



## CONSOLIDATED COMMISSION ON UTILITIES

Guam Power Authority | Guam Waterworks Authority

P.O. Box 2977 ~~Hagatna~~, Guam 96932 | (671) 648-3002 | guamccu.org

**Regular Board Meeting**  
**CCU Conference Room, Gloria B. Nelson Public Service Building**  
**5:30 p.m., Tuesday, September 28, 2021**

### AGENDA \*AMENDED

#### 1. CALL TO ORDER

The CCU Chairman called the CCU Regular Meeting of September 28, 2021 to order at 5:30 p.m. He said four [4] Commissioners were present for a quorum and that Comm. Sanchez was excused. Others in attendance include:

#### Commissioners:

Joseph T. Duenas	CCU Chairman
Francis E. Santos	CCU Vice Chairman
Michael T. Limtiaco	CCU Secretary
Peter Roy Martinez	Commissioner

#### Executive Mgmt.:

John Benavente	GM / GPA
Miguel Bordallo	GM / GWA
Melinda Mafnas	AGMO / GPA
Tom Cruz	AGMO / GWA
Tricee Limtiaco	AGMA / GPA
Chris Budasi	AGMA / GWA
John J. Cruz	AGMET / GPA – Online
John Kim	CFO / GPA
Taling Taitano	CFO / GWA
Graham Botha	Legal Counsel / GPA
Therese Rojas	Legal Counsel / GWA

#### Management & Staff:

Vien Wong	IT Support / GPA
Vlad Navasca	IT Support / GPA
Vangie Lujan	Compliance & Safety / GWA
Ann Borja-Gallarde	Management Analyst IV / GWA Ex. Office
Joyce Sayama	Management Analyst / GPA Ex. Office

**Guest:**

PNC News

Online

Anmarie Muna

AM Insurance

**2. APPROVAL OF MINUTES**

The Minutes of the Special Meeting of June, 3, 2021 and the Special Meeting of June 18, 2021 were presented for approval.

Comm. Santos motioned to approve the Minutes subject to verification and written correction, second by Comm. Martinez. There was no discussion and the motion passed 4 ayes, 1 absent.

**3. PUBLIC COMMENTS - None**

**4. GWA**

**4.1 GM Report**

**GWA Workforce availability  
as of September 17, 2021**

Healthy	348	94.1%
Sick, not COVID-19 related	4	1.1%
COVID-19 Quarantined	9	2.4%
Employee with COVID-19, active case	1	0.3%
Military Leave	7	1.9%
LTD	1	0.3%
	<b>370</b>	<b>100%</b>

	Total	
Healthy/Reporting for duty at worksite	340	91.9%
Healthy/Reporting for duty - Teleworking	8	2.2%
Employee with COVID-19, active case	1	0.3%
Employee sick - symptoms unrelated to COVID-19	4	1.1%
Military Leave	7	1.9%
Employee (to be) tested for COVID-19 with results pending	3	0.8%
Employee's direct exposure to a household member with symptoms related to COVID-19	1	0.3%
Employee sick - symptoms related to COVID-19	3	0.8%
Employee's direct exposure to a household member - COVID-19	2	0.5%
LTD/Workers Comp	1	0.3%
	<b>370</b>	<b>100%</b>

**GWA Workforce Vaccine Status  
as of September 17, 2021**

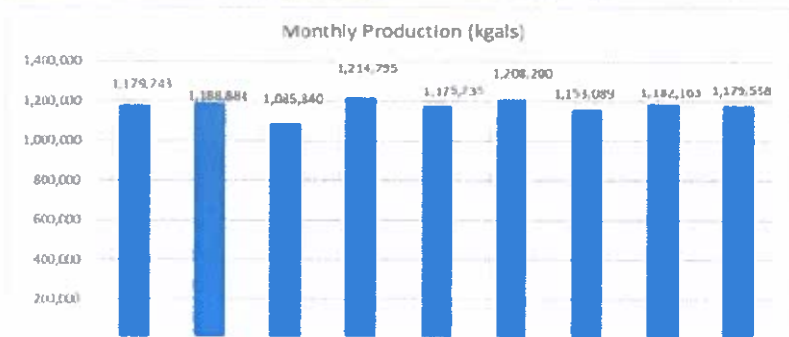
One Shot Remaining	24	6.49%
Fully Vaccinated	300	81.08%
Did Not Receive Shot	46	12.43%
	<b>370</b>	<b>100%</b>

Operations Update  
Production (August 2021)

Monthly Production Summary - August 2021		
<b>Deep Wells</b>		<b>34.9 MGD</b>
Active wells =	91 of 120	
Avg days in operation =	31 days	
Total Production =	1,081,128 Kgals	
<b>Springs</b>		<b>0.22 MGD</b>
Avg days in operation =	31 days	
Total Production =	6,911 Kgals	
<b>Ugum Surface Water Plant</b>		<b>2.0 MGD</b>
Avg days in operation =	31 days	
Total Production =	62,754 Kgals	
<b>Tumon Maui Well</b>		<b>0.93 MGD</b>
Avg days in operation =	31 days	
Total Production =	28,765 Kgals	
		<b>1,179,558 Kgals</b>
		<b>38.1 MGD</b>

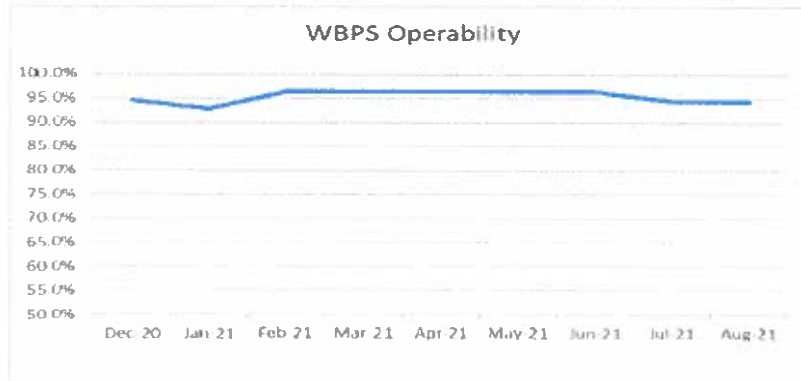
  

DW Status as of 8/31/2021		
Active	91	
Grounded motor or Pump failure	12	A26-D01-D03-D10-D18B-F06-F13-Y16-Y20-F04-F15-Y21
Out of commission	8	A02-A07-A28-C05-D13-M14-M101-M05
Temporarily Secured - PFO	2	A23-A25
Standby	6	A29-D24-F05-M09-Y01-Y02
Temporarily Secured - Unbalance Power	1	F07
<b>TOTAL</b>	<b>120</b>	

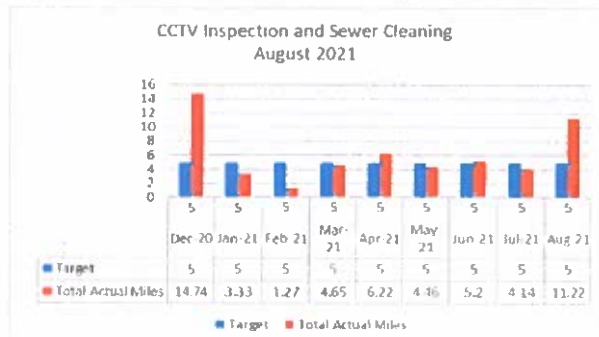
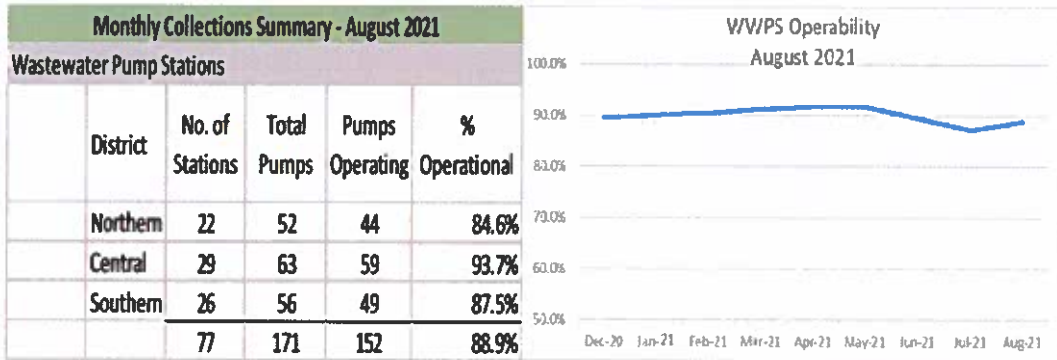


Distribution (August 2021)

Monthly Distribution Summary - August 2021					
Water Booster Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	13	26	25	96.2%
	Central	7	14	12	85.7%
	Southern	7	15	15	100.0%
	<b>TOTAL</b>	<b>27</b>	<b>55</b>	<b>52</b>	<b>94.5%</b>

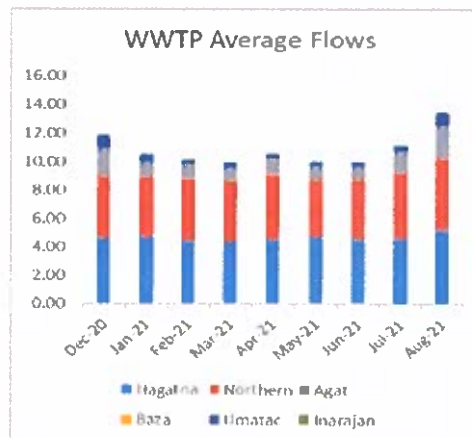


Wastewater Collections (August 2021)



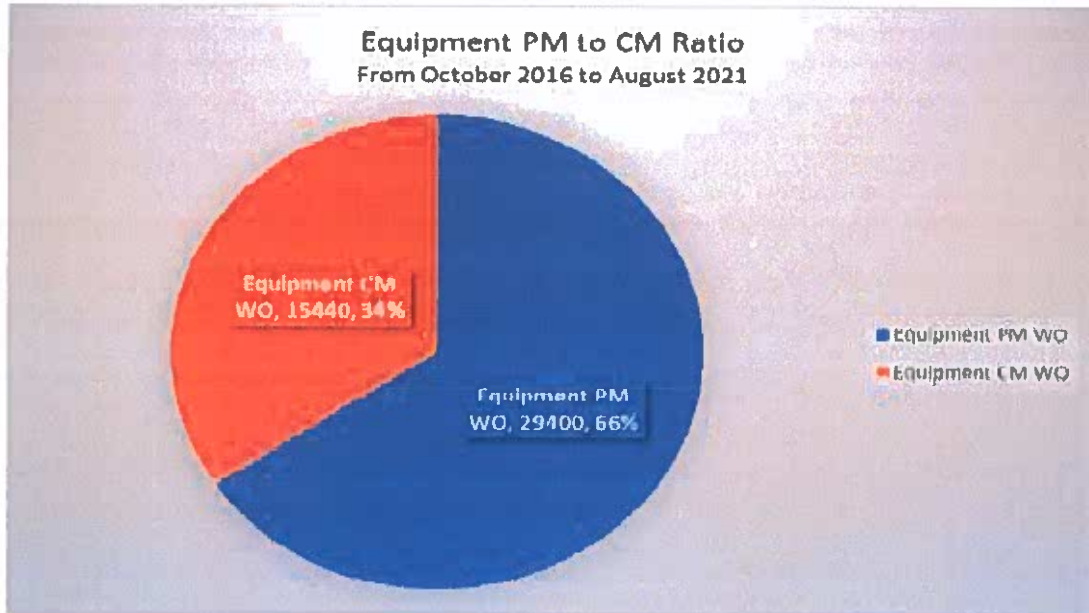
Wastewater Treatment (August 2021)

Monthly Wastewater Treatment Summary - August 2021			
WW Treatment Plants - Flows			
Facility	Avg. Daily Flows	Sludge (lbs)	Sludge Disp. (\$)
Hagatna	5.06	89,720	\$ 8,075
Northern	5.10	606,920	\$ 54,623
Agat	2.39	78,700	\$ 7,083
Baza	0		
Umatac	0.78		
Inarajan	0.16		
	<b>13.49</b>	<b>775,340</b>	<b>\$ 69,781</b>

