



**CONSOLIDATED COMMISSION ON UTILITIES**

Guam Power Authority | Guam Waterworks Authority  
P.O. Box 2977 ~~Hagatna~~, Guam 96932 | (671) 648-3002 | [guamccu.org](http://guamccu.org)

**GUAM WATERWORKS AUTHORITY WORK SESSION**

*CCU Conference Room*

*8:30 a.m., Tuesday, July 19, 2022*

**AGENDA**

**1. CALL TO ORDER**

**2. ISSUES FOR DECISION**

- 2.1 [Relative to Tumon Chaot and Agana Heights Reservoir / Resolution 22-FY2022](#)
- 2.2 [Relative to Authorizing GWA Management to Execute MOU/MOA for the One-Guam Water Resource Information Program / Resolution 23-FY2022](#)
- 2.3 [Relative to Creation of the Classification Specifications for Utility Customer Care Series of Positions / GWA Resolution 24-FY2022 / GPA Resolution FY2022-24](#)
- 2.4 [Additional Funding for Construction Mgmt. Contract for Sta. Rosa, Sinifa and Sta. Rita Tank and System Upgrades / Resolution 25-FY2022](#)
- 2.5 [Relative to Duenas Camacho & Assoc. Post Design Services Extension Change Order for the Upgrade of Northern District Wastewater Treatment Plant Upgrades / Resolution 26-FY2022](#)

**3. 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: GPA Work Session: July 19; CCU Regular Monthly Mtg.: July 26**

**6. ADJOURNMENT**



Gloria B. Nelson Public Service Building | 688 Route 15 | Mangilao, Guam 96913  
Tel: (671) 300-6846

## Issues for Decision

### **Resolution No. 22-FY2022**

Relative to Additional Funding for the Tumon No. 2, Hyundai, and Chaot No. 2 Reservoir Construction Contract

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

The objective of the additional funding and subsequent contract modification, via a Change Order, is to comply with Court Order requirements and complete items necessary for the proper operation of the reservoirs and compliance with GWA agreement with CLTC. These items include the following:

1. Relocate the San Vitores Road 12" and 16" pressure reducing valve and flow meter vaults to the center lane. A new pressure reducing valve vault for the 16" line will also be added to the scope.
2. Install chain link fence and construct an earth berm for the Chamorro Land Trust Commission (CLTC) lot behind the Tumon reservoir as part of the right of entry agreement between GWA and CLTC for use of Lot 5075-REM-A NEW-1 during construction.
3. Replace chlorine injector system at the Agana Heights and Chaot Reservoir central chlorination buildings.
4. Installation of conduits, cables, sensors, pull boxes, power monitoring panels, and associated electrical and instrumentation work for the SCADA system at the Agana Heights and Chaot reservoir sites.

This project is a Court Order project that falls under the deadline requirements established. The reservoirs have been completed.

#### **Where is the project located?**

1. San Vitores Road pressure reducing valve and flow meter work is located on San Vitores Road in front of the Bayview Hotel area.
2. The fence and earth berm work are located behind the Tumon reservoir located off Marine Drive.
3. The Chaot reservoir chlorination building is located at the Chaot reservoir site at the end of Dero Road.
4. The Agana Heights reservoir chlorination building is located at the Agana Heights reservoir site across Homeland Security building.

**How much will it cost?**

The price provided by AIC, International is \$554,844.00.

**Breakdown**

- San Vitores pressure reducing valve and flow meter work: \$321,844.00
- CLTC lot chain link fence and earth berm work: \$75,000.00
- Chlorine injectors (De Nora brand) work: \$3,000.000
- Agana Heights and Chaot Reservoir SCADA work: \$155,000.00

GWA Management also seeks approval of a 20% contingency in the amount of \$110,976.00.

Total requested additional funding: \$665,820.00

**When will it be completed?**

All work is anticipated to be completed by the end of December 2022.

**What is the funding source?**

1. PW 09-11: Water System Reservoirs 2005 Improvements
2. EE 09-09: SCADA Improvements Phase 4

**The RFP/Bid responses (If applicable):**

Not applicable



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**GWA RESOLUTION NO. 22-FY2022**

**RELATIVE TO ADDITIONAL FUNDING FOR THE TUMON NO. 2, HYUNDAI, AND  
CHAOT NO. 2 RESERVOIRS CONSTRUCTION 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 currently has a number of critical Court Order (“CO”) Projects, including the construction (i.e., repair, rehabilitate, replace or relocate) of the Tumon No. 2, Hyundai, and Chaot No. 2, as stated in Paragraph 29 (b) (4), (5), and (6) of the Court Order; and

**WHEREAS**, GWA issued an Invitation for Bid (IFB-09-ENG-2017) soliciting bid proposals from experienced, responsible, and responsive bidders to construct the Tumon No. 2 reservoir, Hyundai reservoir, and Chaot-Agana Heights reservoir off-site work in the Base Bid and an Additive Bid to construct the Chaot No. 2 reservoir, Hyundai booster pump station and Hyundai off site water line improvements; and

**WHEREAS**, Resolution No. 05-FY2018 (See Exhibit A) approved GWA to award the contract to AIC, International for the Base Bid; and

**WHEREAS**, in compliance with the Court Order, GWA has executed a construction contract with AIC International, Inc. for the Base Bid work to address the following:

1. The construction of the new Tumon reservoir (1.0 MG) to replace the existing Tumon steel tank; and



2. The construction of the new Hyundai (Barrigada Heights) reservoir (1.0 MG) to replace the existing Hyundai steel tank; and
3. Construction of new 12" and 16" pressure reducing valves (PRV) and flow meters at Pale San Vitores and St. Johns' to regulate pressure and monitor flow from the Tumon reservoir and Astumbo pressure zone; and
4. The disconnection of the A-series well from the Sinajana-Agana Heights distribution lines, Chaot and Agana Heights central chlorination system modifications, and Dero Road PRV rehabilitation to improve the Sinajana-Agana Heights water system;

**WHEREAS**, Resolution No. 45-FY2018 (See Exhibit B) approved GWA to execute Change Order No. 1 to construct Chaot No. 2 (0.5 MG), Barrigada Heights booster pump station, and transmission lines at North and South Sabana Drive, Corenoso Street, and associated side streets; and

**WHEREAS**, the Tumon, Hyundai (Barrigada Heights), and Chaot No. 2 reservoirs have been completed and are in service; and

**WHEREAS**, the remaining work, which includes the San Vitores PRVs' and flow meter and Barrigada Heights booster pump station work are in progress and nearing completion, respectively; and

**WHEREAS**, GWA seeks to issue a contract modification with AIC International, Inc. for additional work required to fully complete the project (See Exhibit C); and

**WHEREAS**, the contract modification shall consist of work described below:

1. Relocate San Vitores 12" and 16" PRV and flow meter vaults, to include new 16" PRV vault; and
2. Install chain link fence and earth berm for CLTC behind Tumon reservoir as part of right of entry agreement between GWA and CLTC for use of Lot 5075-REM-A NEW-1 during construction; and

3. Replace chlorine injector system at Agana Heights and Chaot reservoir central chlorination building; and
4. Installation of conduits, cables, sensors, pull boxes, power monitoring panels and associated electrical and instrumentation work for SCADA system at Agana Heights and Chaot reservoirs;

**WHEREAS**, the current contract with AIC International, Inc. is in the amount of Twenty-Two Million Eight Hundred Sixty Thousand Two Hundred Nineteen Dollars (\$22,860,219.00) with a total authorized funding of Twenty-Two Million Eight Hundred Sixty Thousand Three Hundred Seventy-Two Dollars and Seventy Cents (\$22,860,372.70); and

**WHEREAS**, GWA management has negotiated the proposed fee from AIC International, finds it to be fair and reasonable, and seeks CCU approval for additional funding to complete the work outline above in the amount of Five Hundred Fifty-Four Thousand Eight Hundred Forty-Four Dollars (\$554,844.00) along with a 20% contingency in the amount of One Hundred Ten Thousand Nine Hundred Seventy-Six Dollars (\$110,976.00) to bring the total additional funding requested to Six Hundred Sixty-Five Thousand Eight Hundred Twenty Dollars (\$665,820.00); and

**WHEREAS**, the funding source for the construction project will be from the CIP PW 09-11: Water System Reservoirs 2005 Improvements and EE 09-09: SCADA Improvements Phase 4; and

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

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds scope of work and fee submitted by AIC International, Inc. are fair and reasonable.
3. The CCU hereby authorizes GWA management to execute a change order in the amount of Five Hundred Fifty-Four Thousand Eight Hundred Forty-Four Dollars and

1 Zero Cents (\$554,844.00), to bring the total contract amount to Twenty-Three Million  
2 Four Hundred Fifteen Thousand Sixty-Three Dollars (\$23,415,063.00).

3 4. The CCU hereby approves a 20% contingency of One Hundred Ten Thousand Nine  
4 Hundred Seventy-Six Dollars (\$110,976.00), which brings the total authorized funding  
5 to Twenty-Three Million Five Hundred Twenty-Six Thousand One Hundred Ninety-  
6 Two Dollars and Seventy Cents (\$23,526,192.70).

7 5. The CCU hereby approves the use of Bond funding from CIP PW 09-11: Water System  
8 Reservoirs 2005 Improvements and PW EE 09-09: SCADA Improvements Phase 4.

9  
10 **RESOLVED**, that the Chairman certified and the Board Secretary attests to the adoption  
11 of this Resolution.

12  
13 **DULY AND REGULARLY ADOPTED**, this 26<sup>th</sup> day of July 2022.

14  
15 Certified by:

Attested by:

16  
17 \_\_\_\_\_  
18 **JOSEPH T. DUENAS**  
19 Chairperson

20 \_\_\_\_\_  
21 **MICHAEL T. LIMTIACO**  
22 Secretary

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**SECRETARY'S CERTIFICATE**

I, Michael T. Limtiaco, 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: \_\_\_\_\_

ABSENTS: \_\_\_\_\_

ABSTAIN: \_\_\_\_\_

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## **GWA RESOLUTION NO. 05-FY2018**

### **RELATIVE TO APPROVING THE CONSTRUCTION CONTRACT FOR THE TUMON NO. 2, HYUNDAI, AND CHAOT NO. 2 RESEVOIRS**

**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 currently has a number of critical Court Order (“CO”) Projects, including the construction (i.e. repair, rehabilitate, replace or relocate) of the Tumon No. 2, Hyundai, and Chaot No. 2, as stated in Paragraph 29 (b) (4), (5), and (6) of the Court Order; and

**WHEREAS**, in compliance with the Court Order, GWA intends to execute a construction project to address the following:

1. The construction of the new Tumon No. 2 reservoir (1.0 MG) to replace the existing Tumon No. 2 steel tank; and
2. The construction of the new Hyundai reservoir (1.0 MG) to replace the existing Hyundai steel tank; and
3. The disconnection of the A-series well from the Sinajana-Agana Heights distribution lines, Chaot and Agana Heights central chlorination system modifications, and Dero Road PRV rehabilitation to improve the Sinajana-Agana Heights water system;

**WHEREAS**, GWA has advertised an Invitation for Bid (IFB) soliciting bid proposal from experienced, responsible, and responsive bidders to construct the Tumon No. 2 reservoir, Hyundai reservoir, and Chaot-Agana Heights reservoir off-site work in the Base Bid and to

1 construct the Chaot No. 2 reservoir, Hyundai booster pump station, and Hyundai off site water  
2 line improvements in the Additive Bid; and

3  
4 **WHEREAS**, the Base Bid work consists of the Contractor furnishing all labor, tools,  
5 equipment and materials necessary to complete the construction of the Tumon No. 2 and  
6 Hyundai reservoirs to include, but not limited to foundation, earthwork, pipework, retaining wall,  
7 storm water detention basin, off-site PRVs, concrete work, electrical work, fences and gates,  
8 protective coatings, SCADA, disinfection, testing and start-up under the provisions of the bid  
9 documents and in accordance with applicable GWA standards; and

10  
11 **WHEREAS**, the Base Bid work will also consist of disconnection of the A-Series wells  
12 to the distribution lines, modification to the Chaot and Agana Heights reservoir central  
13 chlorination system, and rehabilitation of the Dero Road PRV; and

14  
15 **WHEREAS**, IFB packages were picked up by 12 interested parties, from which GWA  
16 received bid proposals from 2 of the 12 parties before the bid proposal deadline (See EXHIBIT  
17 A – Abstract of Bids); and

18  
19 **WHEREAS**, GWA engineering and the design team analyzed all bid proposals received  
20 on November 1<sup>st</sup>, 2017 and determined that AIC International, Inc., who submitted the lowest  
21 Base Bid as being the responsive and responsible bidder and met all the bid requirements set  
22 forth by GWA (See EXHIBIT B – Recommendation Memorandum); and

23  
24 **WHEREAS**, GWA Management finds the AIC International, Inc. Base Bid proposal of  
25 Fourteen Million Eight Hundred Twenty Eight Thousand One Hundred Ninety Four Dollars  
26 (\$14,828,194.00) to be acceptable (See EXHIBIT C – Bid Proposal); and

27  
28 **WHEREAS**, GWA Management will assess any additional funding availability from the  
29 latest Capital Improvements Plan to ascertain if any or all the Additive bid items as part of this  
30 IFB can be awarded later through a change order or via a subsequent CCU approval process as a  
31 means of maximizing system improvements efficiently; and  
32

**WHEREAS**, GWA Management is seeking approval to enter into contract with AIC International, Inc. for IFB-09-ENG-2017 in the amount of Fourteen Million Eight Hundred Twenty Eight Thousand One Hundred Ninety Four Dollars (\$14,828,194.00), along with a ten percent (10%) contingency of One Million Four Hundred Eighty Two Thousand Eight Hundred Nineteen Dollars and Forty Cents (\$1,482,819.40), bringing the total requested funding amount to Sixteen Million Three Hundred Eleven Thousand Thirteen Dollars and Forty Cents (\$16,311,013.40); and

**WHEREAS**, the funding source for the construction project will be from the CIP PW 09-11: Water System Reservoirs 2005 Improvements, PW 12-04: Agana Heights and Chaot Tank Construction, PW 12-06: Tank Replacement Piti and Hyundai Tanks, PW 09-03: Water Distribution System Pipe Replacement and Upgrades; and PW 09-04: Pressure Zone Realignment; and

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

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the bid proposal submitted by AIC International, Inc. are fair and reasonable.
3. The CCU hereby authorizes the management of GWA to accept the bid from AIC International, Inc. attached hereto as EXHIBIT C, and which is also incorporated into this Resolution in its entirety.
4. The CCU hereby further authorizes the management to enter into a contract with AIC International, Inc. in the amount of Fourteen Million Eight Hundred Twenty Eight Thousand One Hundred Ninety Four Dollars (\$14,828,194.00).
5. The CCU hereby approves the funding total of Fourteen Million Eight Hundred Twenty Eight Thousand One Hundred Ninety Four Dollars (\$14,828,194.00), along with a ten percent (10%) contingency of One Million Four Hundred Eighty Two Thousand Eight Hundred Nineteen Dollars and Forty Cents (\$1,482,819.40), bringing the total requested funding amount to

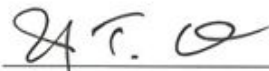
Sixteen Million Three Hundred Eleven Thousand Thirteen Dollars and Forty Cents (\$16,311,013.40.)

6. The CCU hereby approves the use of funding from CIP PW 09-11: Water System Reservoirs 2005 Improvements, PW 12-04: Agana Heights and Chaot Tank Construction, PW 12-06: Tank Replacement Piti and Hyundai Tanks, PW 09-03: Water Distribution System Pipe Replacement and Upgrades; and PW 09-04: Pressure Zone Realignment.

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


**DULY AND REGULARLY ADOPTED**, this 22<sup>nd</sup> day of November 2017.

Certified by:



**JOSEPH T. DUENAS**  
Chairperson

Attested by:

  
**J. GEORGE BAMBA**  
Secretary

I, J. George Bamba, 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: 5

NAYS: 0

ABSTENTIONS: 0

ABSENT: 0

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Guam Power Authority | Guam Waterworks Authority  
P.O. Box 2977 Hagatna, Guam 96932 | (671)549-3002 | guamccu.org

## **GWA RESOLUTION NO. 45-FY2018**

### **RELATIVE TO CONTRACT MODIFICATION FOR THE TUMON NO. 2, HYUNDAI, AND CHAOT NO. 2 RESEVOIRS CONSTRUCTION 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 currently has a number of critical Court Order (“CO”) Projects, including the construction (i.e. repair, rehabilitate, replace or relocate) of the Tumon No. 2, Hyundai, and Chaot No. 2, as stated in Paragraph 29 (b) (4), (5), and (6) of the Court Order; and

**WHEREAS**, GWA has advertised an Invitation for Bid (IFB-09-ENG-2017) soliciting bid proposal from experienced, responsible, and responsive bidders to construct the Tumon No. 2 reservoir, Hyundai reservoir, and Chaot-Agana Heights reservoir off-site work in the Base Bid and an Additive Bid to construct the Chaot No. 2 reservoir (Bid Schedule Table C – Item No. 5, 6, and 7), Hyundai booster pump station (Bid Schedule Table B – Item No. 8), and Hyundai off site water line improvements (Bid Schedule Table B – Item No. 9) (See Exhibit A – Bid Schedule); and

**WHEREAS**, Resolution No. 05-FY2018 (See Exhibit B – Resolution No. 05-FY2018) approved GWA to award the contract to AIC International, Inc. for the Base Bid; and

**WHEREAS**, in compliance with the Court Order, GWA has executed a construction contract with AIC International, Inc. for the Base Bid work to address the following:

1. The construction of the new Tumon No. 2 reservoir (1.0 MG) to replace the existing Tumon No. 2 steel tank; and
2. The construction of the new Hyundai reservoir (1.0 MG) to replace the existing Hyundai steel tank; and
3. The disconnection of the A-series well from the Sinajana-Agana Heights distribution lines, Chaot and Agana Heights central chlorination system modifications, and Dero Road PRV rehabilitation to improve the Sinajana-Agana Heights water system;

**WHEREAS**, GWA seeks to issue a contract modification with AIC International, Inc. for portions of the Additive Bid work as noted in the Bid Schedule Tables above to construct the 0.5 MG Chaot No. 2 Reservoir that will bring the Chaot site capacity back to 1.0 MG capacity, the new Hyundai booster pump station, and the Hyundai off site water line improvements that will service Hyundai (705) Pressure Zone Upper; and

**WHEREAS**, the contract modification work shall consist of Bid Schedule Table C – Item No. 5, Bid Schedule Table B – Item No. 8, and Bid Schedule Table C – Item No. 9 describe below:

1. Contractor furnishing all labor, tools, equipment and material necessary to complete the construction of the second 0.5 MG pre-stressed concrete tank to include, but not limited to: foundation, earthwork, pipework, retaining wall, storm water detention basin, fences, gates, improves to access roads, protective coatings, disinfection, testing and start-up, under the provision of the bid documents and in accordance with applicable GWA standards; and
2. Contractor furnishing all labor, tools, equipment and material necessary to complete the construction of the Hyundai Booster Pump Station and waterlines on North Sabana Street, South Sabana Street, Corenoso Street, and associated side streets, under the provision of the bid documents and in accordance with applicable GWA standards; and

**WHEREAS**, the current contract awarded to AIC International, Inc. is in the amount of Fourteen Million Eight Hundred Twenty-Eight Thousand One Hundred Ninety-Four Dollars and Zero Cents (\$14,828,194.00) with a total authorized funding for the awarded Base Bid work is

Sixteen Million Three Hundred Eleven Thousand Thirteen Dollars and Forty Cents (\$16,311,013.40); and

**WHEREAS**, GWA management seeks approval to execute Contract Modification No. 1 to include the construction of Chaot No. 2 Reservoir, Hyundai Booster Pump Station, and water lines in the amount of Five Million Nine Hundred Fifty-Three Thousand Nine Hundred Sixty-Three Dollars and Zero Cents (\$5,953,963.00), plus a 10% contingency of Five Hundred Ninety-Five Thousand Three Hundred Ninety-Six Dollars and Thirty Cents (\$595,396.30), to bring Contract Modification No. 1 authorized funding to Six Million Five Hundred Forty-Nine Thousand Three Hundred Fifty-Nine Dollars and Thirty Cents (\$6,549,359.30); and

**WHEREAS**, GWA management seeks CCU approval to bring the total authorized funding for the construction project with AIC International, Inc. to Twenty-Two Million Eight Hundred Sixty Thousand Three Hundred Seventy-Two Dollars and Seventy Cents (\$22,860,372.70); and

**WHEREAS**, the funding source for the construction project will be from the CIP PW 09-11: Water System Reservoirs 2005 Improvements and PW 12-04: Agana Heights & Chaot Tanks; and

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

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the bid proposal submitted by AIC International, Inc. are fair and reasonable.
3. The CCU hereby authorizes GWA management to execute Contract Modification No. 1 in the amount of Five Million Nine Hundred Fifty-Three Thousand Nine Hundred Sixty-Three Dollars and Zero Cents (\$5,953,963.00), to bring the total contract amount to Twenty Million Seven Hundred Eighty-Two Thousand One Hundred Fifty-Seven Dollars and Zero Cents (\$20,782,157.00).

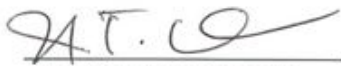
4. The CCU hereby approves a 10% contingency for the Contract Modification No. 1 work, which brings the authorized Contract Modification No. 1 funding to Six Million Five Hundred Forty-Nine Thousand Three Hundred Fifty-Nine Dollars and Thirty Cents (\$6,549,359.30).
5. The CCU hereby further approves the total authorized construction funding including contingencies to Twenty-Two Million Eight Hundred Sixty Thousand Three Hundred Seventy-Two Dollars and Seventy Cents (\$22,860,372.70).
6. The CCU hereby approves the use of Bond funding from CIP PW 09-11: Water System Reservoirs 2005 Improvements and PW 12-04: Agana Heights & Chaot Tanks.


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

**DULY AND REGULARLY ADOPTED**, this 28<sup>th</sup> day of August 2018.

Certified by:

Attested by:

  
**JOSEPH T. DUENAS**  
 Chairperson

  
**J. GEORGE BAMBA**  
 Secretary

### SECRETARY'S CERTIFICATE

I, J. George Bamba, 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:	<u>5</u>
NAYS:	<u>0</u>
ABSTENTIONS:	<u>0</u>
ABSENT:	<u>0</u>





**AIC INTERNATIONAL, INC.**  
Engineered Construction

01 July 2022

Mr. Garret Yeoh - Project Manager  
Guam Waterworks Authority  
Gloria B. Nelson Public Service Building  
688 Route 15, Mangilao, Guam 96913

Reference: GWA Central Reservoirs Tumon No. 2, Hyundai, Chaot No. 2

Subject: Change Order No.8

Dear Mr. Yeoh,

Please review the following signed and approved Contract Change Request (CCR) and Rough Order Magnitude (ROM) Contract Change Request for various additive work items related to GWA Central Reservoirs.

Listed below are CCR's with description and projected amounts with an estimated cost breakdown summing up to a total amount of \$ 554,884.00 for Change Order No. 8.

<u>CCR No.</u>	<u>Contract Change Request (CCRs)</u>	<u>Amount (\$)</u>
GWA CCR072	San Vitores Vault Relocation to Road Centerline	\$ 321,884.00
GWA CCR073	Install Chainlink Fence 6ft height, approximate 400 linear feet	\$ 35,000.00
GWA CCR074	Chamorro Land Trust Berm Construction – Tumon No. 2	\$ 40,000.00
GWA CCR076	Chlorine Injectors De Nora Model Change including Accessories	\$ 3,000.00
GWA CCR057	Chaot No. 2 Instrumentation Drawings Modifications	\$ 80,000.00
	a. Install conduit from existing MCC to New DS	
	b. Install Conduit and Fittings for Intrusion Magnetic Switch	
	c. Install Additional CCTV @ Side of Building	
	d. Install conduit & cables from ATS to New LCP 01	
	e. Install conduit & cables from existing emergency generator to New LCP01	
	f. Install conduit, fittings & support for RTU Antenna.	
	g. Install power conduit & cables for new & existing chlorine analyzer/controller	
	h. Install control conduit & cables for new & existing chlorine analyzer/controller	
	i. Install conduit & cables from New LIT (Fuel Tank) to New LCP01	
	j. Install power conduit & cables for relocated chlorine gas cylinder & gas detection panel	
	k. Install control conduit & cables for relocated chlorine gas cylinder & gas detection panel	
	l. Install gas sensor conduit & cables for relocated Gas Detection Panel	

AIC International, Inc.  
P. O. Box DR  
Hagatna, Guam 96932  
Telephone: (671) 565-9142 Facsimile: (671) 565-9145  
Email Address: [guam@aicconstruction.com](mailto:guam@aicconstruction.com)

GWA Central Reservoirs  
Tumon No.2, Hyundai and Chaot No.2

	m. Install power conduit & cables for 2-each exhaust fan	
	n. Install additional pull boxes	
	o. Power monitoring panel with CT's & protection	
GWA CCR078	Agana Reservoir Instrumentation Drawings Modifications	\$ 75,000.00
	a. Demolition/Removal (e) RTU Panel/Conduits and Feeders	
	b. Install (n) cables from (n) LCP-01 to PCP, (e) conduits to be used.	
	c. Install conduits fittings for (n) Intrusion Magnetic Switch	
	d. Install (n) DS with Power conduit & Wiring from MCC	
	e. Install Comm cables & conduit from (n) LCP-01 to (e) CP-1	
	f. Install Control Conduit & Cables from ATS to (n) LCP-01	
	g. Install (n) LCP-01	
	h. Install wires & rough-ins conduit from relocated Gas Detection Panel to LCP-01	
	i. Install wires & rough-ins from Chlorine Gas Cylinder to (n) LCP-01	
	j. Demolition/Removal (e) RTU Panel/Conduits and Feeders	
	<b>TOTAL:</b>	<b>\$ 554,884.00</b>

We are recommending GWA's budget allocation and approval for funds related to Change Order No. 8.

Please feel free to contact us for further information regarding this letter.

Sincerely,



Robert Sonny C. Magno

Project Manager

Our ref. RSS-288, GWA Central Reservoirs (Owner Correspondence)

## REQUEST TO INCLUDE FOR BUDGET

CCR No.	Tank Location	Description	Specific Site Location	Status		Change Order 08 Breakdown
072	Tumon No.2 Reservoir	San Vitores Vault relocation Permitting	San Vitores	Pending GWA	On Going	321,884.00
073	Tumon No.2 Reservoir	CLT Chainlink Fence 6ft High, Approx 400LF	CLT access back lot	Pending AIC	Pending	35,000.00
074	Tumon No.2 Reservoir	CLT Berm Construction, additional fencing between GWA and CLT and add 25ft	CLT to GWA Ponding Basin	Pending Design	Pending	\$40,000
New Item	Hyundai Reservoir	Steel Tank re-piping	Hyundai	Pending AIC	Deleted	
076	Chaot No.2 Reservoir	Chlorine Injector De Nora Model Change and accessories	Chaot No.2/Agana	Pending AIC	Completed	3,000.00
077	Chaot No.2 Reservoir	Instrumentation Modification (labor, consumables, equipment only) Install conduit from existing MCC to New DS Install Conduit and Fittings for Intrusion Magnetic Switch Install Additional CCTV @ Side of Building Install conduit & cables from ATS to New LCP 01 Install conduit & cables from existing emergency generator to New LCP01 Install conduit, fittings & support for RTU Antenna. Install power conduit & cables for new & existing chlorine analyzer/controller Install control conduit & cables for new & existing chlorine analyzer/controller Install conduit & cables from New LIT (Fuel Tank) to New LCP01 Install power conduit & cables for relocated chlorine gas cylinder & gas detection panel Install control conduit & cables for relocated chlorine gas cylinder & gas detection panel Install gas sensor conduit & cables for relocated Gas Detection Panel Install power conduit & cables for 2-each exhaust fan Install additional pullbox Power monitoring panel with CT's & protection	Chaot Chlorination Room (New Drawings Changes from Contract Drawings)	Pending AIC	Pending	80,000.00
078	Agana Reservoir	Instrumentation Modification (labor, consumables, equipment only) Demolition/Removal (e) RTU Panel/Conduits and Feeders Install (n) cables from (n) LCP-01 to PCP, (e) conduits to be used. Install conduits fittings for (n) Intrusion Magnetic Switch Install (n) DS with Power conduit & Wiring from MCC Install Comm cables & conduit from (n) LCP-01 to (e) CP-1 Install Control Conduit & Cables from ATS to (n) LCP-01 Install (n) LCP-01 Install wires & rough-ins conduit from relocated Gas Detection Panel to LCP-01 Install wires & rough-ins from Chlorine Gas Cylinder to (n) LCP-01	Agana Chlorina	Pending AIC	Pending	75,000.00
TOTAL						554,884.00





Gloria B. Nelson Public Service Building | 688 Route 15 | Mangilao, Guam 96913  
Tel: (671) 300-6846

## Issues for Decision

### **Resolution No. 23-FY2022**

Relative to Authorizing the Memorandum of Understanding-Memorandum of Agreement for The One-Guam Water Resource Information Program

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

The Guam Waterworks Authority (GWA) and the Department of the Defense (DoD), Department of the Navy have executed an updated 2016 MOU between the GWA and the Department of the Navy Relative to the Military Build-up, in which GWA committed to advancing the “One-Guam” vision for water and wastewater utility needs expected to increase as a result of military and civilian population growth, including the management of the Northern Guam Lens Aquifer (NGLA). The 2016 MOU included provisions for cooperation “to enhance monitoring and management of the NGLA in order to mitigate impacts to potable water resources” and “share access to, responsibilities for, the maintenance” of the monitoring system assets.

GWA also received DoD grant funding to expand and rehabilitate the NGLA monitoring system to improve each entity's ability to manage Guam's water resources. The federal grant conditions require maintenance and sustainment of these monitoring system assets over their anticipated useful life. Accordingly, GWA, DoD, along with the Water and Environmental Research Institute (WERI) and the U.S. Geological Survey (USGS), developed the One-Guam Water Resource Information Program (OGWRIP) as the organizational framework under which to accomplish the stated objectives of the 2016 One-Guam MOU.

The objective is to establish and participate in the OGWRIP via the execution of a Memorandum of Agreement with the DoD as an Exhibit to the 2016 One-Guam MOU, and a Memorandum of Agreement with WERI-USGS to provide supplemental financial support for the OGWRIP. This is necessary to meet GWA's obligations under the 2016 One-Guam MOU and DoD grant conditions for maintenance and sustainment of monitoring system assets constructed/rehabilitated under such grants. The execution of the MOU and MOA is urgent as the wells are anticipated to be completed by the end of this fiscal year, and maintenance-sustainment requirements will follow thereafter.

#### **Where is the location?**

The MOU is intended to cover the NGLA monitoring system and other water resource monitoring locations Island-wide.

#### **How much will it cost?**

To be determined. Cost depends on annual budgets for the OGWRIP and Guam Legislature appropriations which contribute to the annual funding.



**When will it be completed?**

The MOAs will be executed upon approval by the CCU and coordination of final minor edits. The MOAs will be reviewed every three (3) years.

**What is the funding source?**

GWA Funds and DOD Funds.

**The RFP/BID responses (if applicable):**

NA



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. 23-FY2022**

**RELATIVE TO AUTHORIZING THE MEMORANDUM OF UNDERSTANDING-  
MEMORANDUM OF AGREEMENT FOR THE ONE-GUAM WATER RESOURCE  
INFORMATION PROGRAM**

**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** the Guam Waterworks Authority (GWA), the CCU and the Department of the Defense, Department (“DoD”) of the Navy executed a 2010 Memorandum of Understanding (MOU) Relative to the Military Build-up, and in 2016 updated this “One-Guam” MOU; and

**WHEREAS** the purpose of the updated MOU was to define the relationship between Joint Region Marianas (JRM), Naval Facilities Engineering Command Marianas (NAVFAC Marianas) as the Department of Defense (DoD) utilities provider, GWA, and the CCU, while developing the “One-Guam” vision for water and wastewater needs expected to increase as a result of military and civilian population growth; and

**WHEREAS** it is the desire of both GWA and DoD to facilitate changes to both systems in a manner that is mutually beneficial and maximizes the effectiveness of the overall Department of Defense (DoD) and GWA utility systems as a whole. The goal is sustainable, reliable, compliant and secure water delivery, followed with reliable and compliant wastewater removal.

1       **WHEREAS**, subsequent to the execution of the 2016 MOU, GWA received over One  
2       Hundred Seventy-Three million dollars (\$173M) in federal grant funding from the DoD Office  
3       of Local Defense Community Cooperation (OLDCC), to implement various water and  
4       wastewater improvement projects required to address impacts from the Military Build-up,  
5       including the Monitoring System Expansion and Rehabilitation Project (MSERP) which aimed  
6       to expand the means by which both DoD and GWA could effectively manage the water  
7       resources of the Northern Guam Lens Aquifer (NGLA); and

8  
9       **WHEREAS**, the MSERP included the rehabilitation of thirteen (13) existing  
10      observation wells located on both Government of Guam and DoD property, and the installation  
11      of up to seven (7) new deep observation wells located on DoD property in sub-basins of the  
12      NGLA where very little scientific data has been obtained, all of which are intended to provide  
13      more comprehensive understanding of shared water resources and potential impacts from  
14      planned development; and

15  
16      **WHEREAS**, as a condition of OLDCC grant funding, GWA and DoD have an  
17      obligation for the long-term maintenance, sustainment and use of these NGLA monitoring  
18      system assets, commensurate with the anticipated useful life of the capital improvements  
19      constructed with grant funding provided; and

20  
21      **WHEREAS**, the 2016 One-Guam MOU outlines the stated objectives, roles and  
22      responsibilities of both GWA and DoD as parties to the MOU, and of the University of Guam  
23      Water and Environmental Research Institute (WERI) and U.S. Department of Interior, U.S.  
24      Geological Survey (USGS), as members of the One-Guam Technical Experts Group (TEG),  
25      specifically with respect to cooperation “to enhance monitoring and management of the NGLA  
26      in order to mitigate impacts to potable water resources” and “share access to, responsibilities  
27      for, the maintenance” of the monitoring system assets; and

28  
29      **WHEREAS**, GWA and DoD have worked together with WERI and USGS to develop  
30      the organizational framework under which to accomplish the stated objectives of the 2016  
31      One-Guam MOU and meet each party’s responsibilities under said MOU and GWA’s  
32      responsibilities under the OLDCC federal grant award; such framework is defined and

documented in the One-Guam Water Resources Information Program (OGWRIP) and the attendant final GWA-NAVFAC MOA and GWA-WERI-USGS MOA (See Exhibit A and Exhibit B respectively); and

**WHEREAS**, the OGWRIP MOAs have been reviewed and vetted by all parties, and has been confirmed as final and acceptable (subject to final legal counsel comment coordination/corrections) to all parties thereto.

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

**Section 1.** The foregoing recitals hereto are hereby ratified, confirmed, and incorporated herein by reference.

**Section 2.** The Consolidated Commission on Utilities supports the intent of the OGWRIP Memorandum of Agreement (MOA) between the United States Navy and the Guam Waterworks Authority (GWA) (Exhibit A), and the Memorandum of Agreement (MOA) between GWA, WERI and USGS (Exhibit B).

**Section 3.** The GWA General Manager is hereby authorized to execute the MOAs upon finalization of legal counsel comment coordination/correction.

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

**DULY AND REGULARLY ADOPTED**, this 26<sup>th</sup> day of July, 2022.

Certified by:

Attested by:

**JOSEPH T. DUENAS**  
Chairperson

**MICHAEL T. LIMTIACO**  
Secretary

//

//

**SECRETARY'S CERTIFICATE**

I, Michael T. Limtiaco, 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

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2

3

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## 2016 MEMORANDUM OF AGREEMENT Exhibit D

8

9

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10

11

Jun 2022

12

13

14

15

Agreement Number: N40192-XXXXXXX-XXX

NAVAL FACILITIES ENGINEERING COMMAND MARIANAS  
GUAM WATERWORKS AUTHORITY

NFM  
4000  
Ser N00/

MEMORANDUM OF AGREEMENT  
BETWEEN  
GUAM WATERWORKS AUTHORITY  
AND  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND MARIANAS

Subj: MEMORANDUM OF AGREEMENT TO ADDRESS THE CO-MANAGEMENT AND  
PROTECTION OF THE NORTHERN GUAM LENS AQUIFER

Ref: (a) Memorandum of Understanding between Guam Waterworks  
Authority, Guam Consolidated Commission on Utilities,  
Naval Facilities Engineering Command Marianas, and  
Joint Region Marianas dated 7 December 2016  
(b) Framework for Discussion: Strategy for an Integrated  
Water System for Guam, September 2018, or later

1. Purpose. Naval Facilities Engineering Systems Command  
Marianas (NFM), as the Department of Defense (DoD) utilities  
provider, and Guam Waterworks Authority (GWA) agree that the  
protection of Guam's sole source aquifer known as the Northern  
Guam Lens Aquifer (NGLA or the "Aquifer") is important to every  
resident of Guam.

The Parties understand the need to protect the NGLA as a  
critical resource for Guam's future.

The Parties understand that the data collected from the  
observation wells may drive some operational decisions in order  
to maintain the health of the NGLA.

The Parties understand that the maintenance of the observation  
wells is key to future ability to collect data from them.

The parties acknowledge that observation wells are located in  
different areas throughout the island, with some placed on DoD  
property, and that maintenance of the observation well system  
therefore requires the cooperation of the parties. The Parties

Agreement Number: N40192-XXXXXXXX-XXX

63 desire to protect and to co-manage the Aquifer as set forth in  
64 this Memorandum of Agreement (the "Agreement").  
65

66 2. Background. Groundwater production from the NGLA is  
67 currently about 40 million gallons per day and may increase by  
68 as much as 25 percent over the next decade because of population  
69 growth that includes proposed relocation of DoD personnel to  
70 northern Guam. A 2013 United States Geological Survey (USGS)  
71 groundwater modeling study funded by the United States Marine  
72 Corps found that increased withdrawals from the NGLA will, in  
73 the long-term, result in a decline in water levels and a rise in  
74 the transition zone between freshwater and saltwater. In some  
75 cases, absent active management of the NGLA, pumping from  
76 individual wells may induce brackish water to enter wells. The  
77 groundwater model developed for this study can be updated with  
78 new hydrologic data collected and can be used to analyze new  
79 scenarios developed to address upcoming demands on the NGLA.  
80

81 Reference (a) was developed to explore opportunities for  
82 partnering and integration of water and wastewater utilities to  
83 better meet the needs of the island's population including  
84 growth from the proposed military buildup.  
85

86 The stated objectives under Section 5.a of Reference (a) include  
87 the following:

- 88 a. Protect the NGLA and other drinking water sources from  
89 contamination and/or saltwater intrusion;
- 90 b. Cooperate to improve the NGLA Observation Well System used  
91 to study the changes in the NGLA via expansion of the  
92 current system, rehabilitation of existing wells, and  
93 proper abandonment of wells no longer intended for  
94 production to enhance monitoring and management of the NGLA  
95 in order to mitigate impacts to potable water resources;  
96 and
- 97 c. Share access to, and responsibilities for, the maintenance  
98 of those wells.  
99

100 Under the Terms of Agreement in Reference (a), the document  
101 states that all Parties will, "Cooperate in completing studies  
102 related to meeting the drinking water needs of Guam including  
103 NGLA sustainability studies. . . ."

104 Reference (b) was the first document developed for the One-Guam  
105 partnership. It is a living document, and protecting the NGLA  
106 as a vital resource for Guam was a driver for the development of  
107 this document.

108 3. Cancellation. No previous documents are superseded.



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109  
110 4. Applicable Laws and Regulations. This document and the  
111 objectives, goals, and processes agreed upon are subject to  
112 applicable laws, regulations, or other applicable requirements  
113 of the United States, the Government of Guam (GovGuam), and the  
114 DoD. The Parties agree that legal, regulatory, or other  
115 requirements applicable to either Party take precedence over any  
116 agreement reflected herein.

117  
118 5. Objectives. It is the primary objective of the parties to  
119 sustain, further develop, and improve the NGLA observation well  
120 system meant to protect Guam's sole source aquifer which serves  
121 both DoD and GWA water systems.

122  
123 6. Terms of Agreement. The Parties agree to:

- 124  
125 a. Cooperate in the development of the NGLA observation well  
126 system to monitor the health of the Aquifer.  
127 b. Jointly support the development of source water data for  
128 the NGLA.  
129 c. Collectively discuss the interpretation of those data to  
130 co-manage the NGLA for the benefit of all who draw water  
131 from it.  
132 d. Make decisions which will benefit the health of the NGLA  
133 jointly after careful interpretation of all the data.  
134 e. Collaborate with USGS to update the model-based management  
135 tool, developed in 2013 by USGS and the Marine Corps, as  
136 increased data availability dictates.

137  
138 7. Roles and Responsibilities. The responsibilities and  
139 expectations for both Parties under this agreement are outlined  
140 below.

141  
142 **a. DoD and GWA jointly will:**

143 (1) Maintain the observation wells based on agreed upon  
144 standards specified below.

145 (2) Submit to well inspections by USGS or the University  
146 of Guam Water and Environmental Research Institute (WERI) for  
147 validation that the wells are properly maintained.

148 (3) Split the cost of data collection and evaluation based  
149 on the respective permitted production rates of each sub-  
150 basin, and subject to periodic review.

151 (4) Provide funding to WERI and USGS for monitoring and  
152 technical support services related to the One-Guam Water  
153 Resources Information Program.

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(5) Review reports USGS and WERI produce by applying the data collected into the model-based management tool (see section 6.a.5 above) to guide the responsible extraction of water from the NGLA.

(6) Responsibly and cooperatively manage the NGLA.

(7) Support the growth and responsible development of northern Guam by cooperatively assessing proposed development actions to identify NGLA impacts.

(8) Work together to optimize the use of extracted water and fulfill essential needs of both parties.

(9) Prevent or mitigate adverse impacts to the NGLA.

**b. GWA will:**

(1) Use grant funds from the Office of Economic Adjustment (OEA) to rehabilitate existing wells determined by WERI to be appropriately placed for use in the NGLA Observation Well system.

(2) Use grant funds from the OEA to build new observation wells in locations determined by WERI.

(3) Relinquish ownership of any NGLA monitoring wells placed by GWA on DoD property.

(4) Fund or otherwise ensure completion of maintenance requirements for all NGLA monitoring wells owned by or assigned to GWA and not located on DoD property.

(5) Maintain the security at the GovGuam monitoring well facilities through intact perimeter fencing, gate locks, and wellhead housing locks. The property will not be left unsecured for any length of time.

(6) Maintain vegetation control at the GovGuam monitoring well facilities.

(7) Provide open access to the USGS and WERI to conduct monitoring operations at the GovGuam monitoring well facilities.

**c. DoD will:**

(1) Assist in the expansion of the NGLA observation well system by performing appropriate DoD reviews (such as required for site approvals), access to the property, or any other requirement that would be inherently a DoD process.

(2) Retain ownership of and responsibility for any NGLA monitoring wells placed on DoD property.

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(3) Fund or otherwise ensure completion of maintenance requirements for all NGLA monitoring wells located on DoD property.

(4) Maintain the security at the DoD monitoring well facilities through intact perimeter fencing, gate locks, and wellhead housing locks. The property will not be left unsecured for any length of time.

(5) Maintain vegetation control at the DoD monitoring well facilities.

(6) Provide open access to the USGS and WERI to conduct monitoring operations at the DoD monitoring well facilities.

## 8. Other Provisions

### **a. Enforceability**

(1) Performance. Performance under this Memorandum of Agreement (MOA) by all Parties is dependent upon lawful appropriation, availability, and allocation of funds by proper authorities. Nothing herein shall constitute nor be considered to constitute an obligation or expenditure of funds in advance of or in excess of proper appropriations for either Party (for DoD: Congress of the United States or otherwise be in violation of the Anti-Deficiency Act, 31 U.S.C. § 1341 et seq., for GWA: Their management and/or the CCU or the PUC).

(2) Benefits. This MOA is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity, by any Party against the United States or GWA, or agencies, instrumentalities, officers, employees, or agents of either.

### **b. Resolution of Disagreements**

(1) The Parties shall consult with one another to resolve issues at the One-Guam water working group level (WG) level and elevate disputes through the respective chains-of-command to the Senior Advisory Group level only if necessary.

(2) Notification of areas of disagreement by any Party will be submitted in writing by and between the GWA General Manager and the NFM Utilities Management Product Line Director.

9. Modification. Modifications to this agreement may be made with the concurrence of all Parties. Modifications desired by any Party are to be requested in writing at least 60 days in advance of the proposed effective date and will become effective only if agreed upon in writing by all Parties.

Agreement Number: N40192-XXXXXXXX-XXX

10. Review. This MOA will be reviewed triennially and/or when there is a change in principals to evaluate its effectiveness and determine if any modifications are required.

11. Effective Date. This MOA is effective upon the date of final signature and shall remain in effect for a period of nine years. This MOA may be terminated by any of the Parties upon providing 90 days written notification to all Parties.

**APPROVED:**

\_\_\_\_\_  
MIGUEL C. BORDALLO, P.E.  
General Manager  
Guam Waterworks Authority

Date: \_\_\_\_\_

\_\_\_\_\_  
TIMOTHY LIBERATORE  
Captain, U.S. Navy  
Commanding Officer  
Naval Facilities Engineering Command Marianas

Date: \_\_\_\_\_

Agreement Number: N40192-XXXXXXXX-XXX

## EXHIBIT B

# ONE-GUAM WATER RESOURCES INFORMATION PROGRAM MEMORANDUM OF AGREEMENT

---

30 June 2022

Agreement Number: X0000-000000000-0000

GUAM WATERWORKS AUTHORITY  
UNIVERSITY OF GUAM WATER AND ENVIRONMENTAL RESEARCH INSTITUTE OF  
THE WESTERN PACIFIC  
U.S. GEOLOGICAL SURVEY PACIFIC ISLANDS WATER SCIENCE CENTER

NFM  
4000  
Ser N00/  
11 JUL 22

MEMORANDUM OF AGREEMENT  
BETWEEN  
GUAM WATERWORKS AUTHORITY  
AND  
THE UNIVERSITY OF GUAM WATER AND ENVIRONMENTAL RESEARCH  
INSTITUTE OF THE WESTERN PACIFIC  
AND  
U.S. GEOLOGICAL SURVEY PACIFIC ISLANDS WATER SCIENCE CENTER

Subj: MEMORANDUM OF AGREEMENT TO IMPLEMENT THE ONE-GUAM WATER  
RESOURCES INFORMATION PROGRAM

Ref: (a) Memorandum of Understanding between Guam Waterworks  
Authority, Guam Consolidated Commission on Utilities,  
Naval Facilities Engineering Command Marianas, and  
Joint Region Marianas dated 7 December 2016

Encl: (1) Components of a Water Resources Information Program  
(2) One-Guam Water Resources Information Program Structure  
(3) WERI-PIWSC One-Guam Work Plan

1. Purpose. Guam Waterworks Authority (GWA), as the local drinking water provider; and the University of Guam (UOG) Water and Environmental Research Institute of the Western Pacific (WERI) and U.S. Geological Survey (USGS) Pacific Islands Water Science Center (PIWSC), as designated collaborating scientific advisors to GWA and Naval Facilities Engineering Command Marianas (NFM) under the provisions of Reference(a) agree to implement the OGWRIP. This document defines the agreements of the Parties and the responsibilities of each Party under the OGWRIP.

2. Background. Reference (a) was developed to explore opportunities for partnering and integration of water and wastewater utilities to better meet the needs of the island's population, including growth from the proposed military buildup.

Agreement Number: N40192-XXXXXXXX-XXX

70  
71 The following information is all from Reference (a):

72 Paragraph 6i, Organizational Components, establishes the  
73 Technical Experts Group (TEG), including WERI and USGS, to  
74 "develop and maintain all databases and technical tools" and to  
75 "identify problems and propose solutions."  
76

77 Under paragraph 6k, WERI is specifically designated as  
78 repository of all water-related data and called on to "perform  
79 technical studies related to [Guam's] water resources."  
80

81 Para. 7d(1), Terms of Understanding, calls for all parties  
82 to "cooperate in determining the most cost-effective and timely  
83 source(s) of funding to facilitate solutions...."  
84

85 Para. 7d(2), Terms of Understanding, calls for all parties  
86 to "cooperate in completing studies related to meeting the  
87 drinking water needs of Guam including NGLA [Northern Guam Lens  
88 Aquifer] sustainability studies."  
89

90 3. Applicability. This document and the objectives, goals, and  
91 processes agreed upon are subject to applicable laws of the  
92 United States, the Government of Guam (GovGuam), and the  
93 Department of Defense (DoD). The Parties agree that legal  
94 requirements applicable to either Party take precedence over any  
95 agreement reflected in this MOA.  
96

97 4. Objectives. To meet the provisions of References (a) cited  
98 above by establishing the OGWRIP organizational structure,  
99 mission, activities, and funding.  
100

101 5. Mission. The One-Guam Water Resources Information Program  
102 will provide DoD and GWA with accessible and reliable data;  
103 timely analyses and reports; directed research on critical  
104 topics; expert advice for informed water-resource management,  
105 engineering, and policy decisions; and professional education,  
106 technical training, and outreach support to best manage the  
107 drinking-water resources of Guam.  
108

109 The targeted data collection and investigations will enable GWA  
110 and NFM to employ adaptive-management techniques by iteratively  
111 reassessing the efficacy of management policies and the  
112 understanding of the water-resource systems.  
113

Agreement Number: N40192-XXXXXXXX-XXX

114 6. Activities. The Water Resources Information Program shall  
115 consist of a hierarchy of activities that can be visualized as a  
116 pyramid as shown in Enclosure 1.

117 Data will be collected, processed, organized, interpreted, and  
118 applied. Information products derived from the data will be made  
119 available to users starting with raw data, up through the  
120 conclusions and recommendations of advisory papers, technical  
121 reports, and professional papers.

122 7. Organizational structure. The integrated One-Guam Water  
123 Resources Information Program will consist of the One-Guam Water  
124 Resources Monitoring System (OGRWMS) and the One-Guam Water  
125 Resources Analytical Program (OGWRAP) in which WERI and USGS  
126 will provide services to both NFM and GWA, as defined in section  
127 10, Roles and Responsibilities. (See glossary of terms in  
128 Enclosure 2.)  
129

130 8. The One-Guam Water Resources Monitoring System (OGWRMS). The  
131 OGWRMS will include data-collection sites for groundwater data  
132 in the north, surface-water data in the south, and rainfall data  
133 throughout the island.  
134

135 9. Terms of Agreement. The Parties understand the need for  
136 close collaboration. Accordingly, the Parties agree to:  
137

- 138 a. Cooperate in preparing annual plans and budgets for the  
139 OGWRIP.  
140
- 141 b. Jointly support the preparation and presentation of annual  
142 plans and budgets by the service providers to the funding  
143 providers.  
144
- 145 c. Collectively identify and discuss services and products  
146 needed by NFM or GWA and the resources on hand or needed by  
147 WERI and PIWSC for providing them.  
148
- 149 d. Manage the OGWRIP to promote scientifically informed  
150 decision-making and best practices to ensure the health of  
151 the NGLA, and Guam's water resources as a whole, in  
152 accordance with the objectives of reference (a), and the  
153 mission of OGWRIP as stated in para. 5, above.  
154

155 10. Responsibilities. The responsibilities and expectations  
156 for the parties under this agreement are outlined below.  
157



Agreement Number: N40192-XXXXXXXX-XXX

a. UOG/WERI and USGS/PIWSC will jointly:

(1) Prepare a *WERI-PIWSC One-Guam Work Plan* (Enclosure 3), which will be the basis for the annual budget.

(2) Provide the deliverables identified in the annual work plan (Enclosure 3) based on the following topics:

a. Perennial water resources monitoring services, reports, and an archive for the data and products.

b. Perennial analytical services and products including up-to-date maps, state-of-the-art models, and expert advice.

iii. Annually selected projects to meet immediate or anticipated operational or capital improvement needs:

iv. Professional education, technical training, and outreach for engineering staff, managers, planners, and executives.

b. GWA will:

(1) Provide funding for the program and facilitating continued access to data-collection sites located on GovGuam property.

11. Annual budgeting and funding process

a. Budgeting timeline

1. During October through December of any given year, all Parties will jointly prepare the annual plan for OGWRIP services and products and the accompanying combined annual OGWRIP budget for the subsequent fiscal year.

2. By the fifteenth of February each year, WERI will submit to the Guam Legislature through the University of Guam, the requests for the GovGuam shares of their respective budget components within the OGWRIP budget. The same budget can be submitted to the Guam Legislature on the first of August to comply with CWMP and GHS enabling statutes.

3. When the legislative appropriation process is complete and UOG has been advised of the appropriations of the GovGuam shares of the CWMP and GHS carried for OGWRIP

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in the UoG budget, UOG will advise GWA of the appropriations and adjust budget shares accordingly in order to balance the budget. In the event of a shortfall in the budget allotment payments from DOA, GWA will fulfill the remaining balance for the fiscal year.

b. Stipulations

1. WERI and UOG will provide a quarterly update to the other Parties documenting the status of funding from the Guam Legislature and disbursements from DOA.
2. Transfers of funds will be made in accordance with existing provisions.

12. Other Provisions

a. **Enforceability**

(1) Performance. Performance under this MOA by all Parties is dependent upon lawful appropriation, availability, and allocation of funds by proper authorities. Nothing herein shall constitute nor be considered to constitute an obligation or expenditure of funds in advance of or in excess of proper appropriations for either Party (for DoD: Congress of the United States or otherwise be in violation of the Anti-Deficiency Act, 31 U.S.C. § 1341 et seq.; for GWA: Their management and/or the CCU or the Public Utilities Commission (PUC). This MOA does not create an actual or implied intention, or requirement for the USGS to enter into a contract or an assistance agreement (e.g., grant or cooperative agreement).

(2) Benefits. This MOA is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity, by any Party against the United States or GWA, or agencies, instrumentalities, officers, employees, or agents of either.

(3) Non-Exclusivity. This agreement in no way restricts DoD and USGS from participating in similar activities or arrangements with other public or private agencies, organizations, or individuals.

(4) Endorsements. Nothing in this agreement may be interpreted to imply that the United States, the Department of the Interior, or the USGS endorses any GWA or WERI product,

Agreement Number: N40192-XXXXXXXX-XXX

service, or policy. GWA and WERI will not take any action or make any statement that suggests or implies such an endorsement.

(5) Federal Advisory Committee Act. The parties will comply with the Federal Advisory Committee Act to the extent it applies.

(6) Interagency Agreements. This MOA does not commit the USGS or DoD to enter into any specific interagency agreements for the purpose(s) of this MOA. Projects involving cost sharing or reimbursable funding between the agencies must be included in follow-on interagency agreements.

**b. Resolution of Disagreements**

(1) The Parties shall consult with one another to resolve issues and elevate disputes through the respective chains-of-command only if necessary.

(2) Notification of areas of disagreement by any Party will be submitted in writing by and between the WERI Director or the PIWSC Director and the GWA General Manager.

13. Statutory Authorities. USGS authority to enter into the MOA is provided by The Organic Act of March 3, 1879, as amended, 43 U.S.C. 31 et seq., and 43 U.S.C. 36c.

14. Modification. Modifications to this agreement may be made with the concurrence of all Parties. Modifications desired by any Party are to be requested in writing at least 60 days in advance of the proposed effective date and will become effective only if agreed upon in writing by all Parties.

15. Review. This MOA will be reviewed triennially and/or when there is a change in principals to evaluate its effectiveness and determine if any modifications are required.

16. Effective Date. This MOA is effective upon the date of final signature and shall remain in effect for a period of nine years. This MOA may be terminated by any of the Parties upon providing 90 days written notification to all Parties.

Agreement Number: N40192-XXXXXXXX-XXX

**APPROVED:**

\_\_\_\_\_  
MIGUEL C. BORDALLO, P.E.  
General Manager  
Guam Waterworks Authority

Date: \_\_\_\_\_

\_\_\_\_\_  
John P. Hoffmann  
Director, Pacific Islands  
Water Science Center  
U.S. Geological Survey

Date: \_\_\_\_\_

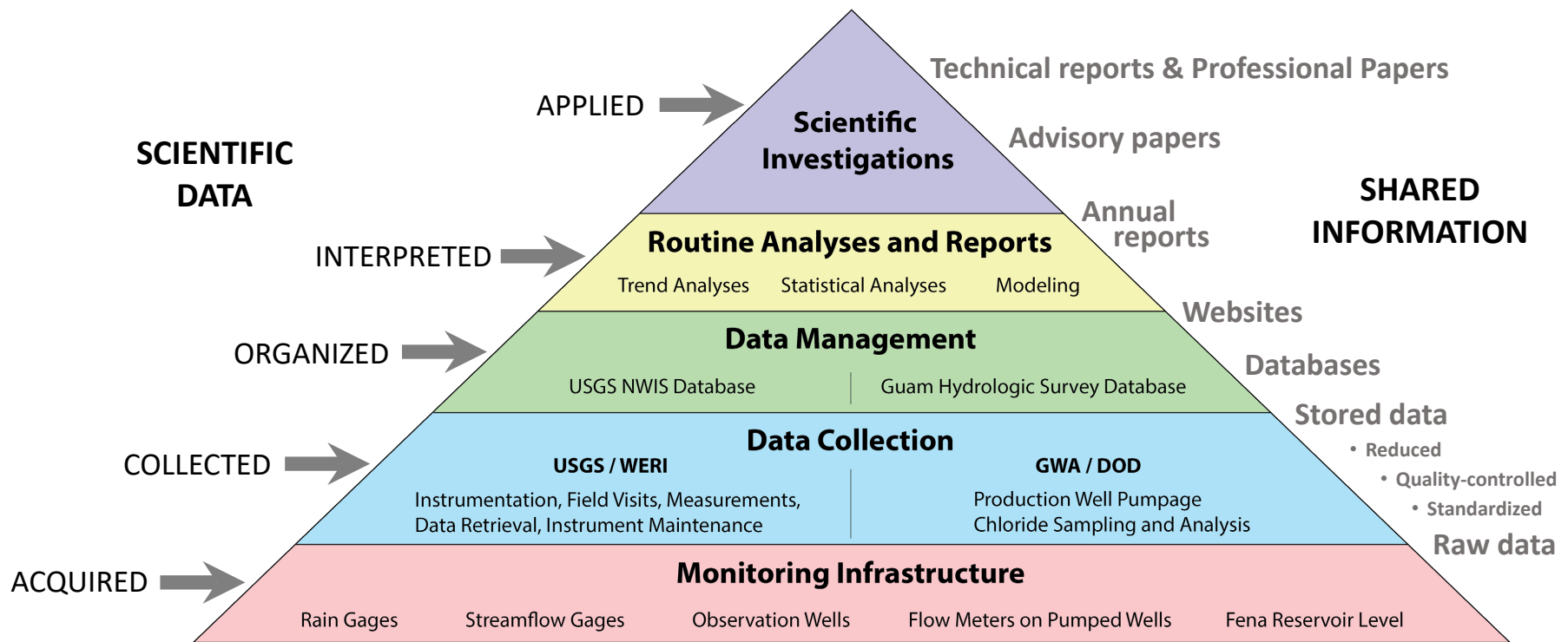
\_\_\_\_\_  
Thomas W. Krise, Ph.D.  
President  
University of Guam

Date: \_\_\_\_\_

\_\_\_\_\_  
John W. Jenson, Ph.D.  
Director, WERI  
University of Guam

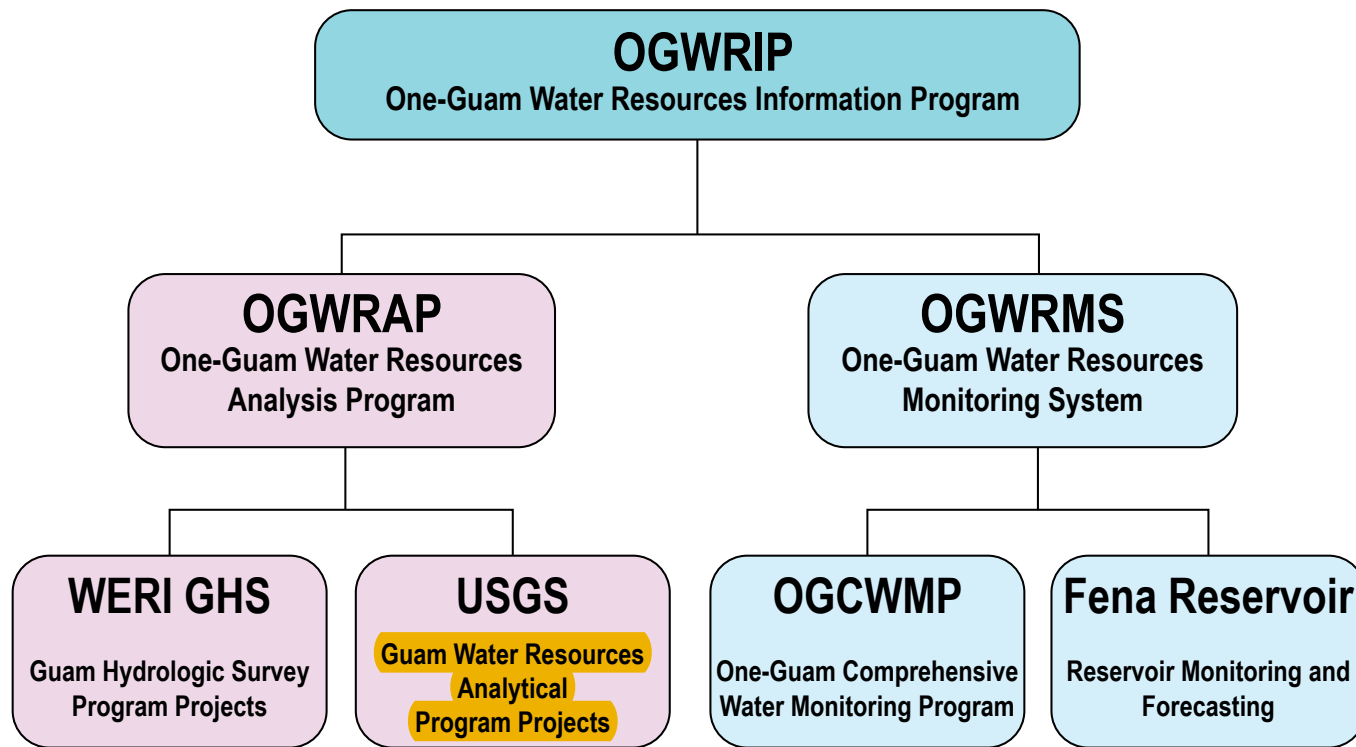
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# Components of a Water Resources Information Program



**Attachment 1.** The essential components of a water resources information program.

# One-Guam Water Resources Information Program (OGWRIP) Program Structure



**Attachment 2.** Organizational structure of the One-Guam Water Resources Information Program.

## Glossary of terms

**Fena Reservoir Monitoring** A program that contains the monitoring of water level in Fena Reservoir, semi-annual vertical-datum surveys of the Fena Reservoir dam settlement markers, and quarterly reports of projected water level in the reservoir.

**Guam Hydrologic Survey (GHS)** A program within the Water and Environment Research Institute of the Western Pacific—established by the Guam Legislature in 1998 with Public Law No. 24-247—that archives hydrologic data from Guam and conducts research on water-related issues of local importance.

**Guam Waterworks Authority (GWA)** The public utility provider for Guam—established by the Guam Legislature in 1996 by Public Law No. 23-119.

**Naval Facilities Engineering Command Marianas (NFM)** The utility provider for military bases on Guam and Oceania.

**One-Guam Comprehensive Water Monitoring Program (OGCWMP)** An expansion of the original Comprehensive Water Monitoring Program (CWMP)—established by the Guam Legislature in 1998 with Public Law No. 24-161—that provides long-term hydrologic information that can be used to understand and sustainably manage Guam’s water resources.

**One-Guam Water Resources Analytical Program (OGWRAP)** A program containing all hydrologic analyses and data interpretation, including but not limited to, statistical trend analyses, annual summary reports, groundwater modeling, groundwater-flow-direction analyses, reservoir-level forecasting, and outreach support.

**One-Guam Water Resources Information Program (OGWRIP)** A collaborative program between the Guam Waterworks Authority, Naval Facilities Engineering Command Marianas, Water and Environmental Research Institute of the Western Pacific, and USGS to protect the Northern Guam Lens Aquifer and other water supplies on Guam by providing water-resource managers with objective scientific information for decision making. The program includes data collection, analysis, modeling, and regular meetings with stakeholders.

**One-Guam Water Resources Monitoring System (OGWRMS)** A program containing all hydrologic data-collection sites and monitoring activities on Guam.

**Pacific Islands Water Science Center (PIWSC)** An office within the U.S. Geological Survey that conducts hydrologic monitoring and investigative studies on a wide variety of issues affecting water resources in the State of Hawai‘i and the U.S. Affiliated Pacific Islands.

**U.S. Geological Survey (USGS)** A scientific, non-regulatory agency of the U.S. Department of the Interior that studies the landscape, natural resources, and natural hazards of the United States.

**Water and Environment Institute of the Western Pacific (WERI)** A research institute within the University of Guam that provides research, education, and outreach on hydrologic resources for Guam, the Commonwealth of the Northern Mariana Islands, and the Federated States of Micronesia.

## Attachment 2. Organizational structure of the One-Guam Water Resources Information Program.—Continued

Enclosure 3

## Joint Annual Plan for WERI-PIWSC One-Guam Deliverables to Guam Waterworks Authority and NAVFAC Marianas

This plan will be updated each year at the start of the budget cycle for the fiscal year.

### I. PERENNIAL PRODUCTS AND SERVICES

Perennial products and services are those that are steadily produced or permanently in place.

#### A. Products: Tools and References for Guam Water Resources Management

Products listed below are accessible on the WERI and USGS websites.<sup>1</sup> Selected items are published in hard copy as pamphlets or posters and are available at WERI.

1. Aquifer Map (WERI). First compiled in 1998 and updated regularly with new data and geospatial tools, WERI's *Hydrogeologic Map of the Northern Guam Lens Aquifer* is the foundation for groundwater exploration, development, modeling, and management. The map is available online at [VB2018Poster1 \(uog.edu\)](#). WERI Technical Report 142 contains details regarding its construction.
2. State of Aquifer Report (WERI, PIWSC). Contains up-to-date and reliable basic information for water resources professionals, policy makers, educators, students, and interested citizens. It is available [online](#), where it is updated continually and revised annually.
3. Reports of Analyses and Modeling Results (WERI, PIWSC). Outcomes of modeling studies are documented in summary reports that provide explanations and advice in non-technical language to inform and support management decisions.
4. Databases and Websites (WERI, PIWSC). WERI and USGS databases and websites contain current and historic hydrologic data including thousands of scanned historical documents.
  - Local databases (WERI) include the [GHS Borehole Database](#) and the [GHS Chloride and Production Database](#).
  - National databases (USGS) include the [National Water Information System \(NWIS\) database](#) and the [GeoLog database](#).
5. Scientific and Technical Reports Library (WERI, PIWSC). The library contains links to downloadable copies of all of the WERI and USGS technical reports and advisory papers. It is available [online](#).

#### B. Services for Guam Water Resources Management

Services listed below are delivered at meetings, presentations, and workshops for GWA employees, NFM staff, CCU members, and other policy makers and agency heads. All content is published online.

1. Comprehensive Water Monitoring Program (PIWSC, WERI). This is the premier service provided by USGS through its partnership with WERI. The program provides quarterly data collection and servicing of rain gages, stream gages, and observation wells by USGS teams supported by WERI. Uses of data by researchers, managers, regulators, students, and policy makers include:
  - Tracking the thickness and condition (water levels and salinity) of the freshwater lens and documenting trends and patterns in storage and salinity across the aquifer.
  - Calibrating groundwater and water-budget models to achieve accuracy and evaluate precision.

---

<sup>1</sup>[Håfa Adai | Guam Hydrologic Survey](#) [Guam Hydrologic Survey \(uog.edu\)](#) ; [USGS Current Water Data for Guam](#)



2. Modeling Programs (PIWSC, WERI). Primary tools to simulate real-world conditions to understand, predict, and manage water resources. Are essential because experiments are not practical.
  - Groundwater (PIWSC, WERI).
    - The USGS numerical groundwater-flow and salinity model—developed 2010–2013 with support from the U.S. Marine Corps—will be used to evaluate the effects of selected aquifer-scale and long-term recharge and withdrawal scenarios on groundwater conditions and the availability of potable water. USGS and WERI models will be upgraded and recalibrated at five-year intervals using data from the CWMP observation well network.
    - WERI will use the [AQUAVEO GMS advanced modeling system](#) to separately simulate each of the aquifer’s six basins at sufficiently fine scale to resolve effects of individual wells. Scenarios will explore alternatives proposed by GWA and/or NFM for optimizing production by changing pumping rates and/or relocating individual wells and wellfields.
  - Surface water. USGS provides quarterly forecasts of estimated stage (water level) in Fena Reservoir. The forecasts estimate reservoir stage for pumping scenarios using El Niño–Southern Oscillation (ENSO) rainfall projections developed by WERI/UOG.
3. Annual Professional Presentations and Workshops
  - August: WERI Regional Advisory Meeting. This will be held annually in conjunction with the annual American Water Works Association local chapter meeting. This meeting features:
    - *Activities Reports* on projects that are recently completed, ongoing, or recently funded
    - *Regional State of the Climate Report* modeled after the ENSO Newsletter Reports
  - November: WERI Guam Advisory Meeting and Workshop. This is a day-long event with up to three two-hour workshop sessions on:
    1. *Aquifer Report* (WERI-USGS *State of the Aquifer* presentation)
    2. *Aquifer model updates and developments*
    3. *Guam drought resiliency workshop and plan review*
  - March–April: Aquifer Field Trips. In-person tour (4–6 hours) or digital variants (2–4 hours)
4. Quarterly Technical Experts Group (TEG) meetings. The TEG is established by the MOA to (1) share data, (2) identify concerns, and (3) propose solutions to the One-Guam Water and Wastewater Working Group. WERI and USGS will present an *NGLA Status and Trends Update* at each meeting.
5. Quarterly workshops for ongoing management support. These will include 2-to-4-hour instructional sessions (which may be credited for Professional Development). They may be delivered in conjunction with the quarterly One-Guam TEG meetings. Proposed topics for now include:
  - NGLA Monitoring Workshop (1<sup>st</sup> quarter)
  - Production Management Workshop (2<sup>nd</sup> quarter)
  - Emerging Contaminants Workshop for GWA/GEPA (3<sup>rd</sup> quarter)
  - Use of WERI Tools: maps and database navigation, application (4<sup>th</sup> quarter)
  - Selected topics of interest to GWA, NFM, other agencies, policy makers upon request

## **II. ANNUALLY SELECTED PROJECTS**

### **A. Technical Support / Studies on an as-needed basis**

These topics will be identified for RFP to interested researchers during annual WERI Advisory Meetings and programmed into WERI-USGS research agendas for the coming fiscal year.

Topics suggested by GWA for FY2023 and the near future include:

1. Scientific support for cesspool and septic tank (C&ST) elimination (ongoing for FY22–FY23)
2. Scientific support for Production Pumping Rate optimization (proposed for FY23–FY24)
3. Well siting optimization: re-siting vs. rehabilitation of wells (proposed for FY23–FY24)
4. Study of correlation between vadose zone thickness and nitrate concentrations
5. Studies of stormwater impacts on NGLA and other infrastructure

## PROPOSED/ANTICIPATED SCHEDULE

### September 2022

- Thu-Fri, 1-2 Sep: *AWWA Meeting*, Hybrid.
  - Annual meeting with presentations, business session, field trips
- Thu, 1 Sep: *WERI Regional Advisory Meeting*, Online w/Guam, CNMI, FSM advisory groups
  - Held in conjunction with the AWWA meeting
  - WERI faculty and students present reports on projects, solicit suggestions
- Thu, 15 Sep: WERI on-site/in-person advisory meeting/workshop in CNMI, Saipan

### October 2022

- WERI faculty begin proposals for One-Guam cycle, in consultation with GWA, NFM, others
- Thu, 20 Oct: WERI on-site/in-person advisory meeting/workshop in FSM, Pohnpei
- Technical Experts Group Mtg, 1<sup>st</sup> Quarter FY2023: NGLA Monitoring Workshop

### November 2022

- Thu, 10 Nov: *WERI Guam Advisory Meeting and Annual Workshops*, Tumon, hybrid:
  1. *WERI Mission: Who We Are and What We Do*, 20 min.
  2. *State of the Aquifer Workshop*: WERI & USGS SOTA presentations, discussion, instruction, 2 hrs
  3. *Aquifer Model Update/Developments Workshop*: WERI, USGS, 1 hr. each)
  4. *Guam Drought Resiliency Workshop / Plan Review for Northern Aquifer and Southern Watersheds* (WERI, USGS, 1 hr. each)
- WERI faculty prepare proposals for coming One-Guam funding period, with GWA, NFM.

### December 2022

- WERI faculty submit One-Guam (GHS) proposals to WERI directorate to prepare One-Guam Budget in coordination with USGS for inclusion in UOG budget
- WERI faculty submit USGS 104b proposals to WERI director for forwarding to USGS.

