other noncurrent assets and deferred charges	223,809,523	220,606,453	3,203,070
Total Assets	1,151,522,651	1,141,353,278	10,169,373
Deferred outflows of resources			
Regulatory assets	2,858,947	2,858,947	-
Debt defeasance due to bond refunding	26,171,691	27,184,464	(1,012,773)
Deferred outflows from pension	7,405,025	7,405,025	-
Deferred outflows from OPEB	41,247,962	41,247,962	-
Total Assets and Deferred Outflows of Resources	**1,229,206,276**	**1,220,049,676**	**9,156,600**
LIABILITIES, DEFERRED INFLOWS of RESOURCES AND NET ASSETS			
Current Liabilities			
Current maturities of long-term debt			
Series 2013 Revenue Bond	3,315,000	3,315,000	-
Series 2014 Refunding Bond	4,205,000	4,205,000	-
Series 2016 Revenue Bond	875,000	875,000	-
Series 2017 Refunding Bond	2,365,000	2,365,000	-
Lease and subscription IT liabilities	375,103	375,103	-
Accounts Payable -Trade	3,698,819	4,329,683	(630,864)
Accrued and Other Liabilities	18,499,850	14,216,960	4,282,889
Interest Payable	7,070,516	7,070,516	-
Accrued Payroll and Employee Benefits	1,442,359	1,334,022	108,337
Current portion of employee annual leave	729,390	729,390	-
Contractors' Payable	6,761,317	8,565,009	(1,803,692)
Customer and Other Deposits	2,297,847	2,268,968	28,879
Total Current Liabilities	51,635,201	49,649,651	1,985,550
Long Term Debt, less current maturities			
Series 2013 Revenue Bond	15,050,000	15,050,000	-
Series 2014 Refunding Bond	55,845,000	55,845,000	-
Series 2016 Revenue Bond	133,265,000	133,265,000	-
Series 2017 Refunding Bond	98,565,000	98,565,000	-
Series 2020A Revenue Bond	134,000,000	134,000,000	-
Series 2020B Refunding Bond	166,075,000	166,075,000	-
Unamortized Bond Premium/Discount	36,349,316	37,287,410	(938,094)
Lease and subscription IT liabilities	192,245	192,245	-
Net pension liability	46,038,335	46,038,335	-
Net OPEB obligation	116,272,057	116,272,057	-
Employee Annual Leave, Less Current Portion	913,289	913,289	-
Employee Sick Leave	1,429,998	1,429,998	-
Total Liabilities	855,630,442	854,582,986	1,047,456
Deferred inflows of resources:			
Contribution in Aid of Construction	639,287	646,937	(7,650)
Deferred inflows from pension	5,176,746	5,176,746	-
Deferred inflows from OPEB	25,852,937	25,852,937	-
Total Liabilities and Deferred Inflows of Resources	887,299,412	886,259,606	1,039,806
Net Assets	341,906,864	333,790,070	**8,116,795**
Total Liabilities, Deferred Inflows of Resources and Net Assets	**1,229,206,276**	**1,220,049,676**	**9,156,600**

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings **SCHEDULE B**
Comparative Budget vs. Actual for the period ending March 31, 2024

	Month to Date		Variance
	Actual (Unaudited) March-24	Budget March-24	Favorable / (Unfavorable)
OPERATING REVENUES			
Water Revenues	6,961,460	6,706,635	254,825
Wastewater Revenues	3,956,620	3,652,565	304,055
Legislative Surcharge	360,055	327,945	32,110
Other Revenues	36,470	39,525	(3,055)
System Development Charge	109,075	102,000	7,075
Total Operating Revenues	11,423,679	10,828,670	595,010
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	877,510	491,667	(385,843)
Power Purchases	1,863,625	1,935,131	71,505
Total Utility Costs	2,741,135	2,426,797	(314,338)
Salaries and Wages	1,671,782	1,825,560	153,778
Pension and Benefits	676,497	649,877	(26,620)
Total Salaries and Benefits	2,348,279	2,475,437	127,158
Capitalized Labor and Benefits	(253,428)	(346,595)	(93,167)
Net Salaries and Benefits	2,094,851	2,128,842	33,991
Administrative and General Expenses			
Sludge removal	98,195	27,993	(70,202)
Chemicals	31,011	159,944	128,933
Materials & Supplies	109,173	207,083	97,909
Transportation	29,745	64,580	34,835
Communications	9,403	13,268	3,864
Claims	43,924	14,917	(29,007)
Insurance	148,838	161,333	12,496
Training & Travel	31,792	16,763	(15,029)
Advertising	1,376	11,199	9,823
Miscellaneous	146,339	111,992	(34,347)
Regulatory Expense	22,675	18,250	(4,425)
Bad Debts Provision	(3,555)	188,520	192,075
Total Administrative and General Expense	668,915	995,841	326,926
Depreciation Expense	2,383,838	2,401,423	17,585
Contractual Expense			
Audit & Computer Maintenance	175,055	165,771	(9,283)
Building rental	41,855	50,264	8,408
Equipment rental	33,767	46,774	13,007
Legal	33,415	125,000	91,585
Laboratory	83,932	43,829	(40,103)
Other	109,149	190,403	81,254
Total Contractual Expense	477,173	622,041	144,868
Retiree Supp. Annuities and health care costs	271,045	252,159	(18,886)
Contribution to Government of Guam	58,458	60,809	2,350
Total Retiree Benefits	329,503	312,968	(16,535)
Total Operating Expenses	8,695,417	8,887,913	192,496
Earnings (Loss) from Operations	2,728,262	1,940,757	787,506
Interest Income - 2010/13/14/16/17/20 Series Bond	1,171,975	647,004	524,971
Interest Income - Other Funds	197,266	22,917	174,349
Interest Income - SDC	28,979	873	28,106
Interest Expense - 2010/13/14/16/17/20 Series Bond	(2,356,839)	(2,356,839)	-
Contributions from Local Government	-	-	-
Loss on Asset Disposal	-	(56,499)	56,499
Amortization of Discount, Premium and Issuance Costs	156,349	124,228	32,121
Defeasance due to bond refunding	(168,795)	(170,449)	1,654
Prior Year Adjustment	-	(7,229)	7,229
Total non-operating revenues (expenses)	(971,065)	(1,795,994)	824,929
Net Income (Loss) before capital contributions	1,757,197	144,762	1,612,435
Capital Contributions			
Grants from US Government	151,279	1,686,437	(1,535,158)
Grants from GovGuam & Others	-	8,937	(8,937)
Total Capital Contributions	151,279	1,695,374	(1,544,095)
Change in Net Assets	1,908,476	1,840,136	68,340
Debt Service Calculation			
Earnings From Operations	2,728,262	1,940,757	
System Development Charge	(109,075)	(102,000)	
Retiree COLA	58,458	60,809	
Interest/Investment Income	197,266	22,917	
Depreciation	2,383,838	2,401,423	
Plus withdrawals (deposits) to Rate Stabilization Fund	-	79,167	
ARPA Grant	-	-	
Balance Available for Debt Service per Section 6.12	5,258,750	4,403,072	
Debt Service			
Principal	896,667	896,667	
Interest	2,356,839	2,356,839	
Total	3,253,505	3,253,505	
Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)	1.62	1.35	
Debt Service Coverage (1.30X) (PUC)	1.62	1.35	

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings
Comparative for the period ending March 31, 2024