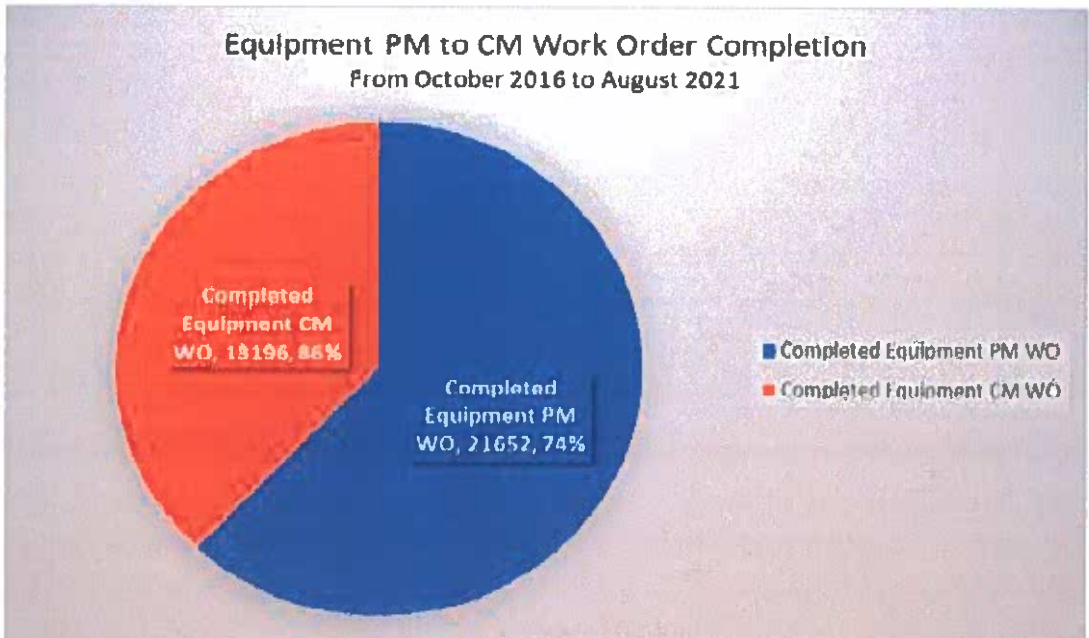


## Asset Management (through August 2021)

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

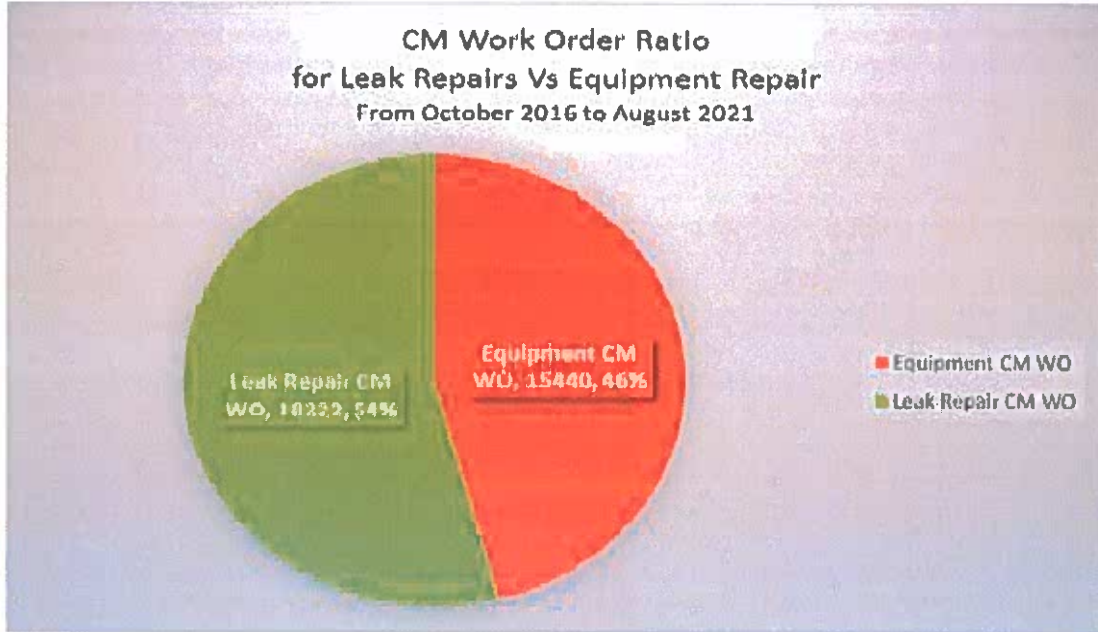


### II. Equipment Preventive Maintenance to Corrective Maintenance *Work Order Completion*

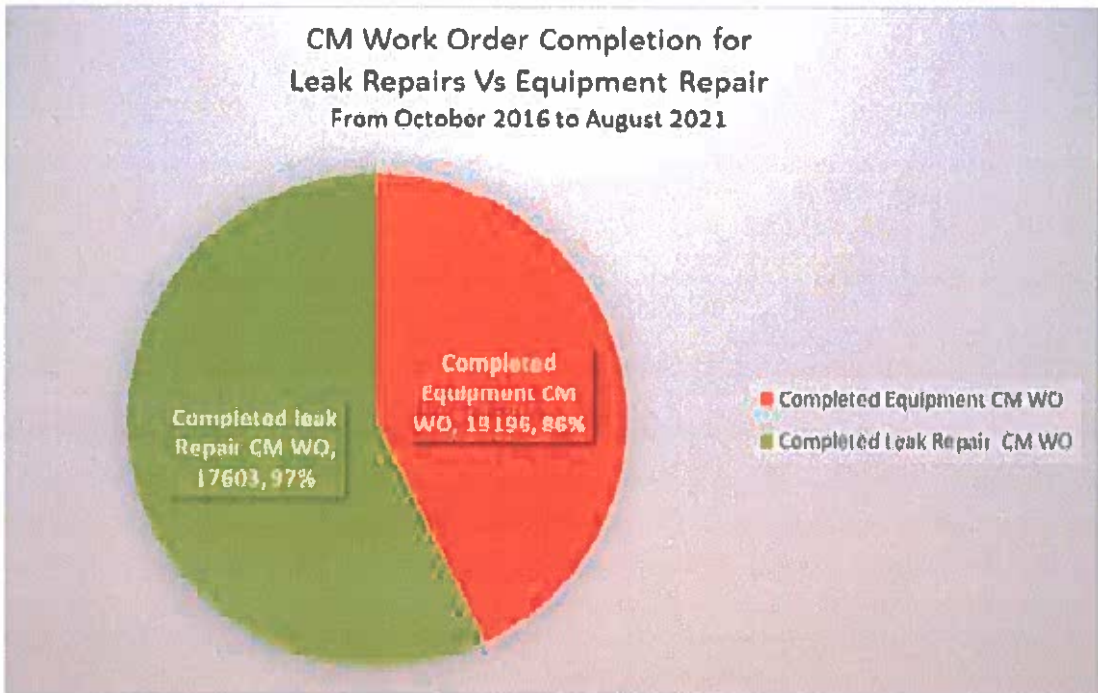


Asset Management (through August 2021)

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 August 2021)

### Tumon Maui Well

- Still waiting on AAFB approval to increase the pumping rates to be consistent with the GEPA well permit.
- The license for TMW will be for 1 more year. Then next term will be a 5-year lease. The valuation of the property will determine the amount of the fee for the lease.
- Next inspection will be October 20, 2021

### OEA Projects

- Observation Wells/NGLA
  - DoD is working to resolve ownership issue w/ adjacent landowner. DOD met with the Department of Land Management to resolve the issue with the property. GWA still needs to access BPM-1 site in Mangilao for rehabilitation project.

### Strategy/Framework Discussion

- Santa Rosa Intertie – Still pending approval by Andersen leadership (as with TMW/AG-1).
- Route 16 Intertie – Project will not start until 2023.

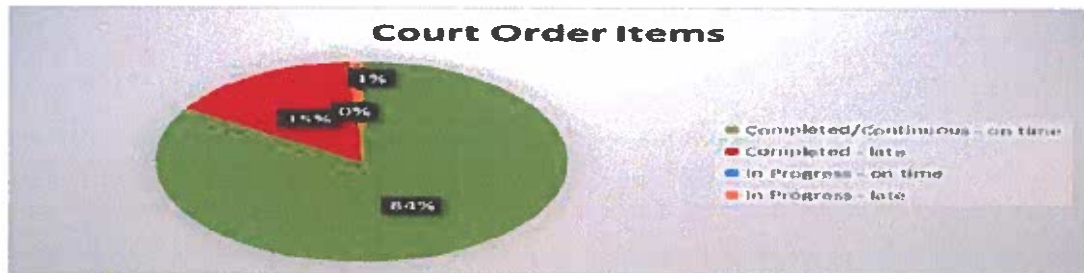
### Property Transfers

- Transfer of Navy Laterals at Murray Road and to Schoeffel Heights to GWA - Right of Entry is being reviewed by DOD
- Transfer of ACEORP Tunnel – No new update; waiting for GovGuam to sign.
- Easement on Marbo property for Sewer Line - GWA request for easement/relocation was delivered to DOD. GWA still waiting on response.
- Amendment to the Cetti Bay easement is approved; documents will be transmitted to GWA.

### Other

- GWA is preparing a Standard Operating Procedures (SOP) for Wastewater Batch Discharge from DOD to GWA.
- DOD is considering discharge of pool water from Camp Blaz to GWA. GWA will issue a Pretreatment Permit for the discharge into GWA wastewater system. DOD will coordinate with GWA on the discharge.
- The AWWA-HIOWPS annual conference will be virtual and will be free.

## Court Order Summary (August 2021 – no changes)



	Court Order Items	%	Performance (on-time or completed)
Completed/Continuous - on time	78	84%	98.9%
Completed - late	14	15%	
In Progress - on time	0	0%	
In Progress - late	1	1%	
<b>Totals</b>	<b>93</b>	<b>100%</b>	

## Court Order – Status Information (August 2021)

- 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 (for August up to September 1, 2021):
  - SSO #453, Aug. 22, 2021-Aga St., Santa Rita – Heavy Rain
  - SSO #454, Aug. 20, 2021-Chalan Pago/Ordot - Sewer overflow, Station Pump Airlocked
  - SSO #457, Aug. 23, 2021-Vicente Salomon, Agaña Heights – FOG
  - SSO #459, Aug. 26, 2021-Chalan Canton Tasi, Merizo – PS Controller Issues
  - SSO #461, Sept. 1, 2021-Chagamin Lago, Inalahan – Heavy Rain

Land Acquisition Summary (for August 2021)

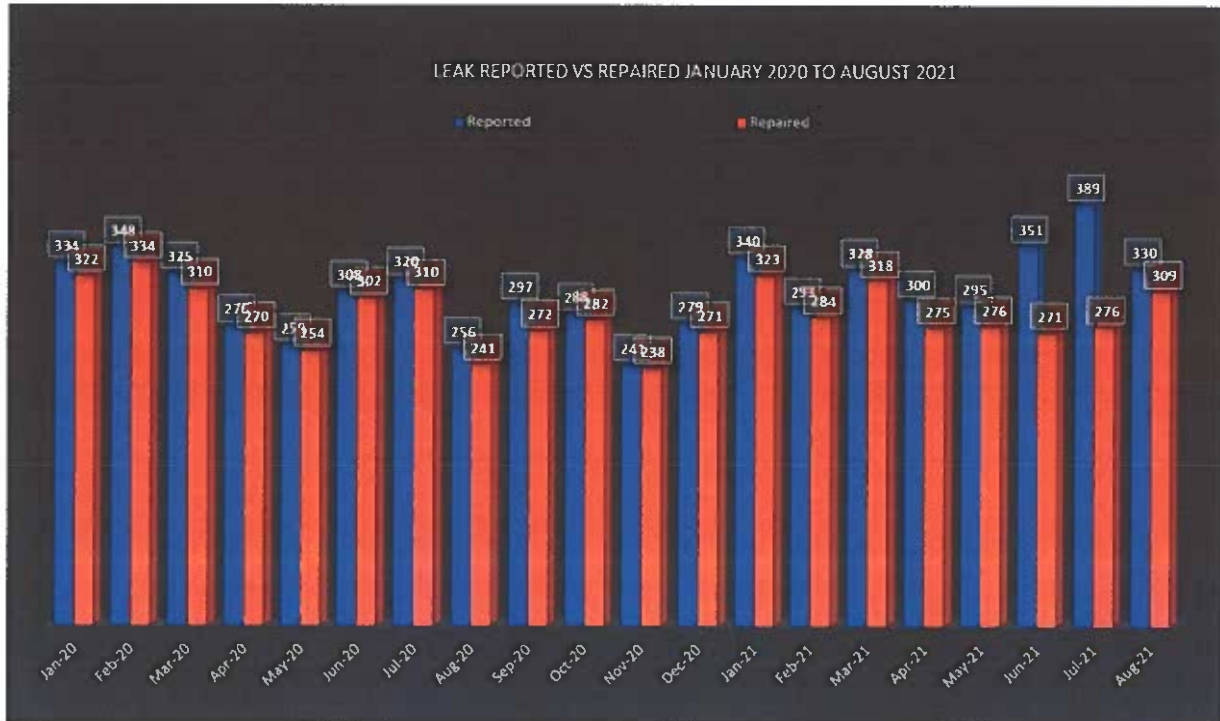
GWA Facility	Location	Gov. or Private Property	Land Acquisition Status
Tanks	Astumbo	Gov't. - CLTC	Petition of Land Registration package forwarded to Attorney General by DLM 11/04/19. AG pending court filing 06/30/2021. <b>Follow up status sent to DLM 09/02/2021.</b>
	Piti	Private	Received final comments 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.
	Airport	Private	<b>Escrow/Title Service for land acquisition purchase opened 08/27/2021.</b>
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. <b>DCA submitted parceling map to DLM for review and comments on August 18, 2021, waiting for their review comments.</b>
Booster Pump Station	Agfayan	Private	TGE working on structural design for pump station area for L28, B19, T3734, Inarajan 11/07/19. Letter of Decision received by CLTC 06/09/2021.