### January 2023

- WERI directorate submits One-Guam Budget to UOG, which submits budget requests to Legislature/GWA and NFM
- TEG Mtg, 2<sup>nd</sup> Quarter FY2023: Production Management Workshop

### February 2023

- WERI faculty submit One-Guam (GHS) proposals to WERI directorate to prepare One-Guam Budget in coordination with USGS for inclusion in UOG budget

### March-April 2023

- WERI Aquifer Field Trips: Senior Executives, Professionals
- UOG Budget Hearing at Legislature
- TEG Mtg: Emerging Contaminants Workshop (GWA/GEPA, 3<sup>rd</sup> Quarter, FY2023)

### May 2023-June 2023

- Summer fieldwork, laboratory work, travel, training gets underway for funded projects
- UOG budget approved by Legislature's committees, allocations made, budgets finalized

### July 2023

- TEG Mtg: Use of WERI Tools (maps and database navigation, application, 4<sup>th</sup> Quarter, FY2023)

### August 2023

- Legislature acts on GovGuam FY2023 budget
- Final CWMP and GHS plans/budget presented to Legislature per PL 24-161, 247



Gloria B. Nelson Public Service Building | 688 Route 15 | Mangilao, Guam 96913  
Tel: (671) 300-6846

### **Issues for Decision**

#### **GPA Resolution No. FY2022-24 / GWA Resolution No. 24- FY2022**

Relative to the Creation of the Utility Customer Care Representative I, Utility Customer Care Representative II, Utility Customer Care Representative III, and the Utility Customer Care Representative Supervisor position for the Guam Power Authority (GPA) and the Guam Waterworks Authority (GWA).

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

The Customer Services Division for both Guam Waterworks Authority (GWA) and Guam Power Authority (GPA) has evolved throughout the years increasing the scope of work to not only service all ratepayers but to manage the day-to-day customer care activities and programs. The Customer Services Division is responsible for directly interacting with customers through various communication modes, requiring additional knowledge abilities, and skills for the position.

The Customer Services Representative (CSR) series was initially created in July 1980, which at the time was under the purview of the Civil Service Commission (CSC) with the intent of the CSR to respond to customer-related inquiries and perform basic administrative and clerical duties. The current GPA and GWA positions that will be replaced by the proposed creations are:

- Customer Service Representative
- Customer Service Supervisor

The current positions have not been updated to account for the modern-day duties and responsibilities, nor reflect the skill sets and standards for a Utility Customer Service Representative required to provide services to GPA and GWA customers. The use of the outdated job standards is not viable for GPA and GWA to meet the needs of its customers because the duties and responsibilities of a Utility Customer Care Representative is more complex than the Customer Service Representative positions developed in 1980 being utilized by both utilities and other government agencies today.

The role of a Customer Service Representative at GPA and GWA has evolved and requires additional knowledge, skills, and abilities specific to a utility organization. Customer inquiries are primarily about more difficult billing and consumption issues, meter installation requirements, connecting to utility systems and troubleshooting for service interruptions. Most of the requests handled by GPA and GWA Utility Representatives take additional time and research to resolve and apply applicable utility rules, regulations, statutes, and rate changes.

Thus, the creation of the Utility Customer Care Series is for the efficient and effective performance of duties and functions for both GPA and the GWA Customer Services Division. The creation of this series of positions is necessary to explicitly identify the utility-based job specifications and complexity needed for the Customer Service Division. Additionally, the creation is also necessary to integrate and support CCU's initiative of "One Utility" within the Customer Services Division by aligning positions and pay scales for both utilities for the team responsible to support customers and resolve their issues.

**Where is the location?**

The Utility Customer Care Representative series of positions will be organizationally based with the Customer Service Divisions of GPA and GWA.

**How much will it cost?**

The proposed pay ranges and demonstration of compliance with §6301 of this Title: GWA & GPA's compensation plan was authorized by P.L. 28-159 and approved by the CCU in October 2007. The proposed compensation is in accordance with the Strategic Pay Plan Methodology. There is no cost in creating the series of positions, however, the proposed salary range to fill the positions are as follows:

- **Utility Customer Care Representative I**
  - **Minimum:** \$35,366 per annum / \$17.00 per hour
  - **Maximum:** \$36,802 per annum / \$17.69 per hour
- **Utility Customer Care Representative II**
  - **Minimum:** \$41,743 per annum / \$20.07 per hour
  - **Maximum:** \$43,437 per annum / \$20.88 per hour
- **Utility Customer Care Representative III**
  - **Minimum:** \$51,132 per annum / \$24.58 per hour
  - **Maximum:** \$53,208 per annum / \$25.60 per hour
- **Utility Customer Care Representative Supervisor**
  - **Minimum:** \$59,686 per annum / \$28.70 per hour
  - **Maximum:** \$62,109 per annum / \$29.86 per hour

**When will it be completed?**

Public Law 28-159, Section 7.0.3 (c) requires GPA and GWA to post a petition on their respective websites for ten (10) days (*Saturdays, Sundays, and government of Guam holidays excepted*). GPA and GWA have met the posting requirements and the position creation can be acted upon by CCU at the July 26, 2022, Board meeting. Once adopted by the CCU, the creation of the Utility Customer Care Representative position will not be filled, until the thirty (30) days have elapsed from the date of filing the petition and resolution with the Legislative Secretary.

**What is the funding source?**

GPA and GWA are responsible for the funding available for these positions and are in compliance with all applicable laws, rules, and regulations regarding the creation, filling and retention of positions in certified, technical, and professional positions. The funding of this position has no financial impact on the Government of Guam General Fund.

**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

**GPA RESOLUTION NO. FY2022-24**  
**GWA RESOLUTION NO. 24-FY2022**

**RELATIVE TO THE CREATION AND APPROVAL OF  
POSITION CLASSIFICATION SPECIFICATIONS FOR**

**UTILITY CUSTOMER CARE REPRESENTATIVE I  
UTILITY CUSTOMER CARE REPRESENTATIVE II  
UTILITY CUSTOMER CARE REPRESENTATIVE III  
UTILITY CUSTOMER CARE REPRESENTATIVE SUPERVISOR**

**WHEREAS**, under 12 G.C.A. § 8104, the Consolidated Commission on Utilities (“CCU”) has plenary authority over financial, contractual, personnel and policy matters relative to the Guam Power Authority (“GPA”); and

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

**WHEREAS**, GPA and GWA are Public Corporations established and existing under the laws of Guam; and

**WHEREAS**, The Customer Services Representative (CSR) series was initially created in July 1980, which at the time was under the purview of the Civil Service Commission (CSC) with the intent of the CSR to respond to customer-related inquiries and perform basic administrative and clerical duties.

**WHEREAS**, GPA and GWA continue to modernize operations by improving and expanding services and implementing new programs and initiatives to provide customers greater access to information and control of their utility usages; and

1       **WHEREAS**, Utility Customer Care Representatives play a vital role in transforming  
2 GPA and GWA customer experience from 1980's transactions type to integrating new modern  
3 transaction and monitoring tools, and providing education and expertise across GPA and GWA  
4 as customers apply new technologies to better manage their power and water consumption.;  
5 and

6  
7       **WHEREAS**, GPA and GWA need for a framework to address, educate, and empower  
8 the customer remains a priority. Education and empowerment underscore the significance of  
9 the Utility Customer Care Representative positions. These skill sets needed to educate and  
10 empower the customer are the foundation for changing the relationship between the utility and  
11 the consumer and providing a structured path for Utility Customer Care Representatives to  
12 progress into a "One Utility" service model.

13  
14       **WHEREAS**, GPA and GWA General Managers request the CCU to approve the  
15 creation of the Utility Customer Care Representative series in the classified status  
16 (Attachments A-D); and

17  
18       **WHEREAS**, GPA and GWA General Managers request the CCU to approve the job  
19 specifications standards of the Utility Customer Care Representative I, Utility Customer Care  
20 Representative II, Utility Customer Care Representative III, and the Utility Customer Care  
21 Representative Supervisor; and

22  
23       **WHEREAS**, Public Law 34-131, Section 2, §6303(e) as added and 4 GCA §6303 (d)  
24 & (2C) authorizes the creation of positions in Autonomous Agencies and Public Corporations;  
25 and

26  
27       **WHEREAS**, GWA Personnel Rules and Regulations as amended by Public Law 28-  
28 159 Section 3 (C) authorizes the CCU to amend, modify or add a position to the list of certified,  
29 technical, and professional positions;

30  
31       **NOW BE IT THEREFORE RESOLVED**, the Consolidated Commission on  
32 Utilities, as the Governing Body of the Guam Power Authority and the Guam Waterworks  
Authority, does hereby approve and authorize the following:



1. To approve the creation of the following positions in the classified service and add these positions to the Certified, Technical, and Professional (CTP) list of positions:

- Utility Customer Care Representative I
- Utility Customer Care Representative II
- Utility Customer Care Representative III
- Utility Customer Care Supervisor

2. To adopt proposed minimum and maximum range of compensation for both the GPA and GWA, in accordance with the Strategic Pay Methodology as follows:

Benchmark Position	Implementation Ranges @ 20th Market Percentile (2017 Market data) - 5 Substep Spread								
	JE Points	Structural Adjustment - MIN				Structural Adjustment - MAX			
		Base Salary	Grade	Step	Sub Step	Base Salary	Grade	Step	Sub Step
Utility Customer Care Representative I	461	35,366	G	5	A	36,802	G	6	A
Utility Customer Care Representative II	496	41,743	H	7	A	43,437	H	8	A
Utility Customer Care Representative III	580	51,132	I	9	B	53,208	I	10	B
Utility Customer Care Supervisor	795	59,686	K	5	C	62,109	K	6	C

3. Upon approval of creation, both GPA and GWA shall conduct timely reclassification audits on current employees. Determination of audit findings shall not adversely affect impact incumbent employee salary.
4. The CCU authorizes the respective General Managers to remove existing Customer Service Series from its CTP list of positions, as necessary.

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

**DULY AND REGULARLY ADOPTED**, this 27<sup>th</sup> day of July 2022.

Certified by:

Attested by:

**JOSEPH T. DUENAS**  
Chairperson

**MICHAEL T. LIMTIACO**  
Secretary

**SECRETARY'S CERTIFICATE**

I, **Michael T. Limtiaco**, 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:

\_\_\_\_\_

//

//

//

**Attachment A**

**UTILITY CUSTOMER CARE REPRESENTATIVE I**

**NATURE OF WORK IN THIS CLASS:**

This is routine utility customer service work.

Under direct supervision, employees in this class perform routine customer service duties involving the processing of utility services and providing billing information for the Guam Power Authority or Guam Waterworks Authority.

**ILLUSTRATIVE EXAMPLES OF WORK:** *(Any one position may not include all the duties listed, nor do the examples cover all the duties which may be performed.)*

Directly interact with customers through various communication modes to receive, respond and process all classes of electric, water and sewer service applications for routine customer inquiries, new installations, service terminations, reconnections, account changes, general billing inquiries and disputes, payment plans, and utility infrastructure services.

Reviews applications, determines eligibility and calculates initial deposits required; Establish and maintain customer records in Customer Information System (CIS) and manual file; Process and update account changes by data entry, to include billing information and service address changes.

Uses utility services rules, ordinances, policies and rate schedules to explain service fees, rates, and procedures to customers.

Assist with customer inquiries and complaints; may determine appropriate action within established guidelines.

Prepares daily, weekly, or monthly reports related to utility activities; maintains pertinent logs; Assist in compiling data for customer reconciliation reports and special reports.

Generates work orders and service calls for utility related activities for all classes of services.

Performs related duties as required.

**MINIMUM KNOWLEDGE, ABILITIES AND SKILLS:**

Knowledge of modern office practices and procedures.

Knowledge of business data processing principles and the use of basic computer software and hardware.

Ability to learn, interpret and apply utility codes, regulations, policies, and procedures related to utility services.

Ability to navigate Customer Information System (CIS) and computerized programs to complete customer-related tasks.

Ability to provide courteous and efficient customer service through various modes of communication by answering questions without unnecessary delay and maintain professional demeanor.

Ability to maintain the confidentiality of a wide range of sensitive account and/or customer information.

Ability to communicate effectively orally and in writing.

Ability to perform arithmetic computations, statistical techniques and prepare graphs.

Ability to work effectively with the public and employees.

Ability to maintain records and prepare reports.

**MINIMUM EXPERIENCE AND TRAINING:**

- A) One (1) year of customer service experience involving public contact work, administrative and clerical experience and graduation from high school or equivalent; or
- B) Any equivalent combination of experience and training which provides the minimum knowledge, abilities and skills.

**LICENSES, CERTIFICATES, AND SPECIAL REQUIREMENTS:**

Possession of a valid drivers' license.

**Established:** July 2022

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**JOSEPH T. DUENAS, Chairman**  
**Consolidated Commission on Utilities**

**Attachment B**

**UTILITY CUSTOMER CARE REPRESENTATIVE II**

**NATURE OF WORK IN THIS CLASS:**

This is moderately complex utility customer service work.

Under general supervision, employees in this class perform a variety of routine and moderately complex utility customer service duties involving the processing of utility services and providing billing information for the Guam Power Authority and/or Guam Waterworks Authority.

**ILLUSTRATIVE EXAMPLES OF WORK:** *(Any one position may not include all the duties listed, nor do the examples cover all the duties which may be performed.)*

Directly interact with customers through various communication modes to receive, respond and process all classes of electric, water and sewer service applications for customer inquiries, new installations, service terminations, reconnections, account changes, billing inquiries and disputes, payment plans, and utility infrastructure services.

Reviews applications, determines eligibility and calculates applicable fees required; Establish and maintain customer records in Customer Information System (CIS) and manual file; Process and update account changes by data entry, to include billing information and service address changes.

Assist to conduct moderately complex research on utility related activities; determines facts and reports findings; may recommend applicable adjustments to customer accounts.

Uses utility services rules, ordinances, policies and rate schedules to explain service fees, rates, and procedures to customers; may recommend waiving fees under appropriate circumstances.

Assist with customer inquiries and complaints; may recommend appropriate action within established guidelines.

Prepares daily, weekly, or monthly reports related to utility activities; maintains pertinent logs; compiles data for customer reconciliation reports and special reports.

Generates work orders and service calls for utility related activities for all classes of services.

Prepares customer service correspondence and memoranda.

Performs related duties as required.

**MINIMUM KNOWLEDGE, ABILITIES AND SKILLS:**

Knowledge of utility services rules, codes, regulations, policies and procedures.

Knowledge of basic methods, procedures, practices, and terminology used in billing and collections of customer accounts.

Knowledge of effective customer service and public relations techniques.

Knowledge of business data processing principles and the use of basic computer software and hardware.

Ability to navigate Customer Information System (CIS) and computerized programs to complete customer-related tasks.

Ability to provide courteous and efficient customer service through various modes of communication by answering questions without unnecessary delay and maintain professional demeanor.

Ability to maintain the confidentiality of a wide range of sensitive account and/or customer information.

Ability to communicate effectively orally and in writing.

Ability to perform arithmetic computations, statistical techniques and prepare graphs.

Ability to work effectively with the public and employees.

Ability to maintain records and prepare reports.

**MINIMUM EXPERIENCE AND TRAINING:**

- A) Two (2) years of experience as a Utility Customer Service Representative I and graduation from high school or equivalent; or
- B) Any equivalent combination of experience and training which provides the minimum knowledge, abilities and skills.

**LICENSES, CERTIFICATES, AND SPECIAL REQUIREMENTS:**

Possession of a valid drivers' license.

**Established:** 26 July 2022

---

**JOSEPH T. DUENAS, Chairman**  
**Consolidated Commission on Utilities**

**Attachment C**

**UTILITY CUSTOMER CARE REPRESENTATIVE III**

**NATURE OF WORK IN THIS CLASS:**

This is complex utility customer service work.

Employees in this class independently perform a variety of complex utility customer service duties involving the processing of utility services and providing billing information for the Guam Power Authority and/or Guam Waterworks Authority.

**ILLUSTRATIVE EXAMPLES OF WORK:** *(Any one position may not include all the duties listed, nor do the examples cover all the duties which may be performed.)*

Directly interact with customers through various communication modes to receive, respond and process all classes of electric, water and sewer service applications for new installations, service terminations, complex billing inquiries and disputes, payment plans, prepaid plans and utility infrastructure services.

Reviews applications, determines eligibility and calculates applicable fees required; Establish and maintain utility accounts in Customer Information System (CIS); Process and update account changes by data entry, to include billing information and service address changes; may recommend applicable adjustments and corrections.

Interprets utility services rules, ordinances, policies and rate schedules to explain service requirements, fees, rates, and procedures to customers; Provides technical assistance to customer service staff for complex related inquiries; Reviews and approves requests to waive fees from junior level Utility Customer Care Representatives

May lead the work of other Utility Customer Care Representatives or customer care programs; may provide instruction and training to junior level staff and review work regarding correctness, accuracy, and adherence to general service level and quality standards.

Conducts complex research on utility related activities; determines facts and reports findings.

May conduct research, assessment and processing of customer claims filed against the Utilities; research fair or depreciated market value for damaged appliance or household goods; provides recommendation to committee for resolution; may serve on various internal committees as a customer care representative.

Research, analyze and resolve disputed billing and collection accounts; prepare statistical data and analysis for management review.

Assist in analyzing and recommending improvements to utility services, records, billing information, metering methods and other related information.

Page 2 of 3

Assist to handle escalated customer service inquiries and complaints through direct action within established guidelines.

Prepares and analyze daily, weekly, or monthly reports related to utility activities; maintains pertinent logs; compiles data for customer reconciliation reports and special reports.

Assist the Customer Service Supervisor or Utility Services Administrator with special projects and assignments.

Generates work orders and service calls for service transactions for all classes of utility services.

Performs related duties as required.

**MINIMUM KNOWLEDGE, ABILITIES AND SKILLS:**

Knowledge of utility services rules, codes, regulations, policies and procedures.

Knowledge of basic methods, procedures, practices, and terminology used in billing and collections of customer accounts.

Knowledge of effective customer service and public relations techniques.

Knowledge of business data processing principles and the use of basic computer software and hardware.

Ability to navigate Customer Information System (CIS) and computerized programs to complete customer-related tasks.

Ability to research and analyze information related to fees, billing, and/or collections.

Ability to provide courteous and efficient customer service through various modes of communication by answering questions without unnecessary delay and maintain professional demeanor.

Ability to maintain the confidentiality of a wide range of sensitive account and/or customer information.

Ability to lead and train the work of others.

Ability to compose correspondences independently.

Ability to communicate effectively orally and in writing.



Page 3 of 3

Ability to perform arithmetic computations, statistical techniques and prepare graphs that assist customers to understand complex billing issues or explain irregularities.

Ability to work effectively with the public and employees.

Ability to maintain records and prepare reports.

**MINIMUM EXPERIENCE AND TRAINING:**

- A) Four (4) years of experience as a Utility Customer Care Representative, including two (2) years as a Utility Customer Care Representative II and graduation from high school or equivalent; or
- B) Any equivalent combination of experience and training which provides the minimum knowledge, abilities and skills.

**LICENSES, CERTIFICATES, AND SPECIAL REQUIREMENTS:**

Possession of a valid drivers' license.

**Established:** July 2022

\_\_\_\_\_  
**JOSEPH T. DUENAS, Chairman**  
**Consolidated Commission on Utilities**

## UTILITY CUSTOMER CARE SUPERVISOR

Attachment D

### **NATURE OF WORK IN THIS CLASS:**

This is supervisory work in customer service and billing activities.

Employees in this class provides first-line supervision to customer service personnel involving the processing of utility services and providing billing information for the Guam Power Authority and/or Guam Waterworks Authority.

**ILLUSTRATIVE EXAMPLES OF WORK:** *(Any one position may not include all the duties listed, nor do the examples cover all the duties which may be performed.)*

Supervises, plans, assigns, review and participates in the processing of utility service applications through various modes of communication, including new installations, service terminations, billing inquiries and disputes, payment plans, prepaid plans and utility infrastructure services.

Receive, review and disseminate work orders, service orders and other applicable documents from other divisions for further processing and completion for utility related activities.

Supervises research on utility related activities; determines facts and resolves inquires and disputes within established guidelines; applies applicable adjustments to customer accounts.

Supervises the research of customer delinquent accounts; schedule non-payment disconnection.

Responsible for the maintenance of residential, commercial and government utility records.

Supervises the daily activities and safety of Utility Customer Care Representatives and/or customer care programs; Provides instruction and training to junior level staff and review work; conducts performance appraisals; provides appropriate corrective actions, as necessary.

Prepare correspondences and technical reports for Utility Services Administrator;

Review meter tampering cases as provided by Internal Auditor's office; bill accounts accordingly; provide findings to Utility Services Administrator for review and approval.

Formulates utility policies and procedures and other appropriate guidelines.

May work with other government agencies for customer related activities.

Performs other duties as assigned.

Performs quality assurance such as reviewing recorded phone calls of Utility Customer Care Representatives assisting customers and providing feedback and coaching if necessary.

**MINIMUM KNOWLEDGE, ABILITIES AND SKILLS:**

Knowledge of utility services rules, codes, regulations, policies and procedures.

Knowledge of basic methods, procedures, practices, and terminology used in billing and collections of customer accounts.

Knowledge of management and/or modern public administration principles, practices, and techniques;

Knowledge of Customer Information System (CIS) and other computerized programs to complete customer-related tasks.

Knowledge of effective customer service and public relations techniques.

Ability to recommend and implement goals, objectives, policies and procedures for providing customer service functions.

Ability to supervise, plan and schedule work assignments.

Ability to maintain clear, concise, and accurate records and reports; prepare periodic and special reports.

Ability to analyze and resolve complex customer service complaints and issues.

Ability to provide courteous and efficient customer service through various modes of communication by answering questions without unnecessary delay and maintain professional demeanor.

Ability to maintain the confidentiality of a wide range of sensitive account and/or customer information

Ability to communicate effectively orally and in writing.

Ability to perform arithmetic computations, statistical techniques and prepare graphs that assist customers to understand complex billing issues or explain irregularities.

Ability to work effectively with the public and employees.

**MINIMUM EXPERIENCE AND TRAINING:**

- A) Two (2) years as a Utility Customer Care Representative, including one (1) year as a Utility Customer Care Representative III and graduation from a recognized college or university with a Bachelor's degree; or
- B) Any equivalent combination of experience and training which provides the minimum knowledge, abilities and skills.

Page 3 of 3

**LICENSES, CERTIFICATES, AND SPECIAL REQUIREMENTS:**

Possession of a valid drivers' license.

**Established:** July 2022

\_\_\_\_\_  
**JOSEPH T. DUENAS, Chairman**  
**Consolidated Commission on Utilities**

DRAFT

**Attachment E****Proposed GPA and GWA Implementation Range - Utility Customer Care Representative Series**

Authority	Benchmark Position	20th Market Percentile - 5 sub steps								
		JE POINTS	Structural Adjustment - MIN				Structural Adjustment - MAX			
			Base Salary	Grade	Step	Sub Step	Base Salary	Grade	Step	Sub Step
GPWA	Utility Customer Care Representative I	461	35,366	G	5	A	36,802	G	6	A
GPWA	Utility Customer Care Representative II	496	41,743	H	7	A	43,437	H	8	A
GPWA	Utility Customer Care Representative III	580	51,132	I	9	B	53,208	I	10	B
GPWA	Utility Customer Care Supervisor	795	59,686	K	5	C	62,109	K	6	C

**Current GPA and GWA Implementation Range - Customer Service Representative Series**

Authority	Benchmark Position	20th Market Percentile - 5 sub steps								
		JE POINTS	Structural Adjustment - MIN				Structural Adjustment - MAX			
			Base Salary	Grade	Step	Sub Step	Base Salary	Grade	Step	Sub Step
GPA	Customer Service Representative	461	36,076	G	5	C	37,541	G	6	C
GPA	Customer Service Representative Supervisor	795	59,686	K	5	C	62,109	K	6	C

Authority	Benchmark Position	20th Market Percentile - 5 sub steps								
		JE POINTS	Structural Adjustment - MIN				Structural Adjustment - MAX			
			Base Salary	Grade	Step	Sub Step	Base Salary	Grade	Step	Sub Step
GWA	Customer Service Representative	461	35,719	G	5	B	37,170	G	6	B
GWA	Customer Service Representative Supervisor	795	59,095	K	5	B	61,495	K	6	B



Gloria B. Nelson Public Service Building | 688 Route 15 | Mangilao, Guam 96913  
Tel: (671) 300-6846

## Issues for Decision

### Resolution No. 25-FY2022

Relative to Approval of Additional Funding to the Construction Management Contract for Santa Rosa, Sinifa, and Santa Rita Tank and System Upgrades

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

The project is part of the 2011 Court Order Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program. As a Court Order project, it is necessary and urgent to work towards meeting the Court Order deadlines.

This contract is to provide construction management services for the construction of the Santa Rosa, Sinifa, and Santa Rita Tank and System Upgrade project. The continuation of construction management services is vital to the completion of the project.

The extension of the construction period is due to impacts resulting from COVID-19 pandemic, global supply chain issues, and a slope failure (landslide) event caused by severe weather, and will involve the following:

1. Santa Rosa Reservoir and Booster Pump Station: The reservoir is scheduled to be placed in service by the end of August 2022. Due to Covid-19 and material shortages, the new booster pump station, pump skid and generator will not arrive until year's end.
2. Sinifa Reservoir: The reservoir is scheduled to be placed in service by the end of August 2022. Remaining work onsite, including the control building, will be completed by year's end.
3. Santa Rita Reservoir: Test pre-cast piled foundation is scheduled to begin the week of July 11<sup>th</sup>, 2022. If successful, production for remaining piles will begin thereafter. The EOR is finalizing the redesign of the waterline, electrical, roadway, and ponding basin due to slope failure. Once completed, a change order with the contractor will need to be issued to implement the redesign.

#### Where is the project located?

- The Santa Rosa reservoir and booster pump station is located in Yigo village
- Sinifa and Santa Rita reservoirs are located in Santa Rita village.

#### How much will it cost?

The price provided by GHD is \$2,118,523.36. GWA Management also seeks approval of a 10% contingency in the amount of \$221,852.34. Total requested additional funding: \$2,340,375.70.

#### When will it be completed?

All work is anticipated to be completed by the end of April 2023.

**What is the funding source?**

PW 09-11: Water System Reservoirs 2005 Improvements

**The RFP/Bid responses (If applicable):**

Not applicable



**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. 25–FY2022**

**RELATIVE TO APPROVAL OF ADDITIONAL FUNDING TO THE CONSTRUCTION MANAGEMENT CONTRACT FOR SANTA ROSA, SINIFA, AND SANTA RITA TANK AND SYSTEM UPGRADES**

**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 is currently working on critical reservoir projects at the GWA Santa Rosa, Sinifa and Santa Rita reservoir sites under the 2011 Court Order (“CO”) Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

**WHEREAS**, the CCU approved Resolution No. 13-FY2018 for Construction Management (CM) services on the construction projects at these sites, which authorized CM contract funding of Two Million Nine Hundred Seventy Seven Thousand Two Hundred Thirty Four Dollars and Sixty Nine Cents (\$2,977,234.69) along with a 10% contingency of Two Hundred Ninety Seven Thousand Seven Hundred Twenty Three Dollars and Forty Seven Cents (\$297,723.47) to bring the total authorized funding amount to a maximum of Three Million Two Hundred Seventy Four Thousand Nine Hundred Fifty-Eight Dollars and Sixteen Cents (\$3,274,958.16) (Exhibit A); and

**WHEREAS**, the CCU approved Resolution No. 32-FY2020 which authorized additional funding, due to construction permitting and archaeological delays, in the amount of Thirty Nine Thousand Six Hundred Thirteen Dollars and Ninety Two Cents (\$39,613.92) to supplement the available contingency of Two Hundred Ninety Seven Thousand Seven Hundred Twenty Three



1 Dollars and Forty Seven Cents (\$297,723.47) to fund Change Order No.1 in the amount of Three  
2 Hundred Thirty Seven Thousand Three Hundred Thirty Seven Dollars and Thirty Nine Cents  
3 (\$337,337.39), bringing the total authorized funding amount to Three Million Three Hundred  
4 Fourteen Thousand Five Hundred Seventy Two Dollars and Eight Cents (\$3,314,572.08)  
5 (Exhibit B); and

6  
7 **WHEREAS**, the construction of improvements at these sites have been delayed by the  
8 impacts of the COVID-19 pandemic, global supply chain issues, and a slope failure (landslide)  
9 event due to severe weather at the Santa Rita reservoir site, all of which are outside of the control  
10 of the contractor and CM; and

11  
12 **WHEREAS**, despite these impacts, the construction of the Santa Rosa and Sinifa  
13 reservoirs are nearing completion and will be ready for service by the end of August 2022; and

14  
15 **WHEREAS**, the Santa Rosa booster pump station construction will be extended to April  
16 2023 due to the long lead supply of the booster pump skid and generator systems; and

17  
18 **WHEREAS**, the Santa Rita reservoir construction will be extended to April 2023 for two  
19 reasons: 1) Change of Casted-In-Drill Holes (CIDH) foundation to Pre-Casted pile foundation, 2)  
20 Redesign of waterline, electrical, roadway, and ponding basin due to slope failure; and

21  
22 **WHEREAS**, test foundation pile driving at the Santa Rita reservoir is scheduled to start  
23 this month, and the redesign of the waterline, electrical, roadway, and ponding basin is being  
24 finalized by the Engineer of Record and geotechnical engineer; and

25  
26 **WHEREAS**, in order to provide continuity of needed construction management services  
27 until construction has been completed, GWA and GHD have negotiated a scope and fee of Two  
28 Million One Hundred Eighteen Thousand Five Hundred Twenty-Three Dollars and Thirty-Six  
29 Cents (\$2,118,523.36), (Exhibit C); and

30 //

31 //

**WHEREAS,** GWA Management is seeking Two Million One Hundred Eighteen Thousand Five Hundred Twenty-Three Dollars and Thirty-Six Cents (\$2,118,523.36), along with a 10% contingency of Two Hundred Twenty-One Thousand Eight Hundred Fifty-Two Dollars and Thirty-Four Cents (\$221,852.34) in additional funding to execute a contract modification to continue construction management services for the three construction sites; and

**WHEREAS,** funding for this project will be from the Bond Funds under the line item "PW 09-11 Water System Reservoirs 2005 Improvements."

**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 fee proposal submitted by GHD are fair and reasonable.
3. The CCU hereby authorizes Two Million Three Hundred Forty Thousand Three Hundred Seventy-Five Dollars and Seventy Cents (\$2,340,375.70) in additional funding to bring the total authorized funding to Five Million Six Hundred Fifty-Four Thousand Nine Hundred Forty-Seven Dollars and Seventy-Eight Cents (\$5,654,947.78).
4. The CCU hereby authorizes the management of GWA the option to issue a change order in the not-to-exceed amount of Two Million One Hundred Eighteen Thousand Five Hundred Twenty-Three Dollars and Thirty-Six Cents (\$2,118,523.36).
5. The CCU hereby authorizes the funding source to be from the bond funds under CIP line-item PW 09-11: Water System Reservoirs 2005 Improvements.

//

//

//

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

3  
4       **DULY AND REGULARLY ADOPTED**, this 26<sup>th</sup> day of July 2022.

5  
6       Certified by:

Attested by:

7  
8 \_\_\_\_\_  
9 **JOSEPH T. DUENAS**  
10 Chairperson

\_\_\_\_\_

**MICHAEL T. LIMTIACO**  
Secretary

11                               **SECRETARY'S CERTIFICATE**

12  
13       I, Michael T. Limtiaco, Board Secretary of the Consolidated Commission on  
14 Utilities as evidenced by my signature above do hereby certify as follows:

15  
16       The foregoing is a full, true and accurate copy of the resolution duly adopted at a  
17 regular meeting by the members of the Guam Consolidated Commission on Utilities,  
18 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:

19       **AYES:** \_\_\_\_\_

20  
21       **NAYS:** \_\_\_\_\_

22       **ABSENT:** \_\_\_\_\_

23       **ABSTAIN:** \_\_\_\_\_

24  
25  
26 ///

27  
28  
29 ///

30  
31  
32 ///



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. 13-FY2018**

**RELATIVE TO APPROVAL OF THE CONSTRUCTION MANAGEMENT CONTRACT  
FOR SANTA ROSA, SINIFA, AND SANTA RITA TANK AND SYSTEM UPGRADES**

**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 is currently working on critical reservoir projects under the 2011 Court Order (“CO”) Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

**WHEREAS**, the design of Santa Rosa, Sinifa, and Santa Rita Tank designs (RFP-09-ENG-2014) have been completed; and

**WHEREAS**, GWA has advertised the Request for Proposals (RFP-06-ENG-2017) soliciting statement of qualifications from experienced and qualified engineering firms to provide construction management services for the Santa Rosa, Sinifa, and Santa Rita Tank and System Upgrades project; and

**WHEREAS**, RFP packages were picked up by 19 interested parties, from which GWA received proposal submittals from 8 firms before the RFP submittal deadline; and

**WHEREAS**, the GWA A-E Selection committee reviewed and evaluated the 8 proposals (See Exhibit A – Score Summary) and generated a short list of the top 3 firms with a

1 recommendation to award a contract to the firm GHD (See Exhibit B – GM’s Determination);  
2 and  
3

4 **WHEREAS**, GHD and GWA negotiated the price for the construction management  
5 services (Santa Rosa, Sinifa, and Santa Rita tank and off-site system upgrades related to all three  
6 tank sites) to be provided in the total amount of Two Million Nine Hundred Seventy-Seven  
7 Thousand Two Hundred Thirty-Four Dollars and Sixty-Nine Cents (\$2,977,234.69) (See Exhibit  
8 C – Scope of Work and Fees); and  
9

10 **WHEREAS**, GWA management seeks approval of the fee proposal amount of Two  
11 Million Nine Hundred Seventy-Seven Thousand Two Hundred Thirty-Four Dollars and Sixty-  
12 Nine Cents (\$2,977,234.69), along with a 10% contingency of Two Hundred Ninety-Seven  
13 Thousand Seven Hundred Twenty Three Dollars and Forty Seven Cents (\$297,723.47), to bring  
14 the total authorized funding amount to a maximum of Three Million Two Hundred Seventy-Four  
15 Thousand Nine Hundred Fifty-Eight Dollars and Sixteen Cents (\$3,274,958.16); and  
16

17 **WHEREAS**, funding for this project will be from the Bond Funds under the line item  
18 “PW 09-11 Water System Reservoirs 2005 Improvements”; and  
19

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

- 22 1. The recitals set forth above hereby constitute the findings of the CCU.
- 23 2. The CCU finds that the terms of the fee proposal submitted by GHD are fair  
24 and reasonable (Exhibit C).
- 25 3. The CCU hereby authorizes the management to accept the fee proposal from  
26 GHD, which is also incorporated into this Resolution in its entirety.
- 27 4. The CCU hereby further authorizes the management of GWA to enter into a  
28 contract with GHD, in the amount of Two Million Nine Hundred Seventy-  
29 Seven Thousand Two Hundred Thirty-Four Dollars and Sixty-Nine Cents  
30 (\$2,977,234.69).
- 31 5. The CCU hereby further approves the total funding amount for this project of  
32 Two Million Nine Hundred Seventy-Seven Thousand Two Hundred Thirty-

Four Dollars and Sixty-Nine Cents (\$2,977,234.69), along with a 10% contingency of Two Hundred Ninety-Seven Thousand Seven Hundred Twenty-Three Dollars and Forty-Seven Cents (\$297,723.47), to bring the total authorized funding amount to Three Million Two Hundred Seventy-Four Thousand Nine Hundred Fifty-Eight Dollars and Sixteen Cents (\$3,274,958.16).


6. The CCU hereby further authorizes the funding source to be from bond funds under the CIP line Item PW 09-11 "Water System Reservoirs 2005 Improvements".

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

**DULY AND REGULARLY ADOPTED**, this 23<sup>rd</sup> day of January 2018.

Certified by:

Attested by:

  
**JOSEPH T. DUENAS**  
 Chairperson

  
**J. GEORGE BAMBA**  
 Secretary

### SECRETARY'S CERTIFICATE

I, J. George Bamba, 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:	<u>5</u>
NAYS:	<u>0</u>
ABSTENTIONS:	<u>0</u>
ABSENT:	<u>0</u>





**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. 32-FY2020**

**RELATIVE TO APPROVAL OF ADDITIONAL FUNDING TO THE CONSTRUCTION  
MANAGEMENT CONTRACT FOR SANTA ROSA, SINIFA, AND SANTA RITA TANK  
AND SYSTEM UPGRADES**

**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 is currently working on critical reservoir projects under the 2011 Court Order (“CO”) Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

**WHEREAS**, the CCU approved Resolution No. 13-FY2018 authorized a funding of \$2,977,234.69 along with a 10% contingency of \$297,723.47 to bring the total authorized funding amount to a maximum of \$3,274,958.16 (Exhibit A) for the construction management contract; and

**WHEREAS**, the construction management contract for the Santa Rosa, Santa Rita, and Sinifa tanks and system upgrade project was issued on April 2, 2018;

**WHEREAS**, the construction management team has completed pre-construction and limited construction task which included design document review, bid review and analysis, development of quality assurance plan, project document control software setup, meetings, and submittal review; and



1       **WHEREAS**, the construction contract for the Santa Rosa, Santa Rita, and Sinifa tanks  
2 and system upgrade project was issued on September 30, 2019;

3  
4       **WHEREAS**, construction at the sites have not started due to the following reasons:

- 5           1. Engineer of Record (Designer) did not complete the archaeological survey  
6 process for the three sites before the bid, which led to the State Historic  
7 Preservation Office delay in reviewing the permit package;  
8           2. Permitting agencies shut down due to the COVID-19 pandemic, which further  
9 extended the permit review process with the State Historic Preservation Office  
10 and Guam Environmental Protection Agency;

11  
12       **WHEREAS**, the construction management construction performance period has expired  
13 due to no construction site activity;

14  
15       **WHEREAS**, GWA and GHD has negotiated Change Order No. 1 scope and fee of Three  
16 Hundred Thirty-Seven Thousand Three Hundred Thirty-Seven Dollars and Thirty-Nine Cents  
17 (\$337,337.39) to continue and extend the construction management period to match contractor's  
18 performance period and construction management cost escalation (Exhibit B); and

19  
20       **WHEREAS**, GWA Management is seeking Thirty-Nine Thousand Six Hundred Thirteen  
21 Dollars and Ninety-Two Cents (\$39,613.92) to supplement the available contingency of  
22 \$297,723.47 to fund Change Order No. 1 in the amount of Three Hundred Thirty-Seven  
23 Thousand Three Hundred Thirty-Seven Dollars and Thirty-Nine Cents (\$337,337.39); and

24  
25       **WHEREAS**, funding for this project will be from the Bond Funds under the line item  
26 "PW 09-11 Water System Reservoirs 2005 Improvements"; and

27  
28       **NOW BE IT THEREFORE RESOLVED**, the Consolidated Commission on Utilities  
29 does hereby approve the following:

- 30  
31           1. The recitals set forth above hereby constitute the findings of the CCU.



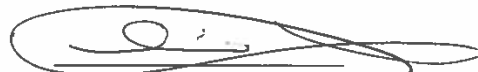
2. The CCU finds that the terms of the scope and fee proposal submitted by GHD are fair and reasonable.
3. The CCU hereby authorizes \$36,613.92 in additional funding to bring the total authorized funding amount to \$3,314,572.08.
4. The CCU hereby authorizes the management of GWA the option to issue Change Order No. 1 in the not-to-exceed amount of \$337,337.39. (Exhibit "B")
5. The CCU hereby authorizes the funding source to be from bond funds under the CIP line Item PW 09-11 "Water System Reservoirs 2005 Improvements".

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

**DULY AND REGULARLY ADOPTED**, this 28<sup>th</sup> day of July 2020.

Certified by:

Attested by:



**JOSEPH T. DUENAS**

**MICHAEL T. LIMTIACO**

Chairperson

Secretary

//

//

//

//

**SECRETARY'S CERTIFICATE**

I, Michael T. Limtiaco, 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:	<u>5</u>
NAYS:	<u>0</u>
ABSENT:	<u>0</u>
ABSTAIN:	<u>0</u>





865 South Marine Corps Drive, Suite 202  
 Tamuning, Guam 96913  
 United States  
 www.ghd.com

Our ref: 11136961

11 July 2022

Mr. Brett Railey, PE  
 Chief Engineer  
 Guam Waterworks Authority  
 Gloria B. Nelson Public Service Building  
 688 Route 15  
 Mangilao, Guam 96913

## **Change Order Request #2 (Rev. 2) – Additional Professional Services – North/South Reservoirs**

Dear Mr. Railey:

GHD is pleased to submit Change Order #2 to GWA for the extension of GHD's construction management (CM) contract for the above referenced project. As you are aware, there have been considerable challenges encountered during construction resulting in construction delays. With construction delays, are accompanying construction management and inspection services to complete construction at all three sites. These challenges include schedule impacts related to the COVID-19 pandemic, slower than anticipated construction progress, slope failure at Santa Rita Tank requiring additional investigation, design-related errors and omissions and additional scope of work for electrical testing for all sites. GHD's current contract period of performance ended in April 2022, and this change order proposal provides additional contract time for our construction management and inspection services with the intent of aligning the additional contract time with the time extension GWA intends to provide to the Contractor. Below is a summary of the primary issues necessitating the contract extension and our proposed fees for them.

### **Construction Schedule Extension**

The construction schedule for all three sites has exceeded our anticipated contractual agreement from Change Order #1, and the Contractor continues to submit requests for additional time. We also anticipate additional time extension requests are forthcoming from the Contractor. These delays are attributed to the impact the current COVID 19 pandemic has had on material procurement, design modifications, unforeseen or changed site conditions, additional scope of work and material procurement, and property access issues. These issues and associated delays are beyond GHD's control as the CM, and we are uncertain when the Contractor's time extension requests will cease. For this reason, we are proposing a monthly fixed fee for continued CM and inspection services to GWA for each project site beginning 01 May 2022. By providing a monthly fee, GWA can estimate their future expenses until project completion for each site and we will not need to continue estimating additional change order amounts for future schedule extensions.

During the proposal for this project in 2017, we estimated there would be 17 roles fulfilled by GHD's team with varying time commitments to the project. The average full-time-equivalent (FTE) labor effort for the 2017 estimate calculated to 7.2 people. Since around December 2020, GHD has executed our work with approximately 6.5 to 7 people, which is slightly less than the estimated level of effort at the time of proposal. Because of this reduced staffing, we agreed to reduce our monthly invoices until we met or exceeded the anticipated level of effort – we exceeded the 7.2 FTE beginning on 31 JAN 2022.

Our past invoices were on average \$61,500 for GHD labor per month and \$5,900 for our CM and CI expenses per month for each site. If GWA is agreeable to reduce our Construction Manager's effort to less than full time, we are able to reduce our monthly rates for GHD labor. The work at SRO and SIN sites has begun to move out of the ground which means there should be less unforeseen condition claims from the

Contractor. For these reasons, we believe it is possible to reduce the Construction Manager's level of effort back to 50% as originally proposed in 2017. For this change order, we propose to utilize 2022 GHD rates for a 6.7 FTE construction management and construction inspection crew.

Our expenses have increased for mileage, fuel, vehicle maintenance, cell phone services, Procore subscription, live video and photo feed, and weather monitoring, therefore we need to increase our monthly expense rate \$100 from \$5,900 to \$6,000 per site.

In addition to GHD's labor and expense, we also need to account for GRT. The current GRT rate as of the date of this proposal is 5.263% which is an increase from 4.167% in our 2017 proposal.

We propose additional budget for subconsultant work at this time only for the specific items identified in this change order request. In our current contract agreement, services for geotechnical sampling, testing, and inspection as well as surveying quality assurance checks are to be billed at cost plus a 10% markup. We will continue to coordinate these subconsultant services under our current contract until we identify the need to request additional budget for such services.

To summarize our revised monthly fees, we propose the following.

#### PROPOSED MONTHLY FEES

Monthly CM Services Any Sites	\$60,000	Includes 50% Construction Manager, Full Time Resident Engineer, and Full Time Construction Admin Assistant. This rate is lump sum per month whether there are one, two, or three active sites. This rate will also apply toward CM services for post-construction work to complete the project reporting and final closeout.
Monthly CI Services Santa Rita	\$30,000	Includes full time construction inspector, partial special inspectors, and engineering support from various engineering disciplines. This rate is lump sum per month until the Santa Rita construction works are complete.
Monthly CI Services Santa Rosa	\$30,000	Includes full time construction inspector, partial special inspectors, and engineering support from various engineering disciplines. This rate is lump sum per month until the Santa Rosa construction works are complete.
Monthly CI Services Sinifa	\$30,000	Includes full time construction inspector, partial special inspectors, and engineering support from various engineering disciplines. This rate is lump sum per month until the Sinifa construction works are complete.
Monthly CM – Expenses Each Site	\$6,000	Includes GHD's mileage, fuel, equipment maintenance, cell phone services, Procore subscription, live video and photo feed, and weather monitoring equipment and service. This rate is lump sum per month per site until the construction works are complete.

### **Additional Electrical Testing**

In Technical Specification Section 260505-1.3, there are electrical testing requirements that are the responsibility of the owner. These tests were not included in GHD's original scope of work, and requires a contract modification should GWA desire GHD subcontract the testing services. We are seeking an on-island source to perform the highlighted tests below. Additionally, we are negotiating with the Contractor, through our CM efforts, to have the Contractor perform some of the tests currently listed under the owner's responsibility to help reduce GWA's costs.

#### **C. Testing Responsibility Matrix:**

<b>System</b>	<b>Testing Agency</b>
Automatic Lighting Control Equipment	O
Control Voltage Electrical Power Cables	O
Contactors	O
Disconnect Switches	O
Electricity Metering	O
Equipotential Grounding Systems	I
Exterior Lighting Systems	O
Grounding Systems	I
Interior Lighting	O
Lighting Control Equipment	O
Lightning Protection Systems	I
Low Voltage Power Switchboard	O
Low Voltage Transformers	O
Metering Equipment	O
Overhead Electrical Power Systems	O
Panelboard SPD	O
Panelboards	O
Protective Devices	I
Surge Protection Devices	O
Vibration and Seismic Controls	I
Variable Frequency Drives	O

The final scope of work for electrical testing is not yet fully defined, because the Contractor may perform some of it, however, we propose an initial not-to-exceed fee of \$30,000 for electrical testing at cost plus 10% markup with the intent Patrick McCandless will perform these services. If additional budget is necessary, we will submit a request in writing to GWA.

### **ENGEO Landslide Evaluation and Reporting**

In response to the slope failure that occurred at the Santa Rita Reservoir project site, GWA has requested GHD subcontract slope stability analysis to ENGEO. ENGEO will contract with APDI to perform drilling services onsite and ENGEO will have onsite engineers, review the findings with ENGEO's engineering geologist on the mainland and provide a report. GHD will provide supporting manpower in the field and project management to facilitate this investigation.

To begin the field investigation, APDI must submit a DPW permit application to be allowed to drill. Part of the permit process requires APDI to submit a copy of their purchase order before DPW will approve the permit. We have met onsite with the project stakeholders and DPW is aware of the need to expedite this work. GHD has proactively provided a purchase order to ENGEO so they can in turn provide APDI with a purchase order. We have proceeded in advance of an executed Change Order in good faith with GWA's knowledge to minimize schedule impacts.

The purpose of this letter is to request approval from GWA to amend our contract and increase the contract fee amount by \$48,000. ENGEO's proposal to GHD is attached for your reference. We propose a time-and-materials fee for this effort because the geotechnical investigations have a strong potential to encounter unforeseen conditions. We intend to only invoice GWA for the actual costs incurred plus a 10% subcontractor mark-up.

It should be noted that we had originally provided the estimate for this landslide evaluation work in January 2022 with the expectation that the permitting process would require minimal effort to obtain signature approvals. Unfortunately, ENGEO has spent considerably more effort than anticipated to obtain the permit approvals from all the agencies, primarily GEPA. On 09 MAR 2022, ENGEO asked if we could request an additional \$4,000 budget to account for their permitting efforts.

ENGEO will only bill for actual hours worked and GHD will only bill actual costs plus 10% markup for this work. If ENGEO's efforts require additional compensation beyond this change order, we will notify GWA immediately to discuss the need for another change order request.

### **Additional Geotechnical Sampling and Testing**

We are also requesting additional soil and concrete sampling and testing budget due to the increased scope of work related to the Santa Rita site utility realignment, ponding basin reconstruction, possible benching of the slope failure, and for additional underground piping installation.

Also at Santa Rita site, the deep foundation system has changed from cast-in-drilled-hole piles to precast concrete driven piles. The precast piles will require additional geotechnical subconsultant investigations prior to concrete placement. It will also require additional observations of the test piles prior to production pile driving.

During the concrete construction of the tanks, vaults, and retaining walls at Santa Rosa and Sinifa sites, the contractor has scheduled more days of concrete place than we originally anticipated. We will need additional budget to properly sample, test, and document the concrete test results.

We still have approximately \$30,000 remaining budget for the geotechnical sampling, testing, and special inspections, however, we are requesting in this change order an additional \$70,000 budget to perform the work listed above. We propose this \$70,000 budget will only be billed at cost plus 10% markup for this work if needed. If our geotechnical sampling and testing require additional compensation beyond this change order, we will notify GWA immediately to discuss the need for another change order request.

## Summary

As mentioned above, we are uncertain as to the actual completion date of construction for each tank site at this time because we are awaiting a contract time extension request from the Contractor. However, in review of their proposed monthly schedules we understand the contractor assumes the following final completion dates.

1. Santa Rita – No completion date has been provided but we have assumed April 2023.
2. Santa Rosa – The contractor's latest schedule update anticipates April 2023 final completion.
3. Sinifa – The contractor's latest schedule update anticipates December 2022 final completion.

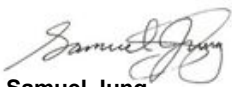
The total cumulative amount of budget for construction management and construction inspection should be decided by GWA. As requested, I have included with this change order request a matrix of the proposed GHD rates and hours we propose to provide for this additional work broken down by month. This matches the current services we have been providing with our current staff and we have managed to provide GWA with a reduced monthly billing rate.

In talking with our Senior Management and Accounting staff, GHD has offered to provide our continued services through 30 April 2022 although we could have stopped worked after our contract period ended. We continued our services in good faith that this change order would be executed between GHD and GWA in a timely manner. We also proposed in our latest invoice dated 06 May 2022, that we bill for the remainder of the contractual unbilled fee remaining to account for our construction management and inspection services through the end of 30 April 2022. By so doing, we believe GWA and GHD can mutually agree that all past disagreements in services, staffing, or performance up through 30 April 2022 are considered finalized. Beginning 01 May 2022, GHD will invoice for our services under the terms proposed in this change order. We understand it may take some time to process this change order which means we will not invoice until the change order is executed. At which time, we will present an invoice to GWA for review and acceptance with the pay period beginning 01 May 2022.

We understand, GWA may want to add scope of work to GHD's CM and CI team concurrent with the designed scope of work. If GHD can use the same CM and CI staff to perform our services without exceeding 8 hours per day, additional staff, or additional expenses we will likely be able to perform the work without raising our fees. Of course, we will need to review GWA's proposed additional scope of work upon written request.

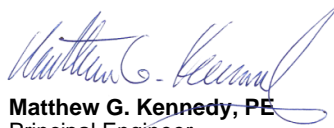
We remain open to discussion with you on the specifics of our proposal. We welcome the opportunity to continue working with you on this important project and look forward to contributing to its successful completion. Should you have any questions about this proposal, please do not hesitate to contact Matt Kennedy or me.

Regards,



**Samuel Jung**  
Sr. Construction Manager

+1 671-727-6802  
samuel.jung@ghd.com



**Matthew G. Kennedy, PE**  
Principal Engineer

+1 707-540-3376  
Matt.Kennedy@ghd.com

Copy: Garrett Yeoh, Kimberlee Loop  
Attachment: GHD Fee Matrix for Change Order 02; Summary of Proposed Fees

**Change Order 02 Summary of Proposed Fees****Change Order Summary**

Description	Amount	Notes
<b>Estimated CM &amp; CI Fees to Project Completion</b>	\$ 1,970,523.36	Estimated CM & CI fees through April 2023 (see Note 1). See attached fee projections for support.
<b>Special Inspections &amp; Testing - Electrical and Instrumentation</b>	\$ 30,000.00	Additional budget amount to be invoiced for actual hours worked at cost plus 10% markup
<b>ENGEO Landslide Evaluation</b>	\$ 48,000.00	Additional budget amount to be invoiced for actual hours worked at cost plus 10% markup
<b>Additional Special Inspections &amp; Testing - Geotechnical</b>	\$ 70,000.00	Additional budget amount to be invoiced for actual hours worked at cost plus 10% markup
<b>Change Order 02 Sub-Total</b>	<b>\$ 2,118,523.36</b>	Total amount requested this change order

Note 1: Based on the current AIC revised project schedule anticipated completion dates for the completion of field work are December 2022 and April 2023 for the Sinifa and Santa Rosa locations, respectively. We have assumed an estimated completion of April 2023 for the Santa Rita location as there is no current schedule (portions of the Santa Rita project in re-design).



**Proposed Staffing Breakdown****Proposed Change Order Monthly Rates**

Description	Amount	Notes
Monthly Construction Management Services	\$ 60,000.00	Lump Sum for 1, 2, or 3 Sites
Monthly Construction Inspection Services	\$ 30,000.00	Lump Sum per site
Monthly CM Expenses	\$ 6,000.00	Lump Sum per site
Special Inspections & Testing - Electrical and Instrumentation	Cost + 10%	To be invoiced for actual hours worked at cost plus 10% markup
ENGEO Landslide Evaluation	Cost + 10%	To be invoiced for actual hours worked at cost plus 10% markup
Additional Special Inspections & Testing - Geotechnical	Cost + 10%	To be invoiced for actual hours worked at cost plus 10% markup
GRT	5.263%	Current Guam GRT as of the date of this change order request.

**Proposed Staffing Breakdown****Construction Management**

	<b>Project Director</b>	<b>Construction Manager</b>	<b>Resident Engineer</b>	<b>CM Admin</b>
<b>GHD Rates</b>	<b>\$ 220.00</b>	<b>\$ 210.00</b>	<b>\$ 160.00</b>	<b>\$ 80.00</b>
<b>Weekly Hours</b>	4.00	16.00	40.00	40.00
<b>Monthly Hours</b>	17.60	70.40	176.00	176.00
<b>Est. Weekly Fees</b>	\$ 880.00	\$ 3,360.00	\$ 6,400.00	\$ 3,200.00
<b>Est. Monthly Fees</b>	\$ 3,872.00	\$ 14,784.00	\$ 28,160.00	\$ 14,080.00

GHD Weekly Rate S/T \$ 13,840.00

GHD Monthly Rate S/T \$ 60,896.00

**Monthly Rate (Rounded) \$ 60,000.00****Construction Inspection (Per Site)**

	<b>Field Inspector</b>	<b>Support Inspector</b>	<b>Special Inspector</b>	<b>Eng Support</b>
<b>GHD Rates</b>	<b>\$ 135.00</b>	<b>\$ 90.00</b>	<b>\$ 140.00</b>	<b>\$ 200.00</b>
<b>Weekly Hours</b>	40.00	6.00	4.00	2.00
<b>Monthly Hours</b>	176.00	26.40	17.60	8.80
<b>Est. Weekly Fees</b>	\$ 5,400.00	\$ 540.00	\$ 560.00	\$ 400.00
<b>Est. Monthly Fees</b>	\$ 23,760.00	\$ 2,376.00	\$ 2,464.00	\$ 1,760.00

GHD Weekly Rate S/T \$ 6,900.00

GHD Monthly Rate S/T \$ 30,360.00

**Monthly Rate (Rounded) \$ 30,000.00**

**Estimated GHD Monthly Labor Based on Current Contractor Schedule Projections as of 09 MAY 2022 (See Notes)**

	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22
Monthly CM Fees	\$ 60,000.00	\$ 60,000.00	\$ 60,000.00	\$ 60,000.00	\$ 60,000.00	\$ 60,000.00	\$ 60,000.00
Monthly SRI Fees	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00
Monthly SRO Fees	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00
Monthly SIN Fees	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00
Monthly Expenses	\$ 18,000.00	\$ 18,000.00	\$ 18,000.00	\$ 18,000.00	\$ 18,000.00	\$ 18,000.00	\$ 18,000.00
Sub-Total	\$ 168,000.00	\$ 168,000.00	\$ 168,000.00	\$ 168,000.00	\$ 168,000.00	\$ 168,000.00	\$ 168,000.00
GRT (5.263%)	\$ 8,841.84	\$ 8,841.84	\$ 8,841.84	\$ 8,841.84	\$ 8,841.84	\$ 8,841.84	\$ 8,841.84
Total	\$ 176,841.84	\$ 176,841.84	\$ 176,841.84	\$ 176,841.84	\$ 176,841.84	\$ 176,841.84	\$ 176,841.84
<b>CUMULATIVE TOTAL</b>	<b>\$ 176,841.84</b>	<b>\$ 353,683.68</b>	<b>\$ 530,525.52</b>	<b>\$ 707,367.36</b>	<b>\$ 884,209.20</b>	<b>\$1,061,051.04</b>	<b>\$1,237,892.88</b>

	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Monthly CM Fees	\$ 60,000.00	\$ 60,000.00	\$ 60,000.00	\$ 60,000.00	\$ 60,000.00
Monthly SRI Fees	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00
Monthly SRO Fees	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00
Monthly SIN Fees	\$ 30,000.00				
Monthly Expenses	\$ 18,000.00	\$ 12,000.00	\$ 12,000.00	\$ 12,000.00	\$ 12,000.00
Sub-Total	\$ 168,000.00	\$ 132,000.00	\$ 132,000.00	\$ 132,000.00	\$ 132,000.00
GRT (5.263%)	\$ 8,841.84	\$ 6,947.16	\$ 6,947.16	\$ 6,947.16	\$ 6,947.16
Total	\$ 176,841.84	\$ 138,947.16	\$ 138,947.16	\$ 138,947.16	\$ 138,947.16
<b>CUMULATIVE TOTAL</b>	<b>\$1,414,734.72</b>	<b>\$1,553,681.88</b>	<b>\$1,692,629.04</b>	<b>\$1,831,576.20</b>	<b>\$1,970,523.36</b>

**Notes**

1 - Sinifa Site is projected to complete work by end of DEC 2022, based on current approved contract extensions.
2 - Santa Rosa Site is projected to complete work by end of APR 2023
3 - Santa Rita Site has no current projected end date due to the slope stability issue and pile pre-design, but has been assumed to be completed by end of APR 2023 for budgeting purposes.
4 - No additional time beyond contractor completion has been included for post-construction contract administration/CM project closeout.



"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. 26-FY2022**

Relative to Approval of Change Orders to the Contract for Design Services for the Upgrades to the Northern District Wastewater Treatment Plant (NDWWTP) to Secondary Treatment, GWA Project No. S17-003-OEA.

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

Specifically, this change order is to increase the Design Engineer's post design portion of its contract to cover justified increases in the project scope caused by extensive structural shop drawing and submittal review, review and coordination of significant Requests for Information (RFIs), review and coordination of major equipment substitutions (resulting in project cost savings), additional design scope including design of additional drying beds, grading and asphalt changes to accommodate new water supply system and additional asphalt surrounding the mechanical shop, and support of SCADA communications between the NDWWTP and GWA's Office in Fadian. This requested increase will also enable post design services to continue supporting the project (project meetings, site visits, finish review of submittals, responses to RFIs, etc.) from the originally anticipated project completion date of December 31, 2021 through delays caused by COVID related issues, out to the end of August 2022. Finally, this increase also allows the Design Engineer to provide a week of on-site training for the GWA Operators for the newly constructed Auto Thermal Aerobic Digestion (ATAD) System.

The project is ongoing and necessary to upgrade the NDWWTP with secondary treatment in accordance with the conditions of federal grant funding, and as required to support the military build-up on Guam. This Change Order is necessary and urgent to allow the Design Engineer to continue supporting the project through its completion.

#### **Where is the location?**

The NDWWTP is located on the northwest coast of the island of Guam, in the community of Dededo.

#### **How much will it cost?**

This increase to the current Design Contract is \$400,000 and is an increase to the previously CCU authorized amount of \$317,837.39.

#### **When will it be completed?**

The project will be completed October 31, 2022.

#### **What is the funding source?**

Bond funds under MP-WW-WWTP-08 and/or SDCs.

#### **The RFP/BID responses (if applicable):**

Neither RFPs or BIDs are applicable here.



**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. 26-FY2022**

**RELATIVE TO THE APPROVAL OF CHANGE ORDERS TO THE CONTRACT FOR  
DESIGN SERVICES FOR THE UPGRADE TO THE NORTHERN DISTRICT  
WASTEWATER TREATMENT PLANT TO SECONDARY TREATMENT, GWA  
PROJECT NO. S17-003-OEA (OEA GRANT OCON 676-16-02)**

**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**, the U.S. Department of Defense, Office of Economic Adjustment awarded to GWA a General Assistance Grant, No. OCON 676-16-02, for community investment on August 26, 2016 for Twenty-One Million Dollars (\$21,000,000); and

**WHEREAS**, the General Assistance Grant is to be used for water and wastewater improvements in support of the relocation of U.S. Marines and their dependents to Guam; and

**WHEREAS**, the report “Final Guam Water and Wastewater Assessment Report in Support of the Economic Adjustment Committee Implementation Plan,” (NAVFAC, Department of the Navy, February 2015) has recommended the design and construction of Northern District Wastewater Treatment Plant (“NDWWTP”) treatment upgrades to comply with the current National Pollutant Discharge Elimination System permit and mitigate impacts from wastewater utilities to nearshore waters, and marine biological resources; and

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1       **WHEREAS**, the original Contract for Design Services for the Upgrade to the NDWWTP  
2 plus contingency was approved by the CCU on July 25, 2017 under Resolution No. 47-FY2017  
3 for a total Fee not to exceed Nine Million Dollars (\$9,000,000.00); and

4  
5       **WHEREAS**, GWA management executed the Contract for Design Services with Duenas,  
6 Camacho & Associates in the amount of Eight Million, Six Hundred Forty Thousand, Seventy -  
7 Eight Dollars and Six Cents (\$8,640,078.06) on August 4, 2017; and

8  
9       **WHEREAS**, GWA management approved Amendments 1 through 3 to the Contract for  
10 Design Services between August 4, 2017 and December 26, 2018 for additional required services  
11 for an archaeological survey and report to support the Federal National Environmental Policy  
12 Act's Environmental Assessment process, and for the preparation of design plans and  
13 specifications for deductive bid items for the NDWWTP Bid Documents bringing the total  
14 amount of the Contract for Design Services to Nine Million Dollars (\$9,000,000.00), the  
15 maximum fee approved by the CCU on July 25, 2017; and

16  
17       **WHEREAS**, the CCU approved an increase to the total amount of the Contract for  
18 Design Services up to a maximum of Nine Million Three Hundred Thousand Dollars  
19 (\$9,300,000.00), to address Amendments 4 and 5 to the Contract for Design Services for the  
20 design of a new waterline between Route 3 and NDWWTP to convey potable water to meet the  
21 increased demands for the new treatment processes required for the upgrade to secondary  
22 treatment and for Part 2 of the preparation of design plans and specifications for deductive bid  
23 items for the NDWWTP Bid Documents, respectively, in a cumulative amount of One Hundred  
24 Twenty-two Thousand Six Hundred Seventy-Eight Dollars and Thirty-Nine Cents (\$122,678.39),  
25 and any additional change orders that may arise during the remainder of the design phase or  
26 during construction services on January 22, 2019.

27  
28       **WHEREAS**, GWA Management executed Amendment 6 for additional design services  
29 from the Design Engineer for the design of a temporary water source system to provide a  
30 domestic and fire flow water supply source to the new upgraded NDWWTP system in the  
31 amount of Eighty-Six Thousand One Hundred Sixty-Three Dollars (\$86,163.00), on September  
32 27, 2021; and

1       **WHEREAS**, GWA Management executed Amendment 7 for additional design services  
2 from the Design Engineer for design support and verification of the appropriateness of an on-site  
3 temporary sludge holding pad in the amount Eight Thousand Nine Hundred Ninety-Six Dollars  
4 (\$8,996.00) on September 27, 2021; increasing the Design Engineer's Contract to Nine Million  
5 Two Hundred Seventeen Thousand Eight Hundred Thirty-Seven Dollars and Thirty-Nine Cents  
6 (\$9,217,837.39), leaving a balance of authorized funding of Eighty-Two Thousand One Hundred  
7 Sixty-Two Dollars and Sixty-One Cents (\$82,162.61); and

8  
9       **WHEREAS**, GWA Management now seeks to execute an amendment to the Design  
10 Engineer's Contract in the not-to-exceed amount of Four Hundred Thousand Dollars  
11 (\$400,000.00) to cover (1) additional services during construction caused by extensive structural  
12 shop drawing and submittal review, review and coordination of significant Requests for  
13 Information (RFIs), review and coordination of major equipment substitutions (resulting in  
14 project cost savings), additional design scope including design of additional drying beds, grading  
15 and asphalt changes to accommodate new water supply system and additional asphalt  
16 surrounding the mechanical shop, support of SCADA Communication between the NDWWTP  
17 and GWA's Office in Fadian; (2) post design services to support the project (project meetings,  
18 site visits, finish review of submittals, responses to RFIs, etc.) from the originally anticipated  
19 project completion date of December 31, 2021 through the end of August, 2022 due to delays  
20 caused by COVID related issues; and (3) the Design Engineer to provide a week of on-site  
21 training for the GWA Operators for the newly constructed Auto Thermal Aerobic Digestion  
22 (ATAD) System; and

23  
24       **WHEREAS**, with the existing balance of authorized funding, GWA Management seeks  
25 an authorization for an additional Three Hundred Seventeen Thousand Eight Hundred Thirty-  
26 Seven Dollars and Thirty-Nine Cents (\$317,837.39) in order to execute the proposed  
27 amendment; and

28  
29       **WHEREAS**, the new authorized amount for the Design Contract will be Nine Million  
30 Six Hundred Seventeen Thousand Eight Hundred Thirty-Seven Dollars and Thirty-Nine Cents  
31 (\$9,617,837.39); and  
32

1       **WHEREAS**, funding for this project will be from Bond Funds under the line item “MP-  
2 WW-WWTP-08 Northern District WWTP Completion” and/or SDC funds as needed.

3  
4       **NOW BE IT THEREFORE RESOLVED**, the Consolidated Commission on Utilities  
5 does hereby approve the following:

- 6           1. The recitals set forth above hereby constitute the findings of the CCU.
- 7           2. The CCU finds that the terms of the Scope of Work and Fee proposal  
8           submitted by Duenas, Camacho & Associates for this increase, as described in  
9           Exhibit A, are fair and reasonable.
- 10          3. The CCU hereby authorizes the management of GWA to execute a contract  
11          modification for a not-to-exceed amount of Four Hundred Thousand Dollars  
12          (\$400,000.00).
- 13          4. The CCU hereby further approves the increase in authorized funding amount  
14          for this Contract from Nine Million Three Hundred Thousand Dollars  
15          (\$9,300,000.00), plus Three Hundred Seventeen Thousand Eight Hundred  
16          Thirty-Seven Dollars and Thirty-Nine Cents (\$317,837.39) to bring the total  
17          authorized funding amount to a maximum of Nine Million Six Hundred  
18          Seventeen Thousand Eight Hundred Thirty-Seven Dollars and Thirty-Nine  
19          Cents (\$9,617,837.39).
- 20          5. The CCU hereby authorizes the funding source to be from bond funds under  
21          CIP line-item MP-WW-WWTP-08: Northern District WWTP Completion  
22          and/or SDC funds as required.

23  
24       **RESOLVED**, that the Chairman certified and the Board Secretary attests to the adoption  
25 of this Resolution.

26       **DULY AND REGULARLY ADOPTED**, this 26<sup>th</sup> day of July 2022.

27  
28       Certified by:

Attested by:

29  
30  
31       \_\_\_\_\_  
32       **JOSEPH T. DUENAS**  
Chairperson

\_\_\_\_\_  
**MICHAEL LIMTIACO**  
Secretary



**SECRETARY'S CERTIFICATE**

I, Michael Limtiaco, 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

Website: [www.dcaguam.com](http://www.dcaguam.com)  
Email: [dca@dcaguam.com](mailto:dca@dcaguam.com)

July 17, 2022

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

Attn: Jerald Johnson, Program Manager

Subject: **GWA RFP-08-ENG, Upgrade of the Northern District Wastewater Treatment Plant (NDWWTP), GWA Project No. S17-003OEA (OEA Grant OCON676-16-02)**

Re: **Post Design Fee Change Order Breakdown**

Hafa Adai Mr. Johnson,

At your request, DCA is providing this letter for our team's post design fee in our change order dated January 10, 2022. In addition to this fee, specific services are offered for the solids process start up. The basis for these additional services is to assist GWA operations in the start up of the new ATAD process.

Post Design fee:	\$360,000.00	See January 10, 2022 letter
Solids Process Start up		
Process Engineer:	\$15,356.80	\$191.96/hr X 80 hours (preparation/flight and start-up)
I&C Engineering:	\$15,126.40	\$189.08/hr X 80 hours (preparation/flight and start-up)
Travel:	\$ 4,000.00	\$2,000 X 2
Hotel/rental:	\$ 2,350.00	\$235 X 5 X 2
DCA Project Manager	\$ 3,200.00	\$160.00/hr X 20 hours
Sub-total:	\$40,033.20	Say \$40,000
Total:	\$400,000.00	Rounded from \$400,033.20

The fees reflected above will be treated as a not-to-exceed time and materials billing to our existing subject contract.

Sincerely,

Kenneth M. Rekdahl, P.E.  
Vice-President  
Dueñas, Camacho & Associates, Inc.



Website: [www.dcaguam.com](http://www.dcaguam.com)  
Email: [dca@dcaguam.com](mailto:dca@dcaguam.com)

January 10, 2022

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

Attn: Jerald Johnson, Program Manager

Subject: **GWA RFP-08-ENG, Upgrade of the Northern District Wastewater Treatment Plant (NDWWTP), GWA Project No. S17-003OEA (OEA Grant OCON676-16-02)**

Re: **Post Design Fee Change Order Request**

Hafa Adai Mr. Johnson,

Dueñas, Camacho & Associates (DCA) would like to inform Guam Waterworks Authority (GWA) that the post design efforts for the subject project are still ongoing. As of October 17, 2020 we have billed 91% of our post design efforts. Based on the present project commissioning schedule we expect the project to continue for an additional five months past the projected completion date of December 2021. While we are not completely billed out, we do expect that additional support will be needed from the design team for final construction and commissioning. This will take our cost out past the current post design contract amount of \$1,618,029.74.

Over the course of the project our design team has assisted in RFI and submittal replies. Some of these RFIs and submittals have been the result of assisting the contractor in project adjustments to help constructability and/or the project schedule. This has resulted in internal cost overruns, see attached. If requested, further justification on the overruns can be provided.

Our estimate for the additional cost to complete the project and provide support during final construction and commissioning is \$360,000. The basis for this additional amount is attached to this letter. Our project time also needs to be extended to the actual project completion date.

Sincerely,

Kenneth M. Rekdahl, P.E.  
Vice-President  
Dueñas, Camacho & Associates, Inc.

Attachment

[illegible]

Billed	Contracted	Overrun
DCA Overrun: 146% , \$604,215.10 -	\$415,224.76 =	\$188,990.34
EMCe Overrun: 223%, \$137,308.76 -	\$61,608.32 =	\$ 75,700.44
TRMA Overrun: NA, \$46,070	- \$0	= \$ 46,070
Total:		\$310,760.78
Estimated amount to completion for		
DCA/EMCe/TRMA \$10,000/month X 5		= \$50,000
GS&P and Jacobs will stay at the current contract amount		
Additional requested amount: \$310,670.78 + \$50,000		= \$360,670.78
		Say \$360,000



Website: [www.dcaguam.com](http://www.dcaguam.com)  
Email: [dca@dcaguam.com](mailto:dca@dcaguam.com)

June 28, 2022

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

Attn: Jerald Johnson, Program Manager

Subject: **GWA RFP-08-ENG, Upgrade of the Northern District Wastewater Treatment Plant (NDWWTP), GWA Project No. S17-003OEA (OEA Grant OCON676-16-02)**

Re: **Post Design Fee Change Order Request Supporting Information**

Hafa Adai Mr. Johnson,

At your request DCA is providing this letter to support our subject project post design fee change order dated January 10, 2022 Below is our reply to the calcification requested.

#### **Post Design Overrun**

As presented the attachment to DCA's January 10, 2022 letter, DCA has an overrun of \$188,990.34. Much of the overrun is attributed to coordination and shop drawing review associated with structural matters. A detailed breakdown of the overrun is attached to this letter. The attached detail provides the justification for the overrun and is considered fair for the project size and scope.

TRMA's post design budget was reduced to zero to meet the fixed project budget. It was agreed that submittals related to architectural matters will be reviewed by either DCA or the project RPR. While the submittals were largely reviewed by DCA and the RPR, there were at least 15 RFIs that required input from the architect, see attached RFI log. In addition, there was coordination between TRMA and DCA for shop drawing details related to ingress and egress, handrails and grates. The amount of \$46,070 billed by TRMA is less than 3% of the post design budget and should be considered fair given the project size and scope.

There was additional overrun of \$75,700.44 for EMCE. The number of hours allowed for post design review of RFI/RFC for EMCE was 16 hours for the electrical engineer. This number is disproportional to the project size and scope. It was initially anticipated that the RPR would have an electrical presence on site and that minimal review by EMCE would be needed. There was at least 70 RFIs related electrical matters that had EMCE replies, see attached. This review does not include the submittals reviewed by EMCE. EMCE's post design services amount to less than 9 % of DCAs post design budget and is considered fair for the project size and scope.

June 28, 2022

There has been discussion on the effects of the COVID pandemic and efforts that the consultants have taken to control cost. While the pandemic did influence equipment and material supply, the project site never experienced a shut down. Services were provided by the design team as normal. The only impact was the number visits conducted by the process engineers, but the process engineer services were provided though online means as needed. I'd like to state that DCA's handling of our consultants has been 1% since the beginning of the project. This is far below industry standard. All post design services provided the DCA's chief structural engineer, Tom Camacho, have not been billed to the project. Tom Camacho reviewed each structural RFI and submittal. These cost controlling measures and DCA's overall PM of the project has and continues to result in cost control. Please contact me should you have any comments or further questions to the overrun justification provided.

