

NEW ISSUE – BOOK-ENTRY ONLY

RATINGS: (See “RATINGS” herein)

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the Authority, based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2024AB Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986. In the further opinion of Bond Counsel, interest on the 2024AB Bonds is not a specific preference item for purposes of the federal individual alternative minimum tax. Bond Counsel observes that interest on the 2024AB Bonds included in adjusted financial statement income of certain corporations is not excluded from the federal corporate alternative minimum tax. Bond Counsel is also of the opinion that, under 48 U.S.C. Section 1423a, interest on the 2024AB Bonds is exempt from taxation by the Government of Guam, or by any state or territory of the United States or any political subdivision thereof, or by the District of Columbia. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2024AB Bonds. See “TAX MATTERS.”



GUAM WATERWORKS AUTHORITY
WATER AND WASTEWATER SYSTEM REVENUE REFUNDING BONDS

\$82,475,000*
Series 2024A

\$51,525,000*
Series 2024B

Dated: Dates of Delivery**Due: As shown on inside front cover**

This cover page contains certain information for quick reference only. It is not a summary of this issue. Investors must read this entire Official Statement to obtain information essential to making an informed investment decision. Capitalized terms not defined on this cover page are defined inside.

The Guam Waterworks Authority Water and Wastewater System Revenue Refunding Bonds, Series 2024A (the “**2024A Bonds**”), and the Guam Waterworks Authority Water and Wastewater System Revenue Refunding Bonds, Series 2024B (the “**2024B Bonds**” and together with the 2024A Bonds, the “**2024AB Bonds**”) mature on the dates and in the amounts and will bear interest at the rates per annum listed on the inside front cover. Interest on the 2024AB Bonds will be payable on January 1 and July 1 of each year, commencing July 1, 2024. The 2024A Bonds and the 2024B Bonds are expected to be delivered on different dates, as more particularly described below.

The 2024AB Bonds are subject to mandatory, optional and extraordinary optional redemption prior to maturity.

The 2024AB Bonds are authorized to be issued pursuant to Chapter 14 of Title 12 of the Guam Code Annotated, as amended (the “**Act**”). The 2024A Bonds will be issued pursuant to a Ninth Supplemental Indenture, to be dated as of March 1, 2024 (the “**Ninth Supplemental Indenture**”), by and among the Guam Waterworks Authority (the “**Authority**”), Bank of Guam as Trustee and as Depository (the “**Trustee**”), and U.S. Bank Trust Company, National Association, as Co-Trustee and Paying Agent (the “**Co-Trustee**”). The 2024B Bonds will be issued pursuant to a Tenth Supplemental Indenture, to be dated as of April 1, 2024 (the “**Tenth Supplemental Indenture**”), by and among the Authority, the Trustee and the Co-Trustee. The Ninth Supplemental Indenture and the Tenth Supplemental Indenture supplement the Indenture, dated as of December 1, 2005 (as amended and supplemented, the “**Indenture**”), by and among the Authority, the Trustee and the Co-Trustee, as successor to U.S. Bank National Association. The issuance, sale and delivery of the 2024AB Bonds have been approved by the Board of Directors of the Guam Economic Development Authority (“**GEDA**”) and by the Consolidated Commission on Utilities, the governing board of the Authority. The issuance, terms and conditions of the 2024AB Bonds are authorized pursuant to Public Law No. 28-71, as amended by Public Law Nos. 30-145 and 32-069, which the Legislature of Guam passed on November 5, 2013. The terms of the Indenture and the amounts and terms of the 2024AB Bonds have been approved by the Guam Public Utilities Commission.

The Authority is issuing the 2024A Bonds to (i) refund all or a portion of the Authority’s outstanding Water and Wastewater System Revenue Bonds Series 2013 for debt service savings, (ii) pay the purchase price of certain of the Authority’s outstanding Bonds tendered for cash pursuant to the Invitation to Tender Bonds for Purchase and (iii) pay costs incurred in connection with the issuance of the 2024A Bonds and of such refunding. The Authority is issuing the 2024B Bonds to (i) refund all or a portion of the Authority’s outstanding Water and Wastewater System Revenue Refunding Bonds Series 2014A for debt service savings and (ii) pay costs incurred in connection with the issuance of the 2024B Bonds and of such refunding.

The Bonds (as herein defined, including but not limited to the 2024AB Bonds) are limited obligations of the Authority payable solely from and secured by a pledge of Revenues (as defined in the Indenture and more particularly described herein) consisting primarily of all gross income and revenue received by the Authority from the ownership or operation of the Authority’s System, all as more particularly described herein, subject to the provisions of the Indenture permitting the application of Revenues for or to the purposes (including payment of Operation and Maintenance Expenses), and exclusive of certain surcharges, all as more particularly described herein.

The Bonds are not a legal or equitable pledge, charge, lien or encumbrance upon any property of the Authority or upon any of its income, receipts or revenues except the Revenues pledged to the payment thereof as provided in the Indenture. Neither the Government of Guam (the “Government”) nor any political subdivision thereof is obligated to pay the principal of, redemption price, if applicable, or interest on the Bonds, except from such Revenues, and none of the Authority, the Government or any political subdivision thereof has pledged its faith or credit to the payment of the principal of, redemption price, if applicable, or interest on the 2024AB Bonds.

The 2024AB Bonds will be issued as fully registered bonds and, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company (“**DTC**”), New York, New York. DTC will act as securities depository of the 2024AB Bonds. Individual purchases of the 2024AB Bonds will be made in book-entry form only. The 2024AB Bonds will be issued only in denominations of \$5,000 or any integral multiple thereof. Payments of principal of, redemption price, if applicable, and interest on the 2024AB Bonds are to be made to purchasers by DTC through DTC participants. See APPENDIX F – “DTC AND ITS BOOK-ENTRY ONLY SYSTEM.” Purchasers will not receive physical delivery of 2024AB Bonds.

Investment in the 2024AB Bonds involves risks which may not be appropriate for certain investors. See “CERTAIN INVESTMENT CONSIDERATIONS” for a discussion of certain factors that should be considered, in addition to the other matters set forth herein, in evaluating the investment quality of the 2024AB Bonds.

The 2024AB Bonds are offered when, as and if issued and received by the Underwriter, subject to the approval of legality by Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the Authority. Certain legal matters will be passed upon for the Authority by Theresa G. Rojas, counsel for the Authority, and for the Underwriter by its counsel, Hawkins Delafield & Wood LLP. Certain legal matters will be passed upon by Orrick, Herrington & Sutcliffe LLP as disclosure counsel to the Authority. It is expected that the 2024A Bonds in book-entry form will be available for delivery through the DTC book-entry system on or about March __, 2024, and the 2024B Bonds in book-entry form will be available for delivery through the DTC book-entry system on or about April __, 2024.

RBC Capital Markets

_____, 2024

* Preliminary, subject to change.

MATURITY SCHEDULES*

\$82,475,000*
Guam Waterworks Authority
Water and Wastewater System Revenue Refunding Bonds
Series 2024A

Maturity Date (July 1)	Principal Amount	Interest Rate	Price/Yield	CUSIP No. 40065F[†]
2024				
2025				
2026				
2027				
2028				
2029				
2030				
2031				
2032				
2033				
2034				
2035				
2036				
2037				
2038				
2039				
2040				
2041				
2042				
2043				
2044				
2045				
2046				

\$51,525,000*
Guam Waterworks Authority
Water and Wastewater System Revenue Refunding Bonds
Series 2024B

Maturity Date (July 1)	Principal Amount	Interest Rate	Price/Yield	CUSIP No. 40065F[†]
2025				
2026				
2027				
2028				
2029				
2030				
2031				
2032				
2033				
2034				
2035				

* Preliminary, subject to change.

[†] CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services (“CGS”), which is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CGS data base. CUSIP numbers have been assigned by an independent company not affiliated with either the Authority or GEDA and are provided solely for convenience and reference. The CUSIP numbers for a specific maturity or maturities are subject to change after the issuance of the 2024AB Bonds. None of the Authority, GEDA or the Underwriter takes responsibility for the accuracy of the CUSIP numbers, and no representation is made as to their correctness on the applicable 2024AB Bond certificates or in this Official Statement.

CONSOLIDATED COMMISSION ON UTILITIES

Joseph T. Duenas
Chairman

Francis E. Santos
Vice Chairman and Chairman of Finance and Budget Committee

Pedro Roy Martinez
Secretary

Michael Lintiaco
Commissioner

Simon A. Sanchez II
Commissioner

GUAM WATERWORKS AUTHORITY

Miguel C. Bordallo, P.E.
General Manager

Taling M. Taitano, CPA, CGFM, CGMA
Chief Financial Officer

Thomas F. Cruz, P.E.
Assistant General Manager, Operations

Jeanet B. Owens, P.E.
Assistant General Manager, Engineering

Paul J. Kemp
Assistant General Manager,
Compliance and Safety

Christopher M. Budasi
Assistant General Manager,
Administration & Support

Theresa G. Rojas, Esq.
General Counsel

GOVERNMENT OF GUAM

Lourdes A. Leon Guerrero
Governor

Joshua F. Tenorio
Lieutenant Governor

GUAM ECONOMIC DEVELOPMENT AUTHORITY

Melanie Mendiola
Chief Executive Officer / Administrator

Carlos Bordallo
Deputy Administrator

Christina D. Garcia
Public Finance Manager

SPECIAL SERVICES

Bond Counsel and Disclosure Counsel
Orrick, Herrington & Sutcliffe LLP

Trustee and Depositary
Bank of Guam
Hagåtña, Guam

Dissemination Agent
Digital Assurance Certification, L.L.C.
Winter Park, Florida

Co-Trustee and Paying Agent
U.S. Bank Trust Company, National Association
Los Angeles, California

Independent Auditors
Ernst & Young LLP

Verification Agent
The Arbitrage Group, Inc.

The Underwriter has provided the following sentence for inclusion in this Official Statement: The Underwriter has reviewed the information in this Official Statement in accordance with and as part of its responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriter does not guarantee the accuracy or completeness of such information.

No dealer, broker, salesperson or other person has been authorized by the Authority or the Underwriter to give any information or to make any representations other than those contained herein and, if given or made, such other information or representations must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the 2024AB Bonds by any person in any jurisdiction in which it is unlawful for such person to make such an offer, solicitation or sale.

This Official Statement is not to be construed as a contract with the purchasers of the 2024AB Bonds. Statements contained in this Official Statement that involve estimates, forecasts or matters of opinion, whether or not expressly so described herein, are intended solely as such and are not to be construed as representations of fact.

Certain statements contained or incorporated by reference in this Official Statement are not intended to reflect historical facts but are estimates and “forward-looking statements.” No assurance can be given that the future results discussed herein will be achieved, and actual results may differ materially from the expectations or forecasts described herein. In this respect, the words “estimate,” “project,” “forecast,” “anticipate,” “expect,” “assume,” “intend,” “believe” and similar expressions are intended to identify forward-looking statements. All projections, forecasts, assumptions, expressions of opinion, estimates and other forward-looking statements are expressly qualified in their entirety by the cautionary statements set forth in this Official Statement. The Authority does not plan to issue any updates or revisions to such forward-looking statements whether or not its expectations are realized, or any events, conditions or circumstances on which such statements are based, do or do not occur.

The information set forth in this Official Statement has been furnished by the Authority and other sources which are believed to be reliable, but it is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation by, the Underwriter. The information and expressions of opinion stated herein are subject to change without notice and neither delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the information or opinions stated herein or in the affairs of the Authority since the date hereof.

The 2024AB Bonds have not been registered under the Securities Act of 1933, as amended, in reliance upon an exemption contained in such act. The 2024AB Bonds have not been registered or qualified under the securities laws of any state.

In connection with this offering the Underwriter may over-allot or effect transactions which stabilize or maintain the market price of the 2024AB Bonds offered hereby at a level above that which might otherwise prevail in the open market. Such stabilizing, if commenced, may be discontinued at any time.

TABLE OF CONTENTS

<p>INTRODUCTION 1</p> <p style="padding-left: 20px;">General 1</p> <p style="padding-left: 20px;">The 2024AB Bonds 1</p> <p style="padding-left: 20px;">Security and Sources of Payment for the 2024AB Bonds 2</p> <p style="padding-left: 20px;">The Authority and the System 2</p> <p style="padding-left: 20px;">Investment Considerations 3</p> <p style="padding-left: 20px;">Continuing Disclosure 3</p> <p style="padding-left: 20px;">Forward-Looking Statements 3</p> <p style="padding-left: 20px;">Miscellaneous 4</p> <p>PLAN OF REFUNDING 5</p> <p style="padding-left: 20px;">General 5</p> <p style="padding-left: 20px;">Refunded Bonds 6</p> <p style="padding-left: 20px;">Escrow Fund 8</p> <p>ESTIMATED SOURCES AND USES OF FUNDS 9</p> <p>THE 2024AB BONDS 10</p> <p style="padding-left: 20px;">General 10</p> <p style="padding-left: 20px;">Redemption of the 2024AB Bonds 10</p> <p style="padding-left: 20px;">Trustee, Co-Trustee, Registrar and Paying Agent 12</p> <p style="padding-left: 20px;">Book-Entry System 12</p> <p>DEBT SERVICE SCHEDULE 13</p> <p>SECURITY AND SOURCES OF PAYMENT FOR THE BONDS 14</p> <p style="padding-left: 20px;">Pledge of Revenues 14</p> <p style="padding-left: 20px;">Allocation of Revenues 14</p> <p style="padding-left: 20px;">Rate Covenant 16</p> <p style="padding-left: 20px;">Bond Reserve Fund 17</p> <p style="padding-left: 20px;">Additional Bonds 17</p> <p style="padding-left: 20px;">Parity Payment Agreements 18</p> <p style="padding-left: 20px;">Subordinate Obligations 19</p> <p style="padding-left: 20px;">Events of Default and Remedies; No Acceleration 19</p> <p style="padding-left: 20px;">Depositaries for Funds and Accounts 19</p> <p>THE AUTHORITY 20</p> <p style="padding-left: 20px;">General 20</p> <p style="padding-left: 20px;">Consolidated Commission on Utilities 20</p> <p style="padding-left: 20px;">Key Management Personnel 21</p> <p style="padding-left: 20px;">The PUC Orders 23</p> <p style="padding-left: 20px;">Typhoon Mawar 24</p> <p>THE SYSTEM 25</p> <p style="padding-left: 20px;">The Water System 25</p> <p style="padding-left: 20px;">The Wastewater System 30</p> <p style="padding-left: 20px;">One-Guam Initiative 33</p> <p style="padding-left: 20px;">Customers 34</p> <p style="padding-left: 20px;">New Water and Sewer Installations 36</p> <p style="padding-left: 20px;">System Development Charges 36</p> <p style="padding-left: 20px;">Water Loss Control Program 37</p> <p style="padding-left: 20px;">Rates and Charges 39</p> <p style="padding-left: 20px;">Billing, Collections and Enforcements 42</p> <p style="padding-left: 20px;">Uniform Disconnection Policy 44</p> <p style="padding-left: 20px;">Debt Service Coverage 44</p> <p style="padding-left: 20px;">Rate Stabilization Fund 45</p> <p style="padding-left: 20px;">Indenture Required Reserves 45</p> <p style="padding-left: 20px;">Working Capital Reserve for Operations and Maintenance 45</p> <p style="padding-left: 20px;">Security Measures 46</p> <p style="padding-left: 20px;">Labor and Employee Relations 46</p> <p style="padding-left: 20px;">Retirement Fund and Other Post-Employment Benefits 47</p> <p style="padding-left: 20px;">Liquidity 51</p> <p>REGULATORY ENVIRONMENT 51</p> <p style="padding-left: 20px;">Environmental Regulations 51</p> <p style="padding-left: 20px;">Regulation of Ratemaking 53</p> <p>FUTURE SYSTEM CAPITAL REQUIREMENTS 54</p> <p style="padding-left: 20px;">Water Resources Master Plan Updates 54</p> <p style="padding-left: 20px;">Capital Improvement Program 54</p> <p style="padding-left: 20px;">U.S. Military Realignment 56</p> <p>HISTORICAL AND PROJECTED OPERATING RESULTS 57</p> <p style="padding-left: 20px;">Historical Operating Results 57</p> <p style="padding-left: 20px;">Projected Operating Results 59</p> <p>CERTAIN INVESTMENT CONSIDERATIONS 61</p> <p style="padding-left: 20px;">General 61</p> <p style="padding-left: 20px;">Limitations on Remedies 61</p> <p style="padding-left: 20px;">Uncertainties of Projections and Assumptions 61</p>	<p>Guam Economy; Impact of Tourism and Military Presence 62</p> <p>Worldwide Health Concerns 63</p> <p>Uncertainties Relating to Political and Military Actions 63</p> <p>2011 Court Order with US EPA 63</p> <p>2024 Partial Consent Decree with US EPA 64</p> <p>Typhoons and Earthquakes 64</p> <p>Climate Change, Risk of Sea-Level Rise and Flooding</p> <p style="padding-left: 20px;">Damage 64</p> <p style="padding-left: 20px;">Rates 65</p> <p style="padding-left: 20px;">Cybersecurity 65</p> <p style="padding-left: 20px;">Insurance 66</p> <p style="padding-left: 20px;">Government Regulation 66</p> <p style="padding-left: 20px;">Implementation of Capital Improvement Program 66</p> <p style="padding-left: 20px;">Secondary Treatment Requirements Under NPDES Permit 67</p> <p>LITIGATION 67</p> <p style="padding-left: 20px;">No Litigation Relating to the 2024AB Bonds 67</p> <p style="padding-left: 20px;">Core Tech International Corporation Litigation 67</p> <p style="padding-left: 20px;">Other Litigation Relating to the Authority and the System 68</p> <p>TAX MATTERS 68</p> <p>UNDERWRITING 70</p> <p>FINANCIAL STATEMENTS 70</p> <p>VERIFICATION OF ESCROW 71</p> <p>CERTAIN LEGAL MATTERS 71</p> <p>AVAILABLE INFORMATION 71</p> <p>RATINGS 71</p> <p>CONTINUING DISCLOSURE 72</p> <p>MISCELLANEOUS 73</p> <p>APPENDIX A – GENERAL INFORMATION REGARDING THE TERRITORY OF GUAM A-1</p> <p>APPENDIX B – FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022 B-1</p> <p>APPENDIX C – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE C-1</p> <p>APPENDIX D – PROPOSED FORMS OF OPINION OF BOND COUNSEL D-1</p> <p>APPENDIX E – PROPOSED FORMS OF CONTINUING DISCLOSURE AGREEMENTS E-1</p> <p>APPENDIX F – DTC AND ITS BOOK-ENTRY ONLY SYSTEM F-1</p>
---	---

[THIS PAGE INTENTIONALLY LEFT BLANK]

**GUAM WATERWORKS AUTHORITY
WATER AND WASTEWATER SYSTEM REVENUE REFUNDING BONDS**

\$82,475,000*
Series 2024A

\$51,525,000*
Series 2024B

INTRODUCTION

General

The purpose of this Official Statement, which includes the cover page, table of contents and appendices hereto (collectively, the “**Official Statement**”), is to provide information in connection with the offering by the Guam Waterworks Authority (the “**Authority**”) of the \$82,475,000* Guam Waterworks Authority Water and Wastewater System Revenue Refunding Bonds, Series 2024A (the “**2024A Bonds**”), and the \$51,525,000* Guam Waterworks Authority Water and Wastewater System Revenue Refunding Bonds, Series 2024B (the “**2024B Bonds**”) and together with the 2024A Bonds, the “**2024AB Bonds**”).

This Introduction is not a summary of this Official Statement, but is only a brief description of, and is qualified by, more complete and detailed information contained in this Official Statement. This Introduction should not be relied upon to provide all of the information necessary to make an informed decision about purchasing the 2024AB Bonds. A full review should be made of this entire Official Statement. The offering of 2024AB Bonds to potential investors is made only by means of this entire Official Statement.

Capitalized terms used herein that are not otherwise defined shall have the meanings set forth in APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE.”

The 2024AB Bonds

The Authority is issuing the 2024A Bonds to (i) refund all or a portion of the Authority’s outstanding Water and Wastewater System Revenue Bonds Series 2013 (the “**2013 Bonds**”) for debt service savings, (ii) pay the purchase price of certain of the Authority’s outstanding Bonds (as defined herein) tendered for cash pursuant to the Invitation to Tender Bonds for Purchase (as further described herein) and (iii) pay costs incurred in connection with the issuance of the 2024A Bonds and of such refunding. The Authority is issuing the 2024B Bonds to (i) refund all or a portion of the Authority’s outstanding Water and Wastewater System Revenue Refunding Bonds Series 2014A (the “**2014A Bonds**”) for debt service savings and (ii) pay costs incurred in connection with the issuance of the 2024B Bonds and of such refunding. See “PLAN OF REFUNDING.”

The 2024AB Bonds are authorized to be issued pursuant to the Act (as defined herein). The 2024A Bonds will be issued pursuant to a Ninth Supplemental Indenture, to be dated as of March 1, 2024 (the “**Ninth Supplemental Indenture**”). The 2024B Bonds will be issued pursuant to a Tenth Supplemental Indenture, to be dated as of April 1, 2024 (the “**Tenth Supplemental Indenture**”). The Ninth Supplemental Indenture and the Tenth Supplemental Indenture supplement the Indenture, dated as of December 1, 2005 (the “**General Indenture**” and, as amended and supplemented, including as supplemented by prior supplemental indentures, the Ninth Supplemental Indenture and the Tenth Supplemental Indenture, the “**Indenture**”), by and among the Authority, Bank of Guam, as trustee (the “**Trustee**”) and depository (the “**Depository**”) for the Revenue Fund, and U.S. Bank Trust Company, National Association, as successor to U.S. Bank National Association, as co-trustee (the “**Co-Trustee**”). The Bonds previously issued by the Authority pursuant to the Indenture are referred to collectively herein as the “**Prior Bonds**,” which are currently outstanding in the aggregate principal amount of \$613,560,000. The Prior Bonds and the 2024AB Bonds, together with any additional bonds that may be issued pursuant to, and outstanding at any given time under, the Indenture, are herein referred to as “**Bonds**.” After giving effect to the issuance of the 2024AB Bonds and the refunding of the Refunded Bonds (as defined herein), the Bonds will be outstanding in the aggregate principal amount of \$_____. See “PLAN OF REFUNDING.”

* Preliminary, subject to change.

The issuance, terms and conditions of the 2024AB Bonds are authorized pursuant to Public Law No. 28-71, as amended by Public Law Nos. 30-145 and 32-069, which the Legislature of Guam (the “**Guam Legislature**”) passed on November 5, 2013. The Consolidated Commission on Utilities (the “**CCU**”) has approved the issuance, sale and delivery of the 2024AB Bonds pursuant to Resolution No. 49-FY2023, adopted on September 27, 2023. The Board of Directors of the Guam Economic Development Authority (“**GEDA**”) has approved the issuance and sale of the 2024AB Bonds pursuant to Resolution No. 24-002, adopted on January 18, 2024. The terms of the Indenture and the aggregate principal amount and terms of the 2024AB Bonds have been approved by the Guam Public Utilities Commission (the “**PUC**”) pursuant to Docket No. 24-03 adopted on January 25, 2024.

Security and Sources of Payment for the 2024AB Bonds

The Bonds, including the 2024AB Bonds, are limited obligations of the Authority payable solely from and secured solely by a pledge of Revenues (as defined in the Indenture and described herein) consisting primarily of all gross income and revenue received by the Authority from the ownership or operation of the Authority’s water and wastewater systems (collectively, the “**System**”), subject to the provisions of the Indenture permitting the application of Revenues for or to the purposes (including payment of Operation and Maintenance Expenses) and on the terms and conditions set forth in the Indenture. The Bonds are not a legal or equitable pledge, charge, lien or encumbrance upon any property of the Authority or upon any of its income, receipts or revenues except the Revenues pledged to the payment thereof as set forth in the Indenture.

The Indenture prohibits the issuance of any bonds or obligations payable from Revenues or secured by a pledge, lien or charge upon Revenues superior to the Bonds, and permits issuance of obligations on a parity with the Bonds only in accordance with the Indenture. The Indenture does not prohibit the incurrence of indebtedness secured by subordinate liens on Revenues.

Neither the Government of Guam (the “**Government**”) nor any political subdivision thereof is obligated to pay the principal of, redemption price, if applicable, or interest on the Bonds, except from such Revenues, and neither the Authority nor the Government or any political subdivision thereof has pledged its faith or credit to the payment of the principal of, redemption price, if applicable, or interest on the Bonds.