Land Acquisition Summary (for August 2021 – continuation)

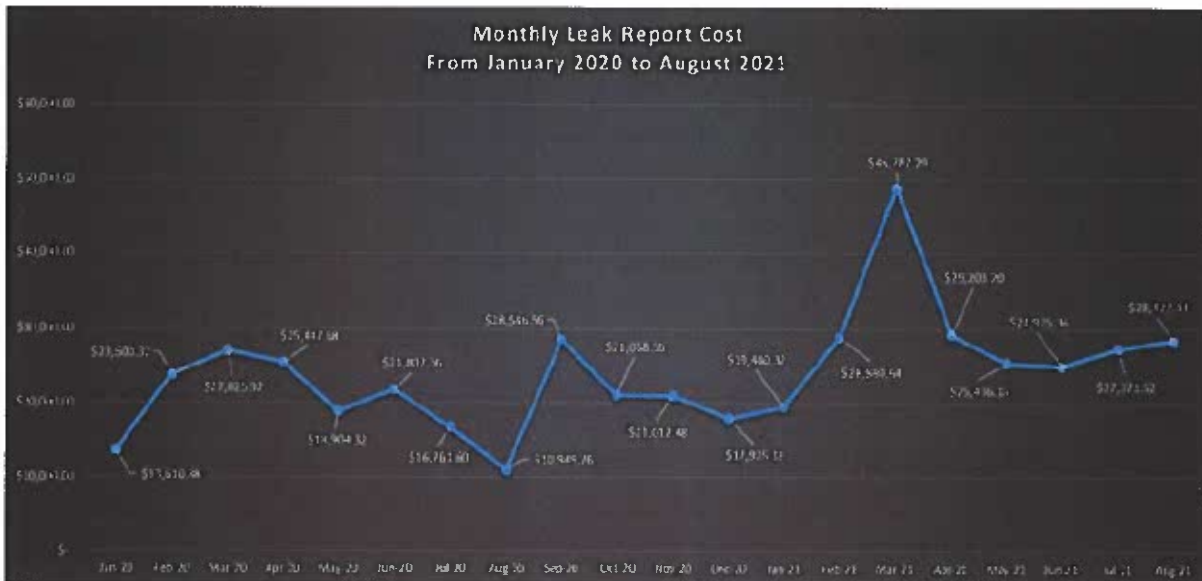
GWA Facility	Location	Gov. or Private Property	Land Acquisition Status
Asan Springs	Asan	Federal	<p>In order for NPS to issue a land ROW agreement with GWA, NPS has to complete NEPA first. GWA has HDR under contract to perform this work and an Environmental Assessment (EA) will be developed. The permit 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 following up with Tim Clark to get him up to speed on things.</p> <p><b>Biological Survey:</b></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> </ul> <p><b>DOAG Environmental Consultation Letter:</b></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> </ul> <p>Pending archaeological survey requirements from SHPO. SHPO Letter sent to NPS for review, 5/29/2021. Received first comments on letter on 7/1/2021; submitted revised letter on 7/12/2021.</p>



Comparison of Leaks Reported vs. Leaks Repaired (through August 2021)



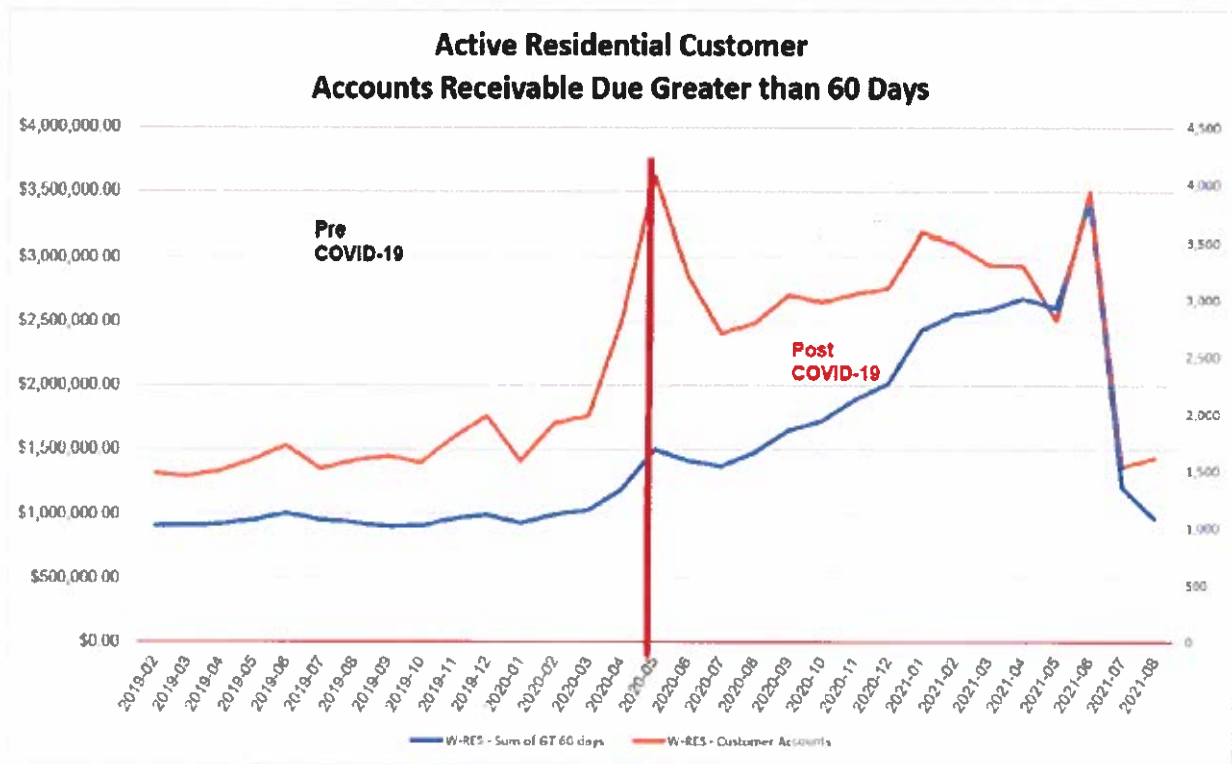
Monthly Leak Report Cost (through August 2021)



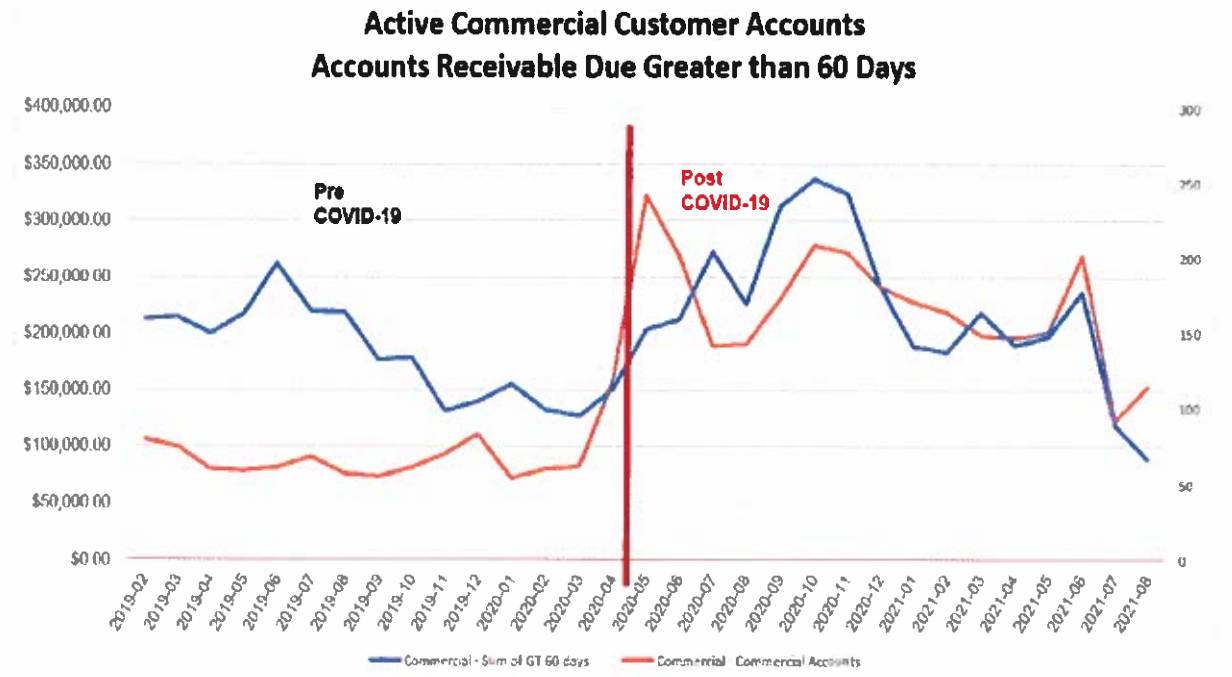
Assumptions:

1. Leak rate = 4 gpm
2. Cost per kgal = \$4.00

Accounts Receivables Due Greater than 60 Days (through August 2021)



Accounts Receivables Due Greater than 60 Days (through August 2021)



AGM for Administration Chris Budasi reported that for August there continues to be improvement for residential customers. We are back to pre-pandemic levels for residential customers. For commercial customers we are still below pre-pandemic status.

#### 4.2 Financials

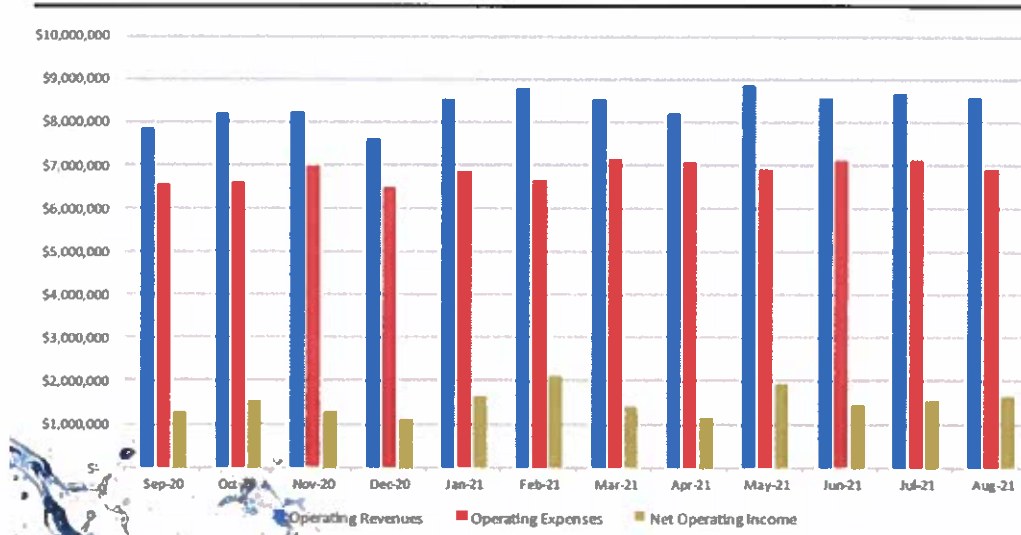


### Key Financial Indicators

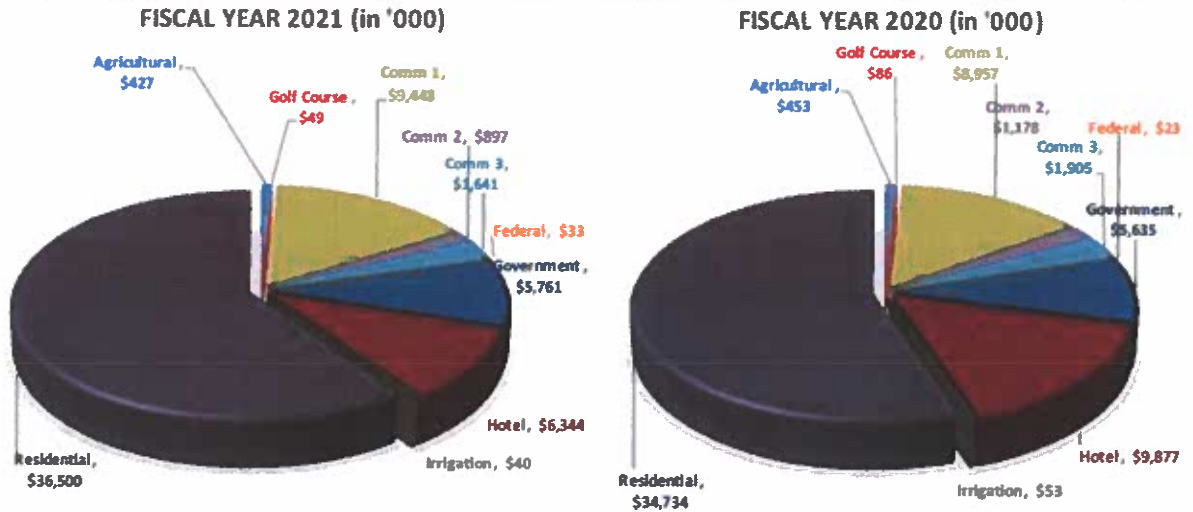
Indicator	Target	Jul-21	Aug-21
<b>DSC YTD</b>			
• Per Section 8.12 of Indenture	1.25	1.35	1.35
• Per PUC / CCU	1.4	1.35	1.35
<b>Days - Cash on Hand</b>	120 days	297 days	309 days
<b>Collection Ratio</b>			
• Month to Date	99%	107%	94%
• Year to Date	99%	98%	99%
<b>Days Billed</b>	30 days	30 days	30 days
<b>Account Receivable Days</b>	30 days	45 days	45 days
<b>Account Payable Days</b>	45 days	39 days	38 days
<b>Employee Count</b>	400 FTE	363 FTE	372 FTE
<b>Water Demand</b>			
• Month to Date	478,754	437,864	443,188
• Year to Date	5,266,296	4,444,009	4,887,197
<b>Wastewater Flow</b>			
• Month to Date	356,472	311,764	332,271
• Year to Date	3,921,196	3,141,131	3,473,402
<b>Water Customers</b>	42,839	43,258	43,184
<b>Wastewater Customers</b>	29,805	29,885	29,796