Sincerely,



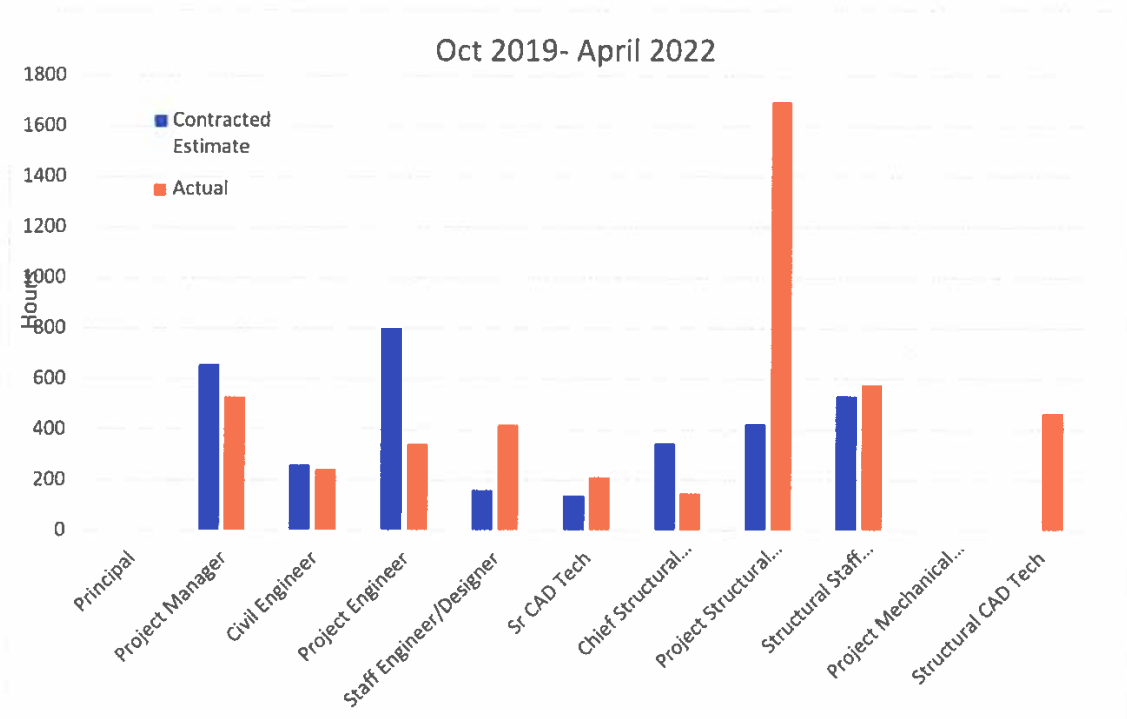
Kenneth M. Rekdahl, P.E.  
Vice-President  
Dueñas, Camacho & Associates, Inc.

Attachment

DCA Overrun  
TRMA RFI Log  
EMCE RFI Log

### Duenas Camacho and Associated Overrun Analysis

The table below presents the past hours used for specific positions within DCA during the NDWWTP reflected Construction period.



Positions that have overrun:

#### Staff Engineer/Designer 2.6X overrun

Staff Engineer position assisted the PM in receiving RFI's and submittals and assuring that the proper consultant was provided the necessary information to reply to the submittal and/or RFI. This position

This position saved effort by not having higher paid engineers monitor and check the project regularly. This allowed for an "as needed" use of engineering positions related to Architectural, Building Mechanical and site civil. This position also relieved the project manager from coordination duties that did not required technical input from.

The project website was reviewed weekly and weekly notices were sent to the appropriate engineer. This position was used for the duration of the project and amounted to 14 hours per month.

The 2.6 overrun is considered justified by the efforts saved by using a lower rate staff to do the non-technical job of the project manager. This was one way that DCA saved on overall cost

#### **Sr CAD Tech 1.5X overrun**

This position overrun provided the CADD work for additional site works at the owner's requests that were not part of the project contract.

Most of the overrun occurred in the last 6 months of the project and included CADD work done for the Sludge holding lagoon, additional pavement around the maintenance building and the sludge drying beds.

The 1.5X overrun is considered justified for the additional effort used.

#### **Project Structural Engineer 4.1X overrun**

This position consisted of the person(s) who initially received and reviewed the shop drawings. This position reviewed each new and revised shop drawing. There were at least 125 submittals related to shop drawings (032000) that were processed and reviewed by the Project structural Engineer, see attached. Of these at least 58 were rejected/resubmit, amend as noted and resubmit or reviewed exceptions noted. Each one of these reply's required detail edits, further coordination and/or additional production effort.

The following table was extracted from the attached shop drawing submittal list taken from the project website.

	Location ID	Initial Shop Drawing	Revised Shop Drawings
Process 1	Influent Pump Station (Route 3)	1	0
Process 2	Headworks	1	10
Process 3	OD	1	6
Process 4	Clarifiers	1	6
Process 5	Future Filters	0	0
Process 6	UV	1	4
Process 7	Septage Receiving	1	5
Process 8	RAS/WAS	1	6
Process 9	Aerated Sludge	1	2
Process 10	Thickening	1	10
Process 11	ATAD	1	0
Process 12	Digester Equipment Bld	1	0
Process 13	Sludge Storage Tanks	1	1
Process 14	Dewatering	1	0



Process 15	Side Stream Pump Station	1	5
Process 16	Plant Water System	0	0
Process 17	New Admin	0	0
Process 18	Renovated Lab	1	2
Process 19	Renovated Maintenance bld	0	0
Process 20	Controls/Generator	1	1
		16	58

DCA expected to review completed shop drawings at least once for each process containing a structure. This would have amounted to 16 completed shop drawings. There were at least 74 reviewed conducted by DCA project structural engineers. This is 4.6 X the 16 anticipated reviews.

To keep the project schedule many of the submittals were provided as a piecemeal submittal. While this helped move the project forward it resulted in multiple reviews and edits to the same process.

Given the number of reviews and edits made to the shop drawing, the 4.1X overrun is considered justified.

#### **Structural Staff 1.1X overrun**

The structural staff position was used to evaluate shop drawings and update model runs for processes where the contractor proposed an alternate approach.

This was the case for the columns used for this project. To save on time the contractor proposed pre-casting columns. The structural staff had to evaluate this for each process.

In addition, there was a request to switch rebar sizes and configurations. Each of these changes were evaluated by the structural staff

#### **Structural CAD Tech.**

There were initially no hours anticipated for this position. However, given the number of revisions to the shop drawings It was necessary to use DCA Structural CADD technicians to update plans and details to provide clarity to the contractor and facility the shop drawing review process.

- 032000-1 - CONCRETE REINFORCEMENT-Oxidation Ditches Foundation Rebar [C - Amend as Noted and Resubmit]
- 032000-1.A - CONCRETE REINFORCEMENT-Oxidation Ditches Foundation Rebar [B - Reviewed/ Exceptions Noted]
- 032000-1.B - CONCRETE REINFORCEMENT-Oxidation Ditches Foundation Rebar Layout [B - Reviewed/ Exceptions Noted]
- 032000-1.C - CONCRETE REINFORCEMENT-Oxidation Ditches Foundation Rebar Layout [B - Reviewed/ Exceptions Noted]
- 032000-10 - CONCRETE REINFORCEMENT - MIL Certificates [A - Reviewed/No Exceptions Taken]
- 032000-11 - CONCRETE REINFORCEMENT-Septage Receiving P7 [C - Amend as Noted and Resubmit]
- 032000-11.A - CONCRETE REINFORCEMENT-P7 Septage Receiving Reinforcement DRW [C - Amend as Noted and Resubmit]
- 032000-11.B - CONCRETE REINFORCEMENT-P7 Septage Receiving Reinforcement DRW [D - Rejected/Resubmit]
- 032000-11.C - CONCRETE REINFORCEMENT-P7 Septage Receiving Reinforcement DRW [B - Reviewed/ Exceptions Noted]
- 032000-11.D - CONCRETE REINFORCEMENT-P7 Septage Receiving Reinforcement DRW [C - Amend as Noted and Resubmit]
- 032000-11.E - CONCRETE REINFORCEMENT-P7 Septage Receiving Reinforcement DRW [F - For Information Only]
- 032000-11.F - CONCRETE REINFORCEMENT-P7 Septage Receiving Reinforcement DRW [C - Amend as Noted and Resubmit]
- 032000-12 - CONCRETE REINFORCEMENT- Rebar Layout 38.3 inch dia hole rebar [D - Rejected/Resubmit]
- 032000-12.A - CONCRETE REINFORCEMENT- Rebar Layout 38.3 inch dia hole rebar [B - Reviewed/ Exceptions Noted]
- 032000-13 - CONCRETE REINFORCEMENT-Side Stream Pump Station P15 update [E - Not Reviewed]
- 032000-14 - CONCRETE REINFORCEMENT-Secondary Clarifiers and Scum Pumping P4 [E - Not Reviewed]
- 032000-15 - CONCRETE REINFORCEMENT-P10 Thickening Facility Foundation Reinforcement [C - Amend as Noted and Resubmit]
- 032000-15.A - CONCRETE REINFORCEMENT-P10 Thickening Facility Foundation Reinforcement [E - Not Reviewed]

- 032000-15.B - CONCRETE REINFORCEMENT-P10 Thickening Facility Foundation Reinforcement [C - Amend as Noted and Resubmit]
- 032000-15.C - CONCRETE REINFORCEMENT-P10 Thickening Facility Foundation Reinforcement [C - Amend as Noted and Resubmit]
- 032000-15.D - CONCRETE REINFORCEMENT-P10 Thickening Facility Foundation Reinforcement [E - Not Reviewed]
- 032000-15.E - CONCRETE REINFORCEMENT-P10 Thickening Facility Foundation Reinforcement [C - Amend as Noted and Resubmit]
- 032000-15.F - CONCRETE REINFORCEMENT-P10 Thickening Facility Foundation Reinforcement [B - Reviewed/ Exceptions Noted]
- 032000-16 - CONCRETE REINFORCEMENT-P3 Oxidation Ditch Wall [C - Amend as Noted and Resubmit]
- 032000-16.A - CONCRETE REINFORCEMENT-P3 Oxidation Ditch Wall [C - Amend as Noted and Resubmit]

- 032000-16.B - CONCRETE REINFORCEMENT-P3 Oxidation Ditch Wall Rebar Shop Drawing [A - Reviewed/No Exceptions Taken]
- 032000-17 - Concrete Reinforcement - P8 RAS / WAS Wall [C - Amend as Noted and Resubmit]
- 032000-17.A - Concrete Reinforcement - P8 RAS / WAS Wall [C - Amend as Noted and Resubmit]
- 032000-17.B - Concrete Reinforcement - P8 RAS / WAS Wall [B - Reviewed/ Exceptions Noted]
- 032000-17.C - Concrete Reinforcement - P8 RAS / WAS Wall [B - Reviewed/ Exceptions Noted]
- 032000-18 - CONCRETE REINFORCEMENT-Secondary Clarifier Wall Reinforcement [C - Amend as Noted and Resubmit]
- 032000-18.A - CONCRETE REINFORCEMENT-Secondary Clarifier Wall Reinforcement [C - Amend as Noted and Resubmit]
- 032000-18.B - CONCRETE REINFORCEMENT-Secondary Clarifier Wall Reinforcement [B - Reviewed/ Exceptions Noted]
- 032000-19 - CONCRETE REINFORCEMENT-Oxidation Ditch Wall Rebar Shop Drawing [E - Not Reviewed]
- 032000-2 - CONCRETE REINFORCEMENT- Mechanical Reinforcing Bar Connectors [C - Amend as Noted and Resubmit]
- 032000-2.A - CONCRETE REINFORCEMENT- Mechanical Reinforcing Bar Connectors [A - Reviewed/No Exceptions Taken]
- 032000-20 - CONCRETE REINFORCEMENT - Rebar Epoxy Touch-Up Paint [A - Reviewed/No Exceptions Taken]
- 032000-21 - CONCRETE REINFORCEMENT - Side Stream Pump Station P15 with Concrete Cover [C - Amend as Noted and Resubmit]
- 032000-21.A - CONCRETE REINFORCEMENT - Side Stream Pump Station P15 with Concrete Cover [C - Amend as Noted and Resubmit]
- 032000-21.B - CONCRETE REINFORCEMENT - Side Stream Pump Station P15 with Concrete Cover [F - For Information Only]
- 032000-22 - CONCRETE REINFORCEMENT-sewer manhole number 5 6 9 10 [C - Amend as Noted and Resubmit]
- 032000-22.A - CONCRETE REINFORCEMENT-sewer manhole number 5 6 9 10 Diameter of Footing Change from 9'-8" to 10'-2" [B - Reviewed/ Exceptions Noted]
- 032000-22.B - CONCRETE REINFORCEMENT-sewer manhole number 5 6 9 10 [F - For Information Only]
- 032000-23 - CONCRETE REINFORCEMENT - P9 Aerated Sludge Storage Facility SOG and Wall [C - Amend as Noted and Resubmit]
- 032000-23.A - CONCRETE REINFORCEMENT - P9 Aerated Sludge Storage Facility SOG and Wall [B - Reviewed/ Exceptions Noted]
- 032000-23.B - CONCRETE REINFORCEMENT - P9 Aerated Sludge Storage Facility SOG and Wall [E - Not Reviewed]
- 032000-24 - CONCRETE REINFORCEMENT-P 6 UV Disinfection Foundation-SOG-Wall [D - Rejected/Resubmit]
- 032000-24.A - CONCRETE REINFORCEMENT-P 6 UV Disinfection Foundation-SOG-Wall [C - Amend as Noted and Resubmit]
- 032000-24.B - CONCRETE REINFORCEMENT-P 6 UV Disinfection Foundation-SOG-Wall [B - Reviewed/ Exceptions Noted]
- 032000-25 - CONCRETE REINFORCEMENT-P2 Headworks Column Rebar Shop drawing [C - Amend as Noted and Resubmit]



- 032000-25.A - CONCRETE REINFORCEMENT-P2 Headworks Column Rebar Shop drawing [E - Not Reviewed]
  - 032000-26 - CONCRETE REINFORCEMENT-P8 RAS-WAS SOG Elevated Slab [B - Reviewed/ Exceptions Noted]
  - 032000-26.A - CONCRETE REINFORCEMENT-P8 RAS-WAS SOG Elevated Slab [B - Reviewed/ Exceptions Noted]
  - 032000-27 - CONCRETE REINFORCEMENT [C - Amend as Noted and Resubmit]
  - 032000-27.A - CONCRETE REINFORCEMENT-Dewatering Facility Reinforcement P14) [B - Reviewed/ Exceptions Noted]
  - 032000-28 - CONCRETE REINFORCEMENT-Sludge Storage Tanks P13 [C - Amend as Noted and Resubmit]
  - 032000-28.A - CONCRETE REINFORCEMENT-Sludge Storage Tanks P13 [A - Reviewed/No Exceptions Taken]
  - 032000-29 - CONCRETE REINFORCEMENT-Wall and Column Headworks P2 [C - Amend as Noted and Resubmit]
  - 032000-29.A - CONCRETE REINFORCEMENT-Wall and Column Headworks P2 [B - Reviewed/ Exceptions Noted]
  - 032000-3 - CONCRETE REINFORCEMENT-Epoxy Coating [D - Rejected/Resubmit]
- 
- 032000-3.A - CONCRETE REINFORCEMENT-Epoxy Coating touch up [A - Reviewed/No Exceptions Taken]
  - 032000-30 - CONCRETE REINFORCEMENT-P3 Oxidation Ditches Elevated Slab and Beams shop drawing [B - Reviewed/ Exceptions Noted]
  - 032000-30.A - CONCRETE REINFORCEMENT-P3 Oxidation Ditches Elevated Slab and Beams shop drawing [E - Not Reviewed]
  - 032000-31 - CONCRETE REINFORCEMENT-P 20 Standby Power and P 20-1 New Main Electrical Room [C - Amend as Noted and Resubmit]
  - 032000-31.A - CONCRETE REINFORCEMENT-P 20 Standby Power and P 20-1 New Main Electrical Room [B - Reviewed/ Exceptions Noted]
  - 032000-32 - CONCRETE REINFORCEMENT-Trapezoidal Swale Headwall between # 2 & # 3 [B - Reviewed/ Exceptions Noted]
  - 032000-33 - CONCRETE REINFORCEMENT-Headwall # 2 [B - Reviewed/ Exceptions Noted]
  - 032000-33.A - CONCRETE REINFORCEMENT-Headwall # 2 [B - Reviewed/ Exceptions Noted]
  - 032000-34 - CONCRETE REINFORCEMENT-Headwall # 3) [B - Reviewed/ Exceptions Noted]
  - 032000-34.A - CONCRETE REINFORCEMENT-Headwall # 3) [B - Reviewed/ Exceptions Noted]
  - 032000-35 - CONCRETE REINFORCEMENT-Process 4 Secondary Clarifiers Stairs ) [B - Reviewed/ Exceptions Noted]
  - 032000-36 - CONCRETE REINFORCEMENT - P2 Headworks - Slab On Grade [A - Reviewed/No Exceptions Taken]
  - 032000-37 - CONCRETE REINFORCEMENT - MIL Certificate Tags 2nd Batch [A - Reviewed/No Exceptions Taken]
  - 032000-38 - CONCRETE REINFORCEMENT-P2 Headworks Elevated Slab and Beam [B - Reviewed/ Exceptions Noted]
  - 032000-39 - CONCRETE REINFORCEMENT-P10 Thickening Facility Elevated Slab and Beam [C - Amend as Noted and Resubmit]
  - 032000-39.A - CONCRETE REINFORCEMENT-P10 Thickening Facility Elevated Slab and Beam [C - Amend as Noted and Resubmit]

- 032000-39.B - CONCRETE REINFORCEMENT-P10 Thickening Facility Elevated Slab and Beam [C - Amend as Noted and Resubmit]
- 032000-39.C - CONCRETE REINFORCEMENT-P10 Thickening Facility Elevated Slab and Beam [A - Reviewed/No Exceptions Taken]
- 032000-4 - CONCRETE REINFORCEMENT-Secondary Clarifier Foundation Reinforcement P4 [C - Amend as Noted and Resubmit]
- 032000-4.A - CONCRETE REINFORCEMENT-Secondary Clarifier Foundation Reinforcement P4 [C - Amend as Noted and Resubmit]
- 032000-4.B - CONCRETE REINFORCEMENT-Secondary Clarifier Foundation Reinforcement P4 [B - Reviewed/ Exceptions Noted]

- 032000-40 - CONCRETE REINFORCEMENT-P16 Plant Water System [A - Reviewed/No Exceptions Taken]
- 032000-41 - CONCRETE REINFORCEMENT-Epoxy Touch Up Paint [A - Reviewed/No Exceptions Taken]
- 032000-42 - CONCRETE REINFORCEMENT-032000-42-P11 ATAD Tank Reactor and SNDR Tank [B - Reviewed/ Exceptions Noted]
- 032000-43 - CONCRETE REINFORCEMENT-Field Inlet #1, #2 & #5 [C - Amend as Noted and Resubmit]
- 032000-43.A - CONCRETE REINFORCEMENT-Field Inlet #1, #2 & #5 [C - Amend as Noted and Resubmit]
- 032000-44 - CONCRETE REINFORCEMENT-P6 UV Disinfection Elevated Slab Rebar Shop drawing [C - Amend as Noted and Resubmit]
- 032000-44.A - CONCRETE REINFORCEMENT-P6 UV Disinfection Elevated Slab Rebar Shop drawing [B - Reviewed/ Exceptions Noted]
- 032000-45 - CONCRETE REINFORCEMENT-P11 Odor Control Building FD and Wall and Roof [B - Reviewed/ Exceptions Noted]
- 032000-46 - CONCRETE REINFORCEMENT-P18 Renovated Repurposed Lab [C - Amend as Noted and Resubmit]
- 032000-46.A - CONCRETE REINFORCEMENT-P18 Renovated Repurposed Lab [D - Rejected/Resubmit]
- 032000-46.B - CONCRETE REINFORCEMENT-P18 Renovated Repurposed Lab [B - Reviewed/ Exceptions Noted]
- 032000-47 - CONCRETE REINFORCEMENT-Process 1-1 Route 3 Pump Station Slab on Grade – Wall Column – Stair - Beam [C - Amend as Noted and Resubmit]
- 032000-47.A - CONCRETE REINFORCEMENT-Process 1-1 Route 3 Pump Station Slab on Grade – Wall Column – Stair - Beam [C - Amend as Noted and Resubmit]
- 032000-47.B - CONCRETE REINFORCEMENT-Process 1-1 Route 3 Pump Station Slab on Grade – Wall Column – Stair - Beam [B - Reviewed/ Exceptions Noted]
- 032000-48 - CONCRETE REINFORCEMENT-P12 Digester Building [C - Amend as Noted and Resubmit]
- 032000-48.A - CONCRETE REINFORCEMENT-P12 Digester Building [C - Amend as Noted and Resubmit]
- 032000-48.B - CONCRETE REINFORCEMENT-P12 Digester Building [A - Reviewed/No Exceptions Taken]
- 032000-49 - CONCRETE REINFORCEMENT-CONCRETE REINFORCEMENT-Field Inlet #2 [B - Reviewed/ Exceptions Noted]
- 032000-5 - CONCRETE REINFORCEMENT - RAS/WAS Foundation Reinforcement Process 8 [C - Amend as Noted and Resubmit]
- 032000-5.A - CONCRETE REINFORCEMENT - RAS/WAS Foundation Reinforcement Process 8 [D - Rejected/Resubmit]

032000-5.B - CONCRETE REINFORCEMENT - RAS/WAS Foundation Reinforcement  
Process 8 [A - Reviewed/No Exceptions Taken]

- 032000-65 - CONCRETE REINFORCEMENT - Street Light Post Foundation Detail [A - Reviewed/No Exceptions Taken]
- 032000-66 - CONCRETE REINFORCEMENT - P16 New Water Tank [C - Amend as Noted and Resubmit]
- 032000-66.A - CONCRETE REINFORCEMENT - P16 New Water Tank [A - Reviewed/No Exceptions Taken]
- 032000-67 - CONCRETE REINFORCEMENT - Light Pole Base Design - Type-H [F - For Information Only]
- 032000-68 - CONCRETE REINFORCEMENT - P11 Chiller Pad [B - Reviewed/ Exceptions Noted]
- 032000-69 - CONCRETE REINFORCEMENT [D - Rejected/Resubmit]
- 032000-69.A - CONCRETE REINFORCEMENT - P9 Electrical Room CMU Wall [B - Reviewed/ Exceptions Noted]
- 032000-7 - CONCRETE REINFORCEMENT-Side Stream Pump Station P15 [E - Not Reviewed]
- 032000-7.A - CONCRETE REINFORCEMENT-Side Stream Pump Station P15 [A - Reviewed/No Exceptions Taken]
- 032000-7.B - CONCRETE REINFORCEMENT-Side Stream Pump Station P15 [B - Reviewed/ Exceptions Noted]
- 032000-70 - CONCRETE REINFORCEMENT - P20 Power Meter Pedestal [A - Reviewed/No Exceptions Taken]
- 032000-71 - CONCRETE REINFORCEMENT - P11 Chiller Pad Electrical Pedestal [B - Reviewed/ Exceptions Noted]
- 032000-72 - CONCRETE REINFORCEMENT - NEW MONUMENT SIGN - LTR-145 [A - Reviewed/No Exceptions Taken]
- 032000-73 - CONCRETE REINFORCEMENT - P9 OVF Line - Catchment [B - Reviewed/ Exceptions Noted]
- 032000-74 - CONCRETE REINFORCEMENT - P3 Splitter Box Ground Level Landing Stair [A - Reviewed/No Exceptions Taken]
- 032000-75 - CONCRETE REINFORCEMENT - Headwall #5 [B - Reviewed/ Exceptions Noted]
- 032000-8 - CONCRETE REINFORCEMENT - Headworks Foundation [D - Rejected/Resubmit]
- 032000-8.A - CONCRETE REINFORCEMENT - Headworks Foundation [C - Amend as Noted and Resubmit]
- 032000-8.B - CONCRETE REINFORCEMENT - Headworks Foundation [C - Amend as Noted and Resubmit]
- 032000-8.C - CONCRETE REINFORCEMENT - Headworks Foundation [B - Reviewed/ Exceptions Noted]
- 032000-9 - CONCRETE REINFORCEMENT - PVC coated tie wire [A - Reviewed/No Exceptions Taken]



TRMA (Architectural) RFIs

- 323 - RAS/WAS Double T Topping Concrete - finish and crack control joint
- 1 - Dueñas, Camacho & Associates, Inc. Response to RFI # 323
- 4 - GHD Inc. Response to RFI # 323
- 5 - GHD Inc. Response to RFI # 323
- 112 - Stair Nosing
- 1 - Dueñas, Camacho & Associates, Inc. Response to RFI # 112
- 148 - ATAD-SNDR Door Schedule- Type-Size-HW
- 2 - Dueñas, Camacho & Associates, Inc. Response to RFI # 148
- 4 - Dueñas, Camacho & Associates, Inc. Response to RFI # 148
- 265 - PAINTS AND COATINGS
- 1 - Dueñas, Camacho & Associates, Inc. Response to RFI # 265
- 2 - GHD Inc. Response to RFI # 265
- 163 - Process 12 ATAD Bldg Aluminum & Roll-up doors size
- 1 - Dueñas, Camacho & Associates, Inc. Response to RFI # 163
- 188 - HM DOORS FOLLOW-UP RESPONSE TO RFI #120
- 1 - Dueñas, Camacho & Associates, Inc. Response to RFI # 188
- 621 - Process 14 Connecting walkway elevation discrepancy
- 2 - Dueñas, Camacho & Associates, Inc. Response to RFI # 621
- 3 - GHD Inc. Response to RFI # 621
- 286 - Floor Finishes, Paints & Coating F1, F2- & F3
- 1 - Dueñas, Camacho & Associates, Inc. Response to RFI # 286
- 2 - GHD Inc. Response to RFI # 286
- 193 - Roll-up door jamb
- 1 - Dueñas, Camacho & Associates, Inc. Response to RFI # 193
- 35 - OVERHEAD DOORS
- 1 - Dueñas, Camacho & Associates, Inc. Response to RFI # 35
- 300 - P12 Digester Building Connection New to Existing
- 1 - Dueñas, Camacho & Associates, Inc. Response to RFI # 300
- 2 - GHD Inc. Response to RFI # 300
- 68 - Door Hardware Set Schedule-Opening Types
- 1 - Dueñas, Camacho & Associates, Inc. Response to RFI # 68
- 102 - FLOOR ACCESS DOOR
- 2 - GHD Inc. Response to RFI # 102
- 3 - GHD Inc. Response to RFI # 102
- 74 - Floor and Wall Tiles size
- 1 - Dueñas, Camacho & Associates, Inc. Response to RFI # 74
- 534 - P9 Electrical Room - reconstruct walls and door
- 1 - Dueñas, Camacho & Associates, Inc. Response to RFI # 534
- 2 - GHD Inc. Response to RFI # 534

EMCE

- 232 - Grounding System - Bonding to Rebar
- 1 - EMCE Response to RFI # 232
- 2 - GHD Inc. Response to RFI # 232
- 303 - Additional RAS/WAS Stair Lighting
- 1 - EMCE Response to RFI # 303
- 2 - GHD Inc. Response to RFI # 303
- 520 - Light Mounting Location at GL C10 - Type H Light Fixture
- 1 - EMCE Response to RFI # 520
- 2 - GHD Inc. Response to RFI # 520
- 382.A - Panelboard "4UV" two sections installation
- 1 - EMCE Response to RFI # 382.A
- 2 - GHD Inc. Response to RFI # 382.A
- 92 - Existing Electrical Load at Southern Link and Site 1
- 1 - EMCE Response to RFI # 92
- 3 - EMCE Response to RFI # 92
- 189 - Switchboards Material Submittal Review
- 1 - EMCE Response to RFI # 189
- 465 - New Feeder Section for Existing Switchboard "SG"
- 1 - EMCE Response to RFI # 465
- 2 - GHD Inc. Response to RFI # 465
- 339 - Primary Riser at Southern Link Pump Station
- 1 - EMCE Response to RFI # 339
- 2 - GHD Inc. Response to RFI # 339
- 23 - Cable & Conduit Size for 09-VFD-211/221
- 1 - EMCE Response to RFI # 23
- 2 - EMCE Response to RFI # 23
- 247 - Light Mounting Height and Location at GL B10 and C10
- 1 - EMCE Response to RFI # 247
- 2 - GHD Inc. Response to RFI # 247
- 104 - Generator Single-Source Manufacturer
- 1 - EMCE Response to RFI # 104
- 21 - Liquid Plant Water Booster Pumps' Cable Size & Circuit Breaker Rating
- 1 - EMCE Response to RFI # 21
- 483 - P18 Renovated/Repurposed Lab Communication Conduits
- 1 - EMCE Response to RFI # 483
- 2 - GHD Inc. Response to RFI # 483
- 65 - Progressive Cavity Pumps Power Provision
- 1 - EMCE Response to RFI # 65
- 509 - Switchgear "SG", Pertinent to Submittal #264313-3A
- 1 - EMCE Response to RFI # 509
- 3 - EMCE Response to RFI # 509
- 4 - GHD Inc. Response to RFI # 509
- 417 - Coordination Study Equipment Evaluation Concerns
- 1 - EMCE Response to RFI # 417
- 2 - GHD Inc. Response to RFI # 417
- 367 - E-1 Light Fixture Wattage Change
- 1 - EMCE Response to RFI # 367
- 2 - GHD Inc. Response to RFI # 367
- 34 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS - GROUNDING ELECTRODES



- 1 - EMCE Response to RFI # 34
- 80 - Grounding Clamp - Material
- 1 - EMCE Response to RFI # 80
- 4 - EMCE Response to RFI # 80
- 528 - Light Mounting Location at GL G10 - Type H Light Fixture
- 1 - EMCE Response to RFI # 528
- 2 - GHD Inc. Response to RFI # 528
- 212 - Discontinued Fire Alarm Devices
- 1 - EMCE Response to RFI # 212
- 226 - Light Switch
- 1 - EMCE Response to RFI # 226
- 2 - GHD Inc. Response to RFI # 226
- 244 - Oxidation Ditch Light Type "P" Mounting Height
- 1 - EMCE Response to RFI # 244
- 478 - SPD VPR Rating for Low Voltage Electrical Power Circuits
- 1 - EMCE Response to RFI # 478
- 2 - GHD Inc. Response to RFI # 478
- 510 - Comms Manhole west of Aerated Sludge Transfer Pump Room
- 1 - EMCE Response to RFI # 510
- 2 - GHD Inc. Response to RFI # 510
- 318 - Explosion Proof Receptacle
- 1 - EMCE Response to RFI # 318
- 2 - GHD Inc. Response to RFI # 318
- 319 - Light Fixture at Headworks Restroom
- 1 - EMCE Response to RFI # 319
- 2 - GHD Inc. Response to RFI # 319
- 382.B - Panelboard "4UV" two sections installation
- 1 - EMCE Response to RFI # 382.B
- 2 - GHD Inc. Response to RFI # 382.B
- 463 - Removal of Electrical Ductbank from EMH6 to EMH7
- 1 - EMCE Response to RFI # 463
- 2 - Dueñas, Camacho & Associates, Inc. Response to RFI # 463
- 3 - GHD Inc. Response to RFI # 463
- 162 - Bonding to Structural Rebar, Lightning Protection System-layout drawings for lightning arrester - conductor & the like
- 1 - EMCE Response to RFI # 162
- 394 - Power Supply to Septage Receiving Station (P7)
- 1 - EMCE Response to RFI # 394
- 2 - GHD Inc. Response to RFI # 394
- 341.B - Roxtec Seal Fitting (or Equal)
- 1 - EMCE Response to RFI # 341.B
- 2 - GHD Inc. Response to RFI # 341.B
- 612 - Ground Rod Cover / Accessible Well
- 1 - EMCE Response to RFI # 612
- 2 - GHD Inc. Response to RFI # 612
- 473 - New Water Tank - Electrical Demolition Scope
- 1 - EMCE Response to RFI # 473
- 2 - GHD Inc. Response to RFI # 473
- 435 - Additional Comms Handhole Between P20-1 and P18?
- 1 - EMCE Response to RFI # 435
- 2 - GHD Inc. Response to RFI # 435
- 52 - Disconnect Switch Rating missing

- 1 - EMCE Response to RFI # 52
- 416 - NAFTA compliant industrial grade GFCI
- 1 - EMCE Response to RFI # 416
- 2 - GHD Inc. Response to RFI # 416
- 177.B - Electrical Handholes
- 1 - EMCE Response to RFI # 177.B
- 287 - Floor-Mounted Receptacle
- 1 - EMCE Response to RFI # 287
- 2 - GHD Inc. Response to RFI # 287
- 408 - Location of CT enclosure and meter for Headworks
- 1 - EMCE Response to RFI # 408
- 2 - GHD Inc. Response to RFI # 408
- 53 - Missing Light Fixture "L2" detail dwg E2.2.2 & E18.2.2
- 1 - EMCE Response to RFI # 53
- 472 - P1 SLPS Circuit Breaker Setting
- 1 - EMCE Response to RFI # 472
- 3 - EMCE Response to RFI # 472
- 4 - GHD Inc. Response to RFI # 472
- 294 - FACP Power Provision (Headworks)
- 1 - EMCE Response to RFI # 294
- 2 - GHD Inc. Response to RFI # 294
- 66 - Request for Electrical Load Calculations
- 1 - EMCE Response to RFI # 66
- 177.A - Electrical Handholes
- 177.A - Electrical Handholes
- 1 - EMCE Response to RFI # 177.A
- 543 - Relocation and Re-Orientation of 500kVA Dry Type Transformer of P6
- 1 - EMCE Response to RFI # 543
- 2 - GHD Inc. Response to RFI # 543
- 396 - Switchboard AT additional section
- 1 - EMCE Response to RFI # 396
- 2 - GHD Inc. Response to RFI # 396
- 246 - EXISTING FIBER OPTIC DUCT BANK CLASHING WITH THE PATH OF 36" & 30" PVC C900 FM LINE
- 1 - EMCE Response to RFI # 246
- 22 - Generator Emission EPA Tier 3 Requirements
- 1 - EMCE Response to RFI # 22
- 593 - Clarification regarding Explosion proof sealing fittings
- 2 - EMCE Response to RFI # 593
- 3 - GHD Inc. Response to RFI # 593
- 190 - Switchboards Material Submittal Review (Part 2)
- 1 - EMCE Response to RFI # 190
- 3 - GHD Inc. Response to RFI # 190
- 177 - Electrical Handholes
- 1 - EMCE Response to RFI # 177
- 3 - EMCE Response to RFI # 177
- 100 - Generator Seismic Performance
- 1 - EMCE Response to RFI # 100
- 382 - Panelboard "4UV" two sections installation
- 1 - EMCE Response to RFI # 382
- 236 - Existing Coordination Studies
- 1 - EMCE Response to RFI # 236

- 2 - GHD Inc. Response to RFI # 236
- 536 - Installing additional Ground Rods as alternative to Helical Ground
- 1 - EMCE Response to RFI # 536
- 2 - GHD Inc. Response to RFI # 536
- 221 - Primary Manhole 1
- 1 - EMCE Response to RFI # 221
- 2 - GHD Inc. Response to RFI # 221
- 518 - Propose Local Field Adjusting Agency and Power Systems Analysis Specialist
- 1 - EMCE Response to RFI # 518
- 2 - GHD Inc. Response to RFI # 518
- 445 - SLPS Electrical Closets
- 1 - EMCE Response to RFI # 445
- 2 - GHD Inc. Response to RFI # 445
- 103 - Generator Controller, Fuel, Engine Induction
- 1 - EMCE Response to RFI # 103,
- 3 - GHD Inc. Response to RFI # 103
- 394.A - Power Supply to Septage Receiving Station (P7)
- 1 - EMCE Response to RFI # 394.A
- 2 - GHD Inc. Response to RFI # 394.A
- 243 - Total Degree Bends of Conduit Runs
- 2 - EMCE Response to RFI # 243
- 3 - GHD Inc. Response to RFI # 243
- 409 - Digester Building, ATAD & SNDR tanks add EHH and CHH
- 1 - EMCE Response to RFI # 409
- 2 - GHD Inc. Response to RFI # 409
- 366 - Laboratory Fume Hood Power Supply
- 1 - EMCE Response to RFI # 366
- 2 - GHD Inc. Response to RFI # 366
- 90 - Utility Fault Current & Arc Flash Assessment Data
- 1 - EMCE Response to RFI # 90
- 222 - Panelboard 4UV
- 1 - EMCE Response to RFI # 222
- 228 - Comms Ductbank from Generator Room to Headworks
- 1 - EMCE Response to RFI # 228
- 320 - Headworks Lights and Panels at GL A-C, 10-11 Level 2
- 1 - EMCE Response to RFI # 320
- 2 - GHD Inc. Response to RFI # 320
- 408.A - Location of CT enclosure and meter for Headworks
- 1 - EMCE Response to RFI # 408.A
- 2 - GHD Inc. Response to RFI # 408.A
- 341.A - Roxtec Seal Fitting (or Equal)
- 1 - EMCE Response to RFI # 341.A
- 2 - GHD Inc. Response to RFI # 341.A
- 38 - UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL SYSTEMS - PRECAST MANHOLES
- 1 - EMCE Response to RFI # 38
- 73 - Chopper Pump Rating at Septage Receiving
- 1 - EMCE Response to RFI # 73
- 197 - P10 Thickening Facility - Propose New gridline B Wall and Column Locations
- 1 - Dueñas, Camacho & Associates, Inc. Response to RFI # 197
- 3 - GHD Inc. Response to RFI # 197
- 5 - GHD Inc. Response to RFI # 197

- 399 - Additional Manholes & Handholes
- 1 - EMCE Response to RFI # 399
- 386 - Conduit connections to handholes - cannot comply with contract criteria
- 1 - EMCE Response to RFI # 386
- 2 - GHD Inc. Response to RFI # 386
- 171 - Metallic Elbows and Bends at Concrete Encased Ductbanks
- 1 - GHD Inc. Response to RFI # 171
- 2 - EMCE Response to RFI # 171
- 561 - Electrical installation in Headworks Electrical Room
- 1 - GHD Inc. Response to RFI # 561
- 534 - P9 Electrical Room - reconstruct walls and door
- 1 - Dueñas, Camacho & Associates, Inc. Response to RFI # 534
- 2 - GHD Inc. Response to RFI # 534



# Management Report GWA Work Session July 19, 2022



### GWA Workforce availability as of July 13, 2022

Healthy	342	94.5%
Sick, not COVID-19 related	7	1.9%
COVID-19 Quarantined	3	0.8%
Employee with COVID-19, active case	5	1.4%
Military Leave	4	1.1%
LTD	1	0.3%
	362	100%

Total		
Healthy/Reporting for duty at worksite	304	84.0%
Healthy/Reporting for duty - Part Teleworking and Part Reporting for duty at worksite	2	0.6%
Healthy/Reporting for duty - Teleworking	5	1.4%
Healthy on annual leave	27	7.5%
Employee wants to electively self-quarantine; status not considered vulnerable - does not report for duty	4	1.1%
Employee sick - symptoms unrelated to COVID-19	7	1.9%
Military Leave	4	1.1%
Employee diagnosed with COVID-19	5	1.4%
LTD/Workers Comp	1	0.3%
Employee's direct exposure to a household member - COVID-19 confirmed case	3	0.8%
	362	100.00%

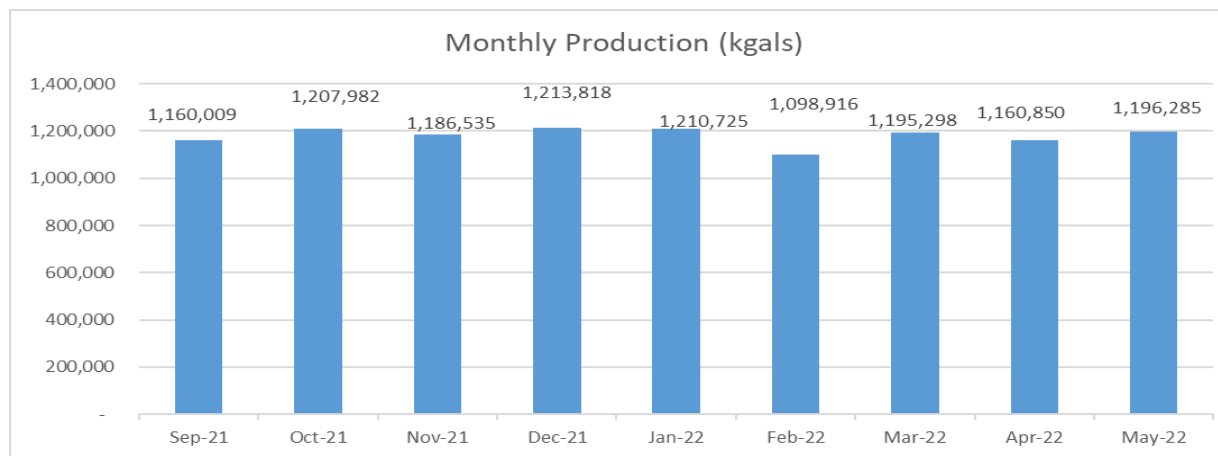
### GWA Workforce Vaccine Status as of July 13, 2022

Fully Vaccinated	342	94%
Did Not Receive Shot	20	6%
	362	100%

## Operations Update

Production (May 2022)

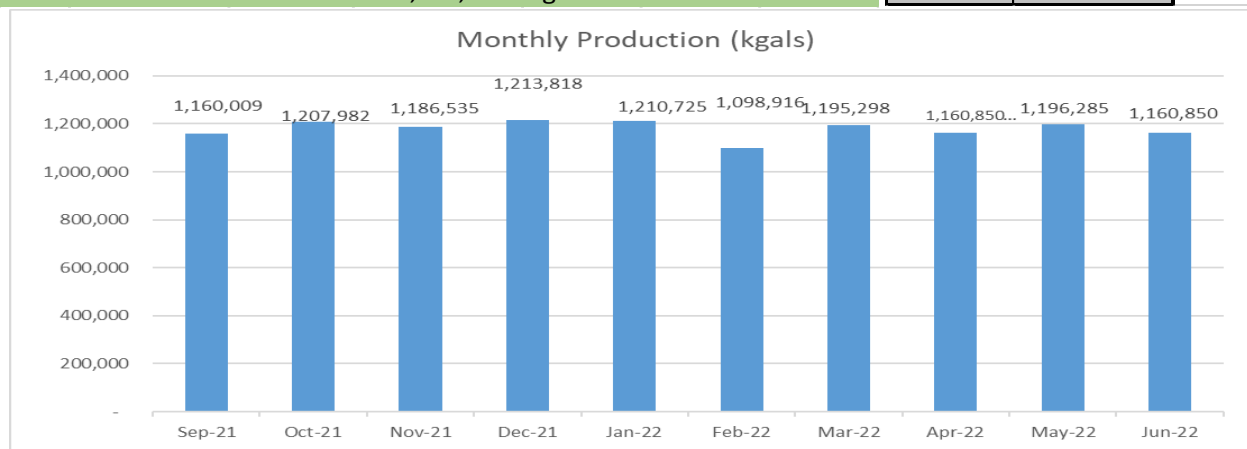
Monthly Production Summary - May 2022					DW Status, May 2022		
Deep Wells					Active	92	
	Active wells =	92	of 120		Grounded Motors	17	A26-D01-D03-D10-D28-F10-F13-F15-F20-G501-M09-M12-M17B-Y04-Y16-Y19-Y21
	Avg days in operation =	31	days				
	Total Production =	1,092,044	Kgals				
Springs					Out of Commission	9	A02-A07-A28-A29-D05-D13-M14-M101-M105
	Avg days in operation =	31	days				
	Total Production =	5669	Kgals				
Ugum Surface Water Plant					Secured - PFO	2	A23-A25
	Avg days in operation =	31	days				
	Total Production =	68,155	Kgals				
Tumon Maui Well					TOTAL	120	
	Avg days in operation =	31	days		TOTAL	240	
	Total Production =	30,417	Kgals				
1,196,285 Kgals 38.6 MGD							



## Operations Update

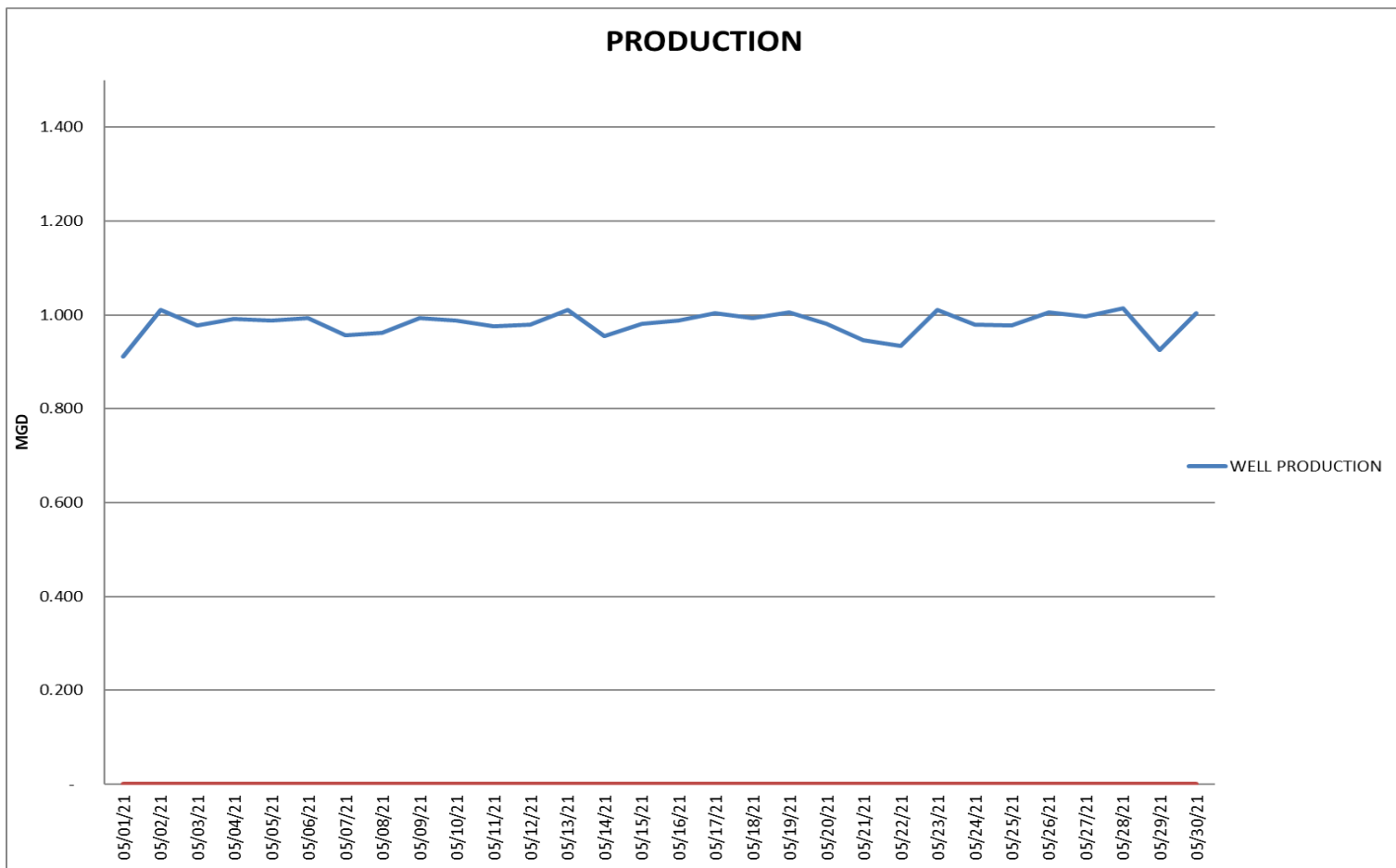
## Production (June 2022)

Monthly Production Summary - June 2022					DW Status: June 30, 2022		
Deep Wells				35.0 MGD	Active	94	
	Active wells =	94	of 120		Grounded Motors	15	A26-D01-D03-D10-D28-F10-F13-F15-F20-G501-M12-Y04-Y16-Y19-Y21
	Avg days in operation =	30	days				
	Total Production =	1,049,320	Kgals				
Springs				0.18 MGD	Out of Commission	9	A02-A07-A28-A29-D05-D13-M14-MJ01-MJ05
	Avg days in operation =	30	days				
	Total Production =	5,451	Kgals				
Ugum Surface Water Plant				2.2 MGD	Secured - PFO	2	A23-A25
	Avg days in operation =	30	days				
	Total Production =	64,974	Kgals				
Tumon Maui Well				0.99 MGD	TOTAL	120	
	Avg days in operation =	30	days				
	Total Production =	29,569	Kgals				
				1,149,314 Kgals			
				38.3 MGD			

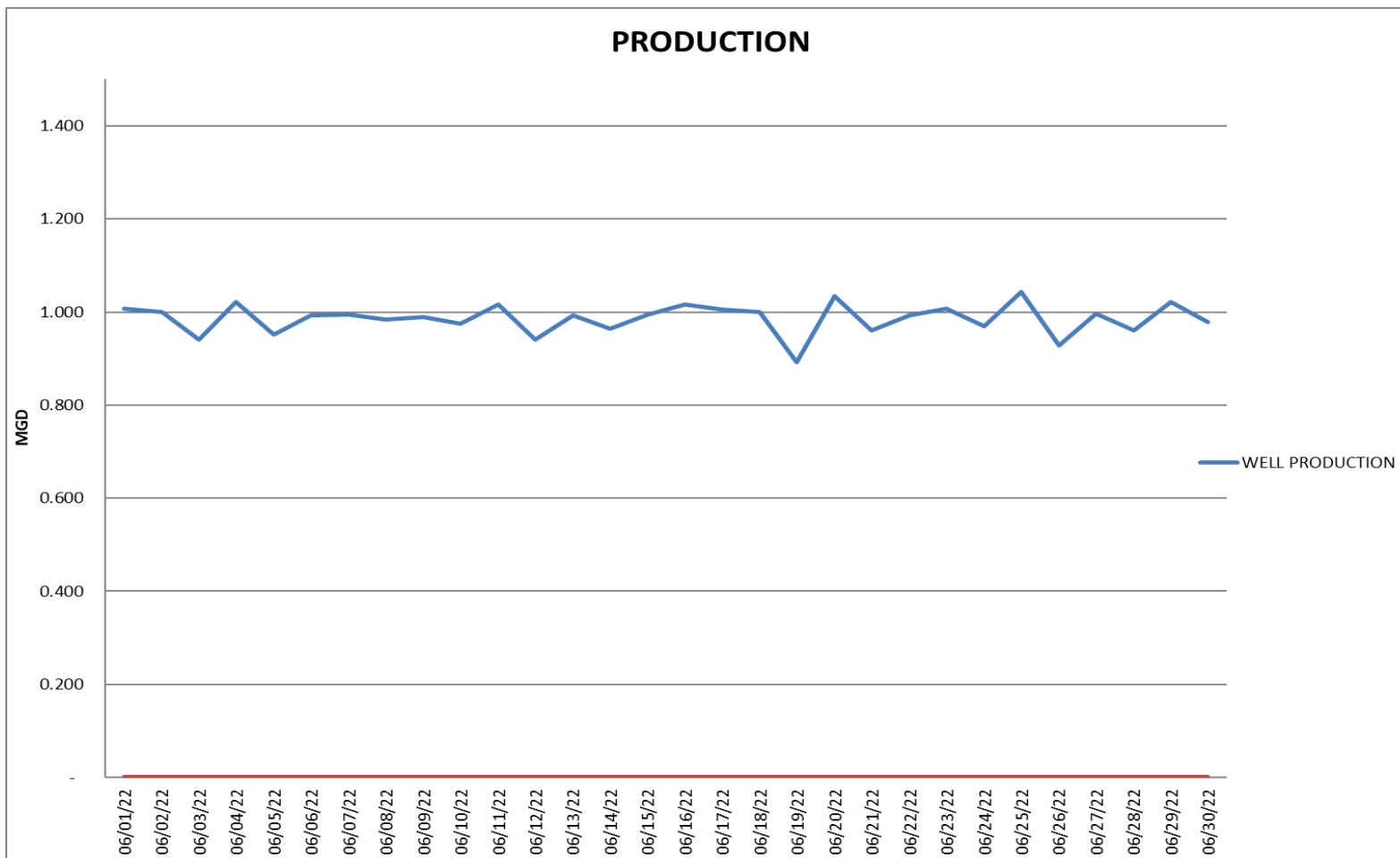




Tumon Maui Well Production (May 2022)

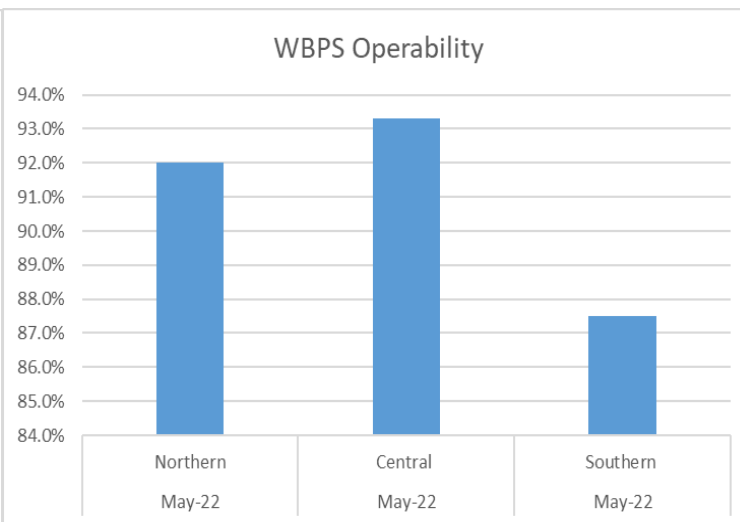
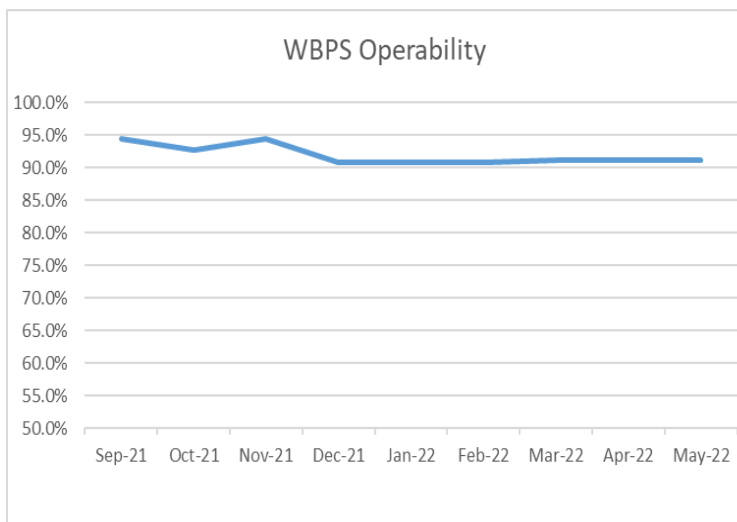


Tumon Maui Well Production (June 2022)



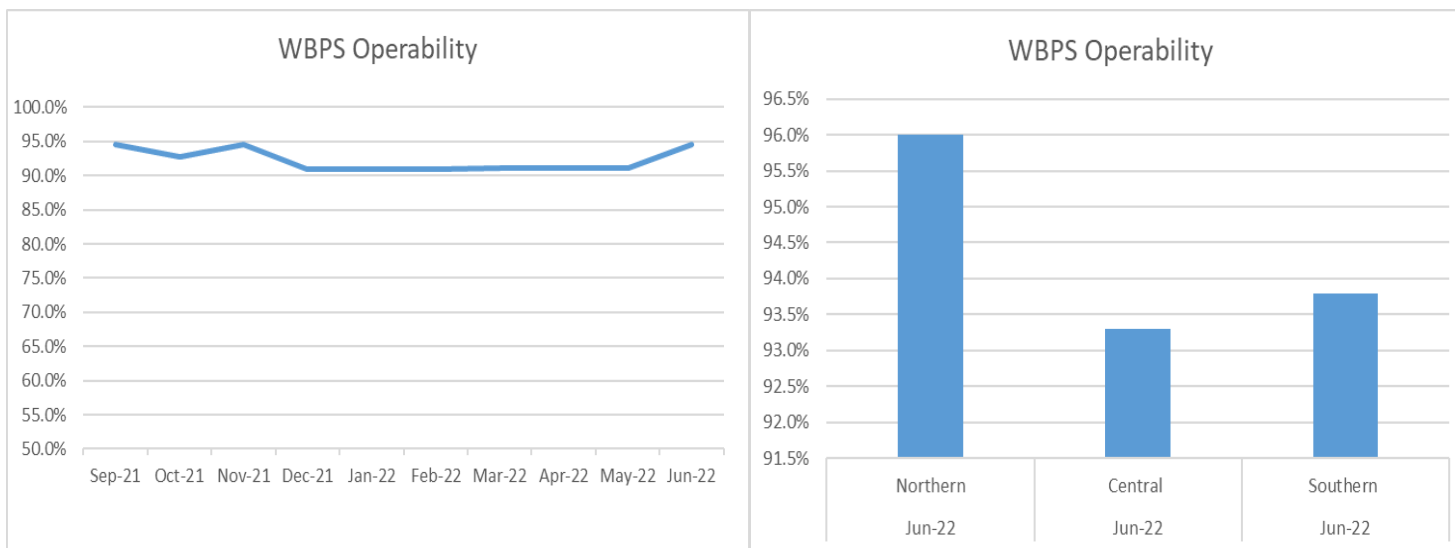
## Distribution (May 2022)

Monthly Distribution Summary - May 2022					
Water Booster Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	13	25	23	92.0%
	Central	7	15	14	93.3%
	Southern	7	16	14	87.5%
		27	56	51	91.1%

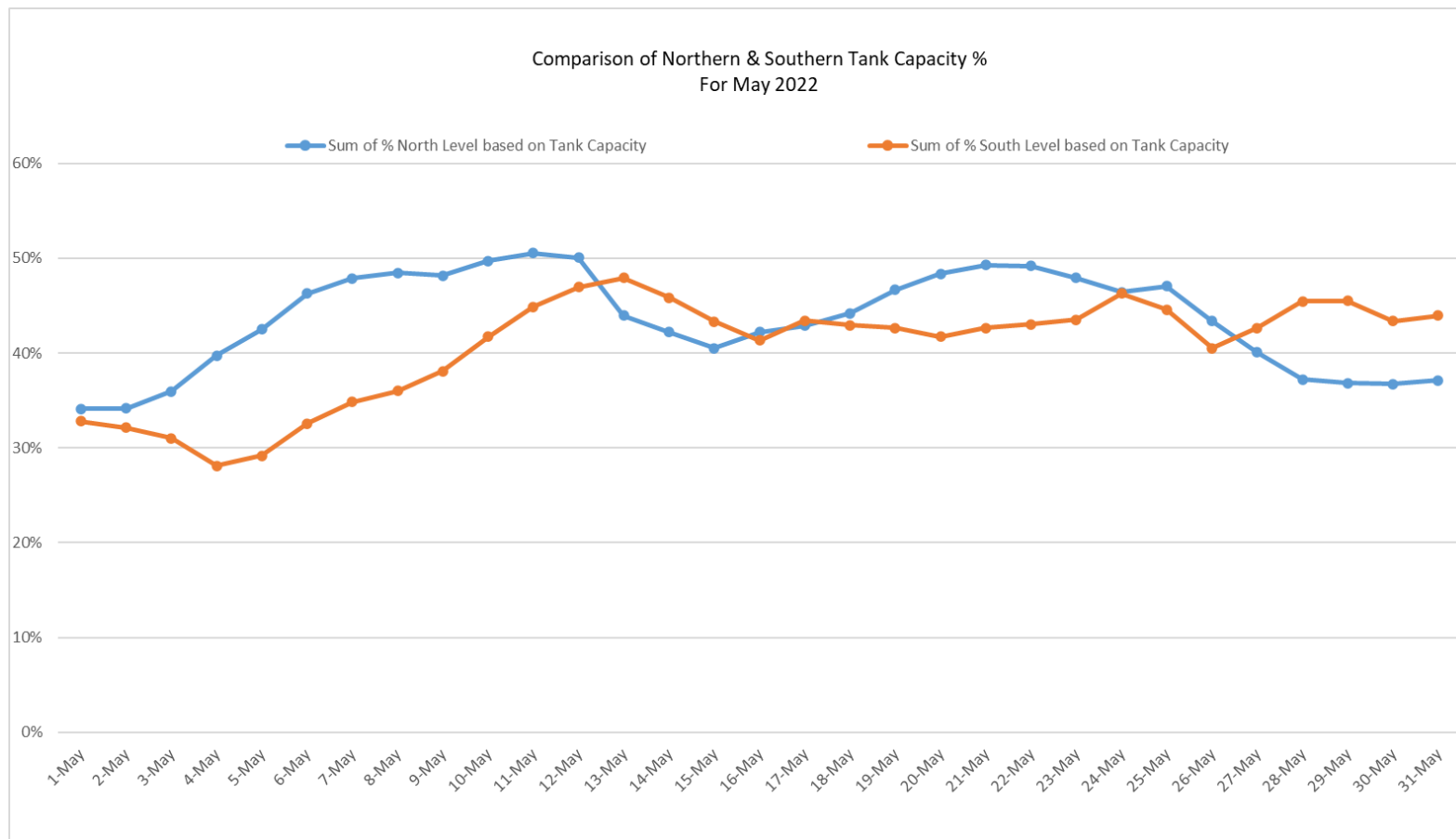


## Distribution (June 2022)

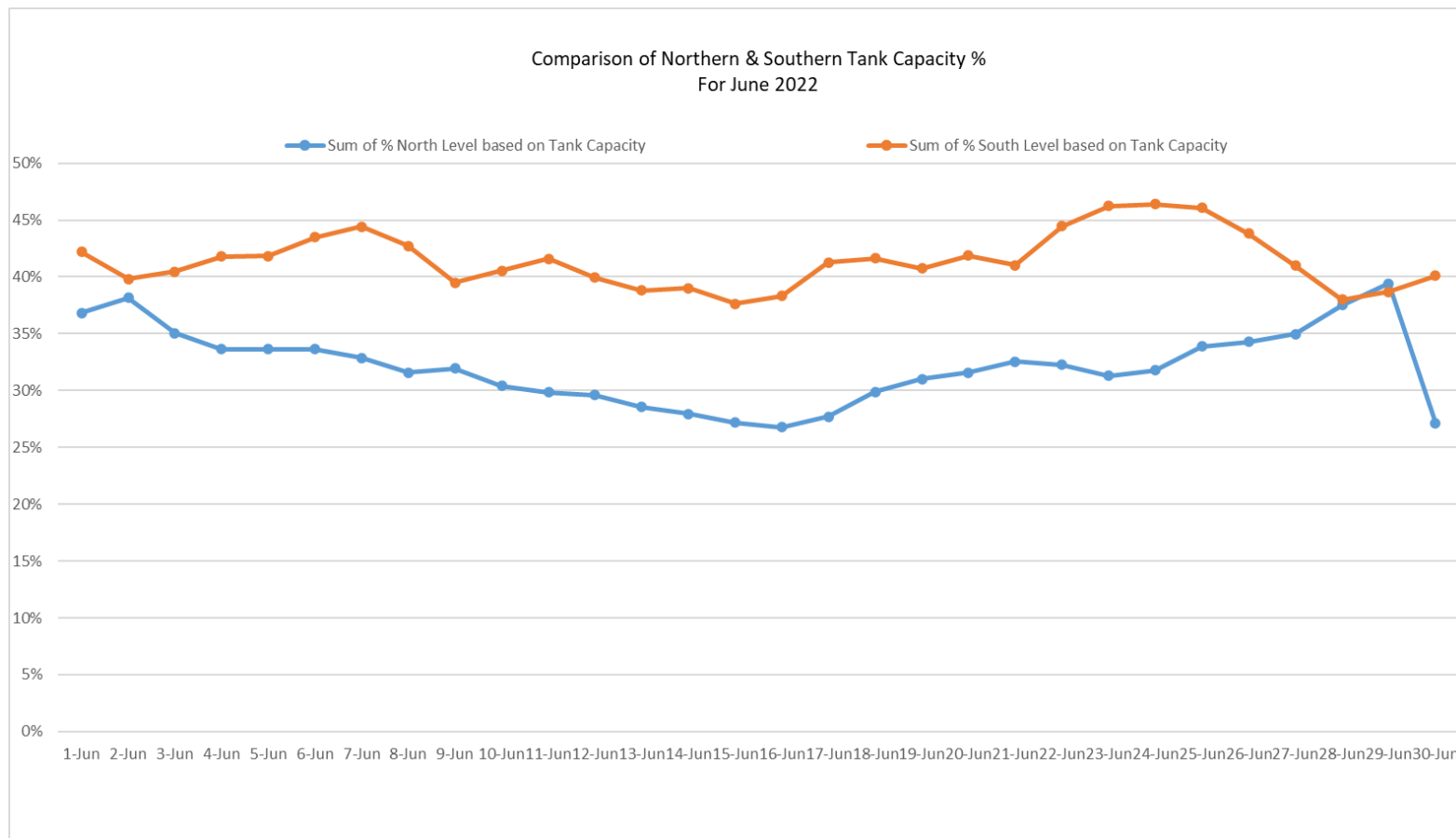
Monthly Distribution Summary - June 2022					
Water Booster Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	13	25	24	96.0%
	Central	7	15	14	93.3%
	Southern	7	16	15	93.8%
		27	56	53	94.6%



## Distribution – Tank Levels (May 2022)

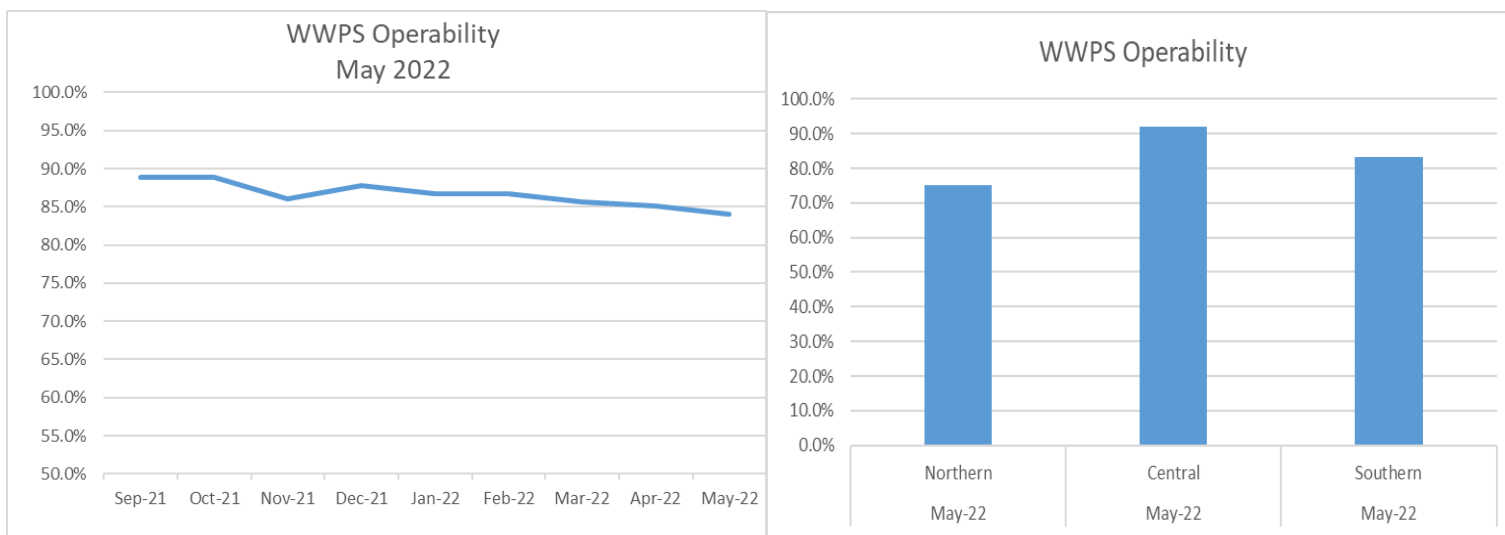


Distribution – Tank Levels (June 2022)



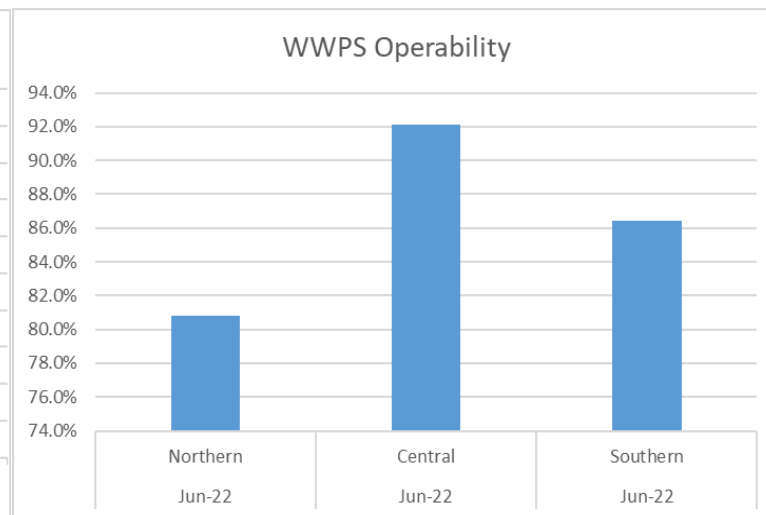
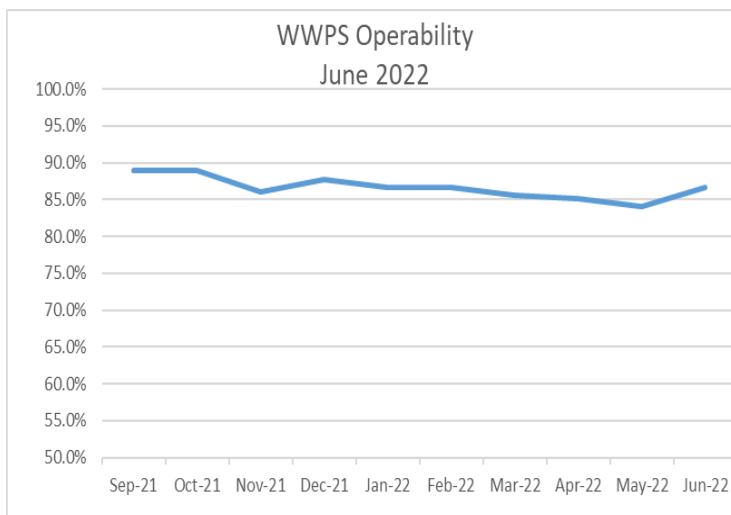
## Wastewater Collections (May 2022)

Monthly Collections Summary - May 2022					
Wastewater Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	22	52	39	75.0%
	Central	29	63	58	92.1%
	Southern	31	66	55	83.3%
		82	181	152	84.0%



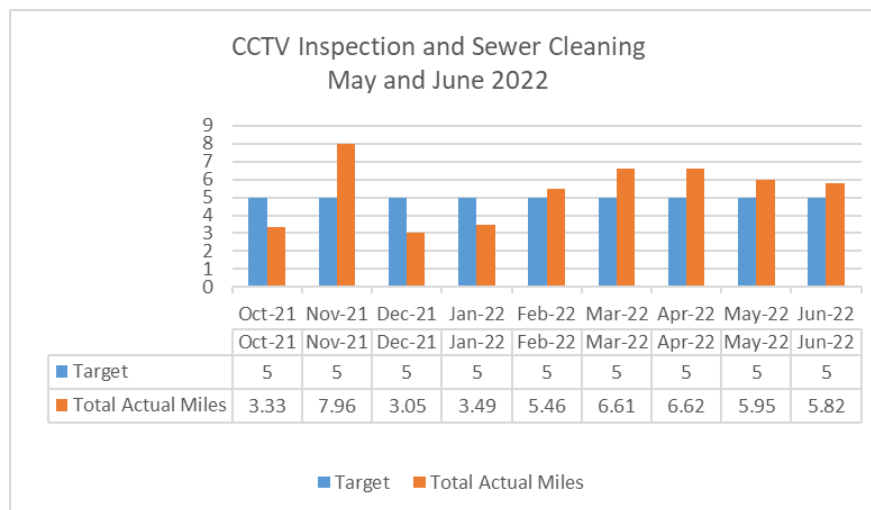
## Wastewater Collections (June 2022)

Monthly Collections Summary - June 2022					
Wastewater Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	22	52	42	80.8%
	Central	29	63	58	92.1%
	Southern	31	66	57	86.4%
		82	181	157	86.7%



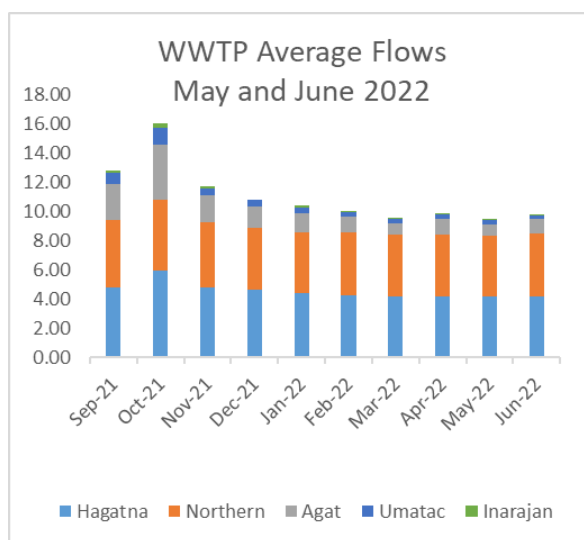


Wastewater Collections - CCTV (May and June 2022)



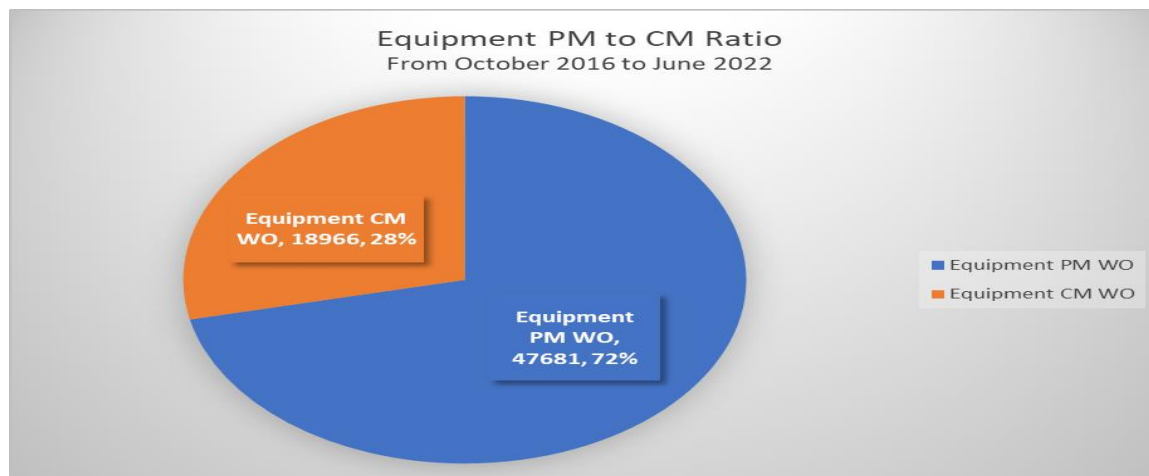
## Wastewater Treatment (May and June 2022)

Monthly Wastewater Treatment Summary - May 2022					Monthly Wastewater Treatment Summary - June 2022				
WW Treatment Plants - Flows					WW Treatment Plants - Flows				
	Facility	Avg. Daily Flows	Sludge (lbs)	Sludge Disp. (\$)		Facility	Avg. Daily Flows	Sludge (lbs)	Sludge Disp. (\$)
	Hagatna	4.16	106,040	\$ 9,544		Hagatna	4.21	317,900	\$ 28,611
	Northern	4.16	108,460	\$ 9,761		Northern	4.31	547,480	\$ 49,273
	Agat	0.82	35,240	\$ 3,172		Agat	0.98	75,120	\$ 6,761
	Umatac	0.27				Umatac	0.26		
	Inarajan	0.06				Inarajan	0.07		
		9.47	249,740	\$ 22,477			9.83	940,500	\$ 84,645

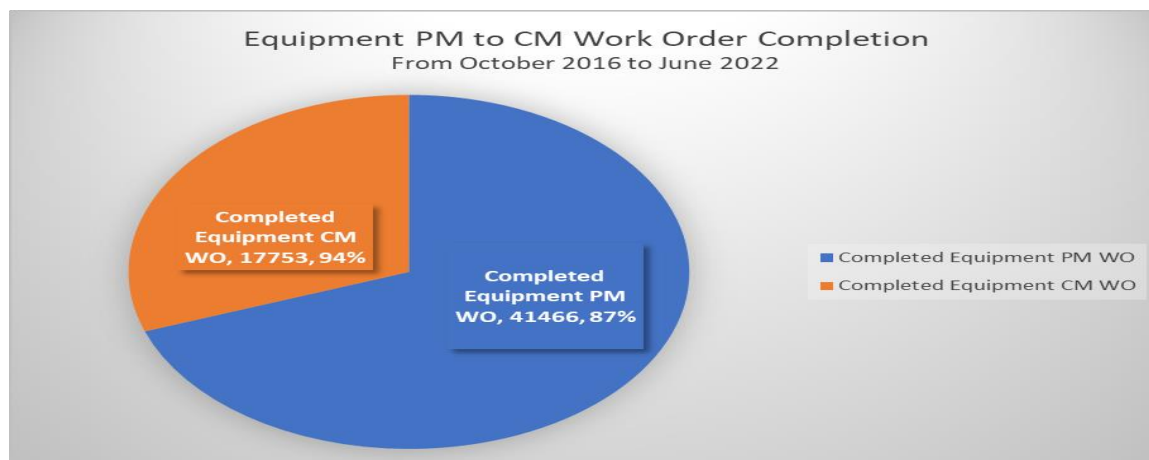


## Asset Management (through June 2022)

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

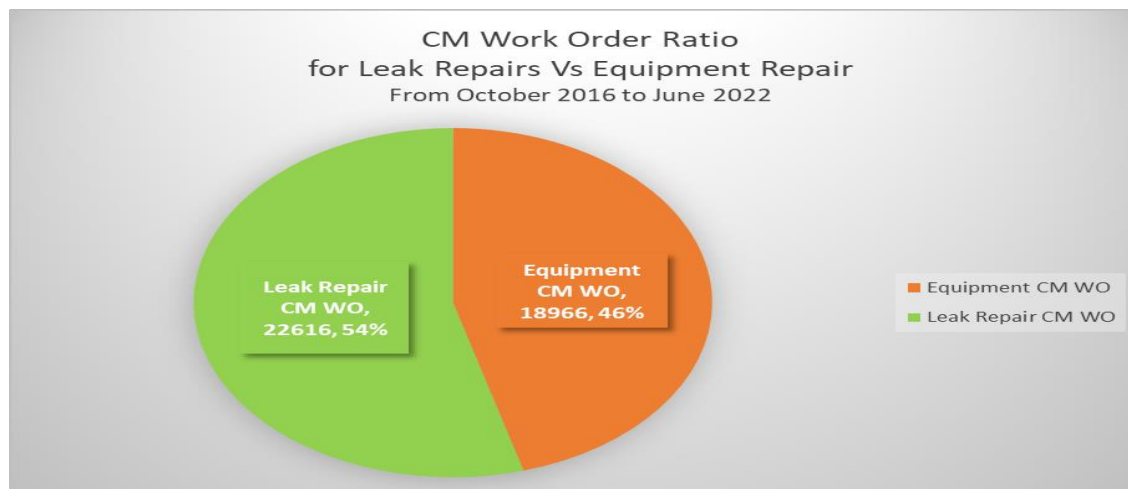


### II. Equipment Preventive Maintenance to Corrective Maintenance *Work Order Completion*

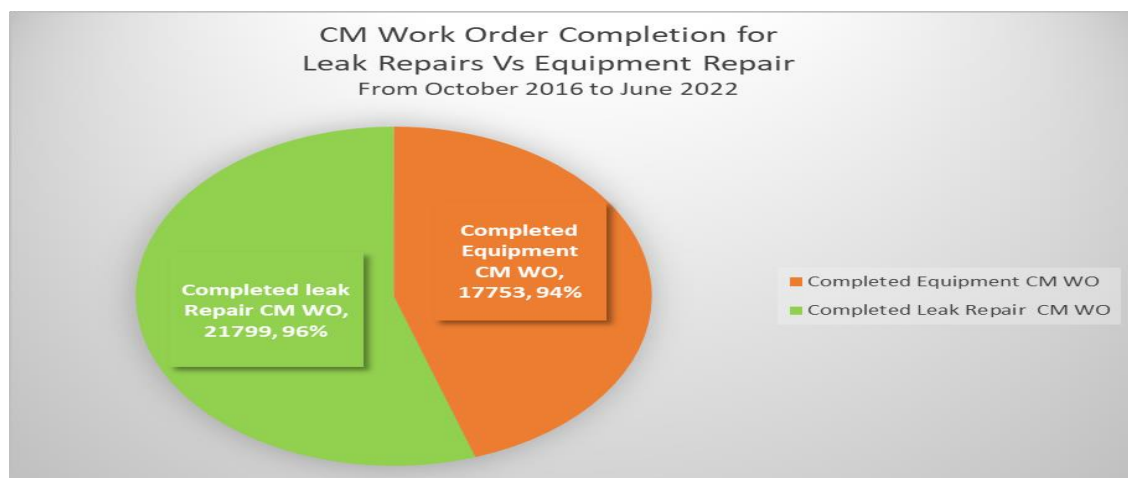


Asset Management (through June 2022)

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



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



### One Guam Update (through June 2022)

- GWA received the amendment to extend the licenses for Tumon Maui Well, AG1 and Tarague waterline to **March 2023.**
- **TMW**
  - Request for Increase of Production Rates (for TMW/AG-1) – no update
- **AG-1 Intertie with Andersen**
  - Increase Production Request (up to permit level) – no update
  - Andersen request additional data to determine if there will be any impact for increasing pumping rates. Maria Lewis will provide Andersen the WERI technical reports in hopes of showing Andersen that increased pumping at AG-1 won't affect their AF series wells. Also, TMW is a different subbasement and will not have zero affect.
  - Easement Concerns
    - GWA have been determining if construction of a gate for secondary access was necessary, however there are no current access issues and not gate is needed. This issue can be reconsidered if the access issues re-occur.
- **OEA Projects - Observation Wells/NGLA**
  - New Wells Drilling Status
    - Yigo well – difficulty drilling due to drill rig issues; hope to have more news at next meeting.
  - Completed Wells:
    - Constructed: Marbo, NCSF2 and Radio Barrigada
    - Rehabilitated well: NCS3.
    - Currently: Yigo well.
  - Outstanding: Northwest Field, Andersen and NCSF1 and rehab EX-8. (7 new & 2 rehab).