SCHEDULE C

	Month to Date Actual (Unaudited) March-24	Month to Date Actual (Unaudited) March-23	Variance Increase / (Decrease)
OPERATING REVENUES			
Water Revenues	6,961,460	5,687,593	1,273,866
Wastewater Revenues	3,956,620	3,988,518	(31,898)
Legislative Surcharge	360,055	295,330	64,726
Other Revenues	36,470	107,966	(71,497)
System Development Charge	109,075	61,057	48,018
Total Operating Revenues	11,423,679	10,140,465	1,283,214
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	877,510	465,499	412,011
Power Purchases	1,863,625	2,271,740	(408,115)
Total Utility Costs	2,741,135	2,737,239	3,896
Salaries and Wages	1,671,782	1,718,484	(46,702)
Pension and Benefits	676,497	667,974	8,523
Total Salaries and Benefits	2,348,279	2,386,458	(38,179)
Capitalized Labor and Benefits	(253,428)	(153,721)	(99,706)
Net Salaries and Benefits	2,094,851	2,232,736	(137,885)
Administrative and General Expenses			
Sludge removal	98,195	57,922	40,273
Chemicals	31,011	73,688	(42,677)
Materials & Supplies	109,173	126,894	(17,720)
Transportation	29,745	58,072	(28,327)
Communications	9,403	8,167	1,236
Claims	43,924	5,850	38,074
Insurance	148,838	147,927	911
Training & Travel	31,792	5,805	25,987
Advertising	1,376	4,699	(3,323)
Miscellaneous	146,339	94,997	51,341
Regulatory Expense	22,675	31,352	(8,677)
Bad Debts Provision	(3,555)	199,429	(202,984)
Total Administrative and General Expense	668,915	814,802	(145,887)
Depreciation Expense	2,383,838	2,356,785	27,053
Contractual Expense			
Audit & Computer Maintenance	175,055	164,663	10,392
Building rental	41,855	48,327	(6,471)
Equipment rental	33,767	27,689	6,078
Legal	33,415	97,432	(64,017)
Laboratory	83,932	20,609	63,323
Other	109,149	119,822	(10,673)
Total Contractual Expense	477,173	478,542	(1,369)
Retiree Supp. Annuities and health care costs	271,045	246,992	24,053
Contribution to Government of Guam	58,458	56,100	2,358
Total Retiree Benefits	329,503	303,092	26,411
Total Operating Expenses	8,695,417	8,923,197	(227,780)
Earnings (Loss) from Operations	2,728,262	1,217,268	1,510,994
Interest Income - 2010/13/14/16/17/20 Series Bond	1,171,975	770,610	401,365
Interest Income - Other Funds	197,266	125,576	71,690
Interest Income - SDC	28,979	6,252	22,727
Interest Expense - 2010/13/14/16/17/20 Series Bond	(2,356,839)	(2,400,140)	43,301
Contributions from Local Government	-	550,000	(550,000)
Loss on Asset Disposal	-	-	-
Amortization of Discount, Premium and Issuance Costs	156,349	124,228	32,121
Defeasance due to bond refunding	(168,795)	(170,449)	1,654
Prior Year Adjustment	-	(6,192)	6,192
Total non-operating revenues (expenses)	(971,065)	(1,000,116)	29,050
Net Income (Loss) before capital contributions	1,757,197	217,152	1,540,045
Capital Contributions			
Grants from US Government	151,279	410,820	(259,541)
Grants from GovGuam & Others	-	-	-
Total Capital Contributions	151,279	410,820	(259,541)
Change in Net Assets	1,908,476	627,972	1,280,504

Debt Service Calculation		
Earnings From Operations	2,728,262	1,217,268
System Development Charge	(109,075)	(61,057)
Retiree COLA	58,458	56,100
Interest/Investment Income	197,266	125,576
Depreciation	2,383,838	2,356,785
Plus withdrawals (deposits) to Rate Stabilization Fund	-	-
ARPA Grant	-	550,000
Balance Available for Debt Service per Section 6.12	5,258,750	4,244,672
Debt Service		
Principal	896,667	852,917
Interest	2,356,839	2,400,140
Total	3,253,505	3,253,056
Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)	1.62	1.30
Debt Service Coverage (1.30X) (PUC)	1.62	1.30

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings **SCHEDULE D**
Comparative Budget vs. Actual for the period ending March 31, 2024

	Year to Date Actual (Unaudited) March-24	Year to Date Budget March-24	Variance Favorable / (Unfavorable)
OPERATING REVENUES			
Water Revenues	39,734,380	40,239,807	(505,427)
Wastewater Revenues	21,791,862	21,915,390	(123,528)
Legislative Surcharge	2,014,960	1,967,671	47,289
Other Revenues	205,698	237,150	(31,452)
System Development Charge	901,988	612,000	289,988
Total Operating Revenues	64,648,887	64,972,017	(323,130)
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	4,966,765	2,950,000	(2,016,765)
Power Purchases	10,533,577	11,610,784	1,077,207
Total Utility Costs	15,500,343	14,560,784	(939,559)
Salaries and Wages	9,665,347	10,953,363	1,288,016
Pension and Benefits	4,008,406	3,899,261	(109,145)
Total Salaries and Benefits	13,673,753	14,852,624	1,178,871
Capitalized Labor and Benefits	(1,392,614)	(2,079,570)	(686,956)
Net Salaries and Benefits	12,281,139	12,773,054	491,915
Administrative and General Expenses			
Sludge removal	566,677	167,958	(398,719)
Chemicals	622,701	959,666	336,965
Materials & Supplies	596,401	1,242,497	646,096
Transportation	244,511	387,480	142,969
Communications	53,457	79,606	26,149
Claims	43,924	89,500	45,576
Insurance	893,027	968,000	74,973
Training & Travel	121,889	100,577	(21,312)
Advertising	13,831	67,193	53,362
Miscellaneous	767,170	671,953	(95,217)
Regulatory Expense	90,729	109,500	18,771
Bad Debts Provision	176,780	1,131,118	954,338
Total Administrative and General Expense	4,191,096	5,975,047	1,783,951
Depreciation Expense	14,401,964	14,408,538	6,574
Contractual Expense			
Audit & Computer Maintenance	881,852	994,628	112,776
Building rental	288,567	301,582	13,016
Equipment rental	190,178	280,645	90,467
Legal	130,018	750,000	619,982
Laboratory	266,716	262,975	(3,741)
Other	540,036	1,142,416	602,380
Total Contractual Expense	2,297,367	3,732,247	1,434,880
Retiree Supp. Annuities and health care costs	1,630,814	1,512,956	(117,858)
Contribution to Government of Guam	350,750	364,853	14,103
Total Retiree Benefits	1,981,564	1,877,809	(103,755)
Total Operating Expenses	50,653,472	53,327,478	2,674,006
Earnings (Loss) from Operations	13,995,415	11,644,539	2,350,876
Interest Income - 2010/13/14/16/17/20 Series Bond	5,667,473	3,882,024	1,785,449
Interest Income - Other Funds	1,251,890	137,500	1,114,390
Interest Income - SDC	99,321	5,238	94,083
Interest Expense - 2010/13/14/16/17/20 Series Bond	(14,141,033)	(14,141,033)	-
Contributions from Local Government	-	-	-
Loss on Asset Disposal	(239,497)	(338,993)	99,496
Amortization of Discount, Premium and Issuance Costs	938,094	745,368	192,726
Defeasance due to bond refunding	(1,012,773)	(1,022,696)	9,923
Prior Year Adjustment	(50,804)	(43,375)	(7,429)
Total non-operating revenues (expenses)	(7,487,328)	(10,775,965)	3,288,638
Net Income (Loss) before capital contributions	6,508,087	868,574	5,639,513
Capital Contributions			
Grants from US Government	1,577,338	10,118,620	(8,541,282)
Grants from GovGuam & Others	31,369	53,623	(22,253)
Total Capital Contributions	1,608,708	10,172,242	(8,563,535)
Change in Net Assets	8,116,795	11,040,816	(2,924,022)
Debt Service Calculation			
Earnings From Operations	13,995,415	11,644,539	
System Development Charge	(901,988)	(612,000)	
Retiree COLA	350,750	364,853	
Interest/Investment Income	1,251,890	137,500	
Depreciation	14,401,964	14,408,538	
Plus withdrawals (deposits) to Rate Stabilization Fund	-	475,000	
ARPA Grant	-	-	
Balance Available for Debt Service per Section 6.12	29,098,031	26,418,430	
Debt Service			
Principal	5,380,000	5,380,000	
Interest	14,141,033	14,141,033	
Total	19,521,033	19,521,033	
Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)	1.49	1.35	
Debt Service Coverage (1.30X) (PUC)	1.49	1.35	