See “SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Pledge of Revenues” and “– Allocation of Revenues” and “REGULATORY ENVIRONMENT – Regulation of Ratemaking.”

The Authority and the System

In 2002, pursuant to Public Law 26-76, the Authority was converted from a government agency to a Guam public corporation organized and existing under Chapter 14 of Title 12 of the Guam Code Annotated, as amended (the “**Act**”). The Authority is authorized to operate and maintain the System for the island of Guam.

The Authority is governed by the CCU, which acts as the governing board of the Authority and the Guam Power Authority (“**GPA**”). The CCU was created in 2002 and consists of five elected members. The CCU makes decisions regarding policies, management, budgeting and financing of the Authority’s operations. Certain actions, however, such as issuing bonds for financing utility capital projects, also require the approval of the Guam Legislature and the PUC. In addition, ratemaking by the CCU is subject to the approval of the PUC, as the regulatory ratemaking body. The Authority may not enter into any contractual agreements or obligations which could increase rates and charges without the prior written approval of the PUC.

The Authority’s goals are directed towards providing more efficient and reliable service to its customers and operating as a self-supporting utility while meeting regulatory requirements. The Authority is subject to federal and Guam regulations governing water supply and wastewater treatment. The drinking water standards promulgated in the federal Safe Drinking Water Act, as amended (the “**Safe Drinking Water Act**” or the “**SDWA**”), are the primary requirements for water supply. Wastewater treatment and disposal must comply with the water quality standards in the federal Clean Water Act, as amended (the “**Clean Water Act**” or the “**CWA**”).

The Authority had difficulty complying with SDWA and CWA regulations prior to 2010. The Authority's previous failure to meet all of the SDWA and CWA standards resulted in the U.S. Environmental Protection Agency (the "US EPA") bringing suit against the Authority in the U.S. District Court of Guam (the "**Guam District Court**") in 2002. In 2003, the Authority and the US EPA entered into a Stipulated Order for Preliminary Relief, which was subsequently amended (as amended, the "**2003 Stipulated Order**"), that required the Authority to make certain improvements to the System and to undertake certain planning measures by specific dates. In 2011, the Guam District Court issued an Order for Preliminary Relief (the "**2011 Court Order**") establishing new deadlines for unfinished projects and certain additional actions and improvements. The 2011 Court Order superseded the 2003 Stipulated Order and all prior orders. The last remaining project under the 2011 Court Order is completion of the replacement, rehabilitation or reconstruction of 12 storage tanks in accordance with the hydraulic assessment approved by the US EPA and the Guam District Court in 2023. The completion deadline for this last project, which the Authority expects to meet, is December 31, 2025. For more information about the storage tanks and hydraulic analysis, see "THE SYSTEM – The Water System – *Water Distribution System – Reservoirs.*" For more information about the 2003 Stipulated Order and the 2011 Court Order, see "REGULATORY ENVIRONMENT – Environmental Regulations – *2003 Stipulated Order and 2011 Court Order.*"

On January 31, 2024, the US EPA filed a complaint in the Guam District Court alleging that the Authority violated certain conditions and limitations of the National Pollutant Discharge Elimination System ("**NPDES**") permits that the US EPA issued to the Authority pursuant to the CWA. The Authority and the US EPA have entered into a consent decree to address certain claims alleged in the complaint (the "**2024 Partial Consent Decree**"), which has been filed with the Guam District Court and is expected to be signed into order in spring 2024. The 2024 Partial Consent Decree requires the Authority to make certain improvements to the System and to undertake certain planning measures by specific dates in the next 10 years. Such improvements primarily relate to the wastewater collection system, including pipelines, pump stations, maintenance and other operational program improvements, and planning studies for secondary wastewater treatment. For more information about the 2024 Partial Consent Decree, see "REGULATORY ENVIRONMENT – Environmental Regulations – *2024 Partial Consent Decree.*"

Investment Considerations

There are important investment considerations and risks associated with the purchase of the 2024AB Bonds. See "CERTAIN INVESTMENT CONSIDERATIONS" for a discussion of some of these considerations and risks. Any one or more of the considerations and risks discussed, and others, could lead to a decrease in the market value of and/or the ability to sell the 2024AB Bonds in the secondary market. Potential purchasers of the 2024AB Bonds are advised to review this entire Official Statement carefully.

Continuing Disclosure

As a condition to the issuance and sale of the 2024AB Bonds, the Authority will covenant for the benefit of the holders and beneficial owners of the 2024AB Bonds to provide annually certain financial information and operating data and to provide notice of the occurrence of certain enumerated events to assist the Underwriter in complying with the Securities and Exchange Commission's Rule 15c2-12 under the Securities Exchange Act of 1934, as amended ("**Rule 15c2-12**"). See "CONTINUING DISCLOSURE" and APPENDIX E – "PROPOSED FORMS OF CONTINUING DISCLOSURE AGREEMENTS."

Forward-Looking Statements

Certain statements contained or incorporated by reference in this Official Statement are not intended to reflect historical facts but are estimates and "forward-looking statements." No assurance can be given that the future results discussed herein will be achieved, and actual results may differ materially from the expectations or forecasts described herein. In this respect, the words "estimate," "project," "forecast," "anticipate," "expect," "assume," "intend," "believe" and similar expressions are intended to identify forward-looking statements. All projections, forecasts, assumptions, expressions of opinion, estimates and other forward-looking statements are expressly qualified in their entirety by the cautionary statements set forth in this Official Statement. The Authority does not plan to issue any updates or revisions to such forward-looking statements whether or not its expectations are realized, or any events, conditions or circumstances on which such statements are based, do or do not occur.

Miscellaneous

Brief descriptions of the 2024AB Bonds, the Authority and the System are provided below. Such descriptions do not purport to be comprehensive or definitive. All references to the 2024AB Bonds and the Indenture are qualified in their entirety by reference to the forms thereof.

The information herein is subject to change without notice, and neither the delivery of this Official Statement nor any sale made with respect hereto shall, under any circumstances, create any implication that there has been no change in the affairs of the Authority or the System since the date hereof.

This Official Statement is not to be construed as a contract or agreement between the Authority and the purchasers or owners of any of the 2024AB Bonds.

(Remainder of Page Intentionally Left Blank)

PLAN OF REFUNDING*

General

2024A Bonds. Proceeds of the 2024A Bonds will be applied to (i) refund all or a portion of the Authority's outstanding 2013 Bonds for debt service savings, (ii) pay the purchase price of certain of the Authority's outstanding Bonds tendered for cash pursuant to the Invitation to Tender Bonds for Purchase and (iii) pay costs incurred in connection with the issuance of the 2024A Bonds and of such refunding. The 2024A Bonds are expected to be delivered on or about March __, 2024.

On February 13, 2024, the Authority, with the assistance of RBC Capital Markets, LLC (the "**Dealer Manager**"), released an Invitation to Tender Bonds for Purchase (as it may be amended or supplemented, the "**Invitation**") inviting beneficial owners of certain maturities of the Authority's outstanding Water and Wastewater System Revenue Bonds Series 2016 (the "**2016 Bonds**"), Water and Wastewater System Revenue Refunding Bonds Series 2017 (the "**2017 Bonds**") and Water and Wastewater System Revenue Refunding Bonds Series 2020B (Federally Taxable) (the "**2020B Bonds**") (collectively, the "**Target Bonds**") to tender such Bonds for purchase pursuant to the terms of the Invitation. The preliminary list of Target Bonds is set forth under "– Refunded Bonds – *Target Bonds*" below. Target Bonds may (i) be purchased pursuant to the terms of the Invitation, or (ii) remain outstanding.

This section is not intended to summarize all the terms of the Invitation. Beneficial owners of the Target Bonds must review the Invitation for further information regarding the Authority's tender offer and the conditions for settlement of the Target Bonds validly tendered and accepted for purchase (collectively, the "**Purchased Bonds**"). The Invitation provides that all tenders for purchase must be made on or before February 28, 2024, unless earlier terminated, amended or extended as more particularly described in the Invitation. On February 29, 2024, the Authority will determine whether to accept any Target Bonds tendered for purchase subject to the conditions set forth in the Invitation, unless earlier terminated, amended or extended as more particularly described in the Invitation. Purchased Bonds will be purchased on the closing date for the 2024A Bonds, subject to the conditions for settlement set forth in the Invitation, and cancelled. Such purchase of the Purchased Bonds will be funded by a portion of the proceeds of the 2024A Bonds and the Authority's ability to fund the tender of such Purchased Bonds is contingent on the issuance of the 2024A Bonds.

Subject to satisfaction of all conditions to the Authority's obligation to purchase the Purchased Bonds pursuant to the Invitation, payment by the Authority will be made through DTC on the closing date for the 2024A Bonds. The Authority expects that, in accordance with DTC's standard procedures, DTC will transmit the aggregate Purchase Prices (as defined in the Invitation) to be paid for the Purchased Bonds (plus Accrued Interest (as defined in the Invitation), as applicable) to DTC participants holding the Purchased Bonds on behalf of Bondowners for subsequent disbursement to the Bondowners. The Authority, the Dealer Manager and the Information Agent and Tender Agent (as defined in the Invitation) have no responsibility or liability for the distribution of the Purchase Prices paid and Accrued Interest by DTC to DTC participants or by DTC participants to Bondowners.

2024B Bonds. Proceeds of the 2024B Bonds will be applied to (i) refund all or a portion of the Authority's outstanding 2014A Bonds for debt service savings and (ii) pay costs incurred in connection with the issuance of the 2024B Bonds and of such refunding. The 2024B Bonds are expected to be delivered on or about April __, 2024.

See "ESTIMATED SOURCES AND USES OF FUNDS."

* Preliminary, subject to change.

Refunded Bonds*

The following tables detail the outstanding 2013 Bonds and the outstanding 2014A Bonds expected to be refunded, and the Target Bonds. The 2013 Bonds to be refunded with proceeds of the 2024A Bonds (the “**Refunded 2013 Bonds**”), the 2014A Bonds to be refunded with proceeds of the 2024B Bonds (the “**Refunded 2014A Bonds**”), and the Purchased Bonds are collectively referred to herein as the “**Refunded Bonds**.” The Refunded Bonds will only be determined by the Authority at the time that the Authority and the Underwriter execute bond purchase contracts for the 2024AB Bonds and as set forth in the Invitation, as applicable. Until such time, the series, maturity dates and principal amounts of the Refunded Bonds remain subject to change by the Authority in its sole discretion.

2013 Bonds

Series	Maturity Date	Outstanding Principal Amount	Coupon	Redemption Date*	Redemption Price	CUSIP†
2013 Bonds	7/1/2024	\$ 3,315,000	5.25%	6/10/2024	100%	40065FBB9
2013 Bonds	7/1/2025	3,485,000	5.25	6/10/2024	100	40065FBC7
2013 Bonds	7/1/2028	11,565,000	5.00	6/10/2024	100	40065FAY0

2014A Bonds

Series	Maturity Date	Outstanding Principal Amount	Coupon	Redemption Date*	Redemption Price	CUSIP†
2014A Bonds	7/1/2025	\$ 4,410,000	5.00%	7/1/2024	100%	40065FBP8
2014A Bonds	7/1/2029	19,970,000	5.00	7/1/2024	100	40065FBQ6
2014A Bonds	7/1/2035	31,465,000	5.00	7/1/2024	100	40065FBR4

(Remainder of Page Intentionally Left Blank)

* Preliminary, subject to change.

† CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services (“CGS”), which is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CGS data base. CUSIP numbers have been assigned by an independent company not affiliated with either the Authority or GEDA and are provided solely for convenience and reference. The CUSIP numbers for a specific maturity or maturities are subject to change after the issuance of the 2024AB Bonds. None of the Authority, GEDA or the Underwriter takes responsibility for the accuracy of the CUSIP numbers.

Target Bonds*

<u>Series</u>	<u>Maturity Date</u>	<u>Outstanding Principal Amount</u>	<u>Coupon</u>	<u>CUSIP†</u>
2016 Bonds	7/1/2028	\$ 1,065,000	5.00%	40065FCC6
2016 Bonds	7/1/2029	1,120,000	5.00	40065FCD4
2016 Bonds	7/1/2030	1,180,000	5.00	40065FCE2
2016 Bonds	7/1/2031	1,240,000	5.00	40065FCF9
2016 Bonds	7/1/2036	14,360,000	5.00	40065FCG7
2016 Bonds	1/1/2046	111,395,000	5.00	40065FCH5
2017 Bonds	7/1/2029	3,015,000	5.00	40065FCV4
2017 Bonds	7/1/2030	3,170,000	5.00	40065FCW2
2017 Bonds	7/1/2031	3,325,000	5.00	40065FCX0
2017 Bonds	7/1/2032	3,495,000	5.00	40065FCY8
2017 Bonds	7/1/2033	3,665,000	5.00	40065FCZ5
2017 Bonds	7/1/2034	3,850,000	5.00	40065FDA9
2017 Bonds	7/1/2035	4,040,000	5.00	40065FDB7
2017 Bonds	7/1/2036	11,455,000	5.00	40065FDC5
2017 Bonds	7/1/2037	12,025,000	5.00	40065FDD3
2017 Bonds	7/1/2040	39,815,000	5.00	40065FDE1
2020B Bonds	7/1/2030	13,775,000	2.75	40065FDG6
2020B Bonds	7/1/2034	27,355,000	3.25	40065FDH4
2020B Bonds	7/1/2043	124,945,000	3.70	40065FDJ0

(Remainder of Page Intentionally Left Blank)

* Preliminary, subject to change.

† CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP CGS, which is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CGS data base. CUSIP numbers have been assigned by an independent company not affiliated with either the Authority or GEDA and are provided solely for convenience and reference. The CUSIP numbers for a specific maturity or maturities are subject to change after the issuance of the 2024AB Bonds. None of the Authority, GEDA or the Underwriter takes responsibility for the accuracy of the CUSIP numbers.

Escrow Fund

A portion of the proceeds of the 2024A Bonds, together with other available funds of the Authority, if necessary, are expected to be deposited in an escrow fund (the “**2024A Escrow Fund**”) to be created and established by the Co-Trustee, in its capacity as Paying Agent for the Refunded 2013 Bonds and as escrow agent (the “**2024A Escrow Agent**”), pursuant to an escrow agreement (the “**2024A Escrow Agreement**”). The amounts so deposited in the 2024A Escrow Fund will either be held as cash, uninvested, in an amount sufficient, or be used to purchase certain securities (the “**2024A Escrow Securities**”) or a combination thereof, in accordance with the requirements of the Indenture, the principal of and interest on which escrow securities (together with any initial cash deposit), will be sufficient, to pay when due the scheduled principal and redemption price of the Refunded 2013 Bonds and interest thereon to become due on or prior to the date fixed for redemption, including retirement in part by mandatory sinking fund installment, if applicable. Upon such deposit in the 2024A Escrow Fund in accordance with the provisions of the 2024A Escrow Agreement and satisfaction of certain other conditions, all liability of the Authority in respect of the Refunded 2013 Bonds will cease, terminate and be completely discharged and the owners thereof shall thereafter be entitled only to payment out of the 2024A Escrow Fund.

A portion of the proceeds of the 2024B Bonds, together with other available funds of the Authority, if necessary, are expected to be deposited in an escrow fund (the “**2024B Escrow Fund**”) to be created and established by the Co-Trustee, in its capacity as Paying Agent for the Refunded 2014A Bonds and as escrow agent (the “**2024B Escrow Agent**”), pursuant to an escrow agreement (the “**2024B Escrow Agreement**”). The amounts so deposited in the 2024B Escrow Fund will either be held as cash, uninvested, in an amount sufficient, or be used to purchase certain securities (the “**2024B Escrow Securities**”) or a combination thereof, in accordance with the requirements of the Indenture, the principal of and interest on which escrow securities (together with any initial cash deposit), will be sufficient, to pay when due the scheduled principal and redemption price of the Refunded 2014A Bonds and interest thereon to become due on or prior to the date fixed for redemption, including retirement in part by mandatory sinking fund installment, if applicable. Upon such deposit in the 2024B Escrow Fund in accordance with the provisions of the 2024B Escrow Agreement and satisfaction of certain other conditions, all liability of the Authority in respect of the Refunded 2014A Bonds will cease, terminate and be completely discharged and the owners thereof shall thereafter be entitled only to payment out of the 2024B Escrow Fund.

The mathematical accuracy of certain computations relating to the adequacy of the cash and/or Escrow Securities and the interest thereon together with other available moneys to pay the scheduled principal, redemption price and interest on the Refunded 2013 Bonds and the Refunded 2014A Bonds on and prior to the applicable redemption date thereof will be verified at the time of delivery of the 2024A Bonds and the 2024B Bonds, respectively, by The Arbitrage Group, Inc. See “VERIFICATION OF ESCROW.”

(Remainder of Page Intentionally Left Blank)

ESTIMATED SOURCES AND USES OF FUNDS

The proceeds of the 2024AB Bonds are expected to be applied as shown below:

	<u>2024A Bonds</u>	<u>2024B Bonds</u>	<u>Total</u>
Sources:			
Principal Amount	\$	\$	\$
[Plus/Less] [Net] Original Issue [Premium/Discount]			
Funds Released from Debt Service Fund			
Funds Released from Bond Reserve Fund			
Total Sources	\$	\$	\$
Uses:			
Refunding of Refunded 2013 Bonds and Refunded 2014A Bonds	\$	\$	\$
Purchase of Purchased Bonds			
Costs of Issuance ⁽¹⁾			
Total Uses	\$	\$	\$

⁽¹⁾ Includes Underwriter's discount, Trustee and Co-Trustee fees, Escrow Agent fees, Verification Agent fees, legal fees and expenses, rating agency fees, printing costs, costs related to the tender offer and other miscellaneous costs of issuance.

(Remainder of Page Intentionally Left Blank)

THE 2024AB BONDS

General

When issued, the 2024AB Bonds will be dated their respective date of delivery and will bear interest at the rates per annum and mature, subject to prior redemption, on the dates and in the principal amounts set forth on the inside cover page of this Official Statement. Interest on the 2024AB Bonds will be payable on January 1 and July 1 of each year (each an “**Interest Payment Date**”), commencing July 1, 2024.

Interest will accrue on the 2024AB Bonds on the basis of a 360-day year consisting of twelve 30-day months. Each 2024AB Bond will bear interest from the Interest Payment Date next preceding the date of authentication thereof, except that: (1) 2024AB Bonds authenticated during the period from the Record Date immediately preceding an Interest Payment Date to such Interest Payment Date, inclusive, will bear interest from such Interest Payment Date; and (2) 2024AB Bonds authenticated on or prior to the Record Date for the applicable first Interest Payment Date for the 2024AB Bonds will bear interest from their date of delivery; provided, however, that if interest on the 2024AB Bonds then Outstanding shall be in default at the time of authentication of any 2024AB Bond, such 2024AB Bond will bear interest from the applicable Interest Payment Date to which interest has previously been paid or made available for payment on the 2024AB Bonds then Outstanding. The 2024AB Bonds will be issued in denominations of \$5,000 and integral multiples thereof.

The 2024AB Bonds when issued will be registered in the name of Cede & Co., as registered owner and nominee of The Depository Trust Company (“**DTC**”), New York, New York. DTC will act as securities depository for the 2024AB Bonds. Individual purchases may be made only in book-entry form, and purchasers will not receive certificates representing their interest in the 2024AB Bonds purchased. Except as described under “**TAX MATTERS**,” so long as Cede & Co. is the registered owner of the 2024AB Bonds, as nominee of DTC, references herein to “**Bondholders**” or to “**registered owners**” of the 2024AB Bonds mean Cede & Co. and not the Beneficial Owners of the 2024AB Bonds. In this Official Statement, the term “**Beneficial Owner**” means the person for whom a DTC participant acquires an interest in the 2024AB Bonds.

So long as DTC, or its nominee Cede & Co. (or such other nominee as an authorized officer of DTC may request), is the registered owner of all 2024AB Bonds, all payments of principal of, redemption price, if applicable, and interest on the 2024AB Bonds are to be made directly to DTC, which, in turn, is to remit such amounts to the Direct and Indirect Participants for subsequent distribution to the Beneficial Owners of the 2024AB Bonds. See APPENDIX F – “**DTC AND ITS BOOK-ENTRY ONLY SYSTEM**.”

Redemption of the 2024AB Bonds*

2024A Bonds

Extraordinary Optional Redemption of the 2024A Bonds. The 2024A Bonds are subject to redemption on any date prior to their respective stated maturities, as a whole, or in part so that the reduction in Annual Debt Service for the 2024A Bonds for each Bond Year after such redemption shall be as nearly proportional as practicable, from and to the extent of proceeds received by the Authority due to a governmental taking of the System or portions thereof by eminent domain proceedings, if such amounts are not used for additions, improvements or extensions to the System, under the circumstances and upon the conditions and terms set forth in the Indenture, at the greater of par or Amortized Value, plus accrued interest to the date fixed for redemption, without premium. “**Amortized Value**” means on any Interest Payment Date, the then current value of the 2024A Bonds, amortizing the original issue premium over the period ending on the first call date using the constant yield method.

Optional Redemption of 2024A Bonds. The 2024A Bonds maturing on or after July 1, 2035*, are subject to redemption prior to their respective stated maturities, at the option of the Authority, from any source of available moneys, on any date on or after July 1, 2034*, as a whole, or in part by such maturities or portions of maturities as shall be determined by the Authority (or by lot within a maturity in the absence of such a determination), at a

* Preliminary, subject to change.

redemption price equal to the principal amount of each 2024A Bond called for redemption, plus interest accrued to the date fixed for redemption, without premium.

Mandatory Sinking Account Redemption of 2024A Bonds. The 2024A Bonds maturing on July 1, 20__ are subject to redemption prior to their stated maturity in part, by lot, on July 1 of each year from Mandatory Sinking Account Payments, commencing July 1, 20__, at a redemption price equal to their principal amount, plus accrued interest thereon to the date fixed for redemption, without premium, in the years and in the amounts as set forth below:

20__ Term Bond	
Date (July 1)	Amount

† Maturity

2024B Bonds

Extraordinary Optional Redemption of the 2024B Bonds. The 2024B Bonds are subject to redemption on any date prior to their respective stated maturities, as a whole, or in part so that the reduction in Annual Debt Service for the 2024B Bonds for each Bond Year after such redemption shall be as nearly proportional as practicable, from and to the extent of proceeds received by the Authority due to a governmental taking of the System or portions thereof by eminent domain proceedings, if such amounts are not used for additions, improvements or extensions to the System, under the circumstances and upon the conditions and terms set forth in the Indenture, at the greater of par or Amortized Value, plus accrued interest to the date fixed for redemption, without premium. “**Amortized Value**” means on any Interest Payment Date, the then current value of the 2024B Bond, amortizing the original issue premium over the period ending on the first call date using the constant yield method.

Optional Redemption of 2024B Bonds. The 2024B Bonds maturing on or after July 1, 2035*, are subject to redemption prior to their respective stated maturities, at the option of the Authority, from any source of available moneys, on any date on or after July 1, 2034*, as a whole, or in part by such maturities or portions of maturities as shall be determined by the Authority (or by lot within a maturity in the absence of such a determination), at a redemption price equal to the principal amount of each 2024B Bond called for redemption, plus interest accrued to the date fixed for redemption, without premium.

Mandatory Sinking Account Redemption of 2024B Bonds. The 2024B Bonds maturing on July 1, 20__ are subject to redemption prior to their stated maturity in part, by lot, on July 1 of each year from Mandatory Sinking Account Payments, commencing July 1, 20__, at a redemption price equal to their principal amount, plus accrued interest thereon to the date fixed for redemption, without premium, in the years and in the amounts as set forth below:

20__ Term Bond	
Date (July 1)	Amount

† Maturity

* Preliminary, subject to change.

Selection of 2024AB Bonds for Redemption. In the event that less than all of the 2024AB Bonds of any maturity are to be redeemed, the 2024AB Bonds (or portions thereof) to be redeemed shall be selected by the Authority or, in the absence of such a selection by the Authority, by the applicable Registrar by lot within such maturity in such manner as the Registrar may determine.