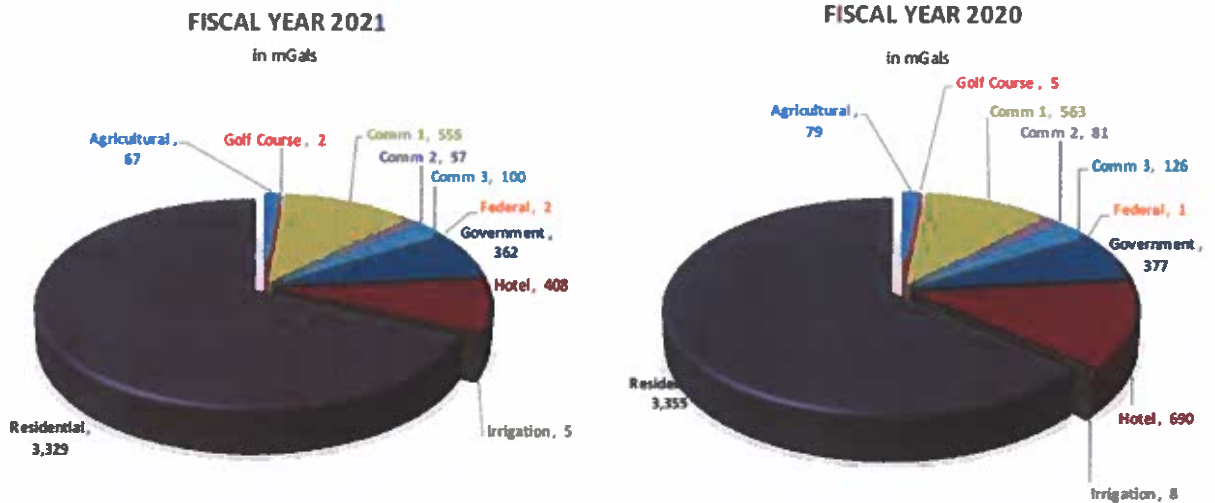
### Income Statement



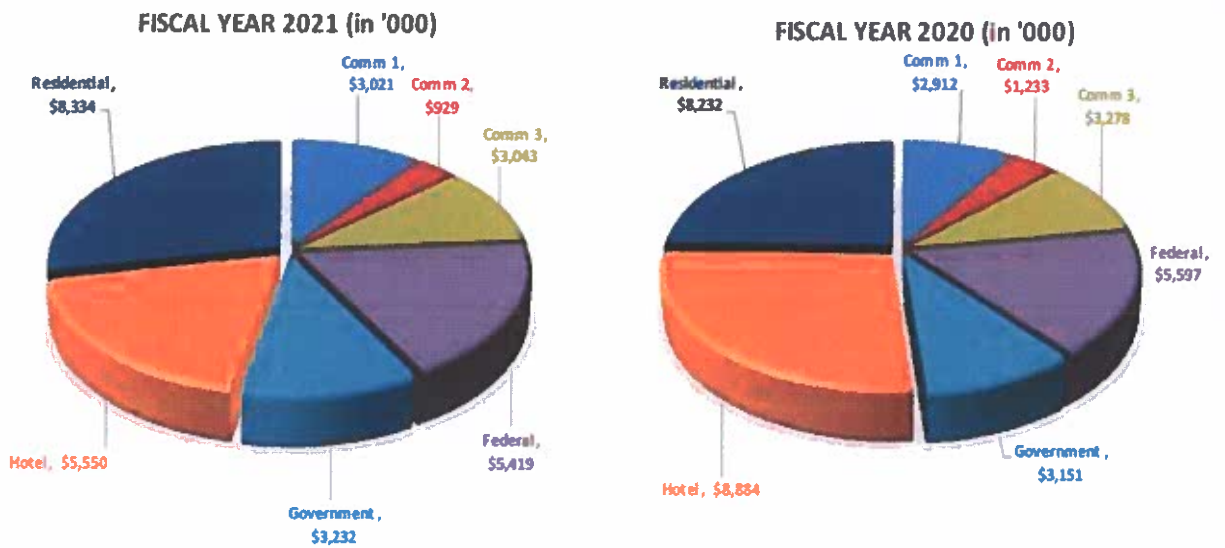
## AUGUST 2021 YTD Water Revenue by Rate Class



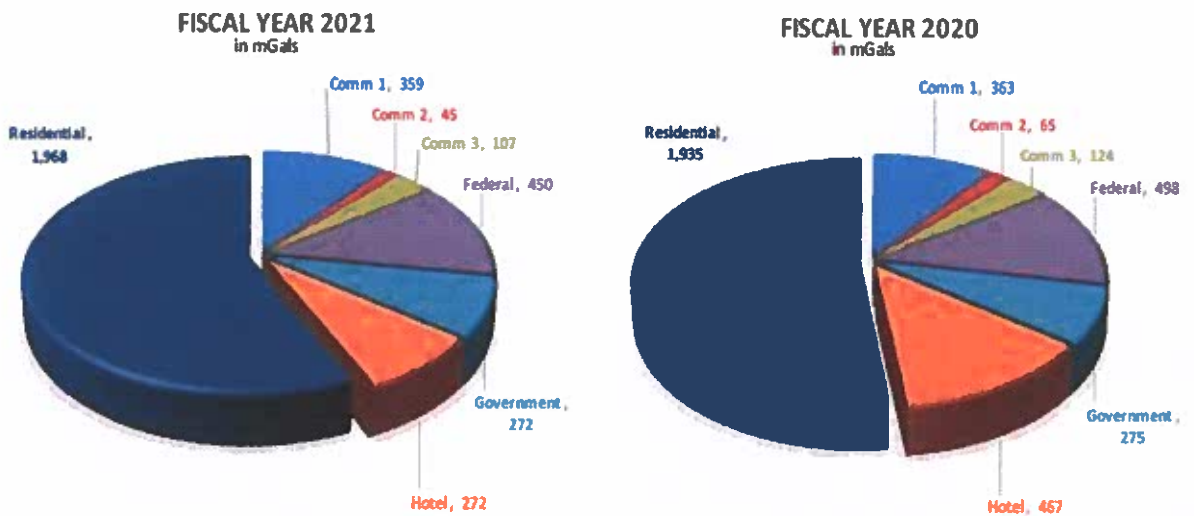
## AUGUST 2021 YTD Demand



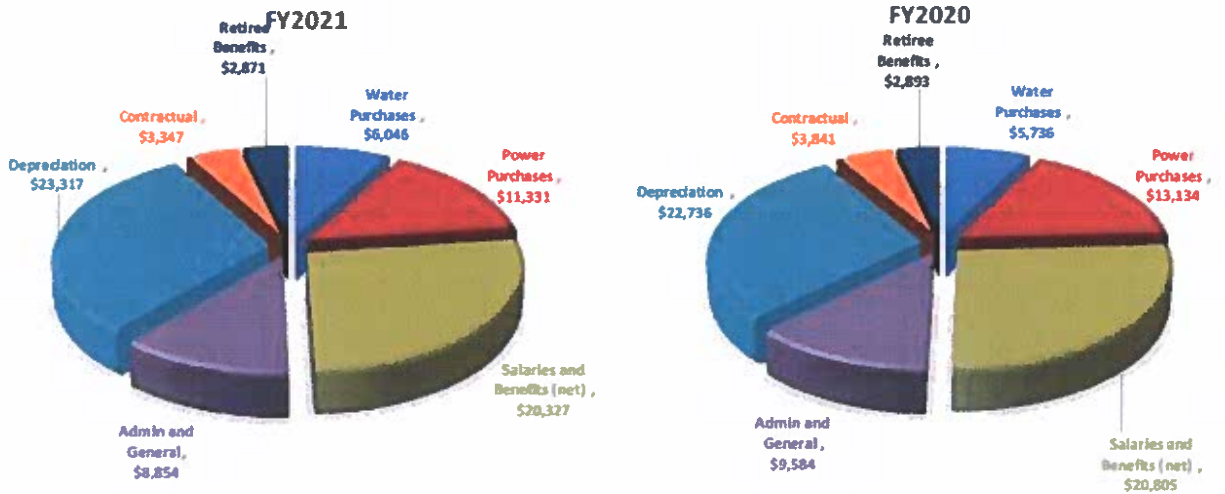
## AUGUST 2021 YTD Waste Water Revenue by Rate Class



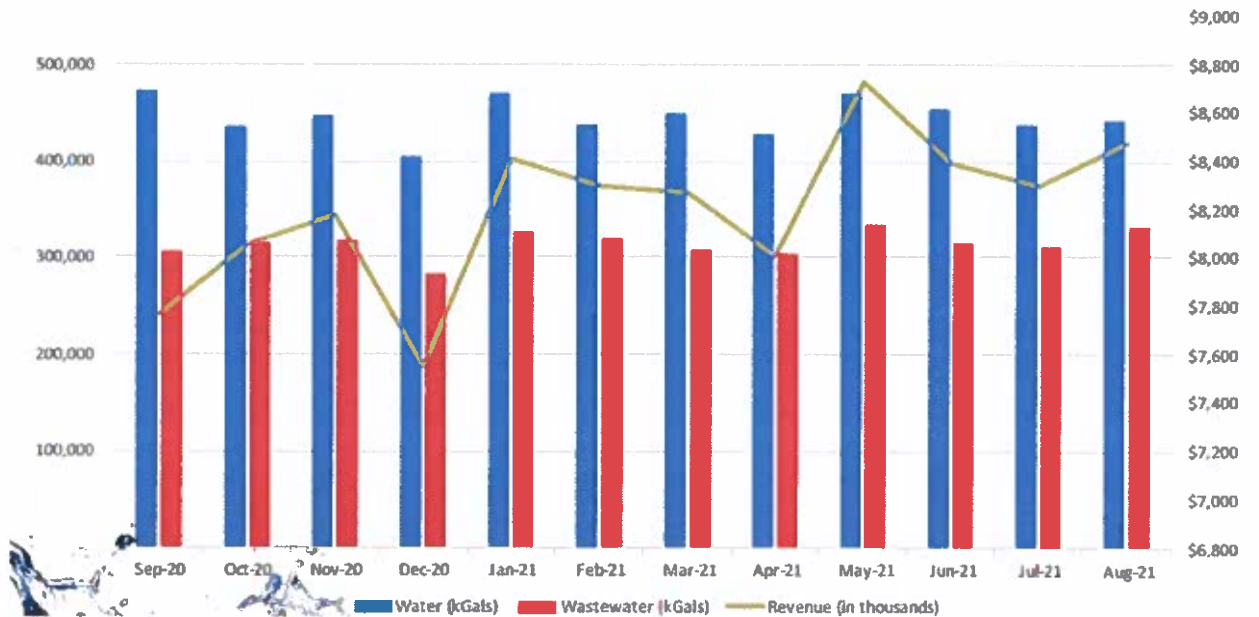
## AUGUST 2021 YTD Flow



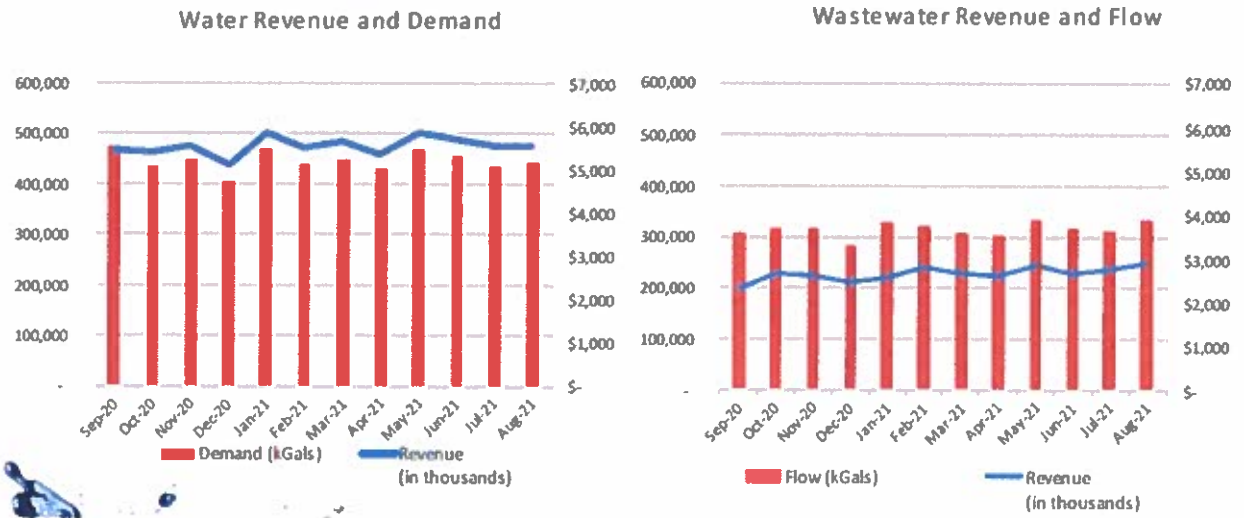
## AUGUST 2021 YTD Expenses by Categories