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings
Comparative for the period ending March 31, 2024 and 2023

SCHEDULE E

	Year to Date Actual (Unaudited) March-24	Year to Date Actual (Unaudited) March-23	Variance Increase / (Decrease)
OPERATING REVENUES			
Water Revenues	39,734,380	33,971,948	5,762,432
Wastewater Revenues	21,791,862	18,726,933	3,064,929
Legislative Surcharge	2,014,960	1,583,796	431,164
Other Revenues	205,698	309,844	(104,146)
System Development Charge	901,988	698,971	203,016
Total Operating Revenues	64,648,887	55,291,491	9,357,395
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	4,966,765	3,112,396	1,854,369
Power Purchases	10,533,577	13,808,275	(3,274,698)
Total Utility Costs	15,500,343	16,920,671	(1,420,329)
Salaries and Wages	9,665,347	9,653,723	11,624
Pension and Benefits	4,008,406	3,773,669	234,737
Total Salaries and Benefits	13,673,753	13,427,392	246,361
Capitalized Labor and Benefits	(1,392,614)	(1,265,843)	(126,772)
Net Salaries and Benefits	12,281,139	12,161,549	119,589
Administrative and General Expenses			
Sludge removal	566,677	306,840	259,838
Chemicals	622,701	670,181	(47,480)
Materials & Supplies	596,401	670,692	(74,292)
Transportation	244,511	262,009	(17,498)
Communications	53,457	58,303	(4,846)
Claims	43,924	27,719	16,205
Insurance	893,027	887,561	5,466
Training & Travel	121,889	53,483	68,406
Advertising	13,831	22,441	(8,610)
Miscellaneous	767,170	592,293	174,877
Regulatory Expense	90,729	104,220	(13,492)
Bad Debts Provision	176,780	1,085,654	(908,874)
Total Administrative and General Expense	4,191,096	4,741,395	(550,299)
Depreciation Expense	14,401,964	14,262,902	139,062
Contractual Expense			
Audit & Computer Maintenance	881,852	978,168	(96,316)
Building rental	288,567	288,749	(182)
Equipment rental	190,178	241,033	(50,855)
Legal	130,018	316,429	(186,411)
Laboratory	266,716	168,340	98,376
Other	540,036	843,178	(303,143)
Total Contractual Expense	2,297,367	2,835,897	(538,530)
Retiree Supp. Annuities and health care costs	1,630,814	1,428,980	201,834
Contribution to Government of Guam	350,750	336,600	14,150
Total Retiree Benefits	1,981,564	1,765,580	215,984
Total Operating Expenses	50,653,472	52,687,995	(2,034,523)
Earnings (Loss) from Operations	13,995,415	2,603,496	11,391,919
Interest Income - 2010/13/14/16/17/20 Series Bond	5,667,473	4,200,138	1,467,335
Interest Income - Other Funds	1,251,890	603,747	648,143
Interest Income - SDC	99,321	16,776	82,545
Interest Expense - 2010/13/14/16/17/20 Series Bond	(14,141,033)	(14,400,839)	259,806
Contributions from Local Government	-	7,000,000	(7,000,000)
Loss on Asset Disposal	(239,497)	(225,995)	(13,502)
Amortization of Discount, Premium and Issuance Costs	938,094	745,368	192,726
Defeasance due to bond refunding	(1,012,773)	(1,022,696)	9,923
Prior Year Adjustment	(50,804)	(134,404)	83,600
Total non-operating revenues (expenses)	(7,487,328)	(3,217,904)	(4,269,423)
Net Income (Loss) before capital contributions	6,508,087	(614,408)	7,122,495
Capital Contributions			
Grants from US Government	1,577,338	8,293,416	(6,716,078)
Grants from GovGuam & Others	31,369	35,749	(4,379)
Total Capital Contributions	1,608,708	8,329,164	(6,720,457)
Change in Net Assets	8,116,795	7,714,756	402,038
Debt Service Calculation			
Earnings From Operations	13,995,415	2,603,496	
System Development Charge	(901,988)	(698,971)	
Retiree COLA	350,750	336,600	
Interest/Investment Income	1,251,890	603,747	
Depreciation	14,401,964	14,262,902	
Plus withdrawals (deposits) to Rate Stabilization Fund	-	1,300,000	
ARPA Grant	-	7,000,000	
Balance Available for Debt Service per Section 6.12	29,098,031	25,407,774	
Debt Service			
Principal	5,380,000	5,117,500	
Interest	14,141,033	14,400,839	
Total	19,521,033	19,518,339	
Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)	1.49	1.30	
Debt Service Coverage (1.30X) (PUC)	1.49	1.30	