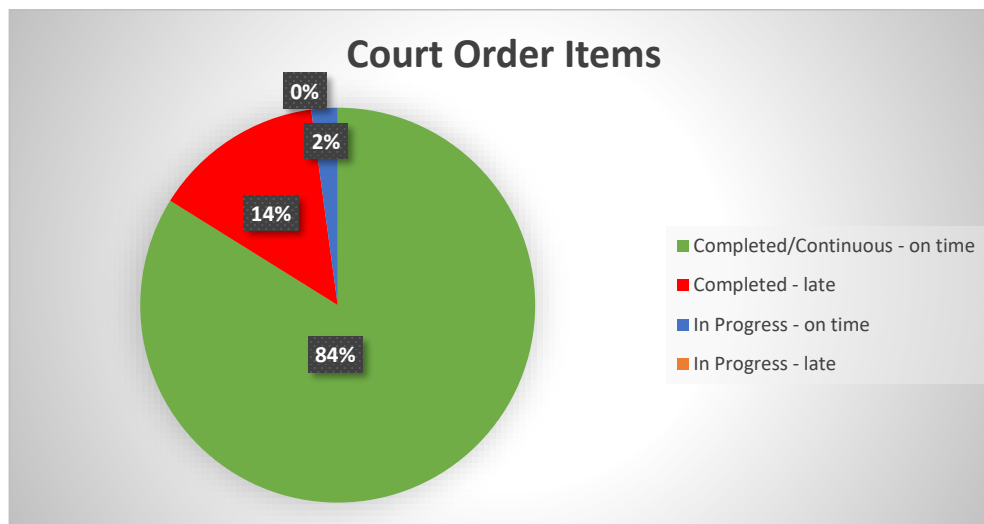
## One Guam Update (through June 2022)

- 30-Other
  - **Cetti Bay Easement**
    - Still at AG's office.
  - **GWA WW Collection System Easement Request for Marbo Property**
    - MCAG is reviewing request.
  - **GAC – GWA and DOD are discussing issues related to disposal of the GAC**
    - DOD asked if GWA allows the discharge of the backwash water to go into the sewer system; GWA does not doing backwashing (just material replacement).
    - Discussion on discharge to wastewater systems currently PFOS is not regulated in wastewater.
    - DOD is asking what the requirements if Andersen is interested in backwashing. Discussions with GWA Compliance & Safety would need to be discussed at length before any discharge can occur.
    - Navy can submit a formal request that would like to discharge the backwash water from the GAC system, with the estimated volume to be discharged and the estimated amount of contamination of PFOS. It is possible it would require testing it before putting in the system. Mauryn McDonald stated it is similar with how they are dealing with GPA's new power plant. With the backwash water situation, Navy might need to have some kind of holding tank (fixed or mobile) and sample from that tank.
    - Navy is looking at the costs on disposal. GWA will send DOD information on the recent replacements/replenishments cost. DPZP provide cost for disposal of GAC is around \$12.50 per pound. For the Fena water plant, at 40,000 lbs. of GAC, it will cost about \$0.5M for disposal and replacement.
    - There is interest in investigating the possibility reactivation on the island.
    - DOD and GWA will continue to discuss options for disposal.
  - **DoD Water Line Status – Two Lovers' Point Road**
    - GWA is interested in an interconnect as Redundancy for NDWWTP
    - GWA request has been drafted. Once finalized and signed, will send to Commanding Officer
  - **AWWA-HIWPS Local Section**
    - Having the annual AWWA-HIWPS conference on August 31 through September 2 at Dusti Thani; looking for a speaker.

### One Guam Update (through June 2022)

- **Route 5 Pipe Installation**
  - DOD would like to install a sewer line along Route 5 to be able to have a future connection to GWA system. GWA contacted DPW's Acting Chief Engineer to coordinate with DoD the installation of the sewerline. The connected to GWA system will be the manhole by the church. DOD will complete the construction of the sewer line prior to road repair.
- **Contracts on Water and Wastewater**
  - Matt B. stated they need to go through the clauses internally and outline the contract (lot of input first internally), then will propose it to GWA.

## Court Order Summary (June 2022 – no changes)

**Court Order Summary**

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



## Court Order – Status Information (June 2022)

No CO delays due to approval of CO extension.

- Final Date to complete CO 29(b) is June 30, 2023.
- Overflow or Bypass events reported to USEPA (May 12, 2022 through July 1, 2022):
  - May 12, 2022, SSO#629, Chalan Nanalao, Yigo - Yigo Pump Station, Pump Station Failure
  - May 14, 2022, SSO#631, Aga Street, Santa Rita - Pump Station Failure
  - May 15, 2022, SSO#632, Aga Street, Santa Rita – FOG
  - May 20, 2022, SSO#634, Condo Street, Tamuning – FOG
  - May 26, 2022, SSO#640, Pas Street, Tamuning – FOG
  - May 26, 2022, SSO#641, Route 16, Harmon, Dededo – FOG
  - June 3, 2022, SSO#644, Comm. Charfauros Street, Agat – FOG
  - June 16, 2022, SSO#646, Crestangayo Street, Harmon, Dededo – FOG
  - June 20, 2022, SSO#649, Vietnam Memorial Highway - Pump Station Failure
  - July 1, 2022, No SSO#, E&L Laundromat, Yona – FOG

## Land Acquisition Summary (through June 2022)

GWA Facility	Location	Gov. or Private Property	Land Acquisition Status
Tanks	Astumbo	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 on 09/02/2021, 10/06/2021, 11/03/2021, 01/27/2022, 03/04/2022, 05/12/2022 and 07/07/2022.
	Piti	Private	Received final comments from DoAg. Waiting on the archaeological report before we can submit 299 form. Waiting for permission from NPS to access the lot and perform the Archeological survey.
Deep Wells	AG-12	Dept. of Agriculture / Manhita Farms	Right of Entry Agreement sent to Dept of AG for signature 05/24/18. 2 <sup>nd</sup> follow up sent on 09/12/18. 3rd follow up sent on 04/10/19. Retracement Survey Property Map filed and recorded at DLM 7/10/19. DCA submitted parceling map to DLM for review and comments on August 18, 2021, waiting for their review comments. ROE Agreement information sent to GWA legal counsel for further review and processing 01/28/2022; Follow up status sent to DCA 03/04/2022 and 07/07/2022.
Booster Pump Station	Agfayan	Private	TGE working on structural design for pump station area for L28, B19, T3734, Inalahan 11/07/19. Letter of Decision received by CLTC 06/09/2021. CLTC has responded for in-kind service letter 10/08/2021. 1 <sup>st</sup> Appraisal Report submitted to GWA on 05/11/2022.

*(Continued on next page)*

## Land Acquisition Summary (through June 2022 – continuation)

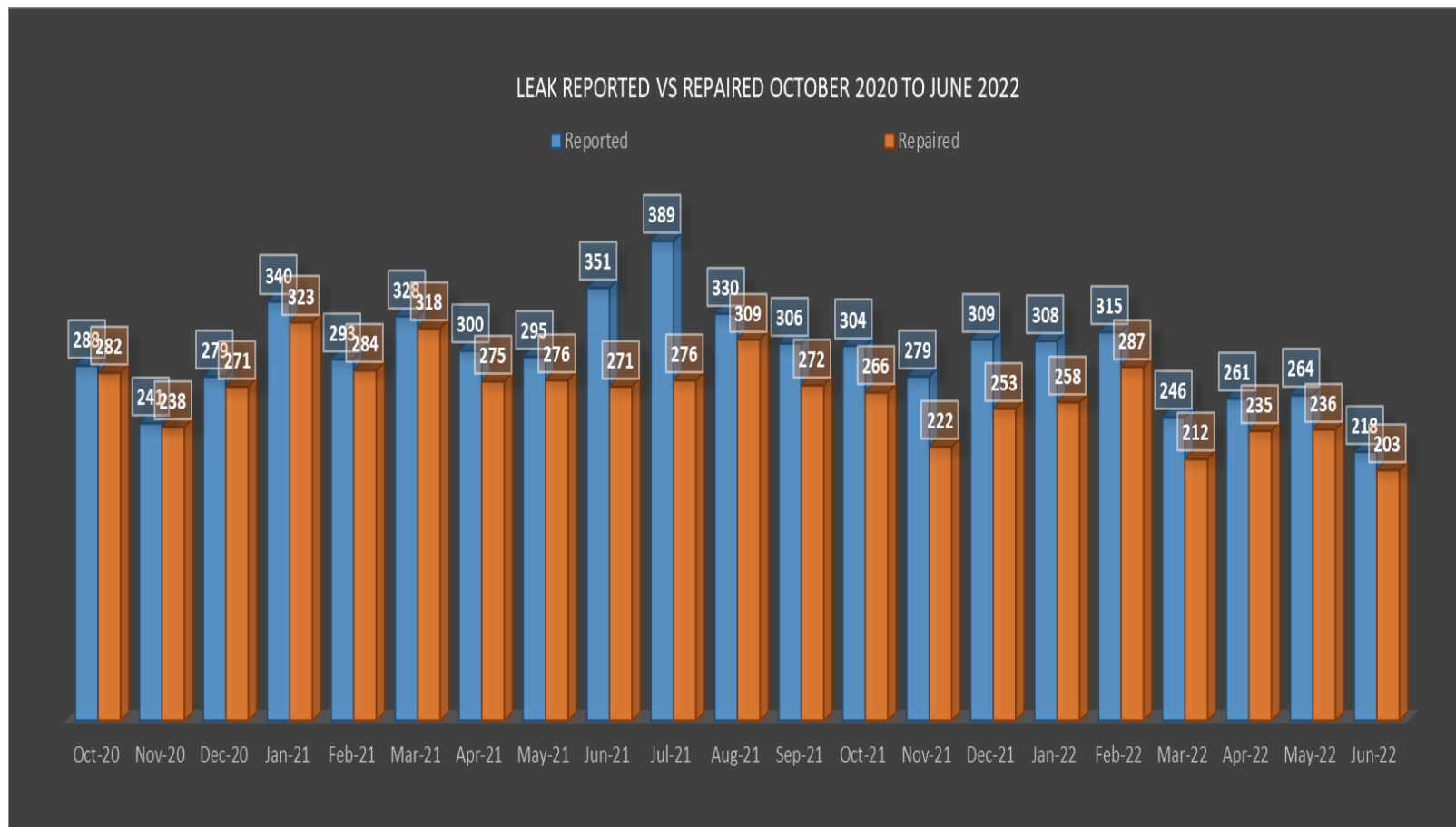
GWA Facility	Location	Gov. or Private Property	Land Acquisition Status
Asan Springs	Asan	Federal	<p>In order for NPS to issue a land ROW agreement with GWA, NPS has to complete NEPA first. GWA has HDR under contract to perform this work and an Environmental Assessment (EA) will be developed. The permit for the biological survey was submitted on 6/12/2020 and was signed by NPS on 1/22/2021. Further coordination between NPS and SHPO is pending to determine necessary approach for an archaeological survey. New Chief of Resources for War in the Pacific National Historical Park, Timothy Clark, hired. Replacing Tahzay Jones, who was previously working with us. HDR working with Tim Clark on coordinating things with NPS.</p> <p><u>Biological Survey:</u></p> <ul style="list-style-type: none"> <li>Fieldwork completed, 2/10/2021. Based on a preliminary finding by HDR's biologist they have found snails close to the site, and within NPS proposed ROW, and outside the proposed ROW. Draft report submitted to NPS, 4/1/2021.</li> <li>Comments received from NPS, 6/4/2021.</li> <li>Final Report submitted to NPS, 6/12/2021.</li> <li>NPS submitted Biological Survey to USFWS, 9/28/2021. met with NPS, USFWS, DOAG on 10/22/2021 to discuss survey and possible Biological Assessment (BA).</li> <li>HDR working with NPS to develop formal BA pending template of BA from USFWS; HDR completed draft Public Scoping Document for NPS review for NEPA process, 11/05/2021. Still waiting on NPS for edits/comments on Scoping documents/BA for NEPA.</li> </ul> <p><u>DOAG Environmental Consultation Letter:</u></p> <ul style="list-style-type: none"> <li>HDR sent Request letter sent to DOAG (Dep of Ag) on 3/15/2021.</li> <li>GWA followed up with DOAG on 6/25/2021.</li> <li>DOAG responded on 7/1/2021, but did not reach GWA Eng. until 8/4/2021; HDR review response letter and will respond soon.</li> <li><b>Pending response from HDR if they had previously sent over their Biological Survey</b></li> </ul> <p><u>SHPO Letter:</u> Pending archaeological survey requirements from SHPO.</p> <ul style="list-style-type: none"> <li>SHPO Letter sent to NPS for review, 5/29/2021; rec'd. first comments on 7/1/2021.</li> <li>Submitted revised letter on 7/12/2021; rec'd. comments on 8/9/2021.</li> <li>Resubmitted letter to NPS on 9/15/2021.</li> <li>NPS submitted Environmental Consultation Request to SHPO, 10/20/2021; SHPO responded to NPS on 12/28/2021 for NEPA.</li> </ul>

*(Continued on next page)*

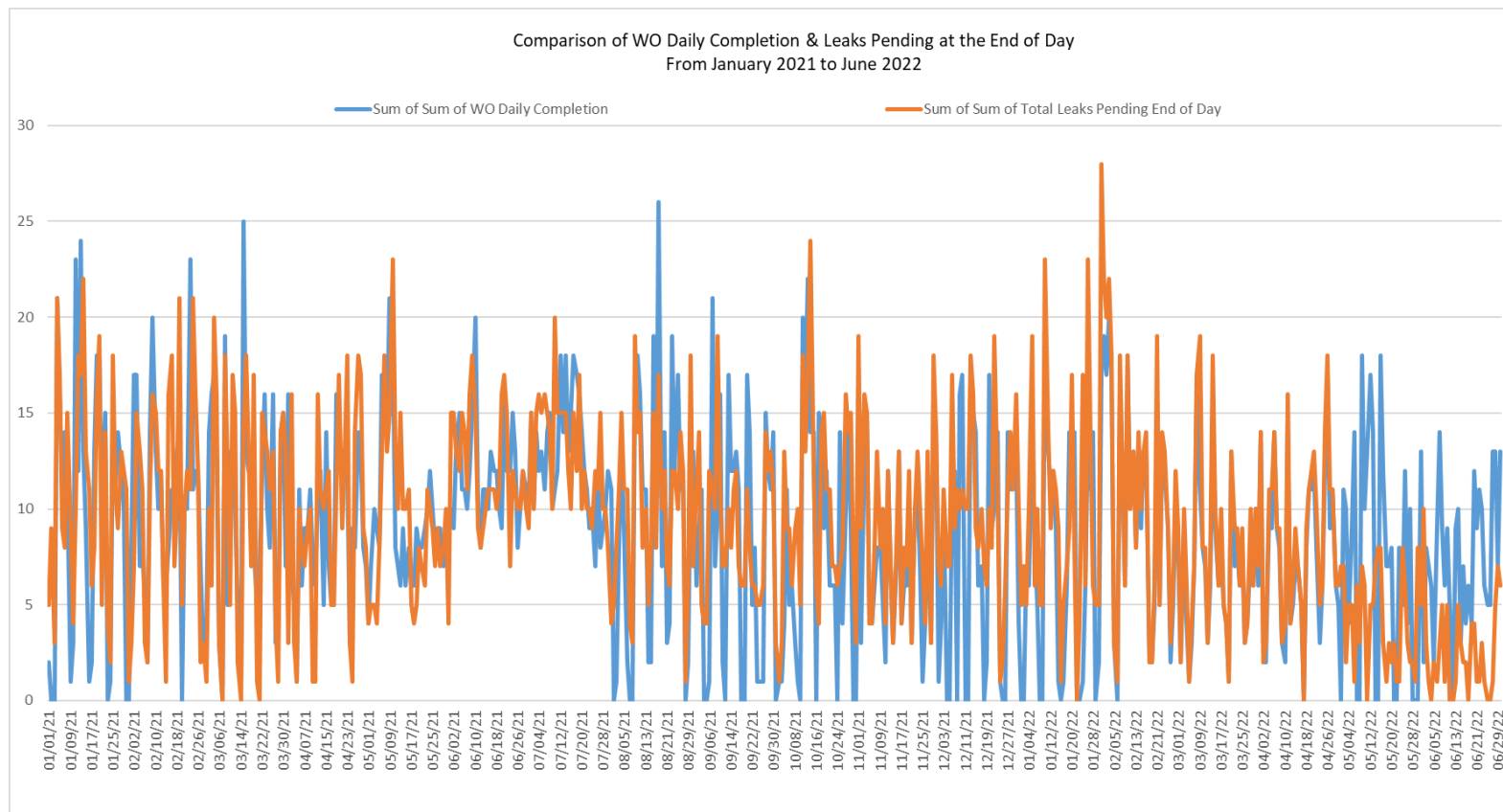
## Land Acquisition Summary (through June 2022 – continuation)

GWA Facility	Location	Gov. or Private Property	Land Acquisition Status
Asan Springs	Asan	Federal	<p><u>Asan Springs – Public Meeting:</u></p> <ul style="list-style-type: none"> <li>Public engagement meeting was held at the Asan Mayor's office on 4/19/2022.</li> <li>The purpose of the public meeting was to inform the public about the rehabilitation of Asan Spring project and its unique property condition being on NPS and GWA land.</li> <li>As of 6/24/2022, NPS has not received any public comments.</li> </ul> <p><u>Biological Assessment Report:</u></p> <ul style="list-style-type: none"> <li>A draft report reviewed by USFW was given to HDR and was issued to GWA and NPS for further input on 5/24/2022.</li> <li>The Final Report is pending comments from NPS; HDR to make revisions based on NPS and GWA comments to the report before sending it to USFW for review and acceptance.</li> </ul> <p><u>Environmental Assessment:</u></p> <ul style="list-style-type: none"> <li>HDR is in the beginning process of getting a draft to NPS for review.</li> <li>The EA will include the NEPA process and follow all necessary requirements for compliance to obtain a ROW agreement with NPS.</li> </ul>

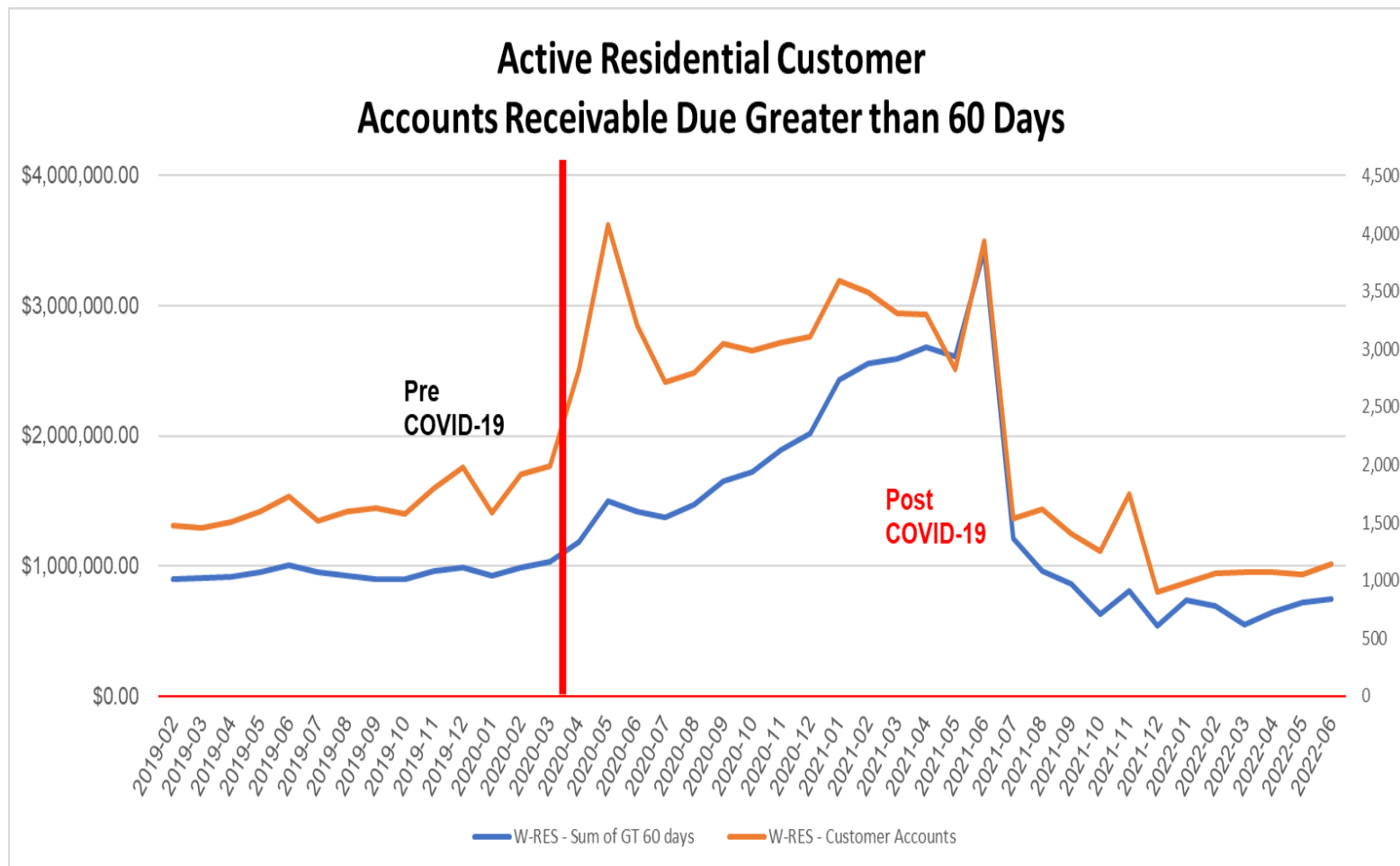
Comparison of Leaks Reported vs. Leaks Repaired (through June 2022)



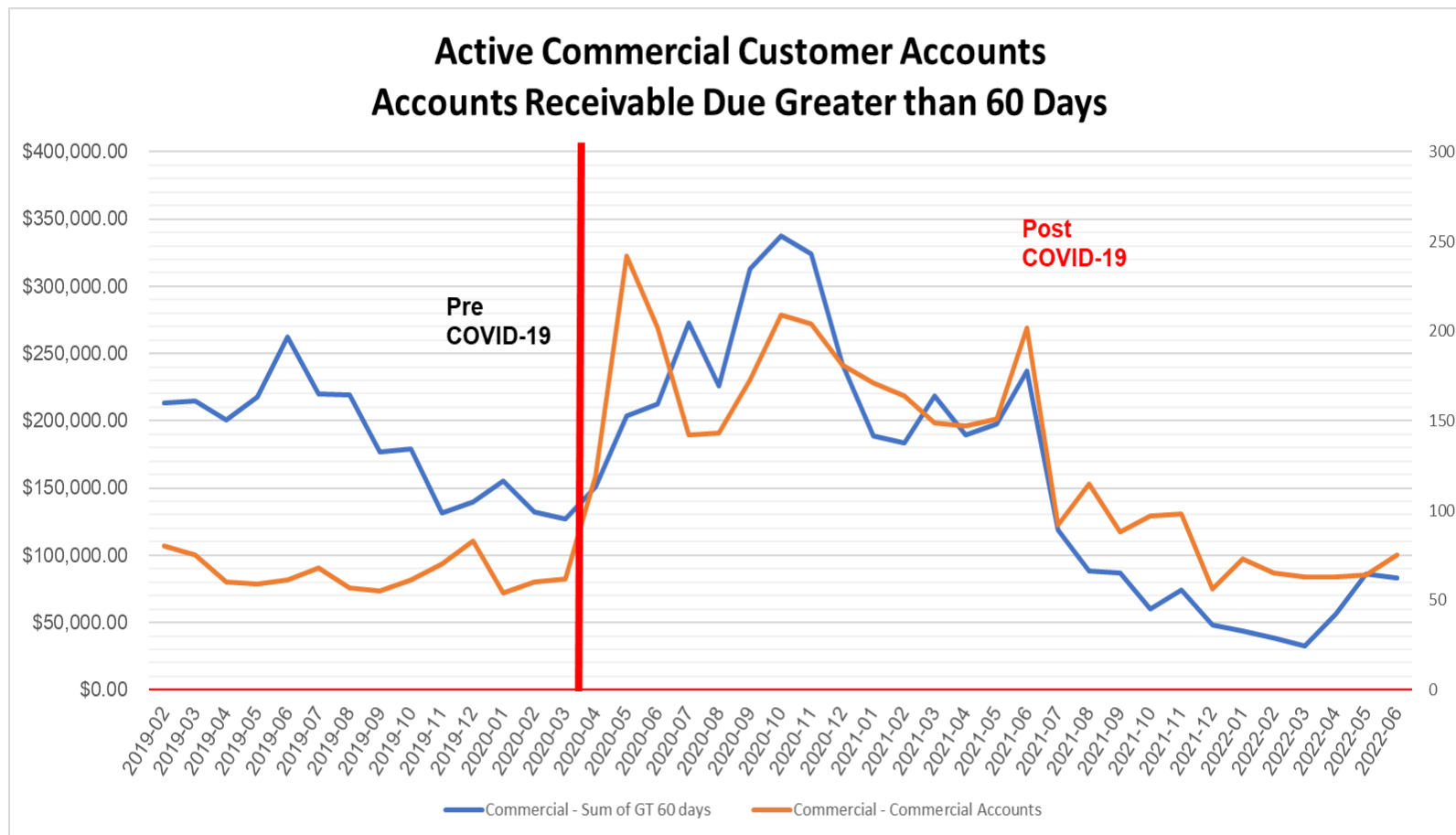
Daily Leak Repairs (through June 2022)



Accounts Receivables – Active Residential Customers (through June 2022)



Accounts Receivables – Active Commercial Customers (through June 2022)







# GWA Financial Overview

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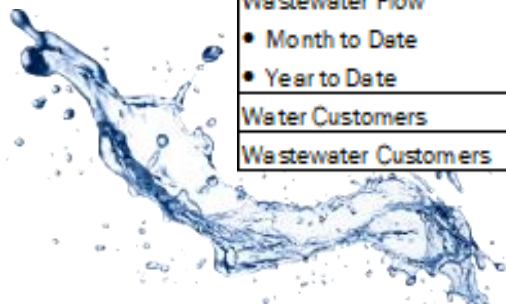
JUNE 2022





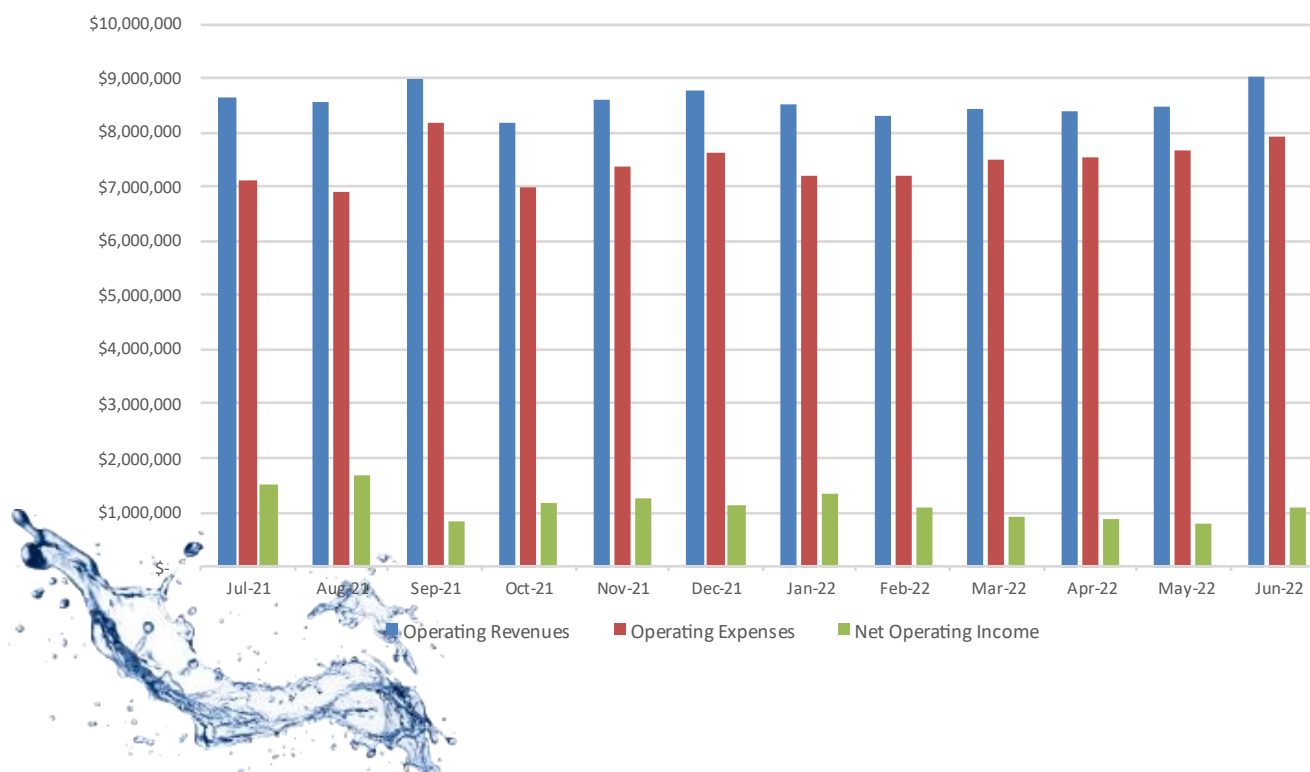
## Key Financial Indicators

Indicator	Target	Apr-22	May-22	Jun-22
DSC YTD				
• Per Section 6.12 of Indenture	1.25	1.25	1.25	1.26
• Per PUC/CCU	1.40	1.25	1.25	1.26
Days – Cash on Hand	120 days	269 days	262 days	276 days
Collection Ratio				
• Month to Date	99%	101%	94%	109%
• Year to Date	99%	97%	97%	98%
Days Billed	30 days	30 days	29 days	30 days
Account Receivable Days	30 days	40 days	40 days	39 days
Account Payable Days	45 days	33 days	35 days	30 days
Employee Count	400 FTE	362 FTE	361 FTE	361 FTE
Water Demand				
• Month to Date	478,754	428,589	433,696	442,382
• Year to Date	4,308,788	3,066,145	3,499,841	3,942,223
Wastewater Flow				
• Month to Date	356,472	305,770	323,197	311,387
• Year to Date	3,208,251	2,230,973	2,554,170	2,865,557
Water Customers	42,839	43,239	43,320	43,281
Wastewater Customers	29,805	30,497	31,157	30,552





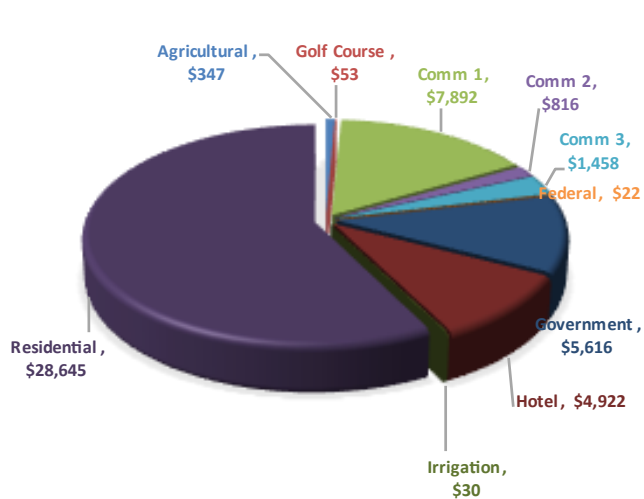
## Income Statement



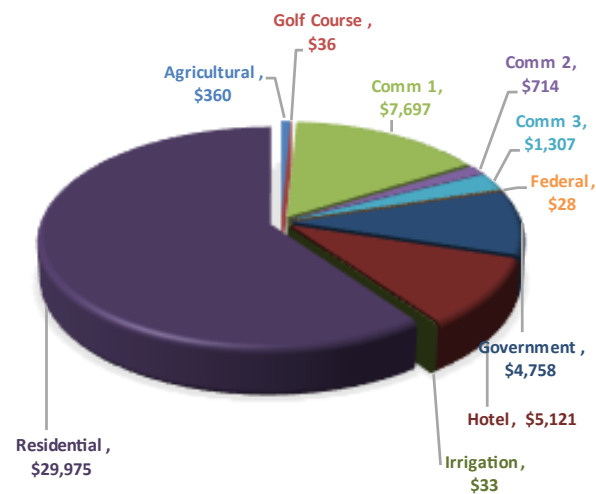


## JUNE 2022 YTD Water Revenue by Rate Class

FISCAL YEAR 2022 (in '000)

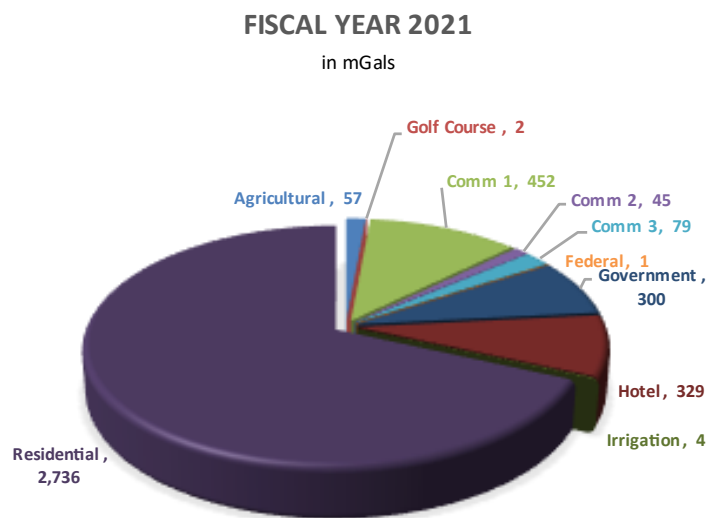
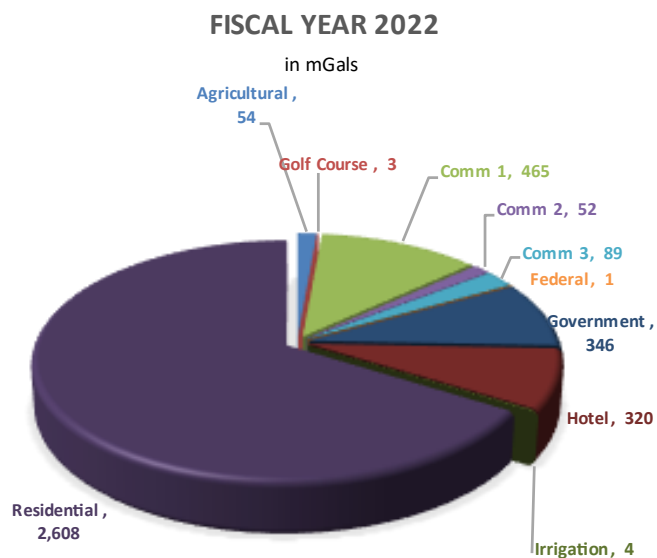


FISCAL YEAR 2021 (in '000)





## JUNE 2022 YTD Demand

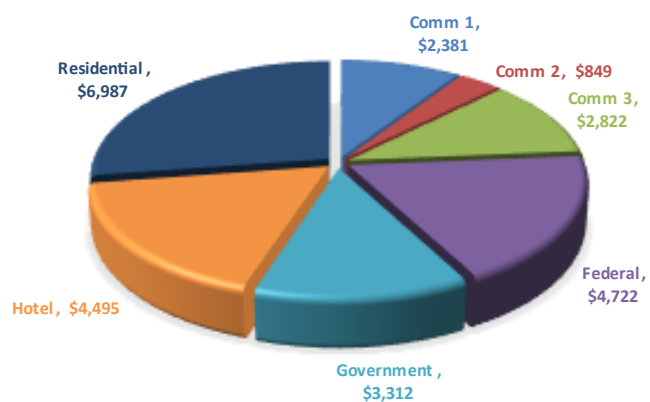




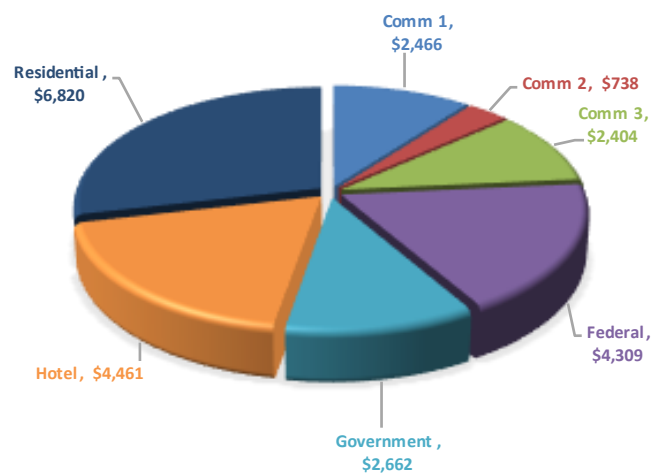
## JUNE 2022 YTD Waste Water Revenue by Rate Class

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FISCAL YEAR 2022 (in '000)



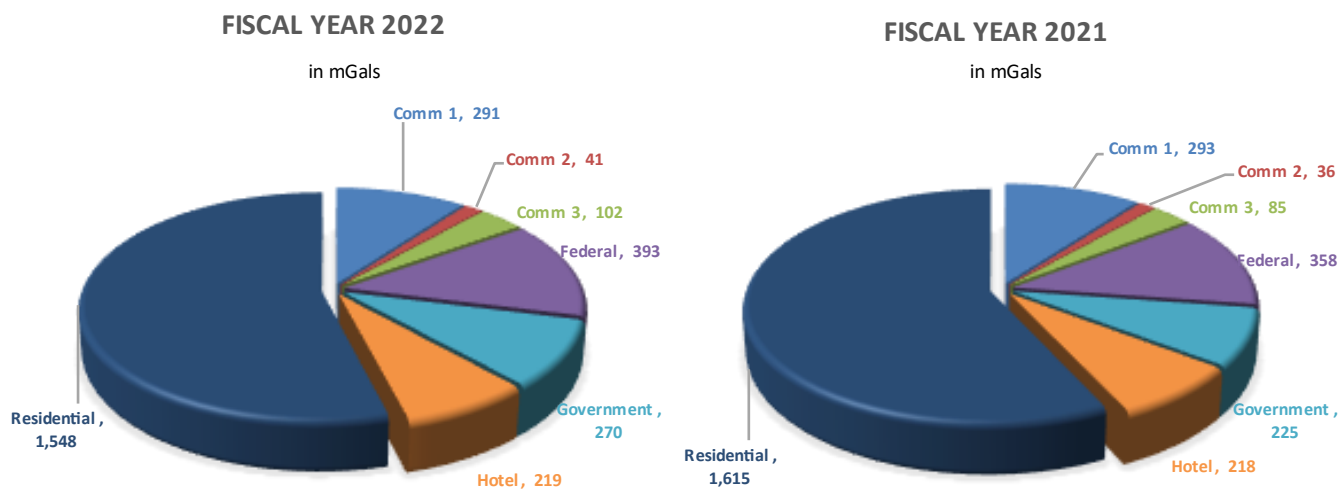
FISCAL YEAR 2021 (in '000)





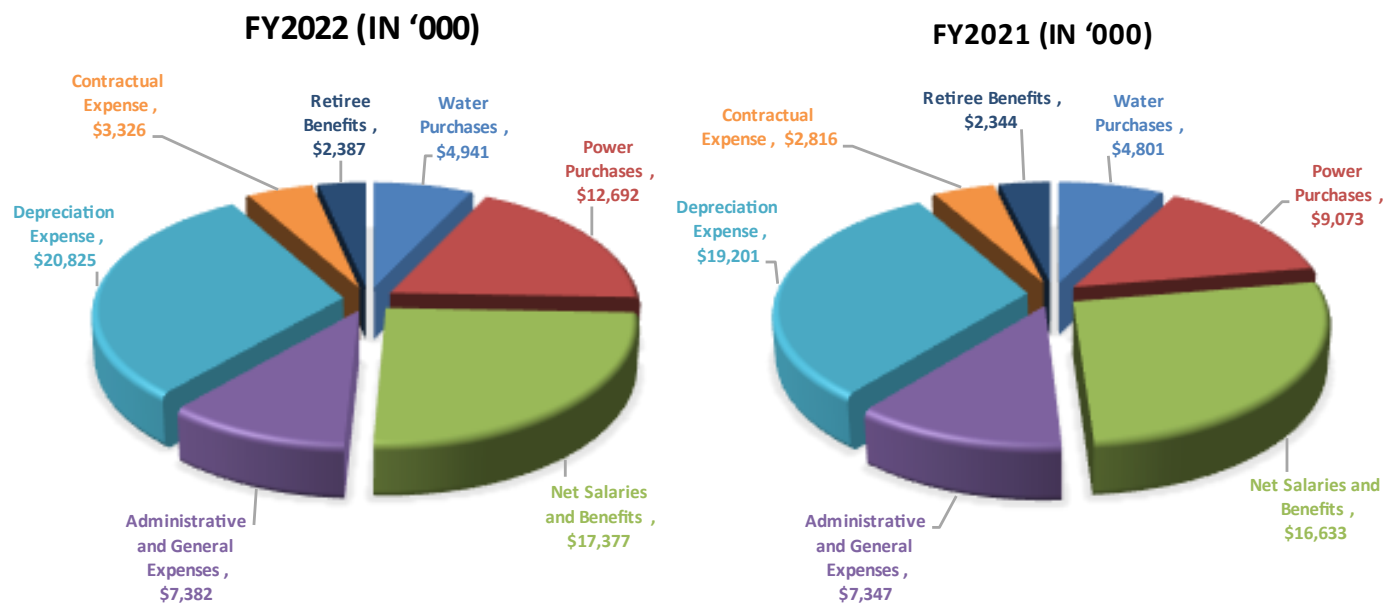
## JUNE 2022 YTD Flow

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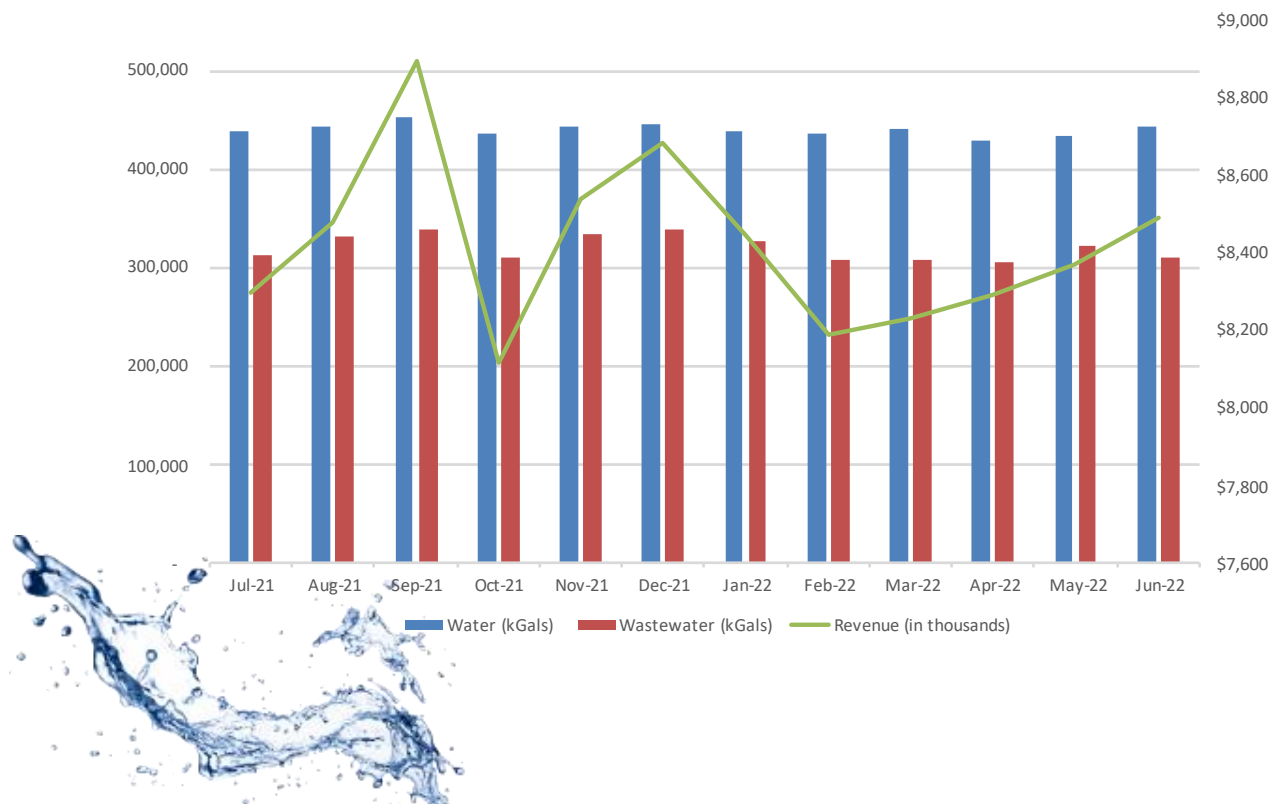
## JUNE 2022 YTD Expenses by Categories





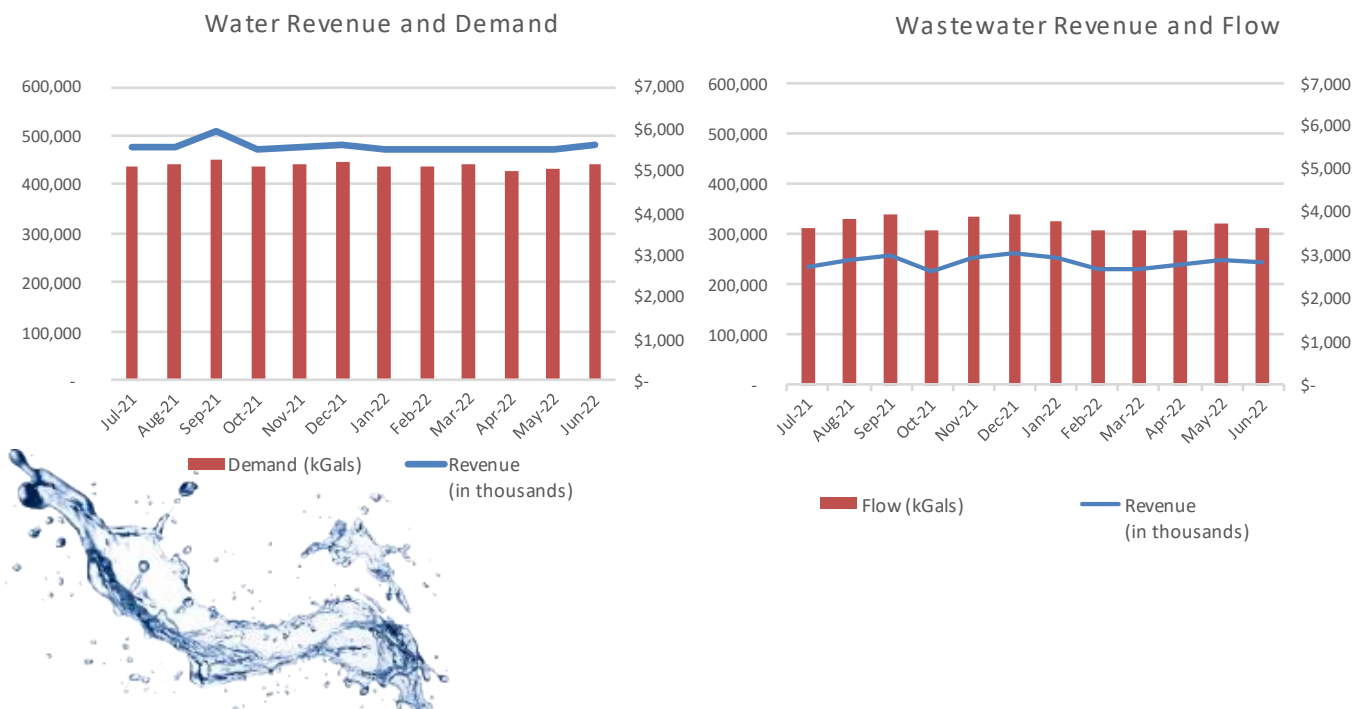


## Overall Revenues and Demand



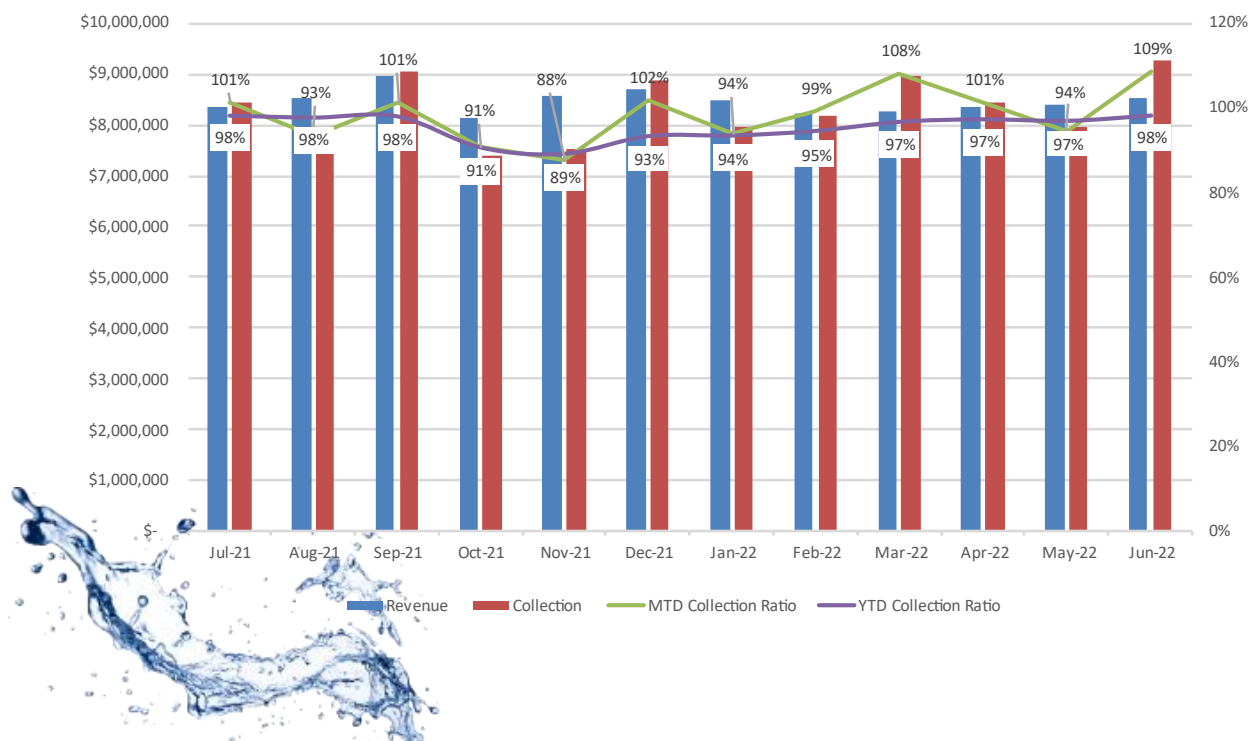


## Revenues and Demand





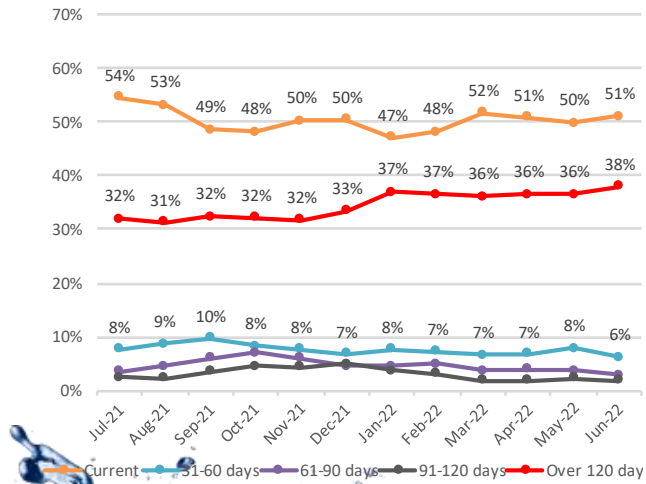
## Overall Revenues and Collections



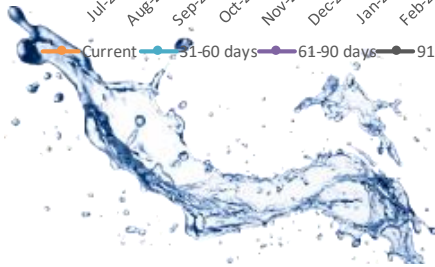
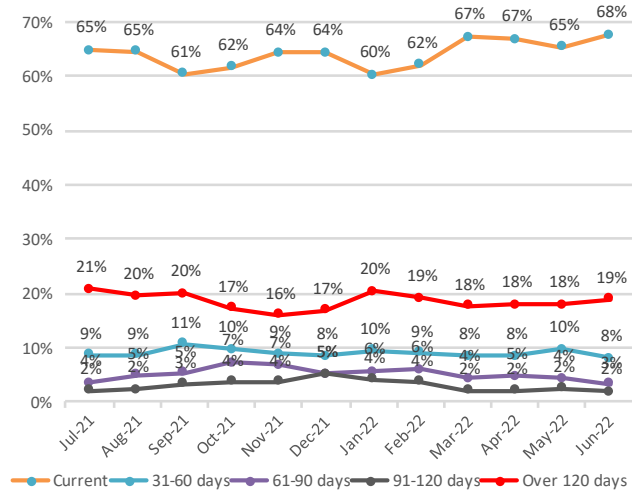


## Overall – AR Aging

% of Aged AR Balance to Total AR Balance

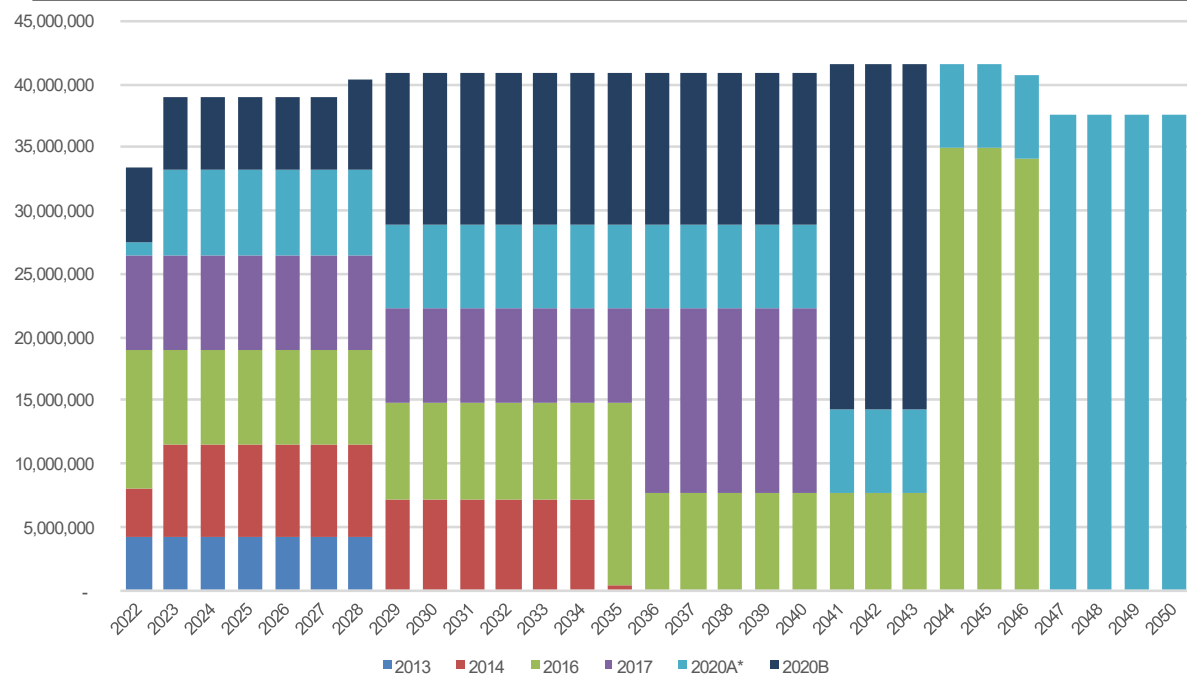


% of Aged AR Balance to Total AR Balance  
(without Inactive Accounts)





## GWA Outstanding Debt Service





**GWA Utility Services Division**  
**Monthly Status Report**  
**Month ending JUNE 2022**

FY2022 UTILITY SERVICES DIVISION ACTIVITIES	WEEK ENDING:	WEEK ENDING:	WEEK ENDING:	WEEK ENDING:	JUNE 2022 MONTHLY TOTAL	WEEKLY AVERAGE JUNE 2022	PREVIOUS MONTH	
	06/11/22	06/18/22	06/25/22	07/02/22			WEEKLY AVERAGE MAY 2022	MAY 2022 MONTHLY TOTAL
<b>Customer Service Activities (Electronic):</b>								
i. Emails Received:								
1. customers@guamwaterworks.org:	94	111	99	137	441	110	114	569
Request type (email):								
a. Apply for water:	37	37	34	37	145	36	36	178
b. Terminate Water:	9	5	8	18	40	10	13	63
c. Copy of Bill:	4	3	2	3	12	3	5	26
d. Billing Dispute & follow up:	5	7	5	18	35	9	11	55
e. General Questions & Other:	30	42	41	42	155	39	34	171
f. Report a water leak:	0	0	0	6	6	2	1	3
g. Report water theft:	0	0	0	0	0	0	0	1
h. Online services inquiry:	2	14	7	13	36	9	11	57
2. gwaservesme@guamwaterworks.org (realtors/prop	7	3	2	5	17	4	3	15
ii. Emails Replied (both):	97	106	98	142	443	111	105	523
iii. Online Portal:								
Request type (online portal):								
a. Start Service:	1	1	0	1	3	1	1	6
b. Stop Service:	0	1	2	0	3	1	1	4
c. Payment Plan:	3	2	2	2	9	2	4	18
d. Customer Information Updates:	1	0	0	0	1	0	0	2
e. Service Investigations:	0	0	0	0	0	0	0	1
f. Account Inquiries:	4	5	2	4	15	4	3	14
g. Technical Support:	2	0	0	0	2	1	0	1
h. Outages & Emergencies:	0	0	0	0	0	0	0	1
<b>Call Center Activities:</b>								
i. Calls Received:	1052	1272	1448	1324	5096	1274	1245	6225
ii. Calls Immediately Answered:	511	442	449	518	1920	480	497	2485
iii. Calls Abandoned:	47	65	55	82	249	62	58	288
iv. Calls Handled by Voice mail:	480	746	766	700	2692	673	660	3298
v. Average duration of call:	4 minutes	3 minutes	3 minutes	4 minutes		3.5 minutes	3.8 minutes	
vi. Breakdown by request type:								
1. Apply/Terminate info:	25	28	27	19	99	25	20	101
2. Automated Telephone Call:	9	3	5	5	22	6	4	19
3. Balance Inquiry:	64	71	63	71	269	67	72	361
4. Call Back:	29	33	14	17	93	23	5	26
5. Dispatch:	16	22	33	62	133	33	31	153
6. Dispute:	2	2	2	0	6	2	2	11
7. Follow-up:	33	30	28	35	126	32	15	77
8. General Questions & Other:	87	104	89	127	407	102	87	435
9. Route Calls to GWA Staff:	59	43	31	44	177	44	34	170
10. No Water:	11	1	7	1	20	5	21	107
11. Online/Phone App Help:	6	4	9	14	33	8	16	78
12. Pay by Phone:	59	40	57	48	204	51	60	302
13. Pay Plan:	41	32	24	15	112	28	35	176
14. Restore Non-payment:	29	25	27	13	94	24	38	188
15. Secure/Unsecure Valve:	8	6	8	4	26	7	10	49
16. Voice Mail:	76	118	103	86	383	96	92	460
17. Water leak:	11	2	3	2	18	5	8	40
<b>Bill Dispute &amp; Resolution Activities:</b>								
i. Dispute Resolution:								
1. Number of disputed accounts resolved:	13	5	11	7	36	9	9	45
2. Number of disputed accounts under review:	1672	1678	1679	1682		1678	1692	
<b>Data Entry of Completed Field work in CIS:</b>								
i. Document Control:								
1. Number of field activities posted:	7	6	21	16	50	13	17	84
2. Number of field activities pending:	0	0	0	0	0	0	0	0
<b>Field Response Activities:</b>								
I. Number of field activities assigned:	247	275	198	344	1064	266	237	1184
II. Number of field activities completed:	267	255	213	293	1028	257	182	909
III. Number of field activities pending field action:	9	4	2	8	23	6	4	18

GWA Utility Services Division  
 Monthly Status Report  
 Month ending JUNE 2022

FY2022		WEEK ENDING:	WEEK ENDING:	WEEK ENDING:	WEEK ENDING:	JUNE 2022 MONTHLY TOTAL	WEEKLY AVERAGE JUNE 2022	PREVIOUS MONTH	
UTILITY SERVICES DIVISION ACTIVITIES		06/11/22	06/18/22	06/25/22	07/02/22			WEEKLY AVERAGE MAY 2022	MAY 2022 MONTHLY TOTAL
<b>Meter Reading Activities:</b>									
I.	Number of meters read:								
A.	Electronically Read Meters:	12263	14769	8704	434	36170	9043	9916	49579
B.	Manually Read Meters:	51	44	37	6	138	35	44	218
i.	Unread meters (Meters scheduled but not read):	7	2	7	3	19	5	6	30
ii.	Number of data logs received:	17	17	37	31	102	26	19	97
iii.	Number of data logs retrieved:	15	12	32	47	106	27	18	88
iv.	Number of data logs pending field action:	0	0	0	0	0	0	1	5
v.	Communication Errors/Reprogramming requests:	1	1	1	0	3	1	1	7
vi.	Number of estimated readings (for the week):	428	118	170	10	726	182	326	1630
vii.	Reasons for Estimations:								
1.	Cant locate meter:	0	0	1	0	1	0	0	1
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	1	0	1	0	0	1
5.	Corrective action to database requested:	4	1	3	2	10	3	3	16
6.	Possible changed out meter:	5	2	4	1	12	3	4	18
7.	Communication/Programming error (code 92's):	2	4	2	0	8	2	2	8
8.	Other:								
a.	Leaks detected on customer's private line:	1887	2415	1222	45	5569	1392	1402	7011
b.	Reverse Flow Detected:	406	105	146	1	658	165	304	1519
c.	No Usage Detected:	339	363	389	16	1107	277	326	1631
d.	Tamper Code:	1	4	5	1	11	3	5	26
C.	Electronic Read Percentage:	99.59%	99.70%	99.58%	98.64%		99.4%	99.5%	
<b>Illegal Connection &amp; Unauthorized Use of Water Activities:</b>									
I.	Number of Inactive Still Consuming Reports rec'd & investigated:	0	0	0	0	0	0	0	1
II.	Number of Illegal Connection reports rec'd & investigated:	1	0	1	1	3	1	0	1