Notice of Redemption. Notice of redemption (except as otherwise provided in the Indenture) is required to be given, not less than 30 nor more than 60 days before the date fixed for redemption, by first class mail to each of the registered owners of 2024AB Bonds designated for redemption at their addresses appearing on the Bond registration books of the Registrar on the date the 2024AB Bonds to be redeemed are selected. Each notice of redemption is required to state the redemption date, the place or places of redemption, the Series and maturities to be redeemed, and, if less than all of any such maturity, the numbers of the 2024AB Bonds of such maturity to be redeemed and, in the case of 2024AB Bonds to be redeemed in part only, the respective portions of the principal amount thereof to be redeemed, and is required also to state that on said date there will become due and payable on each of said 2024AB Bonds the redemption price thereof or of said specified portion of the principal thereof in the case of a 2024AB Bond to be redeemed in part only, together with interest accrued thereon to the redemption date, and that from and after such redemption date interest thereon shall cease to accrue, and is also to require that such 2024AB Bonds be then surrendered, with a written instrument of transfer duly executed by the registered owner thereof or by such registered owner's attorney duly authorized in writing. No defect in or failure to give such mailed notice of redemption shall affect the validity of proceedings for the redemption of such 2024AB Bonds. Each notice of redemption shall also state the CUSIP number, date of issue and interest rate on each 2024AB Bond, or portion thereof, to be redeemed, and shall include the redemption agent name and address; provided, however, that failure to include any of such information in any redemption notice, or any inaccuracy in any such information, shall not affect the sufficiency of the proceedings for redemption of any 2024AB Bonds.

The Authority may, at its option, prior to the date fixed for redemption in any notice of redemption, rescind and cancel such notice of redemption.

Trustee, Co-Trustee, Registrar and Paying Agent

The Bank of Guam has been appointed to act as the Trustee for the Bonds, including the 2024AB Bonds, and U.S. Bank Trust Company, National Association, as successor to U.S. Bank National Association, has been appointed to act as Co-Trustee, registrar (the "**Registrar**") and paying agent (the "**Paying Agent**") for the 2024AB Bonds.

Book-Entry System

The 2024AB Bonds will be delivered in fully registered form only, and when delivered will be registered in the name of Cede & Co., as nominee of DTC. DTC acts as securities depository for the 2024AB Bonds. Ownership interests in the 2024AB Bonds may be purchased in book-entry only form, in the denominations set forth above. The Indenture provides that, so long as DTC acts as securities depository for the 2024AB Bonds, the Authority, the Trustee, the Co-Trustee, the Registrar and the Paying Agent may treat DTC as the absolute owner of such 2024AB Bonds for all purposes and that none of the Authority, the Trustee, the Co-Trustee, the Registrar and the Paying Agent shall have any liability with respect to (i) the accuracy of the records of DTC or any Participant with respect to any beneficial ownership interest in the 2024AB Bonds, (ii) the delivery to any Participant, any Beneficial Owner or any other person, other than DTC, of any notice with respect to the 2024AB Bonds, (iii) the payment to any Participant, any Beneficial Owner or any other person, other than DTC, of any amount with respect to principal or redemption price of or interest on the 2024AB Bonds, (iv) the selection by DTC or any Participant of any person to receive payment in the event of a partial redemption of the 2024AB Bonds or (v) any consent given or other action taken by DTC as Holder of the 2024AB Bonds. See APPENDIX F – "DTC AND ITS BOOK-ENTRY ONLY SYSTEM."

DEBT SERVICE SCHEDULE

The following table sets forth the debt service schedule for the Prior Bonds and the 2024AB Bonds.

Table 1
Debt Service Schedule

Fiscal Year Ending September 30,	Prior Bonds ⁽¹⁾⁽²⁾	2024A Bonds Principal	2024A Bonds Interest	2024B Bonds Principal	2024B Bonds Interest	Total Debt Service
2024	\$ 39,042,065					
2025	39,040,778					
2026	39,036,815					
2027	39,038,065					
2028	40,299,565					
2029	40,930,165					
2030	40,930,353					
2031	40,932,003					
2032	40,926,265					
2033	40,927,703					
2034	40,929,490					
2035	40,929,965					
2036	40,934,295					
2037	40,926,385					
2038	40,934,865					
2039	40,926,995					
2040	40,931,340					
2041	41,585,030					
2042	41,581,770					
2043	41,584,025					
2044	41,585,000					
2045	41,583,250					
2046	40,755,625					
2047	37,580,000					
2048	37,576,000					
2049	37,575,000					
2050	37,576,500					
2051	--					
2052	--					
2053	--					
Total ⁽³⁾	\$1,086,599,310					

⁽¹⁾ Comprised of the 2013 Bonds, the 2014A Bonds, the 2016 Bonds, the 2017 Bonds, the Authority's Water and Wastewater System Revenue Bonds Series 2020A Bonds and the 2020B Bonds. See "PLAN OF REFUNDING."

⁽²⁾ Net of capitalized interest payments.

⁽³⁾ Totals reflect rounding.

SECURITY AND SOURCES OF PAYMENT FOR THE BONDS

Pledge of Revenues

The Bonds are limited obligations of the Authority and are payable solely from, and secured solely by a lien on and pledge of, the Revenues. Pursuant to the Indenture, the Authority has pledged all of the Revenues, subject only to the provisions of the Indenture permitting the application thereof for or to the purposes and on the terms and conditions set forth in the Indenture, to secure the payment of the principal of, premium, if any, and interest on the Bonds in accordance with their terms and the provisions of the Indenture and the payment of Credit Agreement Payments and Parity Payment Agreement Payments in accordance with their terms. The Indenture provides that such pledge constitutes a lien on and security interest in the Revenues and will attach, be perfected and be valid and binding from and after delivery of the first Series of Bonds issued under the General Indenture, without any physical delivery of such Revenues or further act.

As defined in the Indenture, “**Revenues**” include all gross income and other amounts received or receivable by the Authority as revenues of any kind from the ownership or operation of any part of the System, including all rates, fees and charges (including ground water, surface water and treated water charges and all wastewater service charges) received by the Authority for providing water and wastewater services (but excluding development charges and assessments and hook-up fees and other special charges such as penalties and fines), all Payment Agreement Receipts, and all proceeds of insurance or grants covering business interruption loss (and related losses and expenses) relating to the System, and all other income and revenue howsoever derived by the Authority from the ownership or operation of, or arising from, the System, together with all interest, profits or other income derived from the investment of amounts in the Revenue Fund, but not including: (1) amounts received as insurance proceeds (except as described above) or from the sale, transfer or other disposition of, or upon the taking by or under the threat of eminent domain of, all or any part of the System (which moneys shall be received and disposed of pursuant to the provisions of the Indenture); (2) proceeds from any securities issued by the Authority or proceeds from loans obtained by the Authority; (3) the proceeds of any court or arbitration award or settlement in lieu thereof received by the Authority; (4) amounts received by the Authority as gifts or as grants (except as described above), whether restricted or unrestricted; and (5) other amounts (except as described above), the use of which is restricted by the donor or grantor.

The Authority has covenanted in the Indenture that, so long as any Bonds are Outstanding, the Authority will not issue any bonds or obligations payable from Revenues or secured by a pledge, lien or charge upon Revenues prior to or on a parity with the Bonds, any Parity Agreement Payments and any Credit Agreement Payments (other than Additional Bonds, Parity Agreement Payments and Credit Agreement Payments).

The ability of the Authority to pay principal of and interest on the Bonds will depend upon the receipt by the Authority of sufficient Revenues. If Revenues and amounts available in the funds and accounts under the Indenture are insufficient to pay the principal of and interest on the Bonds, no other source of repayment exists. The Authority has no taxing power. See “CERTAIN INVESTMENT CONSIDERATIONS – Limitations on Remedies.”

Allocation of Revenues

The Indenture requires the Authority to deposit all Revenues upon receipt in the Revenue Fund held by the Depository. The Indenture provides that on or before the fifth day of each calendar month, the Depository is required to transfer from the Revenue Fund (to the Trustee as necessary) for deposit into one or more of the following respective separate funds, the following amounts in the following order of priority, the requirements of each such fund or account (including the making up of any deficiencies in any such fund or account resulting from lack of Revenues sufficient to make any earlier required deposit) at the time of deposit to be satisfied, and the results of such satisfaction being taken into account, before any transfer is made to any fund subordinate in priority:

- (A) into the Operation and Maintenance Fund, an amount equal to the amount of Operation and Maintenance Expenses budgeted by the Authority, pursuant to the budget, as revised, filed in accordance with the Indenture, to be paid from Revenues during the next succeeding calendar month (including any amount to be held as a reserve for transfer to the Rebate Fund) plus the amount of any Other

Credit Agreement Payments then due and payable or to become due and payable during such month not otherwise included in such amount;

(B) into the Debt Service Fund held by the Co-Trustee, an amount equal to the amount necessary to increase the amount in the Debt Service Fund to the aggregate amount for all Outstanding Bonds of all unpaid interest, principal and Mandatory Sinking Account Payments and for all Outstanding Parity Payment Agreements of all Parity Payment Agreement Payments with respect thereto and for all Outstanding Credit Agreements of all Credit Agreement Reimbursement Payments due and payable to the extent not otherwise included in such amount which shall be required to have been transferred to the Debt Service Fund on the basis of the following transfer requirement rules (after taking into account amounts transferred and to be transferred from any Construction Account to pay Capitalized Interest):

(1) an amount equal to the amount of interest payable on each Bond on a current un compounded basis on any Interest Payment Date shall be transferred in equal monthly amounts over the Interest Accrual Period for such Bond ending on such Interest Payment Date (or in the case of Variable Rate Bonds 110% of the amount of interest accrued during the next preceding calendar month less any excess deposited for the next preceding calendar month); provided that to the extent that a Qualified Counterparty is obligated to make payments to the Authority on or prior to such Interest Payment Date pursuant to an Outstanding Payment Agreement Related to any Bonds, an amount equal to the amount of any such payment obligation shall be transferred from the Revenue Fund to the Debt Service Fund on the date such payment is due and the amount of each monthly transfer with respect to such Bonds as described in this subparagraph (1) during the Interest Accrual Period (or portion thereof) over which such payment obligation accrues shall be reduced by an amount equal to the amount of such Qualified Counterparty's payment obligation accruing during the next preceding calendar month;

(2) the amount of interest payable on each Bond on a deferred compounded basis on any Interest Payment Date shall be transferred in substantially equal monthly amounts over the period during which such interest accrues on such basis;

(3) the amount of the principal of each Bond shall be transferred in equal monthly amounts over the Principal Payment Period for such Bond ending on the maturity date for such Bond;

(4) the amount of each Mandatory Sinking Account Payment for Bonds shall be transferred in equal monthly amounts over the Principal Payment Period for such Bonds ending on the date such Mandatory Sinking Account Payment is due;

(5) the amount of any Parity Payment Agreement Payment payable on any Payment Agreement Payment Date shall be transferred (a) in the case of such payments calculated based on a fixed rate, in equal monthly installments over the Payment Agreement Payment Accrual Period for such Payment Agreement Payment ending on such Payment Agreement Payment Date and (b) in the case of such payments calculated based on a variable rate, in monthly installments equal to 110% of the amount of such obligation accrued during the next preceding calendar month less any excess deposited for the next preceding calendar month; and

(6) to the extent not otherwise included in amounts described in subparagraphs (1) through (5) above, the amount of any Credit Agreement Reimbursement Payment due and payable is to be transferred;

(C) into the Bond Reserve Fund held by the Co-Trustee, the amount, if any, needed to increase the amount in the Bond Reserve Fund to the Bond Reserve Fund Requirement (equal to the Maximum Annual Debt Service for the then current or any future Fiscal Year on all Outstanding Bonds) as of the date of such transfer;

(D) into the Subordinate Securities Fund (and any accounts therein), the amount, if any, needed to increase the amount in such Fund and each such account to its requirement (including any requirements for reasonable debt service reserves and requirements related to Payment Agreements that constitute Subordinate Securities (including Termination Payments)) established by each resolution, indenture or other instrument pursuant to which Subordinate Securities are issued and outstanding;

(E) into the Operation, Maintenance, Renewal and Replacement Reserve Fund, the amount, if any, needed to increase the amount in the Operation, Maintenance, Renewal and Replacement Reserve Fund to an amount equal to one-fourth (1/4) of the sum of the amounts of Operation and Maintenance Expenses and Renewal and Replacement Costs budgeted by the Authority, pursuant to the budget, as revised, filed in accordance with the Indenture, for the then current Fiscal Year;

(F) into the Rate Stabilization Fund, the amount specified for such month in a Certificate of the Authority which also certifies that such amount is consistent with the annual budget established by the Authority pursuant to the Indenture; and

(G) into the Capital Improvement Fund, the balance remaining in the Revenue Fund after the deposits described above.

The Indenture provides that, in the event that the amount in any Fund or Account is insufficient for the purposes for which such Fund or Account was established, the Trustee, the Co-Trustee or the Depository upon the direction of the Trustee, is required to transfer to such Fund or Account the amount of such deficiency by withdrawing said amount from subordinate Funds and Accounts in reverse order of the priority described above and prior to any other claims upon such Funds and Accounts, subject only to the limitation that amounts in the Bond Reserve Fund shall only be used as provided in the Indenture.

See APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – DEFINITIONS” for definitions of the capitalized terms used above and descriptions of certain of the Funds and Accounts referenced above.

Rate Covenant

The Authority has covenanted in the Indenture to at all times fix, prescribe and collect rates, fees and charges in connection with the services furnished by the System which will be sufficient to yield the sum of Net Revenues during each Fiscal Year equal to at least 1.25 times the Aggregate Annual Debt Service for such Fiscal Year and to yield Revenues during each Fiscal Year equal to at least the aggregate amount of all transfers required to be made pursuant to the provisions of the Indenture described above in (A) through (E) under “– Allocation of Revenues” (collectively, the “**Rate Covenant**”).

“**Net Revenues**” is defined in the Indenture to mean, for any particular period, (a) the sum of (i) all of the Revenues (other than Payment Agreement Receipts) received during such period plus (ii) the aggregate amount of all transfers from the Rate Stabilization Fund to the Revenue Fund during such period, less (b) the sum of (x) all Operation and Maintenance Expenses incurred during such period plus (y) the amount of all transfers from the Revenue Fund to the Rate Stabilization Fund during such period.

The Indenture provides that if, at the end of a Fiscal Year, (i) the sum of Net Revenues for such Fiscal Year were less than 1.25 times Aggregate Annual Debt Service for such Fiscal Year, or (ii) Revenues were less than the aggregate amount of all required transfers described above in (A) through (E) under “– Allocation of Revenues” for such Fiscal Year, the Authority is required to promptly employ a Consulting Engineer to make recommendations as to a revision of rates, fees and charges or the methods of operation of the System, and promptly upon its receipt of such recommendations, to revise such rates, fees and charges or methods of operation and to take such other actions as will be in conformity with such recommendations, subject to applicable requirements or restrictions imposed by law, including approval of any rate increases by the PUC, and subject to a good faith determination of the CCU that such recommendations, in whole or in part, are in the best interests of the Authority, the Owners and each Credit Provider, if any. The Indenture provides that if the Authority complies in all material respects with the reasonable

recommendations of the Consulting Engineer with respect to said rates, fees, charges and methods of operation or collection, or makes a good faith determination that such recommendations are not in the best interests of the Authority, the Authority will be deemed to have complied with the Rate Covenant for such Fiscal Year; provided, that Net Revenues are in no event less than Aggregate Annual Debt Service for such Fiscal Year.

See APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – DEFINITIONS” for definitions of the capitalized terms used above and “– CERTAIN COVENANTS – Rate Covenant.”

For discussions of additional requirements relating to rate-setting, see “REGULATORY ENVIRONMENT – Regulation of Ratemaking.”

Bond Reserve Fund

The Indenture establishes the Bond Reserve Fund to be used and withdrawn by the Co-Trustee solely for the purpose of paying debt service on the Bonds (including Payment Agreement Payments to the extent provided in any Supplemental Indenture) in the event of a deficiency in the Debt Service Fund, in the manner and to the extent set forth in the Indenture. So long as the Authority is not in default under the Indenture, any amount in the Bond Reserve Fund in excess of its Bond Reserve Fund Requirement is to be transferred to the Revenue Fund.

“**Bond Reserve Fund Requirement**” is defined in the Indenture to mean, as of any particular date of calculation, an amount equal to the Maximum Annual Debt Service for the then current or any future Fiscal Year on all Outstanding Bonds; provided, however, that if upon issuance of a Series of Bonds, such amount would require moneys to be credited to the Bond Reserve Fund from such Bond proceeds in an amount in excess of the maximum amount permitted from tax-exempt bond proceeds under the Code, the Bond Reserve Fund Requirement shall mean an amount equal to the sum of the Bond Reserve Fund Requirement immediately preceding issuance of such Bonds plus the maximum amount permitted under the Code to be deposited therein from the proceeds of such Bonds, as specified by Certificate of the Authority.

Upon the issuance of the 2024A Bonds and the refunding of the Refunded 2013 Bonds and the retirement of the Purchased Bonds, the Bond Reserve Fund Requirement is \$_____ and \$_____ will be released from the Bond Reserve Fund and deposited into the Escrow Fund. See “PLAN OF REFUNDING” and “ESTIMATED SOURCES AND USES OF FUNDS.”

If and to the extent provided by a Supplemental Indenture, the Bond Reserve Fund Requirement may be wholly or partially satisfied by a Credit Facility. Notwithstanding anything to the contrary contained in the Indenture, such Supplemental Indenture may provide that a draw on such Credit Facility is to be made only after all cash in the Bond Reserve Fund been withdrawn and that if a drawing or other claim on such Credit Facility is honored, amounts available for deposit pursuant to the provisions of the Indenture relating to allocation of Revenues to the Bond Reserve Fund will be applied by the Co-Trustee to reimburse, as soon as practicable, the amount of each payment honoring such drawing or other claim.

See APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – REVENUES AND FUNDS – Application of Bond Reserve Fund.”

Additional Bonds

The General Indenture permits the Authority to issue Additional Bonds secured on a parity with the Outstanding Bonds, including the 2024AB Bonds, upon the satisfaction of the requirements set forth in the Indenture, including, among other things, the filing of the documents described below, as applicable, with the Trustee.

If and to the extent that a Series of Additional Bonds is being issued to provide moneys for deposit in a Construction Account, the following certificates and reports are to be filed:

(A) a certificate of a Consulting Engineer setting forth (I) the projected Date of Completion for the Project or Projects for which such Series of Additional Bonds is being issued and for any other uncompleted Projects, and (II) an estimate of the cost of construction of such Projects;

(B) a written report of a Consulting Engineer setting forth for each Fiscal Year from the then current Fiscal Year through the later of (I) the first Fiscal Year commencing at least five years after the date of original issuance of such additional Series, or (II) the first Fiscal Year commencing at least three years after the Date of Completion projected by the Consulting Engineer in the certificate described in (A) above, estimates of Revenues, Operation and Maintenance Expenses and Net Revenues; and

(C) a certificate of the Authority (I) setting forth (a) the estimates of Revenues, Operation and Maintenance Expenses, and Net Revenues, as set forth in the written report of a Consulting Engineer described in subparagraph (B) above, for each of the Fiscal Years covered by such report, and (b) the Aggregate Annual Debt Service and Capitalized Interest for each of such Fiscal Years, including Annual Debt Service and Capitalized Interest on all future Series of Bonds, if any, which such Certificate of the Authority shall estimate (based on the estimate of the Consulting Engineer of the cost of construction of such Projects) are required to complete payment of the cost of construction of such Projects, and (II) demonstrating that for each of such Fiscal Years (a) Revenues are projected to be at least equal to the aggregate amount of all transfers required to be made pursuant to the provisions of the Indenture described above in (A) through (E) under “– Allocation of Revenues,” and, to the extent applicable, otherwise required to provide for the payment of all obligations of the Authority to be paid from Revenues, and (b) Net Revenues are projected to be at least equal to 1.25 times Aggregate Annual Debt Service.

(D) In lieu of the certificates and reports required by the provisions of the Indenture summarized in subparagraphs (A), (B) and (C) above, the Authority may deliver to the Trustee a Certificate of the Authority to the effect that for the last complete Fiscal Year or any period of 12 consecutive calendar months out of the 18 calendar months next preceding the original issuance of such Additional Bonds, Net Revenues for such Fiscal Year or 12-month period equaled at least 1.25 times the Maximum Annual Debt Service on all Bonds then Outstanding plus the Series of Additional Bonds being issued.

In addition, a Series of Bonds may be issued for the sole purpose of depositing in a Construction Account the amounts necessary to complete any one or more Projects without filing with the Trustee the certificates and reports required by the provisions of the Indenture summarized in subparagraphs (B) and (C), if such certificates and reports demonstrating compliance with such provisions of the Indenture were filed in connection with the issuance of the prior Series of Bonds for each of such Projects and if the principal amount of such Additional Bonds to be issued for completion purposes does not exceed 10% of the principal amount of Bonds previously issued for and allocable to such Projects.

The General Indenture also provides that if and to the extent that a Series of Additional Bonds is being issued for the purpose of refunding Bonds, the Authority is required to file with the Trustee either (i) a certificate of an Independent Certified Public Accountant that Aggregate Annual Debt Service for each Fiscal Year thereafter will be less than or equal to Aggregate Annual Debt Service for each such Fiscal Year in the absence of such refunding, or (ii) the certificates and reports described in subparagraphs (A) (if any one or more of the Projects for which the Bonds being refunded is not then completed), (B) and (C) above; provided that in lieu of the certificates and reports described in subparagraphs (A), (B) and (C), the Authority may deliver to the Trustee the certificate described in subparagraph (D) above.

See APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – ISSUANCE OF BONDS; ISSUANCE OF A SERIES OF BONDS; PARITY PAYMENT AGREEMENTS – Issuance of Additional Series of Bonds” and “– Proceedings for the Issuance of a Series of Bonds; Parity Payment Agreements.”

Parity Payment Agreements

The Authority is permitted under the General Indenture to enter into one or more Parity Payment Agreements, the Authority payments of which are secured by a lien upon and pledge of Revenues equal to and on a parity with the lien and pledge securing the Bonds, provided the Authority complies with certain provisions of the

Indenture. The Authority is not currently a party to any Parity Payment Agreements, nor does the Authority have any current plans to enter into any Parity Payment Agreements.

See APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – ISSUANCE OF BONDS; ISSUANCE OF A SERIES OF BONDS; PARITY PAYMENT AGREEMENTS – Additional Parity Payment Agreements” and “– Proceedings for the Issuance of a Series of Bonds; Parity Payment Agreements.”

Subordinate Obligations

The Indenture does not prevent the Authority from issuing or incurring any indebtedness secured by a lien or charge on Revenues that is junior and subordinate to the lien and charge of the Bonds. The Authority does not have any subordinate obligations outstanding. As part of the ongoing capital program, the Authority may establish a commercial paper program as subordinate obligations for funding but would do so only if such a program were economically and financially feasible. Any such program would require necessary approvals from the CCU, the PUC and the Guam Legislature. The Authority does not expect to commence such a program, if at all, in Fiscal Year 2024.

Events of Default and Remedies; No Acceleration

The Indenture specifies Events of Default and related remedies. The remedies granted to the Trustee and the Bondowners under the Indenture do not include any right to accelerate the payment of the Bonds, including the 2024AB Bonds. The Trustee is authorized to take certain actions upon the occurrence of an Event of Default, including proceedings to enforce the rights of the Bondowners. See APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – EVENTS OF DEFAULT AND REMEDIES OF BONDOWNERS” for descriptions of the Events of Default and remedies under the Indenture.

Depositaries for Funds and Accounts

The Co-Trustee has been appointed to act as Depositary for the Debt Service Fund and the Bond Reserve Fund. The Trustee has been appointed as Depositary for the Revenue Fund, the Operation and Maintenance Fund, the Subordinate Securities Fund, the Operation, Maintenance, Renewal and Replacement Reserve Fund, the Capital Improvement Fund, the Rate Stabilization Fund and the Rebate Fund. The Authority may enter into a Supplemental Indenture from time to time to provide for a different or additional Depositary for any fund or account established under the Indenture.

(Remainder of Page Intentionally Left Blank)

THE AUTHORITY

General

In 1950, the Guam Legislature enacted Public Law 1-12 assigning responsibility for the public water supply to the Guam Department of Public Works. Shortly thereafter, in 1952, the Guam Legislature enacted Public Law 1-88 creating the Public Utility Agency of Guam (the “**PUAG**”), which consisted of telephone, power, water and wastewater utilities. The PUAG remained responsible for Guam’s water and wastewater systems for the ensuing 44 years. In 1996, the Authority was established as a new semiautonomous, self-supporting agency responsible for Guam’s water and wastewater utilities, and began operations on February 1, 1997. In 2002, by virtue of the passage of Public Law 26-76, the Authority converted to its current status as a public corporation, organized and existing as a Guam public corporation under Chapter 14 of Title 12 of the Guam Code Annotated, and authorized to operate and maintain the System for Guam.