SCHEDULE F

Guam Waterworks Authority
Statement of Cash Flows (Unaudited)
FY2024

	YTD Mar-24	YTD Sep-23	Increase (Decrease)
Cash flows from operating activities:			
Cash received from trade and others	60,050,650	109,423,799	(49,373,149)
Cash payments to suppliers/contractors for goods and services	(17,767,974)	(46,036,276)	28,268,302
Cash payments to employees for services	(13,565,416)	(14,198,864)	633,448
Cash payments for retiree healthcare costs and other benefits	(1,981,564)	(3,560,495)	1,578,931
Net cash provided by operating activities	26,735,697	45,628,164	(18,892,467)
Cash flows from noncaptial financing activities:			
Receipts from the Local Government operating grant	-	12,400,000	(12,400,000)
Proceeds from legal settlement	-	950,000	(950,000)
	-	13,350,000	(13,350,000)
Cash flows from capital and related financing activities:			
Contributed capital received (grants)	2,940,590	9,843,758	(6,903,168)
Acquisition of utility plant	(9,950,697)	(41,331,452)	31,380,755
Repayment of Long Term Debt	74,679	(10,235,000)	10,309,679
Interest expense	(14,266,515)	(28,801,678)	14,535,163
Net cash provided by (used in) capital and related financing activities	(21,201,943)	(70,524,372)	49,322,429
Cash flows from investing activities:			
Transfers from (to) restricted fund	(11,902,122)	11,442,493	(23,344,615)
Interest income received	7,018,684	11,604,779	(4,586,095)
Net cash provided by investing activities	(4,883,438)	23,047,272	(27,930,710)
Net increase (decrease) in cash	650,316	11,501,064	(10,850,748)
Unrestricted cash at beginning of the period	50,324,888	38,823,824	11,501,063
Unrestricted cash at end of period	50,975,203	50,324,888	650,315
Reconciliation of operating loss to net cash provided by operating activities:			
Operating Income (loss)	13,995,415	3,208,386	10,787,029
Adjustments to reconcile to net cash provided by operating activities:			
Depreciation expense	14,401,964	30,911,997	(16,510,033)
Bad debts (recovery)	176,780	421,467	(244,687)
Capitalized labor and benefits	(1,392,614)	(3,075,928)	1,683,314
Other Non-cash adjusments		(323,071)	323,071
(Increase) decrease in assets:			
Accounts receivable	(4,627,115)	1,249,367	(5,876,482)
Materials and supplies inventory	38,307	(623,993)	662,300
Prepaid expenses	361,369	526,069	(164,700)
Regulatory Assets	-	(62,188)	62,188
Increase (decrease) in liabilities:			
Accounts payable	(630,864)	(177,966)	(452,898)
Accrued payroll and employee benefits	108,337	13,098,151	(12,989,814)
Customer deposits	28,879	(6,345)	35,224
Other liabilities	4,275,239	482,218	3,793,021
Net cash provided by operating activities	26,735,697	45,628,164	(18,892,467)

GUAM WATERWORKS AUTHORITY
Restricted and Unrestricted Cash Summary
FY2024

SCHEDULE G

Description	Unaudited March 31, 2024	Unaudited September 30, 2023	Increase (Decrease)
UNRESTRICTED			
Change Fund	2,000	2,000	-
Petty Cash	3,930	3,930	-
BOG Deposit Accounts	27,159,277	26,112,801	1,046,476
BOG O & M Reserve	14,840,783	14,477,230	363,553
BOG CapEx Fund	8,019,213	8,778,927	(759,714)
BOG Rate Stabilization Fund	950,000	950,000	-
Sub-total Unrestricted	**50,975,203**	**50,324,888**	**650,316**
RESTRICTED			
Bank Pacific	8,159	6,345	1,813
Bank of Hawaii	321,344	167,390	153,954
Community First FCU	2,113	2,538	(425)
First Hawaiian Bank	83,025	82,921	104
Bank Pacific Surcharge	1,884,738	6,863	1,877,875
Bank Pacific Escrow Deposit	958,758	958,711	48
BOG Customer Refunds	2,253,038	2,157,517	95,522
BOG Sewer Hookup Revolving Fund	2,154,882	2,079,769	75,113
BOG Operation and Maintenance Fund	3,083,482	3,083,482	-
BOG Revenue Trust	1,000,028	(137,922)	1,137,950
BOG Revenue Trust Fund	9,479,045	10,471,820	(992,775)
BOG Capital Improvement Revenue Fund	13,789,361	8,452,503	5,336,857
	35,017,973	**27,331,937**	**7,686,036**
BOG - SDC Deposit	2,138,811	1,125,796	1,013,016
BOG - SDC CDs	4,250,000	4,250,000	-
Total SDC	**6,388,811**	**5,375,796**	**1,013,016**
Total Restricted	**41,406,784**	**32,707,733**	**8,699,052**
Reserve Funds			
BOG Series 2013 Construction Fund	3,460,751	3,459,448	1,303
BOG Series 2016 Construction Fund	23,768,131	27,091,177	(3,323,046)
BOG Series 2017 Refunding Construction Fund	3,683,920	3,648,718	35,202
BOG Series 2020A Construction Fund	112,117,962	111,457,380	660,582
BOG CIF-Construction Fund Transfers	4,828,344	4,710,065	118,279
Total Restricted - Held by Trustee	**147,859,109**	**150,366,788**	**(2,507,679)**
BOG OMRRRF Fund	17,423,213	17,423,213	-
USB Series 2013 Debt Service Fund	3,204,203	1,494,615	1,709,587
USB Series 2013 Debt Service Reserve Fund	12,031,688	12,031,688	-
USB Series 2014 Refunding Debt Service Reserve Fund	12,271,161	10,100,975	2,170,186
USB Series 2016 Debt Service Fund	2,558,076	2,061,782	496,293
USB Series 2016 Debt Service Reserve Fund	7,591,999	7,591,999	-
USB Series 2017 Refunding Debt Service Reserve Fund	7,566,460	7,566,460	-
USB Series 2017 Debt Service Fund	3,261,000	2,015,191	1,245,809
USB Series 2020A Debt Service Fund	1,800,852	1,753,543	47,309
USB Series 2020A Debt Service Reserve Fund	6,659,700	6,659,700	-
USB Series 2020B Debt Service Reserve Fund	1,582,063	1,540,498	41,565
Total Investments	**75,950,414**	**70,239,665**	**5,710,749**
Total Restricted and Unrestricted Cash	**316,191,511**	**303,639,073**	**12,552,438**

Guam Waterworks Authority
Accounts Receivable - Government (Active)
March 31, 2024

SCHEDULE H

Customer Name	No. of Accounts	AGING Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total
Autonomous Agencies (Active)							
Guam Housing & Urban Renewal Authority	10	6,434	-	-	-	-	6,434
Guam Housing Corporation	1	45	-	-	-	-	45
Guam Int'l Airport Authority	8	113	103	123	97	262,195	262,631
Guam Power Authority	25	20,802	33,220	-	-	-	54,022
Guam Solid Waste Authority	5	11,824	14,331	3,776	18	-	29,950
Port Authority of Guam	5	5,235	-	-	-	-	5,235
Total Autonomous Agencies	**54**	**44,453**	**47,655**	**3,900**	**115**	**262,195**	**358,317**
Semi-Autonomous Agencies (Active)							
Guam Environmental Protection Agency	2	159	-	-	-	-	159
Guam Memorial Hospital Authority	3	48,009	48,598	49,333	44,355	64,173	254,467
University of Guam	48	12,233	-	-	-	-	12,233
							-
Total Semi-Autonomous Agencies	**53**	**60,400**	**48,598**	**49,333**	**44,355**	**64,173**	**266,859**
Line Agencies (Active)							
Department of Administration	3	1,299	-	-	-	-	1,299
Department of Agriculture	7	5,341	5,957	4,931	4,876	7,229	28,334
Department of Chamorro Affairs	7	3,913	-	-	-	-	3,913
Department of Corrections	9	130,798	107,051	99,835	5,690	-	343,373
Department of Customs & Quarantine	1	528	528	-	-	-	1,056
Department of Education	51	304,996	334,421	263,365	72,748	201,742	1,177,272
Department of Mental Health and Substance	4	1,894	447	125	-	-	2,466
Department of Military Affairs/GUARNG	1	2,642	5,739	0	-	-	8,381
Department of Parks & Recreation	13	57,965	67,162	14,545	1,403	-	141,075
Department of Public Health & Social Services	7	2,696	2,626	2,719	992	2,998	12,031
Department of Public Works	10	18,909	3,871	-	74	171	23,026
Department of Youth Affairs	3	2,283	-	-	-	-	2,283
Guam Energy Office	1	222	-	-	-	-	222
Guam Fire Department	11	7,682	9,168	2,333	358	163	19,704
Guam Homeland Security/Civil Defense	1	983	1,028	1,297	771	-	4,079
Guam Police Department	9	5,140	1,980	727	158	-	8,005
Guam Public Library	6	895	78	-	-	-	974
Guam Veterans Affairs Office	2	911	821	249	-	-	1,982
Guam Visitors Bureau	2	728	-	-	-	-	728
Office of Technology	1	251	-	-	-	-	251
Office of the Governor	2	1,567	-	-	-	-	1,567
Total Line Agencies	**151**	**551,642**	**540,879**	**390,125**	**87,071**	**212,303**	**1,782,021**
Other Government of Guam Entities (Active)							
Mayors Council of Guam	63	22,178	15,052	14,807	7,515	15,411	74,963
Merizo Mayor	1	102	-	-	-	-	102
Gershman, Brickner & Bratton, Inc. (GBB)	1	4,868	7,530	10,370	34,061	5,370	62,199
The Office of the Dededo Mayor	1	576	1,529	-	-	-	2,104
							-
Total Other Government of Guam Entities	**66**	**27,723**	**24,111**	**25,177**	**41,576**	**20,781**	**139,367**
Total as of March 31, 2024 (Active)	**324**	**684,219**	**661,242**	**468,535**	**173,117**	**559,451**	**2,546,564**