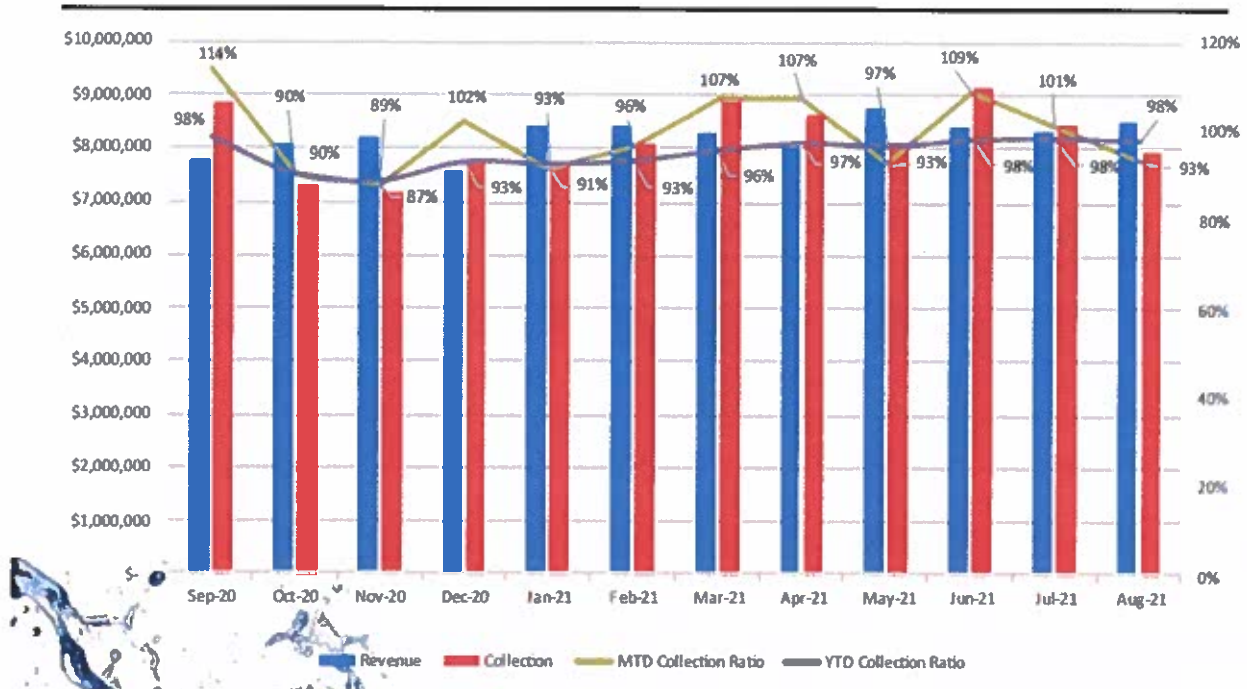
## Overall Revenues and Demand



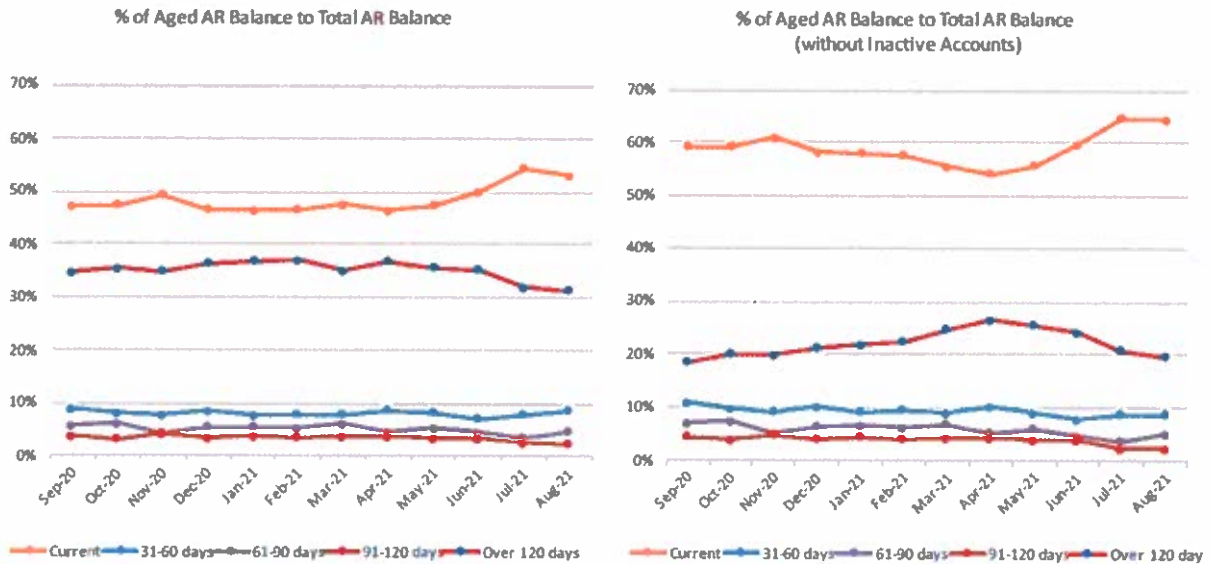
## Revenues and Demand



## Overall Revenues and Collections



## Overall – AR Aging



### **4.3 Resolution No. 28-FY2021 Approval of Legislation Authorization to Set-Up Tax Exempt Commercial Paper Program**

The Authority has all but exhausted its current borrowing authority and must plan for the next set of CIPs in its Master Plan, in particular, the projects that are likely to be included in the upcoming USEPA consent decree. Given the increasing cost of construction, GWA management is seeking additional borrowing authority for up to \$300 million.

Including a Commercial Paper (CP) Program in GWA’s integrated financing strategy, as discussed in the PUC FY20 Rate Order and the GWA Capital Financing Alternatives Study, has the potential to reduce debt service requirements.

The financing will support CIP projects throughout the island. The borrowing costs of the 2020A Bonds resulted in coupon rates of 4% and an all in TIC (True Interest Cost) of 4.587%. The Series 2020B Bonds (taxable refunding of Series 2013 Bonds) resulted in average coupon rates of 3.61% and an all in TIC of 3.7%.

The interest rates on CP are based Federal Reserve Board publications which use data for certain trades to estimate a relation between interest rates on the traded securities and their maturities, with the final pricing on CP based on the specific short-term credit rating of the issuer. Normally, the cost of CP is calculated using the CP index, plus a spread for credit support in the form of a letter of credit (L/C) and a remarketing fee. The dealer fee, for rate



setting and dealer services, is based on market conditions and is in the range of 5 to 15 basis points. There are additional fees for obtaining a credit rating, as CP is generally rated. We hope to have legislation in place by the end of January 2022. GWA Operating Revenues are the pledged funding source to pay debt service and related fees.

Comm. Limtiaco asked if the all the interest was included in the rolling balance in the 27-year bond as well and the GM said yes. Comm. Santos asked if the commercial paper rates are at 1.6%. The GM said the Federal Reserve Board establishes data and that data is used to establish what the CP would cost. Other fees are added into the mix between 5-15 basis points and the credit rating of the issuer also is key. In terms of range it could be 1.6% as opposed to 3.4% on long term bonds. The GM said interest is accrued only on the amounts that are drawn. As the funds are drawn down administrative costs will come into play but the overall costs are minimum.

Comm. Santos asked about GEDA's fees and the GM said it would only be for the take-out bond. He has not seen any figures from GEDA yet for the Commercial Paper program. Comm. Duenas said this question is important and asked the GM could verify this.

The GM said that he hopes the Commercial Paper Program in place by the end of January next year. The additional Commercial Paper funds would not be needed until the end of the fiscal year which gives enough time.

Comm. Limtiaco asked re the line-out for the total cumulative amounts and asked if the final draft is inclusive of the line-outs. The GM said the existing law places a limit on short term borrowing. The proposed legislation removes this language and applies the new limit and borrowing authorization for the Commercial Paper Program and also ties in the take out provision.

Comm. Santos motioned to approve Resolution 28-FY2021, second by Comm. Limtiaco. There was no further discussion or objection and the motion passed - 4 ayes 1 absent.

#### **4.4 Resolution No. 29-FY2021 Approval of Amendment for the Indefinite Delivery / Indefinite Quantity Professional Project/Construction Management Service Contract**

GWA currently has an IDIQ contract with Brown and Caldwell (BC). Amendment No. 2 to Task Order No. 3 extends the contract time to align with the project's forecasted completion date of December 2022 and includes adding project management and contract management services for the Rt.1 Phase 2 construction (on-going). The amount of increase is \$141,435.00.

Amendment No. 4 to Task Order No. 4 extends the contract time to align with the project's current construction schedule. Due to permitting delays, the original construction completion date has passed and construction is now scheduled to be completed on December 17, 2021. This amendment to Task Order No. 4 extends BC's services to December 31, 2021 and increases the Task Order budget by \$95,964.00 (excluding tax) on a Time and Materials basis to cover project and contract management effort throughout this extension. Additionally, this

amendment to Task order No. 4 includes additional survey work needed to complete the transfer of easements for the sewer forcemain in the amount of \$8,800.00 (excluding tax).

Task Order No. 3 construction is located along Route 1 from Asan-Adelup to the Hagatna Sewer Pump Station. Task Order No. 4 construction is located at Lemai Drive, Santa Rita in the Hyundai Subdivision.

The cost for Amendment No. 2 to Task Order No. 3 is \$141,435.00 and the cost for Amendment No. 4 to Task Order No. 4 is \$110,002.00 (including tax). Therefore, the total cost of Amendment to Owner-Engineer Agreement No. 4 and change order to the IDIQ Contract is \$251,437.00.

The current authorized IDIQ contract amount is \$2,296,795.00. In total, an additional \$251,437.00 will be added to the IDIQ Contract to cover the proposed amendments for Task Order Nos. 3 and 4 that will increase the IDIQ contract amount to \$2,548,232.00.

Task Orders, and their amendments, issued to date include:

- Task Order No.1 – Consulting Engineer’s Report
  - Amendment No.1 – Clarification relative to the Municipal Advisor Disclosure
  - Amendment No.2 – Increase in scope for additional draft reports, updating financial projections, and evaluation of COVID-19 impacts on the financial projections.
  - Amendment No.3 – Increase in scope to address continuing development of changes required to the financial plan to adequately address the COVID-19 impacts, additional financial analysis and report modifications.
  - Amendment No.4 – Increase in scope to add task for assistance with and attendance at the individual investor meetings.
- Task Order No.2 – Project/Contract Management for Rt.4 Sewer Rehabilitation
  - Amendment No.1 – Extension of performance time and associated increase in total fee due to construction period extensions.
- Task Order No.3 – Project/Contract Management for Rt.1 Sewer Rehabilitation
  - Amendment No.1 – Extension of performance time and associated increase in total fee due to construction period extensions; plus increasing the scope to provide PM/CM for construction of the Adelup to Hagatna section.
  - Proposed Amendment No. 2 – Extends the contract time to align with the project’s current construction schedule which increases the Task Order budget by \$141,435 to cover project and contract management effort.
- Task Order No.4 – Project/Construction Management for SSES phase 2 Hyundai Subdivision Lift Station
  - Amendment No.1 - Extension of performance time and associated increase in total fee due to construction delays; plus adding archaeological services to the scope of work.

- Amendment No.2 – Extension of performance time (no-cost change order).
- Amendment No.3 – Extension of performance time (no-cost change order).
- Proposed Amendment No. 4 – Extends the contract time to align with the project’s current construction schedule which increases the Task Order budget by \$95,964 to cover project and contract management effort. Additional survey work needed to complete the transfer of easements for the sewer forcemain in the amount of \$8,800.
- Task Order No.5 - Cost of Service Study (PUC Stipulation)
- Task Order No.6 – Water Meter Technical Assistance
- Task Order No.7 – Consent Decree and Hydraulic Modeling Assistance
- Task Order No.8 – Water Resources Master Plan Interim Update

Task Order No. 3 is anticipated to be completed by December 31, 2022.; Task Order No. 4 is anticipated to be completed by December 31, 2021. The funding source will be from the USEPA Grant Funds.