**GWA Utility Services Division**  
**Monthly Status Report**  
**Month ending MAY 2022**

FY2022							PREVIOUS MONTH	
UTILITY SERVICES DIVISION ACTIVITIES							WEEKLY AVERAGE APR 2022	APR 2022 MONTHLY TOTAL
	WEEK ENDING: 05/07/22	WEEK ENDING: 05/14/22	WEEK ENDING: 05/21/22	WEEK ENDING: 05/28/22	WEEK ENDING: 06/04/22	MAY 2022 MONTHLY TOTAL	WEEKLY AVERAGE MAY 2022	
<b>Collections Activities:</b>								
I. Number of accounts cut for nonpayment:	84	64	70	67	53	338	68	346
II. Number of accounts restored for nonpayment:	85	55	74	55	43	312	62	180
III. Number of No water reports responded to:	3	6	0	5	2	16	3	24
IV. Number of Secure/Unsecure valve reports responded to:	12	4	4	5	2	27	5	46
V. Number of Verify reads responded to:	1	4	0	2	2	9	2	10
VI. Number of new pay plans negotiated for active accounts:	111	88	87	82	94	462	92	467
VII. Number of active pay plans negotiated and ongoing:	439	455	429	451	375		430	524
VIII. Number of inactive accounts with a payment arrangement:	6	6	6	6	6		6	
IX. Number of broken payment plans:	100	31	51	25	81	288	58	282
<b>Customer Service Activities (lobby visits):</b>								
<b>A. GBN Public Service Building – Fadian</b>								
i. Total Customers Assisted:	201	178	198	184	180	941	188	806
ii. Total Abandoned Requests:	3	4	6	5	11	29	6	34
iii. Average Wait Time:	9 minutes	6 minutes	8 minutes	5 minutes	7 minutes		7 minutes	9.25 minutes
iv. Average Service Time:	13 minutes	10 minutes	16 minutes	14 minutes	11 minutes		12.8 minutes	11.5 minutes
v. Purpose of lobby visit:								
1. Apply for water:	51	50	70	63	57	291	58	226
2. Restore water cut for non payment:	16	6	5	5	4	36	7	43
3. Terminate Water:	11	16	11	15	18	71	14	38
4. Copy of Bill:	17	20	17	16	21	91	18	89
5. Billing Dispute:	67	42	61	46	26	242	48	234
6. Billing Dispute follow up:	1	0	0	0	0	1	0	2
7. General Questions & Other:	29	40	37	42	46	194	39	151
8. Report a water leak:	0	0	0	0	0	0	0	1
9. Report water theft:	0	0	0	0	0	0	0	1
10. Payment Arrangement:	10	6	7	7	11	41	8	36
<b>B. Julale Satellite Office – Hagatna</b>								
i. Total Customers Assisted:	192	171	179	167	174	883	177	741
ii. Total Abandoned Requests:	23	12	16	8	13	72	14	51
iii. Average Wait Time:	5 minutes	2 minutes	6 minutes	5 minutes	7 minutes		5 minutes	5.25 minutes
iv. Average Service Time:	7 minutes	6 minutes	9 minutes	9 minutes	9 minutes		8 minutes	9 minutes
v. Purpose of lobby visit:								
1. Apply for water:	38	35	47	42	55	217	43	157
2. Restore water cut for non payment:	10	8	7	5	13	43	9	48
3. Terminate Water:	18	10	20	17	9	74	15	68
4. Copy of Bill:	22	26	22	21	23	114	23	99
5. Billing Dispute:	68	59	46	58	48	279	56	205
6. Billing Dispute follow up:	5	1	2	2	2	12	2	7
7. General Questions & Other:	33	22	32	24	23	134	27	99
8. Report a water leak:	0	0	0	0	0	0	0	1
9. Report water theft:	0	0	0	0	0	0	0	0
10. Payment Arrangement:	9	12	17	8	19	65	13	70
<b>C. Upper Tumon Satellite Office – Upper Tumon</b>								
i. Total Customers Assisted:	255	173	214	225	181	1048	210	923
ii. Total Abandoned Requests:	9	5	2	6	3	25	5	20
iii. Average Wait Time:	7 minutes	5 minutes	6 minutes	9 minutes	12 minutes		7.8 minutes	7.75 minutes
iv. Average Service Time:	10 minutes	10 minutes	11 minutes	12 minutes	11 minutes		10.8 minutes	11.75 minutes
v. Purpose of lobby visit:								
1. Apply for water:	61	47	61	63	54	286	57	241
2. Restore water cut for non payment:	17	7	13	20	4	61	12	52
3. Terminate Water:	15	14	15	21	21	86	17	85
4. Copy of Bill:	44	31	39	21	27	162	32	161
5. Billing Dispute:	64	41	57	67	55	284	57	213
6. Billing Dispute follow up:	0	0	0	0	0	0	0	0
7. General Questions & Other:	36	23	28	26	16	129	26	121
8. Report a water leak:	0	0	0	0	0	0	0	0
9. Report water theft:	0	0	0	0	0	0	0	0
10. Payment Arrangement:	21	10	8	15	11	65	13	57

**GWA Utility Services Division**  
**Monthly Status Report**  
**Month ending MAY 2022**

FY2022 UTILITY SERVICES DIVISION ACTIVITIES							PREVIOUS MONTH					
							WEEKLY AVERAGE MAY 2022	WEEKLY AVERAGE APR 2022	APR 2022 MONTHLY TOTAL			
							WEEK ENDING: 05/07/22	WEEK ENDING: 05/14/22	WEEK ENDING: 05/21/22	WEEK ENDING: 05/28/22	WEEK ENDING: 06/04/22	MAY 2022 MONTHLY TOTAL
Customer Service Activities (Electronic):												
i. Emails Recieved:												
1. customers@guamwaterworks.org:												
Request type (email):												
a. Apply for water:												
b. Terminate Water:												
c. Copy of Bill:												
d. Billing Dispute & follow up:												
e. General Questions & Other:												
f. Report a water leak:												
g. Report water theft:												
h. Online services inquiry:												
2. gwaservesme@guamwaterworks.org (realtors/prop mgrs):												
ii. Emails Replied (both):												
iii. Online Portal:												
Request type (online portal):												
a. Start Service:												
b. Stop Service:												
c. Payment Plan:												
d. Customer Information Updates:												
e. Service Investigations:												
f. Account Inquiries:												
g. Technical Support:												
h. Outages & Emergencies:												
Call Center Activities:												
i. Calls Recieved:												
ii. Calls Immediately Answered:												
iii. Calls Abandoned:												
iv. Calls Handled by Voice mail:												
v. Average duration of call:												
vi. Breakdown by request type:												
1. Apply/Terminate info:												
2. Automated Telephone Call:												
3. Balance Inquiry:												
4. Call Back:												
5. Dispatch:												
6. Dispute:												
7. Follow-up:												
8. General Questions & Other:												
9. Route Calls to GWA Staff:												
10. No Water:												
11. Online/Phone App Help:												
12. Pay by Phone:												
13. Pay Plan:												
14. Restore Non-payment:												
15. Secure/Unsecure Valve:												
16. Voice Mail:												
17. Water leak:												
Bill Dispute & Resolution Activities:												
i. Dispute Resolution:												
1. Number of disputed accounts resolved:												
2. Number of disputed accounts under review:												
Data Entry of Completed Field work in CIS:												
i. Document Control:												
1. Number of field activities posted:												
2. Number of field activities pending:												
Field Response Activities:												
I. Number of field activities assigned:												
II. Number of field activities completed:												
III. Number of field activities pending field action:												

**GWA Utility Services Division**  
**Monthly Status Report**  
**Month ending MAY 2022**

FY2022 UTILITY SERVICES DIVISION ACTIVITIES		WEEK ENDING:	WEEK ENDING:	WEEK ENDING:	WEEK ENDING:	WEEK ENDING:	MAY 2022 MONTHLY TOTAL	WEEKLY AVERAGE MAY 2022	PREVIOUS MONTH	
		05/07/22	05/14/22	05/21/22	05/28/22	06/04/22			WEEKLY AVERAGE APR 2022	APR 2022 MONTHLY TOTAL
<b>Meter Reading Activities:</b>										
I. Number of meters read:										
A. Electronically Read Meters:		10407	12445	14258	5761	6708	49579	9916	10160	40640
B. Manually Read Meters:		55	60	36	23	44	218	44	42	168
i. Unread meters (Meters scheduled but not read):		5	13	6	4	2	30	6	7	26
ii. Number of data logs received:		26	21	22	21	7	97	19	20	81
iii. Number of data logs retrieved:		17	23	16	29	3	88	18	20	81
iv. Number of data logs pending field action:		0	0	0	5	0	5	1	0	0
v. Communication Errors/Reprogramming requests:		2	1	3	0	1	7	1	2	7
vi. Number of estimated readings (for the week):		177	679	458	273	43	1630	326	173	691
vii. Reasons for Estimations:										
1. Cant locate meter:		0	1	0	0	0	1	0	1	4
2. Temporary Obstruction:		0	0	0	0	0	0	0	0	0
3. Vicious Dog:		0	0	0	0	0	0	0	0	0
4. Flooded meter:		0	0	1	0	0	1	0	0	0
5. Corrective action to database requested:		5	2	4	3	2	16	3	4	16
6. Possible changed out meter:		6	4	4	3	1	18	4	7	29
7. Communication/Programming error (code 92's):		7	0	0	0	1	8	2	7	27
8. Other:										
a. Leaks detected on customer's private line:		1477	1809	2118	715	892	7011	1402	1534	6134
b. Reverse Flow Detected:		141	652	436	261	29	1519	304	141	565
c. No Usage Detected:		357	343	410	254	267	1631	326	332	1327
d. Tamper Code:		11	1	6	2	6	26	5	6	22
C. Electronic Read Percentage:		99.47%	99.52%	99.75%	99.60%	99.35%		99.5%	99.6%	
<b>Illegal Connection &amp; Unauthorized Use of Water Activities:</b>										
I. Number of Inactive Still Consuming Reports rec'd & investigated:		0	0	0	0	1	1	0	1	4
II. Number of Illegal Connection reports rec'd & investigated:		0	0	0	0	1	1	0	2	6



## **Engineering Monthly Report July 2022**

**Prepared By:**

**Barbara C. Cruz, P.E.  
Acting Chief Engineer**

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**A. Summary Table of 2010, 2013, 2016 and 2020 Bonds****Potable Water**

CIP #	CIP Description	2016 Bond Allotment	% Encumbered	% Available	2020 Bond Allotment	% Encumbered	% Available
PW 05-01	Ground Water Disinfection	\$ -	N/A	N/A	\$ -	N/A	N/A
PW 05-03	Santa Rita Springs Booster Pump Rehab Phase II	\$ -	N/A	N/A	\$ -	N/A	N/A
PW-05-05	"A Series Well Transmission Line	\$ -	N/A	N/A	\$ -	N/A	N/A
PW 05-06	Water Booster Pump Station	\$ -	N/A	N/A	\$ 700,000.00	33.29%	66.71%
PW 05-07	Meter Replacement Program	\$ 1,400,000.00	100.00%	0.00%	\$ -	N/A	N/A
PW 05-08	Barrigada Tank Repair/Replacement	\$ -	N/A	N/A	\$ -	N/A	N/A
PW 05-09	Leak Detection	\$ 100,000.00	0.00%	100.00%	\$ 400,000.00	0.00%	100.00%
PW 05-10	Potable Water System Planning	\$ 876,294.00	99.99%	0.01%	\$ 400,000.00	0.00%	100.00%
PW 05-11	Implement Ground Water Rule	\$ -	N/A	N/A	\$ -	N/A	N/A
PW 05-12	Brigade II (Ugum Lift) BPS Upgrade	\$ -	N/A	N/A	\$ -	N/A	N/A
PW 05-13	Deep Well Rehabilitation	\$ 250,000.00	44.01%	55.99%	\$ 350,000.00	0.00%	100.00%
PW 05-14	New Deep Wells at Down Hard	\$ 1,190,000.00	0.00%	100.00%	\$ 500,000.00	0.00%	100.00%
PW 05-15	Rehabilitation of Asan Springs	\$ -	N/A	N/A	\$ 550,000.00	0.00%	100.00%
PW 05-16	Master Meters	\$ 2,151,539.00	90.70%	9.30%	\$ -	N/A	N/A
PW 09-01	Ugum Water Treatment Plant Intake	\$ -	N/A	N/A	\$ 600,000.00	0.00%	100.00%
PW 09-02	Water Wells	\$ 2,500,000.00	6.80%	93.20%	\$ 500,000.00	0.00%	100.00%
PW 09-03	Water Distribution System	\$ -	N/A	N/A	\$ 2,250,000.00	100.00%	0.00%
PW 09-04	Pressure Zone Realignment	\$ 1,141,000.00	100.00%	0.00%	\$ -	N/A	N/A
PW 09-06	Central Water Distribution System 2005	\$ -	N/A	N/A	\$ -	N/A	N/A
PW 09-08	Mechanical/Electrical Equipment	\$ -	N/A	N/A	\$ -	N/A	N/A
PW 09-09	Water Reservoir Internal/External	\$ -	N/A	N/A	\$ -	N/A	N/A
PW 09-10	Water Reservoir Internal/External	\$ 800,000.00	100.00%	0.00%	\$ -	N/A	N/A
PW 09-11	Water System Reservoirs 2005 Improvements	\$ 58,830,170.00	99.86%	0.14%	\$ 25,900,000.00	0.76%	99.24%
PW 11-01	Distribution System Upgrades	\$ -	N/A	N/A	\$ -	N/A	N/A
PW 11-02	Ugum Water Treatment Plant Reservoir	\$ -	N/A	N/A	\$ 7,500,000.00	0.00%	100.00%
PW 12-01	Water Audit Program & Water Loss Control Plan	\$ 550,000.00	100.00%	0.00%	\$ -	N/A	N/A
PW 12-02	Production Plan / Reduce Navy Purchases	\$ -	N/A	N/A	\$ -	N/A	N/A
PW 12-03	Hydraulic Assessment of Tanks	\$ -	N/A	N/A	\$ -	N/A	N/A
PW 12-04	Agana Heights & Chaot Tanks	\$ 1,220,000.00	100.00%	0.00%	\$ -	N/A	N/A
PW 12-05	Tank Major Repair Yigo #1, Mangilao #2, Astumbo#1	\$ 1,822,133.00	100.00%	0.00%	\$ -	N/A	N/A
PW 12-06	Tank Replacement Piti & Hyundai	\$ 7,300,000.00	100.00%	0.00%	\$ 6,500,000.00	0.00%	100.00%
PW 12-07	Assessment of Maligloj Elevated & Yigo Elevated	\$ -	N/A	N/A	\$ -	N/A	N/A
PW 12-08	Public Water System Asset Inventory/ Condition Assessment	\$ -	N/A	N/A	\$ -	N/A	N/A
PW 12-09	Public Water System GIS & Mapping	\$ -	N/A	N/A	\$ -	N/A	N/A
PW 14-01	Fire Hydrant Replacement Program	\$ 1,200,000.00	100.00%	0.00%	\$ -	N/A	N/A
MP-PW-Pipe-01	Astumbo Zone Piping				\$ -	N/A	N/A
MP-PW-Pipe-02	Route 1 Astumbo Zone Piping				\$ -	N/A	N/A
MP-PW-Pipe-03	Harmon Cliffline Piping to Route 1				\$ -	N/A	N/A
MP-PW-Pipe-04	Hyundai Well Piping				\$ 500,000.00	0.00%	100.00%
MP-PW-Pipe-05	Kaiser Zone Looping				\$ 300,000.00	0.00%	100.00%
MP-PW-Pipe-06	Mangilao Pressure Zone Realignment				\$ 300,000.00	0.00%	100.00%
MP-PW-Pipe-07	Mataquac BPS Suction Piping				\$ 500,000.00	3.40%	96.60%
MP-PW-Pipe-08	Nimitz Lower BPS Piping				\$ -	N/A	N/A
MP-PW-Pipe-09	Yigo, Santa Rosa Zone Realignment				\$ -	N/A	N/A
MP-PW-Pipe-10	Miscellaneous Piping Projects				\$ 200,000.00	0.00%	100.00%
MP-PW-Pipe-11	Miscellaneous Piping Connections				\$ 200,000.00	0.00%	100.00%
MP-PW-Pipe-12	Rehabilitation and Replacement Program				\$ 2,000,000.00	41.44%	58.56%
MP-PW-Pipe-13	2-Inch Pipe Replacement Program				\$ 3,330,000.00	0.00%	100.00%
MP-PW-Pipe-14	Asbestos Cement Pipe Replacement Program				\$ -	N/A	N/A
MP-PW-Pipe-15	PRV Rehab and Replacement				\$ 2,050,000.00	0.00%	100.00%
MP-PW-Pipe-16	Valve Exercise, Repair, and Replacement Program				\$ 250,000.00	0.00%	100.00%
MP-PW-Pipe-17	Cross Island Highway Piping				\$ 100,000.00	0.00%	100.00%
MP-PW-Tank-22	Existing Tank Inspections				\$ 150,000.00	0.00%	100.00%
MP-PW-Tank-23	Recurring Tank Inspections				\$ 400,000.00	0.00%	100.00%
MP-PW-BPS-01	Rehabilitate and Replace BPSs				\$ 409,000.00	0.00%	100.00%
MP-PW-BPS-02	Nimitz Hill Upper BPS				\$ 48,000.00	0.00%	100.00%
MP-PW-BPS-03	Route 15 BPS				\$ -	N/A	N/A
MP-PW-SWTP-01	Ugum SWTP River Intake Cleaning Project				\$ 380,000.00	0.00%	100.00%
MP-PW-SWTP-02	Ugum SWTP Intake Modifications				\$ 1,174,000.00	0.00%	100.00%
MP-PW-SWTP-03	Ugum SWTP Reliability Improvements				\$ 1,150,000.00	22.84%	77.16%
MP-PW-SWTP-04	Ugum SWTP 7-Year Improvement Project				\$ -	N/A	N/A
MP-PW-Well-01	Well Rehabilitation Program				\$ 3,600,000.00	0.00%	100.00%
MP-PW-Well-02	Well Equipment Overhaul Program				\$ -	N/A	N/A
MP-PW-Well-03	Capacity Enhancement – Well Exploration Program				\$ 500,000.00	0.00%	100.00%
MP-PW-Well-04	Capacity Enhancement – Well Development and Construction				\$ -	N/A	N/A
MP-PW-Well-05	Wellhead Protection Program				\$ 300,000.00	0.00%	100.00%
MP-PW-Well-06	Well Repair Program				\$ 1,200,000.00	0.00%	100.00%
MP-PW-Misc-01	South Guam Water Supply Study				\$ 100,000.00	0.00%	100.00%
MP-PW-Misc-02	Master Meter Implementation and Ongoing Meter Replacement				\$ 750,000.00	85.59%	14.41%
MP-PW-Misc-03	Hydrant Condition Assessment and Maintenance				\$ -	N/A	N/A
MP-PW-Misc-04	OneGuam Program				\$ 100,000.00	0.00%	100.00%
MP-PW-Misc-05	Leak Detection Assistance				\$ 150,000.00	0.00%	100.00%
DoD-3	Rehabilitation and New NGLA Monitoring Wells				\$ -	N/A	N/A
		\$ 81,331,136.00			\$ 66,291,000.00		

## Wastewater

CIP #	CIP Description	2016 Bond Allotment	% Encumbered	% Available	2020 Bond Allotment	% Encumbered	% Available
WW 05-04	Wastewater System Planning	\$ 312,983.00	100.00%	0.00%	\$ 150,000.00	56.32%	43.68%
WW 05-05	Wastewater Vehicles	\$ -	N/A	N/A	\$ -	N/A	N/A
WW 05-07	NDWWTP - Chlorine Tanks	\$ -	N/A	N/A	\$ -	N/A	N/A
WW 09-01	Lift station upgrades	\$ 1,714,755.00	70.04%	29.96%	\$ 1,050,000.00	9.21%	90.79%
WW 09-06	Wastewater Collection System Repl/ Rehabilitation	\$ 1,055,478.00	43.06%	56.94%	\$ 1,400,000.00	0.00%	100.00%
WW 09-08	Facilities Plan/Design for Baza Gardens WWTP	\$ -	N/A	N/A	\$ -	N/A	N/A
WW 09-10	Facilities Plan/Design for Agat-Santa Rita WWTP	\$ -	N/A	N/A	\$ -	N/A	N/A
WW 11-03	Baza Gardens STP Replacement	\$ 25,048,522.50	88.62%	11.38%	\$ -	N/A	N/A
WW 11-04	Facilities Plan/Design for Umatac-Merizo WWTP	\$ 252,105.00	89.65%	10.35%	\$ -	N/A	N/A
WW 11-08	Agat/Santa Rita STP Replacement	\$ 2,226,659.06	77.75%	22.25%	\$ -	N/A	N/A
WW 12-01	Northern District WWTP Primary Treatment Upgrade	\$ -	N/A	N/A	\$ -	N/A	N/A
WW 12-02	Biosolids Management Plan	\$ -	N/A	N/A	\$ -	N/A	N/A
WW 12-03	Agana WWTP Interim Measures	\$ -	N/A	N/A	\$ -	N/A	N/A
WW 12-04	I&I SSES Southern	\$ -	N/A	N/A	\$ -	N/A	N/A
WW 12-05	I&I SSES Central	\$ -	N/A	N/A	\$ -	N/A	N/A
WW 12-06	I&I SSES Northern	\$ -	N/A	N/A	\$ -	N/A	N/A
WW 12-07	Umatac Merizo Replacement	\$ 20,952,871.63	99.87%	0.13%	\$ -	N/A	N/A
WW 12-08	Wastewater System GIS & Mapping	\$ -	N/A	N/A	\$ -	N/A	N/A
WW 12-09	Wastewater Facility Back Up Power	\$ -	N/A	N/A	\$ -	N/A	N/A
WW 12-10	Wastewater System Asset Inventory	\$ -	N/A	N/A	\$ -	N/A	N/A
WW 17-01	Wastewater Sewer System Expansion	\$ -	N/A	N/A	\$ -	N/A	N/A
WW 17-02	Northern District WWTP Secondary Treatment Upgrade	\$ -	N/A	N/A	\$ -	N/A	N/A
MP-WW-Pipe-01	Gravity Pipe Rehabilitation/Replacement Program				\$ 1,970,000.00	0.00%	100.00%
MP-WW-Pipe-02	Barriqada Pump Station Pipe Rehabilitation/Replacement				\$ -	N/A	N/A
MP-WW-Pipe-03	Route 1 Pitti Pipe Rehabilitation/Replacement				\$ 940,000.00	0.00%	100.00%
MP-WW-Pipe-04	Southern Link Pump Station Pipe Rehabilitation/Replacement				\$ 657,000.00	0.00%	100.00%
MP-WW-Pipe-05	Agana Heights Pipe Replacement				\$ -	N/A	N/A
MP-WW-Pipe-06	Northern District Route 1 Capacity Replacement - Phase 1				\$ -	N/A	N/A
MP-WW-Pipe-07	Northern District Route 1 Capacity Replacement - Phase 2				\$ -	N/A	N/A
MP-WW-Pipe-08	Northern District Route 1 Capacity Replacement - Phase 3				\$ -	N/A	N/A
MP-WW-Pipe-09	North Dededo Capacity Replacement - Phase 1				\$ -	N/A	N/A
MP-WW-Pipe-10	North Dededo Capacity Replacement - Phase 2				\$ -	N/A	N/A
MP-WW-Pipe-11	Route 16 Capacity Replacement				\$ -	N/A	N/A
MP-WW-Pipe-12	Barriqada Capacity Replacement				\$ -	N/A	N/A
MP-WW-Pipe-13	Mangilao Capacity Replacement				\$ -	N/A	N/A
MP-WW-Pipe-14	Dededo Capacity Replacement				\$ -	N/A	N/A
MP-WW-Pipe-16	Yigo Capacity Replacement				\$ -	N/A	N/A
MP-WW-Pipe-17	Mamajanao Capacity Replacement				\$ 814,000.00	0.00%	100.00%
MP-WW-Pipe-18	Agat-Santa Rita Capacity Replacement - Phase 1				\$ -	N/A	N/A
MP-WW-Pipe-19	Agat-Santa Rita Capacity Replacement - Phase 2				\$ -	N/A	N/A
MP-WW-Pipe-20	Agat-Santa Rita Capacity Replacement - Phase 3				\$ -	N/A	N/A
MP-WW-Pipe-21	Baza Gardens Capacity Replacement - Phase 1				\$ -	N/A	N/A
MP-WW-Pipe-22	Baza Gardens Capacity Replacement - Phase 2				\$ -	N/A	N/A
MP-WW-Pipe-23	Baza Gardens Capacity Replacement - Phase 3				\$ -	N/A	N/A
MP-WW-Pipe-24	Umatac-Merizo Capacity Replacement				\$ -	N/A	N/A
MP-WW-Pipe-25	Piping Near Bayside Lift Station				\$ -	N/A	N/A
MP-WW-Pipe-26	Finile Drive Rehabilitation - Agat				\$ 813,000.00	0.00%	100.00%
MP-WW-Pipe-27	Septic/Cesspool System Reduction Program				\$ 350,000.00	0.00%	100.00%
MP-WW-MH-01	Manhole Rehabilitation Program				\$ 350,000.00	0.00%	100.00%
MP-WW-FM-01	Force Main Rehabilitation/Replacement Program				\$ 100,000.00	0.00%	100.00%
MP-WW-FM-02	Replace Yigo Lift Station Force Main				\$ 200,000.00	0.00%	100.00%
MP-WW-FM-03	Route 1 Asan Force Main Rehabilitation/Replacement				\$ 2,124,000.00	0.00%	100.00%
MP-WW-FM-04	Hagåtña WWTP Force Main Rehabilitation/Replacement				\$ 6,600,000.00	0.00%	100.00%
MP-WW-Pump-01	Lift Station Rehabilitation/Replacement Program				\$ 8,320,000.00	11.16%	88.84%
MP-WW-Pump-02	Turnon Basin - Fujita Lift Station Analysis				\$ 9,600,000.00	0.00%	100.00%
MP-WW-Pump-03	Replacement of Former Navy Pump Station (Donut Hole)				\$ 1,301,000.00	0.00%	100.00%
MP-WW-WWTP-01	Hagåtña WWTP Primary Treatment Repair/Rehabilitation Program				\$ -	N/A	N/A
MP-WW-WWTP-02	Hagåtña WWTP Secondary Treatment Upgrade				\$ -	N/A	N/A
MP-WW-WWTP-03	Inarajan WWTP Repair/Rehabilitation Program				\$ -	N/A	N/A
MP-WW-WWTP-04	Pago Socio WWTP Pump Station Conversion				\$ -	N/A	N/A
MP-WW-WWTP-05	Umatac-Merizo WWTP Repair/Rehabilitation Program				\$ -	N/A	N/A
MP-WW-WWTP-06	Agat-Santa Rita WWTP Repair/Rehabilitation Program				\$ -	N/A	N/A
MP-WW-WWTP-07	Baza Gardens Cross Island Pipeline - Preliminary Treatment Equipment Repair and Rehabilitation Program				\$ -	N/A	N/A
MP-WW-WWTP-08	Northern District WWTP Completion				\$ 7,500,000.00	62.50%	37.50%
MP-WW-WWTP-09	Ocean Outfall Inspection Program				\$ 100,000.00	0.00%	100.00%
MP-WW-Misc-01A	Update Wastewater Collection System Model (Major Update)				\$ -	N/A	N/A
MP-WW-Misc-01B	Update Wastewater Collection System Model (Continued)				\$ 50,000.00	0.00%	100.00%
MP-WW-Misc-02	I/I and SSES Assessments				\$ 50,000.00	0.00%	100.00%
MP-WW-Misc-03	Miscellaneous Wastewater Improvements				\$ 500,000.00	0.00%	100.00%
MP-WW-Misc-04	Fats, Oils, and Grease Study				\$ 50,000.00	0.00%	100.00%
DoD-01	NDWWTP Secondary Treatment Capacity 12MGD				\$ -	N/A	N/A
DoD-02	Northern Systems Wastewater System				\$ -	N/A	N/A
		\$ 51,563,374.19			\$ 44,989,000.00		

## Electrical Engineering Support

CIP #	CIP Description	2016 Bond Allotment	% Encumbered	% Available	2020 Bond Allotment	% Encumbered	% Available
EE 05-02	SCADA Pilot Project	\$ -	N/A	N/A	\$ -	N/A	N/A
EE 09-01	Wastewater Pumping Station Electrical Upgrade	\$ -	N/A	N/A	\$ -	N/A	N/A
EE 09-02	Electrical Upgrade - Water Wells	\$ -	N/A	N/A	\$ -	0.00%	0.00%
EE 09-03	Electrical Upgrade - Water Booster	\$ -	N/A	N/A	\$ -	N/A	N/A
EE 09-04	Electrical Upgrade - Water Booster	\$ -	N/A	N/A	\$ 150,000.00	0.00%	100.00%
EE 09-05	Electrical Upgrade - Other Water	\$ -	N/A	N/A	\$ 100,000.00	0.00%	100.00%
EE 09-06	SCADA Improvements - Phase 1	\$ -	N/A	N/A	\$ -	N/A	N/A
EE 09-07	SCADA Improvements - Phase 2	\$ -	N/A	N/A	\$ 45,000.00	0.00%	100.00%
EE 09-08	SCADA Improvements - Phase 3	\$ 1,077,497.00	74.43%	25.57%	\$ 25,000.00	0.00%	100.00%
EE 09-09	SCADA Improvements - Phase 4	\$ 4,378,118.00	75.19%	24.81%	\$ -	N/A	N/A
MP-Gen-EE-01	SCADA Implementation Phase A2 – Initial Project Completion				\$ 4,250,000.00	0.00%	100.00%
MP-Gen-EE-02	SCADA Implementation Phase B – Additional Sites				\$ -	N/A	N/A
MP-Gen-EE-03	SCADA Implementation Phase C – Additional Instruments				\$ -	N/A	N/A
MP-Gen-EE-04	SCADA System Improvement Program				\$ -	N/A	N/A
		\$ 5,455,615.00			\$ 4,570,000.00		

## Miscellaneous Engineering Support

CIP #	CIP Description	2016 Bond Allotment	% Encumbered	% Available	2020 Bond Allotment	% Encumbered	% Available
MC 05-01	Laboratory Modernization	\$ 1,127,000.00	100.00%	0.00%	\$ -	N/A	N/A
MC 05-02	Land Survey	\$ 1,260,524.00	96.74%	3.26%	\$ -	N/A	N/A
MC 09-01	General Plant Improvements	\$ 1,543,760.00	70.05%	29.95%	\$ -	N/A	N/A
MC 15-01	Information Technology Intergration Improvements	\$ 664,412.00	78.85%	21.15%	\$ -	N/A	N/A
MP-Gen-Misc-01	GWA Systems Planning				\$ 550,000.00	90.03%	9.97%
MP-Gen-Misc-02A	WRMP Update (Comprehensive Update)				\$ -	N/A	N/A
MP-Gen-Misc-02B	WRMP Update (Interim Update)				\$ 200,000.00	0.00%	100.00%
MP-Gen-Misc-03	Surveying and Property Delineation				\$ 250,000.00	0.00%	100.00%
MP-Gen-Misc-04	Information Technology Improvements				\$ 1,650,000.00	88.47%	11.53%
MP-Gen-Misc-05	GWA Infrastructure Improvements				\$ 2,500,000.00	4.59%	95.41%
MP-Gen-Misc-06	GPWA Fleet Maintenance Facility				\$ 500,000.00	0.00%	100.00%
MP-Gen-Misc-07	Mobile Equipment Replacement Program				\$ 800,000.00	0.00%	100.00%
MP-Gen-Misc-08	General Plant Improvements				\$ 1,000,000.00	0.00%	100.00%
MP-Gen-Misc-09	Security and Resilience Program				\$ 200,000.00	0.00%	100.00%
		\$ 4,595,696.00			\$ 7,650,000.00		

	2016 Bond Allotment	2020 Bond Allotment
CIP Water	\$ 81,331,136	\$ 66,291,000
CIP Wastewater	\$ 51,563,374	\$ 44,989,000
CIP Electrical	\$ 5,455,615	\$ 4,570,000
CIP Miscellaneous	\$ 4,595,696	\$ 7,650,000
	<b>\$ 142,945,821</b>	<b>\$ 123,500,000</b>

Bond Fund	Construction Fund Amount (\$M)	Estimated # of months fund available for use	Total Funds encumbered to date (\$M)***	% of fund used	Rate of Spending: (\$M) per year
2005	\$82.930	82*	\$82.930	100.00%	12.14
2010	\$87.656	135**	\$84.688	96.61%	7.53
2013	\$140.819	97**	\$138.808	98.57%	17.17
2016	\$142.946	67**	\$132.385	92.61%	23.71
2020	\$123.590	22**	\$12.299	9.95%	6.71

\* End date November 2013 via CCU Resolution 06-FY2014

\*\* Includes the month of June 2022

\*\*\* Includes Expenses Only



**B. Projects Procurement**Percentage Key:

100%	Approved by GM
99%	Signature required from either Accounting/Legal/GM
98%	Processing engineering service or construction contract (with legal)
95%	Request for CCU approval (GM/engineering)
90%	A/E fee negotiation or contractor bid evaluation (engineering)
80%	Selected A/E or Conducted bid opening (engineering)
70%	Advertised RFP/IFB (engineering)
60%	RFP/IFB Package under legal review
50%	RFP/IFB Package completed (engineering)
Less than 50%	Project Scope of work development in progress

- Red text anywhere indicates a change from the last report.

**BOX KEY FOR PROCUREMENT:**

<b>(Type of Procurement)</b> (Relevant CIP NO. or Funding Source)	<b>(Project Title)</b>	
(Percentage complete for procurement)	<b>Activities/Notes:</b> (see percentage key above)	<b>Consultant</b> (listed when selected)
Project Description	Summary of project description	

<b><u>BID PACKAGE</u></b> PW 09-02	<b>New Well Construction (AG-10-Y-8 &amp; AG-12)</b>	
	<b>Activities/Notes:</b> GWA engineering continuing discussion with Dept. of Agriculture and lessee on options of acquisition of property for well site at AG-12. Internal GWA discussions underway for survey and appraisal services. GWA executed Change Order with GHD to update the design plans specific to the new well locations.	
Project Description:	The project is to construct three new production wells for GWA as well as installation of a water main to connect the new production wells to the Ysengsong Reservoirs.	

<b>RFP</b> PW 09-02	<b>New Well Construction (Construction Management)</b>	
	<b>Activities/Notes:</b> SOW being developed	
Project Description:	The work performed under this project procurement shall consist of Construction Management and Inspection Services for the construction of up to three (3) new production wells for GWA. GWA plans to increase source water production to improve system redundancy that allows for operating the water production wells more effectively. The overall goal of the Construction Manager (CM) is to manage the entire construction process so that the project can be delivered efficiently and professionally.	

<b>RFP</b> S20-003-EPA USEPA	<b>Fujita Wastewater Pump Station Redundant Force Main</b>	
	<b>Activities/Notes:</b> AECOM submitted final proposal (04/29/2022), and sent to USEPA (05/03) for review and approval; USEPA approved (05/20).  Request for Approval submitted and GM approved (05/23).  Formal contract sent to AECOM (06/06); AECOM returned signed contract (06/10).  Formal contract signed by Legal (06/13); submitted to Finance for review and signature (06/13)  Once approved by Finance/GM, we forward NTP to AECOM and schedule project kickoff.	
Project Description:	The work to be performed under this project procurement shall consist of identifying redundant force main options and provide the design for the selected option. After the redundant force main is placed in operation, investigate the condition of the original 14-inch force main to determine if repair, relocation, or replacement is needed in order to ensure force main redundancy. Identify options and provide the design for the selected option, including potential use of CIPP and if necessary, pump station upgrades.	

<b>BID PACKAGE</b> EE 09-02, EE 09-05 MP-PW-WELL-06	<b>Deep Well Power Line Conditioner Pilot Project</b>	
	<b>Activities/Notes:</b> Project Engineer submitted a draft of the design-build bid.  Drawings and specifications revised.	

Project Description:	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.
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<b><u>BID PACKAGE</u></b> E22-01-BND	<b>Current Balancing Unit for Deep Well A-09</b>	
	<b>Activities/Notes:</b> Project Engineer prepared a draft of the plans and specifications.  Draft solicitation document was submitted for review.	
Project Description:	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 shorten its life expectancy. The wells are operated by 3-phase electric motors. The CBU is designed to adjust and balance the voltages which in turn will balance the currents to less than 3%, and therefore reduce current imbalances and prevent motor overheating. There are other factors that can cause motor overheating but current imbalance is a condition that can happen frequently.	

<b><u>BID PACKAGE</u></b> USEPA-SRF	<b>Groundwater Wells A-02, A-07, A-12, D-05 and F-03 Rehabilitation (Re-Bid)</b>	
	<b>Activities/Notes:</b> GWA submitted comments on the FINAL design specification to Designer on 05/17/2022. Minor revisions to the design specification are needed for the bid process.  Designer is in the process of making revisions to the bid and is being finalized before sending to GWA to be put out for bid.	
Project Description:	Work to be performed under this project consists of rehabilitating four (4) existing production well sites including development, testing and permitting of a new production well.	

<b><u>RFP-01-ENG-2022</u></b> GWA Bond	<b>Indefinite Delivery/Indefinite Quantity (ID/IQ) for Engineering Design and Construction Management Services for Undersized Waterline Replacement</b>	
	<b>Activities/Notes:</b> Bid Proposal Packages opened on 05/25/2022 at 10:00 AM. Currently on the Scoring Phase.	

Project Description:	The work to be performed under this project procurement shall consist of the replacement of 2" diameter potable waterlines throughout the island. This ID/IQ will focus on sites which requires removal of old 2" pipeline and installation of new appropriately sized waterline around the island. The ID/IQ firm shall work with GWA to develop a master list and prioritize locations for waterline replacement.	
<b><u>RFP-02-ENG-2022</u></b> GWA Bond	<b>Construction Management Services for Brigade II Booster Pump Station</b>	
	<b>Activities/Notes:</b> Bid Proposal Packages opened on 05/25/2022 at 10:00 AM. Currently on the Scoring Phase.	
Project Description:	The work to be performed under this project procurement shall consist of providing CM services for water system improvements including construction of a new booster station, to include new building structure, pump system, electrical system, piping, instrumentation, SCADA, and general site upgrades; off-site improvements, to include new pressure reducing valves, piping, valves, and vaults; demolition of existing facilities, including yard piping, vaults, and appurtenances; and commissioning of the Brigade II BPS system which includes the booster station and SCADA.	
<b><u>RFP-03-ENG-2022</u></b> GWA Bond	<b>Indefinite Delivery/Indefinite Quantity (ID/IQ) for Engineering Design and Construction Management Services for Waterline Replacement and Upgrades</b>	
	<b>Activities/Notes:</b> Bid Proposal Packages opened on 05/25/2022 at 10:00 AM. Currently on the Scoring Phase.	
Project Description:	The work to be performed under this project procurement shall consist of preparation of Plans, Specifications, and Cost Estimate Development. Develop design for 2" waterline distribution improvements and replacement. This ID/IQ will focus on sites which requires removal of old pipeline and installation of new appropriately sized waterline around the island.	
<b><u>RFP-04-ENG-2022</u></b> GWA Bond	<b>Indefinite Delivery/Indefinite Quantity (ID/IQ) for Engineering Design and Construction Management Services for Asbestos Concrete Pipes (ACP) Waterline Replacement</b>	
	<b>Activities/Notes:</b> Bid Proposal Packages opened on 05/25/2022 at 10:00 AM. Currently on the Scoring Phase.	
Project Description:	The work to be performed under this project procurement shall consist of design and construction management services for the replacement of asbestos cement waterlines throughout the island. The work includes preparation of Plans, Specifications, and Cost Estimate Development. Develop design for 2" waterline distribution improvements and replacement.	

<b><u>RFP-05-ENG-2022</u></b> GWA Bond	<b>Construction Management Services for Pressure Zone Realignment Construction Phase II</b>	
	<b>Activities/Notes:</b> Bid Proposal Packages opened on 05/24/2022 at 10:00 AM. Currently on the Scoring Phase.	
Project Description:	The work to be performed shall consist of CM and Inspection Services on behalf of GWA for the development of the Pressure Zone Realignment Construction Phase II Project. The Construction Manager (CM) will manage the entire construction process to ensure project is completed. The CM services will be conducted in two phases: Phase I, for pre-construction activities before the issuance of the DPW building permit and Phase II, for construction, after the issuance of the DPW building permit.	

<b><u>RFP-06-ENG-2022</u></b> USEPA	<b>Indefinite Delivery/Indefinite Quantity (ID/IQ) for Engineering Design and Construction Management Services for Islandwide Sewer Collection/Transmission System Repair, Rehabilitation, and Replacement</b>	
	<b>Activities/Notes:</b> CCU approved Resolution (01/25/2022) to petition PUC for procurement.  PUC approved petition (01/27) for GWA to go ahead with procurement of IDIQ PM/CM.  Met with the Legal Counsel (02/15) to discuss DB and options.  Draft RFP submitted for procurement review on 03/02; Engineering sent to Legal Counsel for review, and waiting on comments. Following up with Legal on status of RFP review.  Expected to advertise by 07/2022.	
Project Description:	The work to be performed under this project procurement shall consist of preparation of design, plans, specifications, cost estimates, and contract documents for wastewater capital projects. Firm will also manage the construction activities related to both open trench and trenchless wastewater projects, to include, but not limited to, cured-in-place-pipe (CIPP).	

<b><u>RFP-07-ENG-2022</u></b> GWA Bond	<b>Indefinite Delivery/Indefinite Quantity (ID/IQ) for Engineering Design and CM Services for the Implementation of District Metered Areas (DMA)</b>	
	<b>Activities/Notes:</b> Draft RFP package submitted to Legal Counsel for review. Updated document to incorporate is the Affidavit Disclosing Ownership, Influence,	

	Commissions and Conflicts of Interest as required by 5 GCA § 5233 as amended by P.L. 36-13 in lieu of the Major Shareholders Disclosure Affidavit.	
Project Description:	The work to be performed under this project procurement shall consist of implementation/development of DMA's throughout the island which includes pipework, vaults, metering and necessary appurtenances; preparation of design, plans, specifications, cost estimates, contract documentation and construction management for water system improvements including waterline replacement/upgrades.	
<b><u>RFP-08-ENG-2022</u></b> GWA Bond	<b>Indefinite Delivery/Indefinite Quantity (ID/IQ) for Water and Wastewater Hydraulic Modeling Services</b>	
	<b>Activities/Notes:</b> Legal Counsel's review is complete. Garrett Yeoh is finalizing the RFP front-end documents.	
Project Description:	The work to be performed under this project procurement shall consist of providing updated model including modeling files; perform and maintain GWA's existing hydraulic modeling services for water and wastewater; calibrate; valve inventory; and conduct training workshops for GWA staff.	

<b><u>RFP-09-ENG-2022</u></b> American Rescue Plan Act	<b>Design Services for Adacao Water and Sewer Infrastructure</b>	
	<b>Activities/Notes:</b> RFP advertised on 05/27/2022; final responses received 06/30.  RFP proposal packages opened on 07/05 at 10:00 AM and firms that submitted were DCA, GHD, SSFM, E.M. Chen, EMPSCO.  Selection team reviewing RFPs; scores due 07/27.  Governor's office took \$7M of ARPA funds (out of the \$14.7M) back for a different project; Looking at additional funding sources for project, likely USEPA funds.  NEPA not required for ARPA funds, but will be required should USEPA funds needed; reviewing USEPA priority list and funding and planning ahead.  Met with CLTC (02/08) to discuss Adacao properties and path forward; sent follow-up email to CLTC (06/06) on information requested on properties and tenants; still waiting on response from CLTC.  Modeled area and downstream wastewater system to check capacity; issues with Double Trouble SPS during wet weather flow; redid proposed force main to terminate after Double Trouble SPS.	
Project Description:	The work to be performed under this project procurement shall consist of evaluating and design water main to replace existing waterline; evaluate and design new sewer system and design connections for existing customers.	

<b><u>BID PACKAGE</u></b> <b><u>RFP-10-ENG-2022</u></b>	<b>Design and CM Services for Waterline Replacement of Various Bridges</b>	
	<b>Activities/Notes:</b> Ryan Diaz is finalizing the front-end documents.	
Project Description:	The work to be performed under this project procurement shall consist of evaluating various bridges with water and sewer line crossing, and determine a priority list for water and sewer line replacement.	

<b><u>BID PACKAGE</u></b> <b><u>IFB-01-ENG-2022</u></b> MP-GEN-MISC-05 & IFCIP	<b>Indefinite Delivery/Indefinite Quantity (ID/IQ) for the Design and Construction of Sewer Collection/Transmission System Repair, Rehabilitation, and Replacement</b>	
	<b>Activities/Notes:</b> Documents to be finalized and sent to legal after ID/IQ RFP for PM/CM Sewer RRR.	
Project Description:	The work to be performed under this project procurement will improve the sewer collection/transmission system, which includes repairing, rehabilitating and/or replacing sewer gravity lines, manholes, laterals, force mains (FM), and related appurtenances. GWA endeavors to enter into contracts to repair, rehabilitate, or replace the sewer collection/transmission system for the protection of human and environmental health, in anticipation of a consent decree with the United States Environmental Protection Agency (USEPA), and to have services in place to complete both planned upgrades and emergency repairs that because of required repair/rehabilitation methods or project scale, are best performed by a contractor over in-house maintenance resources.	

<b><u>BID PACKAGE</u></b> <b><u>IFB-02-ENG-2022</u></b> GWA Bond	<b>Aplacho Sewer Pump Station Drainage and Roadway Improvements</b>	
	<b>Activities/Notes:</b> Bids will be accepted until 10:00 AM on 08/16/2022.  Construction to be completed in 185 calendar days upon issuance of Notice to Proceed.  Pre-Bid Conference done on 06/27 at 10:00 AM. Site Inspection followed at 1:30 PM.  This is a joint project with DPW, Design and CM under DPW and Construction under GWA.  Legal is preparing the MOA Agreement.	
Project Description:	Work to be performed under this project consists of installation of subterranean drainage interceptors, perforated pipes, concrete swale, and restoration of damaged paved road.	

<b><u>BID PACKAGE</u></b> <b><u>IFB-03-ENG-2022</u></b> IFCIP	<b>GWA Upper Tumon Warehouse Renovation</b>	
	<b>Activities/Notes:</b> Draft bid documents submitted to Legal Counsel for review.  \$700K reserved under IFCIP.	



Project Description:	Work to be performed under this project consists of replacement of the existing warehouse metal roofing and sidings to include insulation, gutters, downspouts, roll-up doors and associated work. Demolition and replacement of gypsum board partition wall, doors, ceiling including electrical and communication systems at the ground and mezzanine floors.
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<b>BID PACKAGE</b> <b>IFB-04-ENG-2022</b> MP-GEN-MISC-05 & IFCIP	<b>GWA/GPA Customer Service Center and IT Renovation</b>	
	<b>Activities/Notes:</b> Draft bid documents submitted to Legal Counsel for review.  \$2,280,000 reserved under Bond 2020 MP-Gen-Misc-05 and \$222,820 reserved under IFCIP.	
Project Description:	Work to be performed under this project consists of the renovation of first floor of GWA's two-story admin building to meet Customer Services, Finance's Cashier/Call Center, and Information Technology requirements in accordance with the current building code, fire/safety code and other relevant codes and standards. When completed, the first floor will consist of the newly renovated GWA/GPA Customer Services Center, Cashier, Call Center, IT and Server rooms, Offices, Training/Conference Room, Breakroom, Men's/Women's Restrooms, Records, Supply and Storage rooms.	

## BOX KEY FOR PROJECT:

<b>(Type of Project)</b> (Relevant CIP NO.)	<b>(Project Title)</b> (Contractor or consultant)	<b>Start Date:</b> (month and year)
(Percentage complete for project)	<b>Activities/Notes:</b> (brief description of activity)	<b>Completion Date:</b> (month and year)
(Court Order Paragraph No.)	(Project type)	
Project Description	Project Description Narrative	

**C. CIP Water Section**

<b><u>INSPECTION</u></b> PW 05-02	<b>Inspection &amp; Maintenance Repairs to GWA Island-Wide Steel Water Tank Reservoirs Phase II (DCA)</b>	<b>Start Date:</b> April 2010
96% Complete	<p><b>Activities/Notes:</b> Remaining work is API inspection, API report, structural inspection, tank bypass planning, and partial construction for the repair work.</p> <p>ID/IQ contract approved on 03/03/2021. CM work is under the ID/IQ.</p> <p>Ongoing CM inspection services for the following sites:</p> <ul style="list-style-type: none"> <li>• Yigo no. 3 steel tank repair</li> <li>• Agat-Umatat steel tank repair</li> <li>• Windward Hills steel tank repair</li> <li>• Santa Ana BPS upgrade for tank bypass</li> <li>• Geus BPS upgrade for tank bypass</li> <li>• Toguan BPS upgrade for tank bypass</li> <li>• Malojloj bypass</li> <li>• Astumbo no. 2 steel tank repair</li> </ul> <p>Continuing review of submittal, RFIs, and project payments.</p> <p>Conducting bi-weekly meetings.</p> <p>Santa Ana reservoir has been taken offline. Santa Ana reservoir inspection scheduled for 05/05/22 to 05/10/22. <b>Santa Ana reservoir has been inspected. API report received. Repair list has been submitted to the Contractor for pricing under a change order.</b></p> <p>Geus BPS pump system is undergoing testing. Full commission is scheduled the week of 05/09/22. From there, the Pigua reservoir can be taken offline for inspection. <b>Hydro pneumatic</b></p>	<b>Completion Date:</b> December 31, 2023

	tank for Pigua BPS scheduled for installation the week of 07/18. Once the hydro pneumatic tank is installed, Operations to schedule to secure tank and run the system off the bypass (booster) system. This is scheduled for the week of 07/25.	
CO 38C	Engineering inspection services	
Project Description:	The Court Order requires GWA to inspect all active and in some cases inactive water reservoirs. The inspection results will allow GWA to determine if a reservoir requires repair or replacement.	

<b>DESIGN</b> PW 05-12	<b>Brigade II BPS Upgrade (EM Chen)</b>	<b>Start Date:</b> April 2012
100% Complete (Basis of Design) 99% Complete (Design)	<b>Activities/Notes:</b> Pending submission of final plans with updated stamps, 100% construction cost estimate, and bid table. Final specifications received.  Last follow up sent to Alan Chen on 07/02/2022.	<b>Completion Date:</b> TBD
N/A	Engineering design services	
Project Description:	The design project is intended to assess system water supply feed from the north as well as Ugum WTP and the water demands downstream from the Brigade BPS so as to reconfigure the piping into the BPS and resize the pumps to me system head requirements.	

<b>DESIGN</b> PW 09-11	<b>Northern and Southern Guam Reservoir Design (TG Engineers)</b>	<b>Start Date:</b> May 2015
90% Complete	<b>Activities/Notes:</b>  <u>Ugum Reservoir</u> Design is at 90%. Designer is working towards 100%.  TGE submitted cost for new instrumentation building and continuation of meetings. Engineering to discuss and negotiate change order cost. Resolution approved to increase project amount to fund Change Order (CO) no. 6. TGE resubmitted their adjusted CO no. 6 for GWA review. Amount reduced due to number of meetings held.  SEARCH provided a date of February to submit the revised AMDP to GWA for review.  GWA brought up the issue of availability of the cased hole drilling rig for the Ugum tank. TGE is proposing to include an alternative bid for pre-cast drive piles. This issue to be discussed further in upcoming meetings.	<b>Completion Date:</b> Completion will be in line with construction completion.

	<p>TGE will submit a CO scope of work and cost to design pre cast pile foundation in lieu of CIDH foundation.</p> <p>TGE to resubmit cost for pre cast pile foundation. GWA does not believe that we should be paying for the full cost for the redesign due to issues with the CIDH design.</p> <p>TGE submitted cost for pre cast pile design. TGE does not believe that they have any responsibility with the availability of the drilling rig for the CIDH foundation; therefore, TGE asserts that GWA has to pay for the redesign from CIDH to pre cast piles. TGE states that GWA can't expect TGE to question their subcontractor's recommendation to use CIDH and eliminate pre cast piles in the geotechnical report. The geotechnical report eliminated precast piles due to availability of space at the sites.</p> <p>CO No. 7 will be issued to TGE to start on pre cast pile foundation design.</p> <p><b>TGE has started design of the pre cast pile foundation for the Ugum Reservoir. TGE shall provide a biddable plans and specifications for GWA by 08/19/2022.</b></p> <p><u>Inarajan and Agfayan Booster Pump Station</u> Biological Assessment and Archaeological report are pending.</p> <p>TGE proceeding with design at both sites. Letter of interest/purchase to DLM/CLTC for Lot 28 is in process. Waiting for CLTC to inform GWA on their choice of appraisal company.</p> <p>DLM/CLTC notified GWA that they would like in-kind services rather than direct payment for the property. GWA to prepare response back to DLM/CLTC. DLM/CLTC has not responded with their choice of appraisal company.</p> <p>TGE provided a letter for GWA review. The letter will request to perform archaeological monitoring during construction in lieu of research design for the Agfayan BPS site.</p> <p>TGE submitted letter to SHPO to perform archaeological monitoring during construction in lieu of research design.</p> <p>TGE, SEARCH, and SHPO (JMJ) conducted a site visit for the Agfayan BPS. SHPO will be</p>	
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	<p>submitting their official comments to site in the coming weeks.</p> <p>TGE and GWA is still awaiting SHPO's comments. TGE to follow up with SHPO with phone call and email. If no response, a letter shall be drafted and send to SHPO's office.</p> <p>SHPO TGE has drafted a letter to be sent to SHPO following up on project requirements. GWA to review and provide comments, if any.</p> <p><u>Santa Rosa, Santa Rita, and Sinifa Reservoir</u> Under construction. See Santa Rosa, Santa Rita, and Sinifa Construction for update.</p> <p>Santa Rita Tank: The Contractor is preparing a package for submittal to GWA/GHD to perform pre cast piles in lieu CIDH. The cost for the foundation redesign shall be the responsibility of the Contractor. It is GWA's stance that any changes to the foundation, which may include additional piles, shall be borne by the Contractor.</p> <p>AIC is willing to pay TGE \$50K to complete design of pre cast piles. TGE is evaluating the cost. TGE to respond to AIC the week of 02/07/2022.</p> <p>TGE has started the pre cast pile design and is working with AIC. The full design is anticipated to be completed within 4 weeks.</p> <p>GWA and AIC is awaiting final design and specs from TGE.</p> <p>AIC assembled several sample pre cast rebar. No issues with fabrication of pre cast rebar cages. Trial batching for pre cast concrete mix completed. AIC will proceed once the final design and specs have been submitted by TGE.</p> <p>TGE will start on redesign of existing roadway, pipe line and electrical conduit realignment. TGE will consider the results of the pvc monitoring pipes (to be installed week of 04/18) for the slide failure.</p> <p>PVC test monitoring pipes have been installed at upper and lower failure locations.</p> <p>Preliminary rerouting of water lines has been submitted for review.</p>	
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	<p>Precast pile design is essentially complete. Contractor has started on re-fabricating the test pile cages. The test piles were increased from 40' to 55' as required by the geotechnical engineer.</p> <p>Test pile driving operation will begin the week of 07/25. The pile driving location plan is under review by the EOR and Geotechnical engineer. Review is expected to be completed the week of 07/18.</p>	
CO 29 (b)(4)	Engineering design services	
Project Description:	<p>The design services will consist of preparation of plans, specifications, and estimates (PS&amp;E), which includes Basis of Design, design calculations, hydraulic modeling (EPANET), computational fluid dynamic modeling (CFD), construction schedule, topographical survey, property research, property mapping, geotechnical engineering, cultural resource inventory and evaluation of historic resources, hazardous materials survey, construction documents, design drawings in Auto CAD, relevant permit, construction bid support service, and response to request for interpretation/information during construction. The tank locations are Ugum, Santa Rita, Santa Rosa, Inarajan and Sinifa.</p>	

<b>DESIGN</b> PW 12-04	<b>Central Guam Reservoirs Design (GHD Inc.)</b>	<b>Start Date:</b> May 2015
93% Complete	<p><b>Activities/Notes:</b></p> <p><u>Tamuning No. 2 Reservoir and Tamuning Booster Pump Station</u> 90% design submitted. Plans are under review by GWA.</p> <p>Per Bobbie, property acquisition letter for Lot 1, Block 5, Tract 1427 has been signed by GM. Property purchase is underway.</p> <p>Parceling map is being prepared.</p> <p>Archaeological survey is pending archaeologist schedule. Biological survey completed. GHD was able to get a hold of John Mark Joseph of SHPO. The archaeologist will begin preparing of the AMDP for submittal to SHPO.</p> <p>Designer is having issues with contacting the sub to perform the archaeological survey.</p> <p>Need approval from GIAA/GEPA for GWA to abandon monitoring well.</p> <p>No update from GEPA. GWA will include a separate bid item for the abandonment of the monitoring well. Once the cost has been received, the cost will be charged to GIAA via existing agreements.</p>	<p><b>Completion Date:</b> Completion will be in line with construction completion.</p>

	<p>GHD moving to 100% design set.</p> <p>100% plans have been submitted on 07/08/2022. GWA to prepare documents for bid.</p> <p><u>Manengggon Reservoir and Access Booster Pump Station</u> 100% design revision submitted. Plans is under review by GWA. Electrical/instrumentation review complete.</p> <p>GWA 100% review completed.</p> <p>Biological Assessment report completed. Archaeological report will need to be expanded. Pending archaeologist schedule for additional site visits. GHD/SEARCH is coordinating with SHPO on what will be required. Historical artifacts found at the adjacent lot. Response received from DPR/SHPO. Designer is attempting to contact archaeologist to finish work plan. Archaeologist has been unresponsive.</p> <p>SEARCH is working on the updated report for submission to SHPO. Onsite monitoring will be required during excavation phases during the construction phase.</p> <p>Archaeological monitoring will be included in the Construction Management contract.</p> <p>Once GHD has complete the Tamuning Reservoir design. Both Tamuning and Manengggon Reservoirs will be packaged together for bid. IFB is tentatively scheduled for 06/22.</p> <p>100% plans submitted to GWA on 07/08. GWA to prepare documents for bid.</p> <p><u>Piti Reservoir</u> DCA and GHD are working to put the bid package together. DCA has already completed the major steel tank repair plan and specifications. GHD is working on site utility plan and specifications.</p> <p>GWA has not submitted the Right of Way application to National Parks Services yet. GWA has received the final Dept. of Agriculture consultation response letter. Biological Assessment report has been completed. Archaeological report needs to be completed before ROW application can be submitted.</p>	
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	<p>Waiting on National Park Service to allow Archaeologist to go onsite to perform survey. GWA did a follow up on this request. National Park Service sent the request to their national office for review and approval. GWA is following up with NPS on request to enter site to conduct archaeological survey.</p> <p>GWA has been following up with NPS on response to enter property to conduct archaeological survey. EOR to contact SEARCH to revise archaeological shovel test locations and resubmit to SHPO. SEARCH has been unresponsive on the report. EOR to follow with SEARCH.</p> <p>GHD will contact Parks and Recs to step up meeting between GHD, DPR, GWA and SEARCH to discuss shovel test locations.</p> <p><u>A23-A25 Deepwell (PFAS Treatment)</u> A23 and A25 MOU signed by DPW and GWA.</p> <p>100% plans and specifications have been submitted to GWA. Planning/Grants is following up with US Army Corp of Engineers for their review and comment. GWA is preparing bid documents concurrently.</p> <p>Grants Section still needs approval from Army Corp before USDOJ can issue the grant award and conditions. Grants Section is actively working with Army Corp for clearance.</p> <p>Grants is working with Army Corp for public commenting.</p> <p>Fish and Wildlife is requiring a full-time biologist to be onsite to monitor work during construction. GWA has retained a biologist to perform a site survey prior to construction. The requirement for a full-time biologist may be waived pending the outcome of the site survey.</p> <p>Awaiting comments from US Army Corp on the biological report.</p> <p><u>Tumon No. 1, Hyundai, Chaot No. 2 Reservoir</u> Under construction. See Tumon no. 1, Hyundai, Chaot no. 2 Reservoir Construction for update.</p>	
CO 29 (b)(4)	Engineering design services	



Project Description:	The design services will consist of preparation of plans, specifications, and estimates (PS&E), which includes Basis of Design, design calculations, hydraulic modeling (EPANET), computational fluid dynamic modeling (CFD), construction schedule, topographical survey, property research, property mapping, geotechnical engineering, cultural resource inventory and evaluation of historic resources, hazardous materials survey, construction documents, design drawings in Auto CAD, relevant permit, construction bid support service, and response to request for interpretation/information during construction The tank locations are Hyundai, Pulantat, Chaot #2, Tumon #2, Piti & Tumon #1.
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<b>DESIGN</b> PW 05-15	<b>Asan Springs Rehabilitation Design (HDR)</b>	<b>Start Date:</b> August 24, 2016
82% Complete	<p><b>Activities/Notes:</b></p> <p>HDR submitted a letter to NPS to coordinate the archaeological survey requirements with SHPO. HDR submitted SHPO Letter to NPS for review on 05/29/2021; first comments 07/01, submitted revised SHPO letter 07/12, additional comments 08/09, and submitted final revision 09/15; NPS (Tim Clark) submitted to SHPO 10/20, SHPO responded on 12/28, HDR and NPS reviewing.</p> <p>Biological survey permit from NPS issued on 01/22/2021, and completed on 02/10 at Asan Springs. Preliminary findings from HDR led to the discovery of snails around the project site. Draft of biological survey has been submitted to NPS for review as of 03/29. NPS comments received on 06/04. Final report to NPS sent on 06/12. Had meeting with USFWS, DOAG, NPS and GWA to discuss 10/22 and additionally on 11/30; HDR submitted draft Biological Assessment request to NPS for review before it can be sent to USFWS, and Public scoping document draft still under review with NPS. NPS still reviewing both documents. Affects Section 106 Letter.</p> <p>Environmental Consultation request sent to DOAG and GEPA on 03/15/2021 by Designer. Sent GWA signed follow-up letter to DOAG and GEPA on 06/22. DOAG responded on 07/01, but letter did not reach GWA Engineering until 08/04. GEPA responded on 08/11. Designer reviewing now and will respond accordingly.</p> <p>Biological Assessment sent to USFWS for their review on 03/10/2022. USFWS sent back comments on 03/25/2022 and further discussion is needed between GWA, HDR, NPS, and USFWS on snail monitoring during construction.</p> <p>Public meeting scheduled on 04/19/2022 at Asan mayor's office 6pm. Comments from the meeting will be recorded and implemented into the Environmental Assessment (EA).</p> <p>Draft EA is ongoing with HDR and NPS.</p> <p>HDR is providing additional comments from USFWS into the Biological Assessment and HDR plans to schedule another meeting with USFWS after May to discuss further.</p>	<b>Completion Date:</b> June 2022
	Engineering design services	

Project Description:	<ul style="list-style-type: none"> <li>- Perform site visits and condition assessment for site conditions to determine demolition and rehabilitation requirement, process equipment condition, structural condition, and electrical system. Site condition assessment shall include all disciplines to execute the project.</li> <li>- Review and validate the current property boundary information to confirm the available space for the project development.</li> <li>- Perform an environmental impact study and prepare all required permits as needed.</li> <li>- Perform an archeological and historical resources study to identify potential impact to the project, prepare all required permits as needed.</li> <li>- Coordinate with Guam Historic Resources Division State Historic Preservation Office (SHPO) on historical resources study. Prepare all necessary reports and documents as required by SHPO.</li> <li>- Coordinate with Guam Department of Agriculture, Division of Aquatic and Wildlife Resources (DAWR) on vegetation clearance. Prepare all necessary reports and documents required by DAWR.</li> <li>- Identify the existing and projected service area, period of design.</li> <li>- Identify and recommend conceptual water treatment system.</li> <li>- Perform a Class 4 engineering cost estimate according to the American Association of Cost Engineers (AACE) International Cost Estimate Classification System for construction fee. Cost must include all disciplines, permit, construction and administration that are necessary to execute the project. All costs will be in current dollars and escalated to the estimated midpoint of construction.</li> </ul>
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<b>CONSTRUCTION MANAGEMENT</b> PW 12-04, PW 12-06 AND PW 09-11	<b>Central Tank Phase I (Chaot #2, Tumon #2, Hyundai) Construction Management (TG Engineers, PC)</b>	<b>Start Date:</b> December 2017
95% complete	<b>Activities/Notes:</b> As of 01/01/2021, GWA Water CIP Engineering will take over CM duties for remaining work. CM will be onboard for limited services – Eadoc project software management and conducting meetings/meeting minutes.  GWA received revised CO no. 2 for review and currently under processing by GWA.  Change Order approved.  GWA is awaiting close out documentation from TGE.  GWA has followed up with CM on close out documents.	<b>Completion Date:</b> December 2021
N/A	Construction Management services	
Project Description:	The work performed under this project procurement shall consist of Construction Management and Inspection Services for the construction of three water reservoirs; 0.5MG Chaot #2, 1MG Tumon #2 (Nissan) and 1MG Hyundai. The overall goal of the Construction Manager (CM)	

	is to manage the entire construction process so that the project can be delivered efficiently and professionally.	
<b>CONSTRUCTION</b> PW 12-04, PW 12-06 AND PW 09-11	<b>Central Tank Phase I (Chaot #2, Tumon #2, Hyundai) Construction (AIC)</b>	<b>Start Date:</b> February 8, 2018
91.2% Complete	<p><b>Activities/Notes:</b>  <u>Tumon No. 1</u>  Tumon no. 1 online – 08/20/2020.</p> <p>Working on St. John's PRV. Final outage completed on 09/02/2021. Work remaining is pavement restoration. Pavement restored.</p> <p>Pale San Vitores PSRV and FM Outlet interconnect line is 66% complete. Interconnecting line has been completed. Contractor will begin on new PSRV and flow meter vault on the 12" line.</p> <p>CCR submitted by the Contractor for the additional potholing, paving, and newly discovered 8 in. interconnect. CCR signed.</p> <p>Contractor is working on the 12" PSRV and flow meter vault.</p> <p>16" PSRV vault will need modifications due to existing vault condition. Project team is proposing to move the flow meter and PSRV to the center lane. DPW should be amendable to the changes since we are moving away from the main roadway.</p> <p>SCADApaks are near completion. Designer to coordinate with ArcSine to perform programming and testing prior to shipment.</p> <p>Awaiting CCR scope of work from contractor to move vault to center lane. We anticipate the CCR to be submitted 05/04/2022.</p> <p>CO no. 07 issued for miscellaneous site working, including San Vitores piping and vault modifications.</p> <p>Contractor has completed 12" bypass line and interconnecting lines at San Vitores Road. Contractor to move work to the center lane for prv and meter vault construction (4 vaults).</p> <p>SCADAPacks for all sites are currently being programmed (Seattle, WA). After completion of programming, the SCADAPacks will be tested and shipped to Guam.</p>	<p><b>Completion Date:</b> TBD (Completion date has passed. Pending time extension for permit delays.)</p>

	<p><u>Barrigada Heights No. 1 (Hyundai)</u> Barrigada Heights no. 1 online – 10/09/2020. Booster pump skid arrived. Contractor is actively working on installing the pump skid and associated equipment.</p> <p>Temporary piping installed at the Hyundai tank. Pressure testing completed. Working with Contractor and GWA Operations to put portion of line into service.</p> <p>Contractor is working on correction to the electrical system. Awaiting signed drawings from EOR to submit to DPW for approval.</p> <p>Contractor to submit a commissioning plan for the BPS.</p> <p>Working on design plan to permanently use the Steel Temp Tank. Additional funding will need to be identified for the work. Decision has been made by GWA to not re-pipe the site.</p> <p>Awaiting stamped drawings from EOR for submission to DPW for building permitting. Civil drawings have been signed. Pending electrical stamp.</p> <p>Electrical drawings stamped. Guam Peals Board is requiring a mechanical stamp for plumbing sheets. EOR has been notified.</p> <p>Guam Peals Board has accepted the revised plans. Plans are back with DPW for final approval. Once we receive DPW's approval, GPA can connect the permanent power. Testing and commissioning can begin once this is completed.</p> <p>Contractor is scheduling the Grundfos booster pump system commissioning agent to be on island the first week of August 2022.</p> <p><u>Barrigada</u> Contractor working on electrical for booster and PRSV station.</p> <p>GPA addressed the incoming unbalanced power. Contractor confirmed that power issue has been resolved.</p> <p><u>Chaot No. 2</u> Chaot No. 2 tank online – 09/02/2020.</p>	
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	<p>Contractor working on A-series well, Dero Rd connection to Leo Palace line, chlorination system improvements and miscellaneous improvements.</p> <p>Tank distribution and Leo Palace line has been completed.</p> <p>Two more outages are needed to complete line work on main roads. Awaiting GWA operations to inform Engineering on outage schedule. Two remaining outages are for Route no. 4 valve changeout and disconnection of wells at Spring Lane.</p> <p><u>Barrigada No. 2</u> DN Tanks completed internal repairs.</p> <p>Negotiating scope and cost with Contractor to repair internal pipe coating.</p> <p>Barrigada Tank No. 2 undergoing chlorination for service.</p> <p>Barrigada Tank No. 2 online on 03/08/2022.</p>	
	Construction Services	
Project Description:	The work performed under this project procurement shall consist of Construction of three water reservoirs; 0.5MG Chaot #2, 1MG Tumon #2 (Nissan) and 1MG Hyundai. Some piping work off site from the reservoir is also required to ensure the reservoirs function optimally.	

<b>CONSTRUCTION MANAGEMENT</b> PW 09-11	<b>Northern and Southern Tank Phase I (Santa Rosa, Sinifa, Santa Rita) Construction Management (GHD)</b>	<b>Start Date:</b> April 2018
<p>Completion:</p> <p>Santa Rita - 100%</p> <p>Santa Rosa - 100%</p> <p>Sinifa - 100% (billing)</p>	<p><b>Activities/Notes:</b> CO no. 1 issued.</p> <p>Santa Rita NTP issued to CM on 12/14/2020.</p> <p>Santa Rosa NTP issued to CM on 01/11/2021.</p> <p>CM providing standard CM services.</p> <p>CCU Resolution to increase funding has been submitted to the CCU for July 2022 session. Once the Resolution has been approved, a change order shall be issued to the CM to extend CM services.</p>	<p><b>Completion Date:</b> Santa Rosa: 455 days from NTP</p> <p>Santa Rita: 485 days from NTP</p> <p>Sinifa: 425 days from NTP.</p>
N/A	Construction Management services	

Project Description:	The work performed under this project procurement shall consist of Construction Management and Inspection Services for the construction of three water reservoirs: 1MG Santa Rosa, 1MG Sinifa and 1MG Santa Rita. The overall goal of the Construction Manager (CM) is to manage the entire construction process so that the project can be delivered efficiently and professionally.
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<b>CONSTRUCTION</b> PW 09-11	<b>Northern and Southern Tank Phase I (Santa Rosa, Sinifa, Santa Rita) Construction (AIC)</b>	<b>Start Date:</b> October 2019
	<p><b>Activities/Notes:</b>  <b>Santa Rosa Reservoir and BPS:</b>  New tank foundation, retaining wall, vault, site piping, detention basin, and site piping work are ongoing.</p> <p>All tank walls and columns have been poured. Contractor is working on the tank roof. Roof pour is scheduled for the end of February.</p> <p>Contractor to resubmit CCR for the booster pump station changes.</p> <p>CCR for Santa Rosa BPS pump revisions has been signed.</p> <p>Tank roof poured on February 25<sup>th</sup>. Ongoing yard piping, vault, electrical, and all other general work.</p> <p>Tank shotcrete completed. DN Tanks installing appurtenances.</p> <p>Ongoing yard piping, vault, and other miscellaneous work.</p> <p>Temporary pump station nearing completion.</p> <p>Tank completed. DN Tanks is working on minor work inside tank.</p> <p>Ongoing yard piping, vaults and other miscellaneous work.</p> <p>Temporary pump station piping connections have been completed.</p> <p>Final inspection of tank interior has been completed by GWA. Contractor to work on punch list items (grinding taper tie hole patches for smooth surface) prior to putting tank online. Tank is tentatively scheduled to be placed online August 2022.</p>	<p><b>Completion Date:</b>  Santa Rosa Final Completion – February 13, 2022</p> <p>Santa Rita Final Completion – March 15, 2022</p> <p>Sinifa Final Completion – January 14, 2022</p>

	<p>GWA engineering and operation has tested the temp bps. Temp bps is acceptable; however, the temp bps still has to be fully commissioned by the Contractor and its supplier/tech JMI.</p> <p>Ongoing yard piping, vault, electrical work.</p> <p><u>Santa Rita Reservoir:</u> New tank foundation preparation, pile rebar cage, detention basin, vault, and site piping are ongoing.</p> <p>Contractor drilled the first pile hole. Hole experienced partial collapse at 20'. Full drill depth is 40'. Per the geotechnical engineer, the current auger machine will not work with these soil conditions. A hollow stem auger is needed. Marianas Drilling who owns a hollow stem auger is not available until January 2022.</p> <p>Contractor is preparing package and work plan to install pre cast piles in lieu of CIDH (cast-in-place drilled holes). See update on design section.</p> <p>Upper roadway to NPS property is collapsing. This may be due to heavy rainfall and excavation of new water line downhill. Design/CM team to evaluate the issue and prepare solution for contractor to execute.</p> <p>GWA sent a notification letter regarding the slope failure to TGE. TGE does not agree with the cause of the slope failure. TGE presented 4 alternatives to address the slope failure on GWA property. TGE to submit recommendation memorandum this week.</p> <p>TGE (EOR) has been actively working on solution for the slope on GWA's site. Geotechnical engineer has performed 4 additional borings for new access roadway, detaining basin, and existing roadway. The proposed solution is to reroute the site access around basin 1. Basin 1 will be filled in against the new road. Basin 2 shall be expanded. Site piping and electrical will be routed along the new access roadway.</p> <p>GHD/ENGEO (CM) is in the permit processing to install 2 PVC pipes to monitor the landslide. There are two permits – clearing and grading and drilling. Drilling permit has been approved. Awaiting clearing and grading permit.</p>	
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	<p>Adjacent land owner contacted Senator Telena Nelson's office. A site visit was conducted by GWA, DPW, AIC, Land Owner, Senator's office. Temporary roadway for Mr. Flores has been completed. Agreement with Mr. Flores for use of access road with ATV has been signed.</p> <p>Access/ATV agreement for Ritter/Flores family has been drafted.</p> <p>Access/ATV agreement signed by Ritter and Flores family.</p> <p>GWA and AIC is awaiting final design and specs from TGE.</p> <p>AIC has assembled several sample pre cast rebar. No issues with fabrication of pre cast rebar cages. Trial batching for pre cast concrete mix completed. AIC will proceed once the final design and specs have been submitted by TGE.</p> <p>TGE will start on redesign of existing roadway, pipe line and electrical conduit realignment. TGE will consider the results of the pvc monitoring pipes (to be installed week of 4/18) for the slide failure.</p> <p>AIC will prepare grade for APDI to access site to install 2 monitoring pvc pipes.</p> <p>PVC monitoring pipes have been installed.</p> <p>Contractor is working on re-fabricating the test pile cages due to the increase in length required by the geotechnical engineer. Test piles have increased from 40' to 55'.</p> <p>Contractor to proceed with ordering additional pipe fittings for the water line re-routing.</p> <p>Test pile driving operation will begin the week of 07/25/2022. Several piles have been mobilized to the site. The pile driving location plan is under review by the EOR and Geotechnical engineer. Review is expected to be completed the week of 07/18.</p> <p><u>Sinifa:</u> Foundation and retaining wall complete.</p> <p>Core wall nos. 1-6 have been poured.</p> <p>Piping, vault, and other general site upgrades are ongoing.</p>	
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	<p>Core wall no. 7 has been poured. Core wall no. 8 pour has been delayed for several weeks due to high winds at the site.</p> <p>Ongoing site work such as retaining wall, vaults, etc.</p> <p>Core wall nos. 8 and 9 have been poured. One more column is schedule for pour next week. Contactor working on control building, piping, vaults, etc.</p> <p>Tank roof has been poured. Tank has been pre-stressed. Shotcrete completed. Shotcrete is currently curing.</p> <p>Ongoing yard piping, vault, electrical work.</p> <p>Tank is expected to be placed online the latter part of August 2022.</p>	
Project Description:	<p>Construction Services</p> <p>The work performed under this project procurement shall consist of Construction Services of three water reservoirs: 1MG Santa Rosa, 1MG Sinifa and 1MG Santa Rita. Some piping work off site from the reservoir is also required to ensure the reservoirs function optimally.</p>	

<b>CONSTRUCTION</b> PW 05-16 USEPA M9692619	<b>Pressure Zone Realignment and Tank Repair-Replacement – Phase I (Sumitomo)</b>	<b>Start Date:</b> December 17, 2019 (Notification of Award)
52.2% Complete	<b>Activities/Notes:</b> Construction work active at all sites. Construction meetings are ongoing.  Clara: Outage for Clara PRV 8" line connection completed on 03/04/2022. Should be the last outage required for this site. Onsite work for electrical installation, backfilling near vaults, etc. ongoing. GTA conduit damage concern being addressed. Situation was raised to GWA Legal Counsel; <b>SMCC to supply documentation.</b>  Kaiser: <b>Kaiser outage for abandonment of 12" on Rte. 1 complete. 1-2 more pending water outages before site is complete.</b> Onsite work for electrical works, SCADA termination, painting, etc still ongoing.  Carnation: Installation of SCADA panel/ antenna, and fencing around control room ongoing.	<b>Completion Date:</b> March 2022

	<p>Ysengsong: Road re-opened 10/25/2021. SCADA programming and electrical work ongoing.</p> <p>Okkodo: Preparing for PRV 30 outage. Previous target dates for end of March to mid-April 2022 were not met due to Contractor shortage of appropriate cutting materials. Belly saw arrived on-island week of 05/01/2022. Outage pending Ops investigation/ testing. Electrical and civil works ongoing on site.</p> <p>Terao: Outage for installing valves on the 12" line on Rte. 15 has been delayed. Pending Ops <b>preparation of Mangilao reservoir.</b></p> <p>Maimai: <b>Outages for connecting new vault(s) and PRV's complete. On-site works for electrical conduits/panels, concrete slab pours, etc. still ongoing.</b></p> <p>Astumbo &amp; Yigo: Contractor in-house SCADA programming and testing ongoing.</p> <p>SMCC payment no. <b>10 in process. Received estimate of additional work proposed to SMCC on 07/08/22.</b> A change order for other additional work and time extension is also in the works. Current estimated time of project completion is <b>November 2022.</b></p>	
N/A	Construction Services	
Project Description:	The work performed under this project procurement shall consist of Construction Services for the installation of control valves (PRVs, PRSVs), piping, and related electrical upgrades to properly control and measure system flow between zones.	