GUAM WATERWORKS AUTHORITY
Accounts Receivable Aging Summary by Rate Class
As of March 31, 2024

SCHEDULE I

ACTIVE AND INACTIVE

Rate Class	No. of Accounts	Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total	
		A G I N G						
Government	442	$ 3,365,199	$ 692,995	$ 469,284	$ 176,571	$ 779,605	$ 5,483,654	22%
Agriculture	419	34,218	15,457	6,828	4,390	29,055	89,948	0%
Commercial I	2,695	1,501,087	205,375	37,894	82,678	560,701	2,387,735	10%
Commercial II	52	350,386	27,585	4,156	185	80,916	463,229	2%
Commercial III	289	664,084	136,540	41,052	95,864	340,782	1,278,321	5%
Golf Course	16	14,569	408	283	267	5,677	21,203	0%
Hotel	55	2,076,741	188,061	27,771	34,119	698,806	3,025,499	12%
Irrigation	32	3,255	387	372	71	1,295	5,379	0%
Residential	47,672	4,554,209	853,795	470,572	300,526	5,570,224	11,749,326	48%
	51,672	**12,563,747**	**2,120,602**	**1,058,211**	**694,673**	**8,067,061**	**24,504,294**	**100%**
		51%	**9%**	**4%**	**3%**	**33%**		
						Less Allowance for Doubtful Accounts:	(9,582,684)	
						Net Accounts Receivable:	**14,921,610**	
						Days Receivables Outstanding	38	

ACTIVE ONLY

Rate Class	No. of Accounts	Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total	
		A G I N G						
Government	441	$ 3,365,199	$ 692,995	$ 469,284	$ 176,571	$ 777,715	$ 5,481,763	28%
Agriculture	395	34,002	11,355	3,287	1,395	4,293	54,332	0%
Commercial I	2,557	1,500,063	199,799	36,944	79,837	304,587	2,121,230	11%
Commercial II	38	350,386	27,585	4,156	185	80,916	463,229	2%
Commercial III	275	664,084	134,554	40,577	92,426	302,999	1,234,639	6%
Golf Course	16	14,569	408	283	267	5,677	21,203	0%
Hotel	53	2,076,741	188,061	27,771	34,119	58,284	2,384,977	12%
Irrigation	31	3,255	387	372	71	-	4,084	0%
Residential	40,251	4,506,657	792,642	415,266	246,368	1,603,063	7,563,997	39%
	44,057	**12,514,955**	**2,047,786**	**997,940**	**631,239**	**3,137,534**	**19,329,454**	**100%**
		65%	**11%**	**5%**	**3%**	**16%**		
					Less Allowance for Doubtful Accounts:		(9,582,684)	
					Net Accounts Receivable:		**9,746,770**	

As of February 29, 2024

Rate Class	No. of Accounts	Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total	
		A G I N G						
Government	441	$ 3,259,634	$ 714,829	$ 471,551	$ 169,195	$ 703,743	$ 5,318,953	22%
Agriculture	417	41,497	10,948	5,616	3,467	27,384	88,913	0%
Commercial I	2,685	1,752,068	77,176	179,420	71,377	533,808	2,613,849	11%
Commercial II	53	299,765	5,546	3,514	185	80,916	389,926	2%
Commercial III	290	722,617	69,135	107,123	50,491	326,608	1,275,974	5%
Golf Course	16	14,933	988	675	650	18,787	36,033	0%
Hotel	55	2,469,534	42,173	49,128	39,572	688,612	3,289,018	13%
Irrigation	32	4,006	460	110	-	1,295	5,872	0%
Residential	47,622	4,364,795	831,912	457,515	344,276	5,566,451	11,564,948	47%
	51,611	**12,928,850**	**1,753,167**	**1,274,651**	**679,213**	**7,947,605**	**24,583,486**	**100%**
		53%	**7%**	**5%**	**3%**	**32%**		
						Less Allowance for Doubtful Accounts:	(9,582,684)	
						Net Accounts Receivable:	**15,000,803**	
						Days Receivables Outstanding	39	

Rate Class	No. of Accounts	Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total	
		A G I N G						
Government	440	$ 3,259,634	$ 714,829	$ 471,551	$ 169,195	$ 701,853	$ 5,317,063	27%
Agriculture	396	37,627	7,642	3,397	3,144	3,538	55,348	0%
Commercial I	2,548	1,744,191	75,774	176,742	65,797	280,510	2,343,015	12%
Commercial II	38	299,765	5,546	3,514	185	80,916	389,926	2%
Commercial III	275	720,579	68,659	103,684	49,074	290,093	1,232,089	6%
Golf Course	16	14,933	988	675	650	18,787	36,033	0%
Hotel	53	2,469,534	42,173	49,128	39,572	48,090	2,648,496	14%
Irrigation	31	4,006	460	110	-	-	4,577	0%
Residential	40,254	4,271,072	780,973	406,665	282,105	1,596,984	7,337,799	38%
	44,051	**12,821,342**	**1,697,045**	**1,215,466**	**609,723**	**3,020,771**	**19,364,346**	**100%**
		66%	**9%**	**6%**	**3%**	**16%**		
					Less Allowance for Doubtful Accounts:		(9,582,684)	
					Net Accounts Receivable:		**9,781,662**	

GUAM WATERWORKS AUTHORITY
Accounts Payable Aging

SCHEDULE J

As of	AGING						
	Current	31 - 60 Days	61 - 90 Days	91 - 120 Days	> 120 Days	**Total**	Days Payable Outstanding
March 31, 2024	$ 2,714,584	$ 394,692	$ 70,496	$ 11,587	$ 507,461	**$ 3,698,819**	
	73%	11%	2%	0%	14%	**100%**	33
February 29, 2024	$ 2,854,347	$ 131,602	$ 54,758	$ 138,639	$ 579,365	**$ 3,758,711**	
	76%	4%	1%	4%	15%	**100%**	38
January 31, 2024	$ 2,674,753	$ 174,117	$ 142,961	$ 104,700	$ 508,528	**$ 3,605,059**	
	74%	5%	4%	3%	14%	**100%**	38