The Authority’s System provides water to the entire civilian population of Guam and provides sewer service to a large percentage of the civilian population, plus Andersen Air Force Base and several smaller United States Navy (the “**Navy**”) facilities. There is, however, a significant civilian population that does not have sewer service, particularly in the northern area of the island where many homes rely on individual septic tanks or other on-site disposal systems. In addition, there are currently two major military installations, Andersen Air Force Base and Naval Base Guam, which occupy large areas on the island. Andersen Air Force Base has its own water and wastewater collection system; however, it does not have a separate wastewater treatment plant and, therefore, the wastewater collected from Andersen Air Force Base is discharged into the Authority’s System and treated at the Northern District wastewater treatment plant (the “**Northern District WWTP**”). Naval Base Guam has its own water and wastewater collection system, as well as its own separate wastewater treatment plant. A third military installation, Marine Corps Base Camp Blaz (“**Camp Blaz**”), is currently being constructed. Marines are expected to begin moving into Camp Blaz as early as 2026, before it is expected to be completed in 2028. The Authority has constructed the service connection and expects that wastewater collected from Camp Blaz, once it is completed, will be discharged into the Authority’s System and treated at the Northern District WWTP. The Authority purchases some of its water supply from the Navy. See “THE SYSTEM.” During Fiscal Year 2023, the Authority served an average of 43,574 water customers and an average of 30,742 wastewater customers. See Table 2 – “Selected Statistics.”

The Authority’s goals are directed towards providing more efficient and reliable service to its customers and operating as a self-sufficient utility while meeting all US EPA and Guam Environmental Protection Agency (“**Guam EPA**”) requirements.

The Authority currently has four Operations and Maintenance divisions: (i) Water Production and Treatment Operation and Maintenance, (ii) Water Distribution Operation and Maintenance, (iii) Wastewater Collection Operation and Maintenance, and (iv) Wastewater Treatment Operation and Maintenance. See “THE SYSTEM – The Water System” and “– The Wastewater System.”

Consolidated Commission on Utilities

The Authority is governed by the CCU, a five-member board elected in a general election to four-year terms that is also charged with oversight of GPA. The CCU makes decisions regarding policies, management, budgeting and financing of the Authority’s operations. Certain actions, however, such as issuing bonds for financing utility capital projects, also require the approval of the Guam Legislature and the PUC. In addition, ratemaking by the CCU is subject to the approval of the PUC, as the regulatory ratemaking body. The Authority may not enter into any contractual agreements or obligations which could increase rates and charges without the prior written approval of the PUC. See “REGULATORY ENVIRONMENT – Regulation of Ratemaking.”

The current members of the CCU are:

Joseph T. Duenas, Chairman. Mr. Duenas was elected as Chairman of the CCU in January 2015. Elected to the CCU and member since January 2009, Mr. Duenas’s government and community service has included serving

as Finance Officer for the Archdiocese of Hagåtña, Director of the Guam Department of Revenue & Taxation, President of the Guam Housing Corporation, Vice Chairman of the Guam Election Commission, PUC Chairman, Board of Directors Chairman for the American Red Cross, Vice Chairman of the Board of Trustees for Guam Community College, and former President of the Rotary Club of Guam. Mr. Duenas has a B.A. in Business Management from the Chaminade University of Honolulu.

Francis E. Santos, Vice Chairman. Mr. Santos is serving his third term as an elected CCU Commissioner. He has over 25 years of experience in the private and public sectors, specializing in healthcare and business management. Mr. Santos currently serves as the Corporate Business Development Director for Tan Holdings and TakeCare Insurance. His extensive healthcare experience includes positions as Senior Vice President for Strategic Planning and Business Development for Guam Regional Medical City, Guam's only private accredited hospital, Plan Administrator for StayWell Health Plan, President/Chief Executive Officer of Island Home Insurance Company, and member/director of Global Health Systems, which specializes in wound care and hyperbaric medicine. His public sector service has included an acting appointment as Superintendent of Guam's Department of Education and chairman of the Guam Education Policy Board. Mr. Santos also served as chairman of the board of iLearn Academy Charter School, Guam's second public charter school. Mr. Santos served three terms as a Senator in the Guam Legislature. Mr. Santos' educational background includes an M.B.A. in Health Care Administration from Loma Linda University and a Bachelor's Degree in Business Management from Seattle University. He is a graduate of Father Duenas Memorial School, Guam.

Pedro Roy Martinez, Secretary. Mr. Martinez was sworn into the CCU in March 2021. He currently holds the Secretary position on the board. Mr. Martinez has a 27-year tenure in the government of Guam including roles as the Deputy Executive Manager of the A. B. Won Pat International Airport Authority and the Director of Development and Alumni Affairs at the University of Guam. Prior to his government service, Mr. Martinez gained entrepreneurship experience through his family-owned business, Pedro's, which encompassed an ice plant, cold storage, building rentals, and a retail and wholesale business. Mr. Martinez has also served as Chairman and Treasurer of the Guam Telephone Authority Board of Directors. Beyond his professional endeavors, he currently holds positions as Vice Chairman on the Board of Directors at Coast360 Federal Credit Union, member of the Father Duenas Memorial School Alumni Association, and, at St. Jude Thaddeus Catholic Church, President of the Parish Council and member of the Finance Council and Knights of Columbus. Mr. Martinez has a Master of Public Administration and a B.B.A. in Management from the University of Guam.

Michael Limtiaco, Commissioner. Mr. Limtiaco was elected to the CCU in 2019. He is currently the Executive Vice President of Pacific Unlimited Inc., and has 25 years of experience in strategic planning, business development, contract administration and operations. Mr. Limtiaco was elected as a Senator and served in the 32nd Guam Legislature. He served as a director on the Guam Memorial Hospital Board and as a transition team member for incoming Executive branch leadership. Mr. Limtiaco holds a B.A. in Business Administration and Business Economics from the University of San Diego.

Simon A. Sanchez II, Commissioner. Mr. Sanchez has served on the CCU since its inception in January 2003, including as chairman from January 2003 until January 2015. He is a former Senator and former Vice Chairman, Public Utilities Commission 1988-1994. Mr. Sanchez has served as Vice President/General Manager of Guam Dry Cleaners since 1988. He has served on numerous government and civic organization boards including the Guam Chamber of Commerce, the Guam Visitors Bureau, the Guam Hotel and Restaurant Association and the Guam Memorial Hospital. Mr. Sanchez graduated from Harvard University in 1980 with an M.A. in City and Regional Planning and from Stanford University in 1978 with a B.A. in history.

Key Management Personnel

Following are brief résumés of key management personnel of the Authority.

Miguel C. Bordallo, P.E., General Manager. Mr. Bordallo joined the Authority as General Manager in January 2016. Mr. Bordallo has over 30 years of experience in environmental/mechanical engineering, and construction in California, Guam and Micronesia. Prior to joining the Authority, Mr. Bordallo was a consulting engineer providing design and design-build services for water and wastewater infrastructure projects and was also vice president of a large construction company on Guam, where he oversaw the construction of John F. Kennedy

High School. Mr. Bordallo was previously a partner at the local engineering firm Duenas, Bordallo and Associates, before moving on as Principal and founder of Bordallo Consulting Engineers. Since joining the Authority, Mr. Bordallo has continued the Authority's intensive capital improvement program, built capacity in the management team and reduced reliance on contracted program management, and is focused on improving the Authority's performance in regulatory compliance, comprehensive water loss reduction, asset management, and resource protection. Mr. Bordallo holds a B.S. in Mechanical Engineering with honors from Marquette University in Milwaukee, Wisconsin, and is a licensed professional engineer in Guam.

Taling M. Taitano, CPA, CGFM, CGMA, Chief Financial Officer. Ms. Taitano became Chief Financial Officer of the Authority in September 2019. During the ten years prior to joining the Authority, Ms. Taitano served as Deputy Superintendent of Finance and Administrative Services for the Guam Department of Education and was appointed by the Guam Education Board as the Interim Superintendent of Education from July 2011 through June 2012. She was also a Partner at Deloitte & Touche LLP and the Chief Financial Officer for a major local health insurance company and a banking institution. Ms. Taitano has held leadership positions in various boards and professional organizations including the Guam Board of Accountancy, Guam Society of Certified Public Accountants and the Association of Government Accountants. She holds a Bachelor of Business Administration degree from the University of Hawaii, Manoa, and is a Certified Public Accountant, Certified Government Financial Manager, and Chartered Global Management Accountant.

Thomas F. Cruz, P.E., Assistant General Manager, Operations. Mr. Cruz first joined the Authority in 2006 as a senior engineer supervisor and has subsequently held various other positions before becoming the Chief Engineer in August 2011. In January 2021, Mr. Cruz became the Assistant General Manager for Operations where his current objectives are to ensure all water and wastewater system operations are conducted efficiently, meeting regulatory compliance requirements and in line with the Authority's plan for improved levels of service for its ratepayers. Mr. Cruz is a licensed Civil Engineer on Guam and has over 20 years of engineering experience in projects ranging from roadway design and construction, water distribution and wastewater collection design as well as construction management. Mr. Cruz holds a Bachelor of Science (Civil Engineering) from Kansas State University and an M.B.A. from the University of Phoenix. Mr. Cruz served as Interim General Manager from August 2014 until March 2015.

Jeanet B. Owens, P.E., Assistant General Manager, Engineering. Ms. Owens has over 25 years in both public and private sectors in managing all aspects of civil infrastructure from planning, design, and construction, especially in water, wastewater, and transportation. She joined the Authority in July 2023. She is a licensed Civil Engineer for the State of California and currently working on Comity license for Guam. She began her career in environmental engineering with Foster Wheeler Inc. and then worked in Hydraulic & Water Conservation and Water Resources in the County of Los Angeles Department of Public Works. She has continued to work all aspects of civil infrastructure including water and wastewater as Vice President in Thomas Properties Group where she worked on the commercial mixed-used development including the Wilshire Grand Hotel in Los Angeles, California where she resumed her work on the Wilshire Grand Hotel as Senior Vice President for Martin Project Management. Ms. Owens also served as Senior Executive Officer for the Regional Rail Program Los Angeles County Metropolitan Transportation Authority managing transportation projects including aspects of hydrology, stormwater management and water sustainability. Ms. Owens holds a Bachelor and Master of Science in Civil Engineering from California State University and Construction Management Certificate Extension Program from the University of California, Los Angeles. As Assistant General Manager of Engineering, Ms. Owens is responsible for delivering engineering services in Planning, Grant Management, Geographic Information System, Capital Improvements and Permits/Inspections for the Authority.

Paul J. Kemp, Assistant General Manager, Compliance and Safety. Mr. Kemp has over 63 years of experience managing and teaching water quality chemistry for natural (ground and surface) waters, drinking water, water for industrial applications (e.g., manufacturing, food and dairy processing), ultra-high purity water, wastewater treatment, water recovery for reuse, and environmental and safety compliance and training. Mr. Kemp has been Assistant General Manager of Compliance at the Authority since 2003. Prior to joining the Authority, he held engineering and management positions in private laboratory, research, and manufacturing companies as well as teaching and research positions in higher education. Mr. Kemp is currently a member of the Joint Editorial Board of "Standard Methods for the Examination of Water and Wastewater," the Hawaii Water Environment Association, Technical Director of the Sunset Terrace Homeowners Association (upgrading its wastewater treatment system) and

Hawaii Section of the American Waterworks Association (Lifetime) Member and Past Chair of Advisory Committee and Fuller Award Committee, the American Chemical Society, the Society of the Sigma Xi (Chemists Honorary Society), and the International Union of Pure and Applied Chemists and has published a number of technical articles in various journals. Mr. Kemp was trained as an analytical chemist specializing in spectroscopic methods and water analysis and received a B.S. in chemistry from Iowa State University and an M.S. in Analytical Chemistry from Oregon State University. He also undertook postgraduate studies at the University of Hawaii.

Christopher M. Budasi, Assistant General Manager of Administration and Support. Mr. Budasi joined Guam Waterworks Authority in October 2018. Prior to joining the Authority, he served more than 15 years in executive-level positions successfully leading teams in finance, human resources, purchasing and supply management, and information technology. Mr. Budasi was the Finance Administrator for the Judiciary of Guam for five years and before that, he served as the Guam Legislature’s Director of the Office of Finance and Budget for four years. Mr. Budasi also has 17 years of experience in the health insurance industry; of those 17 years, he spent six years as a Senior Executive responsible for all underwriting and information technology functions. Mr. Budasi received a B.A. in Government and a B.A. in Economics and Management from Beloit College in Beloit, Wisconsin.

Theresa G. Rojas, Esq., General Counsel. Ms. Rojas became the General Counsel for the Authority in September 2021. Prior to joining the Authority, she was employed with both government and private sector firms. In private practice Ms. Rojas was a member of the legal team who successfully defended Guam’s port agency against an invalid and unlawful multi-million-dollar arbitration award. Ms. Rojas has successfully argued and won both civil and criminal appeals in the Supreme Court of Guam and previously served as in-house counsel to Guam’s largest finance company. Ms. Rojas received her B.A. in Political Science and Economics from Gonzaga University in 2003 and her J.D., *cum laude*, from Thomas M. Cooley Law School, Western Michigan University in 2012. Prior to law school Ms. Rojas was a government auditor holding a Certified Government Financial Manager designation; now inactive.

The PUC Orders

In 2020, pursuant to an order (the “**2020 Order**”), the PUC ordered, among other things, certain annual base and non-lifeline rate increases for water and wastewater for Fiscal Years 2020 and 2021, and pro forma annual base, lifeline and non-lifeline rate increases for water and wastewater for Fiscal Years 2022-2024, subject to the completion of a comprehensive review and update of the Authority’s five-year financial plan for Fiscal Years 2020-2024 (the “**Comprehensive Review and Update**”) by May 1, 2021. Completion of the Comprehensive Review and Update required the completion of the following analytical studies by March 31, 2021: (i) a comprehensive econometric forecast of water sales volumes by customer class; (ii) a study regarding the advancement and expansion of water loss reduction measures, including documentation of water loss reductions achieved and a comprehensive five year water loss reduction plan for Fiscal Years 2020-2024 (the “**Water Loss Control Analytical Study**”); (iii) a water and wastewater cost of service and rate design study that independently examined the allocation of costs to all customer classes of both the water and wastewater systems; (iv) a household water affordability evaluation; (v) investigation of the availability and relative costs of alternative debt instruments (e.g., letters-of-credit or surety bonds) to fund debt service reserves and commercial paper or lines of credit to finance the Authority’s ongoing capital construction program; (vi) a review of the Authority’s current capitalized labor expense protocol; and (vii) a septic tank/cesspool review and analysis. The Authority completed the required Comprehensive Review and Update and analytical studies on time. The PUC considered the Comprehensive Review and Update and the Authority’s requested annual rate increases for Fiscal Years 2022-2024 in September 2022 (the “**2022 Order**”). Given the timing of such action, no rate increase was ordered for Fiscal Year 2022. Pursuant to the 2022 Order, the PUC ordered, among other things, base and non-lifeline rate increases for water and wastewater by 5.5% in Fiscal Year 2023 (effective October 1, 2022) and by 5.5% in Fiscal Year 2024 (effective October 1, 2023), subject to a true-up analysis for Fiscal Year 2024. On June 1, 2023, the Authority submitted its true-up submission for the Fiscal Year 2024 rates, requesting a 27.0% rate increase for basic, lifeline and non-lifeline rates, which would enable the Authority to, among other things, fund necessary operation and maintenance expenses, internally finance capital improvements, rebuild a modest level of rate stabilization reserve, and incrementally improve debt service coverage levels. After a review of the Authority’s true-up submission and in consultation with its technical consultant, Georgetown Consulting Group, Inc. (the “**Technical Consultant**”), the PUC subsequently ordered in September 2023 (the “**2023 Order**”) an overall increase to the base, lifeline and non-lifeline rates by 16.7% in Fiscal Year 2024 (effective October 1, 2023), deferring annual rate increases to partially replenish the Rate Stabilization Fund and

making adjustments for reductions to projected labor and power expenses. For more information, see “THE SYSTEM – Rates and Charges – 2020-2024 Rate Plan.”

Typhoon Mawar

On May 24, 2023, Typhoon Mawar struck Guam with winds exceeding 140 miles per hour. The Authority began pre-storm preparations on May 19, 2023, and continued operations throughout the storm. Pre-storm preparations included topping off reservoir levels, pre-staging emergency response equipment and supplies, securing facilities, and activating staff for duty at the Government of Guam Emergency Operations Center. The Authority estimates that approximately 20% of customers maintained water service throughout the storm and during the immediate post-storm recovery period. The Authority’s water production rate was never below 50% of normal. By June 4, 2023 (day 11) production was at 75% of normal with service restored to 62% of customers by June 6, 2023 (day 13). By June 17, 2023 (day 24) production rates were at 100% of normal with service restored to over 92% of customers. On June 23, 2023 (day 29), the Authority announced full water service restoration to all 19 municipalities.

During the storm, portions of the System experienced reduced pressure which can sometimes cause bacterial contamination. As a precautionary measure, the Authority issued a Precautionary Boil Water Notice on May 25, 2023, recommending customers boil water before drinking while the Authority worked to bring all production facilities back into service and replenish water tank levels to increase pressure in the System. The Authority conducted multiple rounds of sampling from GEPA-designated sampling points within all portions of the Authority’s distribution system that had water service and laboratory analysis of such samples confirmed the water was safe to drink. As of June 23, 2023, the Precautionary Boil Water Notice was lifted for all areas.

The Authority sustained approximately \$4.1 million in damage to its facilities as a result of the typhoon, with the majority of such damage sustained by larger wastewater collection, treatment and other facilities located in the north, consistent with the path of the storm. In addition, the Authority incurred approximately \$2.5 million in labor, material, equipment rental and other service costs in its response and recovery activities. The Authority is working with its insurers and the Federal Emergency Management Agency (“**FEMA**”) to recover reimbursable costs. On February 2, 2024, the Authority received an advance payment of \$1 million from its insurance carrier.

See also “CERTAIN INVESTMENT CONSIDERATIONS – Typhoons and Earthquakes.”

(Remainder of Page Intentionally Left Blank)

THE SYSTEM

The System is comprised of the Authority's water and wastewater systems, each of which is further described herein. The following table presents selected statistics regarding Authority operations for Fiscal Year 2023 (unaudited). See also "HISTORICAL AND PROJECTED OPERATING RESULTS." The Authority's Fiscal Year is currently October 1 – September 30.

Table 2
Selected Statistics
Fiscal Year 2023⁽¹⁾

Average Number of Water Customers	43,574
Average Number of Wastewater Customers	30,742
Annual Water Sales (million gallons)	5,062
Annual Wastewater Collection (million gallons)	3,754
Operating Revenues ⁽²⁾	\$106,821,609
Gross Investment in Utility Plant	\$1,238,168,612
Net Utility Plant Investment	\$812,761,289
Total Equity	\$331,733,348
Net Current Assets	\$105,204,887

⁽¹⁾ Unaudited.

⁽²⁾ Excludes revenues from System Development Charges. See "-- System Development Charges."

Source: *Guam Waterworks Authority*.

The Water System

The Authority's water supply system consists of: (i) 120 wells (93 of which were operating as of December 31, 2023; (ii) one active production spring (the "**Santa Rita Spring**"), as further as described below; (iii) one surface water treatment plant, the Ugum Water Treatment Plant (the "**Ugum WTP**"); (iv) one "Maui" well (the "**Tumon Maui Well**"), as further described below; (v) 29 booster pump stations, all of which are currently in service; (vi) 26 active reservoirs/tanks in service having a total active volume of 30.2 million gallons ("**mg**"); (vii) seven additional reservoirs under repair/rehabilitation with expected total active volume of 9 mg; (viii) approximately 586 miles, including some 2-inch distribution lines, of water distribution pipelines; and (ix) approximately 3,800 fire hydrants. In addition, the Authority has contracts in process for the construction of three additional reservoirs with expected total active volume of 7.0 mg. The Authority's water system does not include any documented/known lead pipes. The Authority is in the process of completing US EPA-required Lead Service Line Inventory in accordance with federal timelines.

Water Supply. Water sources on Guam include groundwater, surface water and springs, all of which are replenished by rainfall on Guam. Trade winds blow over Guam throughout the year and are responsible for significant rainfall and a relatively constant temperature between 76 and 88 degrees Fahrenheit throughout all seasons. Annual rainfall averages 80 inches in the western coastal area to 110 inches in the highest mountain locations in the south. Three-quarters of the total annual rainfall occurs between the months of June and December. Rain is the only source of fresh water for the island. According to the National Weather Service, total annual rainfall on Guam averaged approximately 102 inches in the last 20 years (2002-2023), with total annual rainfall at a high of approximately 140 inches in 2023.

Topographic features divide Guam into northern and southern areas. Because of the island's topography, potable water comes from groundwater in the northern portion of the island and primarily surface water in the southern portion of the island.

Groundwater. The Authority's groundwater wells provide approximately 86% of the Authority's water supply. In the north, a limestone plateau, bordered by steep cliffs, slopes southwesterly from an elevation of 600 feet to less than 100 feet at the midsection of the island. The plateau surface is generally flat and is interrupted by three hills: Barrigada Hill (elevation 665 feet), composed of a limestone dome, and Mount Santa Rosa (elevation

858 feet) and Mataguac Hill (elevation 630 feet), both composed of volcanic rock. There are no perennial streams within the northern area due to the permeability of the limestone. The main groundwater source is located under the plateau. The rainfall percolates through the limestone and forms a freshwater “lens” that floats at approximately sea level above deeper, higher density brackish and saltwater. Previous studies of the Guam aquifers have concluded that the freshwater lens under the northern part of the island can provide a maximum sustainable water supply of up to 80 million gallons per day (“**mgd**”). For Fiscal Year 2023, the Authority pumped an average of 35.5 mgd of groundwater, or about 44.4% of the sustainable yield, and the Navy and the United States Air Force (the “**Air Force**”) collectively pumped approximately 3.0 mgd of groundwater, indicating total groundwater extraction of approximately 38.5 mgd, or 48.1% of the sustainable yield.

Pursuant to the 2018 WRMP Update (as defined and further described herein), it is estimated that the Authority’s groundwater requirements will increase to approximately 39.1 mgd by 2025. In addition, the United States Department of Defense (the “**DOD**”) projected an additional need for 1.7 mgd to support the United States (“**U.S.**”) military realignment above the 3.4 mgd of groundwater pumped at that time. This would bring the total groundwater demand to 44.2 mgd, or 55.3% of the 80 mgd sustainable yield in 2025, assuming there are no improvements in water loss from current non-revenue water loss. The Authority is in the process of finalizing an interim update to the 2018 WRMP Update and anticipates that the 2024 WRMP Update (as defined and further described herein) will be submitted to the CCU in April 2024. See “FUTURE SYSTEM CAPITAL REQUIREMENTS – Water Resources Master Plan Updates.”

In December 2013, the United States Geological Survey (the “**USGS**”) completed a study of Guam’s groundwater resources to determine the impacts of climate scenarios and recharge on the sustainable yield, and also to assess the impacts of increased pumping to accommodate the proposed military realignment. The results indicated that the groundwater resources can be used to meet the anticipated future needs; however, the groundwater resources will need to be managed during an extended drought to maintain acceptable salinity levels. As a result of the Supplementary Environmental Impact Statement and Record of Decision for the U.S. military realignment (as further described herein), released by the DOD in 2015, the DOD and the Authority partnered in the rehabilitation of 13 existing and installation of seven new observation wells for the Northern Guam Lens Aquifer (the “**NGLA**”) for the purpose of improving data collection from the aquifer and management of the groundwater resources. This rehabilitation and installation work was completed in 2022. See also “FUTURE SYSTEM CAPITAL REQUIREMENTS – U.S. Military Realignment.”

Upon completion of the NGLA observation well project, the DOD and the Authority signed a *Memorandum of Agreement to Address the Co-Management and Protection of the Northern Guam Lens Aquifer* on October 21, 2022, with the stated objective of sustaining and improving the NGLA observation well system to protect Guam’s sole source aquifer, which serves both the DOD’s and the Authority’s water systems.