<b>DESIGN</b> PW 05-12	<b>Pressure Zone Realignment and Tank Repair-Replacement (GHD)</b>	<b>Start Date:</b> August 2018
<p>Design will be done in Phases.</p> <p>Phase I - 100% (Design)</p> <p>Phase II - <b>100%</b> (Design)</p> <p>Phase III - 30%</p>	<p><b>Activities/Notes:</b> Designer submitted Phase II 60% plans on 08/04/2020 and reviewed by Water CIP Engineering team on 08/11/2020.</p> <p>Engineering, Operations and designers performed several site visits and investigations for Phases II and III. Resolution for CO no. 3 on Design services for Nimitz Hill Waterline Replacement and Phase II CM services is in the works approved 02/29/2021. CO no. 3 signed by GHD on 03/25 and is with Accounting for processing.</p>	<b>Completion Date:</b>

	<p>Phase II 100% plans is scheduled to be submitted by the end of February. Phase III 30% has been submitted for review.</p> <p>Phase II plans nearing completion. Two additional sites were added.</p> <p>Phase II shall be grant funded. Project team working with Grants to send out scope and plans to local/federal agencies for commenting, i.e. SHPO, Fish and Wildlife, etc. <b>Phase II design is 100%. Project is ready to bid once clearances from the local/federal agencies have been provided and addressed.</b></p> <p>Phase III work ongoing. EOR to schedule meeting with engineering and operations to discuss sites.</p> <p><b>Phase IV site list has been drafted.</b></p>	
N/A	Engineering design services	
Project Description:	The design project is intended to assess current and recommended pressure zones, and design and install control valves (PRVs, PRSVs) to properly control and measure system flow between zones. Scope also includes setting up pilot DMAs; and design for new or repaired water tanks needed to complete the court order tank requirements.	

<b><u>DESIGN, CONSTRUCTION, CONSTRUCTION MANAGEMENT</u></b> PW 09-11	<b>Tank Repair and Bypass (AIC)</b>	<b>Start Date:</b> May 1, 2020
36% Complete	<p><b>Activities/Notes:</b> Construction contract effective 04/21/2020. NTP issued 05/01/2020 with modified language for work starting onsite.</p> <p><u>Agat-Umatac</u> Agat-Umatac repairs to be completed by 01/31/2022. Remaining work is exterior coating and minor interior paint touch up. Awaiting GEPA approval to place tank back online. Disinfection has been completed. Tank online 02/19/2022.</p> <p><u>Yigo No. 3</u> Yigo no. 3 repairs to be completed by 01/31/2022. Remaining work is welding wall back and performing repairs to the wall. Minor interior coating will be completed this week. Tank is under chlorination for service.</p>	<b>Completion Date:</b> TBD (Dependent on repairs required after inspection)

	<p>Tank placed onsite 03/18/2022, but taken offline due to paint issues. Project team is working to rectify coating issue.</p> <p>Tank has been allowed to air out for 2 weeks. Tank hatches have been closed 05/03/2022. Ops to flush tank floor.</p> <p>Contractor has replaced leaking tank drain valve.</p> <p>Operations to put tank online 07/18.</p> <p><u>Astumbo No. 1</u> Astumbo no. 1 delayed due to presence of lead paint. Change order approved for lead abatement at tank. Scheduling Island Certs to perform further API inspection on tank wall which has active corrosion. Inspection completed. Pending CCR resubmittal for additional wall plate replacement.</p> <p>AIC sand blasted the corroded wall section of Astumbo. Holes are now present. A change order is needed to replace 7 wall pieces. Pending final API report and CCR cost for additional plate repair.</p> <p>Change order issued for the additional wall plate replacement. Contractor has started floor repair.</p> <p><u>Windward Hills</u> Windward Hills repair ongoing. Contractor will begin cutting wall for access into the tank to begin interior repairs – floor replacement, column repair, metal repair, interior coating and other miscellaneous metal repair. Contractor poured the first section of the new concrete tank floor. Repairs ongoing.</p> <p>Portion of new tank floor is completed. Concrete portion of tank floor is nearing completion.</p> <p>Contractor installing anchor chairs and preparing for interior sweep blasting for coating.</p> <p><u>Santa Ana</u> Santa Ana bypass work is ongoing. Pump and motor control no. 1 installed and tested. Pump 2 is scheduled to be tested on Friday, 03/11/2022.</p> <p>Bypass was tested, but the tank outlet valve is leaking. Valve scheduled to be changed out 04/13/2022.</p>	
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	<p>Tank taken offline. Contractor is currently cleaning and preparing scaffolding. API inspector is scheduled for 05/05-10/2022.</p> <p>Repair list submitted to Contractor for pricing. Contractor to submit repair cost the week of 07/18.</p> <p><u>Malojloj</u> Malojloj bypass work ongoing. Work will be split into two separate outages due to the time required to place the system back online. Outage no. 1 completed last week. Outage no. 2 to be rescheduled. Current connection allows for tank bypassing. However, Malojloj bypass will be put into service after Windward Hills, Umatac Subdivision, and Pigua tanks are repaired.</p> <p>Ladda PSRV installed.</p> <p>Bypass ready.</p> <p>Malojloj will be taken down for inspection after Pigua or Umatac Subdivision have been repaired.</p> <p><u>Pigua</u> Gues BPS work ongoing. Contractor installed pump skid. Working on piping and electrical.</p> <p>Pigua PSRV installed.</p> <p>Geus pump skid system has been tested. Full commission scheduled for next week. Hydro pneumatic tank for Pigua BPS scheduled for installation the week of 07/18. Once the hydro pneumatic tank is installed, Operations to schedule to secure tank and run the system off the bypass (booster) system. This is scheduled for the week of 07/25.</p> <p><u>Umatac Subdivision</u> Toguan BPS work ongoing. Contractor working on piping and electrical.</p> <p>Booster pump skid installed. Contractor working on electrical and other miscellaneous site work.</p> <p>Electrical service changes are required. Contractor is currently applying for changes with GPA.</p> <p>Contractor is preparing a CCR for the electrical changes.</p>	
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Project Description:	The work to be performed under this project consist of installing by-pass piping, valves, etc. ahead of certain tank inspection work. The operation of the by-pass will allow the tank inspector to determine appropriate repairs after which the contractor will proceed to repair the tank.
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<b>DESIGN</b> PW 09-02	<b>New Well Site Development - Y-08, AG-10, AG-12 (GHD)</b>	<b>Start Date:</b> September 2018 (Extension)
99% Complete	<b>Activities/Notes:</b> 100% plans and specifications were submitted on 06/04/2020. CO no. 8 to complete final plan set and engineer estimate is under negotiation with GHD. Updates to plans pending changes made to the A-series wells.	<b>Completion Date:</b> TBD
N/A	Engineering Design Services	
Project Description:	The design project is intended to design 3 new wells to increase production capacity. The design services will consist of preparation of plans, specifications, and estimates (PS&E), which includes Basis of Design, design calculations, construction schedule, construction documents, design drawings in Auto CAD, relevant permit, construction bid support service, and response to request for interpretation/information during construction.	

<b>CONSTRUCTION</b> PW 14-01	<b>Fire Hydrant Replacement Phase I (Mega United Corporation, Ltd.)</b>	<b>Start Date:</b> October 19, 2019
71% Complete	No construction activity. Awaiting for the arrival of GWA FH materials.	<b>Completion Date:</b> April 23, 2022
Project Description:	The work performed under this project consist of replacing the dry barrel fire hydrants with wet barrel type fire hydrants. The replacement will involve removal of defective fire hydrant laterals, gate valves, hydrant stem and barrel and other appurtenances necessary to complete the project.	

<b>CONSTRUCTION</b> PW 05-07	<b>Groundwater Well Production Meter Replacement Project (Giant Construction)</b>	<b>Start Date:</b> April 29, 2020
64.91% Complete (Percentage completion was reduced due to incorporation of CO no. 5)	<b>Activities/Notes:</b> Contractor completed installation of above-ground discharge piping for deep wells: Y-23, Y-09, Y-17, Y-07, F-15, HGC-2, M-18, D-26, Y-20, F-18, Y-19, F-13, D-27, D-25, Y-12, Y-18, F-17, Y-14, Y-21A, Y-10, Y-22, A-13, EX-05, A-10, Y-15, H-01, D-01, AG-02, F-02, and F-04. To date, 30 deep wells were completed as required by the project scope.  A 'Substantial Completion' inspection was scheduled on 10/11/2021 and corrective actions were completed on 11/29.  A CO no. 4 was approved on 10/20 extending the contract date to 01/14/2022 allowing enough	<b>Completion Date:</b> July 9, 2022

	<p>time to process CO no. 5 that will add 15 critical production wells listed in Additive Bid no. 1 to the existing contract.</p> <p>The request for CO no. 5 was approved by CCU on 10/26/2021 and PUC on 10/28/2021.</p> <p>A formal CO no. 5 was routed to Accounting on 11/03 and was signed by the GM on 12/06.</p> <p>Contractor was issued the signed CO no. 5 and was advised to proceed ordering the materials (except water meter) for the next 15 wells as per approved shop drawings dated 11/15/2021. Contractor submitted a new model version (5W8C) of Endress Hauser Promag W800 and not the older version 5W8B used for the first 30 wells. Approval of meter submittal is delayed, as GWA is making sure that the frequency bandwidths offered in the EH electromagnetic flowmeter can be supported by cellular service providers on island. Service providers are not very responsive to our request for information.</p> <p>CO no. 6 extending the contract time by 215 calendar days was approved on 02/02/2022.</p> <p>About 90% of the above ground piping materials are already on island. The water meter submittal was only approved on 03/17 after service providers confirmed their cellular services support the new version of promag W800 meter.</p> <p>Estimated shipment date of meters is 05/11. Estimated time of arrival of meters, air relief valves and butterfly vales to Guam is 07/30. The Covid-19 pandemic and global supply shortages affected the material production and delivery process.</p> <p>On 06/07, Contractor submitted a change order proposal to extend the contract time due to delays on arrival of the meters and valves. CO no. 7 extending the contract time for an additional 120 calendar days is being processed.</p>	
	Construction services	
Project Description:	Work to be performed under this project shall consist of replacing the production well meters and associated well head piping. Construction management is performed in-house.	



<b><u>DESIGN AND CONSTRUCTION</u></b> PW 09-03	<b>Casimiru Waterline Replacement Project (Giant Construction)</b>	<b>Start Date:</b> February 13, 2021
99% Complete	<p><b>Activities/Notes:</b></p> <p>The final design drawings were approved 08/03/2021. Contractor submitted Building Permit application to DPW on 08/05.</p> <p>On 08/11, the permit clearance was submitted to Historic Preservation Office (HPO), DPR. On 09/30/21, the Contractor received Certificate of Approval from HPO. DPR requires an Archaeologist to conduct Research Design for Archaeological Monitoring and Discovery Plan. SHPO states this project has the potential to affect historic properties that are 840 feet away.</p> <p>A letter was sent to SHPO asking for clarification on how the project will affect the historic properties located 840 feet away. SHPO has not responded to this letter.</p> <p>All material piping materials arrived on island. The Contractor is ready to proceed with the excavation as soon as the permit is issued.</p> <p>The GM met with Acting DPR Director on 10/26 and discussed the concern re-requirement for AMDP. GM followed the discussion with an email the same day.</p> <p>DPR signed the HEP on 11/15. HEP and Building Permit was released first week of December 2021.</p> <p>Contractor submitted a claim for the 90-day time extension on 01/25/22 due to late approval of permits. CO was approved on 02/04 extending the contract time to 05/09.</p> <p>The project sign was installed. As of end of February 2022, the following were completed (1) installation of 2,250 out of 2,560 linear feet of pipe, (2) service laterals stub-outs to all existing meters (3) all new and existing fire hydrant reconnections, and (4) pressure testing of water main including service lateral stub-outs.</p> <p>By end of March 2022, 2,547 feet out of 2,560 feet of 6-inch waterline has been installed. Contractor conducted another pressure testing due to leak. After completion of pressure testing, Contractor restored damaged a.c. pavement. Remaining works are disinfection of the waterline and service laterals, connection of</p>	<b>Completion Date:</b> May 9, 2022

	<p>existing PRV to new waterline and tapping to existing waterline for transfer of service.</p> <p>Disinfection of new waterline was completed on 04/28. Tapping of new waterline to existing waterline is delayed due to failure of GTA to the clear the tapping location of their cables because of manpower issue.</p> <p>On 05/13, project was substantially completed. All existing service laterals and existing PRV were disconnected from the old waterline and reconnected to new waterline. An outstanding punch list created during inspection was completed on June.</p> <p>On 06/08, Engineering requested the Contractor to submit a change order proposal to relocate meters on the private properties to the road right-of-way, and lower the meter/valve boxes on the right-of-way to the existing grade. Contractor submitted its proposal on 06/20. On 06/30, Contractor was requested to revise its proposal and include a schedule to identify estimated completion date.</p>	
	Design and Construction services	
Project Description:	<p>Work to be performed under this project shall consist of design and construction of existing ACP replacement. Approximate length of existing waterline to be replaced is 2,750 feet. Construction management is performed in-house.</p>	

<b><u>CONSTRUCTION</u></b> PW 09-03 MP-PW-PIPE-12	<b>Tai Road/S-13 and Canada-Toto Loop/Blas Street Waterline Replacement (Giant Construction Corporation)</b>	<b>Start Date:</b> May 17, 2021
10.25% Complete	<b>Activities/Notes:</b> Replacement of waterline along Blas St. has been completed and pressure tested except for reconnection to the existing waterline. Reconnection of existing laterals to the existing 12-inch PVC waterline was halted pending GTA issuance of work clearance.  CO no. 2 pre-approved by the CCU and PUC to replace waterline along Taison Road is being processed to include the extension of contract completion date incurred by the delay in obtaining permit from DPR-SHPO.  Former GWA project engineer has retired. Project has been assigned to Jessey Mendiola.  Disinfection plan recently approved by GEPA; schedule for disinfection and tying in of laterals pending. GWA and CM will be present to witness.	<b>Completion Date:</b> June 16, 2022
Project Description:	Work to be performed under this project consist of replacing an existing 6-inch asbestos cement pipes (ACP) with new 8-inch polyvinyl chloride (PVC) water line along Tai Road; replacing an existing 2-inch water line with a new 6-inch water line along S-13; disconnecting existing branch water lines, service connections and other water appurtenance connections from an existing 6-inch ACP water line and reconnect to existing 12-inch PVC water line along Canada-Toto Loop; and replacing an existing 6-inch ACP water line with new 6-inch PVC water line along Blas Street.	

<b><u>CONSTRUCTION MANAGEMENT</u></b> PW 09-03	<b>Tai Road/S-13 and Canada-Toto Loop/Blas Street Waterline Replacement (DCA)</b>	<b>Start Date:</b> May 7, 2021
10.25% Complete	<b>Activities/Notes:</b> Assisting project contractor to obtain permits and clearances from various related agencies.	<b>Completion Date:</b> Based on 13-month continuous construction period
Project Description:	Work to be performed is awarded under Task Order no. 2 for CM services under the ID/IQ For Professional Project Management and Construction Management Services contract with DCA. Work under this task order is to provide construction management and inspection services for the Tai Road/S-13 and Canada-Toto Loop/Blas Street Waterline Replacement project.	

<b><u>PROJECT MANAGEMENT, PROCUREMENT SUPPORT &amp; CONSTRUCTION MANAGEMENT</u></b> MP-PW-SWTP-03	<b>Ugum Water Treatment Plant Rehabilitation (DCA)</b>	<b>Start Date:</b> July 6, 2021
100 %Complete (Basic Services)  66% Complete (Based on Total Contract Amount)	<b>Activities/Notes:</b> The draft Assessment and Procurement Report and Bid Schedule were submitted on 08/19/2021. Work on gathering more information to complete the assessment-procurement report and bid schedule is ongoing.  Coordination with material suppliers has started. This coordination work is for the purpose of preparing the specifications.  Draft Procurement (Bid) package was submitted 10/06.  Review comments sent to DCA on 10/26.  After discussion with Ugum Operators, additional comments were sent to DCA on 10/27, including furnishing 2 1-ton chlorine containment vessels inside the chlorine room.  Because additional comments were not received on time, the October target date for the final submittal was moved to first week of November 2021.  A second invoice for \$61,498.20 was approved on 10/18 bringing the total payment to \$120,925.20.  DCA submitted on 12/08/2021 a revised "draft" final submittal that includes Procurement Report, Specifications, cost estimate, and Bid Form. DCA needs confirmation from Operations on some items before submitting a "final" final report.  DCA encountered delay in getting clarification from material vendors regarding questions from Ugum operations. Final submittal was received 02/18/2022 with the revised construction cost of \$4.224M.  On 02/28, a request was sent to Acting Chief Engineer to identify funding source(s) in order to proceed with the rehabilitation project. No funding source(s) has been identified yet.	<b>Completion Date:</b> December 3, 2021 (Delayed as stated in the Activities/Notes)

	<p>GWA and the Consultant had a separate discussion with the DPW building official re-permitting of the project. Per DPW, if Ugum Rehabilitation project will involve replacement of parts and equipment only, building permit will still be required but no need for plans/sketches to be stamped by PE. If the project will involve new improvements, then the plans must be stamped by PE.</p> <p>DCA revised and resubmitted on 04/18 the final submittal to remove new improvement items from the bid documents such as railing and ladder for backwash tank, neutralization tank, and sludge tank.</p> <p>Funding sources for \$4,626,002.65 project cost were identified and waiting for certification.</p> <p><b>The front-end documents of the bid have been prepared.</b></p>	
	Project Management, Procurement Support and Construction Management services	
Project Description:	<p>Work to be performed is awarded under Task Order no. 3 under the ID/IQ for Professional Project/Construction Management Services contract with DCA. Work will consist of assessment/site investigation of existing condition of the plant, preparation of schedule, procurement documents, relevant permits, construction bid support services, and response to request for interpretation/information, construction management services for the plant rehabilitation.</p>	

<b>IN-HOUSE DESIGN AND CONSTRUCTION</b> PW 09-03 <b>36% Complete</b>	<b>Balaku Street and Borja Street Replacement Project (GWA)</b>	<b>Start Date:</b> June 21, 2021
	<b>Activities/Notes:</b> <p>All required clearances for Building permit have been secured. Permit was sent to DPW on 09/29/2021 for final approval.</p> <p>On 10/26, Highway Encroachment Permit section notified GWA that a \$525.00 fee is required before the permit is released. Of this amount \$500.00 is refundable upon satisfactory restoration of damaged pavement.</p> <p>On 10/27, a request was sent to Accounting to process a check to Treasurer of Guam for \$525.00.</p> <p>The separate permit fee assessed by DPW in the amount of \$1,955.25 has been waived.</p>	<b>Completion Date:</b> May 15, 2022 <b>(To be extended by 4 months)</b>

	<p>HEP and Building permits were released on 11/04 and copy sent to Operations. Operations plans to start excavation by mid- January 2022.</p> <p>Operations unable to start the project as scheduled. The HEP was extended for 2 months (from 01/15/2022 to 03/15/2022).</p> <p>GIS/Survey completed establishment of the R-O-W boundary and lot corners.</p> <p>Installation of Balaku waterline is complete except for 2 service laterals. <b>Operations will be returning to complete the 2 service laterals on Balaku and start on Borja waterline installations in July.</b></p> <p><b>The Highway Encroachment Permit was extended for another 4 months, with expiration on 9/15/22.</b></p>	
	Design and Construction services	
Project Description:	<p>Work to be performed under this project shall consist of in-house design and construction of waterline replacement in Balaku Street in the village of Barrigada and Borja Street in the village of Sinajana. Approximately 450 feet of 4-inch waterline will be installed in Balaku Street and 500 feet of 6-inch waterline in Borja street.</p>	

**D. CIP Wastewater Section**

<b>DESIGN</b> WW 09-06	<b>Bayside SPS Improvements Design (EMPSCO)</b>	<b>Start Date:</b>
<b>92% Construction Services</b>	<p><b>Activities/Notes:</b></p> <p><b>Outside Pipe Support – This is an additional work to be included in CO no. 3.</b></p> <p><b>In lieu of CIPP, GWA considered the request of Sumitomo to use 8" diameter ductile iron pipe to rehab the influent discharge pipe. This is a substitution request, the design deviates, Sumitomo to provide Certificate of Design and signed approved shop drawings.</b></p> <p>CO no. 3 is under negotiation to include adjustment of exhaust vents, provision of kick board at railing, <b>time extension</b> and extended overhead.</p> <p>Close out documents underway.</p>	<p><b>Completion Date:</b> <b>July 27, 2022</b> (tentative schedule)</p>
CO #3	Engineering design services	

Project Description:	The intent of this project for an engineering firm to prepare design drawings and specification to upgrade the Bayside Sewer Pump Station given the facility is in major disrepair and the adjacent river is eroding away the access road to the facility which is causing maintenance challenges and install underground power cable due to GPA's concern that existing power pole, located on the bank is at risk of being lost due to storm surges.
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<b>CONSTRUCTION</b> MP-WW-PIPE-01	<b>Yigo Sewer Pump Station Flood Mitigation and Facility Rehabilitation (Ian Corporation)</b>	<b>Start Date:</b> May 3, 2021
10.2% Complete	<b>Activities/Notes:</b> Contractor continues to procure/submit materials/submittals, shop drawings, RFIs, substitution requests for approval.  Contractor submits Billing Invoice no. 2; <b>under review.</b>	<b>Completion Date:</b> May 29, 2022
Project Description:	Work to be performed under this project consist of demolition of existing building features and equipment, including the existing power pole and power meter, plumbing fixtures and piping, water service piping, electrical system, ventilation system, building fascia and monorail beam and construction of rehabilitation and flood mitigation features including structural wall repairs, flood barrier gates, raised louver sills, cantilever monorail beam, elevated platforms, ventilation system, site work, site water piping, utility tie-in connections, protective coatings, electrical system, instrumentation and controls, testing, startup, and appurtenant work.	

<b>CONSTRUCTION MANAGEMENT</b> WW 09-01	<b>Yigo Sewer Pump Station Flood Mitigation and Facility Rehabilitation (DCA)</b>	<b>Start Date:</b> May 3, 2021
12% Complete	<b>Activities/Notes:</b> Second invoice has been approved and remitted.	<b>Completion Date:</b> May 29, 2022
Project Description:	Work to be performed under this project consist of demolition of existing building features and equipment, including the existing power pole and power meter, plumbing fixtures and piping, water service piping, electrical system, ventilation system, building fascia and monorail beam and construction of rehabilitation and flood mitigation features including structural wall repairs, flood barrier gates, raised louver sills, cantilever monorail beam, elevated platforms, ventilation system, site work, site water piping, utility tie-in connections, protective coatings, electrical system, instrumentation and controls, testing, startup, and appurtenant work.	

**E. CIP Engineering Support**

<b>DESIGN</b> EE 09-08	<b>SCADA System for Water and Wastewater Facilities Phase A-1 (AECOM)</b>	<b>Start Date:</b> June 11, 2015
100% Complete (Design) 84% Services during Construction	<b>Activities/Notes:</b> Negotiate changes to the remaining tasks to better align with current state of the system ongoing. Scoping details discussed.  AECOM preparing proposal.  GWA received RFI from AECOM.	<b>Completion Date:</b> November 2017 - Design December 11, 2019 - (Bid and Construction Support)
N/A	Engineering design services	
Project Description:	The A/E firm will design an integrated, robust and secure Supervisory Control and Data Acquisition (SCADA) system for GWA's water and wastewater systems, and to provide support services during bid and construction. The 22 sites will consist of a combination of water facilities such as production wells, reservoirs, booster pump station and wastewater sites include sewer treatment plants and sewer pump stations. Executed by approved change orders, number of sites in original design scope has changed from 22 sites to 19 sites and design of High Water Alarm for 20 critical sewer pump stations has been added. Scope also includes bid and construction support of the design-build project of GPWA SCADA EMS project.	

**F. GIS Section**

<b>MAPPING</b> MC 05-02	<b>Island Wide Survey- (Duenas, Camacho &amp; Ass.)</b>	<b>Start Date:</b> December 2007
99% complete	<b>Activities/Notes:</b> Still on hold for the Tumon no.1 Tank (aka Airport Tank).	<b>Completion Date:</b> October 2019
	Survey services	
Project Description:	The contracted land surveyor is required to conduct title research, property valuation and mapping of property boundaries where GWA facilities are located, including the lots which are not registered under GWA's name.	

<b>MAPPING</b> MC 05-02	<b>Island Wide Survey PH II - (Duenas, Camacho &amp; Ass.)</b>	<b>Start Date:</b> August 30, 2017
80% complete	<b>Activities/Notes:</b> Second Extension Date will be on December 2022.  CO no. 5 was approved on 06/07/2022.	<b>Completion Date:</b> <b>December 2022</b> (Extension Date)
	Survey services	



Project Description:	The work performed under this project procurement shall consist of a professional land surveyor conducting field work to mark corners of existing government properties as a means of severing out portions of the larger property to be deeded to GWA. Surveyor shall also prepare all necessary maps and documents for recording at DLM.
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**G. Permits Section**

PERMITS  
MONTHLY REPORT 2022

	2022												
Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Building Permit	27	47	43	22	10	19							168
Occupancy Permit	11	14	24	8	17	11							85
New Installation	12	25	25	12	25	29							128
Sewer Application	0	4	17	0	4	4							29
Sewer Inspection	0	0	0	0	0	0							0
Private Utility Acceptance	0	1	0	1	0	0							2
Relocation of Water Meter	0	2	3	0	0	0							5
Tapping-Water	0	1	5	1	2	0							9
Tapping-Sewer	0	0	0	0	0	1							1
Clearance-Water	30	17	6	6	47	60							166
Clearance-Sewer	0	0	0	0	0	0							0
Highway Encroachment	13	13	12	12	18	20							88
Verification of Utilities	10	12	14	15	3	9							63
Fire Flow Test	0	3	0	0	0	1							4
Schedule Water Outage	0	0	0	0	0	0							0

NOTE: Completed work orders for each calendar month are reported.

AVERAGE PROCESSING TIME FOR COMPLETION (DAYS)  
FOR THE CALENDAR MONTH OF **JUNE 2022**

Description	2022											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Building Permit	24	13	40	8	11	24						
Occupancy Permit	0	0	0	0	0	0						
New Installation	51	43	69	78	34	26						
Sewer Application	0	0	0	0	0	0						
Sewer Inspection	0	0	0	0	0	0						
Private Utility Acceptance	0	17	0	14	0	0						
Relocation of Water Meter	0	201	168	0	0	0						
Tapping-Water	0	13	126	27	79	0						
Tapping-Sewer	0	0	0	0	0	110						
Clearance-Water	3	8	20	3	5	8						
Clearance-Sewer	0	0	0	0	0	0						
Highway Encroachment	0	0	2	0	0	0						
Verification of Utilities	10	12	35	21	22	3						
Fire Flow Test	0	3	0	0	0	5						
Schedule Water Outage	0	0	0	0	0	0						


#### **H. USEPA SRF Project Status Report**

United States Environmental Protection Agency State Revolving Funds (USEPA SRF)

- Projects listed below that are noted to be in the procurement phase will follow the “Percentage Key” below.

Percentage Key:

100%	Approved by GM
99%	Signature required from either Accounting/Legal/GM
98%	Processing engineering service or construction contract (with legal)
95%	Request for CCU approval (GM/engineering)
90%	A/E fee negotiation or contractor bid evaluation (engineering)
80%	Selected A/E or Conducted bid opening (engineering)
70%	Advertised RFP/IFB (engineering)
60%	RFP/IFB Package under legal review
50%	RFP/IFB Package completed (engineering)
Less than 50%	Project Scope of work development in progress

- Red text anywhere indicates a change from the last report.
- Cells highlighted in green  indicate contract amount certified and active project.

NOTE: Table below only reflects SRF projects that are still active. All other projects previously shown are on prior reports.

GWA Work Session - July 19, 2022 - GM REPORT

Project	Project Description	Project Manager	Phase		Start Date (NTP Issued)	Anticipated Completion Date	Contract Amount	Contractor	Status as of 07/11/2022
3	Asan-Adelup-Hagatna Route 1 Sewer Line Rehabilitation and Replacement	Brown & Caldwell	Design	2	12/11/2015	3/30/2017 for Design requirements	\$ 1,780,210.00	HDR	HDR assisting as needed.
			Construction	2	11/9/2018	6/30/2021	\$6,275,783.00	InfraTech	Archaeological report to be done upon completion of Phase II by CoreTech/Hawaiian Dredging. CO no. 6 executed. CO no. 7 signed.
			Construction (Phase II)		1/26/2021	4/21/2023	\$ 8,742,000.00	CoreTech/Hawaiian Dredging	CO no. 8 signed and sent to GWA for execution. CO nos. 5 – 10 signed by CTHD and sent to GWA for signature for signature. CO nos. 11 – 13 signed by CTHD and sent to GWA for signature.
			CM (Phase II)	2	8/3/2017	3/8/2020	\$ 870,610.41	DCA	Final inspection held on 06/13. All deficiencies have since been corrected. Asphalt replacement to be scheduled after July festivities as per DPW. Working with Contractor on schedule, submittals, responding to RFIs, and assisting in the negotiations of PCO costs. Fee proposal for CM services for Phase II submitted and accepted by GWA. CO to add CM for Phase II executed.
		GWA Chief Engineer	Project / Contract Management		1/22/2020	12/31/2021	\$ 476,050.00	B&C	Executed under the IDIQ contract, Task Order 3 (TO3) authorizes Brown and Caldwell to manage and complete the construction of Rte. 1 Sewer Line Rehabilitation and Replacement project in conformance to the contract requirements. Amendment 1 to TO3 is executed to increase scope, cost and schedule to manage and complete the construction of Phase 2. On 09/28/2021, the CCU approved resolution 29-FY2021 authorizing to process Amendment 2 to TO3 to increase time and funding to continue to manage and complete the construction project, and send a notification to the PUC. Amendment 2 to TO 3 approved by Mr. Budasi on 12/15/2021. Approved Amendment sent to John Riegel. CIPP lining is complete. Asphalt resurfacing and guard rail installation are the only punch list items to complete. Substantial completion was 06/13/2022.

GWA Work Session - July 19, 2022 - GM REPORT

Project	Project Description	Project Manager	Phase		Start Date (NTP Issued)	Anticipated Completion Date	Contract Amount	Contractor	Status as of 07/11/2022
7	Groundwater Wells Rehabilitation (F-3, A-2, A-7, A-12, D-5)	G. Watson	Design	6	5/27/2016	2/28/2018 (for design only)	\$ 1,758,247.00	AECOM	Bid and Construction Support Services on hold until construction IFB is issued.
			Construction	4					Comments submitted to AECOM in May. Next advertisement, tentatively July.
		R. Diaz/B. Bailey	CM	4			\$ 640,248.00	DCA	DCA was awarded the contract but GWA has not issued NTP until construction is approved.
8	Tumon Sewer Hot Spots	Brown & Caldwell	Design	7	6/24/2016	10/30/2017 for design only	\$ 572,089.00	TG Engineers	TGE to provide engineering services during bid process.
			Construction	See Project 15	12/1/2018	12/31/2019	See Project 15	See Project 15	See Project 15
			CM	See Project 15	5/31/2019	5/31/2020	See Project 15	Am Orient	Procurement 100%: Contract fully executed. CM services to be on hold until bidding restarted.

GWA Work Session - July 19, 2022 - GM REPORT

Project	Project Description	Project Manager	Phase		Start Date (NTP Issued)	Anticipated Completion Date	Contract Amount	Contractor	Status as of 07/11/2022
14	Southern SSES Sewer Rehabilitation Phase II (Baza Gardens-Talofofo)	Brown & Caldwell	Design				The design was previously completed under bond funding.		
			Construction	8	8/2/2016	February 2022	\$ 1,189,815.00	ProPacific	<p>Santa Rita</p> <ul style="list-style-type: none"> <li>Archaeology – SHPO accepted proposed remedial actions along force main section with a couple of profile additions.</li> <li>Task order amendments</li> </ul> <p>1) BC Amendment for contract extension through September 2022 and budget to cover archaeological field work approved by GWA.</p> <p>2) PPBC construction contract extension to February 2022. Seeking \$53k in standby time due to archaeological delay. Update?</p> <ul style="list-style-type: none"> <li>Hawaii Engineering Services (HES) programmed and inspected lift station. PPBC made corrections and are now employing USSI to make final inspection.</li> <li>USSI inspected site on 05/20/22 and provided additional corrective items. PPBC has made those corrections and now waiting for USSI to inspect and turn on the station. Attempting to schedule commissioning. Station still not operating, pending demonstration of control functionality by USSI.</li> </ul>
			CM	8	7/29/2016	5/28/2017	\$ 425,756.09	EMPSCO	Closed out. Does USEPA need anything?
		GWA Chief Engineer	Project / Contract Management		6/17/2019	9/30/2021	\$ 269,228.00	B&C	<p>Executed under the IDIQ contract, Task Order 4 (TO4) authorizes Brown and Caldwell to manage and complete the construction of Southern SSES Sewer Rehabilitation Phase 2 project in conformance to the contract requirements.</p> <p>Amendments 1 and 2 to TO4 are executed to increase scope of work to include archaeological services, and increase contract time and funding to continue to manage and complete the construction project.</p> <p>Amendment 3 to TO4 is executed to extend completion date to 09/30/2021.</p> <p>On 09/28/2021, the CCU approved resolution 29-FY2021 authorizing to process Amendment 4 to TO4 to increase time and funding to continue to manage and complete the construction project, and send a notification to the PUC.</p> <p>Amendment 4 to TO 4 approved by Mr. Budasi on 12/15/2021. Approved Amendment sent to John Riegel.</p> <p>Amendment 5 submitted for GWA approval. This Amendment extends contract completion date and increases amount for archaeological monitoring.</p> <p>The lift station has been energized following DPW issuance of the occupancy permit and GPW installation of power meter. Commissioning schedule for 07/12/2022 and training will be on 07/13.</p>

GWA Work Session - July 19, 2022 - GM REPORT

Project	Project Description	Project Manager	Phase		Start Date (NTP Issued)	Anticipated Completion Date	Contract Amount	Contractor	Status as of 07/11/2022
15	Tamuning Sewer Hot Spots	G. Gattoc	Design	10	9/9/2016	10/31/2017 (for design only)	\$ 663,629.00	TG Engineers	TGE to provide engineering support services during bid process and construction.
			Construction	9	1/30/2020	12/31/2020	\$ 1,093,955.87	Ian Corporation	Pending Work at Site #2 <ul style="list-style-type: none"> <li>Clean-out ring and cover ordered/received by contractor was determined to be the wrong size; a replacement part has been ordered.</li> <li>CO no. 2 in process.</li> <li>All construction field tests completed; pending reports.</li> <li>Percentage of Completion: 56.47%</li> </ul>
			CM	9	3/31/2019	3/31/2020	\$ 531,000.75	Am Orient	CM acknowledged Notice to Proceed (NTP).
16	Talofofo Sewer Pump Stations (4 Stations)	G. Gattoc	Design (for Talofofo and Chalan Pago PS)	11	8/17/2016	5/29/2020	\$ 493,818.86	EMPSCO	<ul style="list-style-type: none"> <li>Contractor delivered generators to GWA on 03/24/2022.</li> <li>GWA to review submitted construction closeout documents/requirements for final completion; contractor working to complete final punchlist.</li> <li>Resolution settlement of Liquidated Damages and contract time extension request ongoing.</li> <li>Percentage of Completion: 88.64%</li> </ul>
			Construction	10	12/27/2018	5/29/2020	\$ 2,411,418.00	Giant Const.	<ul style="list-style-type: none"> <li>GWA to review submitted construction closeout documents/requirements for Final Completion.</li> <li>Resolution settlement of Liquidated Damages and contract time extension request ongoing.</li> <li>Percentage of Completion: 88.64%</li> </ul>
			CM		12/1/2018	12/31/2019			GWA Engineering will management construction management tasks.



GWA Work Session - July 19, 2022 - GM REPORT

Project	Project Description	Project Manager	Phase		Start Date (NTP Issued)	Anticipated Completion Date	Contract Amount	Contractor	Status as of 07/11/2022
18	Pressure Zone Realignment Construction- Phase I (Water Hydraulic Model Barrigada Service Area)	Barbara Cruz J. Mendiola/G. Yeoh	Design	12	8/3/2016	3/15/2017	\$ 523,268.00	GHD	Design complete.
			Construction (Phase I)	12	8/3/2016	6/30/2020	\$ 5,228,471.82	Sumitomo	<ul style="list-style-type: none"> <li>• Carnation, Clara, and Ysengsong sites nearing completion. Pending electrical work and inspection. Kaiser also nearing completion; pending electrical work and valve installation along Rte. 1, and work to abandon lines near the old Kaiser concrete reservoir.</li> <li>• Terao and Maimai sites ongoing. Operations to confirm dates for Terao outages proposed for early July. Maimai outages are both complete as of 06/25/2022.</li> <li>• Kaiser outage for valve connection on Rte.1 scheduled for 06/30.</li> <li>• Change Order for additional line work and meter installation in Nimitz, Talofoto, and Asan offered to SMCC. Awaiting cost estimate from them.</li> <li>• Outage for Okkodo is on hold until Operations is able to perform the outage(s).</li> <li>• Payment Request no. 9 submitted to GWA. Will be reviewed and submitted for processing by 06/30.</li> <li>• All PZR sites have work in progress (Ysengsong, Clara, Kaiser, Okkodo, Terao, Carnation, Maimai, Yigo Reservoir SCADA, Astumbo Reservoir SCADA).</li> </ul>
			CM		6/15/2019	6/30/2020			
23	Project Advertisement	Each IFB or RFP requires advertising	Engineering/ Procurement	MISC	1		\$ 25,172.50	PDN/Post	Ongoing
24	Dungca Beach Sewer Improvements	R. Carino	Design			2/28/2021	\$ 594,735.28	GHD	90% Design ongoing. <ul style="list-style-type: none"> <li>• GHD to continue working on the design of Phase I (Trankilo Street). GHD to provide update.</li> <li>• Initiate environmental group to complete Phase 1 reporting/permitting applications.</li> <li>• GHD to resubmit cost of the additional work (separate the project into phases). Waiting for the revised cost.</li> <li>• Letter of Interest to owner of the property at Lagoon Drive sent on 06/27/2022. Waiting for response.</li> <li>• Archaeological Data Monitoring Plan approved.</li> <li>• Signed copy of Categorical Exclusions received on 07/08.</li> <li>• A letter of interest for the proposed location of reburial monument was emailed on 06/27. Waiting for the response. Prior to reach out to lot owner (Takagi san), GM to discuss with Tom Konner.</li> <li>• EPA aware of potential requirement of additional land (advise from SHPO). GM to meet and discuss with Tom Konner.</li> </ul>

GWA Work Session - July 19, 2022 - GM REPORT

Project	Project Description	Project Manager	Phase		Start Date (NTP Issued)	Anticipated Completion Date	Contract Amount	Contractor	Status as of 07/11/2022
25	Hagatna Sewer Pump Station Force Main	G. Gattoc	Design				\$603,951.14	GHD	<ul style="list-style-type: none"> <li>• Engineering met with GM and EPA on 06/09/2022 regarding the impacts of climate change study conducted by WERI and its implications on a design alternative selection.</li> <li>• GM is ready to decide on a single force main (FM) design by directional drilling crossing the bay towards the WWTP and the subsequent assessment/rehabilitation of the existing FM.</li> <li>• GWA GM asked Engineering to examine the viability of relocating Hagatna Main SPS in terms of land availability, existing elevations, etc.</li> <li>• Hagatna WWTP UV interim disinfection implementation deemed unfeasible.</li> <li>• Next progress meeting scheduled: TBD.</li> <li>• Percentage of Completion: 20%</li> </ul>
26	Fujita Sewer Pump Station Redundant Force Main	G. Gattoc	Design						<ul style="list-style-type: none"> <li>• AECOM submitted final proposal (04/29/2022), and sent to USEPA (05/03) for review and approval; USEPA approved (05/20).</li> <li>• Request for Approval submitted and GM approved (05/23).</li> <li>• Formal contract sent to AECOM (06/06); AECOM returned signed contract (06/10).</li> <li>• Formal contract signed by Legal (06/13); submitted to Finance for review and signature (06/13)</li> <li>• Once approved by Finance/GM, we forward NTP to AECOM and schedule project kickoff.</li> </ul>
27	2021 Well Rehab (A-28, M-14, D-15 & F-7)	J. Mendiola	Design						<ul style="list-style-type: none"> <li>• Procurement on hold until issues with A-series Wells are resolved.</li> </ul>
							\$ 73,764,297.38		



## Financial Statement Overview June 2022

### Key Financial Indicators

Indicator	Target	Apr 22	May 22	Jun 22
DSC YTD				
• Per Section 6.12 of Indenture	1.25	1.25	1.25	1.26
• Per PUC / CCU	1.40	1.25	1.25	1.26
Days – Cash on Hand	120 days	269 days	262 days	276 days
Collection Ratio				
• Month to Date	99%	101%	94%	109%
• Year to Date	99%	97%	97%	98%
Days Billed	30 days	30 days	29 days	30 days
Account Receivable Days	30 days	40 days	40 days	39 days
Account Payable Days	45 days	33 days	35 days	30 days
Employee Count	400 FTE	362 FTE	361 FTE	361 FTE
Water Demand				
• Month to Date	478,754	428,589	433,696	442,382
• Year to Date	4,308,788	3,066,145	3,499,841	3,942,223
Wastewater Flow				
• Month to Date	356,472	305,770	323,197	311,387
• Year to Date	3,208,251	2,230,973	2,554,170	2,865,557
Water Customers	42,839	43,239	43,320	43,281
Wastewater Customers	29,805	30,497	31,157	30,552

### Water and Wastewater Consumption

Water consumption is 3% less and wastewater flow is down 1% for the month of June compared to prior year. The decreases in water consumption and wastewater flows are mainly due to a drop in use by residential customers that was not made up by increases in other customer classes.

Year to Date (YTD) water demand is down 2% while wastewater flows are up by 1% compared to last year. Increases in the Commercial and GovGuam customer classes offset decreases in the Residential and Hotel customer classes. Note that the number of YTD billing days through June 2022 of 270 days is 3 days more than the prior year's 267 days. See Schedule K for Water Demand for FY2015 to FY2022.

YTD average daily water consumption for June 2022 of 14,601 kGals is 3% lower than June 2021's 15,004 kgals. Increases in the commercial and GovGuam customer classes were not enough to offset decreases in the Hotel and Residential average daily water consumption.

### Balance Sheet (Schedule A)

- Total Assets & Deferred Outflows of Resources of \$1.23B in September 2021 increased by \$10.5M or 1% in June 2022. Current Assets decreased by \$13.8M primarily due to decreases in federal receivables. Property, Plant and Equipment increased by \$33.3M due to increases in construction work in progress offset by increases in accumulated depreciation. Other Noncurrent Assets decreased by \$8.1 million as bond funds were used to pay contractors. Days Cash on Hand was calculated at 276 days. Schedule G contains a schedule of restricted and unrestricted cash and investments.



- Liabilities & Deferred Inflow of Resources of \$920.0M in September 2021 decreased by \$1.0M or less than 1% to \$919.0M in June 2022 primarily due to reductions in contractors' payable offset by increases in interest payable.
- Accounts Receivable days in June and May 2022 were 39 days and 40 days respectively. Accounts Payable days were 30 days in June 2022, 5 days less than the 35 days in May 2022. 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 June 2022 of \$9.0M were 5% or \$462K less than budget of \$9.5M. June 2022 Total Operating Revenues is 5% or \$440.7K more than June 2021's \$8.6M.
- Total Year to Date Operating Revenues as of June 2022 of \$76.7M were 10% or \$8.6M less than the budget of \$85.3M. Total Year to Date Operating Revenues as of June 2022 were 2% or \$1.2M more than Year to Date Operating Revenues as of June 2021's \$75.5M.
- Below are the percentages of operating revenues (water and wastewater) contributed by GWA's customer classes for FY2022 and FY2021 Year to Date as of June as well as the revenue totals:

Customer Class	FY2022		FY2021	
o Residential	\$35,632,307	47.28%	\$36,794,779	49.80%
o Commercial	\$16,216,729	21.52%	\$15,325,782	20.74%
o Hotel	\$9,417,683	12.50%	\$9,581,528	12.97%
o Government of Guam	\$8,927,261	11.84%	\$7,420,577	10.04%
o Federal Government	\$4,743,377	6.29%	\$4,336,544	5.87%
o Agriculture, Golf Course, Irrigation	\$431,054	.57%	\$429,051	.58%
TOTALS	\$75,368,411	100.00%	\$73,888,260	100.00%

- Total Operating Expenses for June 2022 of \$7.9M were \$437.3K or 6% more than budget of \$7.5M. June 2022 Total Operating Expenses were 11% or \$781.1K more than June 2021's \$7.1M. The largest increase month over month was in power which increased by 50% or \$533.6K.
- Total Year to Date Operating Expenses as of June 2022 of \$68.9M were \$1.7M or 3% more than budget of \$67.2M. Total Year to Date Operating Expenses as of June 2022 were 11% or \$6.7M more than June 2021 YTD's \$62.2M. The largest increase year over year was due to power purchases which was \$3.6M more or more than half of the \$6.7M increase.
- Earnings from Operations for June 2022 of \$1.1M were 45% or \$899K less than the budget of \$2.0M and 24% or \$340.4K less than June 2021's \$1.5M. Change in Net Assets for June 2022 of \$1.7M was 39% or \$1.1M less than the \$2.8M budget and \$7.1M or 81% less than June 2021's \$8.9M. The decrease in the Change in Net Assets year over year was mostly due to the decrease in contributions from Federal Grants.
- Year to Date Earnings from Operations as of June 2022 of \$7.8M were 57% or \$10.3M less than the budget of \$18.1M and 42% or \$5.5M less than June 2021 YTD's \$13.3M. Year to Date Change in Net Assets as of June 2022 of \$11.6M was 54% or \$13.6M less than the \$25.1M budget and \$22.5M or 66% less than June 2021 YTD's \$34.0M.

**Cash Flow (Schedule F)**

As of June 2022, cash flows from operating activities were \$27.6M, the cash used in capital and financing activities were \$38.7M, and the cash from investing activities were \$11.5M resulting in an increase in cash of \$485K for the fiscal year.

**Customer Payments**

Despite the pandemic, while only 8% of payments are made in cash, more than a third of payments continue to be made in person. Beginning in August 2021, ratepayers were able to access one walkup window in Upper Tumon to make payments; the drive through continues to remain open.

Using social media, GWA continues to encourage customers to conduct business online or via the phone. An automated customer service online support portal is also available on the GWA website for permits, submissions related to backflow testing, payment plans, and other customer related requests.

On April 28, 2020, CCU Resolution 24-FY2020 granted the lifting of credit card limits on payments for non-residential accounts. In FY2022 (October through December), approximately 50% 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 – December 2021	160	\$649,270	\$13,055	2.01%
January – March 2022	177	\$753,282	\$15,146	2.01%
April 2022	60	\$279,610	\$5,622	2.01%
May 2022	65	\$255,746	\$5,142	2.01%
June 2022	61	\$231,188	\$4,648	2.01%

Since the suspension of disconnections for nonpayment was lifted, the Upper Tumon office has been open for payments on Saturdays. For the Saturdays in June, 325 payments totaling \$63,278 were made towards GWA billings and 410 payments totaling \$106,233 were made for GPA.

The new merchant service agreement will transfer credit card processing from Bank of Hawaii to First Hawaiian Bank (FHB). GWA Resolution 20-FY2022 authorized set up an FHB account to be used to deposit funds collected through this process. We are working with FHB to make the switch.

For the month of June, Finance posted \$109,125 in utility payments from the Department of Administration (DOA) for eligible renters as part of the Guam Emergency Rental Assistance Program (GERAP). Additionally, GWA posted \$56,211 from eligible homeowners as part of the Guam Homeowners Assistance Fund (GHAFF). Furthermore, GWA posted \$11,388 payments from eligible Low Income Household Water Assistance Program.

**Guam Solid Waste (GSW) Customer Payments**

GPWA began to accept GSW payments. June 6, 2022. For the month of June, GWA accepted \$50,849 in GSW payments at the Upper Tumon Office. GWA will bill \$814 to GSW for processing fees.

**PUC Docket**

The GWA Comprehensive Review and Update of its Five-Year Financial Plan & Capital Improvement Program (Financial Plan Update) and related Rate Application Model (RAM) were delivered to the PUC as required on



May 1, 2021. The stipulated analytical studies were previously provided to the PUC as required on March 31, 2021.

The ALJ issued his proposed order on May 12, 2022. GWA provided an initial response on May 26, 2022, and an official response on May 27, 2022. The PUC consultants provided a report and recommended rate decision and order on June 14, 2022. Informal discussion indicate the PUC hearing will be scheduled in September, but we are waiting for formal confirmation.

#### ***FY2022 & FY2023 Budget***

A request to modify the budget will be made once the PUC order on rates for FY2022 is issued. Because the order will be issued midway through FY2022, it is anticipated that it will also cover rates for FY2023.

A budget update is issued monthly to the business unit managers to help them track and plan their expenditures based on the available budget.

GWA continues to monitor revenues and will adjust as needed to ensure continuity of services to our customers while keeping the safety of our staff the highest priority.

#### ***Rate Stabilization Fund***

CCU Resolution 11-FY2021 authorized the establishment of a Rate Stabilization Fund (RSF) as a mechanism for managing future uncertainties and risks as well as to promote predictable rates. In September 2021, GWA transferred the authorized \$11.4 million from GWA's Working Capital Reserves into the RSF. These funds were originally transferred into the Working Capital Reserves from the Working Capital Reserves for Debt Service per CCU Resolution 17-FY2020 which dissolved the Working Capital Reserves for Debt Service fund.

On January 25, 2022, CCU Resolution 06-FY2022 authorized transfers up to \$2 million from the RSF into the GWA general fund. Resolution 19-FY2022 authorized transfers from the RSF to the general fund by \$3.3 million for a total of up to \$5.3 million. A \$1.1 million transfer was made at the end of June 2022, bringing total transfers to \$3.45 million,

#### ***FY22 Audit***

Proposals for GWA RFP 2022-03 Independent Financial Audit Services were due on July 14, 2022. GWA is working with the OPA to rate the proposals and hopes to have a selection made before the end of July.

#### ***COVID Updates***

There were 2,911 COVID-19 positive tests and 8 COVID-related fatalities reported during the month of June. For the month of June 2022, the average daily positive test rate was 97 compared to the 33 daily average in May. Executive Order 2022-17 extended the public health emergency to August 4, 2022.

By the end of June 2022, 137,224 residents were fully vaccinated, 62,308 had received their first booster, and 9,001 had received a second booster. Incentives are being offered to residents who take their last dose in the primary series or receive a booster. There were 15 persons hospitalized for COVID at the end of June.

#### ***GVB Visitor Arrivals***

Visitor Arrivals for May 2022 increased 359.7% over May 2021, from 4,352 to 20,008. Fifty percent of arrivals were from Korea and 30% originated from the United States. Calendar year arrivals were up 186.1% and fiscal year arrivals were up 203.7%. COVID-19 testing requirements were lifted for international travelers flying to US destinations. As Guam's source tourism markets relax restrictions, airplanes are expected to increase weekly flights into Guam. However, 'tourism stakeholders' predict a slow recovery.

**GUAM WATERWORKS AUTHORITY**  
**June 30, 2022**  
**FINANCIAL AND RELATED REPORTS**  
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**GUAM WATERWORKS AUTHORITY**  
**Balance Sheet**  
**June 30, 2022**

**SCHEDULE A**

	Unaudited June 30, 2022	Audited September 30, 2021	Increase (Decrease)
<b>ASSETS AND DEFERRED OUTFLOWS of RESOURCES</b>			
<u>Current Assets</u>			
Cash			
Unrestricted (Schedule G)	35,529,751	35,044,630	485,121
Restricted Funds (Schedule G)	39,161,131	42,426,211	(3,265,080)
Accounts Receivable Trade, Net of Allowance for Doubtful Receivables of \$10,158,002 at Jun 30, 2022 and \$8,584,821 at Sept 30, 2021	10,187,442	11,392,368	(1,204,926)
Federal Receivable	544,339	11,436,000	(10,891,661)
Other Receivable	1,987,335	1,002,328	985,006
Prepaid Expenses	1,042,363	849,867	192,496
Materials & Supplies Inventory, Net of Allowance for Obsolescence of \$64,131 at Jun 30, 2022 and \$64,131 at Sept 30, 2021	4,223,550	4,284,336	(60,786)
Total Current Assets	92,675,910	106,435,741	(13,759,831)
<u>Property, Plant and Equipment</u>			
Utility plant in service			
Water system	418,067,026	415,123,284	2,943,742
Wastewater system	513,629,047	513,741,066	(112,019)
Non-utility property	33,302,480	33,051,603	250,877
Total property	964,998,554	961,915,953	3,082,601
Less: Accumulated Depreciation	(387,677,497)	(367,521,639)	(20,155,858)
Land	5,287,305	5,240,187	47,117
Construction Work in Progress	217,866,750	167,589,130	50,277,620
Property, Plant and Equipment, net	800,475,112	767,223,632	33,251,480
<u>Noncurrent assets</u>			
Restricted cash (Schedule G)	171,292,702	193,458,224	(22,165,521)
Investments (Schedule G)	81,729,354	67,678,709	14,050,645
Total other noncurrent assets and deferred charges	253,022,057	261,136,933	(8,114,876)
<b>Total Assets</b>	<b>1,146,173,078</b>	<b>1,134,796,306</b>	<b>11,376,772</b>
Deferred outflows of resources			
Regulatory assets	2,633,615	1,922,989	710,626
Debt defeasance due to bond refunding	29,744,050	31,286,637	(1,542,587)
Deferred outflows from pension	12,904,653	12,904,653	-
Deferred outflows from OPEB	48,780,079	48,780,079	-
<b>Total Assets and Deferred Outflows of Resources</b>	<b>1,240,235,475</b>	<b>1,229,690,663</b>	<b>10,544,812</b>
<b>LIABILITIES, DEFERRED INFLOWS of RESOURCES AND NET ASSETS</b>			
<u>Current Liabilities</u>			
Current maturities of long-term debt			
Series 2013 Revenue Bond	2,990,000	2,990,000	-
Series 2014 Refunding Bond	555,000	555,000	-
Series 2016 Revenue Bond	4,055,000	4,055,000	-
Series 2017 Refunding Bond	2,145,000	2,145,000	-
Notes Payable	-	-	-
Accounts Payable -Trade	3,525,198	2,652,457	872,740
Accrued and Other Liabilities	2,174,489	2,011,179	163,310
Interest Payable	14,792,951	7,324,101	7,468,851
Accrued Payroll and Employee Benefits	1,436,389	918,403	517,986
Current portion of employee annual leave	660,125	660,125	-
Contractors' Payable	16,779,196	25,847,832	(9,068,636)
Customer and Other Deposits	2,372,268	2,237,010	135,258
Total Current Liabilities	51,485,617	51,396,108	89,509
<u>Long Term Debt, less current maturities</u>			
Series 2013 Revenue Bond	21,510,000	21,510,000	-
Series 2014 Refunding Bond	64,055,000	64,055,000	-
Series 2016 Revenue Bond	134,975,000	134,975,000	-
Series 2017 Refunding Bond	103,180,000	103,180,000	-
Series 2020A Revenue Bond	134,000,000	134,000,000	-
Series 2020B Refunding Bond	166,075,000	166,075,000	-
Unamortized Bond Premium/Discount	39,247,194	40,654,335	(1,407,141)
Net pension liability	56,364,779	56,364,779	-
Net OPEB obligation	106,433,894	106,433,894	-
Employee Annual Leave, Less Current Portion	1,185,813	1,185,813	-
Employee Sick Leave	1,339,208	1,339,208	-
<b>Total Liabilities</b>	<b>879,851,505</b>	<b>881,169,137</b>	<b>(1,317,632)</b>
Deferred inflows of resources:			
Contribution in Aid of Construction	573,753	244,720	329,033
Deferred inflows from pension	985,049	985,049	-
Deferred inflows from OPEB	37,575,154	37,575,154	-
<b>Total Liabilities and Deferred Inflows of Resources</b>	<b>918,985,461</b>	<b>919,974,060</b>	<b>(988,599)</b>
<b>Net Assets</b>	<b>321,250,015</b>	<b>309,716,603</b>	<b>11,533,411</b>
<b>Total Liabilities, Deferred Inflows of Resources and Net Assets</b>	<b>1,240,235,475</b>	<b>1,229,690,663</b>	<b>10,544,812</b>



**GUAM WATERWORKS AUTHORITY**  
**Statement of Operations and Retained Earnings**  
**Comparative Budget vs. Actual for the period ending June 30, 2022**

SCHEDULE B

	Month to Date Actual (Unaudited) June-22	Budget* June-22	Variance Favorable / (Unfavorable)
<b>OPERATING REVENUES</b>			
Water Revenues	5,446,065	5,863,373	(417,309)
Wastewater Revenues	2,792,898	3,226,426	(433,528)
Legislative Surcharge	252,487	274,214	(21,727)
Other Revenues	50,500	35,895	14,606
System Development Charge	473,290	77,442	395,848
<b>Total Operating Revenues</b>	<b>9,015,239</b>	<b>9,477,350</b>	<b>(462,111)</b>
<b>OPERATING AND MAINTENANCE EXPENSES</b>			
Water Purchases	581,637	571,438	(10,199)
Power Purchases	1,595,734	1,205,155	(390,579)
Total Utility Costs	2,177,371	1,776,593	(400,778)
Salaries and Wages	1,561,438	1,680,210	118,771
Pension and Benefits	591,334	696,002	104,668
Total Salaries and Benefits	2,152,773	2,376,212	223,439
Capitalized Labor and Benefits	(186,617)	(308,333)	(121,717)
Net Salaries and Benefits	1,966,156	2,067,879	101,723
<b>Administrative and General Expenses</b>			
Sludge removal	91,867	127,518	35,652
Chemicals	54,939	154,647	99,708
Materials & Supplies	163,534	169,912	6,378
Transportation	96,389	59,260	(37,130)
Communications	12,057	27,135	15,078
Claims	14,479	14,331	(149)
Insurance	147,927	82,972	(64,954)
Training & Travel	1,719	23,501	21,782
Advertising	4,331	11,583	7,252
Miscellaneous	98,587	119,179	20,592
Regulatory Expense	12,035	30,183	18,149
Bad Debts Provision	169,829	139,113	(30,716)
Total Administrative and General Expense	867,693	959,335	91,643
<b>Depreciation Expense</b>	<b>2,328,342</b>	<b>1,855,919</b>	<b>(472,423)</b>
<b>Contractual Expense</b>			
Audit & Computer Maintenance	128,955	126,287	(2,668)
Building rental	42,398	41,412	(986)
Equipment rental	42,404	53,236	10,833
Legal	-	-	-
Laboratory	7,106	61,535	54,430
Other	85,034	241,889	156,855
Total Contractual Expense	305,896	524,359	218,464
Retiree Supp. Annuities and health care costs	210,255	233,386	23,131
Contribution to Government of Guam	51,833	52,768	934
Total Retiree Benefits	262,088	286,153	24,065
<b>Total Operating Expenses</b>	<b>7,907,545</b>	<b>7,470,239</b>	<b>(437,307)</b>
<b>Earnings (Loss) from Operations</b>	<b>1,107,694</b>	<b>2,007,111</b>	<b>(899,417)</b>
Interest Income - 2010/13/14/16/17/20 Series Bond	112,196	128,299	(16,103)
Interest Income - Other Funds	18,367	29,550	(11,184)
Interest Income - SDC	1,784	2,488	(703)
Interest Expense - 2010/13/14/16/17/20 Series Bond	(2,457,450)	(2,638,329)	180,879
Contributions from Federal Government	-	-	-
Federal Expenditures	-	-	-
Loss on Asset Disposal	-	-	-
AFUDC	-	-	-
Amortization of Discount, Premium and Issuance Costs	156,349	(23,078)	179,427
Defeasance due to bond refunding	(171,398)	(22,439)	(148,960)
Prior Year Adjustment	67,815	-	67,815
Total non-operating revenues (expenses)	(2,272,337)	(2,523,508)	251,171
<b>Net Income (Loss) before capital contributions</b>	<b>(1,164,643)</b>	<b>(516,397)</b>	<b>(648,247)</b>
<b>Capital Contributions</b>			
Grants from US Government	2,864,793	3,311,071	(446,278)
Grants from GovGuam & Others	-	-	-
Total Capital Contributions	2,864,793	3,311,071	(446,278)
<b>Change in Net Assets</b>	<b>1,700,150</b>	<b>2,794,675</b>	<b>(1,094,525)</b>
<b>Debt Service Calculation</b>			
Earnings From Operations	1,107,694	2,007,111	
System Development Charge	(473,290)	(77,442)	
Retiree COLA	51,833	52,768	
Interest/Investment Income	18,367	29,550	
Depreciation	2,328,342	1,855,919	
Plus withdrawals (deposits) to Rate Stabilization Fund	1,100,000	-	
<b>Balance Available for Debt Service per Section 6.12</b>	<b>4,132,946</b>	<b>3,867,907</b>	
<b>Debt Service</b>			
Principal	812,083	772,500	
Interest	1,976,089	1,996,663	
<b>Total</b>	<b>2,788,172</b>	<b>2,769,163</b>	
<b>Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)</b>	<b>1.48</b>	<b>1.40</b>	
<b>Debt Service Coverage (1.40X) inclusive of reserves (PUC)</b>	<b>1.48</b>	<b>1.40</b>	

\*Interim budget

**GUAM WATERWORKS AUTHORITY**  
**Statement of Operations and Retained Earnings**  
**Comparative for the period ending June 30, 2022 and 2021**

SCHEDULE C

	Actual (Unaudited) June-22	Month to Date Actual (Audited) June-21	Variance Increase / (Decrease)
<b>OPERATING REVENUES</b>			
Water Revenues	5,446,065	5,534,847	(88,783)
Wastewater Revenues	2,792,898	2,610,363	182,535
Legislative Surcharge	252,487	249,117	3,370
Other Revenues	50,500	38,351	12,149
System Development Charge	473,290	141,855	331,435
<b>Total Operating Revenues</b>	<b>9,015,239</b>	<b>8,574,534</b>	<b>440,705</b>
<b>OPERATING AND MAINTENANCE EXPENSES</b>			
Water Purchases	581,637	524,717	56,920
Power Purchases	1,595,734	1,062,114	533,620
Total Utility Costs	2,177,371	1,586,830	590,540
Salaries and Wages	1,561,438	1,570,878	(9,439)
Pension and Benefits	591,334	603,381	(12,047)
Total Salaries and Benefits	2,152,773	2,174,259	(21,486)
Capitalized Labor and Benefits	(186,617)	(302,527)	115,911
Net Salaries and Benefits	1,966,156	1,871,732	94,424
<b>Administrative and General Expenses</b>			
Sludge removal	91,867	89,595	2,271
Chemicals	54,939	98,151	(43,212)
Materials & Supplies	163,534	179,171	(15,636)
Transportation	96,389	6,691	89,699
Communications	12,057	14,407	(2,350)
Claims	14,479	-	14,479
Insurance	147,927	83,134	64,793
Training & Travel	1,719	15,690	(13,971)
Advertising	4,331	19,653	(15,322)
Miscellaneous	98,587	90,451	8,136
Regulatory Expense	12,035	164,419	(152,384)
Bad Debts Provision	169,829	167,887	1,942
Total Administrative and General Expense	867,693	929,248	(61,555)
<b>Depreciation Expense</b>	<b>2,328,342</b>	<b>2,142,179</b>	<b>186,163</b>
<b>Contractual Expense</b>			
Audit & Computer Maintenance	128,955	63,863	65,092
Building rental	42,398	41,373	1,025
Equipment rental	42,404	2,600	39,804
Legal	-	-	-
Laboratory	7,106	71,707	(64,602)
Other	85,034	156,078	(71,044)
Total Contractual Expense	305,896	335,621	(29,726)
Retiree Supp. Annuities and health care costs	210,255	210,492	(238)
Contribution to Government of Guam	51,833	50,333	1,500
Total Retiree Benefits	262,088	260,826	1,262
<b>Total Operating Expenses</b>	<b>7,907,545</b>	<b>7,126,436</b>	<b>781,109</b>
<b>Earnings (Loss) from Operations</b>	<b>1,107,694</b>	<b>1,448,098</b>	<b>(340,404)</b>
Interest Income - 2010/13/14/16/17/20 Series Bond	112,196	2,533	109,663
Interest Income - Other Funds	18,367	1,096	17,271
Interest Income - SDC	1,784	361	1,423
Interest Expense - 2010/13/14/16/17/20 Series Bond	(2,457,450)	(2,480,584)	23,133
Contributions from Federal Government	-	-	-
Federal Expenditures	-	-	-
Loss on Asset Disposal	-	-	-
AFUDC	-	509,058	(509,058)
Amortization of Discount, Premium and Issuance Costs	156,349	156,349	-
Defeasance due to bond refunding	(171,398)	(172,097)	699
Prior Year Adjustment	67,815	328,583	(260,768)
Total non-operating revenues (expenses)	(2,272,337)	(1,654,701)	(617,637)
<b>Net Income (Loss) before capital contributions</b>	<b>(1,164,643)</b>	<b>(206,603)</b>	<b>(958,040)</b>
<b>Capital Contributions</b>			
Grants from US Government	2,864,793	9,079,207	(6,214,414)
Grants from GovGuam & Others	-	-	-
Total Capital Contributions	2,864,793	9,079,207	(6,214,414)
<b>Change in Net Assets</b>	<b>1,700,150</b>	<b>8,872,604</b>	<b>(7,172,454)</b>
<b>Debt Service Calculation</b>			
Earnings From Operations	1,107,694	1,448,098	
System Development Charge	(473,290)	(141,855)	
Retiree COLA	51,833	50,333	
Interest/Investment Income	18,367	1,096	
Depreciation	2,328,342	2,142,179	
Plus withdrawals (deposits) to Rate Stabilization Fund	1,100,000	-	
<b>Balance Available for Debt Service per Section 6.12</b>	<b>4,132,946</b>	<b>3,499,851</b>	
<b>Debt Service</b>			
Principal	812,083	772,500	
Interest	1,976,089	1,847,251	
<b>Total</b>	<b>2,788,172</b>	<b>2,619,751</b>	
<b>Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)</b>	<b>1.48</b>	<b>1.34</b>	
<b>Debt Service Coverage (1.40X) (PUC)</b>	<b>1.48</b>	<b>1.34</b>	

**GUAM WATERWORKS AUTHORITY**  
**Statement of Operations and Retained Earnings**  
**Comparative Budget vs. Actual for the period ending June 30, 2022**

SCHEDULE D

	Year to Date Actual (Unaudited) June-22	Budget* June-22	Variance Favorable / (Unfavorable)
<b>OPERATING REVENUES</b>			
Water Revenues	48,215,231	52,770,359	(4,555,128)
Wastewater Revenues	24,921,137	29,037,831	(4,116,694)
Legislative Surcharge	2,232,043	2,467,928	(235,885)
Other Revenues	363,099	323,053	40,046
System Development Charge	936,091	696,978	239,113
<b>Total Operating Revenues</b>	<b>76,667,601</b>	<b>85,296,148</b>	<b>(8,628,547)</b>
<b>OPERATING AND MAINTENANCE EXPENSES</b>			
Water Purchases	4,941,257	5,464,039	522,783
Power Purchases	12,692,303	10,577,980	(2,114,323)
Total Utility Costs	17,633,560	16,042,019	(1,591,541)
Salaries and Wages	14,330,392	15,121,886	791,493
Pension and Benefits	5,407,091	6,264,022	856,931
Total Salaries and Benefits	19,737,483	21,385,908	1,648,425
Capitalized Labor and Benefits	(2,360,935)	(2,775,000)	(414,065)
Net Salaries and Benefits	17,376,549	18,610,908	1,234,359
<b>Administrative and General Expenses</b>			
Sludge removal	532,086	1,152,292	620,206
Chemicals	1,289,987	1,348,406	58,419
Materials & Supplies	1,326,527	1,547,181	220,654
Transportation	511,419	530,572	19,153
Communications	114,221	259,322	145,101
Claims	60,923	128,975	68,052
Insurance	855,412	746,752	(108,661)
Training & Travel	36,986	197,245	160,259
Advertising	43,745	103,831	60,085
Miscellaneous	944,698	1,027,259	82,561
Regulatory Expense	158,224	271,650	113,426
Bad Debts Provision	1,507,368	1,252,019	(255,350)
Total Administrative and General Expense	7,381,597	8,565,503	1,183,907
<b>Depreciation Expense</b>	<b>20,824,725</b>	<b>16,703,274</b>	<b>(4,121,451)</b>
<b>Contractual Expense</b>			
Audit & Computer Maintenance	1,044,723	1,141,507	96,784
Building rental	381,576	372,705	(8,871)
Equipment rental	292,668	477,812	185,144
Legal	285,586	-	(285,586)
Laboratory	178,410	568,634	390,224
Other	1,142,983	2,187,121	1,044,138
Total Contractual Expense	3,325,945	4,747,779	1,421,834
Retiree Supp. Annuities and health care costs	1,920,904	2,100,471	179,567
Contribution to Government of Guam	466,500	465,697	(803)
Total Retiree Benefits	2,387,404	2,566,168	178,765
<b>Total Operating Expenses</b>	<b>68,929,778</b>	<b>67,235,651</b>	<b>(1,694,127)</b>
<b>Earnings (Loss) from Operations</b>	<b>7,737,823</b>	<b>18,060,497</b>	<b>(10,322,674)</b>
Interest Income - 2010/13/14/16/17/20 Series Bond	133,581	1,154,695	(1,021,114)
Interest Income - Other Funds	24,209	265,954	(241,745)
Interest Income - SDC	5,304	22,388	(17,084)
Interest Expense - 2010/13/14/16/17/20 Series Bond	(22,117,052)	(23,744,963)	1,627,911
Contributions from Federal Government	-	-	-
Federal Expenditures	-	-	-
Loss on Asset Disposal	(191,873)	-	(191,873)
AFUDC	-	-	-
Amortization of Discount, Premium and Issuance Costs	1,407,141	(207,698)	1,614,839
Defeasance due to bond refunding	(1,542,587)	(201,947)	(1,340,639)
Prior Year Adjustment	157,652	-	157,652
Total non-operating revenues (expenses)	(22,123,624)	(22,711,571)	587,948
<b>Net Income (Loss) before capital contributions</b>	<b>(14,385,801)</b>	<b>(4,651,074)</b>	<b>(9,734,727)</b>
<b>Capital Contributions</b>			
Grants from US Government	25,919,212	29,799,643	(3,880,431)
Grants from GovGuam & Others	-	-	-
Total Capital Contributions	25,919,212	29,799,643	(3,880,431)
<b>Change in Net Assets</b>	<b>11,533,411</b>	<b>25,148,569</b>	<b>(13,615,158)</b>
<b>Debt Service Calculation</b>			
Earnings From Operations	7,737,823	18,060,497	
System Development Charge	(936,091)	(696,978)	
Retiree COLA	466,500	465,697	
Interest/Investment Income	24,209	265,954	
Depreciation	20,824,725	16,703,274	
Plus withdrawals (deposits) to Rate Stabilization Fund	3,450,000	-	
<b>Balance Available for Debt Service per Section 6.12</b>	<b>31,567,166</b>	<b>34,798,444</b>	
<b>Debt Service</b>			
Principal	7,308,750	6,952,500	
Interest	17,784,802	17,969,963	
<b>Total</b>	<b>25,093,552</b>	<b>24,922,463</b>	
<b>Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)</b>	<b>1.26</b>	<b>1.40</b>	
<b>Debt Service Coverage (1.40X) inclusive of reserves (PUC)</b>	<b>1.26</b>	<b>1.40</b>	