GUAM WATERWORKS AUTHORITY
WATER DEMAND BY RATE CLASS
FY2015 - FY2024

SCHEDULE K

CLASS		AUDITED								UNAUDITED	Annualized Based on 6 months	
		FY2015 TOTAL CONSUMPTION (kGal)	FY2016 TOTAL CONSUMPTION (kGal)	FY2017 TOTAL CONSUMPTION (kGal)	FY2018 TOTAL CONSUMPTION (kGal)	FY2019 TOTAL CONSUMPTION (kGal)	FY2020 TOTAL CONSUMPTION (kGal)	FY2021 TOTAL CONSUMPTION (kGal)	FY2022 CONSUMPTION (kGal)*	FY2023 TOTAL CONSUMPTION (kGal)	FY2024 TOTAL CONSUMPTION (kGal)	% Inc / (Dec.)
R	Residential	3,415,662	3,429,689	3,206,811	3,313,613	3,359,905	3,712,723	3,622,617	3,450,574	3,185,230	3,096,475	-3%
C	Commercial	1,020,089	1,022,890	964,639	910,905	906,192	822,029	786,054	818,460	816,393	860,517	5%
F	Federal	1,168	1,180	2,508	1,813	1,602	1,338	2,069	1,389	1,099	1,268	15%
G	Government	515,974	475,366	448,430	450,165	405,980	408,502	404,026	470,581	445,116	464,895	4%
H	Hotel	999,116	1,008,087	1,004,525	989,723	1,079,919	714,161	448,034	462,757	554,767	624,144	13%
G	Golf	6,850	6,770	5,252	2,741	2,793	5,835	2,855	3,796	6,415	919	-86%
A	Agriculture	67,376	78,628	69,482	81,127	90,803	84,492	68,805	65,719	49,748	62,674	26%
I	Irrigation	10,385	11,351	10,143	8,504	7,896	8,654	5,404	4,888	3,242	3,329	3%
	GRAND TOTAL	6,036,620	6,033,960	5,711,790	5,758,590	5,855,091	5,757,733	5,339,864	5,278,164	5,062,012	5,114,220	1%

Guam Waterworks Authority **SCHEDULE L**
System Development Charges Project Status
As of March 31, 2024

Funding Summary

Total available project funds	$	18,530,727
Total project expenditures and encumbrances		12,445,814
Total unobligated project funds	**$**	**6,084,913**

Projects Funded

Project Description	**Expenditures**	**Outstanding Encumbrances**	**Expenditures and Encumbrances**
Agat-Santa Rita Wastewater Treatment Plant Replacement	1,202,006	-	1,202,006
Baza Gardens Wastewater Cross Island Pumping & Conveyance	1,151,116	2,854	1,153,971
Central Guam Reservoirs	276,008	4,032	280,040
Line Replacement Phase IV	256,937	-	256,937
Northern District WWTP	7,552,513	-	7,552,513
Northern District WWTP (Land Purchase)	1,000,000	-	1,000,000
Route 4 Relief Sewerline Rehab & Replacement	519,227	-	519,227
South Paulino Heights Waterline Upgrade	84,056	4,714	88,770
Talofofo Sewer Improvement	-	241,142	241,142
Groundwater Well Production Meter Rep.	143,647	7,560	151,207
	$ 12,185,510	**$ 260,303**	**$ 12,445,814**

Future planned projects	**FY 2024-2025**
Water Distribution System Pipe Replacement & Upgrades	500,000
Capacity Enhancement - Well Development and Construction Progra	394,000
Well Repair Program	200,000
	$ 1,094,000

Guam Waterworks Authority	Date: 3/29/2024
	Time:

GUAM WATERWORKS AUTHORITY

WATER DISTRIBUTION FACILITIES REPORT

REVIEWS

TOTAL PUMPS INSTALLED	68	OVERAL AVERAGE	*93%*
TOTAL PUMPS OPERATIONAL	62	% OF OPERATING PUMPS	*91%*
TOTAL BOOSTER PUMP STATIONS	30		

Northern District

NO:	FACILITY	PUMP HORSEPOWER	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL,STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	PUMP AND MOTOR INVENTORY
1	Yigo	20	3	2	67%	OP	A	Pump 2 offline, pending inspection of stage pump.	1438158				
2	Gayinero	20	2	2	100%	OP	A						
3	Mataguac	25	2	2	100%	OP	A						
4	Santa Rosa	15	2	2	100%	OP	A	Temporay BPS online. Main BPS under construction					
5	Barrigada 2M	40	2	2	100%	OP	A						
6	Barrigada Hieghts	30	6	6	100%	OP	A						
7	Chln. Palauan	5	2	1	50%	N/A	N/A	Pump 1 impeller requires replacement.	1438162				
8	Access	60	2	1	50%	OP	A	Pump 1 motor currently being repaired at vendor.	1434788				
9	Agana Hieghts	30	3	3	100%	OP	A						
10	Nimitz Hill	7.5	2	2	100%	N/A							
11	Adawag	1.5	2	1	50%	N/A	N/A	Inspection needed for pump 2 due to discharge pressure inadequate	1438165				
12	Pale Kiren	1	1	1	100%	N/A	N/A						
13	Ulloa/Untalan	1	2	1	50%	OP	A	Inspection needed for pump 1 due to control tripping off.	1438166				
14	Latte Heights	15	2	2	100%	OP	A						
15	Asan	1.5	1	1	100%	N/A	N/A						
	TOTAL = 15		**34**	**29**	**85%**								
pump availability =no of operational pumps/no of pumps*100%													

Central District

NO:	FACILITY	PUMP HORSEPOWER	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL,STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	UPDATES
1	Pago	150 / 100	3	3	100%	0P	A						
2	Brigade	60	3	3	100%	OP	A						
3	Windward Hills	200 / 75	3	2	67%	OP	A	Inspection pending on pump 3 due to not discharge pressure not building. Pending availability of crane.	1392067				
4	Santa Rita Spring	40	2	2	100%	OP	A						
5	Santa Ana (Lower)	25	2	2	100%	N/A	N/A						
6	Camacho	1	1	1	100%	N/A	N/A						
7	Tenorio	1.5	1	1	100%	N/A	N/A						
	Total=7		**15**	**14**	**93%**								
pump availability =no of operational pumps/no of pumps*100%													

Southern District

NO:	FACILITY	PUMP HORSEPOWER	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL,STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	UPDATES
1	Malojloj Line	125 / 50	3	3	100%	OP	A						
2	Geus	7.5	3	3	100%	OP	A						
3	Pigua	7.5	2	2	100%	N/A	N/A						
4	Toguan	10	2	2	100%	OP	A						
5	WBP-2	25	2	2	100%	OP	A						
6	WBP-1	5	2	2	100%	OP	A						
7	Malojloj Elevated	15	3	3	100%	OP	A						
8	Ija	7.5	2	2	100%	N/A	N/A						
	Total=8		**19**	**19**	**100%**								
pump availability =no of operational pumps/no of pumps*100%													