Wells are used to extract the groundwater for use. The Authority owns 120 wells, and well capacity varies from less than 100 gallons per minute (“**gpm**”) to over 500 gpm. The number of wells in service varies from day to day to meet system needs. As of December 31, 2023, of the 120 wells, 93 wells were operating to meet system demands, one well was in standby mode, two wells were secured (pending the addition of treatment for perfluorooctanesulfonic acid (“**PFOS**”) and perfluorooctanoic acid (“**PFOA**”) contamination), 16 wells were inactive, and eight wells were out of commission. Inactive wells are out of service due to pump or pump motor failure, and out-of-commission wells are out of service due to various reasons, including screen failure, casing failure, air production, etc. The inactive and out-of-commission wells are not considered necessary to meet the Authority’s daily water needs, and constitute 10.5% of the Authority’s 40.1 mgd of permitted well capacity. Most of the Authority’s wells are drilled to below sea level to “tap” the basal aquifer, a freshwater lens that extends below sea level. The capacity of individual basal aquifer wells averages approximately 230 gpm which is designed to avoid localized over-pumping of the aquifer. The 2018 WRMP Update includes an updated assessment of well conditions, building on previous assessments conducted in 2013 and 2014. The 2018 WRMP Update identifies several recommended capital improvement projects, including an on-going well rehabilitation program, well equipment overhaul program, capacity enhancement program for new well development and a well repair program to address pump upgrades, safety equipment upgrades, pump pedestal upgrades, replacement discharge piping, new chlorination equipment, electrical improvements and site work. The Authority also determined that many of the production flow meters measuring output at the wells were not functioning properly. The Authority completed the replacement of all 120 production flow meters in 2023. The Authority recently rehabilitated five wells, and has

completed the design to rehabilitate four additional wells, however, the Authority has placed this project on hold due to limited construction contractor availability.

As part of the One-Guam Initiative (as further described herein), the Authority operates the Navy-owned Tumon Maui well. A “Maui” well is a horizontal tunnel excavated at the groundwater surface for the collection of fresh potable water. The Tumon Maui well has a design flow rate of 1.3 mgd and typically supplies on average 1.0 mgd, approximately 2.6% of the Authority’s total annual water supply. The Authority also operates the Navy-owned Agafa Gumas well, which has a design flow rate of 0.36 mgd and typically supplies on average 0.25 mgd, approximately 0.7% of the Authority’s total annual water supply. See also “THE SYSTEM – One-Guam Initiative.”

The Authority also operates the water system for A. B. Won Pat International Airport Authority, Guam (“GIAA”). GIAA has three wells with two currently operational and a 1.5 mg storage tank. The wells are turned on and off as needed to keep the storage tank within the required levels since the well pumping capacity exceeds the airport demand. GIAA wells all have some level of contamination and include carbon filter treatment before water is pumped into the storage tanks. As of December 31, 2023, the average demand of the GIAA system is approximately 0.27 mgd.

Springs. The Authority owns five springs located in the southern and central areas of the island. Only one spring, the Santa Rita Spring, has been consistently used, producing approximately 0.77 mgd, or approximately 2.0% of the Authority’s total water supply. In addition, the Authority has a project planned to rehabilitate the currently inactive Asan Springs, which was built in 1929. The design phase has been completed and in order to move the project into construction, the Authority has undertaken additional environmental studies required in order to obtain construction and utility easements from the United States Department of the Interior, National Park Service, which owns land on which part of the reservoir is located. Based on historical data, Asan Springs should produce approximately 0.4 mgd.

Surface Water. Surface water sources comprise approximately 9% of the Authority’s total water supply. Generally, surface water resources are available in the southern portion of Guam. The southern portion of Guam is of volcanic origin and mountainous. A nearly continuous mountain ridge parallels the coastline from Piti (mid-island on the west side) to Guam’s southern tip. Several peaks in the ridge exceed 1,000 feet, with Mount Lamlam being the highest at 1,332 feet. The southern portion has more than 40 streams draining into the sea. The only large surface impoundment on the island for potable water, known as the Fena Valley Lake Reservoir, is located approximately 2.5 miles southeast of Santa Rita.

The Authority currently operates the Ugum WTP, which treats surface water collected from the Ugum River in southern Guam and supplies approximately 4.8% of the Authority’s total water supply. The design flow rate of the Ugum WTP is 4.0 mgd; however, the Ugum WTP cannot always operate at full capacity when flows in the Ugum River are low or there is high turbidity in the Ugum River due to heavy rainfall. The current production rate is approximately 1.8 mgd. Although the Authority has upgraded some of the systems at the Ugum WTP, additional upgrades are needed. The Authority is in the process of issuing a construction contract for a capital improvement project which includes construction of an additional reinforced concrete finished water storage tank and repair of the existing steel tank. In addition, an additional construction contract for rehabilitation and upgrades to the Ugum WTP major processes, river intake and pump station was approved by the PUC in September 2023.

To help supply its customers on the southern part of Guam, the Authority also purchases water from the Navy pursuant to the terms of a 1982 Memorandum of Agreement under which the Authority is permitted to purchase up to 4.39 mgd of water. After 2009, however, the Navy requested that the Authority work to reduce the total purchases to a maximum of 3.5 mgd. Although the Memorandum of Agreement has expired, the Authority and the Navy continue to operate in accordance with its provisions, while both parties undertake the development of a new utility service agreement, which is expected to be finalized in 2024. The Navy collects surface water in the Fena Valley Lake Reservoir and also obtains spring water from the Almagosa and Bona Springs. The surface water and spring water is then treated at the Fena Water Treatment Plant (the “**Fena WTP**”), which is owned by the Navy and operated by a private contractor.

In Fiscal Year 2023, the Authority purchased approximately 591 mg of water from the Navy, or approximately 4.1% of the Authority’s total demand. The Authority intends to continue reducing the use of Navy

water by repairing leaks and addressing flow and pressure issues within the System. The Authority’s projections for water to be purchased from the Navy in Fiscal Years 2024-2028 are set forth in Table 3 – “Historical and Projected Water Requirements.”

The Navy initially sets water rates for a full fiscal year and such rates are subject to periodic adjustments. Customers, including the Authority, are now required to prepay based on rates initially set by the Navy that may be adjusted on a quarterly basis. In Fiscal Year 2020, the Navy increased its rate for purchased water by approximately 8.06%, while the amount of water the Authority purchased from the Navy decreased by 18.6%. In Fiscal Year 2021, the Navy kept the same rate for purchased water while the amount of water the Authority purchased from the Navy increased by 19.15%. In Fiscal Year 2022, the Navy decreased its rate for purchased water by approximately 1.55% and the amount of water the Authority purchased from the Navy decreased by 15.7%. In Fiscal Year 2023, the Navy increased its rate for purchased water by approximately 2.8% and the amount of water the Authority purchased from the Navy increased by 24.11%. The total annual cost of water purchased from the Navy has averaged about \$5.8 million over the last five years.

If the Navy were to significantly increase rates, the Authority would expect to reflect those increased rates in its annual rate review by the PUC; however, no assurance can be given that the PUC would increase rates sufficient to address all increased purchased water costs. See “REGULATORY ENVIRONMENT – Regulation of Ratemaking.”

Water Requirements. The actual average supply requirement for the Authority’s System during Fiscal Years 2019 through 2022 was approximately 14,709 mg; however, average actual water billed in the System during the same period, based on the Authority’s water sales, was approximately 5,459 mg, meaning average annual unaccounted for (or non-revenue) water in the System during this time period was approximately 62.9% of the water delivered to the System. The difference between supply and consumption is due to leakage, malfunctioning production and/or customer meters, and water used for line flushing, hydrant tests and maintenance, fighting fires, and similar activities. See also “– Water Loss Control Program – *Non-Revenue Water.*”

The following table shows by sources and uses the Authority’s historical water requirements for Fiscal Years 2019 through 2022 based on audited billing information and for Fiscal Year 2023 based on unaudited billing information, and projected water requirements for Fiscal Years 2024 through 2028. Projected data reflect, among other things, the following: (i) with respect to Authority production, assumptions of annual reductions in production rates in certain wells to align with regulatory requirements, ongoing non-revenue water management efforts and prospective military realignment requirements; (ii) with respect to and Navy water purchases, assumptions of reduction of Navy water purchases where the Authority’s sources can be used, and implementation of pipe replacement/loss reduction projects in areas served by Navy sources; and (iii) with respect to billed water, conservative assumptions include 3.56% increase in billed water use for Fiscal Year 2024 relative to Fiscal Year 2023, and 1.55% average increase in billed water use for Fiscal Year 2025 through Fiscal Year 2029.

(Remainder of Page Intentionally Left Blank)

Table 3
Historical and Projected Water Requirements
Fiscal Years 2019 through 2028
(gallons in millions)

	Historical					Projections				
	2019	2020	2021	2022	2023 ⁽¹⁾	2024	2025	2026	2027	2028
Sources										
Authority Production ⁽²⁾	14,418	14,393	14,030	14,175	13,762	14,025	14,161	13,975	13,976	13,870
Purchases from Navy ⁽³⁾	582	554	565	476	591	491	550	526	522	481
Total Sources⁽⁴⁾	15,000	14,947	14,595	14,651	14,353	14,516	14,711	14,501	14,498	14,351
Uses										
Billed Water ⁽⁴⁾	5,855	5,758	5,340	5,280	5,062	5,242	5,431	5,462	5,516	5,574
Non-Revenue Water	9,145	9,189	9,255	9,371	9,291	9,274	9,280	9,039	8,981	8,777
Total Uses⁽⁵⁾	15,000	14,947	14,595	14,651	14,353	14,516	14,711	14,501	14,498	14,351

⁽¹⁾ Unaudited for Fiscal Year 2023.

⁽²⁾ Historical values for Fiscal Years 2019 through 2023 are based on the Authority’s water system production reports. Projections for Fiscal Years 2024 through 2028 are based on five-year actual annual average (2019-2023) with adjustments year over year to align production rates to permit values and general reductions from continued implementation of the water loss control program.

⁽³⁾ Historical values for Fiscal Years 2019 through 2023 are based on actual purchases. Fiscal Year 2023 values reflect increased purchases during post Typhoon Mawar response and recovery (see “THE AUTHORITY – Typhoon Mawar”). Projections for Fiscal Years 2024 through 2028 assume reductions from water loss are largely dependent on water line replacements and any immediate reductions will not be material.

⁽⁴⁾ Historical values for Fiscal Years 2019 through 2023 are based on billing data and includes post-billing adjustments. Projections for Fiscal Years 2024 through 2028 of billed volumes reflect conservative assumptions based on an analysis of historical raw billing data net of non-revenue accounts and do not include post-billing adjustments. These projections do not incorporate anticipated yet still uncertain increases in billed water volumes associated with prospective military realignment.

⁽⁵⁾ Totals may reflect rounding.

Source: Guam Waterworks Authority.

Water Distribution System. The Authority’s water distribution system includes an extensive network of transmission and distribution pipelines, booster pump stations, reservoirs/tanks and approximately 3,800 fire hydrants.

Pipelines. The existing piping network comprises approximately 586 miles of ductile iron, polyvinyl chloride (“PVC”), cast iron, asbestos cement, and galvanized steel pipe. Approximately 80 miles of piping is documented to have been installed prior to 1980, approximately 246 miles of piping was installed between 1980 and 2011, and approximately 260 miles of piping has no documented installation date but a significant portion is expected to be older piping installed during the Navy period of control. Up to 15 miles of piping is constructed of 2-inch diameter or smaller pipe, up to 7.5 miles of which may be constructed of galvanized steel, which is believed to be a significant source of System leaks due to the poor corrosion resistance of buried steel pipe and poor construction practices.

Booster Pump Stations. The Authority has 29 booster pump stations, all of which are currently in service. Twenty-one of the active booster pump stations are equipped with working emergency generators and eight are served by portable generators to ensure continued operation during power failures. The booster pump stations include 67 pumps, 94% of which were operational as of December 31, 2023.

The Authority assessed all water booster pump stations in 2013 and again as part of the 2018 WRMP Update (excluding pump stations that have been rehabilitated since 2013) and developed recommendations for prioritized upgrades to all systems. Since the 2013 assessment, 11 booster pump stations have been upgraded, and one pump station upgrade is currently in progress. Some of the upgrades have been completed as part of the Authority’s on-going capital improvement of water reservoirs. Rehabilitation of other pump stations is still required. The scope of the recommended improvements includes pump and mechanical upgrades, site improvements and structural and electrical upgrades. The 2020-2024 CIP (as defined and further described herein) includes projects for continued upgrades to the existing booster pump stations, which will nearly complete the recommended improvements. Improvements at the booster pump stations are intended to improve reliability and increase efficiencies.

Reservoirs. The Authority currently has 33 reservoirs, 26 of which are currently in active use having a total capacity of 30.2 mg and seven of which are currently off-line pending repair, rehabilitation or replacement having a total capacity of 9 mg. The Authority's reservoirs are predominantly ground-level reservoirs. New reservoirs are made from concrete while older reservoirs are made from steel. There are no steel-elevated reservoirs still in service. In addition, the Authority has contracts in process for the construction of three additional reservoirs with expected total capacity of 7 mg. Once the three additional reservoirs are completed and repairs are made to the off-line reservoirs, the Authority expects to have a total of 36 reservoirs having a total capacity of 46.2 mg.

The 2011 Court Order originally required a hydraulic analysis to assess the adequacy and guide the repair, rehabilitation, or replacement of 36 of the Authority's then-existing water storage reservoirs. The hydraulic analysis determined that some of the reservoirs should be demolished and replaced with new reservoirs while other reservoirs should be repaired or rehabilitated, which requires reservoirs to be taken offline and the use of pumped bypasses or temporary reservoirs to facilitate repairs. In 2023, the Guam District Court approved a revised hydraulic analysis submitted by the Authority, after review and concurrence by US EPA, determining that the repair/rehabilitation/replacement of four of the original 36 reservoirs were no longer hydraulically required due to improvements in the distribution network, thereby reducing the total number of reservoirs requiring capital improvements under the 2011 Court Order to 32. As of December 31, 2023, 20 reservoirs have been repaired or replaced with new reservoirs and 12 reservoirs remain to be completed (six are in the process of rehabilitation; three are currently under contract for new construction; and three are currently pending repair/replacement contracts). The deadline to complete this last project under the 2011 Court Order, which the Authority expects to meet, is December 31, 2025. For more information regarding the 2011 Court Order, see "REGULATORY ENVIRONMENT – Environmental Regulations – 2003 Stipulated Order and 2011 Court Order." Furthermore, three of the four reservoirs that are no longer hydraulically required are under contract for optional repair and/or rehabilitation.

The Wastewater System

General. The Authority provides wastewater services for a portion of Guam's general population, the Andersen Air Force Base, and some U.S. Naval facilities in the northern end of the island. The main U.S. Naval base located in southern Guam is served by its own wastewater collection and treatment system. For planning purposes, Guam is divided into seven wastewater districts based on population distribution and the topography of the island: Northern District, Hagåtña, Agat-Santa Rita, Umatac-Merizo, Inarajan, Baza Gardens and Pago Socio. The Authority's wastewater system includes six wastewater treatment plants and an extensive collection system.

Unlike the Authority's water system, which serves essentially the entire civilian population of Guam, there is a significant percentage of the population that is not served by the Authority's wastewater system. This is particularly true in the northern area of Guam, where many homes rely on individual septic tanks or other on-site disposal systems. Based on a comparison of the average number of water customers and wastewater customers for Fiscal Year 2023, approximately 12,832 customers, or approximately 29.4% of water system customers, that do not have sewer service.

Wastewater Collection Systems

General. The Authority's wastewater collection systems consist of approximately 316 miles of gravity sewer pipes and force main pipes that collect sewage and transport it to the six wastewater treatment plants. There are 84 wastewater pump stations (all of which were active as of December 31, 2023) with 186 individual pumps (83% of which were operational as of December 31, 2023) and 7,310 manholes. The older portions of the wastewater collection system date back to the 1940s. Although the majority of the piping material is PVC and asbestos cement, the system also includes concrete, iron, clay, and polyethylene plastic.

System Condition. The overall condition of the wastewater collection system is fair. Approximately 30% of the piping is constructed of asbestos cement, which has experienced accelerated rates of corrosion in certain sections of the system. Because of the poor condition of such piping, repair or replacement will be necessary for most of the asbestos cement piping in the future. The Authority has completed five projects over the past five years to address the asbestos cement piping issues by repairing or replacing approximately 11% of the asbestos cement pipe in the system, and more projects are planned.

The Authority completed infiltration and inflow analyses and sewer system evaluation surveys (“SSES”) for northern, central, and southern wastewater collection service areas, and subsequently initiated repairs of identified acute defects and correction of areas of infiltration and inflow. The Authority completed cleaning and closed circuit television (“CCTV”) inspections of the system in accordance with the requirements of the 2011 Court Order but maintains an on-going cleaning and CCTV program for maintenance of the wastewater collection system. A “hot spots” program was established to address areas identified with the SSES and CCTV work as requiring frequent cleaning, such as sags in the line. Intensive maintenance of these “hot spots” will continue until permanent repairs to the lines can be completed. The Authority utilized the information from these surveys, CCTV, and maintenance programs to inform capital improvements needed as part of the 2018 WRMP Update. The Authority’s capital improvement programs place significant emphasis on wastewater collection system repair and rehabilitation. As an example, the Authority recently completed a construction contract for the first phase of “hot spot” repairs and has also completed a \$30 million cured-in-place-pipe (“CIPP”) rehabilitation of nine miles of the Northern District WWTP sewer interceptor. Additionally, the Authority completed all construction for the two-phases of CIPP rehabilitation of gravity sewer mains from Asan to Hagatna in June 2022.

The Authority’s capital improvement programs include projects to rehabilitate or replace collection system elements to reduce the inflow into the sewer system and lower the flow rates in the collection system and into the wastewater treatment plants. The Interim CIP (as defined and further described herein) included and the 2025-2029 CIP (as defined and further described herein) is expected to include projects to rehabilitate wastewater pump stations and an ongoing supervisory control and data acquisition (“SCADA”) master plan project to provide centralized monitoring and reporting of the pump stations. See “FUTURE SYSTEM CAPITAL REQUIREMENTS – Capital Improvement Program.”

Wastewater Treatment Plants. The Authority owns and operates six wastewater treatment plants. Previously, the Authority had a seventh wastewater treatment plant, the Baza Gardens Wastewater Treatment Plant (the “**Baza Gardens WWTP**”); however, Baza Gardens WWTP was converted to a pump station and was decommissioned in December 2018. The following section describes the remaining wastewater treatment plants.

Northern District WWTP. The Northern District WWTP, one of the Authority’s two largest wastewater treatment plants, serves the northern area of Guam. The facility has an ocean outfall, constructed in 2009, consisting of a large diameter pipe extending approximately 1,958 feet away from shore to discharge treated effluent into the Philippine Sea at a depth of approximately 140 feet. The Northern District WWTP has a design capacity of 9.0 mgd and is currently treating approximately 4.87 mgd (approximately 42% of Guam’s average daily treatment).

The Northern District WWTP is operating in compliance with the current NPDES permit, most recently issued by the US EPA in 2020, which requires secondary treatment. The Authority completed a project to upgrade the Northern District WWTP to secondary treatment in August 2022.

In connection with the U.S. military realignment on Guam, it is expected that a new DOD wastewater collection system will be constructed on property owned by the DOD and tied into the Authority’s wastewater collection system. The wastewater will then be conveyed to the Northern District WWTP for treatment and disposal. In 2023, a portion of the recently constructed sewer collection system for the new Camp Blaz was tested and initial test flows were discharged to the Authority’s collection system. The U.S. military realignment is expected to increase wastewater flows by 1.2 mgd, which would have a significant indirect but manageable impact on the Northern District WWTP. See also “FUTURE SYSTEM CAPITAL REQUIREMENTS – U.S. Military Realignment.”

Hagåtña WWTP. The Hagåtña wastewater treatment plant (the “**Hagåtña WWTP**”), one of the Authority’s two largest wastewater treatment plants, serves the central area of Guam. The facility has an ocean outfall, constructed in 2008, consisting of a large diameter pipe extending approximately 2,120 feet away from shore to discharge the treated effluent into the Philippine Sea at a depth of approximately 275 feet. The Hagåtña WWTP has a design capacity of 12.0 mgd and is currently treating approximately 4.5 mgd (approximately 39% of Guam’s average daily treatment capacity).

The 2011 Court Order mandated that the Hagåtña WWTP comply with its then-existing NPDES permit. Accordingly, the Authority completed interim treatment improvements in 2013 and an upgrade of the plant to

provide chemically enhanced primary treatment in 2014. The Authority is currently in compliance with the 2011 Court Order with respect to the Hagåtña WWTP. However, the US EPA subsequently issued an NPDES permit for the plant that became effective on June 1, 2013 (the “**2013 Hagåtña Permit**”), which includes secondary treatment standards that the existing facility is unable to meet until secondary treatment upgrades are implemented. The 2013 Hagåtña Permit expired on May 31, 2018, and the US EPA issued the current NPDES permit in 2020. The current NPDES permit also requires secondary treatment standards. The Authority originally estimated that the design and construction necessary to satisfy the secondary treatment requirements would take approximately five years, and the cost of upgrading the Hagåtña WWTP would be approximately \$268 million (in 2023 dollars) based on planning conducted as part of the Authority’s 2018 WRMP Update. Under the 2024 Partial Consent Decree, however, the Authority is required to submit a feasibility study for secondary treatment upgrades to the Hagåtña WWTP to the US EPA by January 2031 for review and approval. The feasibility study is required to include analyses of design options, alternative locations, climate change and sea level rise, and planning level construction cost estimates and construction timelines. See “REGULATORY ENVIRONMENT – Environmental Regulations – 2024 Partial Consent Decree.”

Agat-Santa Rita WWTP. The Agat-Santa Rita wastewater treatment plant (the “**Agat-Santa Rita WWTP**”) was completed in 2018. It serves both the Agat-Santa Rita and the Baza Gardens wastewater districts. The Agat-Santa Rita WWTP has a design flow rate of 1.6 mgd during dry weather and 9.3 mgd during wet weather. The current average daily flow through Fiscal Year 2023 is 1.62 mgd. The effluent from the plant is sent through a combined outfall shared with the U.S. Navy’s Apra Harbor wastewater treatment plant and discharged to the ocean through the Tipalao Bay outfall. The outfall terminates at a diffuser located approximately 1,600 feet from shore at a depth of 125 feet. Flow from the recently closed Baza Gardens WWTP is treated at the Agat-Santa Rita WWTP. The Agat-Santa Rita WWTP is operating in compliance with the current NPDES permit, most recently issued by the EPA in 2020, which requires secondary treatment. The Authority has conducted infiltration and inflow analyses and SSES at the Agat-Santa Rita WWTP, which have shown reported instances of excessive infiltration and inflow enter into the sewer collection system. Some collection system repairs have been completed and other repair and rehabilitation projects are under way in Agat and Santa Rita to reduce such inflows. In addition, the upgraded Agat-Santa Rita WWTP includes sufficient equalization storage to meter wet-weather inflows so the plant operates within NPDES permit conditions.

Umatac-Merizo WWTP. The Umatac-Merizo wastewater treatment plant (the “**Umatac-Merizo WWTP**”) is located between the villages of Umatac and Merizo. An upgrade to the Umatac-Merizo WWTP was completed in January 2020 and included improvements to the aeration basin and overland percolation fields, as well as new pump station, upgrades to the existing pump station, a new effluent storage tank and disinfection facility. The plant has a permitted capacity of 0.6 mgd and a current average daily flow through Fiscal Year 2023 of 0.53 mgd. Treated effluent is discharged to the Toguan River.

Inarajan WWTP. The Inarajan wastewater treatment plant (the “**Inarajan WWTP**”) is located north of the village of Inarajan. The Inarajan WWTP has a design capacity of 0.19 mgd, less than 1% of the Authority’s wastewater treatment capacity, and the current daily flow is 0.11 mgd. Treated effluent is discharged to percolation basins. The Inarajan WWTP is not subject to a NPDES permit because the facility does not discharge to surface waters and is currently in compliance with applicable discharge requirements.

Pago Socio WWTP. The Pago Socio wastewater treatment plant (the “**Pago Socio WWTP**”) is the smallest wastewater treatment plant owned and operated by the Authority, providing less than 1% of the Authority’s wastewater treatment capacity. The Pago Socio WWTP does not discharge to surface water; influent is treated in a centralized septic tank and effluent is disposed via leach fields. The Pago Socio WWTP is not subject to an NPDES permit because the facility does not discharge to surface waters and is currently in compliance with applicable discharge requirements. The Authority plans to convert the Pago Socio WWTP to a pump station, abandon the plant and transfer the influent wastewater to the Hagåtña WWTP.