Comm. Santos motioned to approve Resolution 29-FY2021, second by Comm. Limtiaco. There was no further discussion or objection and the motion passed – 4 ayes, 1 absent.

Comm. Santos asked the GM’s the status of GPA and GWA’s vaccination policy. GWA GM Bordallo said that GPA has taken action to do testing in-house and GWA will wait to see the outcome but GWA’s draft policy is ready and pending GPA. GPA GM said the in-house testing is for both those that vaccinated and unvaccinated. The policy should be finalized next week.

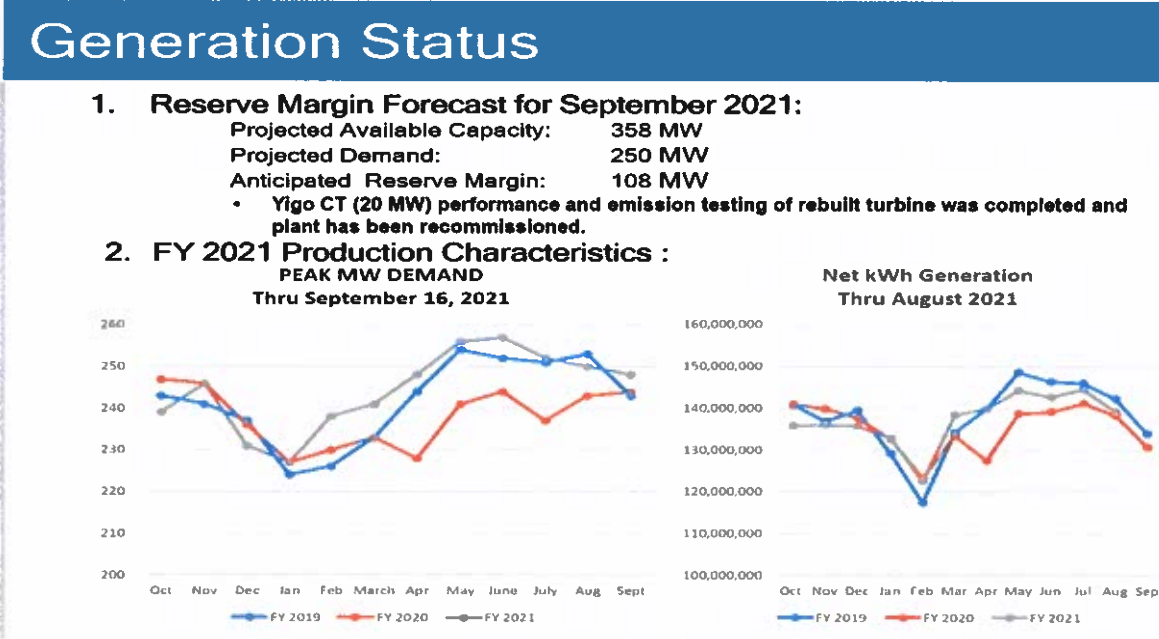
AGMA Tricee Limtiaco reported that 2 types of testing the Abbot Binex will be available the Abbot Rapid Antigen testing and if these come up presumptive positive DPHSS have verbally confirmed that GPA would be trained to run the Abbott ID Machine – a molecular test not PCR. We would be able to confirm presumptive positive on site. The AGMA confirmed that these test will be done in a special room. There are series of steps being undertaken right now to allow GPA to put this all in place. She said this will help us become more efficient in GPA’s testing and will lower the amount of time that employees are out waiting to get tested.

Comm. Limtiaco asked if there is a mandatory vaccination policy with the testing alternative and that the unvaccinated will still need to test weekly and those vaccinated are not being tested. He asked the current employee data statistics - how many are testing positive that are unvaccinated vs. those that are vaccinated? AGMA Limtiaco said that per the Presidential Order, GPA will arrange testing for those who are unvaccinated however employees who would like to test despite their vaccination status will be accommodated. Relative to the make-up of those who are vaccinated and unvaccinated. The AGMA reported on cases in August and September there were 14 positive cases; of the 8 cases in August, 6 were fully vaccinated, 5 of them had household contact. In Sept. there were 6 cases and 5 were fully vaccinated. Re GWA 30 cases [since the onset of COVID] were reported 40% were vaccinated and 60% were not vaccinated. Comm. Limtiaco said based on these figures how does testing only the

unvaccinated solve the problem. GM Benavente said they are moving forward and following the federal mandate. 88% of GPA’s employees are fully vaccinated however there are some testimonials that even in families those that were not vaccinated had a more serious illness. At this time GPA is moving towards compliance and beyond this we want the testing to be available.

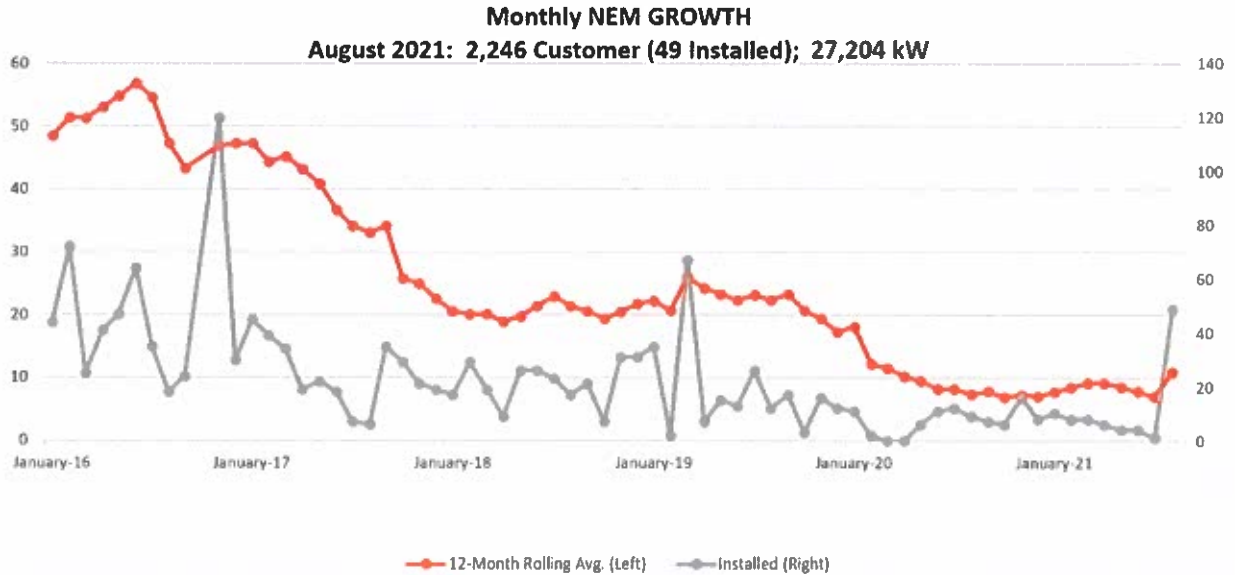
Comm. Limtiaco said testing the unvaccinated only does not make sense because current data shows that more than half were vaccinated. Comm. Duenas said his concern is how many days were the vaccinated ill vs. the unvaccinated. What was the severity of the illness from the vaccinate versus those that are unvaccinated? This would be interesting to know.

5. GPA  
5.1 GM Report



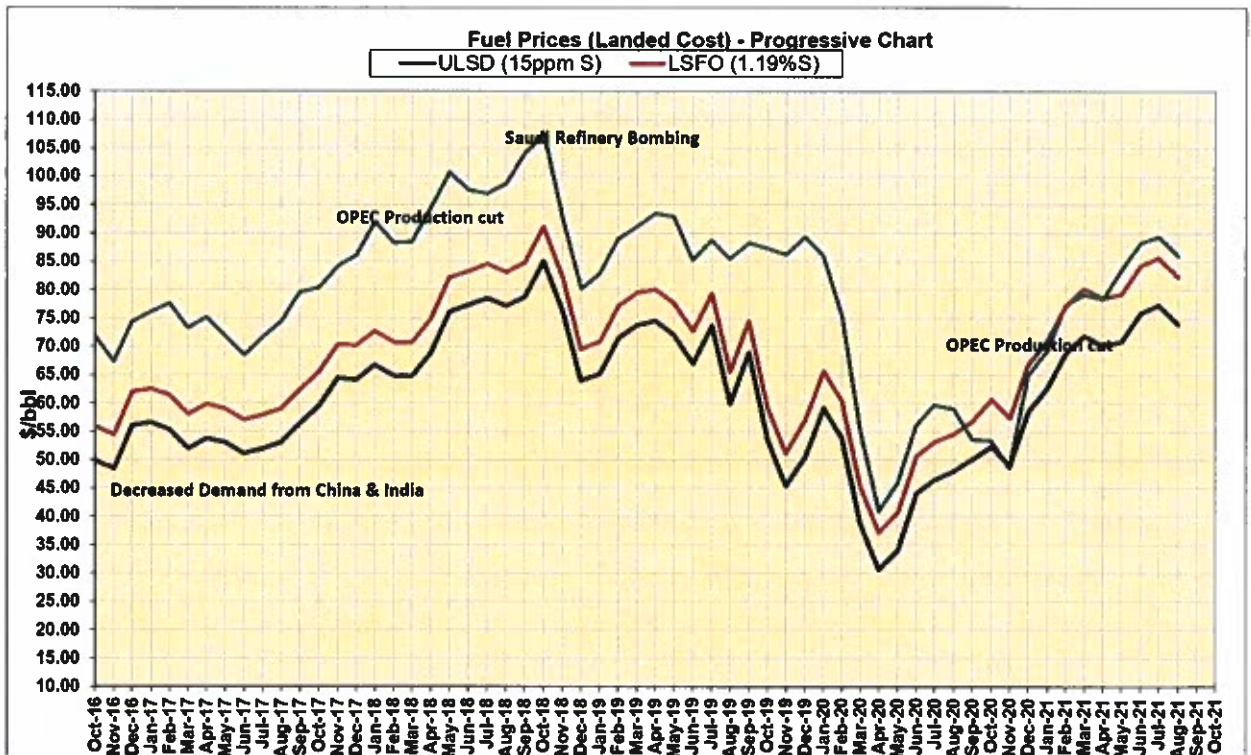
## Net Metering

### 3. Net Metering (NEM) Growth Thru Aug 2021:



## GPA Fuel Landed Cost (Per Barrel) Sept 16, 2021

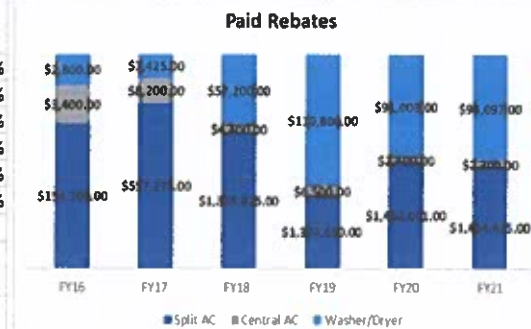
4. HSRFO \$83.06; LSRFO \$91.39; ULSD \$86.01



## Demand Side Management (DSM)

## 5. DSM Funding as of Aug 31, 2021:

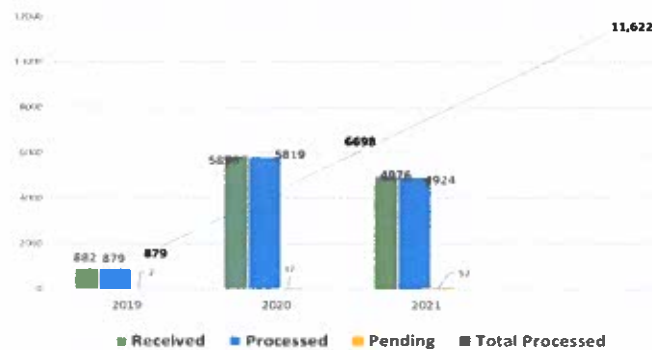
	FY'21 thru 8/21/21	FY'16-FY21 YTD TOTAL	
Regular/OT Pay	\$ 141,399.12	\$ 299,243.12	4.1%
Other Contractual	\$ 72,650.00	\$ 306,481.05	4.2%
Ads & Radio Announcements	\$ -	\$ 9,000.00	0.1%
Paid Rebates-Split AC	\$ 1,454,425.00	\$ 6,358,876.00	86.3%
Paid Rebates- Central AC	\$ 2,300.00	\$ 27,200.00	0.4%
Paid Rebates- Washer/Dryer	\$ 94,097.00	\$ 363,325.00	4.9%
<b>Total Expenses</b>	<b>\$ 1,764,871.12</b>	<b>\$ 7,364,125.17</b>	
Bank Interest (+)	\$ 269.04	\$ 6,059.66	
Bank Fees	\$ 425.00	\$ 5,647.32	
<b>DSM Ending Balance (LEAC Funds): \$1,462,768.63</b>			



## 6. DSM Rebate Application Report 2019 to 2021:



**FY2019-2021 (YTD)  
Rebate Applications**



## 7. PUC Update:

### Current GPA Dockets on PUC Agenda (September 30, 2021):

- GPA Docket 21-16, Petition to Approve the Contract with Tristar Terminals Guam, Inc. for the Lease of an Additional Storage Tank for ULSD Diesel Fuel for Piti 8 & 9 supply source.