GUAM WATERWORKS AUTHORITY

Guam Waterworks Authority

VEHICLE FLEET STATUS

4/1/2024

EQUIPMENT STATUS				
Description	**Number of Equipment**	**Number of Equipment Available**	**Number of Equipment Not Available**	**Percentage**
Backhoe (Leased)	3	3	0	100%
Dump Truck (Leased)	3	3	0	100%
Trailer (Leased)	3	3	0	100%
Backhoe	2	2	0	100%
Boom Truck	1	0	1	0%
Crane	1	1	0	100%
Dump Truck	1	0	1	0%
Forklift	6	6	0	100%
Fuel Tanker	1	0	1	0%
Heavy Duty	13	9	4	69%
Hoist Rig	1	1	0	100%
Jetter	1	0	1	0%
Light	129	105	24	81%
Mini Backhoe	2	0	2	0%
Pumper Truck	1	0	1	0%
Skidster	1	1	0	100%
Sludge Truck	3	1	2	33%
Tractor	2	2	0	100%
Tractor Mower	1	1	0	100%
Trailer	16	10	6	63%
Trencher	1	0	1	0%
Vacuum Truck	6	3	3	50%
Water Buffalo	2	0	2	0%
Water Tanker	5	2	3	40%
Compressor	1	1	0	100%
Total	206	154	52	

SUMMARY						
Operational	**Operational w/Rprs Pending**	**Not in Operation-Accident (Docs Pending)**	**Not in Operation-Assessment Pending**	**Not in Operation-Repairs Pending**	**Not in Operation-Vendor Repairs**	**Recommend Survey**
3	0	0	0	0	0	0
3	0	0	0	0	0	0
3	0	0	0	0	0	0
1	1	0	0	0	0	0
0	0	0	0	0	0	1
1	0	0	0	0	0	0
0	0	0	0	1	0	0
6	0	0	0	0	0	0
0	0	0	0	0	0	1
8	1	0	0	0	3	1
1	0	0	0	0	0	0
0	0	0	0	0	1	0
101	4	2	15	3	3	1
0	0	0	0	2	0	0
0	0	0	0	0	1	0
1	0	0	0	0	0	0
1	0	0	0	2	0	0
2	0	0	0	0	0	0
0	1	0	0	0	0	0
10	0	0	2	3	1	0
0	0	0	0	1	0	0
2	1	0	2	0	1	0
0	0	0	2	0	0	0
2	0	0	3	0	0	0
1	0	0	0	0	0	0
146	8	2	24	12	10	4

Guam Waterworks Authority		Date:	4/5/2024
REVIEWS			
TOTAL PUMPS INSTALLED	186	OVERAL AVERAGE	*81%*
TOTAL PUMPS OPERATIONAL	152	% OF OPERATING PUMPS	*82%*
TOTAL PUMP STATIONS	84		

GUAM WATERWORKS AUTHORITY

WASTEWATER FACILITIES REPORT

Northern District

NO:	FACILITY	PRIORITY LISTED	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL,STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	UPDATES
1	SOUTHERN LINK	1	4	3	75%	GPA	A	Pump #1 was secured due to seal failre. Pump will be inspected by JMI due to warranty. Pump #4 is on standby and will be used for emergencies as per plan	WO # 1430285				
2	FUJITA	1	4	2	50%	GPA	A	Pump #2 was removed 11/3/22 due to seal failure. Using impeller from #2 on #4. 6/12/23, Pump #3 was connected to VFD #4 due to Pump #4 has a bearing issue, pump delivered to vendor 9/12 for repairs.	P#2 WO 1323701 P#4 WO 1376739	VFD #2 and #3 are inoperable and in need of replacement. (PIT are working on new replacement)			P#2 OR 54967 (pending PO) Impeller PO 502226 (ETA Jan 2024) P#4 PO 502730 VFD OR 54834 (pending PO)
3	YPAO	1	2	2	100%	GPA	A						
4	PASEO DE ORO	1	2	1	50%	GPA	A	Pump #1 was removed due to seal failure.	WO #1410711				OR 55164 (pending PO)
5	HARMON	2	2	2	100%	GPA	A						
6	ROUTE 16	1	4	1	25%	GPA	M	2/3/24, P#1 was secured due to seal failure. Pump was delivered to vendor for repairs. P#3 secured 9/15/22 due to damaged volute and defective check valve. #4 was secured, using VFD at Agana Main PS. Pump #4 was connected to new soft starter and is operational only when needed. Electrician needs to connect sub monitor. Pump is on standby.	P#1 WO 1424040 P#3 WO #1332734	VFD #3 needs to be relaced. (PIT are working on new replacement) Calvin will be working on write up for new pumps, valves, and pedestals for #3 &#4.			P#1 PO 503136 Volute OR 54968 (pending PO)
7	LATTE DOUBLE TROUBLE	1	2	2	100%	GPA	A						
8	LATTE SUN RISE	2	2	1	50%	GPA	A	7/31/23, Pump #1 was removed due to seal failure.	WO #1384262				OR 54657 (pending PO)
9	LATTE SUBMARINE	2	2	2	100%	GPA	A						
10	LATTE PLANTATION	2	2	2	100%	GPA	A						
11	PGD	2	2	2	100%	GPA	A						
12	MACHECHE	2	2	2	100%	GPA	A						
13	HAFA ADAI	2	2	1	50%	GPA	A	Pump #2 was removed due to motor was grounded.	WO# 1417247				OR 55163 (pending PO)
14	YPAOPAO	1	3	2	67%	GPA	N/A	7/5/23 Pump #1 shorted as per electricians.	WO #1376323				P#1 OR54701 (pending PO)
15	PACIFIC LATTE	2	2	2	100%	GPA	A						
16	YIGO	1	3	2	67%	GPA	A	Pump #3 is secured. Pending electrical connection to new soft starter with contractor.					
17	ZERO DOWN	2	2	1	50%	GPA	A	Pump #1 was secured due to motor was grounded. Pending pump removal.	WO #1431068				Pending OR
18	SANTA ANA	2	2	2	100%	GPA	A						
19	MACHANAONAO	1	2	2	100%	GPA	A						
20	FEMA 96	2	2	2	100%	GPA	A						
21	ASTUMBO 1	2	2	2	100%	GPA	A	7/30/23, Electrician found pump #1 open windings.	P#1 WO #1383026				P#1 OR 54658 (pending PO)
22	ASTUMBO 2	2	2	1	50%	GPA	A	7/31/23, pump 1 was removed and installed at Astumbo #1 due to pump failure.					
Total	**22**		**52**	**39**	**75%**								