\*Interim budget

**GUAM WATERWORKS AUTHORITY**  
**Statement of Operations and Retained Earnings**  
**Comparative for the period ending June 30, 2022 and 2021**

**SCHEDULE E**

	Actual (Unaudited) June-22	Year to Date Actual (Audited) June-21	Variance Increase / (Decrease)
<b>OPERATING REVENUES</b>			
Water Revenues	48,215,231	48,441,382	(226,150)
Wastewater Revenues	24,921,137	23,269,146	1,651,991
Legislative Surcharge	2,232,043	2,177,732	54,310
Other Revenues	363,099	371,599	(8,500)
System Development Charge	936,091	1,209,059	(272,968)
<b>Total Operating Revenues</b>	<b>76,667,601</b>	<b>75,468,918</b>	<b>1,198,683</b>
<b>OPERATING AND MAINTENANCE EXPENSES</b>			
Water Purchases	4,941,257	4,800,984	140,273
Power Purchases	12,692,303	9,073,187	3,619,116
Total Utility Costs	17,633,560	13,874,171	3,759,389
Salaries and Wages	14,330,392	14,030,317	300,076
Pension and Benefits	5,407,091	5,354,090	53,001
Total Salaries and Benefits	19,737,483	19,384,407	353,076
Capitalized Labor and Benefits	(2,360,935)	(2,751,315)	390,380
Net Salaries and Benefits	17,376,549	16,633,092	743,457
<b>Administrative and General Expenses</b>			
Sludge removal	532,086	1,165,869	(633,784)
Chemicals	1,289,987	1,116,670	173,317
Materials & Supplies	1,326,527	1,127,534	198,993
Transportation	511,419	337,472	173,947
Communications	114,221	115,709	(1,488)
Claims	60,923	55,590	5,333
Insurance	855,412	709,777	145,635
Training & Travel	36,986	27,181	9,806
Advertising	43,745	60,790	(17,045)
Miscellaneous	944,698	867,673	77,024
Regulatory Expense	158,224	284,541	(126,317)
Bad Debts Provision	1,507,368	1,477,764	29,604
Total Administrative and General Expense	7,381,597	7,346,571	35,025
<b>Depreciation Expense</b>	<b>20,824,725</b>	<b>19,201,347</b>	<b>1,623,378</b>
<b>Contractual Expense</b>			
Audit & Computer Maintenance	1,044,723	877,943	166,780
Building rental	381,576	372,356	9,219
Equipment rental	292,668	183,775	108,893
Legal	285,586	-	285,586
Laboratory	178,410	226,335	(47,926)
Other	1,142,983	1,155,340	(12,357)
Total Contractual Expense	3,325,945	2,815,750	510,195
Retiree Supp. Annuities and health care costs	1,920,904	1,891,199	29,705
Contribution to Government of Guam	466,500	453,000	13,500
Total Retiree Benefits	2,387,404	2,344,199	43,205
<b>Total Operating Expenses</b>	<b>68,929,778</b>	<b>62,215,130</b>	<b>6,714,648</b>
<b>Earnings (Loss) from Operations</b>	<b>7,737,823</b>	<b>13,253,788</b>	<b>(5,515,965)</b>
Interest Income - 2010/13/14/16/17/20 Series Bond	133,581	21,846	111,735
Interest Income - Other Funds	24,209	9,042	15,167
Interest Income - SDC	5,304	11,626	(6,322)
Interest Expense - 2010/13/14/16/17/20 Series Bond	(22,117,052)	(22,562,419)	445,367
Interest Expense - ST BOG	-	-	-
Contributions from Federal Government	-	188,768	(188,768)
Federal Expenditures	-	(130,939)	130,939
Loss on Asset Disposal	(191,873)	28,991	(220,864)
AFUDC	-	4,577,040	(4,577,040)
Amortization of Discount, Premium and Issuance Costs	1,407,141	1,405,391	1,750
Defeasance due to bond refunding	(1,542,587)	(1,548,873)	6,287
Deferred outflows from pension	-	-	-
Prior Year Adjustment	157,652	240,178	(82,526)
Total non-operating revenues (expenses)	(22,123,624)	(17,759,350)	(4,364,274)
<b>Net Income (Loss) before capital contributions</b>	<b>(14,385,801)</b>	<b>(4,505,562)</b>	<b>(9,880,239)</b>
<b>Capital Contributions</b>			
Grants from US Government	25,919,212	38,548,043	(12,628,831)
Grants from GovGuam & Others	-	7,106	(7,106)
Total Capital Contributions	25,919,212	38,555,148	(12,635,936)
<b>Change in Net Assets</b>	<b>11,533,411</b>	<b>34,049,587</b>	<b>(22,516,176)</b>
<b>Debt Service Calculation</b>			
Earnings From Operations	7,737,823	13,253,788	
System Development Charge	(936,091)	(1,209,059)	
Retiree COLA	466,500	453,000	
Interest/Investment Income	24,209	9,042	
Depreciation	20,824,725	19,201,347	
Plus withdrawals (deposits) to Rate Stabilization Fund	3,450,000	-	
<b>Balance Available for Debt Service per Section 6.12</b>	<b>31,567,166</b>	<b>31,708,118</b>	
<b>Debt Service</b>			
Principal	7,308,750	6,952,500	
Interest	17,784,802	16,625,263	
<b>Total</b>	<b>25,093,552</b>	<b>23,577,763</b>	
<b>Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)</b>	<b>1.26</b>	<b>1.34</b>	
<b>Debt Service Coverage (1.40X) (PUC)</b>	<b>1.26</b>	<b>1.34</b>	

**SCHEDULE F**
**Guam Waterworks Authority**  
**Statement of Cash Flows (Unaudited)**  
**FY2022**
**YTD**  
**Jun-22**
**Cash flows from operating activities:**

Cash received from trade and others	74,804,785
Cash payments to suppliers/contractors for goods and services	(25,600,359)
Cash payments to employees for services	(21,606,901)
<b>Net cash provided by operating activities</b>	<b>27,597,525</b>

**Cash flows from capital and related financing activities:**

Contributed capital received (grants)	36,810,873
Acquisition of utility plant	(60,975,779)
Repayment of Long Term Debt	135,446
Interest expense	(14,625,995)
<b>Net cash provided by (used in) capital and related financing activities</b>	<b>(38,655,455)</b>

**Cash flows from investing activities:**

Transfers from (to) restricted fund	11,379,957
Interest income received	163,094
<b>Net cash provided by investing activities</b>	<b>11,543,051</b>

Net increase (decrease) in cash 485,121

Unrestricted cash at beginning of the period 35,044,630

**Unrestricted cash at end of period 35,529,751**

Reconciliation of operating loss to net cash provided by operating activities:

<b>Operating Income (loss)</b>	<b>7,737,823</b>
Adjustments to reconcile to net cash provided by operating activities:	
Depreciation expense	20,824,725
Bad debts (recovery)	1,507,368
Capitalized labor and benefits	(2,360,935)
Recovery of provision for inventory obsolescence	-
Non-cash pension costs	-
(Increase) decrease in assets:	
Accounts receivable	(1,287,449)
Materials and supplies inventory	60,786
Prepaid expenses	(192,496)
Regulatory Assets	(710,626)
Increase (decrease) in liabilities:	
Accounts payable	872,740
Accrued payroll and employee benefits	517,986
Customer deposits	135,258
Other liabilities	492,343
<b>Net cash provided by operating activities</b>	<b>27,597,525</b>

**GUAM WATERWORKS AUTHORITY**  
**Restricted and Unrestricted Cash Summary**  
**FY2022**

**SCHEDULE G**

Description	Unaudited June 30, 2022	Audited September 30, 2021	Increase (Decrease)
<b>UNRESTRICTED</b>			
Change Fund	2,000	2,000	-
Petty Cash	3,930	4,430	(500)
BOG Deposit Accounts	13,480,749	11,783,670	1,697,079
BOG O & M Reserve	13,869,668	13,863,240	6,428
BOG CapEx Fund	8,173,404	9,391,290	(1,217,886)
<b>Sub-total Unrestricted</b>	<b>35,529,751</b>	<b>35,044,630</b>	<b>485,121</b>
<b>RESTRICTED</b>			
ANZ Bank	672	1,374	(702)
Bank Pacific	19,135	13,720	5,415
Bank of Hawaii	162,562	187,857	(25,294)
Community First FCU	3,913	2,897	1,015
First Hawaiian Bank	18,685	28,808	(10,124)
Bank Pacific Surcharge	294,517	346,165	(51,648)
Bank Pacific Escrow Deposit	934,365	905,936	28,429
BOG Customer Refunds	2,284,195	2,101,144	183,051
BOG Emergency Reserve Fund	6,246	6,245	(0)
BOG Sewer Hookup Revolving Fund	63,780	61,318	2,462
BOG Operation and Maintenance Fund	3,083,482	3,083,482	-
BOG Revenue Trust	274,007	902,327	(628,320)
BOG Revenue Trust Fund	8,456,318	7,604,696	851,622
BOG Capital Improvement Revenue Fund	7,960,887	6,017,960	1,942,927
BOG Rate Stabilization Fund	7,950,000	11,400,000	(3,450,000)
	<b>31,512,764</b>	<b>32,663,929</b>	<b>(1,151,166)</b>
BOG - SDC Deposit	1,398,366	4,512,282	(3,113,916)
BOG - SDC CDs	6,250,000	5,250,000	1,000,000
<b>Total SDC</b>	<b>7,648,366</b>	<b>9,762,282</b>	<b>(2,113,916)</b>
<b>Total Restricted</b>	<b>39,161,131</b>	<b>42,426,211</b>	<b>(3,265,081)</b>
<b>Reserve Funds</b>			
BOG Series 2013 Construction Fund	4,264,512	4,566,711	(302,199)
BOG Series 2016 Construction Fund	41,431,019	56,620,524	(15,189,505)
BOG Series 2017 Refunding Construction Fund	4,123,912	4,368,640	(244,728)
BOG Series 2020A Construction Fund	119,237,847	122,317,770	(3,079,923)
BOG Series 2020A Capitalized Interest Fund	2,235,412	5,584,579	(3,349,167)
BOG Series 2020A Cost of Issuance Fund	-	-	-
<b>Total Restricted - Held by Trustee</b>	<b>171,292,702</b>	<b>193,458,224</b>	<b>(22,165,521)</b>
BOG OMRRRF Fund	17,423,213	17,423,213	-
USB Series 2013 Debt Service Fund	3,954,098	1,396,665	2,557,433
USB Series 2013 Debt Service Reserve Fund	12,031,688	12,031,688	-
USB Series 2014 Refunding Debt Service Fund	2,272,281	1,048,078	1,224,204
USB Series 2014 Refunding Debt Service Reserve Fund	7,742,083	7,736,844	5,239
USB Series 2016 Debt Service Fund	7,596,845	2,816,611	4,780,235
USB Series 2016 Debt Service Reserve Fund	7,591,999	7,591,999	-
USB Series 2010 Debt Service Fund	-	31,558	(31,558)
USB Series 2017 Refunding Debt Service Reserve Fund	7,566,460	7,566,460	-
USB Series 2017 Debt Service Fund	4,829,128	1,903,114	2,926,014
USB Series 2020A Debt Service Fund	1,115,961	-	1,115,961
USB Series 2020A Debt Service Reserve Fund	6,659,700	6,659,700	-
USB Series 2020B Debt Service Reserve Fund	2,945,897	1,472,780	1,473,117
<b>Total Investments</b>	<b>81,729,354</b>	<b>67,678,709</b>	<b>14,050,645</b>
<b>Total Restricted and Unrestricted Cash</b>	<b>327,712,938</b>	<b>338,607,774</b>	<b>(10,894,837)</b>

Guam Waterworks Authority  
Accounts Receivable - Government (Active)  
June 30, 2022

## SCHEDULE H

A G I N G							
Customer Name	No. of Accounts	Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total
<b>Autonomous Agencies (Active)</b>							
Guam Int'l Airport Authority	8	31,374	60	60	60	262,391	293,945
Guam Power Authority	25	62,327	-	-	-	-	62,327
Guam Housing & Urban Renewal Authority	9	10,373	316	-	-	-	10,689
Port Authority of Guam	5	1,999	-	-	-	-	1,999
Guam Solid Waste Authority	4	846	79	81	-	-	1,007
Guam Housing Corporation	1	37	-	-	-	-	37
<b>Total Autonomous Agencies</b>	<b>52</b>	<b>106,956</b>	<b>456</b>	<b>141</b>	<b>60</b>	<b>262,391</b>	<b>370,004</b>
<b>Semi-Autonomous Agencies (Active)</b>							
Guam Memorial Hospital Authority	3	41,358	34,056	1,247	150	13,705	90,516
University of Guam	48	8,902	-	-	-	-	8,902
Guam Environmental Protection Agency	2	287	-	-	-	-	287
<b>Total Semi-Autonomous Agencies</b>	<b>53</b>	<b>50,546</b>	<b>34,056</b>	<b>1,247</b>	<b>150</b>	<b>13,705</b>	<b>99,705</b>
<b>Line Agencies (Active)</b>							
Department of Education	52	473,476	265,414	58,380	30	-	797,300
Department of Corrections	9	74,854	-	-	-	-	74,854
Department of Parks & Recreation	15	50,619	-	20,212	-	-	70,831
Department of Public Works	10	26,289	2,848	4,116	-	-	33,254
Department of Chamorro Affairs	7	18,860	-	-	-	-	18,860
Department of Military Affairs/GUARNG	1	12,194	-	-	-	-	12,194
Department of Agriculture	7	6,990	26	-	-	-	7,017
Guam Fire Department	11	5,298	1,052	-	-	-	6,350
Office of the Governor	2	3,806	-	-	-	-	3,806
Guam Veterans Affairs Office	2	1,249	936	1,107	-	-	3,293
Department of Public Health & Social Services	9	1,860	1,387	22	-	-	3,269
Guam Police Department	7	2,703	0	187	-	-	2,890
Department of Mental Health and Substance	3	1,850	-	-	-	-	1,850
Department of Youth Affairs	3	1,190	-	-	-	-	1,190
Guam Energy Office	1	471	-	199	-	-	670
Guam Public Library	6	433	63	-	-	-	495
Department of Customs & Quarantine	1	428	-	-	-	-	428
Guam Visitors Bureau	2	369	-	-	-	-	369
Department of Administration	3	253	-	-	-	-	253
Office of Technology	1	45	-	-	-	-	45
							-
							-
<b>Total Line Agencies</b>	<b>152</b>	<b>683,238</b>	<b>271,727</b>	<b>84,223</b>	<b>30</b>	<b>-</b>	<b>1,039,218</b>
<b>Other Government of Guam Entities (Active)</b>							
Mayors Council of Guam	62	19,435	8,421	368	-	-	28,224
Merizo Mayor	1	76	47	96	-	-	219
The Office of the Dededo Mayor	1	159	-	-	-	-	159
Agat Mayor's Office	1	26	32	-	-	-	58
							-
							-
<b>Total Other Government of Guam Entities</b>	<b>65</b>	<b>19,696</b>	<b>8,500</b>	<b>464</b>	<b>-</b>	<b>-</b>	<b>28,660</b>
<b>Total as of June 30, 2022 (Active)</b>	<b>322</b>	<b>860,437</b>	<b>314,738</b>	<b>86,076</b>	<b>240</b>	<b>276,096</b>	<b>1,537,587</b>

Guam Waterworks Authority  
Accounts Receivable - Government (Inactive)

GWA Work Session - July 19, 2022 - GM REPORT

GUAM WATERWORKS AUTHORITY  
Accounts Receivable Aging Summary by Rate Class  
As of June 30, 2022

SCHEDULE I

ACTIVE AND INACTIVE

Rate Class	A G I N G							
	No. of Accounts	Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total	
Government	437	\$ 2,620,712	\$ 315,186	\$ 86,146	\$ 1,929	\$ 568,406	\$ 3,592,379	18%
Agriculture	415	29,748	6,628	1,461	822	33,145	71,804	0%
Commercial I	2,674	1,227,727	42,551	68,348	30,953	549,244	1,918,823	9%
Commercial II	35	251,757	55	3,188	299	2,676	257,976	1%
Commercial III	303	485,356	133,725	22,643	40,317	326,316	1,008,358	5%
Golf Course	16	4,372	-	-	-	-	4,372	0%
Hotel	58	1,466,010	32,214	39,265	29,175	880,481	2,447,144	12%
Irrigation	34	4,421	1,675	386	222	1,758	8,462	0%
Residential	49,072	4,305,986	732,076	366,121	284,631	5,347,288	11,036,103	54%
	<b>53,044</b>	<b>10,396,090</b>	<b>1,264,111</b>	<b>587,559</b>	<b>388,348</b>	<b>7,709,313</b>	<b>20,345,421</b>	<b>100%</b>
		51%	6%	3%	2%	38%		

Less Allowance for Doubtful Accounts: (10,158,002)  
Net Accounts Receivable: 10,187,419

Days Receivables Outstanding 39

As of May 31, 2022

Rate Class	A G I N G							
	No. of Accounts	Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total	
Government	435	\$ 2,736,905	\$ 545,969	\$ 110,959	\$ 19,483	\$ 564,502	\$ 3,977,818	19%
Agriculture	413	27,611	4,965	1,211	498	33,361	67,645	0%
Commercial I	2,666	1,259,336	162,656	80,941	81,055	489,050	2,073,038	10%
Commercial II	35	248,630	3,188	299	576	2,285	254,978	1%
Commercial III	302	493,999	104,339	111,778	90,423	327,013	1,127,552	5%
Golf Course	16	3,836	672	-	-	-	4,508	0%
Hotel	58	1,216,673	112,522	41,348	27,644	870,137	2,268,323	11%
Irrigation	34	4,650	541	236	214	1,544	7,185	0%
Residential	49,014	4,385,684	682,865	425,733	256,115	5,307,149	11,057,546	53%
	<b>52,973</b>	<b>10,377,322</b>	<b>1,617,717</b>	<b>772,506</b>	<b>476,007</b>	<b>7,595,042</b>	<b>20,838,593</b>	<b>100%</b>
		50%	8%	4%	2%	36%		

Less Allowance for Doubtful Accounts: (9,982,672)  
Net Accounts Receivable: 10,855,921

Days Receivables Outstanding 40

ACTIVE ONLY

Rate Class	A G I N G							
	No. of Accounts	Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total	
Government	435	\$ 2,620,712	\$ 314,979	\$ 86,076	\$ 390	\$ 557,949	\$ 3,580,105	23%
Agriculture	391	29,748	6,507	1,327	720	4,985	43,288	0%
Commercial I	2,483	1,226,029	41,861	62,657	23,652	309,963	1,664,161	11%
Commercial II	35	251,757	55	3,188	299	2,676	257,976	2%
Commercial III	288	485,291	133,471	22,382	39,542	268,350	949,036	6%
Golf Course	16	4,372	-	-	-	-	4,372	0%
Hotel	55	1,466,010	32,214	39,265	29,175	285,352	1,852,016	12%
Irrigation	33	4,421	1,675	386	222	463	7,166	0%
Residential	40,135	4,245,567	693,187	312,198	205,922	1,469,213	6,926,086	45%
	<b>43,871</b>	<b>10,333,907</b>	<b>1,223,948</b>	<b>527,479</b>	<b>299,921</b>	<b>2,898,951</b>	<b>15,284,206</b>	<b>100%</b>
		68%	8%	3%	2%	19%		

Less Allowance for Doubtful Accounts: (10,158,002)  
Net Accounts Receivable: 5,126,204

As of May 31, 2022

Rate Class	A G I N G							
	No. of Accounts	Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total	
Government	431	\$ 2,736,697	\$ 525,686	\$ 109,420	\$ 9,026	\$ 562,636	\$ 3,943,465	25%
Agriculture	389	27,489	4,832	1,110	469	5,180	39,079	0%
Commercial I	2,475	1,240,938	157,028	73,497	69,631	260,992	1,802,086	11%
Commercial II	35	248,630	3,188	299	576	2,285	254,978	2%
Commercial III	286	493,533	104,077	111,003	89,942	269,423	1,067,979	7%
Golf Course	16	3,836	672	-	-	-	4,508	0%
Hotel	55	1,216,673	112,522	41,348	27,644	275,008	1,673,195	11%
Irrigation	33	4,650	541	236	214	249	5,890	0%
Residential	40,111	4,341,308	630,946	344,976	193,497	1,461,439	6,972,165	44%
	<b>43,831</b>	<b>10,313,753</b>	<b>1,539,492</b>	<b>681,890</b>	<b>390,999</b>	<b>2,837,212</b>	<b>15,763,345</b>	<b>100%</b>
		65%	10%	4%	2%	18%		

Less Allowance for Doubtful Accounts: (9,982,672)  
Net Accounts Receivable: 5,780,673



**GUAM WATERWORKS AUTHORITY**  
**Accounts Payable Aging**

**SCHEDULE J**

<b>As of</b>	<b>AGING</b>							<b>Days Payable Outstanding</b>
	Current	31 - 60 Days	61 - 90 Days	91 - 120 Days	> 120 Days	Total		
<b>June 30, 2022</b>	\$ 3,111,217 88%	\$ 35,804 1%	\$ 99,315 3%	\$ 12,249 0%	\$ 266,946 8%	\$ <b>3,525,531</b> <b>100%</b>		30
<b>May 31, 2022</b>	\$ 3,808,392 85%	\$ 281,016 6%	\$ 126,158 3%	\$ 28,475 1%	\$ 262,863 6%	\$ <b>4,506,905</b> <b>100%</b>		35
<b>April 30, 2022</b>	\$ 3,546,221 88%	\$ 145,780 4%	\$ 53,456 1%	\$ 68,301 2%	\$ 225,986 6%	\$ <b>4,039,744</b> <b>100%</b>		33

**GUAM WATERWORKS AUTHORITY  
WATER DEMAND BY RATE CLASS  
FY2015 - FY2022**

**SCHEDULE K**

CLASS	AUDITED							UNAUDITED	
	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 ANNUALIZED 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	3,476,974	-4%
C Commercial	1,020,089	1,022,890	964,639	910,905	906,192	822,029	786,054	807,714	3%
F Federal	1,168	1,180	2,508	1,813	1,602	1,338	2,069	1,452	-30%
G Government	515,974	475,366	448,430	450,165	405,980	408,502	404,026	461,711	14%
H Hotel	999,116	1,008,087	1,004,525	989,723	1,079,919	714,161	448,034	427,183	-5%
G Golf	6,850	6,770	5,252	2,741	2,793	5,835	2,855	3,845	35%
A Agriculture	67,376	78,628	69,482	81,127	90,803	84,492	68,805	72,228	5%
I Irrigation	<u>10,385</u>	<u>11,351</u>	<u>10,143</u>	<u>8,504</u>	<u>7,896</u>	<u>8,654</u>	<u>5,404</u>	<u>5,191</u>	-4%
GRAND TOTAL	<u>6,036,620</u>	<u>6,033,960</u>	<u>5,711,790</u>	<u>5,758,590</u>	<u>5,855,091</u>	<u>5,757,733</u>	<u>5,339,864</u>	<u>5,256,298</u>	-2%

\*FY2022 is annualized for 9 months.

**Guam Waterworks Authority**  
**System Development Charges Project Status**  
**As of June 30, 2022**

**SCHEDULE L**

**Funding Summary**

Total available project funds	\$ 15,751,716
Total project expenditures and encumbrances	10,919,482
Total unobligated project funds	<b>\$ 4,832,234</b>

**Projects Funded**

<b>Project Description</b>	<b>Expenditures</b>	<b>Outstanding Encumbrances</b>	<b>Expenditures and Encumbrances</b>
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	274,240	5,800	280,040
Line Replacement Phase IV	256,937	-	256,937
Northern District WWTP	3,908,853	2,042,688	5,951,540
Northern District WWTP (Land Purchase)	1,000,000	-	1,000,000
Route 4 Relief Sewerline Rehab & Replacement	519,227	74,641	593,869
South Paulino Heights Waterline Upgrade	84,056	4,714	88,770
Talofofo Sewer Improvement	-	241,142	241,142
Groundwater Well Production Meter Rep.	113,543	37,664	151,207
	<b>\$ 8,509,979</b>	<b>\$ 2,409,503</b>	<b>\$ 10,919,482</b>

**Future planned projects**

**FY 2022-2025**

Water Distribution System Pipe Replacement & Upgrades	1,500,000
Capacity Enhancement - Well Development and Construction Progr	394,000
Well Repair Program	200,000
	<b>\$ 2,094,000</b>



## Financial Statement Overview May 2022

### Key Financial Indicators

Indicator	Target	Mar 22	Apr 22	May 22
DSC YTD				
• Per Section 6.12 of Indenture	1.25	1.26	1.25	1.25
• Per PUC / CCU	1.40	1.26	1.25	1.25
Days – Cash on Hand	120 days	274 days	269 days	262 days
Collection Ratio				
• Month to Date	99%	108%	101%	94%
• Year to Date	99%	97%	97%	97%
Days Billed	30 days	30 days	30 days	29 days
Account Receivable Days	30 days	41 days	40 days	40 days
Account Payable Days	45 days	37 days	33 days	35 days
Employee Count	400 FTE	362 FTE	362 FTE	361 FTE
Water Demand				
• Month to Date	478,754	439,919	428,589	433,696
• Year to Date	3,830,033	2,637,556	3,066,145	3,499,841
Wastewater Flow				
• Month to Date	356,472	307,453	305,770	323,197
• Year to Date	2,851,779	1,925,203	2,230,973	2,554,170
Water Customers	42,839	43,135	43,239	43,320
Wastewater Customers	29,805	30,513	30,497	31,157

### Water and Wastewater Consumption

Water consumption is 8% less and wastewater flow is down 4% for the month of May compared to prior year. The decreases in water consumption and wastewater flows are mainly due to a drop in use by residential customers that was not made up by increases in other customer classes.

Year to Date (YTD) water demand is down 1% while wastewater flows are up by 2% compared to last year. Increases in the Commercial and GovGuam customer classes offset decreases in the Residential and Hotel customer classes. Note that the number of YTD billing days through May 2022 of 240 days is 3 days more than the prior year's 237 days. See Schedule K for Water Demand for FY2015 to FY2022.

YTD average daily water consumption for May 2022 of 14,583 kGals is 3% lower than May 2021's 14,983 kgals. Increases in the commercial and GovGuam customer classes were not enough to offset decreases in the Hotel and Residential average daily water consumption.

### Balance Sheet (Schedule A)

- Total Assets & Deferred Outflows of Resources of \$1.23B in September 2021 increased by \$5.3M or less than 1% in May 2022. Current Assets decreased by \$11.8M primarily due to decreases in federal receivables. Property, Plant and Equipment increased by \$27.5M due to increases in construction work in progress offset by increases in accumulated depreciation. Other Noncurrent Assets decreased by \$9.7 million as bond funds were used to pay contractors. Days Cash on Hand was calculated at 262 days. Schedule G contains a schedule of restricted and unrestricted cash and investments.



- Liabilities & Deferred Inflow of Resources of \$920M in September 2021 decreased by \$4.9M or 1% to \$915.1M in May 2022 primarily due to reductions in contractors' payable offset by increases in interest payable.
- Accounts Receivable days in May and April 2022 were 40 days. Accounts Payable days were 35 days in May 2022, 2 days more than the 33 days in April 2022. 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 May 2022 of \$8.5M were 11% or \$1M less than budget of \$9.5M. May 2022 Total Operating Revenues is 4% or 375K less than May 2021's \$8.8M.
- Total Year to Date Operating Revenues as of May 2022 of \$67.7M were 11% or \$8.2M less than the budget of \$75.8M. Total Year to Date Operating Revenues as of May 2022 were 1% or \$758K more than Year to Date Operating Revenues as of May 2021's \$66.9M.
- Below are the percentages of operating revenues (water and wastewater) contributed by GWA's customer classes for FY2022 and FY2021 Year to Date as of May as well as the revenue totals:

Customer Class	FY2022		FY2021	
○ Residential	\$31,754,730	47.48%	\$32,669,806	49.88%
○ Commercial	\$14,472,877	21.64%	\$13,515,747	20.64%
○ Hotel	\$8,138,973	12.17%	\$8,436,026	12.88%
○ Government of Guam	\$7,808,198	11.68%	\$6,540,833	9.99%
○ Federal Government	\$4,321,550	6.46%	\$3,954,242	6.04%
○ Agriculture, Golf Course, Irrigation	\$380,634	.57%	\$377,279	.58%
TOTALS	\$66,876,962	100.00%	\$65,493,933	100.00%

- Total Operating Expenses for May 2022 of \$7.7M were \$211K or 3% more than budget of \$7.5M. May 2022 Total Operating Expenses were 11% or \$790K more than May 2021's \$6.9M. The largest increase month over month was in power.
- Total Year to Date Operating Expenses as of May 2022 of \$60.7M were \$920K or 2% more than budget of \$59.8M. Total Year to Date Operating Expenses as of May 2022 were 10% or \$5.6M more than May 2021 YTD's \$55.1M. The largest increase year over year was due to power purchases, more than half of the increase or \$3.1M.
- Earnings from Operations for May 2022 of \$789K were 61% or \$1.2M less than the budget of \$2M and 60% or \$1.2M less than May 2021's \$1.95M. Change in Net Assets for May 2022 of \$1M was 63% or \$1.8M less than the \$2.8M budget and \$3.1M or 75% less than May 2021's \$4.2M. The decrease in the Change in Net Assets year over year was mostly due to the decrease in contributions from Federal Grants.
- Year to Date Earnings from Operations as of May 2022 of \$6.97M were 57% or \$9.1M less than the budget of \$16.1M and 41% or \$4.8M less than May 2021 YTD's \$11.8M. Year to Date Change in Net Assets as of May 2022 of \$10.2M was 55% or \$12.2M less than the \$22.4M budget and \$15M or 60% less than May 2021 YTD's \$25.2M.

**Cash Flow (Schedule F)**

As of May 2022, cash flows from operating activities were \$25.9M, the cash used in capital and financing activities were \$39.3M, and the cash from investing activities were \$13.5M resulting in an increase in cash of \$450K for the fiscal year.

**Customer Payments**

Despite the pandemic, while only 8% of payments are made in cash, more than a third of payments continue to be made in person. Beginning in August 2021, ratepayers were able to access one walkup window in Upper Tumon to make payments; the drive through continues to remain open.

Using social media, GWA continues to encourage customers to conduct business online or via the phone. An automated customer service online support portal is also available on the GWA website for permits, submissions related to backflow testing, payment plans, and other customer related requests.

On April 28, 2020, CCU Resolution 24-FY2020 granted the lifting of credit card limits on payments for non-residential accounts. In FY2022 (October through December), approximately 50% 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 – December 2021	160	\$649,270	\$13,055	2.01%
January – March 2022	177	\$753,282	\$15,146	2.01%
April 2022	60	\$279,610	\$5,622	2.01%
May 2022	65	\$255,746	\$5,142	2.01%

Since the suspension of disconnections for nonpayment was lifted, the Upper Tumon office has been open for payments on Saturdays. For the Saturdays in May, 295 payments totaling \$74,612 were made towards GWA billings and 433 payments totaling \$251,928 were made for GPA.

The new merchant service agreement will transfer credit card processing from Bank of Hawaii to First Hawaiian Bank (FHB). GWA Resolution 20-FY2022 authorized set up an FHB account to be used to deposit funds collected through this process.

For the month of May, Finance posted \$46,028 in utility payments from the Department of Administration (DOA) for eligible renters as part of the Guam Emergency Rental Assistance Program (GERAP). Additionally, GWA posted \$56,605 from eligible homeowners as part of the Guam Homeowners Assistance Fund (GHAFF). Furthermore, GWA posted \$12,508 payments from eligible Low Income Household Water Assistance Program.

**Guam Solid Waste Customer Payments**

GPWA have made updates to its software to allow GSW payments. June 6, 2022 is the target date to begin acceptance of GSW payments at the GPWA sites.

**PUC Docket**

The GWA Comprehensive Review and Update of its Five-Year Financial Plan & Capital Improvement Program (Financial Plan Update) and related Rate Application Model (RAM) were delivered to the PUC as required on



May 1, 2021. The stipulated analytical studies were previously provided to the PUC as required on March 31, 2021.

The ALJ issued his proposed order on May 12, 2022. GWA provided an initial response on May 26, 2022, and an official response on May 27, 2022. The PUC consultants provided a report and recommended rate decision and order on June 14, 2022. It is likely the PUC hearing will be scheduled in August, but we are waiting for formal confirmation.

#### ***FY2022 & FY2023 Budget***

A request to modify the budget will be made once the PUC order on rates for FY2022 is issued. Because the order will be issued midway through FY2022, it is anticipated that it will also cover rates for FY2023.

A budget update is issued monthly to the business unit managers to help them track and plan their expenditures based on the available budget.

GWA continues to monitor revenues and will adjust as needed to ensure continuity of services to our customers while keeping the safety of our staff the highest priority.

#### ***Rate Stabilization Fund***

CCU Resolution 11-FY2021 authorized the establishment of a Rate Stabilization Fund (RSF) as a mechanism for managing future uncertainties and risks as well as to promote predictable rates. In September 2021, GWA transferred the authorized \$11.4 million from GWA's Working Capital Reserves into the RSF. These funds were originally transferred into the Working Capital Reserves from the Working Capital Reserves for Debt Service per CCU Resolution 17-FY2020 which dissolved the Working Capital Reserves for Debt Service fund.

On January 25, 2022, CCU Resolution 06-FY2022 authorized transfers up to \$2 million from the RSF into the GWA general fund. Resolution 19-FY2022 authorized transfers from the RSF to the general fund by \$3.3 million for a total of up to \$5.3 million. A \$750 thousand transfer was made at the end of May 2022, bringing total transfers to \$2.35 million,

#### ***COVID Updates***

There were 1,014 COVID-19 positive tests and 10 COVID-related fatalities reported during the month of May. For the month of May 2022, the average daily positive test rate was 33 compared to the 29 daily average in April. Executive Order 2022-14 extended the public health emergency to July 4, 2022.

By the end of May 2022, 136,991 residents were fully vaccinated, 60,322 had received their first booster, and 5,785 had received a second booster. Incentives are being offered to residents who take their last dose in the primary series or receive a booster. There were 9 persons hospitalized for COVID at the end of May.

#### ***GVB Visitor Arrivals***

Visitor Arrivals for May 2022 increased 359.7% over May 2021, from 4,352 to 20,008. Fifty percent of arrivals were from Korea and 30% originated from the United States. Calendar year arrivals were up 186.1% and fiscal year arrivals were up 203.7%. COVID-19 testing requirements were lifted for international travelers flying to US destinations. As Guam's source tourism markets relax restrictions, airplanes are expected to increase weekly flights into Guam. However, 'tourism stakeholders' predict a slow recovery.

**GUAM WATERWORKS AUTHORITY  
May 31, 2022  
FINANCIAL AND RELATED REPORTS  
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GWA Work Session - July 19, 2022 - GM REPORT

GUAM WATERWORKS AUTHORITY  
Balance Sheet  
May 31, 2022

SCHEDULE A

	Unaudited May 31, 2022	Audited September 30, 2021	Increase (Decrease)
<b>ASSETS AND DEFERRED OUTFLOWS of RESOURCES</b>			
<u>Current Assets</u>			
Cash			
Unrestricted (Schedule G)	35,494,987	35,044,630	450,358
Restricted Funds (Schedule G)	38,359,874	42,426,211	(4,066,337)
Accounts Receivable Trade, Net of Allowance for Doubtful Receivables of \$9,982,672 at May 31, 2022 and \$8,584,821 at Sept 30, 2021	10,855,955	11,392,368	(536,413)
Federal Receivable	2,951,614	11,436,000	(8,484,386)
Other Receivable	1,447,566	1,002,328	445,237
Prepaid Expenses	1,346,547	849,867	496,680
Materials & Supplies Inventory, Net of Allowance for Obsolescence of \$64,131 at May 31, 2022 and \$64,131 at Sept 30, 2021	4,187,917	4,284,336	(96,420)
Total Current Assets	94,644,460	106,435,741	(11,791,281)
<u>Property, Plant and Equipment</u>			
Utility plant in service			
Water system	417,937,843	415,123,284	2,814,559
Wastewater system	513,661,657	513,741,066	(79,409)
Non-utility property	32,721,852	33,051,603	(329,750)
Total property	964,321,353	961,915,953	2,405,400
Less: Accumulated Depreciation	(385,376,026)	(367,521,639)	(17,854,387)
Land	5,287,305	5,240,187	47,117
Construction Work in Progress	210,507,171	167,589,130	42,918,041
Property, Plant and Equipment, net	794,739,802	767,223,632	27,516,170
<u>Noncurrent assets</u>			
Restricted cash (Schedule G)	172,559,467	193,458,224	(20,898,757)
Investments (Schedule G)	78,839,710	67,678,709	11,161,001
Total other noncurrent assets and deferred charges	251,399,177	261,136,933	(9,737,757)
<b>Total Assets</b>	<b>1,140,783,439</b>	<b>1,134,796,306</b>	<b>5,987,133</b>
Deferred outflows of resources			
Regulatory assets	2,562,828	1,922,989	639,839
Debt defeasance due to bond refunding	29,915,449	31,286,637	(1,371,188)
Deferred outflows from pension	12,904,653	12,904,653	-
Deferred outflows from OPEB	48,780,079	48,780,079	-
<b>Total Assets and Deferred Outflows of Resources</b>	<b>1,234,946,447</b>	<b>1,229,690,663</b>	<b>5,255,783</b>
<b>LIABILITIES, DEFERRED INFLOWS of RESOURCES AND NET ASSETS</b>			
<u>Current Liabilities</u>			
Current maturities of long-term debt			
Series 2013 Revenue Bond	2,990,000	2,990,000	-
Series 2014 Refunding Bond	555,000	555,000	-
Series 2016 Revenue Bond	4,055,000	4,055,000	-
Series 2017 Refunding Bond	2,145,000	2,145,000	-
Notes Payable	-	-	-
Accounts Payable -Trade	4,506,886	2,652,457	1,854,429
Accrued and Other Liabilities	2,885,170	2,011,179	873,991
Interest Payable	12,335,501	7,324,101	5,011,400
Accrued Payroll and Employee Benefits	1,170,619	918,403	252,215
Current portion of employee annual leave	660,125	660,125	-
Contractors' Payable	13,638,636	25,847,832	(12,209,196)
Customer and Other Deposits	2,456,249	2,237,010	219,239
Total Current Liabilities	47,398,186	51,396,108	(3,997,922)
<u>Long Term Debt, less current maturities</u>			
Series 2013 Revenue Bond	21,510,000	21,510,000	-
Series 2014 Refunding Bond	64,055,000	64,055,000	-
Series 2016 Revenue Bond	134,975,000	134,975,000	-
Series 2017 Refunding Bond	103,180,000	103,180,000	-
Series 2020A Revenue Bond	134,000,000	134,000,000	-
Series 2020B Refunding Bond	166,075,000	166,075,000	-
Unamortized Bond Premium/Discount	39,403,543	40,654,335	(1,250,792)
Net pension liability	56,364,779	56,364,779	-
Net OPEB obligation	106,433,894	106,433,894	-
Employee Annual Leave, Less Current Portion	1,185,813	1,185,813	-
Employee Sick Leave	1,339,208	1,339,208	-
<b>Total Liabilities</b>	<b>875,920,423</b>	<b>881,169,137</b>	<b>(5,248,714)</b>
Deferred inflows of resources:			
Contribution in Aid of Construction	579,492	244,720	334,772
Deferred inflows from pension	985,049	985,049	-
Deferred inflows from OPEB	37,575,154	37,575,154	-
<b>Total Liabilities and Deferred Inflows of Resources</b>	<b>915,060,118</b>	<b>919,974,060</b>	<b>(4,913,942)</b>
<b>Net Assets</b>	<b>319,886,329</b>	<b>309,716,603</b>	<b>10,169,725</b>
<b>Total Liabilities, Deferred Inflows of Resources and Net Assets</b>	<b>1,234,946,447</b>	<b>1,229,690,663</b>	<b>5,255,783</b>

**GUAM WATERWORKS AUTHORITY**  
**Statement of Operations and Retained Earnings**  
**Comparative Budget vs. Actual for the period ending May 31, 2022**

SCHEDULE B

	Actual (Unaudited) May-22	Month to Date Budget* May-22	Variance Favorable / (Unfavorable)
<b>OPERATING REVENUES</b>			
Water Revenues	5,307,802	5,863,373	(555,571)
Wastewater Revenues	2,813,485	3,226,426	(412,941)
Legislative Surcharge	247,769	274,214	(26,445)
Other Revenues	45,899	35,895	10,005
System Development Charge	55,017	77,442	(22,425)
<b>Total Operating Revenues</b>	<b>8,469,972</b>	<b>9,477,350</b>	<b>(1,007,378)</b>
<b>OPERATING AND MAINTENANCE EXPENSES</b>			
Water Purchases	576,605	571,438	(5,167)
Power Purchases	1,597,071	1,205,155	(391,916)
Total Utility Costs	2,173,676	1,776,593	(397,083)
Salaries and Wages	1,516,378	1,680,210	163,832
Pension and Benefits	588,334	696,002	107,669
Total Salaries and Benefits	2,104,711	2,376,212	271,501
Capitalized Labor and Benefits	(264,025)	(308,333)	(44,309)
Net Salaries and Benefits	1,840,687	2,067,879	227,192
<b>Administrative and General Expenses</b>			
Sludge removal	23,457	127,518	104,062
Chemicals	79,508	154,647	75,139
Materials & Supplies	162,411	169,912	7,501
Transportation	30,159	59,260	29,100
Communications	11,790	27,135	15,345
Claims	-	14,331	14,331
Insurance	147,927	82,972	(64,954)
Training & Travel	3,837	23,501	19,665
Advertising	11,902	11,583	(318)
Miscellaneous	82,177	119,179	37,002
Regulatory Expense	9,861	30,183	20,323
Bad Debts Provision	167,381	139,113	(28,268)
Total Administrative and General Expense	730,408	959,335	228,927
<b>Depreciation Expense</b>	<b>2,332,959</b>	<b>1,855,919</b>	<b>(477,040)</b>
<b>Contractual Expense</b>			
Audit & Computer Maintenance	83,309	126,287	42,977
Building rental	42,397	41,412	(985)
Equipment rental	32,481	53,236	20,755
Legal	-	-	-
Laboratory	22,886	61,535	38,649
Other	158,765	241,889	83,125
Total Contractual Expense	339,838	524,359	184,521
Retiree Supp. Annuities and health care costs	211,704	233,386	21,682
Contribution to Government of Guam	51,833	52,768	934
Total Retiree Benefits	263,537	286,153	22,616
<b>Total Operating Expenses</b>	<b>7,681,105</b>	<b>7,470,239</b>	<b>(210,866)</b>
<b>Earnings (Loss) from Operations</b>	<b>788,867</b>	<b>2,007,111</b>	<b>(1,218,244)</b>
Interest Income - 2010/13/14/16/17/20 Series Bond	1,270	128,299	(127,029)
Interest Income - Other Funds	97	29,550	(29,454)
Interest Income - SDC	407	2,488	(2,081)
Interest Expense - 2010/13/14/16/17/20 Series Bond	(2,457,450)	(2,638,329)	180,879
Contributions from Federal Government	-	-	-
Federal Expenditures	-	-	-
Loss on Asset Disposal	(171,347)	-	(171,347)
AFUDC	-	-	-
Amortization of Discount, Premium and Issuance Costs	156,349	(23,078)	179,427
Defeasance due to bond refunding	(171,398)	(22,439)	(148,960)
Prior Year Adjustment	(16,942)	-	(16,942)
Total non-operating revenues (expenses)	(2,659,016)	(2,523,508)	(135,508)
<b>Net Income (Loss) before capital contributions</b>	<b>(1,870,148)</b>	<b>(516,397)</b>	<b>(1,353,752)</b>
<b>Capital Contributions</b>			
Grants from US Government	2,891,125	3,311,071	(419,947)
Grants from GovGuam & Others	-	-	-
Total Capital Contributions	2,891,125	3,311,071	(419,947)
<b>Change in Net Assets</b>	<b>1,020,977</b>	<b>2,794,675</b>	<b>(1,773,698)</b>
<b>Debt Service Calculation</b>			
Earnings From Operations	788,867	2,007,111	
System Development Charge	(55,017)	(77,442)	
Retiree COLA	51,833	52,768	
Interest/Investment Income	97	29,550	
Depreciation	2,332,959	1,855,919	
Plus withdrawals (deposits) to Rate Stabilization Fund	750,000	-	
<b>Balance Available for Debt Service per Section 6.12</b>	<b>3,868,739</b>	<b>3,867,907</b>	
<b>Debt Service</b>			
Principal	812,083	772,500	
Interest	1,976,089	1,996,663	
<b>Total</b>	<b>2,788,172</b>	<b>2,769,163</b>	
<b>Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)</b>	<b>1.39</b>	<b>1.40</b>	
<b>Debt Service Coverage (1.40X) inclusive of reserves (PUC)</b>	<b>1.39</b>	<b>1.40</b>	

\*Interim budget

**GUAM WATERWORKS AUTHORITY**  
**Statement of Operations and Retained Earnings**  
**Comparative for the period ending May 31, 2022 and 2021**

SCHEDULE C

	Actual (Unaudited) May-22	Month to Date Actual (Audited) May-21	Variance Increase / (Decrease)
<b>OPERATING REVENUES</b>			
Water Revenues	5,307,802	5,675,590	(367,789)
Wastewater Revenues	2,813,485	2,791,201	22,283
Legislative Surcharge	247,769	260,554	(12,785)
Other Revenues	45,899	40,290	5,609
System Development Charge	55,017	77,451	(22,434)
<b>Total Operating Revenues</b>	<b>8,469,972</b>	<b>8,845,087</b>	<b>(375,114)</b>
<b>OPERATING AND MAINTENANCE EXPENSES</b>			
Water Purchases	576,605	685,835	(109,230)
Power Purchases	1,597,071	1,036,141	560,929
Total Utility Costs	<b>2,173,676</b>	<b>1,721,976</b>	<b>451,699</b>
Salaries and Wages	1,516,378	1,479,838	36,540
Pension and Benefits	588,334	527,757	60,576
Total Salaries and Benefits	<b>2,104,711</b>	<b>2,007,595</b>	<b>97,116</b>
Capitalized Labor and Benefits	(264,025)	(325,547)	61,522
Net Salaries and Benefits	<b>1,840,687</b>	<b>1,682,048</b>	<b>158,639</b>
<b>Administrative and General Expenses</b>			
Sludge removal	23,457	131,857	(108,400)
Chemicals	79,508	116,167	(36,659)
Materials & Supplies	162,411	85,254	77,157
Transportation	30,159	45,858	(15,699)
Communications	11,790	10,142	1,648
Claims	-	30,025	(30,025)
Insurance	147,927	78,330	69,596
Training & Travel	3,837	1,255	2,582
Advertising	11,902	6,609	5,293
Miscellaneous	82,177	108,528	(26,352)
Regulatory Expense	9,861	25,269	(15,408)
Bad Debts Provision	167,381	174,546	(7,165)
Total Administrative and General Expense	<b>730,408</b>	<b>813,840</b>	<b>(83,432)</b>
<b>Depreciation Expense</b>	<b>2,332,959</b>	<b>2,147,948</b>	<b>185,011</b>
<b>Contractual Expense</b>			
Audit & Computer Maintenance	83,309	107,398	(24,088)
Building rental	42,397	41,373	1,025
Equipment rental	32,481	19,438	13,043
Legal	-	-	-
Laboratory	22,886	12,637	10,249
Other	158,765	89,419	69,345
Total Contractual Expense	<b>339,838</b>	<b>270,265</b>	<b>69,573</b>
Retiree Supp. Annuities and health care costs	211,704	204,479	7,225
Contribution to Government of Guam	51,833	50,333	1,500
Total Retiree Benefits	<b>263,537</b>	<b>254,812</b>	<b>8,725</b>
<b>Total Operating Expenses</b>	<b>7,681,105</b>	<b>6,890,889</b>	<b>790,216</b>
<b>Earnings (Loss) from Operations</b>	<b>788,867</b>	<b>1,954,197</b>	<b>(1,165,330)</b>
Interest Income - 2010/13/14/16/17/20 Series Bond	1,270	2,869	(1,599)
Interest Income - Other Funds	97	2,081	(1,985)
Interest Income - SDC	407	664	(257)
Interest Expense - 2010/13/14/16/17/20 Series Bond	(2,457,450)	(2,480,584)	23,133
Contributions from Federal Government	-	-	-
Federal Expenditures	-	-	-
Loss on Asset Disposal	(171,347)	-	(171,347)
AFUDC	-	509,029	(509,029)
Amortization of Discount, Premium and Issuance Costs	156,349	156,349	-
Defeasance due to bond refunding	(171,398)	(172,097)	699
Prior Year Adjustment	(16,942)	-	(16,942)
Total non-operating revenues (expenses)	<b>(2,659,016)</b>	<b>(1,981,688)</b>	<b>(677,327)</b>
<b>Net Income (Loss) before capital contributions</b>	<b>(1,870,148)</b>	<b>(27,491)</b>	<b>(1,842,657)</b>
<b>Capital Contributions</b>			
Grants from US Government	2,891,125	4,178,864	(1,287,739)
Grants from GovGuam & Others	-	-	-
Total Capital Contributions	<b>2,891,125</b>	<b>4,178,864</b>	<b>(1,287,739)</b>
<b>Change in Net Assets</b>	<b>1,020,977</b>	<b>4,151,373</b>	<b>(3,130,397)</b>
<b>Debt Service Calculation</b>			
Earnings From Operations	788,867	1,954,197	
System Development Charge	(55,017)	(77,451)	
Retiree COLA	51,833	50,333	
Interest/Investment Income	97	2,081	
Depreciation	2,332,959	2,147,948	
Plus withdrawals (deposits) to Rate Stabilization Fund	750,000	-	
<b>Balance Available for Debt Service per Section 6.12</b>	<b>3,868,739</b>	<b>4,077,109</b>	
<b>Debt Service</b>			
Principal	812,083	772,500	
Interest	1,976,089	1,847,251	
<b>Total</b>	<b>2,788,172</b>	<b>2,619,751</b>	
<b>Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)</b>	<b>1.39</b>	<b>1.56</b>	
<b>Debt Service Coverage (1.40X) (PUC)</b>	<b>1.39</b>	<b>1.56</b>	

**GUAM WATERWORKS AUTHORITY**  
**Statement of Operations and Retained Earnings**  
**Comparative Budget vs. Actual for the period ending May 31, 2022**

**SCHEDULE D**

	Year to Date Actual (Unaudited) May-22	Budget* May-22	Variance Favorable / (Unfavorable)
<b>OPERATING REVENUES</b>			
Water Revenues	42,769,167	46,906,986	(4,137,819)
Wastewater Revenues	22,128,239	25,811,405	(3,683,166)
Legislative Surcharge	1,979,556	2,193,713	(214,158)
Other Revenues	312,599	287,158	25,441
System Development Charge	462,801	619,536	(156,735)
<b>Total Operating Revenues</b>	<b>67,652,362</b>	<b>75,818,798</b>	<b>(8,166,436)</b>
<b>OPERATING AND MAINTENANCE EXPENSES</b>			
Water Purchases	4,359,620	4,892,602	532,982
Power Purchases	11,096,569	9,372,825	(1,723,744)
Total Utility Costs	15,456,189	14,265,427	(1,190,763)
Salaries and Wages	12,437,303	13,441,676	1,004,373
Pension and Benefits	4,810,944	5,568,020	757,076
Total Salaries and Benefits	17,248,247	19,009,696	1,761,449
Capitalized Labor and Benefits	(2,174,318)	(2,466,667)	(292,349)
Net Salaries and Benefits	15,073,929	16,543,029	1,469,101
<b>Administrative and General Expenses</b>			
Sludge removal	440,219	1,027,894	587,675
Chemicals	1,235,048	1,207,083	(27,965)
Materials & Supplies	1,162,993	1,364,723	201,730
Transportation	415,029	469,591	54,561
Communications	102,164	228,805	126,641
Claims	46,443	114,644	68,201
Insurance	707,486	663,779	(43,706)
Training & Travel	35,267	177,146	141,879
Advertising	39,414	92,248	52,833
Miscellaneous	846,111	907,947	61,836
Regulatory Expense	146,189	241,467	95,277
Bad Debts Provision	1,337,539	1,112,905	(224,634)
Total Administrative and General Expense	6,513,904	7,608,232	1,094,329
<b>Depreciation Expense</b>	<b>18,496,383</b>	<b>14,847,355</b>	<b>(3,649,028)</b>
<b>Contractual Expense</b>			
Audit & Computer Maintenance	915,768	1,016,058	100,289
Building rental	339,178	331,293	(7,885)
Equipment rental	250,264	424,238	173,973
Legal	285,586	-	(285,586)
Laboratory	171,304	507,241	335,937
Other	1,057,949	1,942,525	884,576
Total Contractual Expense	3,020,049	4,221,355	1,201,306
Retiree Supp. Annuities and health care costs	1,710,649	1,867,085	156,436
Contribution to Government of Guam	414,667	412,930	(1,737)
Total Retiree Benefits	2,125,316	2,280,015	154,699
<b>Total Operating Expenses</b>	<b>60,685,769</b>	<b>59,765,413</b>	<b>(920,357)</b>
<b>Earnings (Loss) from Operations</b>	<b>6,966,593</b>	<b>16,053,386</b>	<b>(9,086,793)</b>
Interest Income - 2010/13/14/16/17/20 Series Bond	21,385	1,026,395	(1,005,011)
Interest Income - Other Funds	5,843	236,403	(230,561)
Interest Income - SDC	3,520	19,900	(16,380)
Interest Expense - 2010/13/14/16/17/20 Series Bond	(19,659,602)	(21,106,633)	1,447,032
Contributions from Federal Government	-	-	-
Federal Expenditures	-	-	-
Loss on Asset Disposal	(191,873)	-	(191,873)
AFUDC	-	-	-
Amortization of Discount, Premium and Issuance Costs	1,250,792	(184,620)	1,435,412
Defeasance due to bond refunding	(1,371,188)	(179,509)	(1,191,679)
Prior Year Adjustment	89,837	-	89,837
Total non-operating revenues (expenses)	(19,851,286)	(20,188,063)	336,777
<b>Net Income (Loss) before capital contributions</b>	<b>(12,884,694)</b>	<b>(4,134,677)</b>	<b>(8,750,016)</b>
<b>Capital Contributions</b>			
Grants from US Government	23,054,419	26,488,571	(3,434,152)
Grants from GovGuam & Others	-	-	-
Total Capital Contributions	23,054,419	26,488,571	(3,434,152)
<b>Change in Net Assets</b>	<b>10,169,725</b>	<b>22,353,894</b>	<b>(12,184,169)</b>
<b>Debt Service Calculation</b>			
Earnings From Operations	6,966,593	16,053,386	
System Development Charge	(462,801)	(619,536)	
Retiree COLA	414,667	412,930	
Interest/Investment Income	5,843	236,403	
Depreciation	18,496,383	14,847,355	
Plus withdrawals (deposits) to Rate Stabilization Fund	2,350,000	-	
<b>Balance Available for Debt Service per Section 6.12</b>	<b>27,770,684</b>	<b>30,930,538</b>	
<b>Debt Service</b>			
Principal	6,496,667	6,180,000	
Interest	15,808,713	15,973,300	
<b>Total</b>	<b>22,305,379</b>	<b>22,153,300</b>	
<b>Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)</b>	<b>1.25</b>	<b>1.40</b>	
<b>Debt Service Coverage (1.40X) inclusive of reserves (PUC)</b>	<b>1.25</b>	<b>1.40</b>	

\*Interim budget

**GUAM WATERWORKS AUTHORITY**  
**Statement of Operations and Retained Earnings**  
**Comparative for the period ending April 30, 2022 and 2021**

**SCHEDULE E**

	Year to Date Actual (Unaudited) May-22	Actual (Audited) May-21	Variance Increase / (Decrease)
<b>OPERATING REVENUES</b>			
Water Revenues	42,769,167	42,906,534	(137,367)
Wastewater Revenues	22,128,239	20,658,783	1,469,456
Legislative Surcharge	1,979,556	1,928,616	50,940
Other Revenues	312,599	333,247	(20,649)
System Development Charge	462,801	1,067,204	(604,403)
<b>Total Operating Revenues</b>	<b>67,652,362</b>	<b>66,894,385</b>	<b>757,977</b>
<b>OPERATING AND MAINTENANCE EXPENSES</b>			
Water Purchases	4,359,620	4,276,267	83,352
Power Purchases	11,096,569	8,011,074	3,085,496
Total Utility Costs	15,456,189	12,287,341	3,168,848
Salaries and Wages	12,437,303	12,459,439	(22,136)
Pension and Benefits	4,810,944	4,750,709	60,234
Total Salaries and Benefits	17,248,247	17,210,148	38,099
Capitalized Labor and Benefits	(2,174,318)	(2,448,788)	274,469
Net Salaries and Benefits	15,073,929	14,761,360	312,568
<b>Administrative and General Expenses</b>			
Sludge removal	440,219	1,076,274	(636,055)
Chemicals	1,235,048	1,018,519	216,529
Materials & Supplies	1,162,993	948,364	214,629
Transportation	415,029	330,781	84,248
Communications	102,164	101,302	862
Claims	46,443	55,590	(9,147)
Insurance	707,486	626,643	80,842
Training & Travel	35,267	11,491	23,777
Advertising	39,414	41,137	(1,723)
Miscellaneous	846,111	777,222	68,889
Regulatory Expense	146,189	120,122	26,067
Bad Debts Provision	1,337,539	1,309,878	27,662
Total Administrative and General Expense	6,513,904	6,417,323	96,580
<b>Depreciation Expense</b>	<b>18,496,383</b>	<b>17,059,168</b>	<b>1,437,215</b>
<b>Contractual Expense</b>			
Audit & Computer Maintenance	915,768	814,080	101,689
Building rental	339,178	330,984	8,195
Equipment rental	250,264	181,175	69,089
Legal	285,586	-	285,586
Laboratory	171,304	154,628	16,676
Other	1,057,949	999,262	58,687
Total Contractual Expense	3,020,049	2,480,129	539,921
Retiree Supp. Annuities and health care costs	1,710,649	1,680,706	29,943
Contribution to Government of Guam	414,667	402,667	12,000
Total Retiree Benefits	2,125,316	2,083,373	41,943
<b>Total Operating Expenses</b>	<b>60,685,769</b>	<b>55,088,694</b>	<b>5,597,075</b>
<b>Earnings (Loss) from Operations</b>	<b>6,966,593</b>	<b>11,805,690</b>	<b>(4,839,098)</b>
Interest Income - 2010/13/14/16/17/20 Series Bond	21,385	19,312	2,072
Interest Income - Other Funds	5,843	7,947	(2,104)
Interest Income - SDC	3,520	11,265	(7,745)
Interest Expense - 2010/13/14/16/17/20 Series Bond	(19,659,602)	(20,081,836)	422,234
Contributions from Federal Government	-	188,768	(188,768)
Federal Expenditures	-	(130,939)	130,939
Loss on Asset Disposal	(191,873)	28,991	(220,864)
AFUDC	-	4,067,983	(4,067,983)
Amortization of Discount, Premium and Issuance Costs	1,250,792	1,249,042	1,750
Defeasance due to bond refunding	(1,371,188)	(1,376,776)	5,588
Prior Year Adjustment	89,837	(88,406)	178,243
Total non-operating revenues (expenses)	(19,851,286)	(16,104,649)	(3,746,637)
<b>Net Income (Loss) before capital contributions</b>	<b>(12,884,694)</b>	<b>(4,298,959)</b>	<b>(8,585,735)</b>
<b>Capital Contributions</b>			
Grants from US Government	23,054,419	29,468,836	(6,414,417)
Grants from GovGuam & Others	-	7,106	(7,106)
Total Capital Contributions	23,054,419	29,475,942	(6,421,523)
<b>Change in Net Assets</b>	<b>10,169,725</b>	<b>25,176,983</b>	<b>(15,007,258)</b>
<b>Debt Service Calculation</b>			
Earnings From Operations	6,966,593	11,805,690	
System Development Charge	(462,801)	(1,067,204)	
Retiree COLA	414,667	402,667	
Interest/Investment Income	5,843	7,947	
Depreciation	18,496,383	17,059,168	
Plus withdrawals (deposits) to Rate Stabilization Fund	2,350,000	-	
<b>Balance Available for Debt Service per Section 6.12</b>	<b>27,770,684</b>	<b>28,208,268</b>	
<b>Debt Service</b>			
Principal	6,496,667	6,180,000	
Interest	15,808,713	14,778,011	
<b>Total</b>	<b>22,305,379</b>	<b>20,958,011</b>	
<b>Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)</b>	<b>1.25</b>	<b>1.35</b>	
<b>Debt Service Coverage (1.40X) (PUC)</b>	<b>1.25</b>	<b>1.35</b>	

**SCHEDULE F**

**Guam Waterworks Authority**  
**Statement of Cash Flows (Unaudited)**  
**FY2022**

**YTD**  
**May-22**

**Cash flows from operating activities:**

Cash received from trade and others	65,985,398
Cash payments to suppliers/contractors for goods and services	(20,989,671)
Cash payments to employees for services	(19,121,347)

**Net cash provided by operating activities**


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25,874,380

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**Cash flows from capital and related financing activities:**

Contributed capital received (grants)	31,538,805
Acquisition of utility plant	(56,239,304)
Repayment of Long Term Debt	120,396
Interest expense	(14,678,760)

**Net cash provided by (used in) capital and related financing activities**


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(39,258,863)

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**Cash flows from investing activities:**

Transfers from (to) restricted fund	13,804,094
Interest income received	30,747

**Net cash provided by investing activities**


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13,834,841

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Net increase (decrease) in cash

450,358

Unrestricted cash at beginning of the period

35,044,630

**Unrestricted cash at end of period**


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35,494,987

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Reconciliation of operating loss to net cash provided by  
operating activities:

**Operating Income (loss)**

6,966,593

Adjustments to reconcile to net cash provided by operating activities:

Depreciation expense	18,496,383
Bad debts (recovery)	1,337,539
Capitalized labor and benefits	(2,174,318)
Recovery of provision for inventory obsolescence	-
Non-cash pension costs	-

(Increase) decrease in assets:

Accounts receivable	(1,246,364)
Materials and supplies inventory	96,420
Prepaid expenses	(496,680)
Regulatory Assets	(639,839)

Increase (decrease) in liabilities:

Accounts payable	1,854,429
Accrued payroll and employee benefits	252,215
Customer deposits	219,239
Other liabilities	1,208,763

**Net cash provided by operating activities**


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25,874,380

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**GUAM WATERWORKS AUTHORITY**  
**Restricted and Unrestricted Cash Summary**  
**FY2022**

**SCHEDULE G**

Description	Unaudited May 31, 2022	Audited September 30, 2021	Increase (Decrease)
<b>UNRESTRICTED</b>			
Change Fund	2,000	2,000	-
Petty Cash	3,930	4,430	(500)
BOG Deposit Accounts	13,294,331	11,783,670	1,510,661
BOG O & M Reserve	13,865,428	13,863,240	2,187
BOG CapEx Fund	8,329,299	9,391,290	(1,061,991)
<b>Sub-total Unrestricted</b>	<b>35,494,987</b>	<b>35,044,630</b>	<b>450,358</b>
<b>RESTRICTED</b>			
ANZ Bank	442	1,374	(932)
Bank Pacific	14,783	13,720	1,063
Bank of Hawaii	390,220	187,857	202,363
Community First FCU	4,402	2,897	1,505
First Hawaiian Bank	17,635	28,808	(11,173)
Bank Pacific Surcharge	196,848	346,165	(149,317)
Bank Pacific Escrow Deposit	934,357	905,936	28,421
BOG Customer Refunds	2,274,143	2,101,144	172,998
BOG Emergency Reserve Fund	6,246	6,245	(0)
BOG Sewer Hookup Revolving Fund	63,564	61,318	2,246
BOG Operation and Maintenance Fund	3,083,482	3,083,482	-
BOG Revenue Trust	383,321	902,327	(519,006)
BOG Revenue Trust Fund	6,175,098	7,604,696	(1,429,598)
BOG Capital Improvement Revenue Fund	7,958,459	6,017,960	1,940,499
BOG Rate Stabilization Fund	9,050,000	11,400,000	(2,350,000)
	<b>30,553,000</b>	<b>32,663,929</b>	<b>(2,110,930)</b>
BOG - SDC Deposit	556,874	4,512,282	(3,955,408)
BOG - SDC CDs	7,250,000	5,250,000	2,000,000
<b>Total SDC</b>	<b>7,806,874</b>	<b>9,762,282</b>	<b>(1,955,408)</b>
<b>Total Restricted</b>	<b>38,359,874</b>	<b>42,426,211</b>	<b>(4,066,338)</b>
<b>Reserve Funds</b>			
BOG Series 2013 Construction Fund	4,263,520	4,566,711	(303,191)
BOG Series 2016 Construction Fund	42,213,300	56,620,524	(14,407,224)
BOG Series 2017 Refunding Construction Fund	4,165,577	4,368,640	(203,062)
BOG Series 2020A Construction Fund	119,682,177	122,317,770	(2,635,593)
BOG Series 2020A Capitalized Interest Fund	2,234,892	5,584,579	(3,349,687)
BOG Series 2020A Cost of Issuance Fund	-	-	-
<b>Total Restricted - Held by Trustee</b>	<b>172,559,467</b>	<b>193,458,224</b>	<b>(20,898,757)</b>
BOG OMRRRF Fund	17,423,213	17,423,213	-
USB Series 2013 Debt Service Fund	3,599,645	1,396,665	2,202,980
USB Series 2013 Debt Service Reserve Fund	12,031,688	12,031,688	-
USB Series 2014 Refunding Debt Service Fund	1,956,547	1,048,078	908,469
USB Series 2014 Refunding Debt Service Reserve Fund	7,736,214	7,736,844	(629)
USB Series 2016 Debt Service Fund	6,678,695	2,816,611	3,862,084
USB Series 2016 Debt Service Reserve Fund	7,591,999	7,591,999	-
USB Series 2010 Debt Service Fund	-	31,558	(31,558)
USB Series 2017 Refunding Debt Service Reserve Fund	7,566,460	7,566,460	-
USB Series 2017 Debt Service Fund	4,210,930	1,903,114	2,307,816
USB Series 2020A Debt Service Fund	929,968	-	929,968
USB Series 2020A Debt Service Reserve Fund	6,659,700	6,659,700	-
USB Series 2020B Debt Service Reserve Fund	2,454,649	1,472,780	981,870
<b>Total Investments</b>	<b>78,839,710</b>	<b>67,678,709</b>	<b>11,161,001</b>
<b>Total Restricted and Unrestricted Cash</b>	<b>325,254,038</b>	<b>338,607,774</b>	<b>(13,353,737)</b>



**Guam Waterworks Authority**  
**Accounts Receivable - Government (Active)**  
**May 31, 2022**

**SCHEDULE H**

<u>Customer Name</u>	<b>A G I N G</b>						<b>Total</b>
	<b>No. of Accounts</b>	<b>Current</b>	<b>31 - 60 days</b>	<b>61 - 90 days</b>	<b>91 - 120 days</b>	<b>Over 120 days</b>	
<b>Autonomous Agencies (Active)</b>							
Guam Int'l Airport Authority	8	30,104	11,180	1,270	108	262,450	305,112
Guam Power Authority	25	171,913	34,331	-	-	-	206,244
Guam Housing & Urban Renewal Authority	9	6,008	-	-	-	-	6,008
Port Authority of Guam	5	1,878	-	-	-	-	1,878
Guam Solid Waste Authority	4	830	227	-	-	-	1,057
Guam Housing Corporation	1	36	-	-	-	-	36
<b>Total Autonomous Agencies</b>	<b>52</b>	<b>210,771</b>	<b>45,738</b>	<b>1,270</b>	<b>108</b>	<b>262,450</b>	<b>520,336</b>
<b>Semi-Autonomous Agencies (Active)</b>							
Guam Memorial Hospital Authority	3	34,056	43,971	1,167	150	13,555	92,899
University of Guam	48	59,908	-	-	-	-	59,908
<b>Total Semi-Autonomous Agencies</b>	<b>51</b>	<b>93,964</b>	<b>43,971</b>	<b>1,167</b>	<b>150</b>	<b>13,555</b>	<b>152,807</b>
<b>Line Agencies (Active)</b>							
Department of Education	52	393,377	364,931	106,085	579	-	864,971
Department of Parks & Recreation	13	37,801	34,362	324	-	-	72,487
Department of Corrections	9	71,643	-	-	-	-	71,643
Department of Chamorro Affairs	7	16,826	15,145	-	-	-	31,970
Department of Public Works	10	15,169	5,466	-	-	-	20,635
Department of Military Affairs/GUARNG	1	6,440	6,986	-	-	-	13,426
Guam Fire Department	11	5,094	1,791	-	-	-	6,885
Department of Agriculture	7	6,612	26	-	-	-	6,639
Department of Public Health & Social Services	9	3,613	1,663	424	-	-	5,700
Guam Police Department	9	5,309	187	-	-	-	5,496
Department of Mental Health and Substance	4	2,586	1,924	-	-	-	4,510
Office of the Governor	2	3,449	-	-	-	-	3,449
Department of Youth Affairs	3	1,399	958	-	-	-	2,357
Guam Veterans Affairs Office	2	936	1,107	-	-	-	2,043
Department of Customs & Quarantine	1	428	428	-	-	-	856
Department of Administration	3	559	288	-	-	-	846
Guam Public Library	6	433	29	-	-	-	462
Guam Energy Office	1	197	199	-	-	-	396
Guam Visitors Bureau	2	329	-	-	-	-	329
Guam Homeland Security/Civil Defense	1	286	-	-	-	-	286
Office of Technology	1	200	-	-	-	-	200
<b>Total Line Agencies</b>	<b>154</b>	<b>572,685</b>	<b>435,490</b>	<b>106,833</b>	<b>579</b>	<b>-</b>	<b>1,115,587</b>
<b>Other Government of Guam Entities (Active)</b>							
Mayors Council of Guam	62	16,209	368	-	-	-	16,577
Merizo Mayor	1	47	96	-	-	-	143
The Office of the Dededo Mayor	1	138	-	-	-	-	138
Agat Mayor's Office	1	32	-	-	-	-	32
<b>Total Other Government of Guam Entities</b>	<b>65</b>	<b>16,427</b>	<b>464</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>16,891</b>
<b>Total as of May 31, 2022 (Active)</b>	<b>322</b>	<b>893,847</b>	<b>525,662</b>	<b>109,270</b>	<b>836</b>	<b>276,005</b>	<b>1,805,620</b>

**Guam Waterworks Authority**  
**Accounts Receivable - Government (Inactive)**



GWA Work Session - July 19, 2022 - GM REPORT

GUAM WATERWORKS AUTHORITY  
Accounts Receivable Aging Summary by Rate Class  
As of May 31, 2022

SCHEDULE I

ACTIVE AND INACTIVE

Rate Class	A G I N G							
	No. of Accounts	Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total	
Government	435	\$ 2,736,905	\$ 545,969	\$ 110,959	\$ 19,483	\$ 564,502	\$ 3,977,818	19%
Agriculture	413	27,611	4,965	1,211	498	33,361	67,645	0%
Commercial I	2,666	1,259,336	162,656	80,941	81,055	489,050	2,073,038	10%
Commercial II	35	248,630	3,188	299	576	2,285	254,978	1%
Commercial III	302	493,999	104,339	111,778	90,423	327,013	1,127,552	5%
Golf Course	16	3,836	672	-	-	-	4,508	0%
Hotel	58	1,216,673	112,522	41,348	27,644	870,137	2,268,323	11%
Irrigation	34	4,650	541	236	214	1,544	7,185	0%
Residential	49,014	4,385,684	682,865	425,733	256,115	5,307,149	11,057,546	53%
	<b>52,973</b>	<b>10,377,322</b>	<b>1,617,717</b>	<b>772,506</b>	<b>476,007</b>	<b>7,595,042</b>	<b>20,838,593</b>	<b>100%</b>
		50%	8%	4%	2%	36%		
Less Allowance for Doubtful Accounts:							(9,982,672)	
Net Accounts Receivable:							<b>10,855,921</b>	
Days Receivables Outstanding							40	

As of April 30, 2022

Rate Class	A G I N G							
	No. of Accounts	Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total	
Government	435	\$ 2,682,119	\$ 423,978	\$ 243,731	\$ 13,571	\$ 556,833	\$ 3,920,233	19%
Agriculture	412	26,810	5,599	879	647	33,351	67,286	0%
Commercial I	2,659	1,292,548	94,137	90,100	32,975	475,554	1,985,314	10%
Commercial II	35	171,102	588	576	1,230	1,092	174,588	1%
Commercial III	298	630,361	105,378	91,900	36,247	300,947	1,164,832	6%
Golf Course	16	3,225	236	-	-	-	3,461	0%
Hotel	58	1,230,281	40,872	36,724	40,669	847,544	2,196,090	11%
Irrigation	33	3,489	537	348	198	1,346	5,918	0%
Residential	48,857	4,420,804	729,114	358,634	259,890	5,277,137	11,045,580	54%
	<b>52,803</b>	<b>10,460,739</b>	<b>1,400,439</b>	<b>822,892</b>	<b>385,429</b>	<b>7,493,803</b>	<b>20,563,302</b>	<b>100%</b>
		51%	7%	4%	2%	36%		
Less Allowance for Doubtful Accounts:							(9,809,224)	
Net Accounts Receivable:							<b>10,754,078</b>	
Days Receivables Outstanding							40	

ACTIVE ONLY

Rate Class	A G I N G							
	No. of Accounts	Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total	
Government	431	\$ 2,736,697	\$ 525,686	\$ 109,420	\$ 9,026	\$ 562,636	\$ 3,943,465	25%
Agriculture	389	27,489	4,832	1,110	469	5,180	39,079	0%
Commercial I	2,475	1,240,938	157,028	73,497	69,631	260,992	1,802,086	11%
Commercial II	35	248,630	3,188	299	576	2,285	254,978	2%
Commercial III	286	493,533	104,077	111,003	89,942	269,423	1,067,979	7%
Golf Course	16	3,836	672	-	-	-	4,508	0%
Hotel	55	1,216,673	112,522	41,348	27,644	275,008	1,673,195	11%
Irrigation	33	4,650	541	236	214	249	5,890	0%
Residential	40,111	4,341,308	630,946	344,976	193,497	1,461,439	6,972,165	44%
	<b>43,831</b>	<b>10,313,753</b>	<b>1,539,492</b>	<b>681,890</b>	<b>390,999</b>	<b>2,837,212</b>	<b>15,763,345</b>	<b>100%</b>
		65%	10%	4%	2%	18%		
Less Allowance for Doubtful Accounts:							(9,982,672)	
Net Accounts Receivable:							<b>5,780,673</b>	

As of April 30, 2022

Rate Class	A G I N G							
	No. of Accounts	Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total	
Government	430	\$ 2,661,837	\$ 421,775	\$ 231,735	\$ 11,704	\$ 556,833	\$ 3,883,884	25%
Agriculture	389	26,810	5,554	850	584	5,233	39,031	0%
Commercial I	2,471	1,286,327	87,420	75,111	30,067	248,972	1,727,895	11%
Commercial II	34	171,102	588	576	1,230	-	173,496	1%
Commercial III	284	630,361	105,378	91,900	36,247	245,746	1,109,631	7%
Golf Course	16	3,225	236	-	-	-	3,461	0%
Hotel	55	1,230,281	40,872	36,724	40,669	252,416	1,600,962	10%
Irrigation	32	3,489	537	348	198	51	4,623	0%
Residential	40,076	4,364,461	654,023	304,360	200,617	1,474,588	6,998,050	45%
	<b>43,787</b>	<b>10,377,892</b>	<b>1,316,382</b>	<b>741,603</b>	<b>321,317</b>	<b>2,783,838</b>	<b>15,541,033</b>	<b>100%</b>
		67%	8%	5%	2%	18%		
Less Allowance for Doubtful Accounts:							(9,809,224)	
Net Accounts Receivable:							<b>5,731,809</b>	

**GUAM WATERWORKS AUTHORITY**  
**Accounts Payable Aging**

**SCHEDULE J**

<u>As of</u>	<u>AGING</u>							<u>Days Payable Outstanding</u>
	Current	31 - 60 Days	61 - 90 Days	91 - 120 Days	> 120 Days	Total		
<b>May 31, 2022</b>	\$ 3,808,392 85%	\$ 281,016 6%	\$ 126,158 3%	\$ 28,475 1%	\$ 262,863 6%	\$ <b>4,506,905</b> <b>100%</b>		35
<b>April 30, 2022</b>	\$ 3,546,221 88%	\$ 145,780 4%	\$ 53,456 1%	\$ 68,301 2%	\$ 225,986 6%	\$ <b>4,039,744</b> <b>100%</b>		33
<b>March 31, 2022</b>	\$ 3,697,292 77%	\$ 537,631 11%	\$ 137,046 3%	\$ 123,952 3%	\$ 275,206 6%	\$ <b>4,771,128</b> <b>100%</b>		37

GUAM WATERWORKS AUTHORITY  
WATER DEMAND BY RATE CLASS  
FY2015 - FY2022

## SCHEDULE K

CLASS	AUDITED							UNAUDITED	
	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 ANNUALIZED 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	3,489,270	-4%
C Commercial	1,020,089	1,022,890	964,639	910,905	906,192	822,029	786,054	807,068	3%
F Federal	1,168	1,180	2,508	1,813	1,602	1,338	2,069	1,504	-27%
G Government	515,974	475,366	448,430	450,165	405,980	408,502	404,026	456,466	13%
H Hotel	999,116	1,008,087	1,004,525	989,723	1,079,919	714,161	448,034	415,229	-7%
G Golf	6,850	6,770	5,252	2,741	2,793	5,835	2,855	3,957	39%
A Agriculture	67,376	78,628	69,482	81,127	90,803	84,492	68,805	71,422	4%
I Irrigation	<u>10,385</u>	<u>11,351</u>	<u>10,143</u>	<u>8,504</u>	<u>7,896</u>	<u>8,654</u>	<u>5,404</u>	<u>4,847</u>	-10%
GRAND TOTAL	<u>6,036,620</u>	<u>6,033,960</u>	<u>5,711,790</u>	<u>5,758,590</u>	<u>5,855,091</u>	<u>5,757,733</u>	<u>5,339,864</u>	<u>5,249,762</u>	-2%

\*FY2022 is annualized for 8 months.