See also “REGULATORY ENVIRONMENT – Environmental Regulations – *Compliance with the CWA – Wastewater System*” and “FUTURE SYSTEM CAPITAL REQUIREMENTS.”

One-Guam Initiative

In 2016, the Authority, the CCU, Naval Facilities Engineering Command Marianas and Joint Region Marianas executed a memorandum of understanding (the “**2016 MOU**”) to explore mutually beneficial opportunities for partnering and integration of the water and wastewater utility systems (the “**One-Guam Initiative**”). The 2016 MOU establishes objectives relating to the implementation of water and wastewater utility service solutions devised to address the projected additional requirements and/or recapitalization efforts needed.

As a proof-of-concept for the One-Guam Initiative, the Navy granted a license to the Authority to operate the Navy-owned Tumon Maui Well in 2016, and the Authority agreed to provide a service connection for Camp Blaz from the Authority’s northern water distribution system (see “THE AUTHORITY – GENERAL” for more information regarding Camp Blaz). The Authority has been successfully operating the well and passing all quarterly inspections for operations and maintenance to the Navy standards, and the Navy has renewed the license annually since 2017. See “– The Water System – *Water Supply*.”

In 2019, the Navy granted another license to the Authority to operate the Navy-owned Agafa Gumas well. Through the One-Guam Initiative, the Authority and the Navy are currently working on longer-term leases for both production facilities, as well as the potential to increase production rates to Guam EPA-permitted maximums if needed. The Authority has been operating under annually-renewed licenses while the DOD evaluates the proposed lease.

The One-Guam Initiative continues to be a vehicle through which the Navy and the Authority achieve coordinated cooperation for utility operations, training, and capital improvements. The Authority and the Navy are currently discussing reservoir interconnections at key locations, joint drought response and management efforts, and a combined hydraulic model as the next integration and inter-operability initiatives. There have also been several shared training sessions amongst the respective staff of each entity, and a commitment to further pursue such activity going forward. The Authority and the Navy executed a *Memorandum of Agreement to Address the Co-Management and Protection of the Northern Guam Lens Aquifer* in October 2022 with the stated objective of sustaining and improving the NGLA observation well system to protect Guam’s sole source aquifer, which serves both DOD and GWA water systems. Following the aftermath of Typhoon Mawar, the Authority and the Navy executed the *Intergovernmental Support Agreement for Water and Wastewater Goods and Support Services* in July 2023, which establishes the terms and conditions under which the parties may provide each other mutual assistance of water and/or wastewater goods and support services for a period of 10 years. Finally, the Navy and the Authority continue to work on the development of an updated utility services agreement to formalize the manner in which the Authority and the Navy purchase water and wastewater services, which is expected to be finalized in mid-2024.

(Remainder of Page Intentionally Left Blank)

Customers

Water Customers. The following table shows water demand and water sales revenues by customer class for Fiscal Year 2023.

Table 4
Water Demand and Water Revenues by Customer Type
Fiscal Year 2023⁽¹⁾

Customer Type	Water Demand (million gallons)	Percent of Total Water Demand	Water Revenues	Percent of Total Water Revenues
Residential	3,185	62.9%	\$37,209	54.1%
Commercial	876	17.3	14,981	21.8
Hotel	555	11.0	9,046	13.2
Government & Federal	446	8.8	7,539	11.0
Total ⁽²⁾	5,062	100.0%	\$68,776	100.0%

⁽¹⁾ Unaudited.

⁽²⁾ Totals may not add due to rounding.

Source: Guam Waterworks Authority

Wastewater Customers. The following table shows wastewater flows and wastewater sales revenues by customer class for Fiscal Year 2023.

Table 5
Wastewater Flows and Wastewater Revenues by Customer Type
Fiscal Year 2023⁽¹⁾

Customer Type	Wastewater Flows (million gallons)	Percent of Total Water Demand	Wastewater Revenues	Percent of Total Water Revenues
Residential	1,906	50.8%	\$ 9,389	25.1%
Commercial	570	15.2	8,538	22.8
Hotel	377	10.0	8,100	21.6
Government & Federal	900	24.0	11,451	30.6
Total ⁽²⁾	3,754	100.0%	\$37,479	100.0%

⁽¹⁾ Unaudited.

⁽²⁾ Totals may not add due to rounding.

Source: Guam Waterworks Authority

Largest Customers. The following two tables show the Authority's 10 largest water customers and wastewater customers, respectively, by revenue for Fiscal Year 2023.

**Table 6
Ten Largest Water Customers
for Fiscal Year 2023⁽¹⁾**

Customer Name	Annual Revenue	Percent of Annual Gross Revenue
1. DEPARTMENT OF EDUCATION ⁽²⁾	\$ 3,279,496	4.77%
2. PACIFIC ISLANDS CLUB	1,287,493	1.87
3. UNIVERSITY OF GUAM	885,893	1.29
4. OUTRIGGER GUAM RESORT	814,170	1.18
5. HOTELS OF THE MARIANAS INC (HILTON)	775,326	1.13
6. HYATT REGENCY GUAM	713,869	1.04
7. GUAM POWER AUTHORITY	692,774	1.01
8. TANOTA DEVELOPMENT LLC (DUSIT)	653,931	0.95
9. MDI GUAM CORPORATION (LEO PALACE)	643,942	0.94
10. THE WESTIN RESORT GUAM	639,428	0.93
Total ⁽³⁾ :	\$10,386,321	15.10%

⁽¹⁾ Unaudited.

⁽²⁾ Includes all 41 public schools and administrative and support facilities.

⁽³⁾ Total may reflect rounding.

Source: Guam Waterworks Authority.

**Table 7
Ten Largest Wastewater Customers
for Fiscal Year 2023⁽¹⁾**

Customer Name	Annual Revenue	Percent of Annual Gross Revenue
1. AIR FORCE DOD	\$ 5,784,105	14.40%
2. DEPARTMENT OF EDUCATION ⁽²⁾	1,980,186	4.16
3. NAVY DOD	1,676,508	5.37
4. OUTRIGGER GUAM RESORT	886,380	2.99
5. HOTELS OF THE MARIANAS INC (HILTON)	825,224	2.45
6. HYATT REGENCY GUAM	762,650	2.20
7. TANOTA DEVELOPMENT LLC (DUSIT)	700,028	1.85
8. THE WESTIN RESORT GUAM	681,000	1.79
9. GERSHMAN, BRICKNER & BRATTON, INC.	662,279	1.78
10. PACIFIC ISLANDS CLUB	614,798	1.72
Total ⁽³⁾ :	\$14,573,159	38.71%

⁽¹⁾ Unaudited.

⁽²⁾ Includes all 41 public schools and administrative and support facilities.

⁽³⁾ Total may reflect rounding.

Source: Guam Waterworks Authority.

New Water and Sewer Installations

The following two tables summarize the new water installations and new sewer installations, respectively, for the Fiscal Years 2019 through 2023.

Table 8
New Water Installations
Fiscal Years 2019-2023

Customer Type⁽²⁾	2019	2020	2021	2022	2023⁽¹⁾
Residential	252	223	310	330	304
Government	2	1	0	1	1
Commercial	24	5	7	9	8
Agricultural	4	0	3	6	3
Total	282	229	320	346	316

⁽¹⁾ Unaudited for Fiscal Year 2023.

⁽²⁾ Does not include irrigation, hotel, federal or golf course customer types, for which there were no new water installations in Fiscal Years 2019-2023.

Source: Guam Waterworks Authority.

Table 9
New Sewer Installations
Fiscal Years 2019-2023

Customer Type⁽²⁾	2019	2020	2021	2022	2023⁽¹⁾
Residential	73	63	65	60	72
Government	0	0	0	2	0
Commercial	8	2	4	3	6
Total	81	65	69	65	78

⁽¹⁾ Unaudited for Fiscal Year 2023.

⁽²⁾ Does not include hotel or federal customer types, for which there were no new sewer installations in Fiscal Years 2019-2023.

Source: Guam Waterworks Authority.

System Development Charges

Public Law 26-164, enacted in 2003, required the Authority to develop and implement Water and Sewer System Development Charges (“**System Development Charges**” or the “**SDCs**”). After approval by the CCU and the PUC, the SDCs were implemented in March 2010. SDCs are one-time fees assessed on each user connecting property to the Authority’s water or wastewater systems, as applicable, for the first time or on each builder if the density of development on an existing connection is increased. SDCs are payable at the time of construction permitting; however, certain qualified residential customers are allowed to amortize SDCs over a specified time period. Although SDCs may vary depending on water meter size, a typical combined water and wastewater SDC for a new residential connection is \$5,600, and a typical combined water and wastewater SDC for a new commercial connection is \$14,002 for a 1-inch meter size.

Revenues generated by SDCs are not included in the Revenues pledged under the Indenture but are to be applied to the costs associated with the construction, expansion, upgrading and repair of water and wastewater facilities resulting from such connections or to pay the principal of, interest on and other financing costs related to, debt obligations incurred by or on behalf of the Authority.

The following table sets forth SDC revenues billed by the Authority for the Fiscal Years 2019 through 2023.

Table 10
Water and Sewer System Development Charges
Fiscal Years 2019-2023

<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023⁽¹⁾</u>
\$ 885,513	\$ 756,338	\$ 1,596,459	\$ 1,245,361	\$ 1,359,167

⁽¹⁾ Unaudited for Fiscal Year 2023.
Source: Guam Waterworks Authority.

The Authority expects to pay for a portion of its capital improvement program with revenues generated from SDCs. See “FUTURE SYSTEM CAPITAL REQUIREMENTS – Capital Improvement Program” and APPENDIX B – “FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022,” Note 14.

Water Loss Control Program

Non-Revenue Water. One of the Authority’s continuing priorities is reducing the level of the System’s non-revenue water. Non-revenue water is defined by the American Water Works Association as “unbilled authorized consumption (e.g., water for firefighting and flushing), plus apparent losses (e.g., customer meter inaccuracies, unauthorized consumption and systematic data handling errors), plus real losses (e.g., system leakage and storage tank overflows).” In other words, non-revenue water is the difference between the amount of water put into the distribution system and the amount of water billed to customers. As set forth in the 2018 WRMP Update, the Authority set a goal of reducing its non-revenue water level to 40% by 2024 and to 20% by 2037. The Authority’s level of non-revenue water for Fiscal Year 2023 was approximately 64.5%, with 59% attributable to real losses.

The Authority completed the Water Loss Control Analytical Study in 2021 as one of the analytical studies required to support the Comprehensive Review and Update (see “THE AUTHORITY – The PUC Orders”). The study determined that national water industry organizations have recently moved away from using percentage non-revenue water as a suitable performance indicator for water loss control; instead, the American Water Works Association supports the use of the key performance indicator of real losses in gallons per connection per day. The Authority has adopted this recommendation and is using this metric for annual reporting to the PUC in addition to the percentage non-revenue water metric. As of October 2023, real losses were 448 gallons/connection/day or 54%.

One component of properly assessing the Authority’s non-revenue water is appropriate data collection and handling. The Authority began using the water audit methodology outlined by the American Water Works Association, known as the M36 Water Audits and Loss Control Programs in 2012. Use of the M36 water audit process has enabled the Authority to properly collect and record financial and operational data necessary to determine accurate water loss, identify other issues affecting non-revenue water (such as authorized but unbilled consumption) and better understand the amount of real losses. The Authority has used this data to drive the components of its water loss control program, as further described below.

Components of Water Loss Control Program. With the original goal of reducing the level of the System’s non-revenue water, the Authority initially focused on a project-based approach, completing leak detection projects and training personnel to sustain an ongoing leak detection program. Although significant improvements were made, the age and condition of the System continued to impact the level of non-revenue water. The Authority then shifted its focus from a project-based approach to the current process-based approach through its water loss control program (the “**Water Loss Control Program**”). The Water Loss Control Program includes efforts to reduce leak repair times, enhance and sustain a leak detection program, install master meters and create district metered areas, realign pressure zones, and enhance the ongoing line replacement program, each of which are further described below.

Leak Repair. One of the main sources of non-revenue water (water loss) is water leaks in the System. Leak repair has been a priority for the Authority. The Authority has added personnel to deploy more leak repair

crews, and increased available equipment resources, including contracted equipment services, to improve response and repair times. In the past five years, the Authority has reduced its daily leak repair work order backlog by more than 95%, from over 330 open work orders per day in 2018 to fewer than 15 open work orders per day in 2023 through December 31, 2023.

Leak Detection Program. In 2019, the Authority augmented a leak detection program that was originally implemented in 2012 to find and repair leaks in the distribution system. Additional staff, updated and additional equipment, and training were allocated to the program in 2019. In addition, the Authority expanded its tools through the use of remote (satellite) leak detection, in a year-long pilot test, to evaluate the efficacy of this technology to detect leaks in portions of the distribution system for which the Authority may not have documentation for existing water lines (e.g., former military installations). Continued development of the leak detection capabilities, used in conjunction with other components of the Water Loss Control Program, such as district metered areas, have enhanced the Authority's ability to conduct water loss reduction campaigns. The Authority currently has two full-time leak detection teams with additional equipment and training, and expects to have a third full-time leak detection team in Fiscal Year 2024.

Master Meters and District Metered Areas. In 2014, the Authority initiated a program to install master meters in the distribution system to help identify water use and water loss. By 2016, the Authority had only installed approximately seven master meters, or approximately 10% of the planned amount. The Authority experienced many challenges with completing the master meter installations as originally planned and subsequently redirected its efforts. The planned master meter installations are now part of the Pressure Zone Realignment Plan, as further described herein. See “– Pressure Zone Realignment” below.

In 2019, the Authority initiated a pilot test to reduce water losses using master meters at discrete areas to track supply and consumption and to identify significant differences between them. The Authority used master meters at three distinct and easily isolated areas (each, a “**District Metered Area**”). Using the master meters that had been installed in each District Metered Area, the Authority compared water supply data and customer consumption to identify leaks and focus its leak detection efforts. The results of the pilot test indicated that in these three District Metered Areas, reduction in water loss ranged from 30% to 61% with an average of 45% across all three District Metered Areas. The Water Loss Control Analytical Study, one of the required analytical studies completed in 2021 to support the Comprehensive Review and Update (see “THE AUTHORITY – The PUC Orders”), recommended full implementation of 36 District Metered Areas throughout the Authority's distribution system with a comprehensive permanent leak detection program. In July 2021, the Authority engaged a contractor for the island-wide implementation of District Metered Areas and technical assistance with standing up the recommended leak detection campaigns and loss control program. The Authority is currently at the end of the second year of the implementation program and has completed 21 of 36 District Metered Areas with plans to complete the remaining 15 District Metered Areas by 2025. The Authority is monitoring flows and conducting leak detection surveys in all but one of the established District Metered Areas. The additional District Metered Areas will be established as work on the installation of metering equipment proceeds under the Pressure Zone Realignment program. See “– Pressure Zone Realignment” below. Data gathered from this program indicates that the majority of leaks detected and repaired are in smaller diameter service laterals that are beyond their useful service life; the Authority has accordingly focused capital replacement for water lines to align with the findings of the Water Loss Control Program.

Pressure Zone Realignment. In 2015, the Authority developed a Pressure Zone Realignment Plan (the “**Pressure Zone Realignment Plan**”) focused on enhancing the distribution system and improving service delivery by aligning service areas to the appropriate service pressures through the creation and/or adjustment of pressure zones within the distribution system. Pressure zone realignment is expected to improve service pressures throughout the island, which would contribute to reduced water loss by minimizing background leaks caused by overpressure in certain water service areas. The design of improvements to implement the Pressure Zone Realignment Plan, including the integration of master meter installations where appropriate, was completed in 2019. A construction bid was issued in 2019 and the construction contract for the first phase of the improvements was awarded in March 2020. As of December 2023, construction of the first phase is 94% complete. Phase 2 design work is 100% complete and the construction bid package is currently being prepared. Phase 3 design work is 60% complete.

Line Replacement Program. The Authority initiated a line replacement program in 2012. To date, the Authority has replaced approximately 21 miles of line in four phases. A fifth phase, which will replace approximately 7.25 miles of line, is pending. In addition to this line replacement program, the 2020-2024 CIP includes approximately \$20 million for replacing asbestos cement pipes and 2-inch galvanized pipes. The Authority has three multi-year, task-order-based design contracts for these water line replacement programs currently awarded with initial Task Orders pending issuance. Additional design task orders under each contract will be executed once the initial task order for project assessment and prioritization is completed.

Production Meters. Production meters record the volume of groundwater pumped into the System. However, faulty production meters have resulted in under- and over-reporting of water production, which impacts non-revenue water calculations. In 2017, the Authority initiated a project to verify production meter performance and to develop plans to replace failed and underperforming meters at the Authority's groundwater well sites. The Authority issued a contract in April 2020 to replace production meters and above-ground piping at 30 of 60 wells identified as needing meter replacements. The project was completed in 2023. Contracts have not yet been awarded for the remaining 30 wells.

2020 and 2022 Orders. The 2020 Order identified specific targets and objectives regarding water loss reduction for Fiscal Years 2020-2024, including, among other things: (i) accelerating planned water line replacements, implementation of district metering areas and other high priority measures; (ii) continuing to work with water loss experts to identify implementable loss reduction measures and appropriate reduction targets; and (iii) providing annual reports to the PUC on the Water Loss Control Program results achieved. The Authority has complied with items (i) through (iii), including the completion of the Water Loss Control Analytical Study. The 2022 Order, which superseded the 2020 Order, requires the Authority to proceed with the projects identified in the Water Loss Control Analytical Study and to provide semi-annual reports on the implementation status of the District Metered Areas and water loss control initiatives. Under the 2022 Order, the Authority is no longer required to comply with item (iii). See "THE AUTHORITY – The PUC Orders."

Rates and Charges

General. The Authority and the CCU establish water and wastewater rates and charges and present them to the PUC for regulatory review and approval. Generally, PUC approval of a proposed rate plan includes an annual true-up analysis to evaluate the necessary level of rate adjustment based on actual financial performance; therefore, while the PUC may approve a rate plan, annual rate adjustments are typically subject to the results of the true-up analysis.

Water Rates. The Authority's water rates consist of a base monthly water charge (the "base rate") that varies according to meter size and a volumetric charge based on water consumption. Residential customer volumetric rates consist of a "lifeline rate" for monthly usage of up to 5,000 gallons, and a "non-lifeline rate" for monthly usage above 5,000 gallons. Approximately 52% of the Authority's residential customers use less than 5,000 gallons per month and only pay the lifeline rate. Water rates for commercial/government and agriculture/irrigation have the same rate structure for basic monthly water charges. Volumetric charges consist of a uniform rate per 1,000 gallons for commercial/government customers and another uniform rate per 1,000 gallons for agriculture/irrigation customers. Adjustments to the lifeline rate are only allowed when the Authority's cost of service increases by 20% following the year of the most recent adjustment to the lifeline rate.

Wastewater Rates. The Authority's wastewater rates consist of a flat monthly rate for residential customers and a volume-based rate for commercial, government and federal customers. The volume charged is 80% of water consumption.

Legislative Surcharge. A "legislative surcharge" or "retirement benefits surcharge" is assessed on the portion of water and wastewater bills subject to the non-lifeline rate. Revenues from the legislative surcharge are used to pay retiree benefits. The legislative surcharge is subject to an annual true-up that adjusts the charge to match the actual retiree benefit cost. Revenues from the legislative surcharge were approximately \$3.01 million in Fiscal Year 2022 and \$3.1 million in Fiscal Year 2023. The current legislative surcharge for Fiscal Year 2024, effective October 1, 2023, is 3.8%.

Historical Rate Plans. Between April 2004 and October 2017, the Authority adjusted its basic and non-lifeline water and wastewater rates 14 times. Since 2009, the Authority has successfully filed two rate petitions, the 2009-2013 rate plan and the 2014-2018 rate plan, both of which were approved by the CCU and the PUC. The 2009-2013 rate plan included proposed annual rate increases for base, lifeline and non-lifeline water and wastewater rates for Fiscal Years 2009 through 2013. The 2009-2013 rate plan had a compounded rate increase through Fiscal Year 2013 of 47.5%. The PUC approved and implemented all proposed annual rate increases for Fiscal Years 2009 through 2013. The 2014-2018 rate plan included proposed annual rate increases for base, lifeline and non-lifeline water and wastewater rates for Fiscal Years 2014 through 2018. The 2014-2018 rate plan had a compounded rate increase through Fiscal Year 2018 of 65.1%. The PUC approved and implemented the proposed annual rate increases for Fiscal Years 2014, 2015, 2016 and 2018, and approved and implemented a lower rate increase than the proposed amount in Fiscal Year 2017.

2020-2024 Rate Plan. The Authority completed a five-year financial plan and rate application for Fiscal Years 2020-2024 in April 2019. The rate application proposed base, lifeline and non-lifeline water and wastewater rates increases for Fiscal Years 2020-2024. The CCU approved the financial plan and rate application on June 5, 2019, and the Authority subsequently petitioned the PUC for consideration of the financial plan and rate application on July 6, 2019. The PUC engaged the Technical Consultant to review the rate application, and the Authority and the Technical Consultant prepared a joint stipulation, including a revised five-year financial plan and a revised rate plan (the “**2020-2024 Financial Plan**”). The 2020-2024 Financial Plan assumed that the proposed rate increase for Fiscal Year 2020 would be in place for the full Fiscal Year. The PUC approved and incorporated the joint stipulation into its order on February 27, 2020 (the “**2020 Order**”); however, the PUC only approved a partial-year implementation of the proposed rate increase for Fiscal Year 2020.

Pursuant to the 2020 Order, the Authority increased the base rate and non-lifeline rate for water and wastewater by 5.0% in Fiscal Year 2020 (effective March 1, 2020) and by 5.0% in Fiscal Year 2021 (effective October 1, 2020). The lifeline rate did not change for Fiscal Year 2020 and Fiscal Year 2021. In addition, the Fiscal Year 2021 rates were not subject to an annual true-up analysis by the PUC to adjust the rate increase based on actual financial performance.

Although the Authority and the Technical Consultant agreed to pro forma annual base, lifeline and non-lifeline rate increases for Fiscal Years 2022, 2023 and 2024, such rate increases were not final at that time. The PUC ordered the completion of the Comprehensive Review and Update, which required the completion of certain analytical studies. See “THE AUTHORITY – The PUC Orders.” The Authority timely submitted the required analytical studies on March 31, 2021 and the Comprehensive Review and Update and updated financial plan on May 1, 2021. The updated financial plan at that time included proposed annual rate increases for Fiscal Years 2022-2024, which were subsequently modified. On December 3, 2021, the Authority submitted a modified financial plan requesting an effective rate increase of 8.1% based on a new rate design structure for Fiscal Year 2022 and 6.5% for Fiscal Years 2023 and 2024.

The PUC considered the Comprehensive Review and Update and the Authority’s requested annual rate increases for Fiscal Years 2022-2024 in September 2022. Given the timing of such action, no rate increase was ordered for Fiscal Year 2022 and consideration of the proposed rate design structure changes was deferred. Pursuant to the 2022 Order, the PUC ordered, among other things, base and non-lifeline rate increases for water and wastewater by 5.5% in Fiscal Year 2023 (effective October 1, 2022) and by 5.5% in Fiscal Year 2024 (effective October 1, 2023), subject to a true-up analysis for Fiscal Year 2024. There were no changes to the lifeline rates. On June 1, 2023, the Authority submitted its true-up submission for the Fiscal Year 2024 rates, requesting a 27.0% rate increase for basic, lifeline and non-lifeline rates, which would enable the Authority to, among other things, fund necessary operation and maintenance expenses, internally finance capital improvements, rebuild a modest level of rate stabilization reserve, and incrementally improve debt service coverage levels. After a review of the Authority’s true-up submission and in consultation with the Technical Consultant, the PUC subsequently ordered in September 2023 an overall increase to the base, lifeline and non-lifeline rates by 16.7% in Fiscal Year 2024 (effective October 1, 2023).

The Authority used revenues generated by the rate adjustments pursuant to the 2020-2024 rate plan to finance capital improvement program projects, to ensure compliance with the Rate Covenant and the temporary minimum debt service coverage ratio of 1.3x authorized by the CCU and PUC in February 2021 (see “– Debt Service Coverage – *CCU and PUC Debt Service Coverage Ratio Policies*”), and to allow for more gradual increases in the Authority’s rates in the future, thereby minimizing sudden rate increases for the Authority’s ratepayers to the extent possible.