Central District

NO:	FACILITY	PRIORITY LISTED	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/ AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL,STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	UPDATES
1	CABRAS ISLAND	1	2	2	100%	Portable	M						
2	COMMERCIAL PORT	1	3	3	100%	OP	A						
3	PITI	1	2	2	100%	GPA	A						
4	ASAN	1	2	2	100%	GPA	A						
5	SINAJANA	2	2	2	100%	GPA	A						
6	NEW CHAOT	1	3	2	67%	OP	A	Pump #2 was removed and brought to maintenance 2/18/22 due to broken pump shaft. Maintenance team is in the process of repiping lines for a new installation.	WO #1266707				Working with Engineering for station upgrades (CIP write up with procurement for review.)
7	ORDOT	2	2	2	100%	OP	A						
8	DERO	1	2	2	100%	OP	A						
9	CHALAN PAGO #5	2	2	1	50%	OP	A	6/3/23, Pump #1 was removed due to grounded motor. Pump was delivered to vendor for repairs 8/31	WO #1370938				PO 502639
10	CHALAN PAGO #3	2	2	2	100%	OP	A						
11	FLORA GARDENS	2	2	2	100%	INOP	A						
12	DOUBLE SHAFT	1	3	3	100%	OP	A						
13	NAMU	2	1	1	100%	OP	A	Found motor defective. Motor was removed and new motor from Maite PS was installed. Motor was sent to vendor for repairs.	WO #1436402				PO 503203
14	TAI MANGILAO	1	3	2	67%	GPA	A	Pump #1 was removed and brought to maintenance 5/12/22 due to mechanical seal issue. Pump was delivered to vendor. Pending parts.	WO #1285248				PO 501491 repairs have been on hold due to priortizing other stations.
15	MANGILAO	1	2	2	100%	GPA	A						
16	FIDIAN	2	2	2	100%	GPA	A						
17	LEYANG	2	2	2	100%	OP	A						
18	SAGAN BONITA 1	2	2	2	100%	OP	A						
19	SAGAN BONITA 2	2	2	1	50%	OP	A	Electricians tested Pump #1 and found pump to be grounded.	WO # 1398315				OR 54742 (pending PO)
20	DAIRY	1	2	1	50%	INOP	A	Pump #2 was removed due to motor was grounded.	WO #1427553				OR 55413 (pending PO)
21	BARRIGADA	1	2	2	100%	GPA	A						
22	TOTO GARDENS	2	2	2	100%	INOP	A						
23	MONGMONG	2	2	2	100%	OP	A						
24	CASIMERU	2	2	1	50%	Portable	A	Pump #1 was removed 11/30/22 and brought to maintenance due to grounded motor as per electricians. Pump was delivered to vendor for repairs.	WO #1330100				PO 502059 repairs have been on hold due to priortizing other stations.
25	MAITE	2	2	1	50%	GPA	A	Motor #1 was removed and installed at Namu.					
26	BAYSIDE	2	2	2	100%	INOP	A						
27	ALUPANG	1	2	2	100%	OP	A						
28	MAMAJANAO	1	3	2	67%	OP	A	Pump #2 was removed 12/11/22 due to seized impeller. Need to replace bearing. Pump was delivered to vendor.	WO 1332262				PO 502000 repairs have been on hold due to priortizing other stations.
29	AGANA MAIN	1	4	2	50%	OP	A	P4 is on Line # 2 /awaiting line 4 riser to be cleaned. Pump #1 was secured due to burnt VFD.	WO #1384376	5/27/23, VFD #1 burnt. 5/29/23, VFD #3 burnt. (PIT are working on new replacement)			VFD OR 54833 (pending PO)
30	LOWER SUNSET	2	2	1	50%	N/A	N/A	Pump #1 in operation. Pump #2 needs to be replaced.					
Total	**30**		**66**	**55**	**83%**								

Southern District

NO:	FACILITY	PRIORITY LISTED	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL,STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	UPDATES
1	GAAN #1	1	4	3	75%	OP	MAN	Pump #1 is available, pending VFD		#2/#5 VFDs are defective due to burnt IGBT and power cards. Currently using VFD from Southern Link for #5			VFDs replacement Bid is in process
2	PUMP STATION #11	2	2	2	100%	INOP	AUTO						
3	PUMP STATION #12	1	2	2	100%	OP	AUTO						
4	PUMP STATION #14	2	2	2	100%	OP	AUTO						
5	PUMP STATION #15	1	2	2	100%	INOP	AUTO						
6	PUMP STATION #16	2	2	2	100%	OP	AUTO						
7	PUMP STATION #17	2	2	2	100%	OP	AUTO						
8	PUMP STATION #18	2	2	2	100%	OP	AUTO						
9	INARAJAN MAIN	1	2	2	100%	OP	AUTO						
10	INARAJAN LIFT	1	2	2	100%	OP	AUTO						
11	TALAFOFO	1	2	2	100%	OP	AUTO						
12	PAGACHAO	2	2	1	50%	NONE	NA	Pump 1 was removed and brought to maintenance due to pump is grounded.	WO #1393508				OR 55320 (pending PO)
13	CHALIGAN	2	2	2	100%	OP	MAN						
14	EJECTOR #2	2	2	1	50%	PORTABLE /INOP	NA	Motor #2 was deemed grounded. Pending maintenance team for removal.	WO #1399462				OR 55165 (pending PO)
15	EJECTOR #3	2	2	1	50%	PORTABLE /INOP	NA	Compressor #2 secured due to compressor not building air.	WO #1377595				OR 55165 (pending PO)
16	EJECTOR #4	2	2	1	50%	PORTABLE /INOP	NA	#1 compresor was removed 3/9/23 due to not holding air	WO #1382545				OR 55165 (pending PO)
17	EJECTOR #5	2	2	1	50%	PORTABLE/INOP	NA	#2 compressor was removed and brought to ejector 7.					OR 55165 (pending PO)
18	EJECTOR #6	2	2	2	100%	PORTABLE/INOP	NA	#2 on standby due to main breaker needs to be upgraded.					
19	EJECTOR #7	2	2	2	100%	PORTABLE/INOP	NA	#1 on standby due to main breaker needs to be upgraded. Currently using compressor from Ejector 5 on line #2. Still pending replacement compressor on line #2.	WO #1399569				OR 55165 (pending PO)
20	NORTH REYES	2	2	2	100%	PORTABLE/INOP	NA						
21	LEYON #3 (DanDan)	2	2	2	100%	OP	MAN						
22	LEYON #4	2	2	2	100%	OP	AUTO						
23	MTL PUMP STATION	2	1	1	100%	PORTABLE/INOP	NA						
24	Baza P/S	1	3	2	67%	OP	AUTO	66066 installed on line #1. 66068 was installed on unit #3 Pump was removed due to impeller snapped, pump was taken to vendor for repairs on threading due to cross threaded. 66067 is currently installed at Windward Hills PS (needs to be removed due to moisture sensor activated). 66069 was removed on 1/8/24 due to seal failure.	66068 WO#-1430545 66067 WO#-1400616 66069 WO#-1418194				66067 PO 503132 66069 OR 55197 (pending PO)
25	Windward Hills	1	3	2	67%	OP	AUTO	8/1/23, 61079 was removed and brought to maintenance due to bearing issues. Repairs were made on rebuild but during installation on 9/1, found that motor needs rewinding. 61106 is currently installed on unit #2. 61107 was removed 9/29 and brought to maitenance shop due to low megger and seal failure.	61079 - WO #1335584 61107 - WO #1398233	PO 501369 for valves (pending approval)			61079 OR54520 (pending PO) 61107 OR 54740 (pending PO)
26	Aplacho	1	3	2	67%	OP	AUTO	7028 was removed due to grounded motor and delivered to vendor for repairs 8/31. 7030 was removed due to grounded motor and delivered to vendor for repairs 8/31. New pump was installed due to motors in need of repairs.	7028 - WO #1374946 7030 - WO #1374300				7028 - PO 502613 7030 - PO 502615
27	Ladera #1	2	2	2	100%	PORTABLE	MAN						
28	Ladera #2	2	2	2	100%	PORTABLE	MAN						
29	Ayuyu	2	2	1	50%	PORTABLE	MAN	Pump #1 was removed and is currently installed at Leyang PS. Needs rewind due to motor grounded. Pump is at maintenance.	WO #1399563				OR 54764 (pending PO)
30	Tenorio	2	2	2	100%	PORTABLE	MAN						
31	Taitague	2	2	2	100%	PORTABLE	MAN						
32	Hyundai	2	2	2	100%	OP	AUTO						
	32		**68**	**58**	**85%**								