**Guam Waterworks Authority**  
**System Development Charges Project Status**  
**As of May 31, 2022**

**SCHEDULE L**

**Funding Summary**

Total available project funds	\$ 15,274,009
Total project expenditures and encumbrances	10,919,482
Total unobligated project funds	<b>\$ 4,354,526</b>

**Projects Funded**

<b>Project Description</b>	<b>Expenditures</b>	<b>Outstanding Encumbrances</b>	<b>Expenditures and Encumbrances</b>
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	274,240	5,800	280,040
Line Replacement Phase IV	256,937	-	256,937
Northern District WWTP	3,153,006	2,798,534	5,951,540
Northern District WWTP (Land Purchase)	1,000,000	-	1,000,000
Route 4 Relief Sewerline Rehab & Replacement	519,227	74,641	593,869
South Paulino Heights Waterline Upgrade	84,056	4,714	88,770
Talofofo Sewer Improvement	-	241,142	241,142
Groundwater Well Production Meter Rep.	113,543	37,664	151,207
	<b>\$ 7,754,133</b>	<b>\$ 3,165,350</b>	<b>\$ 10,919,482</b>

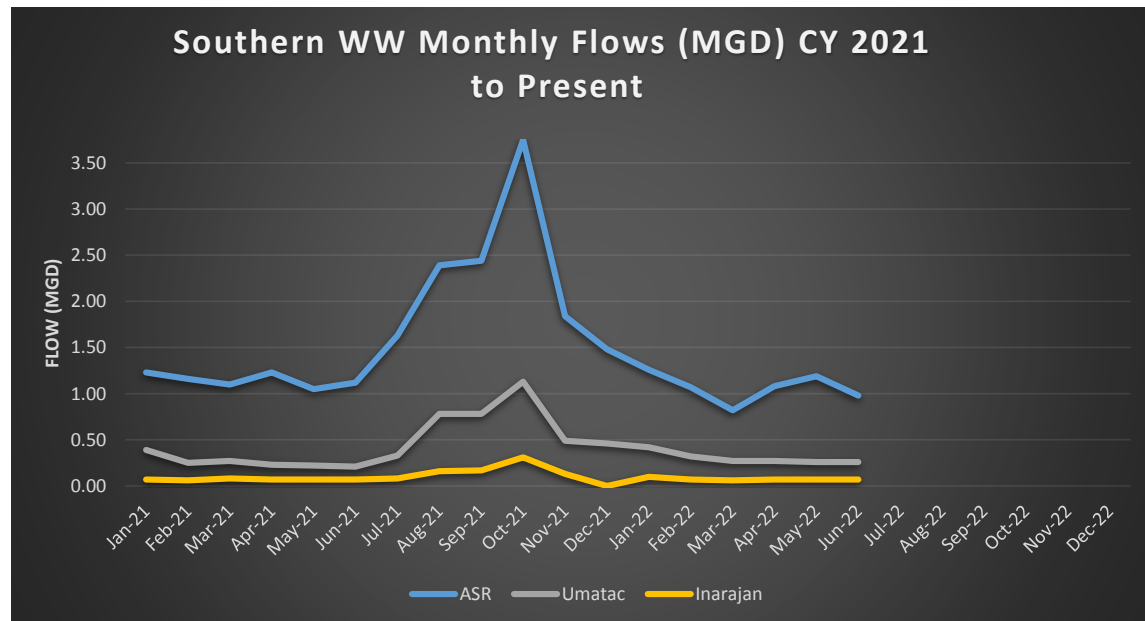
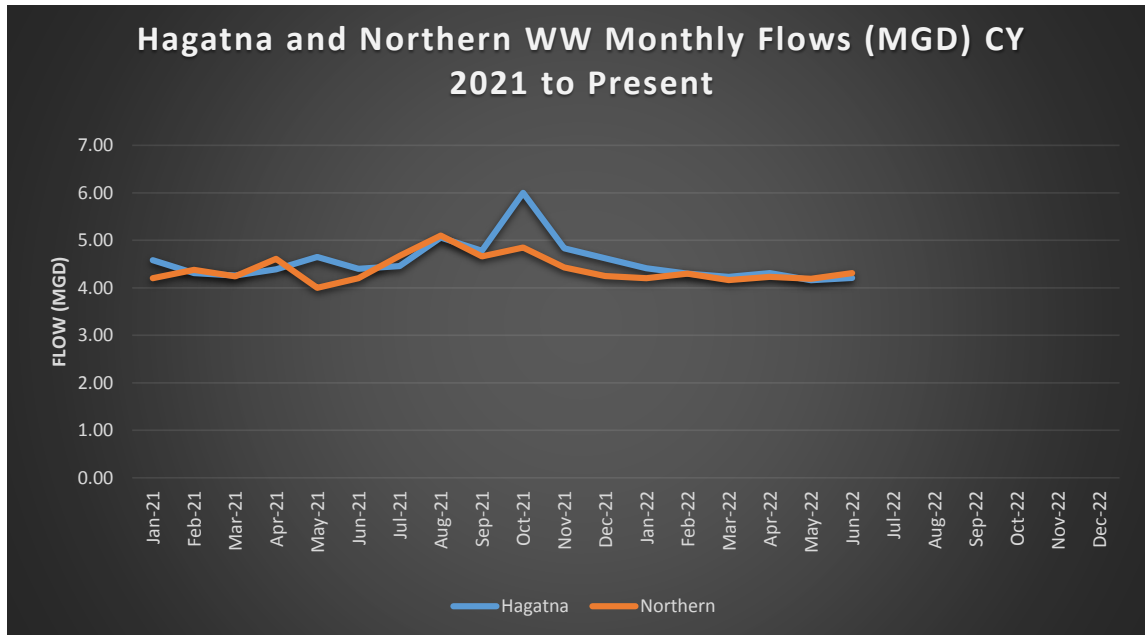
**Future planned projects**

**FY 2022-2025**

Water Distribution System Pipe Replacement & Upgrades	1,500,000
Capacity Enhancement - Well Development and Construction Progra	394,000
Well Repair Program	200,000
	<b>\$ 2,094,000</b>

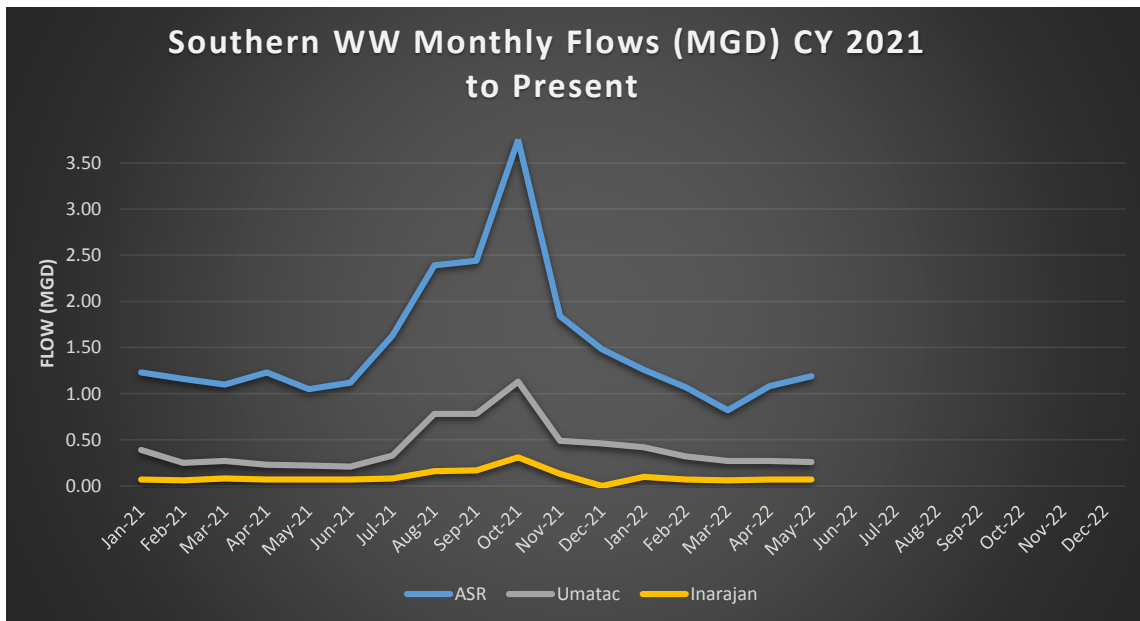
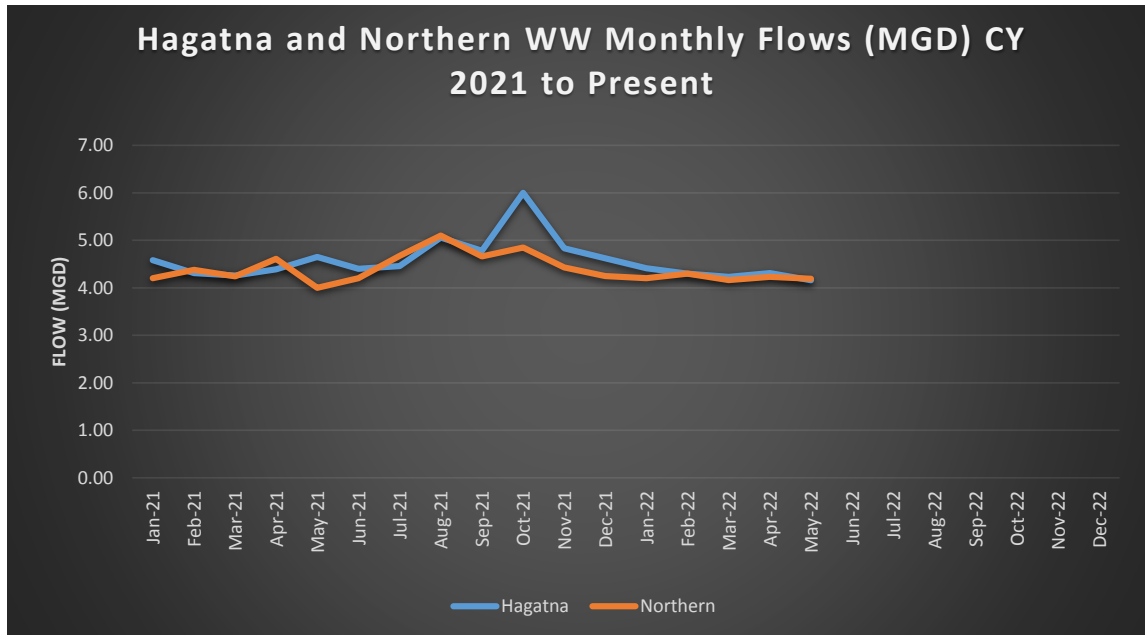
**Wastewater Treatment Plant Average Monthly Flows Million Gallons Per Day**

2021	Hagatna	Northern	ASR	Umatac	Inarajan
Jan-21	4.58	4.20	1.23	0.39	0.07
Feb-21	4.31	4.38	1.16	0.25	0.06
Mar-21	4.26	4.24	1.10	0.27	0.08
Apr-21	4.39	4.61	1.23	0.23	0.07
May-21	4.65	4.00	1.05	0.22	0.07
Jun-21	4.40	4.20	1.12	0.21	0.07
Jul-21	4.46	4.67	1.63	0.33	0.08
Aug-21	5.06	5.10	2.39	0.78	0.16
Sep-21	4.78	4.66	2.44	0.78	0.17
Oct-21	6.00	4.85	3.75	1.13	0.31
Nov-21	4.83	4.43	1.84	0.49	0.13
Dec-21	4.62	4.25	1.48	0.46	0.00
<b>2021 Average MGD</b>	<b>4.70</b>	<b>4.47</b>	<b>1.70</b>	<b>0.46</b>	<b>0.11</b>
<b>2021 Total MGY</b>	<b>1,715</b>	<b>1,630</b>	<b>623</b>	<b>169</b>	<b>39</b>
2022	Hagatna	Northern	ASR	Umatac	Inarajan
Jan-22	4.41	4.20	1.26	0.42	0.10
Feb-22	4.30	4.30	1.07	0.32	0.07
Mar-22	4.23	4.16	0.82	0.27	0.06
Apr-22	4.31	4.23	1.08	0.27	0.07
May-22	4.16	4.19	1.19	0.26	0.07
Jun-22	4.21	4.31	0.98	0.26	0.07
Jul-22					
Aug-22					
Sep-22					
Oct-22					
Nov-22					
Dec-22					
<b>2022 Average MGD</b>	<b>4.27</b>	<b>4.23</b>	<b>1.07</b>	<b>0.30</b>	<b>0.11</b>
<b>2022 Total MGY</b>	<b>773</b>	<b>766</b>	<b>193</b>	<b>54</b>	<b>13</b>



**Wastewater Treatment Plant Average Monthly Flows Million Gallons Per Day**

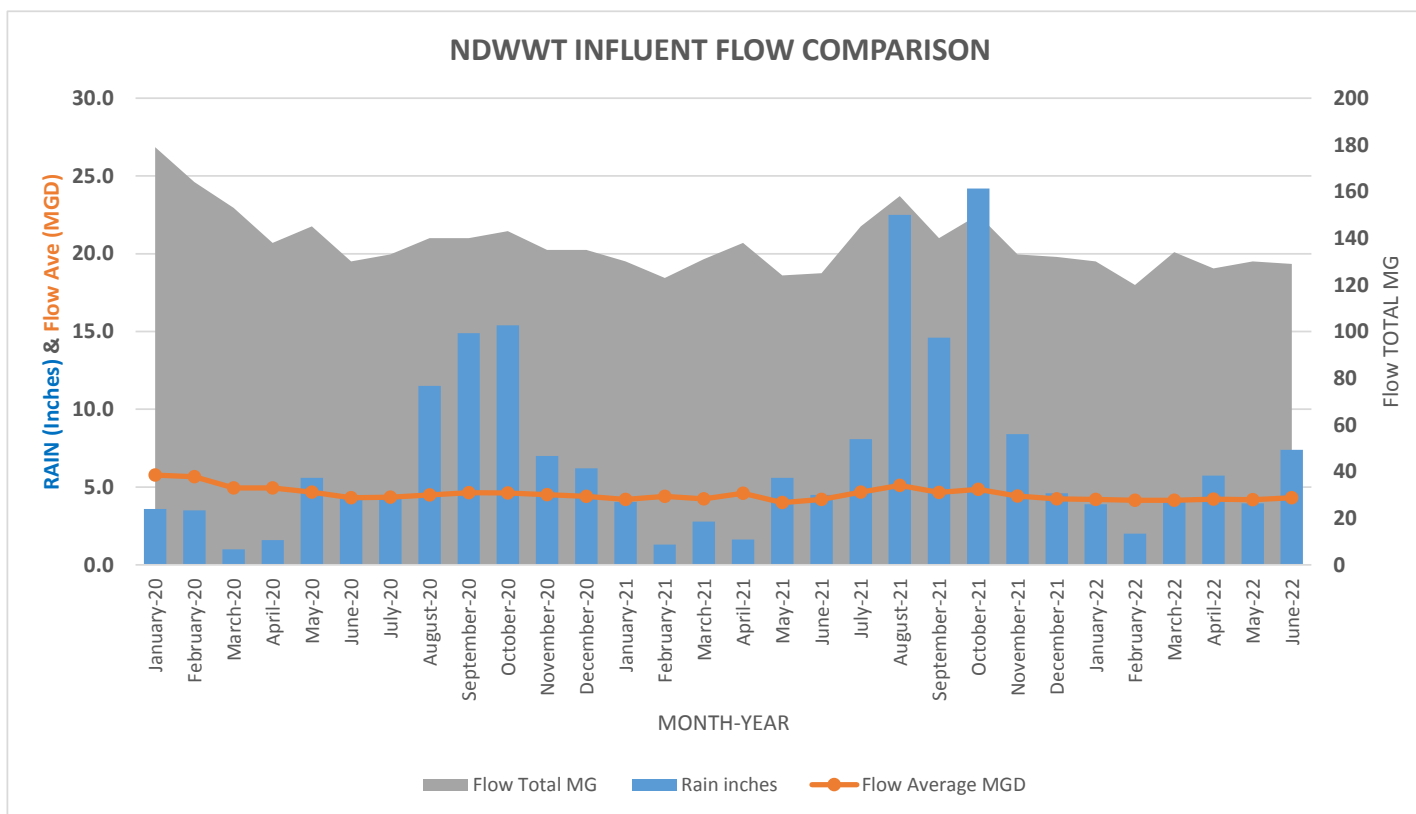
2021	Hagatna	Northern	ASR	Umatac	Inarajan
Jan-21	4.58	4.20	1.23	0.39	0.07
Feb-21	4.31	4.38	1.16	0.25	0.06
Mar-21	4.26	4.24	1.10	0.27	0.08
Apr-21	4.39	4.61	1.23	0.23	0.07
May-21	4.65	4.00	1.05	0.22	0.07
Jun-21	4.40	4.20	1.12	0.21	0.07
Jul-21	4.46	4.67	1.63	0.33	0.08
Aug-21	5.06	5.10	2.39	0.78	0.16
Sep-21	4.78	4.66	2.44	0.78	0.17
Oct-21	6.00	4.85	3.75	1.13	0.31
Nov-21	4.83	4.43	1.84	0.49	0.13
Dec-21	4.62	4.25	1.48	0.46	0.00
<b>2021 Average MGD</b>	<b>4.70</b>	<b>4.47</b>	<b>1.70</b>	<b>0.46</b>	<b>0.11</b>
<b>2021 Total MGY</b>	<b>1,715</b>	<b>1,630</b>	<b>623</b>	<b>169</b>	<b>39</b>
2022	Hagatna	Northern	ASR	Umatac	Inarajan
Jan-22	4.41	4.20	1.26	0.42	0.10
Feb-22	4.30	4.30	1.07	0.32	0.07
Mar-22	4.23	4.16	0.82	0.27	0.06
Apr-22	4.31	4.23	1.08	0.27	0.07
May-22	4.16	4.19	1.19	0.26	0.07
Jun-22					
Jul-22					
Aug-22					
Sep-22					
Oct-22					
Nov-22					
Dec-22					
<b>2022 Average MGD</b>	<b>4.28</b>	<b>4.22</b>	<b>1.08</b>	<b>0.31</b>	<b>0.11</b>
<b>2022 Total MGY</b>	<b>647</b>	<b>636</b>	<b>164</b>	<b>47</b>	<b>11</b>





## NDWWT INFLUENT FLOW vs RAIN COMPARISON

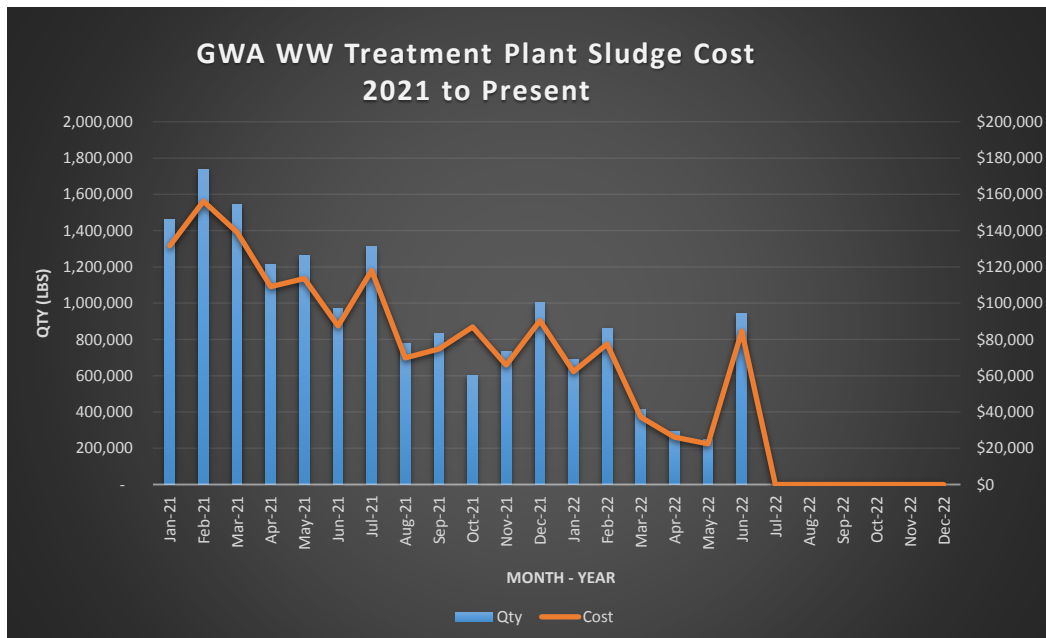
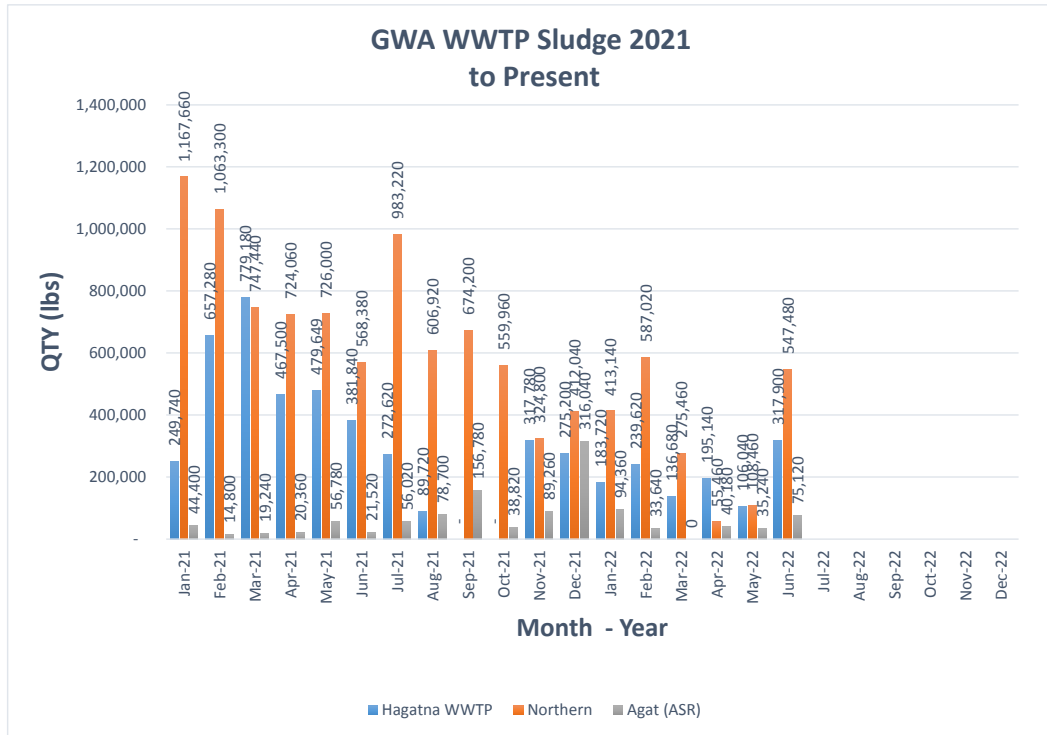
Date	Rain inches	Flow Average MGD	Flow Total MG
January-20	3.6	5.77	179
February-20	3.5	5.66	164
March-20	1.0	4.95	153
April-20	1.6	4.95	138
May-20	5.6	4.68	145
June-20	4.3	4.32	130
July-20	4.4	4.35	133
August-20	11.5	4.50	140
September-20	14.9	4.63	140
October-20	15.4	4.62	143
November-20	7.0	4.51	135
December-20	6.2	4.40	135
January-21	4.1	4.20	130
February-21	1.3	4.40	123
March-21	2.8	4.24	131
April-21	1.6	4.61	138
May-21	5.6	4.00	124
June-21	4.5	4.20	125
July-21	8.1	4.67	145
August-21	22.5	5.10	158
September-21	14.6	4.66	140
October-21	24.2	4.85	150
November-21	8.4	4.43	133
December-21	4.6	4.25	132
January-22	3.9	4.20	130
February-22	2.0	4.15	120
March-22	4.3	4.16	134
April-22	5.7	4.23	127
May-22	4.0	4.19	130
June-22	7.4	4.31	129



GWA Work Session - July 19, 2022 - GM REPORT

	Hagatna WWTP		Northern		Agat (ASR)		Hagatna + Northern + Agat	
2021	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
Month- Yr	lbs	\$	lbs	\$	lbs	\$	lbs	\$
Jan-21	249,740	\$22,477	1,167,660	\$105,089	44,400	\$3,996	1,461,800	\$131,562
Feb-21	657,280	\$59,155	1,063,300	\$95,697	14,800	\$1,332	1,735,380	\$156,184
Mar-21	779,180	\$70,126	747,440	\$67,270	19,240	\$1,732	1,545,860	\$139,127
Apr-21	467,500	\$42,075	724,060	\$65,165	20,360	\$1,832	1,211,920	\$109,073
May-21	479,649	\$43,168	726,000	\$65,340	56,780	\$5,110	1,262,429	\$113,619
Jun-21	381,840	\$34,366	568,380	\$51,154	21,520	\$1,937	971,740	\$87,457
Jul-21	272,620	\$24,536	983,220	\$88,490	56,020	\$5,042	1,311,860	\$118,067
Aug-21	89,720	\$8,075	606,920	\$54,623	78,700	\$7,083	775,340	\$69,781
Sep-21	-	\$0	674,200	\$60,678	156,780	\$14,110	830,980	\$74,788
Oct-21	-	\$0	559,960	\$50,396	38,820	\$3,647	598,780	\$56,873
Nov-21	317,780	\$28,600	324,800	\$29,232	89,260	\$8,033	731,840	\$65,866
Dec-21	275,200	\$24,768	412,040	\$37,084	316,040	\$28,444	1,003,280	\$90,295
<b>Grand Total</b>	<b>3,970,509</b>	<b>\$357,346</b>	<b>8,557,980</b>	<b>\$770,218</b>	<b>912,720</b>	<b>\$115,128</b>	<b>13,441,209</b>	<b>\$1,242,692</b>

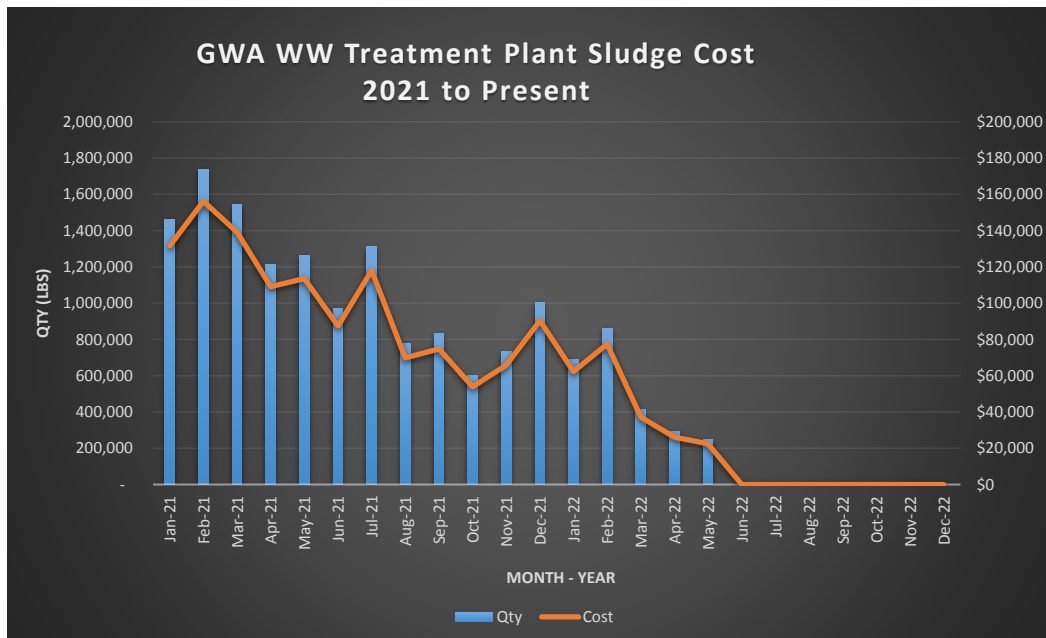
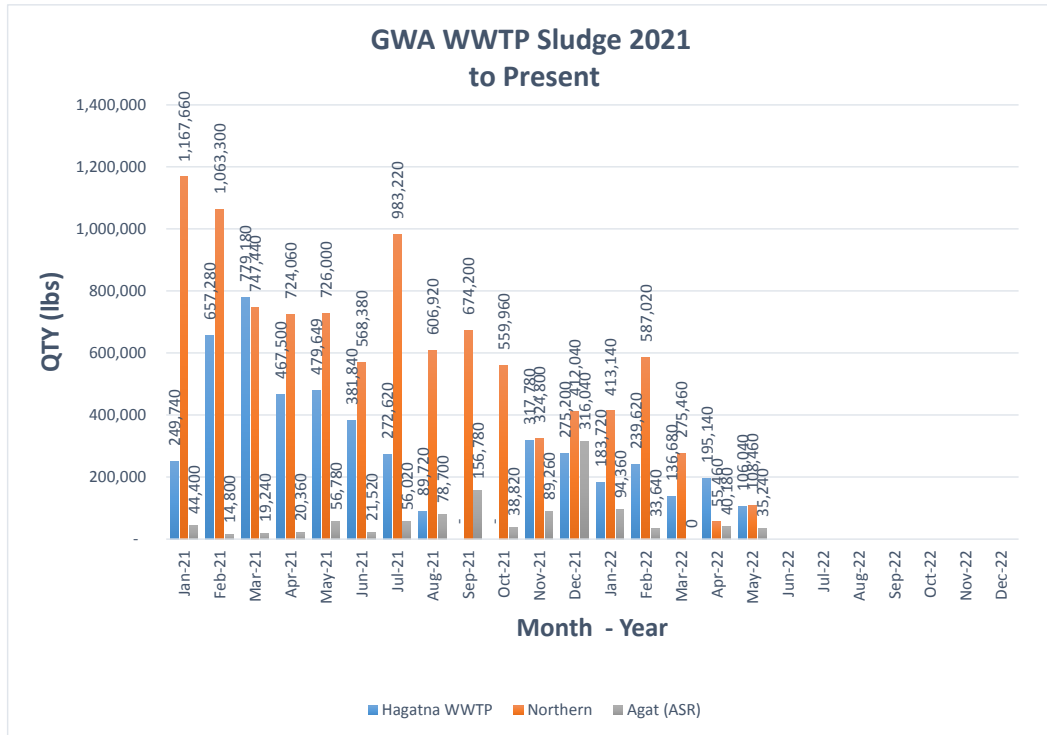
	Hagatna WWTP		Northern		Agat (ASR)		Hagatna + Northern + Agat	
2022	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
Month- Yr	lbs	\$	lbs	\$	lbs	\$	lbs	\$
Jan-22	183,720	\$16,535	413,140	\$37,183	94,360	\$8,492	691,220	\$62,210
Feb-22	239,620	\$21,566	587,020	\$52,832	33,640	\$3,028	860,280	\$77,425
Mar-22	136,680	\$12,301	275,460	\$24,791	0	\$0	412,140	\$37,093
Apr-22	195,140	\$17,563	55,460	\$4,991	40,180	\$3,616	290,780	\$26,170
May-22	106,040	\$9,544	108,460	\$9,761	35,240	\$3,172	249,740	\$22,477
Jun-22	317,900	\$28,611	547,480	\$49,273	75,120	\$6,761	940,500	\$84,645
Jul-22		\$0		\$0		\$0	-	\$0
Aug-22		\$0		\$0		\$0	-	\$0
Sep-22		\$0		\$0		\$0	-	\$0
Oct-22		\$0		\$0		\$0	-	\$0
Nov-22		\$0		\$0		\$0	-	\$0
Dec-22		\$0		\$0		\$0	-	\$0
<b>Grand Total</b>	<b>1,179,100</b>	<b>\$106,119</b>	<b>1,987,020</b>	<b>\$178,832</b>	<b>278,540</b>	<b>\$25,069</b>	<b>3,444,660</b>	<b>\$310,019</b>



GWA Work Session - July 19, 2022 - GM REPORT


	Hagatna WWTP		Northern		Agat (ASR)		Hagatna + Northern + Agat	
2021	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
Month- Yr	lbs	\$	lbs	\$	lbs	\$	lbs	\$
Jan-21	249,740	\$22,477	1,167,660	\$105,089	44,400	\$3,996	1,461,800	\$131,562
Feb-21	657,280	\$59,155	1,063,300	\$95,697	14,800	\$1,332	1,735,380	\$156,184
Mar-21	779,180	\$70,126	747,440	\$67,270	19,240	\$1,732	1,545,860	\$139,127
Apr-21	467,500	\$42,075	724,060	\$65,165	20,360	\$1,832	1,211,920	\$109,073
May-21	479,649	\$43,168	726,000	\$65,340	56,780	\$5,110	1,262,429	\$113,619
Jun-21	381,840	\$34,366	568,380	\$51,154	21,520	\$1,937	971,740	\$87,457
Jul-21	272,620	\$24,536	983,220	\$88,490	56,020	\$5,042	1,311,860	\$118,067
Aug-21	89,720	\$8,075	606,920	\$54,623	78,700	\$7,083	775,340	\$69,781
Sep-21	-	\$0	674,200	\$60,678	156,780	\$14,110	830,980	\$74,788
Oct-21	-	\$0	559,960	\$50,396	38,820	\$3,494	598,780	\$53,890
Nov-21	317,780	\$28,600	324,800	\$29,232	89,260	\$8,033	731,840	\$65,866
Dec-21	275,200	\$24,768	412,040	\$37,084	316,040	\$28,444	1,003,280	\$90,295
<b>Grand Total</b>	<b>3,970,509</b>	<b>\$357,346</b>	<b>8,557,980</b>	<b>\$770,218</b>	<b>912,720</b>	<b>\$82,145</b>	<b>13,441,209</b>	<b>\$1,209,709</b>

	Hagatna WWTP		Northern		Agat (ASR)		Hagatna + Northern + Agat	
2022	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
Month- Yr	lbs	\$	lbs	\$	lbs	\$	lbs	\$
Jan-22	183,720	\$16,535	413,140	\$37,183	94,360	\$8,492	691,220	\$62,210
Feb-22	239,620	\$21,566	587,020	\$52,832	33,640	\$3,028	860,280	\$77,425
Mar-22	136,680	\$12,301	275,460	\$24,791	0	\$0	412,140	\$37,093
Apr-22	195,140	\$17,563	55,460	\$4,991	40,180	\$3,616	290,780	\$26,170
May-22	106,040	\$9,544	108,460	\$9,761	35,240	\$3,172	249,740	\$22,477
Jun-22		\$0		\$0		\$0	-	\$0
Jul-22		\$0		\$0		\$0	-	\$0
Aug-22		\$0		\$0		\$0	-	\$0
Sep-22		\$0		\$0		\$0	-	\$0
Oct-22		\$0		\$0		\$0	-	\$0
Nov-22		\$0		\$0		\$0	-	\$0
Dec-22		\$0		\$0		\$0	-	\$0
<b>Grand Total</b>	<b>861,200</b>	<b>\$77,508</b>	<b>1,439,540</b>	<b>\$129,559</b>	<b>203,420</b>	<b>\$18,308</b>	<b>2,504,160</b>	<b>\$225,374</b>



Guam Waterworks Authority		Date: 7/1/2022	 <b>GUAM WATERWORKS AUTHORITY</b> <b>WATER DISTRIBUTION FACILITIES REPORT</b>
		Time:	
<b>REVIEWS</b>			
TOTAL PUMPS INSTALLED	56	OVERALL AVERAGE	94%
TOTAL PUMPS OPERATIONAL	53	% OF OPERATING PUMPS	95%
TOTAL BOOSTER PUMP STATIONS	27		

NO.	FACILITY	PUMP HP	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
<b>Northern District</b>													
1	Yigo	30	3	3	100%	OP	A						
2	Gayinero	20	2	2	100%	OP	A						
3	Mataguac	25	2	1	50%	OP	A	Pump 1 motor burnt. PO issued to JMI for new motor.					
4	Santa Rosa	15	1	1	100%	OP	A	Station currently undergoing renovation. Only one pump left in operation at this time.					
5	Hyundai	40	2	2	100%	OP	A	Both pumps operational.		Electrical upgrade completed.			
6	Chin, Palauan	5	2	2	100%	N/A							
7	Access	60	2	2	100%	OP	A						
8	Aqana Heights	30	3	3	100%		A						
9	Nimlitz Hill	7.5	2	2	100%	N/A							
10	Adawag	1.5	1	1	100%	N/A							
11	Pala Kiren	1	1	1	100%	N/A							
12	Uloa/Untalan	1	2	2	100%	OP	A						
13	Latte Heights	15	2	2	100%	OP	A						
	<b>TOTAL = 13</b>		<b>25</b>	<b>24</b>	<b>96%</b>								
<b>Central District</b>													
1	Pago	150 / 100	3	3	100%	OP	A						
2	Brigade	60 / 20	3	3	100%	OP	A						
3	Windward Hills	200 / 75	3	2	67%	OP	A	Pump repaired, pending scheduling of crane for installation.					
4	Santa Rita Spring	40	2	2	100%	OP	A						
5	Santa Rita (Lower)	25	2	2	100%	N/A							
6	Camacho	1	1	1	100%	N/A							
7	Tenorio	1.5	1	1	100%	N/A							
	<b>Total=7</b>		<b>15</b>	<b>14</b>	<b>93%</b>								
<b>Southern District</b>													
1	Maloljoj Line	125 / 50	3	2	67%	OP	A	Pump 3 motor burnt; repairs ongoing. Note: Pump 1 operational, pending mechanical seal replacement.					
2	Geus	7.5	3	3	100%	OP	A						
3	Piqua	7.5	2	2	100%	N/A							
4	Toquan	25	1	1	100%	OP	A	Only one pump left installed due to station renovation.					
5	WBP-2	25	2	2	100%	OP	A						
6	WBP-1	5	2	2	100%	OP	A						
7	Maloljoj Elevated	15	3	3	100%	OP	A						
	<b>Total=7</b>		<b>16</b>	<b>15</b>	<b>94%</b>								
pump availability =no of operational pumps/no of pumps*100%													

Guam Waterworks Authority			Date: 6/3/2022 Time:		<div></div> WATER DISTRIBUTION FACILITIES REPORT									
REVIEWS														
TOTAL PUMPS INSTALLED		56	OVERAL AVERAGE		91%									
TOTAL PUMPS OPERATIONAL		51	% OF OPERATING PUMPS		91%									
TOTAL BOOSTER PUMP STATIONS		27												

NO.	FACILITY	PUMP HP	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
Northern District													
1	Yigo	30	3	3	100%	OP	A						
2	Gavnerio	20	2	2	100%	OP	A						
3	Mataquac	25	2	1	50%	OP	A	Pump 1 motor burnt. PO issued to JMI for new motor.					
					100%	OP	A	Station currently undergoing renovation. Only one pump left in operation at this time.					
4	Santa Rosa	15	1	1									
5	Hyundai	40	2	1	50%	OP	A	1-29-21 work still ongoing with upgrading control wires. One pump placed on standby.		Electrical wires being upgraded.			
6	Orin Palauan	5	2	2	100%	N/A							
7	Access	60	2	2	100%	OP	A						
8	Adana Heights	30	2	2	100%	OP	A						
9	Nimitz Hill	7.5	2	2	100%	N/A							
10	Adawao	1.5	1	1	100%	N/A							
11	Paia Kian	1	1	1	100%	N/A							
12	Ulga/Ungajan	1	2	2	100%	OP	A						
13	Late Heights	15	2	2	100%	OP							
TOTAL = 13			25	23	92%								
Central District													
1	Pago	150 / 100	3	3	100%	OP	A						
2	Broadway	60 / 20	3	3	100%	OP							
3	Windward Hills	200 / 75	3	2	67%	OP	A	rebuild kit. 6-3-22 still pending delivery of parts.					
4	Santa Rita Spring	40	2	2	100%	OP	A						
5	Santa Ana (Lower)	25	2	2	100%	N/A							
6	Camacho	1	1	1	100%	N/A							
7	Tenorio	1.5	1	1	100%	N/A							
TOTAL=7			15	14	93%								
Southern District													
1	Maloloi Line	125 / 50	3	1	33%	OP	A	Pump 1 leaking on mechanical seals. Pump 3 motor burnt; repairs ongoing.					
2	Geus	7.5	3	3	100%	OP							
3	Pisua	7.5	2	2	100%	N/A							
4	Toquan	25	1	1	100%	OP	A	Only one pump left installed due to station renovation.					
5	WBP-2	25	2	2	100%	OP	A						
6	WBP-1	15	3	3	100%	OP	A						
7	Maloloi Elevated	15	3	3	100%	OP							
TOTAL=7			16	14	88%								
pump availability =no of operational pumps/no of pumps*100%													





**Guam Waterworks Authority**  
**VEHICLE FLEET STATUS**  
**6/30/2022**

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	3	1	2	33%
Boom Truck	1	0	1	0%
Crane	1	1	0	100%
Dump Truck	1	1	0	100%
Forklift	6	6	0	100%
Fuel Tanker	1	1	0	100%
Heavy Duty	12	11	1	92%
Hoist Rig	1	1	0	100%
Jetter	1	0	1	0%
Light	160	117	43	73%
Mini Backhoe	4	0	4	0%
Pumper Truck	1	0	1	0%
Skidster	1	0	1	0%
Sludge Truck	5	3	2	60%
Tractor	2	2	0	100%
Tractor Mower	1	0	1	0%
Trailer	17	13	4	76%
Trencher	1	0	1	0%
Vacuum Truck	5	2	3	40%
Water Buffalo	2	2	0	100%
Water Tanker	6	4	2	67%
Compressor	1	1	0	100%
Total	242	175	67	

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
0	1	0	0	2	0	0
0	0	0	0	0	0	1
0	1	0	0	0	0	0
1	0	0	0	0	0	0
6	0	0	0	0	0	0
1	0	0	0	0	0	0
11	0	0	0	1	0	0
1	0	0	0	0	0	0
0	0	0	0	0	1	0
112	5	3	11	9	10	10
0	0	0	0	2	0	2
0	0	0	0	0	1	0
0	0	0	0	1	0	0
3	0	0	0	0	0	2
1	1	0	0	0	0	0
0	0	0	0	0	1	0
13	0	1	0	3	0	0
0	0	0	0	1	0	0
1	1	0	1	0	2	0
2	0	0	0	0	0	0
3	1	0	0	0	2	0
1	0	0	0	0	0	0
165	10	4	12	19	17	15



**Guam Waterworks Authority**  
**VEHICLE FLEET STATUS**

6/3/2022

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	3	1	2	33%
Boom Truck	1	0	1	0%
Crane	1	0	1	0%
Dump Truck	1	1	0	100%
Forklift	6	4	2	67%
Fuel Tanker	1	1	0	100%
Heavy Duty	12	10	2	83%
Hoist Rig	1	1	0	100%
Jetter	1	0	1	0%
Light	147	111	36	76%
Mini Backhoe	4	1	3	25%
Pumper Truck	1	0	1	0%
Skidster	1	0	1	0%
Sludge Truck	5	0	5	0%
Tractor	2	2	0	100%
Tractor Mower	1	0	1	0%
Trailer	17	13	4	76%
Trencher	1	0	1	0%
Vacuum Truck	5	3	2	60%
Water Buffalo	2	2	0	100%
Water Tanker	6	4	2	67%
Compressor	1	1	0	100%
Total	229	164	65	

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
0	1	0	0	2	0	0
0	0	0	0	0	0	1
0	0	0	0	1	0	0
1	0	0	0	0	0	0
4	0	0	1	1	0	0
1	0	0	0	0	0	0
10	0	0	0	1	1	0
1	0	0	0	0	0	0
0	0	0	0	0	1	0
106	5	3	6	9	8	10
1	0	0	0	1	0	2
0	0	0	0	0	1	0
0	0	0	0	1	0	0
0	0	0	0	2	1	2
1	1	0	0	0	0	0
0	0	0	1	0	0	0
13	0	1	0	3	0	0
0	0	0	0	1	0	0
2	1	0	1	0	1	0
2	0	0	0	0	0	0
3	1	0	0	0	2	0
1	0	0	0	0	0	0
155	9	4	9	22	15	15

GWA Work Session - July 19, 2022 - GM REPORT

Guam Waterworks Authority				Date: 7/8/2022		<div></div> <div>WASTEWATER FACILITIES REPORT</div>							
REVIEWS													
TOTAL PUMPS INSTALLED		181	OVERALL AVERAGE		86%								
TOTAL PUMPS OPERATIONAL		157	% OF OPERATING PUMPS		87%								
TOTAL PUMP STATIONS		82											
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	2	50%	GPA	A	Pumps 1&2 were secured due to contractor will be working in wet well. They will also be changing out the pumps and VFDs as part of the Northern upgrades.		VFD#4: Awaiting Repairs		Pending new pumps which are part of the Northern Treatment Plant upgrades	
2	FUJITA	1	4	3	75%	GPA	A	Pump #2 was installed but impeller was pitted and worn. Removed impeller from #4 and placed it on #2. Pump #4 secured due to impeller needed.					PO 501487
3	YPAO	1	2	2	100%	GPA	A						
4	PASEO DE ORO	1	2	2	100%	GPA	A						
5	HARMON	2	2	1	50%	GPA	A	6-2-22, pump #2 was removed and brought to maintenance due to water was found in the dry chamber.	WO 1290412				OR 52510
6	ROUTE 16	1	4	3	75%	GPA	M	Pump #3 secured due to damaged wear plate and defective check valve. Pump secured due to VFD issues. Pump can still operate manually but not on auto.					OR 50082 check valve OR 50487 wear plate
7	LATTE DOUBLE TROUBLE	1	2	1	50%	GPA	A	12-2-21, pump #1 was removed and brought to maintenance due to broken impeller	WO 1249603				PO 501008
8	LATTE SUN RISE	2	2	2	100%	GPA	A						
9	LATTE SUBMARINE	2	2	2	100%	GPA	A						
10	LATTE PLANTATION	2	2	2	100%	GPA	A						
11	PGD	2	2	1	50%	GPA	A	pump 2 was removed and brought to maintenance due to open windings.	WO 1270274				PO 501386
12	MACHECHE	2	2	1	50%	GPA	A	Pump #1 was removed and brought to vendor for repairs due to bearing issue	WO 1240813				PO 500963
13	HAFA ADAI	2	2	2	100%	GPA	A						
14	YPAOPAO	1	3	2	67%	GPA	N/A	9-2-21, Pump #3 was removed due to pump was grounded. Pump at vendor, pending repairs	P#3 WO 1240839				PO 500903
15	PACIFIC LATTE	2	2	2	100%	GPA	A						
16	YIGO	1	3	2	67%	GPA	A	Pump #1 was removed and brought to maintenance due to low insulation on windings. Pump #3 on standby. No data plate to confirm FLA.					PO 501348
17	ZERO DOWN	2	2	2	100%	GPA	A						
18	SANTA ANA	2	2	2	100%	GPA	A						
19	MACHANAONAO	1	2	2	100%	GPA	N/A						
20	FEMA 96	2	2	2	100%	GPA	A						
21	ASTUMBO 1	2	2	2	100%	GPA	A						
22	ASTUMBO 2	2	2	2	100%	GPA	A						
Total	22		52	42	81%								


GWA Work Session - July 19, 2022 - GM REPORT

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 due to broken pump shaft.	WO #1266707				
7	ORDOT	2	2	2	100%	OP	A						
8	DERO	1	2	2	100%	OP	A						
9	CHALAN PAGO #5	2	2	2	100%	OP	A						
10	CHALAN PAGO #3	2	2	2	100%	OP	A						
11	FLORA GARDENS	2	2	2	100%	INOP	A						
12	DOUBLE SHAFT	1	3	2	67%	OP	A	Pump 2 removed due to impeller broke/Shaft worn				Bid was awarded to JMI. ETA date 4/1/22. Pushed to June 2022	Pumps arrived 7/8/22. Maintenance prepping for installation.
13	NAMU	2	1	1	100%	OP	A						
14	TAI MANGILAO	1	3	2	67%	GPA	A	Pump #2 was removed and brought to maintenance due to mechanical seal issue. Pending disconnection from electrician for removal.					OR 52532
15	MANGILAO	1	2	2	100%	GPA	A			Breaker for sump pump is defective			
16	FIDIAN	2	2	2	100%	GPA	A	Pump #1 is secured due to oring on duct foot keeps coming out. Need to order from manufacturer.	WO 1234258				
17	LEYANG	2	2	1	50%	OP	A	Pump #2 was removed and brought to vendor for repairs due to seal failure.	WO 1240816				PO 500975
18	SAGAN BONITA 1	2	2	2	100%	OP	A						
19	SAGAN BONITA 2	2	2	2	100%	OP	A						
20	DAIRY	1	2	2	100%	INOP	A						
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	2	100%	Portable	A			GPA RELOCATED GENERATOR			
25	MAITE	2	2	2	100%	GPA	A						
26	BAYSIDE	2	1	1	100%	INOP	A						
27	ALUPANG	1	2	2	100%	OP	A						
28	MAMAJANAO	1	3	3	100%	OP	A						
29	Agara Main	1	4	3	75%	OP	A	P4 is on Line # 2 /awaiting line 4 riser to be cleaned					
<b>Total</b>	<b>29</b>		<b>63</b>	<b>58</b>	<b>92%</b>								

GWA Work Session - July 19, 2022 - GM REPORT

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#2 is at vendor pending repairs due to seal failure. Pump #5 was installed 6/30.	(69044)#2-WO 1264613	#2/#5 VFDs are defective due to burnt IGBT and power cards. Currently using VFD from Southern Link for #5			VFDs replacement (OR 51690 pending OQ)
2	PUMP STATION #11	2	2	2	100%	INOP	AUTO						
3	PUMP STATION #12	1	2	1	50%	OP	AUTO	pump #1 was drooped to vendor due to bearing and seal issues.	WO 1255934				PO 500978
4	PUMP STATION #14	2	2	1	50%	OP	AUTO	Pump#2 was removed and dropped to vendor for repairs due to motor was grounded.	WO 1235765				PO 500986
5	PUMP STATION #15	1	2	2	100%	INOP	AUTO			Pump #1 defective hourly meter.	20-05-1208		Generator Secured By GPA 4/18/20 due to Oil Leak.
6	PUMP STATION #16	2	2	1	50%	OP	AUTO	Pump #1 was removed due to bearing issue.	WO 1271243				PO 500986
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		SUMP PUMP 20-01-0733	6-6-19 Exhaust blower for wet well is defective and needs replacement. Requested for electricians to relocate the existing blower unit at the old Agat treatment plant wet well and install it at Talofofo.		OQ 37914 & 37915 was submitted for replacement of blower fans and ventilation duct.	Sump pumps OR 50370 (pending OQ)
12	PAGACHAO	2	2	2	100%	NONE	NA						
13	CHALIGAN	2	2	2	100%	OP	MAN			Requesting for electricians to make assessments to ventilation system to make it operational.	(Vent- 19-12-0390)	12-23-19 Fred is working on getting a lift to be able to go to the roof top to make assessments on the motor.	Pending PO for lift for electricians to access roof top to inspect blower.
14	EJECTOR #2	2	2	2	100%	PORTABLE /INOP	NA						
15	EJECTOR #3	2	2	1	50%	PORTABLE /INOP	NA	Compressor #1 was secured due to compressor is defective causing motor to trip. Need to replace compressor.					
16	EJECTOR #4	2	2	2	100%	PORTABLE /INOP	NA						
17	EJECTOR #5	2	2	1	50%	PORTABLE/INOP	NA	11-13-20 Compressor #1 was removed and to be used at Ejector 7 for compressor #1. Compressor was installed but pending motor installation.					
18	EJECTOR #6	2	2	2	100%	PORTABLE/INOP	NA						
19	EJECTOR #7	2	2	2	100%	PORTABLE/INOP	NA						
20	NORTH REYES	2	2	1	50%	PORTABLE/INOP	NA	Pump #1 was removed due to defective bearing issue.	WO 1236267				Pending OR
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	3	100%	OP	AUTO	S/N 66066 just received from vendor, currently at maintenance pending impeller. 66067 was removed due to seal failure.	WO1274069				PO 501235
25	Windward Hills	1	3	2	67%	OP	AUTO	Pump #3 and Spare are at vendor, pending mechanical seal.	WO 1268583 1261825	WO			PO 501085/ PO 501089
26	Aplacho	1	3	2	67%	OP	AUTO	Pump #3 was removed due to damaged wiring	WO 1267740				OR 52320
27	Ladera #1	2	2	2	100%	PORTABLE	MAN						
28	Ladera #2	2	2	2	100%	PORTABLE	MAN						
29	Ayuyu	2	2	2	100%	PORTABLE	MAN						
30	Tenorio	2	2	2	100%	PORTABLE	MAN						
31	Talague	2	2	2	100%	PORTABLE	MAN						
31			66	57	86%								

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Guam Waterworks Authority				Date: 6/8/2022		<div></div> <div>WASTEWATER FACILITIES REPORT</div>							
REVIEWS													
TOTAL PUMPS INSTALLED		181		OVERALL AVERAGE		83%							
TOTAL PUMPS OPERATIONAL		152		% OF OPERATING PUMPS		84%							
TOTAL PUMP STATIONS		82											

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	2	50%	GPA	A	Pumps 1&2 were secured due to contractor will be working in wet well. They will also be changing out the pumps and VFDs as part of the Northern upgrades.		VFD#4: Awaiting Repairs		Pending new pumps which are part of the Northern Treatment Plant upgrades	
2	FUJITA	1	4	3	75%	GPA	A	Pump #2 was installed but impeller was pitted and worn. Removed impeller from #4 and placed it on #2. Pump #4 secured due to impeller needed.					OR 52336
3	YPAO	1	2	2	100%	GPA	A						
4	PASEO DE ORO	1	2	2	100%	GPA	A						
5	HARMON	2	2	1	50%	GPA	A	6-2-22, pump #2 was removed and brought to maintenance due to water was found in the dry chamber.					OR 52510
6	ROUTE 16	1	4	2	50%	GPA	M	P#3 secured due to damaged wear plate and defective check valve. P#4 secured due to VFD issues. Pump can still operate manually but not on auto.					OR 50082 check valve OR 50487 wear plate
7	LATTE DOUBLE TROUBLE	1	2	1	50%	GPA	A	12-2-21, pump #1 was removed and brought to maintenance due to broken impeller	WO 1249603				PO 501008
8	LATTE SUN RISE	2	2	2	100%	GPA	A	Pump #2 is secured due to leak on discharge pipe. Pump is still operational.					
9	LATTE SUBMARINE	2	2	2	100%	GPA	A						
10	LATTE PLANTATION	2	2	2	100%	GPA	A						
11	PGD	2	2	1	50%	GPA	A	pump 2 was removed and brought to maintenance due to open windings.	WO 1270274				OR 52274
12	MACHECHE	2	2	1	50%	GPA	A	Pump #1 was removed and brought to vendor for repairs due to bearing issue	WO 1240813				PO 500963
13	HAFA ADAI	2	2	1	50%	GPA	A	P2 removed and brought to vendor for repairs due to water had entered into the motor.	WO 1133763				PO 500312
14	YPAO PAO	1	3	1	33%	GPA	N/A	9-2-21, Pump #3 was removed due to pump was grounded. Pump at vendor, pending repairs 1-5-21, Pump #2 was removed due to insulation of windings were low. Pump is at vendor for repairs.	P#3 WO 1240839 P#2 WO 1257195				PO 500903/ PO 500987
15	PACIFIC LATTE	2	2	2	100%	GPA	A						
16	YIGO	1	3	2	67%	GPA	A	Pump #1 was removed and brought to maintenance due to low insulation on windings. Pump #3 on standby. No data plate to confirm F.L.A.					OR 52454
17	ZERO DOWN	2	2	2	100%	GPA	A						
18	SANTA ANA	2	2	2	100%	GPA	A						
19	MACHANAONAO	1	2	2	100%	GPA	N/A						
20	FEMA 96	2	2	2	100%	GPA	A						
21	ASTUMBO 1	2	2	2	100%	GPA	A						
22	ASTUMBO 2	2	2	2	100%	GPA	A						
Total	22		52	39	75%								

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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 due to broken pump shaft.	WO #1266707				
7	ORDOT	2	2	2	100%	OP	A						
8	DERO	1	2	2	100%	OP	A						
9	CHALAN PAGO #5	2	2	2	100%	OP	A						
10	CHALAN PAGO #3	2	2	2	100%	OP	A						
11	FLORA GARDENS	2	2	2	100%	INOP	A						
12	DOUBLE SHAFT	1	3	2	67%	OP	A	Pump 2 removed due to impeller broke/Shaft worn				Bid was awarded to JMI. ETA date 4/1/22. Pushed to June 2022.	
13	NAMU	2	1	1	100%	OP	A						
14	TAI MANGILAO	1	3	2	67%	GPA	A	Pump #2 was removed and brought to maintenance due to mechanical seal issue. Pending disconnection from electrician for removal.					OR 52532
15	MANGILAO	1	2	2	100%	GPA	A			Breaker for sump pump is defective	WO#1234269		
16	FIDIAN	2	2	2	100%	GPA	A	Pump #1 is secured due to oring on duct foot keeps coming out. Need to order from manufacturer.	WO 1234258				
17	LEYANG	2	2	1	50%	OP	A	Pump #2 was removed and brought to vendor fro repairs due to seal failure.	WO 1240816				PO 500975
18	SAGAN BONITA 1	2	2	2	100%	OP	A						
19	SAGAN BONITA 2	2	2	2	100%	OP	A						
20	DAIRY	1	2	2	100%	INOP	A						
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	2	100%	Portable	A			GPA RELOCATED GENERATOR			
25	MAITE	2	2	2	100%	GPA	A						
26	BAYSIDE	2	1	1	100%	INOP	A						
27	ALUPANG	1	2	2	100%	OP	A						
28	MAMAJANAO	1	3	3	100%	OP	A						
29	Agara Main	1	4	3	75%	OP	A	P4 is on Line # 2 /awaiting line 4 riser to be cleaned					
<b>Total</b>	<b>29</b>		<b>63</b>	<b>58</b>	<b>92%</b>								

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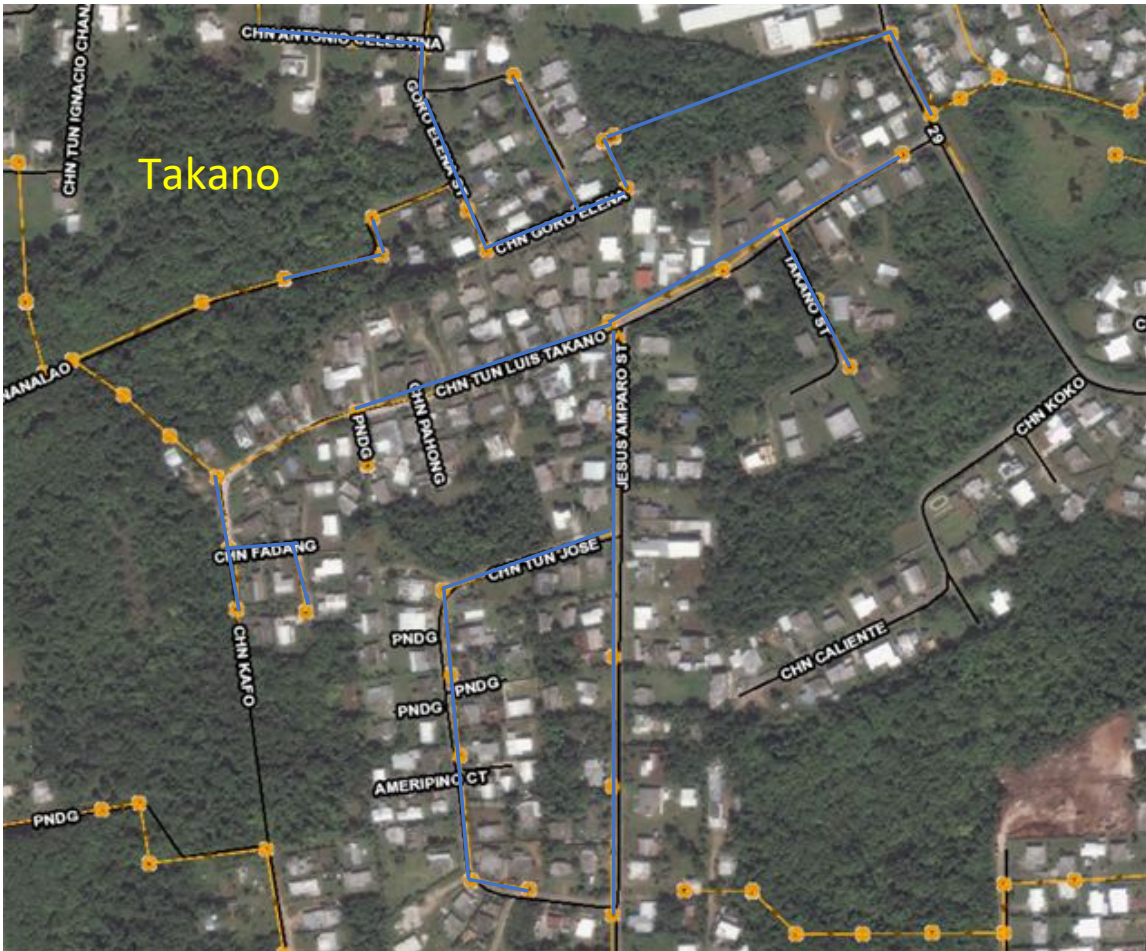
Southern District													
NO:	FACILITY	PRIORITY LISTED	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL, STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	UPDATES
1	GAAN #1	1	4	2	50%	OP	MAN	Pump#2 and #5 was repaired and picked up from vendor. Pump #4 was placed back online. Pump #2 was installed on line #3 due to pump #3 was removed due to seal failure.	(69044)#2-WO 1264613 (69045)#3-WO 1267786	#2/#5 VFDs are defective due to burnt IGBT and power cards. Currently using VFD from ASRWWTP on #2 (IGBT burnt.)			VFDs replacement (OR 51690 pending OQ)
2	PUMP STATION #11	2	2	2	100%	INOP	AUTO						
3	PUMP STATION #12	1	2	1	50%	OP	AUTO	pump #1 was dropped to vendor due to bearing and seal issues.	WO 1255934				OR 51910
4	PUMP STATION #14	2	2	1	50%	OP	AUTO	Pump#2 was removed and dropped to vendor for repairs due to motor was grounded.	WO 1235765				OR 51618
5	PUMP STATION #15	1	2	2	100%	INOP	AUTO			Pump #1 defective hourly meter.	20-05-1208		Generator Secured By GPA 4/18/20 due to Oil Leak.
6	PUMP STATION #16	2	2	1	50%	OP	AUTO	Pump #1 was removed due to bearing issue.	WO 1271243				OR 52183
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	SUMP PUMP 20-01-073		6-6-19 Exhaust blower for wet well is defective and needs replacement. Requested for electricians to relocate the existing blower unit at the old Agat treatment plant wet well and install it at Talofofo.		OQ 37914 & 37915 was submitted for replacement of blower fans and ventilation duct.	Sump pumps OR 50370 (pending OQ)
12	PAGACHAO	2	2	2	100%	NONE	NA						
13	CHALIGAN	2	2	2	100%	OP	MAN			Requesting for electricians to make assessments to ventilation system to make it operational.	(Vent- 19-12-0390)	12-23-19 Fred is working on getting a lift to be able to go to the roof top to make assessments on the motor.	Pending PO for lift for electricians to access roof top to inspect blower.
14	EJECTOR #2	2	2	2	100%	PORTABLE /INOP	NA						
15	EJECTOR #3	2	2	1	50%	PORTABLE /INOP	NA	Compressor #1 was secured due to compressor is defective causing motor to trip. Need to replace compressor.					
16	EJECTOR #4	2	2	2	100%	PORTABLE /INOP	NA						
17	EJECTOR #5	2	2	1	50%	PORTABLE/INOP	NA	11-13-20 Compressor #1 was removed and to be used at Ejector 7 for compressor #1. Compressor was installed but pending motor installation.					
18	EJECTOR #6	2	2	2	100%	PORTABLE/INOP	NA						
19	EJECTOR #7	2	2	2	100%	PORTABLE/INOP	NA						
20	NORTH REYES	2	2	1	50%	PORTABLE/INOP	NA	Pump #1 was removed due to defective bearing issue.	WO 1236267				Pending OR
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	S/N 66066 and 66067 was removed due to seal failure.	WO 1268358 WO1274069				OR 52119/ OR 52236
25	Windward Hills	1	3	2	67%	OP	AUTO	Pump #3 and Spare are at vendor, pending mechanical seal.	WO 1268583 WO 1261825				PO 501095/ PO 501089
26	Aplacho	1	3	2	67%	OP	AUTO	Pump #3 was removed due to damaged wiring	WO 1267740				OR 52320
27	Ladera #1	2	2	2	100%	PORTABLE	MAN						
28	Ladera #2	2	2	2	100%	PORTABLE	MAN						
29	Ayuyu	2	2	2	100%	PORTABLE	MAN						
30	Tenorio	2	2	2	100%	PORTABLE	MAN						
31	Talague	2	2	2	100%	PORTABLE	MAN						
31			66	55	83%								







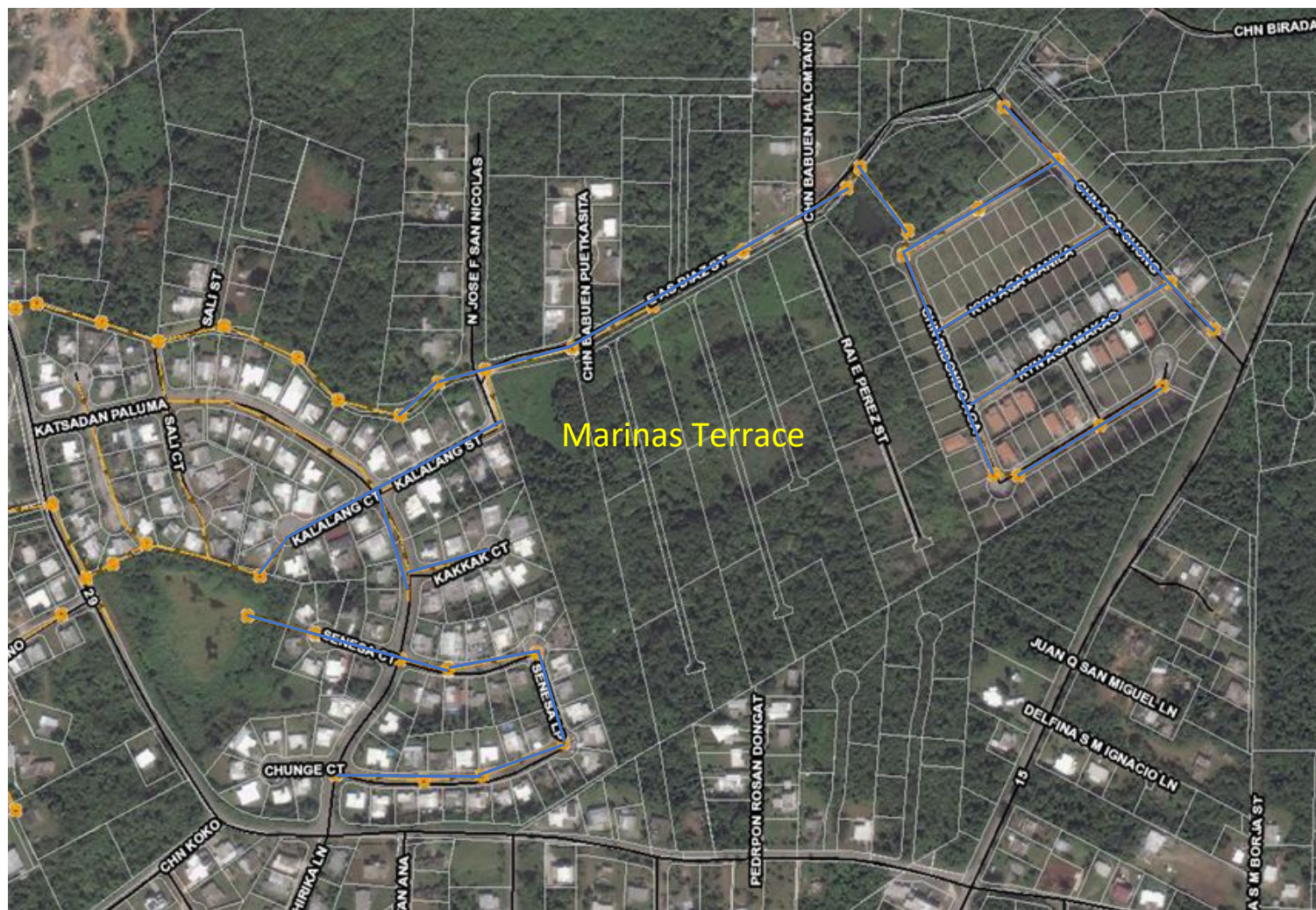






















**5.10 miles a month required, 61.3 miles a year to complete for 2027 (306.83 miles to complete in 5 years)**

306.83 miles / 5 years = 61.3 miles/yr

61.3 miles /12 months = 5.1 miles a month required to be completed

5.1 miles x 5,280ft = 26,928 ft. / 4 weeks = 6,732 ft./week required to be completed

6,732 ft / 5 days = 1,346.4ft required to be completed daily