Rate Adjustments. The following table sets forth the Authority’s rate adjustments, their effective dates, and principal reasons for such adjustments in the last 10 years.

Table 11
Summary of Rate Adjustments Approved Since 2013⁽¹⁾

Effective Date	Rate Adjustment		Principal Reason for Adjustment
	Water	Wastewater	
February 1, 2013 ⁽²⁾	6.10%	6.10%	Base rate increase to enable sufficient net revenues in order to meet relevant debt service coverage policies and Indenture requirements.
November 1, 2013	15.00%	15.00%	Base rate increase to finance projects required under 2011 Court Order and to enable sufficient net revenues in order to meet relevant debt service coverage policies and Indenture requirements.
December 1, 2014	14.50%	14.50%	Base rate increase to enable sufficient net revenues in order to meet relevant debt service coverage policies and Indenture requirements.
October 1, 2015	16.50%	16.50%	Base rate increase to enable sufficient net revenues in order to meet relevant debt service coverage policies and Indenture requirements.
October 1, 2016 ⁽²⁾	3.50%	3.50%	Base rate increase to enable sufficient net revenues in order to meet relevant debt service coverage policies and Indenture requirements. The PUC approved a 7% increase, but the Authority reduced the increase to 3.5% after true-up.
October 1, 2017	4.00%	4.00%	Base rate increase to enable sufficient net revenues in order to meet relevant debt service coverage policies and Indenture requirements.
March 1, 2020	5.00%	5.00%	Base rate increase for funding remaining 2011 Court Order projects and planned CIP, and to meet relevant debt service coverage policies and Indenture requirements.
October 1, 2020	5.00%	5.00%	Base rate increase for funding planned CIP, and to meet relevant debt service coverage policies and Indenture requirements.
October 1, 2022	5.50%	5.50%	Base rate increase for funding planned CIP, and to meet relevant debt service coverage policies and Indenture requirements.
October 1, 2023 ⁽²⁾	16.70%	16.70%	Base rate increase for funding planned CIP, and to meet relevant debt service coverage policies and Indenture requirements.

⁽¹⁾ Covers base and non-lifeline rate water and wastewater rate adjustments only.

⁽²⁾ In February 2013, October 2016, and October 2023 the lifeline rate was also increased. Adjustments to the lifeline rate are only allowed when the Authority’s cost of service increases by at least 20% following the year of the most recent adjustment to the lifeline rate. See “– Water Rates.”

Source: Guam Waterworks Authority.

2025-2029 Rate Plan. The Authority is in the process of preparing its five-year financial plan and rate application for Fiscal Years 2025-2029 (the “**2025-2029 Financial Plan**”), which is expected to include proposed annual rate increases for Fiscal Years 2025-2029 ranging from 10.0% to 30.0%. The proposed annual rate increases are expected to address, among other things, anticipated 2025-2029 CIP costs and increased labor and pension costs. The 2025-2029 Financial Plan takes into account the requirements of the 2024 Partial Consent Decree. **The 2025-2029 Financial Plan is expected to be submitted to the CCU for consideration on or around February 27, 2024. If the CCU takes action with respect to the 2025-2029 Financial Plan on or around such date, the Authority expects to provide a supplement to this Preliminary Official Statement that will briefly summarize such action, which is expected to include information regarding proposed annual rate increases for Fiscal Years 2025-2029.** A draft of the 2025-2029 Financial Plan will be provided to the PUC for initial review on or around March 4, 2024, and formally submitted in June 2024 following completion of certain public notice requirements with respect to proposed rate annual increases in accordance with the Ratepayers’ Bill of Rights. The Authority anticipates that the PUC will approve the 2025-2029 Financial Plan in September 2024.

The Authority has submitted a separate petition to the PUC to approve a new rate design structure for water and wastewater rates, which includes the following: (i) adoption of new meter-size scaled base charges for wastewater service applicable across all customer classes; (ii) adoption of inclining three-tiered residential volumetric water rates, and (iii) adoption of new residential sewer volumetric rate structure. The Authority anticipates that the PUC will take action on this matter on or around February 22, 2024. If approved by the PUC, the Authority anticipates the proposed rate design structure would be effective for Fiscal Year 2026 at the earliest.

Billing, Collections and Enforcements

The following three tables show a comparison of the Authority’s typical monthly water, wastewater and combined water and wastewater bills, respectively, for selected residential, commercial and large commercial usage levels to bills charged by other water and wastewater utilities based on available data from January 2024. In Fiscal Year 2023, based on the Authority’s current rate structure, approximately 54% of residential customers used 5,000 gallons or less each month and qualified for the lifeline rate for monthly usage of up to 5,000 gallons. See “– Rates and Charges – *Water Rates.*”

**Table 12
Typical Monthly Water Bills⁽¹⁾**

Utility	5,000 gal/mo. Residential (3/4” meter) ⁽²⁾	7,500 gal/mo. Residential (3/4” meter) ⁽²⁾	35,000 gal/mo. Commercial (1” meter)	1,200,000 gal/mo. Large Commercial (4” meter)
Guam Waterworks Authority	\$49.33	\$87.17	\$695.39	\$22,711.76
Samoa Power Authority	30.38	43.09	250.73	8,276.93
City and County of Honolulu Board of Water Supply	36.76	49.89	199.73	6,425.92
Commonwealth Utilities Commission – CNMI ⁽³⁾	35.10	48.75	224.06	9,853.09
County of Hawaii Department of Water Supply ⁽⁴⁾	47.07	60.60	240.26	6,995.45
County of Kauai Department of Water	46.90	59.03	203.10	6,093.25
County of Maui Department of Water Supply	47.45	57.98	275.83	7,638.63

⁽¹⁾ Based on available data from January 2024. The Authority’s data is based on Fiscal Year 2024 rates.
⁽²⁾ County of Hawaii and County of Maui are based on use 5/8-inch meters (the predominant meter size for single-family residences).
⁽³⁾ Includes a water electric charge.
⁽⁴⁾ Includes a power cost charge.
Source: *Guam Waterworks Authority.*

Table 13
Typical Monthly Wastewater Bills⁽¹⁾

Utility	Residential 5,000 gal/mo.⁽²⁾	Residential 7,500 gal/mo.⁽²⁾	Commercial 35,000 gal/mo.⁽²⁾	Large Commercial 1,200,000 gal/mo.⁽²⁾
Guam Waterworks Authority⁽³⁾	\$32.14	\$32.14	\$290.35	\$24,254.32
Samoa Power Authority	25.60	25.60	463.72	15,898.72
City and County of Honolulu Dept. of Environmental Services ⁽⁴⁾	96.07	105.33	463.24	14,784.80
Commonwealth Utilities Commission – CNMI ⁽⁵⁾	24.29	34.79	185.21	6,068.46
County of Hawaii Department of Environmental Management	52.00	52.00	223.50	9,076.50
County of Kauai Department of Public Works ⁽⁶⁾	66.50	66.50	138.75	14,831.00
County of Maui Department of Environmental Management ⁽⁷⁾	39.00	39.00	264.25	13,104.50

⁽¹⁾ Based on available data from January 2024. The Authority’s data is based on Fiscal Year 2024 rates.

⁽²⁾ Value shown is metered water consumption. The Authority, City and County of Honolulu and County of Hawaii base sewer bills on 80% of metered water consumption.

⁽³⁾ Assumes use of commercial 1 rate for Commercial Customer and commercial 2 rates for the Large Commercial customer.

⁽⁴⁾ Assumes total suspended solids of 600 mg/L for the Large Commercial (hotel with restaurant).

⁽⁵⁾ Includes a wastewater electric charge.

⁽⁶⁾ Assumes use of group I commercial rate for the Commercial Customers and hotel with restaurant rate for Large Commercial customers.

⁽⁷⁾ Assumes a single meter Commercial/Government/Religious rate for Commercial and single meter hotel rate for Large Commercial customers.

Source: Guam Waterworks Authority.

Table 14
Typical Monthly Water and Wastewater Bills⁽¹⁾

Utility	Residential 5,000 gal/mo.	Residential 7,500 gal/mo.	Commercial 35,000 gal/mo.	Large Commercial 1,200,000 gal/mo.
Guam Waterworks Authority⁽¹⁾	\$81.47	\$119.31	\$985.74	\$46,966.09
Samoa Water Authority	55.98	68.69	714.45	24,175.65
City and County of Honolulu Board of Water Supply	132.83	155.22	662.97	21,210.72
Commonwealth Utilities Commission – CNMI	59.39	83.54	409.27	15,921.55
County of Hawaii Department of Water Supply	99.07	112.60	463.76	16,071.95
County of Kauai Department of Water	113.40	125.53	341.85	20,924.25
County of Maui Department of Water Supply	86.45	96.98	540.08	20,743.13

⁽¹⁾ Based on available data from January 2024. The Authority’s data is based on Fiscal Year 2024 rates.

Source: Guam Waterworks Authority.

Customers have several options for paying their bills, including but not limited to in-person at the Authority’s physical customer service centers, by mail and via a payment dropbox, and through the Authority’s telephone payment system (implemented in 2010) or online payment system (implemented in 2010 and recently modernized in 2020), including via a mobile application. These different payment methods have contributed to the Authority maintaining a high collection ratio since 2010. The Authority has also implemented a late payment collection program. Under the program, all bills are due 15 days after the billing date and the Authority may discontinue service for non-payment upon providing advance written notice at least 10 days prior to the termination date. Furthermore, the program requires the Authority to make all reasonable efforts to collect all past due bills, including employing a collection agency. As set forth in the following table, the Authority’s collection ratio ranged from 96% to 98% for Fiscal Years 2019-2023. See also APPENDIX B – “FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022,” Notes 2 and 4.

Table 15
Collection Data⁽¹⁾
Fiscal Years 2019 through 2023

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023⁽²⁾</u>
Cash Received from Customers (Amount Collected)	\$110,222,560	\$103,358,111	\$98,274,136	\$99,541,497	\$103,874,586
Total Revenues (Amount Billed)	\$112,757,386	\$105,295,043	\$101,663,817	\$103,170,498	\$108,180,776
Collection Ratio	98%	98%	97%	96%	96%

⁽¹⁾ Includes System Development Charges. See Table 10 – “Water and Sewer System Development Charges” and “– System Development Charges.”

⁽²⁾ Unaudited.

Source: Guam Waterworks Authority.

As of December 31, 2023, Accounts Receivable, including inactive accounts, were approximately \$24.7 million, of which approximately \$9.5 million, or about 38%, are over 120 days.

Uniform Disconnection Policy

In 2003, the CCU mandated that a disconnection practice be established on a regular and ongoing basis and that all customers, including Government accounts, be subject to the same disconnection policy. The Authority’s disconnection target is to schedule disconnection when a customer becomes 30 days delinquent and to ensure all such customers are disconnected before they become 45 days delinquent. Customers with verifiable health- and/or age-related issues may qualify for an exception to this disconnection mandate. Customers with ongoing bill disputes or payment plans are excluded from the automated disconnection process.

In response to the COVID-19 pandemic, the Authority prepared and implemented its Continuity of Operations Plan that called for, among other things, suspension of disconnections and reconnection of previously disconnected customers to ensure access to basic water and wastewater services for all residents through June 1, 2021. When nonpayment disconnections resumed on June 2, 2021, only six-month payment plan terms were allowed as mandated by statute, with few exceptions considered only on a case by case basis and subject to consideration and approval by the Authority’s General Manager.

Debt Service Coverage

Rate Covenant. The Authority has covenanted in the Indenture to at all times fix, prescribe and collect rates, fees and charges in connection with the services furnished by the System which will be sufficient to yield the sum of Net Revenues during each Fiscal Year equal to at least 1.25x the Aggregate Annual Debt Service for such Fiscal Year (the “**Debt Service Coverage Ratio**”). See “SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Rate Covenant” and “HISTORICAL AND PROJECTED OPERATING RESULTS.”

CCU and PUC Debt Service Coverage Ratio Policies. The CCU’s current debt service coverage ratio policy (most recently adopted in 2020) provides a target minimum debt service coverage ratio of 1.40x for Fiscal Years 2020 and 2021 and 1.50x beginning in Fiscal Year 2022, calculated in a manner consistent with the Indenture, which does not supplement Net Revenues with reserves or other available funds. In February 2021, due in part to the adverse financial impact of the COVID-19 pandemic on the Authority, the CCU temporarily authorized a target minimum debt service coverage ratio of 1.30x during the pendency of adverse financial conditions.

In addition, the PUC’s current debt service coverage ratio policy (most recently adopted in 2020) provides a target minimum debt service coverage ratio of 1.40x, calculated in a manner consistent with the Indenture, which does not supplement Net Revenues with reserves or other available funds. In September 2022, as part of the 2022 Order (see “THE AUTHORITY – The PUC Orders”), the PUC ordered a temporary minimum debt service coverage ratio of 1.30x for Fiscal Years 2022-2024.

These policies may be further modified from time to time by the CCU and the PUC, as applicable. The modification or termination of such policies, or any failure of the Authority to achieve the targets set forth under such policies, do not affect the requirements of the Indenture in respect of the issuance of additional Bonds such as the 2024AB Bonds or otherwise, nor does any such failure constitute an Event of Default under the Indenture.

Rate Stabilization Fund

The Indenture establishes the Rate Stabilization Fund. The Rate Stabilization Fund is funded by transfers from the Revenue Fund as directed by the Authority. See “SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Allocation of Revenues.” All amounts in the Rate Stabilization Fund shall be transferred by the Authority from time to time to the Revenue Fund in the amounts specified by a Certificate of the Authority which also certifies that such amount is consistent with the annual budget established by the Authority pursuant to the Indenture.

The Authority implemented several cost containment strategies to address a reduction in revenues resulting from the COVID-19 pandemic, including use of the Rate Stabilization Fund. In February 2021, the CCU authorized the transfer of up to \$11.4 million from the Working Capital Reserve for Operations and Maintenance account to the Rate Stabilization Fund, consistent with the Authority’s Fiscal Year 2021 budget, as amended at that time. The CCU requires that transfers to and from the Rate Stabilization Fund be structured to enable the Authority to target achievement of a temporary minimum debt service coverage ratio of 1.3 times during the pendency of adverse financial conditions that occasion deferral of the Authority’s conformance with previously established CCU and PUC policies related to targeted debt service coverage of 1.5 times and a minimum of 120 days of annual Operations and Maintenance Expenses in the Working Capital Reserve for Operations and Maintenance account. See “THE SYSTEM – Debt Service Coverage – CCU and PUC Debt Service Coverage Ratio Policies.” The Authority must notify the CCU of the final amount of any planned transfers into the Rate Stabilization Fund up to the authorized amount of \$11.4 million. Transfers out of the Rate Stabilization Fund must be formally approved by the CCU as part of the annual approval of the budget. Interest earned on the Rate Stabilization Fund is accounted for as general revenues and transferred to the Revenue Fund. In Fiscal Years 2022 and 2023, with CCU approval, the Authority transferred approximately \$5.75 million and \$5.65 million, respectively, from the Rate Stabilization Fund to the Revenue Fund, which helped the Authority to maintain debt service coverage ratios of 1.31 times and 1.37 times, respectively, in such Fiscal Years, without a rate increase in Fiscal Year 2022. The CCU’s target coverage policy is separate from the 1.25 times covenant required by the Indenture and subject to change. See “– Rates and Charges” and Table 22 – “Historical Operating Results and Debt Service Coverage.” As of December 31, 2023, the balance in the Rate Stabilization Fund was approximately \$950,000.

Indenture Required Reserves

The Authority covenants under the Indenture to maintain two funds: (i) the Operation and Maintenance Fund, available for working capital purposes, and (ii) the Operation, Maintenance, Renewal and Replacement Reserve Fund, available for emergency renewals, replacements and other contingency items. The General Indenture requires monthly deposits into the Operation and Maintenance Fund if necessary to increase the amount in such fund to the amount of Operation and Maintenance Expenses budgeted by the Authority, pursuant to such budget, to be paid from Revenues during the next succeeding calendar month (including any amount to be held as a reserve for transfer to the Rebate Fund) plus the amount of any Other Credit Agreement Payments Expenses then due and payable or to become due and payable during such month and not otherwise included in such amount. The required balance of \$13.4 million was on deposit in such fund as of January 31, 2024. The General Indenture requires monthly deposits into the Operation, Maintenance, Renewal and Replacement Reserve Fund if necessary to increase the amount in such fund to one-fourth of the sum of amounts of Operation and Maintenance Expenses and Renewal and Replacement Costs budgeted by the Authority for the then-current Fiscal Year. The Authority assumes such requirement to equal 90 days of Operation and Maintenance Expenses. The required balance of \$17.4 million was on deposit in such fund as of January 31, 2024. For the last five years, the Authority has maintained these funds at the required levels.

Working Capital Reserve for Operations and Maintenance

The General Indenture establishes the Capital Improvement Fund and provides that the Authority may direct the creation of accounts within the Capital Improvement Fund for appropriate purposes, and may restrict the

purposes for which amounts in any such account may be used or withdrawn. Pursuant to the CCU's current working capital reserve policy (most recently revised in 2020) (the "**Working Capital Reserve Policy**"), the Authority established a Working Capital Reserve for Operations and Maintenance account within the Capital Improvement Fund to provide additional liquidity to assist the Authority in addressing unforeseen obligations and unexpected, short-term cash flow demands. Amounts on deposit in the Working Capital Reserve for Operations and Maintenance account are available to pay Operation and Maintenance Expenses if the Authority's then-current cash flow is insufficient to pay such expenses. The Chief Financial Officer is authorized to withdraw up to \$500,000, subject to the prior approval of the General Manager; prior CCU approval is required for any withdrawal greater than \$500,000. Pursuant to the policy, the amount required to be on deposit in the Working Capital Reserve for Operations and Maintenance account is equal to 120 days of the Operation and Maintenance Expenses for the then-current Fiscal Year, less depreciation expense. The Working Capital Reserve for Operations and Maintenance account requirement is subject to annual review and adjustment during the regular budgeting and rate-setting process. The required balance of \$14.7 million was on deposit in such fund as of January 31, 2024.

The Working Capital Reserve Policy may be further modified from time to time by the CCU. The modification or termination of such policy, or any failure of the Authority to achieve the target set forth under such policy, does not affect the requirements of the Indenture in respect of the issuance of additional Bonds such as the 2024AB Bonds or otherwise, nor does any such failure constitute an Event of Default under the Indenture.

Security Measures

In 2004, the Authority completed a vulnerability assessment on all of its public water systems and developed its own emergency response plan (the "**Authority Emergency Response Plan**"), which has since been incorporated into the Government's emergency response plan (the "**Guam Emergency Response Plan**"). The Authority works closely with the Guam Homeland Security/Office of Civil Defense ("**Guam Homeland Security**") on emergency response planning coordination efforts and updates to the Guam Emergency Response Plan.

In accordance with the America's Water Infrastructure Act of 2018, the Authority completed a risk and resiliency assessment in 2020, which included risks to the Authority's system from malevolent acts and natural disasters, resilience of the Authority's water and wastewater infrastructure, monitoring and operation of the systems and the Authority's financial infrastructure. As a result, the Authority drafted an update to the Authority Emergency Response Plan in August 2022. A full and finalized update to the Authority Emergency Response Plan will be included in an update to the Guam Emergency Response Plan that Guam Homeland Security has planned for Fiscal Year 2024.

In 2018, the Authority also completed a network security and vulnerability assessment, which included information technology general controls, operational technology network, site physical security, network architecture security, and penetration and vulnerability. The Authority has updated and expanded its cybersecurity standard operating procedures, and is implementing critical redundancy solutions for its information technology network. In addition, the Authority has implemented a formal cyber security policy, has designated a cyber security coordinator for the utility and has completed cyber security training for all employees. See "CERTAIN INVESTMENT CONSIDERATIONS – Cybersecurity."

Labor and Employee Relations

As of December 31, 2023, the Authority had 359 employees. Most of the Authority's employees are classified as employees of the Government and within the Guam Civil Service System. Certain management positions and key skilled supervisory personnel hold unclassified positions.

The Guam Federation of Teachers ("**GFT**") regularly recruits non-management employees of the Authority. As of December 31, 2023, 42 employees, or approximately 12% of the Authority's employees, have joined the union. The CCU ratified a collective bargaining agreement between the GFT and the Authority in September 2020 for a period of five years. The GFT does not have the ability under Guam law to negotiate for wage and benefit adjustments and may engage in a strike only under very limited circumstances. The Authority's management believes that relations with its employees are positive.

Retirement Fund and Other Post-Employment Benefits

General. The Government of Guam Retirement Fund (the “GGRF”) provides retirement annuities and other payments to retired Government employees and their dependents, including Authority employees and their dependents. Employees hired on or before September 30, 1995, are members of the Government of Guam Employees Retirement System (the “DB Plan”). Employees hired after September 30, 1995, became members of the Defined Contribution Retirement System (the “DC Plan”). From April 1, 2017 to December 31, 2017 and from June 1, 2023 to December 31, 2023, eligible, active DC Plan members could elect to become members of the Defined Benefit 1.75 Retirement System (the “DB 1.75 Plan”). In addition, new employees hired on or after January 1, 2024 will become members of the DC Plan and eligible, active DC Plan members may elect to become a member of the DB 1.75 Plan. The DB Plan, DC Plan, and DB 1.75 Plan are further described below.

DB Plan. The DB Plan is a single-employer defined benefit pension plan administered by the GGRF to which the Authority contributes based upon a fixed percentage of the payroll for those employees of the DB Plan. A single actuarial valuation is performed annually covering all DB Plan members, and the same contribution rate applies to each employer, including the Authority. Members of the DB Plan are required to contribute a certain percentage of their annual covered salary, which is currently 9.5%. The DB Plan member and employer contribution requirements are established by statute. According to the Government of Guam Retirement Fund Actuarial Valuation as of September 30, 2022 (the “2022 GGRF Valuation Report”), the most recent valuation report as of the date of this Official Statement, there were a total of 1,070 active members (including 15 Authority employees), 7,283 retired members and 3,087 inactive members under the DB Plan as of September 30, 2022.

DC Plan. The DC Plan is a single-employer defined contribution pension plan administered by the GGRF. Contributions to the DC Plan by members are based on an automatic deduction of 6.2% of the member’s regular base pay starting on January 1, 2018. Contributions are deposited into each individual employees’ 401(a) account with the DC Plan. The default plan for all new Government employees, including Authority employees, is the DC Plan. According to the 2022 GGRF Valuation Report, there were a total of 7,571 active members (including 257 Authority employees) under the DC Plan as of September 30, 2022.

DB 1.75 Plan. The DB 1.75 Plan is a governmental defined benefit pension plan administered by the GGRF with an effective date of January 1, 2018. The DB 1.75 Plan members are required to contribute 9.5% of their base salary to the DB 1.75 Plan and 1% of their base salary to a Government deferred compensation plan. As described above under “– General,” certain existing employees and members of the DC Plan were provided an opportunity to participate in the DB 1.75 Plan in 2017. According to the 2022 GGRF Valuation Report, there were a total of 2,906 active members (including 98 Authority employees), 249 retired members and 18 inactive members under the DB 1.75 Plan as of September 30, 2022.

As further described above under “– General,” certain existing employees and members of the DC Plan currently have, and certain new employees and members of the DC Plan will have, an opportunity to participate in the DB 1.75 Plan.

DB Plan and DB 1.75 Plan Annual Valuation Results. The DB Plan’s unfunded actuarial accrued liability (“UAAL”) and funded ratio for Fiscal Years 2018-2022 are shown in the following table. The UAAL and funded ratio includes the DB 1.75 Plan.

Table 16
Unfunded Actuarial Accrued Liability and Funded Ratio of Defined Benefit Plans⁽¹⁾
Fiscal Years 2018 through 2022
(in millions)

Fiscal Year	Accrued Liability	Actuarial Assets	Unfunded Actuarial Accrued Liability	Funded Ratio
2018	\$ 3,197.1	\$ 2,021.9	\$ 1,175.2	63.24%
2019	3,221.3	2,066.0	1,155.4	64.13
2020	3,228.1	2,053.9	1,174.2	63.62
2021	3,267.5	2,125.3	1,142.2	65.04
2022	3,236.6	2,063.6	1,173.0	63.76

⁽¹⁾ Does not include Cost-of-Living Allowance and Supplemental Annuity Liability.
Source: Government of Guam Retirement Fund Actuarial Valuation as of September 30, 2022.