### Disposition of Previous GPA Dockets:

- GPA Docket 21-17, Petition to Approve the Amendment to the Contract for Residual Fuel Oil No. 6 for the Baseload Power Generating Plants - **Approved**

## 8. GPA Budget:

- On August 24, 2021 the CCU approved for the first time a two year budget (FY'2022 & FY'2023) for GPA.

## 9. Phase III Renewable Project Update:

- GlidePath filed an appeal in the Superior Court of the OPA's decision which favored a GPA award to Engie for 40 MW of solar with full energy shifting ESS. Opposition briefs have been filed in Superior Court.

## 10. Renewable Energy - Integrated Resource Plan (IRP) & NEM Studies

INTERIM UPDATE

### DSM Update:

- ✓ Existing Program Rebate Levels Reset - Completed
- DSM Plan Update - Sept 24, 2021
- EV Plan (Final Draft in Review) - Sept 24, 2021

### Generation System Reliability &

#### Adequacy:

- ✓ Power Plant and System Capacity State Models - Completed
- ✓ Analysis without ESS - Completed
- ✓ Analysis with ESS - Completed
- ✓ RPS to 50% by 2029 Plan - Completed

#### Strategic Plan: 90% Completed

- Environmental Strategic Plan Update - Modification being made, Sept 24, 2021
- ✓ IT Strategic Plan - Completed
- ✓ IT Consolidation Plan - Completed

#### Capacity Plan:

- ✓ Candidate Resources - Completed
- ✓ Peak Load and Energy Forecast - Completed
- ✓ Generation Hourly Load Forecast - Completed
- ✓ Capacity Expansion Runs - Completed
- Final Draft Report - Ongoing, Sept 30, 2021

#### Frontier Project:

- ✓ Project Summary - Completed

### Distribution Plan:

- ✓ Distribution Models Verification - Completed
- ✓ Transformer Overloads - Completed
- ✓ Capacity Contribution - Completed
- ✓ Voltage Imbalance - Completed
- ✓ System Voltage Analysis - Completed
- ✓ Automated Switching & Fault Circuit Indicator Comm Study - Completed
- ✓ Solar Irradiance Sensor Network Plan - Completed
- Ongoing; L+G to advise
  - Load Flow Studies
  - NEM Growth Impacts
  - Conservation Voltage Reduction
  - Demand Response

### Long Range Transmission Plan Study:

- ✓ Summaries of Renewal Integration Study & System Impact Studies - Completed
- ✓ Grid Controller - Completed

### UFS NEM Rate Study:

- Net Metering Rate - Ongoing, Final Draft in Review



## 10. Renewable Energy - Integrated Resource Plan (IRP)

### Schedule Summary

VOLUME	VOLUME TITLE	STATUS/DATE
Executive Summary	Executive Study	Oct 1, 2021
Volume I	Generation System Reliability, Adequacy, and Resiliency	Final Draft
Volume II	Generation Expansion Plan	Sept 24, 2021
Volume III	Environmental Strategic Plan	Sept 24, 2021
Volume IV	Demand Side Management Plan	Final Draft
Volume V	Medium Range Distribution Plan	TBD
Volume VI	Information/Operational Technology Plan	Final Draft
Volume VII	Strategic Plan	Oct 1, 2021
Volume VIII	Electric Vehicle Roadmap	Final Draft
Volume IX	Net Metering Plan	Final Draft



• CCU Work Session Presentation

• CCU Resolution for Approval

### GPA GRID TRANSFORMATION SOLUTIONS TOWARD A HIGHLY RESILIENT, RELIABLE, AFFORDABLE AND HIGH RENEWABLE ENERGY PRODUCTION GRID

**Charge/Discharge-Axylene Battery Energy Storage Systems (CBESS)** - Provides spinning reserve and frequency regulation. Greatly improves grid response to RORX, flat curve ramp ups, and excess solar PV production events. Provides other grid services.

**Time-of-Use (TOU) Rates** - Provides incentives for customers to change their electricity use behavior to match the needs of the grid.

**Medium Voltage Generation** - Better follows the changes in demand and available generation, especially when large intermittent sources of power are on the grid. Reduces power ripples.

**Daytime Charging Electric Vehicles (EV)** - Provides customers of synchronous generation and solar PV during excess solar PV production events when solar PV production is high and system loads are low. Slows growth of system peak deferring expensive investments for new capacity.

**Energy Shifting Battery Energy Storage Systems (ES BESS)** - Decreases Excess Solar PV Production Events by storing 100% of energy for nighttime use. Reduces expensive production from peaking generation.

**Microgrids** - Using synchronous generators and Solar PV + energy-shifting battery energy storage systems with grid-forming capability to provide power after natural disasters such as typhoons especially in southern Guam.

**Demand Response (DR)** - Aggregates customer demand up or down whenever needed by the grid.

**Grid Controller** - Optimizes all resources to provide the most benefit at the least cost. Improves system stability and system economics.

**Synchronous Condensers (SC)** - Provides Short-Circuit MVA to power system to keep the grid stable, prevents grid-tied inverter cessations, improves fault response and voltage, and allows GPA grid to operate with 100% renewable energy.

**Solar Irradiance Sensor Network** - Provide real-time estimates of solar PV power production. Forecast solar PV power production. Track cloud cover.

**Smart Grid (SG)** - Advanced technology for getting the right information to the right people at the right time to make better strategic and operational decisions and to make the right control operations actions immediately.

**System Protection** - Improve System Protection to operate at an environment with less synchronous generation and more inverter based resources.

**Energy Efficiency** - Energy efficiency has a much higher rate of return than just simply installing solar PV. Putting energy efficiency first lowers energy costs for everyone.

**Improving Synchronous Reliability** - Improving GPA generator availability results in saving more load and less generation. It also significantly lowers energy costs.



## 11. New Power Plant Update: GPA Activities

### Completed:

- **ECA Amendment:** Signed on March 17, 2021.
- **Archaeological & Cultural Requirements:**
  - ✓ Revised Research Design for pipeline and transmission line routes submitted to GHPO
  - ✓ Revised Archaeological Inventory Survey
  - ✓ Resolution on Section 106 process between Navy/SHPO/GPA
  - ✓ Cultural Survey for boring scope fuel/water/power project areas outside the plant site boundary
- **Environmental Requirements:**
  - ✓ Baseline noise study for Piti 41 MW diesel generator plant site.

### Ongoing / Pending:

- **Archaeological & Cultural Requirements:**
  - ✓ Section 106 process for cultural survey on Navy properties (bull cart trails along pipeline route and Harmon Substation)
  - ✓ Cultural Survey for construction area. (Evaluation of Pedonlisong Springs near San Miguel School in Mongmong-Toto area for non-cultural site boundaries)
  - ✓ Cultural survey and boring for proposed site in Piti for diesel generator relocation
- **Water & Wastewater Requirements:**
  - ✓ Water Supply and Discharge Agreement Review
  - ✓ Coordinate with GWA on Change of Law issues due to update NPDES permit affecting discharge of wastewater from cooling system
  - ✓ Follow up with KEPCO-EWP/Doosan on phosphate treatment proposal to address change in law issue.
- **Other:**
  - ✓ Buffer Zone Exemption for Piti 41 MW diesel generator plant site (GPA).

### Critical Path & Risk Items

#### Cultural Survey

(SHPO Approvals Required)

- Approx. 17 miles of pipeline requires approval for boring and construction excavation.
- Pipeline construction research design development and GHPO approval
- Section 106 process required for Navy properties

#### Delays on permit approvals

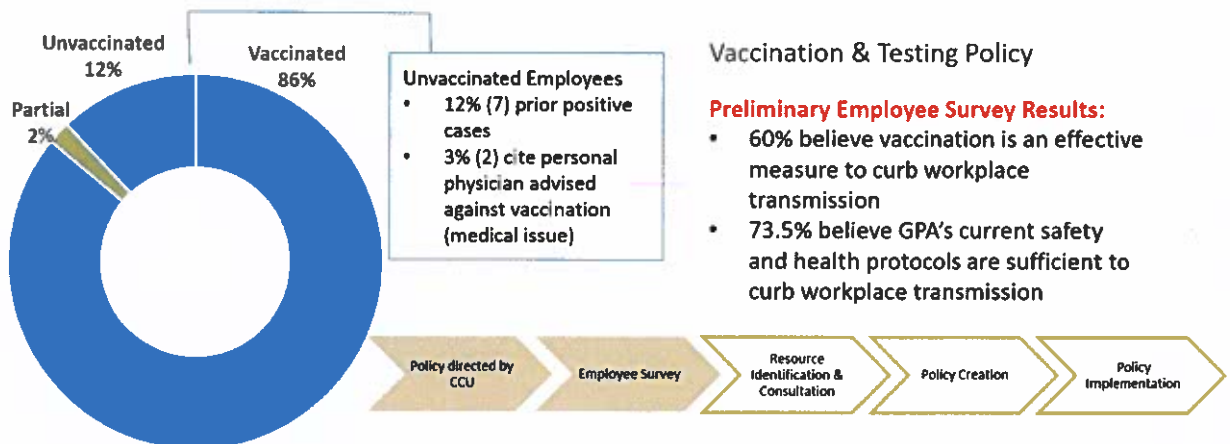
- Construction Permits
- Air Permits
- NPDES Permit

#### Construction Mitigation

For any wetland, biological, cultural or other findings during construction (unknowns)



## 12. COVID-19 Vaccination:





### 13. Streetlights:

- Basically, all streetlights have been converted to LED
- Significantly reduced cost to DPW from conversion
- DPW authorized the installation of additional LED streetlights for FY22.
- DPW FY22 budget increased to about \$5.4M
- Additional streetlight materials are being procured.
- Additional lights will improve public safety for the community.

### 14. Emergency Rental Assistance (ERA) Program:

- As of 9/16/2021: \$695,566.96 paid toward qualified customer past-due balances.
- \$587,547.68 (16 batches) received; \$108,019.28 pending receipt (2 batches).

## 15. Five Federal Grants Awarded to GPA in FY 2021

### ➤ Diesel Emissions Reduction Act (DERA) - USEPA

- ✓ \$250,000.00 awarded for Diesel Engine Replacement & Powerhouse Upgrade for the Diesel Bucket Truck Replacement Project
- ✓ Grant Writers:
  - William Mafnas, Engineer II (primary writer)
  - Jessica Lazatin, Engineer II
  - Victor A. Torres, Engineer II (former writer)
  - John J. Cruz, Jr., P.E., AGMET

### ➤ Technical Assistance Program (TAP) - DOI/OIA

- ✓ \$208,750.00 awarded for Guam's Critical Energy Infrastructure & GPA's Energy Engineering Training & Certification Program
- ✓ Grant Writers:
  - Jessica Lazatin, Engineer II (primary writer)
  - John J. Cruz, Jr., P.E., AGMET
  - Sandra Perez, HR Manager

### ➤ Energizing Insular Communities (EIC) program - DOI/OIA

- ✓ \$1,446,464.00 awarded for UOG's LED lighting upgrades, HVAC controls and solar PV generation & Tamuning Elementary school's LED lighting upgrades.
- ✓ Grant Writers:
  - Victor A. Torres, Engineer II (primary writer)
  - Jennifer Sablan, P.E., SPORD Manager
  - John J. Cruz, Jr., P.E., AGMET



**\$1,905,214.00 Total Federal Grants Awarded to GPA**



## 2021 Diesel Emissions Reduction Act (DERA) - #EPA-OAR-OTAQ-21-04

- \$250,000 in federal assistance to support the Diesel Engine Replacement and Powerhouse Upgrade for the Diesel Bucket Truck Vehicle Replacement project received full United States Environmental Protection Agency (EPA) funding.
- GPA is taking the lead for Guam with completing a comprehensive assessment of the impact of electric vehicles upon Guam's power grid, to ensure that GPA meets Guam's future energy needs, including providing energy at the lowest possible cost(s) to directly benefit all our customers. We are advancing to upgrade our current vehicle fleet, from one that mostly runs on gasoline and diesel fuel, to an all-electric vehicle fleet. As the nation faces one of the most important air quality challenges of reducing emissions, GPA is committed to doing its part to comply with the Diesel Emission Reduction Act

## Department of Interior (DOI) under the Office of Insular Affairs (OIA)

### Technical Assistance Program (TAP)

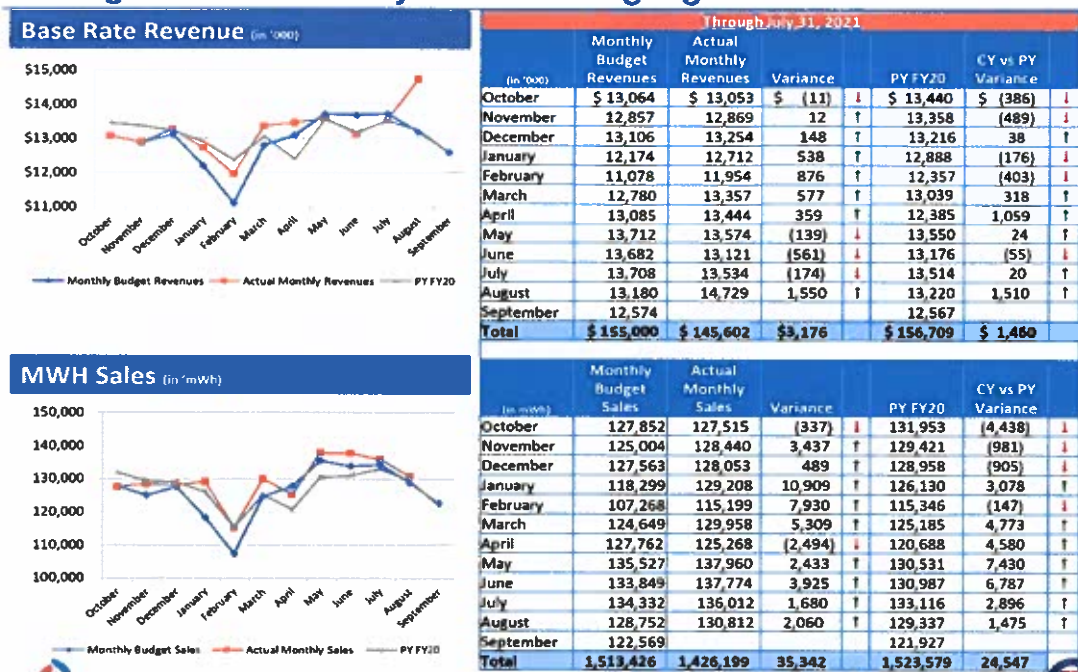
- \$159,200 awarded to GPA for the Comprehensive Security Plan for Guam's Critical Energy Infrastructure. The development of the plan will help strengthen GPA's physical and cybersecurity posture to meet and exceed industry standards.
- \$49,550 awarded to GPA for the Energy Engineering Training & Certification Program

### Energizing Insular Communities (EIC) Program

- \$1,291,938 for energy upgrades at the University of Guam, including LED lighting upgrades, energy-efficient HVAC controls, and solar PV generation (BEST Schools Program).
- \$154,526 towards LED lighting upgrades at Tamuning Elementary School (BEST Schools Program).

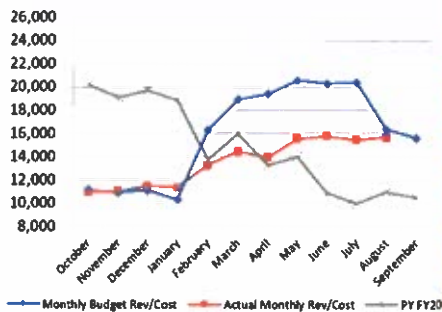
## 5.2 Financials

### August 2021 Monthly Financial Highlights

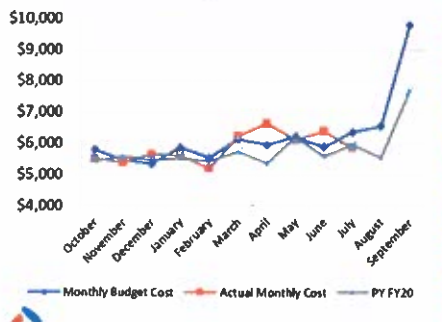


## August 2021 Monthly Financial Highlights (Continued)

### Fuel Revenues (in '000)



### O&M Costs (in '000)



Through July 31, 2021						
	Monthly Budget Revenue	Actual Monthly Revenue	Variance		PY FY20	CY vs PY Variance
\$000						
October	\$ 11,098	\$ 10,910	\$ (187)	↓	\$ 20,165	\$ 9,255
November	10,850	10,984	134	↑	19,088	(8,104)
December	11,072	11,435	362	↑	19,697	(8,262)
January	10,268	11,335	1,067	↑	18,820	(7,485)
February	16,274	13,241	(3,033)	↓	13,701	(460)
March	18,911	14,442	(4,469)	↓	15,968	(1,526)
April	19,383	13,932	(5,451)	↓	13,254	678
May	20,561	15,547	(5,014)	↓	14,001	1,546
June	20,307	15,770	(4,537)	↓	10,867	4,902
July	20,380	15,446	(4,934)	↓	9,935	5,511
August	16,352	15,685	(667)	↓	10,925	4,760
September	15,566				10,438	
<b>Total</b>	<b>\$191,023</b>	<b>\$148,727</b>	<b>\$(26,729)</b>		<b>\$176,860</b>	<b>\$(17,695)</b>

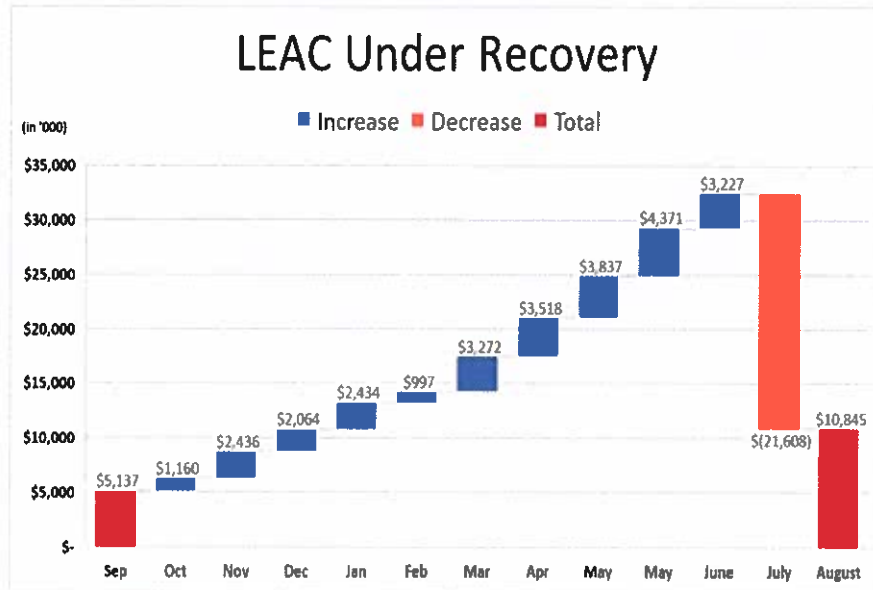
  

	Monthly Budget Cost	Actual Monthly Cost	Variance		PY FY20	CY vs PY Variance
\$000						
October	\$ 5,790	\$ 5,515	\$ 275	↑	\$ 5,421	\$(94)
November	5,469	5,389	80	↑	5,572	184
December	5,334	5,645	(311)	↓	5,460	(185)
January	5,857	5,620	237	↑	5,521	(99)
February	5,530	5,193	337	↑	5,417	224
March	6,143	6,231	(88)	↓	5,723	(508)
April	5,956	6,634	(679)	↓	5,357	(1,277)
May	6,211	6,106	104	↑	6,215	109
June	5,889	6,390	(501)	↓	5,578	(812)
July	6,363	5,871	492	↑	5,957	86
August	6,543				5,539	
September	9,806				7,700	
<b>Total</b>	<b>\$ 74,892</b>	<b>\$ 58,594</b>	<b>\$(52)</b>		<b>\$ 69,461</b>	<b>\$(2,372)</b>

## August 2021 Monthly Financial Highlights (Continued)

Through July 31, 2021												
	1Q2019	2Q2019	3Q2019	4Q2019	1Q2020	2Q2020	3Q2020	4Q2020	1Q2021	2Q2021	3Q2021	4Q2021
Residential	43,920	44,144	44,329	44,479	44,203	44,509	45,069	44,191	44,503	44,575	45,247	45,317
Commercial	5,273	5,291	5,303	5,289	5,154	5,352	5,309	5,366	5,301	5,307	5,330	5,338
Government	1,090	1,074	1,075	1,070	1,072	1,059	1,061	1,081	1,063	1,060	1,049	1,058
Streetlights	1,151	1,152	1,138	1,138	1,135	1,128	1,139	1,132	1,133	1,132	1,132	1,134
Navy	1	1	1	1	1	1	1	1	1	1	1	1
<b>Total</b>	<b>51,435</b>	<b>51,662</b>	<b>51,846</b>	<b>51,977</b>	<b>51,565</b>	<b>52,049</b>	<b>52,579</b>	<b>51,771</b>	<b>52,001</b>	<b>52,075</b>	<b>52,759</b>	<b>52,848</b>

Debt service coverage (DSC) calculation-indenture	2018	2019	2020	2021
Senior lien coverage	2.53	1.78	1.42	1.69
Debt service coverage (DSC) calculation-IPP as O&M				
Senior lien coverage	1.65	1.46	1.23	1.63



(In '000)	2020				2021						
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	August
Opening Recovery Balance	\$ 5,137	\$ 6,297	\$ 8,733	\$ 10,797	\$ 13,231	\$ 14,228	\$ 17,500	\$ 21,018	\$ 24,855	\$ 29,226	\$ 32,453
Under/(Over)	1,160	2,436	2,064	2,434	997	3,272	3,518	3,837	4,371	3,227	\$(21,608)
Closing Recovery Balance	\$ 6,297	\$ 8,733	\$ 10,797	\$ 13,231	\$ 14,228	\$ 17,500	\$ 21,018	\$ 24,855	\$ 29,226	\$ 32,453	\$ 10,845

### 5.3 Resolution 2021-25 Piti T-7 Power Transformer Purchase

If approved, this project will provide the replacement of the Piti Substation T-7 Power Transformer that failed in January 3, 2021. Transformer placed in service since the 1960s and is over 50 years old.

The new power transformer costs \$1,034,968.00 and will be delivered 8 months from receipt of purchase order. It will be funded with revenue funds.

Niagara Power Transformer Corp., Benson Guam Enterprises, Inc., R&D Marketing and EMB submitted bids for GPA's consideration under Bid Invitation No. GPA-042-21. Benson Guam Enterprises, Inc. was determined to be the lowest responsive bidder.

The GM said that his approving authority is \$1M and he is asking the CCU to approve this purchase. The PUC's threshold for approval is \$1.5M so this procurement will not need to go before the PUC. He will move forward with the procurement with the CCU approval only. He mentioned that it would take 32 weeks in lead time.

Comm. Santos motioned to approve Resolution 2021-25, second by Comm. Martinez.

In discussion Comm. Limtiaco said that Benson Guam was not necessarily the lowest responsive bidder there were two other bids lower than them. He asked the GM to explain. The GM said the 2 other bidders did not meet the qualification relative to specifications. One bidder did not include the technical training portion of the bid.

On the motion there were 4 ayes, 1 absent and the motion passed.

The GM reported that DPW lifted the stop order on the KEPCO project. Preliminary discussion said March-April 2022 will be new completion date. The power plant will only have 4-month impact on the next LEAC – Feb-July. The GM said this will help with the LEAC recovery – the KEPCO 8.55 cents vs. 17.2 cents.

Comm. Limtiaco asked how many days did the stop work order cause KEPCO, the GM said 37 days. Comm. Limtiaco pointed out that the delay was only a month and KEPCO's new commissioning deadline is extended from December 2021 to March 2022 – 3 months. The GM explained that KEPCO lost their financing for their short term construction. They met with the GM to manage expectations and the GM said that he would come back to the Commission with an update.

There was discussion on the work that GPA needs to do in advance relative to transmission lines and the GM said that this project is 90% completed the poles and lines are up already.

## **6. OTHER DISCUSSION**

**6.1 CCU Rules Update - This matter was not discussed.**

**6.2 \* Public Notices**

Legal Counsel Rojas mentioned that the Commission wanted to ensure that this board remained compliant with open government notices. This came about due to recent passage of P.L. 36-34 in July – it created 3 amendments – 1 – live streaming. Relative to this matter she found that the CCU has been in compliant even before the law was passed. She reported that the CCU's website is user friendly and the live-streaming of Commission meetings which the website does provide. This board is compliant and is in the meeting notices and on the website. 2 – the legislature voided actions that are non-compliant. The legislation requires the agenda contains specific detail to put the public on notice. She said our agendas are very clear as to actions to be taken. The law requires that non action items like General Manager Report, Financial Report – these are fine the way it is written.

Comm. Limtiaco recommended that the GM Report be more detailed to speak of the various divisions i.e. Operations, Financials, Engineering etc.

Comm. Santos asked about “paid for by government funds” and are we in compliance. Counsel Rojas said this is a good question and they will research this further and report back to the Commission.

## **7. ANNOUNCEMENTS**

**7.1 Next CCU Meetings**

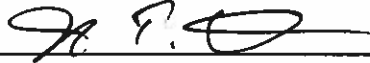
The Chairman announced that the next CCU meeting would be a work session for GWA on October 19; a work session for GPA on Oct. 21 and the regular monthly CCU meeting on October 26.

**8. ADJOURNMENT**

There being no other business to bring before the Commission the meeting adjourned at 7:06 p.m.

\\s\\  
BlS

Attested

  
\_\_\_\_\_  
JOSEPH T. DUENAS, Chairman

  
\_\_\_\_\_  
MICHAEL T. LIMTIACO, Secretary