Significant actuarial assumptions and methods used in the 2022 GGRF Valuation included: (a) the interest rate used to discount future benefit payments to the present and long term expected rate of return on plan assets of 7.0%; (b) the Entry Age Normal method; (c) total payroll growth of 2.50% per year; (d) 3-year phase-in of gains/losses relative to interest rate assumption; (e) amortization of UAAL to an end date of May 1, 2033. According to the 2022 GGRF Valuation Report, and based on the GGRF 2022 Audited Financial Statements, the GGRF actuary calculated an investment return on the total market value of assets of -17.7% for the fiscal year ending September 30, 2022. The average annual return on the market value of assets has been 2.1% for the last five fiscal years. The investment return on the actuarial value of assets (recognizing investment gains and losses over a 3-year period) was 1.6% for the Fiscal Year ended September 30, 2022.

The GGRF is subject to GASB Statement No. 67; each participating employer, including the Authority, is subject to GASB Statement No. 68 (“**GASB 68**”). GASB 68 was incorporated into the Authority’s financial statements beginning in Fiscal Year 2015. For the Authority’s proportionate share of the GGRF’s net pension liability and pension expense for the Fiscal Year 2022, see APPENDIX B – “FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022,” Note 8.

Contribution Rates. Under Title 4, Chapter 8, Section 8137 of the Guam Code Annotated, as amended, the Government is required to completely fund the unfunded actuarial accrued liability by May 1, 2033. The actuarial employer contributions rates set forth in the annual valuations apply to the Fiscal Year beginning one year after the valuation date. Components of the actuarial employer contribution rates include percentages towards (1) the UAAL of the DB Plan and DB 1.75 Plan, (2) normal cost of the DB Plan and DB 1.75 Plan, and (3) contributions and expenses for the DC Plan.

Although the actuarial contributions rates are provided to the Guam Legislature by the GGRF in advance of each Fiscal Year and used for budget preparation, the Guam Legislature is not required to adopt such rates but has done so in recent years. The Government applies the same employer statutory contribution rate to all employees (i.e., DB Plan members, DC Plan members, etc.). Of the amounts contributed by the employers under the DC Plan, an amount equal to 6.2% of the DC Plan member’s regular base pay starting on January 1, 2018, is deposited into the member’s individual annuity account; the remaining amount in excess of 6.2% starting on January 1, 2018, of the DC Plan member’s regular base pay is contributed towards the UAAL of the DB Plan. The following table sets forth the actuarial employer contribution rates and the statutory employer contribution rates for Fiscal Years 2018-2022:

Table 17
Employer Contribution Rates – Actuarial and Statutory⁽¹⁾
Fiscal Years 2018 through 2022

Fiscal Year	Actuarial Rate	Statutory Rate
2018	26.28%	27.83%
2019	26.97	26.56
2020	28.32	26.28
2021	28.43	26.97
2022	29.43	28.32

⁽¹⁾ The actuarial employer contributions rates set forth in the annual valuations apply to the Fiscal Year beginning one year after the valuation date. For example, the actuarial contribution rate determined in the valuation report as of September 30, 2020 (Fiscal Year 2020) is applied for the Fiscal Year beginning October 1, 2022 (Fiscal Year 2022).
Source: *Government of Guam Retirement Fund Actuarial Valuation as of September 30, 2022.*

In addition, the statutory rates for Fiscal Years 2023 and 2024 are 28.43% and 29.43%, respectively.

The following table sets forth the actual contributions made by the Authority to the DB Plan during Fiscal Years 2019 through 2023. Such amounts were equal to the required contributions for those years.

Table 18
Authority’s Contributions to DB Plan
Fiscal Years 2019 through 2023

Fiscal Year	Amount
2019	\$2,007,437
2020	2,113,893
2021	2,001,837
2022	1,935,310
2023 ⁽¹⁾	1,913,025

⁽¹⁾ Unaudited for Fiscal Year 2023.
Source: *Guam Waterworks Authority.*

The following table sets forth the actual contributions made by the Authority to the DC Plan, as well as the portion of such contributions that are applied to the unfunded liability of the DB Plan during Fiscal Years 2019 through 2023. Such amounts were equal to the required contributions for those years.

Table 19
Authority’s Contributions to DC Plan and DB Plan toward Unfunded Liability
Fiscal Years 2019 through 2023

Fiscal Year	DC Plan Amount	Portion of DC Plan Amount to DB Plan
2019	\$2,618,445	\$2,022,192
2020	2,837,095	2,178,351
2021	2,950,859	2,282,397
2022	3,245,167	2,536,730
2023 ⁽¹⁾	3,282,537	2,576,894

⁽¹⁾ Unaudited for Fiscal Year 2023.
Source: *Guam Waterworks Authority.*

COLA and Supplemental Annuity Payments. Public Law 25-72, passed in 1999, requires the payment of supplemental annuity and cost-of-living-allowance (“COLA”) benefits to retirees and specifies that these payments are to be vested, limited-duration benefits to be provided by the GGRF. Public Law 36-107 increased ad hoc COLA payments of \$2,000 per year to \$2,200 per year to retired DB Plan and DC Plan members and spouse survivors. In addition, supplemental annuity payments of \$4,238 (subject to an aggregate limitation of \$40,000 per year when combined with the member’s regular retirement annuity) have been provided to retired DB Plan members and survivors whose benefits commenced prior to October 1, 1995. These payments have been made outside of the GGRF trusts through annual allocations, and are anticipated to continue in future years. Effective Fiscal Year 2017 and pursuant to GASB Statement No. 73, the resultant actuarial liability relating to these payments have been included in the government-wide financial statements.

Other Post-Employment Benefits. The Government makes annual expenditures for certain postretirement healthcare benefits (“OPEB”) to retirees who are members of the GGRF. The Government provides medical, dental, and life insurance coverage. Prior to Fiscal Year 2020, the retiree medical and dental plans were fully-insured products provided through insurance companies. Starting in Fiscal Year 2020, the Government began to phase in policy self-insurance: dental in Fiscal Year 2020, pharmaceuticals in Fiscal Year 2022 and medical in Fiscal Year 2024. Benefits under the dental plan are capped at \$1,000 per subscriber. The Government shares in the cost of these plans, with its contribution amount set each year at renewal. Current statutes prohibit active and retired employees from contributing different amounts for the same coverage. As such, the Government contributes substantially more to the cost of retiree healthcare than to active healthcare. For the life insurance plan, the Government provides retirees with \$10,000 of life insurance coverage through an insurance company. Retirees do not contribute to the cost of this coverage. The OPEB unfunded actuarial accrued liability for the Government, including fiduciary funds and component units such as the Authority, was approximately \$2.77 billion for Fiscal Year 2022, \$2.60 billion for Fiscal Year 2021, and \$2.52 billion for Fiscal Year 2020. The OPEB unfunded actuarial accrued liability allocated to the Authority was approximately \$116.2 million for Fiscal Year 2022, \$106.4 million for Fiscal Year 2021, and \$84.2 million for Fiscal Year 2020.

The OPEB plan is financed on a substantially “pay-as-you-go” basis whereby contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due. The Authority is then required to reimburse the General Fund for the OPEB costs of the Authority’s retirees. The Authority applies revenues generated by the Legislative Surcharge to pay these costs. See “REGULATORY ENVIRONMENT – Regulation of Ratemaking.”

The following table sets forth the Government’s contributions from the General Fund for OPEB for Fiscal Years 2018-2022, as well as the Authority’s contributions to reimburse the Government for the OPEB costs of the Authority’s retirees (i.e., medical, dental and life insurance).

Table 20
Government Contributions from General Fund for OPEB and
Authority’s Contribution to Reimburse OPEB
Fiscal Years 2018 through 2022

Fiscal Year	Government Contributions	Authority’s Contribution to Reimburse OPEB
2018	\$31,348,666	\$1,617,515
2019	30,569,444	1,795,850
2020	27,920,521	1,745,004
2021	32,565,557	1,598,791
2022	N/A ⁽¹⁾	1,966,259

⁽¹⁾ The Government contribution amount for Fiscal Year 2022 is not yet available.

Sources: Extracted from Government of Guam Financial Statements for Fiscal Year 2022 and Guam Waterworks Authority Financial Statements for Fiscal Year 2022.

See APPENDIX B – “FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022,” Schedule 6.

Liquidity

As of January 31, 2024, the Authority had approximately 367 days of cash on hand, or \$72.1 million, which includes funds in the Operation, Maintenance, Renewal and Replacement Reserve Fund, Operation and Maintenance Fund, and Working Capital Reserve for Operations and Maintenance account, all as described under “– Indenture Required Reserves” and “– Working Capital Reserve for Operations and Maintenance”, as well as unrestricted funds on hand in the amount of \$26.6 million.

REGULATORY ENVIRONMENT

Environmental Regulations

General. The Authority is subject to federal and Guam regulations governing water supply and wastewater treatment. The drinking water standards promulgated in the SDWA are the primary requirements for water supply. Wastewater treatment and disposal must comply with the water quality standards in the CWA. Guam EPA is the local agency responsible for monitoring Authority operations for compliance. Generally, Guam EPA regulations are the same as the federal standards, although the agency can implement more stringent requirements if Guam EPA determines it is necessary. Guam EPA and the US EPA jointly enforce environmental regulations on Guam, except that Guam EPA has primacy for establishing and enforcing water quality standards under the SDWA, while the US EPA has retained NPDES permit authority under the CWA.

The Authority had difficulty complying with SDWA and CWA regulations prior to 2010. In 2002, the US EPA filed a complaint against the Authority in the Guam District Court seeking to appoint a receiver to address the Authority’s inability to comply with the CWA and the SDWA. In part in response to concerns over continued non-compliance by the Authority, the Guam Legislature created the CCU as the governing body of both the Authority and GPA, thereby removing the Authority, as well as GPA, from the direct control of the Government of Guam.

2003 Stipulated Order and 2011 Court Order. In 2002, members of the CCU met with the U.S. Attorney General and representatives from the US EPA to discuss the CCU’s role in the rehabilitation of the Authority. The US EPA and the Authority agreed to enter into the 2003 Stipulated Order, pursuant to which the Authority was given the opportunity to comply with federal water and wastewater regulations under the governance of the CCU. The 2003 Stipulated Order required the Authority to make certain improvements to the System and to undertake certain planning measures by specific dates. The Authority began implementing the specified projects, including, among other things, the completion of the 2006 WRMP to serve as the basis for the Authority’s long-term planning. The 2006 WRMP set forth an assessment of the Authority’s System and outlined improvements over a 20-year period necessary for regulatory compliance and System growth. The CCU and the US EPA approved the 2006 WRMP. However, the Authority did not meet all of the deadlines in the 2003 Stipulated Order, and the US EPA required it to pay fines in the aggregate amount of \$413,750 from 2004 through 2010.

In 2010, the US EPA requested that the Guam District Court order the Authority to address the then-remaining items in the 2003 Stipulated Order, as well as certain additional actions or improvements, some of which were identified by the Authority in the 2006 WRMP. In 2011, the Guam District Court issued the 2011 Court Order, which established deadlines for such projects and superseded the 2003 Stipulated Order and all prior orders. The 2011 Court Order contains 86 projects, two notice requirements and five ongoing reporting requirements relating to management, operations, financial administration, facilities construction and rehabilitation and training requirements to be implemented in accordance with strict schedules. The Authority has prioritized and complied with the timelines set forth in the 2011 Court Order, and the US EPA has not fined the Authority for any missed compliance dates since the issuance of the 2011 Court Order. The Authority has completed 85 of the 86 projects under the 2011 Court Order and is in compliance with the two notice requirements and five ongoing reporting requirements under the 2011 Court Order.

The last remaining project under the 2011 Court Order is completion of the replacement, rehabilitation or reconstruction of 12 storage tanks in accordance with the hydraulic assessment approved by the US EPA and the Guam District Court in 2023. The completion deadline for this last project, which the Authority expects to meet, is December 31, 2025. For more information about the storage tanks and hydraulic analysis, see “THE SYSTEM – The Water System – *Water Distribution System* – Reservoirs.”

2024 Partial Consent Decree. On January 31, 2024, the US EPA filed a complaint in the Guam District Court alleging that the Authority violated certain conditions and limitations of the NPDES permits that the US EPA issued to the Authority pursuant to the Clean Water Act. The Authority and the US EPA have entered into the 2024 Partial Consent Decree, which has been filed with the Guam District Court and is expected to be signed into order in spring 2024. The 2024 Partial Consent Decree requires the Authority to make certain improvements to the System and to undertake certain planning measures by specific dates in the next 10 years. As further described below, such improvements primarily relate to the wastewater collection system, including pipelines, pump stations, maintenance and other operational program improvements, and planning studies for secondary wastewater treatment.

The compliance requirements contained in the 2024 Partial Consent Decree are centered on the Authority's wastewater collection system and include assessment and capacity analyses to determine acceptable future upgrades to gravity collection lines in specific areas, as well as setting specific annual rehabilitation/replacement requirements for the entire sewer collection network. Similarly, inventory, assessment and analyses are required for sewer pump station force main (discharge) piping in order to begin rehabilitation/replacement of a certain percentage of the Authority's total force main piping inventory. The 2024 Partial Consent Decree also specifies criteria for upgrading the Authority's sewer pump stations, based on a tiered schedule of pump station priorities based on the Authority's 2018 WRMP Update, and design and construction of a certain number of such pump station upgrades over the compliance period. In addition to the improvement projects, the 2024 Partial Consent Decree includes maintenance and operational program requirements, such as formalization of sewer spill response plans, sewer line cleaning and inspection (existing), and asset management plan (existing), as well as formal adoption of certain wastewater pre-treatment programs. There is also a requirement for completion for a feasibility and planning study by January 2031 for the rehabilitation or replacement of the Hagåtña WWTP to an upgraded secondary treatment facility to comply with current NPDES permit requirements. Regular reporting requirements on the status of compliance requirements are also defined in the 2024 Partial Consent Decree.

Under the 2024 Partial Consent Decree, the Authority and the US EPA will also reengage in negotiations by 2031 to address other unresolved claims outside of the 10-year compliance period of the 2024 Partial Consent Decree, including but not limited to continued wastewater collection system improvements and upgrading the Hagåtña WWTP to secondary treatment. See also “– *Compliance with the CWA – Wastewater System.*”

Compliance with the SDWA – Water System. Treatment of groundwater obtained by the Authority from wells and the Santa Rita Spring and drinking water from the Ugum WTP and the Fena WTP complies with SDWA requirements.

Although the Authority's drinking water is in compliance with regulatory requirements, per- and polyfluoroalkyl substances, or PFAS, which include PFOS and PFOA and other compounds, are not currently regulated but have become a nationwide issue. PFAS has been detected in Guam's aquifer at isolated locations. The Authority has proactively addressed regulatory guidelines by shutting down impacted wells and providing additional treatment for the emerging PFAS issues in cooperation with the Guam EPA and the US EPA. Currently, two wells are shut down for PFAS contamination pending the installation of a granular activated carbon treatment system. Design of this project is complete and construction bid packet issuance is pending. The Authority, with assistance from the DOD, is evaluating the potential sources of the PFAS contamination. In anticipation of promulgation of final federal rules regulating PFAS compounds, the Authority is currently in the planning stages for additional treatment systems that might be required, and evaluating various treatment technologies for suitability given Guam's unique conditions.

The Authority has been in discussions with Guam EPA regarding proposed local regulations of banned, but currently unregulated (federal SDWA) pesticide compounds (i.e., dieldrin) which have been detected and reported in Guam's groundwater sources. Based on regulatory limits under consideration, a few of the Authority's production wells may require additional treatment. The Authority has taken proactive measures and has initiated installation of additional granular activated carbon treatment systems at three wells likely to be impacted.

Compliance with the CWA – Wastewater System. Four of the Authority's six wastewater treatment plants require an NPDES permit to discharge treated wastewater under the Clean Water Act – the Hagåtña WWTP, the Northern District WWTP, the Agat-Santa Rita WWTP and the Umatac-Merizo WWTP. Prior to 2020, an individual NPDES permit was issued for each of the four wastewater treatment plants; the Authority's current NPDES permit,

effective January 1, 2020, applies to all four plants and supersedes any previously-issued NPDES permit. The current NPDES permit expires on December 31, 2024. The Authority is currently preparing the permit renewal application for submission to the US EPA by June 1, 2024. The Northern District WWTP and the Agat-Santa Rita WWTP are in full compliance with the current NPDES permit.

The Umatac-Merizo WWTP is in compliance with all NPDES permit requirements except for seasonal variances for a single permit limit. The current NPDES permit includes effluent limitations for total phosphorus for discharge. The Authority does not expect the Umatac-Merizo WWTP to meet the permit limits for phosphorus at certain times of the year. The Authority is making operational adjustments to improve performance and expects to conduct studies of plant effluent constituents, phosphorous levels in the effluent at different times of the year and phosphorous removal rates if such adjustments do not improve results. Construction of phosphorus control improvements at the Umatac-Merizo WWTP is pending completion of such studies. “THE SYSTEM – The Wastewater System – *Wastewater Treatment Plants* – Umatac-Merizo WWTP.”

The Hagåtña WWTP is not currently in compliance with the NPDES permit. Until June 2013, the Hagåtña WWTP operated under a secondary treatment variance issued by the US EPA under the CWA, which allowed the Authority to discharge effluent from the Hagåtña WWTP’s chemically-enhanced primary treatment process into the Philippine Sea. A prior NPDES permit, effective June 1, 2013, added secondary treatment requirements, which are also required under the existing NPDES permit. However, the Hagåtña WWTP is unable to meet those secondary treatment requirements until certain upgrades are implemented at the plant. Under the 2024 Partial Consent Decree, the Authority is required to submit a feasibility study for secondary treatments to the Hagåtña WWTP to the US EPA by January 2031 for review and approval. The feasibility study is required to include analyses of design options, alternative locations, climate change and sea level rise, and planning level construction cost estimates and construction timelines. See “– *2024 Partial Consent Decree*” and “THE SYSTEM – The Wastewater System – *Wastewater Treatment Plants* – Hagåtña WWTP.”

The Authority’s remaining two wastewater treatment plants, the Inarajan WWTP and Pago-Socio WWTP, are not subject to an NPDES because they do not discharge to surface waters. These wastewater treatment plants are otherwise in compliance with applicable discharge requirements.

Other Environmental Regulations. In addition to the water and wastewater regulations discussed above, the Authority must also comply with other applicable environmental requirements, including, but not limited to, air emission standards for standby diesel generators, regulations related to above-ground and underground petroleum storage tanks, regulations under the Clean Air Act and various health and safety regulations regarding work performed by the Authority’s employees (including voluntary compliance with the Occupational Health and Safety Act).

Regulation of Ratemaking

The Authority’s ratemaking is regulated by the PUC. The Authority and the CCU establish water and wastewater rates and charges and present them to the PUC for regulatory review and approval. Guam law requires that the PUC set rates that are just and fair and are adequate to provide revenues sufficient to pay for all prudent acts of owning, properly maintaining and operating the System. Generally, PUC approval of a proposed rate plan includes an annual true-up analysis to evaluate the necessary level of rate adjustment based on actual financial performance; therefore, while the PUC may approve a rate plan, annual rate adjustments are typically subject to the results of the true-up analysis. In connection with the 2020-2024 rate plan, the PUC made an exception to this process by requiring a Comprehensive Review and Update for Fiscal Years 2022-2024. See “THE SYSTEM – Rates and Charges – *2020-2024 Rate Plan*.”

Pursuant to the Act and the Indenture, the Authority has pledged to the holders of all Bonds while any Bonds remain outstanding and not fully performed or discharged, to, among other things, maintain the rights, powers and duties of the CCU and the PUC to fulfill the terms of the Bonds and the Indenture, and maintain the rights and remedies of bondholders provided in the Act and the Indenture.

FUTURE SYSTEM CAPITAL REQUIREMENTS

Water Resources Master Plan Updates

In 2006, the Authority completed the original Water Resources Master Plan (2004-2007) (the “**2006 WRMP**”), a planning document that set forth an assessment of the Authority’s System and outlined capital improvements over a 20-year period. The Authority completed an update to the 2006 WRMP in 2018 (the “**2018 WRMP Update**”), which the CCU adopted in 2018. The 2018 WRMP Update provided a comprehensive assessment of the Authority’s progress toward achieving the recommendations set forth in the 2006 WRMP and further developed a capital improvement program and financial plan to achieve the Authority’s goals and objectives to meet acceptable levels of service and system improvement for the next 20 years, through 2037. The long-term planning effort also addressed programmatic elements of the Authority’s operations to sustain the utility and maintain compliance with drinking water standards and clean water regulations. The 2018 WRMP Update called for approximately \$1.61 billion of capital spending (\$1.26 billion in 2017 dollars) over the 2018-2037 forecast period. The 2018 WRMP Update provides the basis for many of the capital improvements included in the current capital improvement program, which is further described herein. See “– Capital Improvement Program.” The Authority is in the process of finalizing an interim update to the 2018 WRMP Update (the “**2024 WRMP Update**”), which will assess the progress of the existing 2020-2024 CIP and drive development of the Authority’s 2025-2029 Financial Plan, which will include the 2025-2029 CIP. The 2024 WRMP Update will update progress made to the 20-year capital improvement program over the 2018-2037 forecast period, including additional projects or adjustment to projects needed to comply with the compliance requirements set forth in the 2024 Partial Consent Decree, as well as needed planning and engineering to address proposed federal regulations for emerging contaminants such as per- and polyfluoroalkyl substances (“**PFAS**”). The Authority anticipates that the 2024 WRMP Update will be submitted to the CCU in April 2024. See “REGULATORY ENVIRONMENT – Environmental Regulations – 2024 Partial Consent Decree” and “– Capital Improvement Program” “THE SYSTEM – Rates and Charges – 2025-2029 Rate Plan.”

Capital Improvement Program

2020-2024 CIP: The CCU approved the Authority’s capital improvement program for Fiscal Years 2020 through 2024 (the “**2020-2024 CIP**”) in June 2019. The Authority made certain adjustments to the 2020-2024 CIP following the onset of the COVID-19 pandemic in July 2020. The capital cost of implementing the 2020-2024 CIP, as adjusted, was estimated to be approximately \$391.7 million and has been financed through a combination of proceeds of previously issued bonds, operating revenues, revenues from System Development Charges, US EPA State Revolving Fund (“**State Revolving Fund**”) grants and other grants. During the period of the 2020-2024 CIP, the COVID-19 pandemic amplified project delivery challenges by causing, for example, delays in the issuance of construction permits to certain projects. As of the end of the first quarter of Fiscal Year 2024, the Authority has expended approximately \$284.3 million on projects associated with the 2020-2024 CIP. Projects from the 2020-2024 CIP that are not already funded but assessed as needed through the ongoing 2024 WRMP Update process (see “– Water Resources Master Plan Update” above), will be incorporated into the 2024-2028 CIP.

Interim CIP: In October 2023, for capital planning purposes, the Authority prepared an interim capital improvement program for Fiscal Years 2024-2028 (the “**Interim CIP**”) based on evaluations conducted through the ongoing 2024 WRMP Update process at that time. **The Interim CIP has not been updated since October 2023, and has not been and will not be approved by the CCU.**

The capital cost of implementing the Interim CIP for Fiscal Years 2024-2028, as shown in the following table, was approximately \$751.3 million, and anticipated to be financed through a combination of proceeds of previously issued bonds, proceeds from Additional Bonds, various prior and future grants, including US EPA State Revolving Fund grants, operating revenues, and System Development Charges and certain reserves.

The following table sets forth the allocation of Interim CIP project costs among (i) water production, treatment, distribution and storage, (ii) wastewater collection and treatment, (iii) electrical, including monitoring and control, and (iv) general plant and miscellaneous, as well as the projected sources of funding for such projects by Fiscal Year. Most notably, the Interim CIP includes certain capital program requirements mandated under the 2024 Partial Consent Decree, including wastewater collection system gravity line assessment, capacity analyses and

certain rehabilitation/replacement for the portions of the sewer collection network; inventory, assessment and analyses are required for sewer pump station force main (discharge) piping and rehabilitation/replacement of a certain percentage of the Authority’s total force main piping inventory; assessment, design and construction of Tier 1 and a certain number of Tier 2 pump station upgrades as such tiers have been identified in the Authority’s 2018 WRMP Update. Furthermore, the Interim CIP includes initial planning and engineering to address proposed federal regulations for emerging contaminants such as PFAS and selected water tank projects.

Table 21
Interim CIP and Sources of Funds
Fiscal Years 2024 through 2028⁽¹⁾
(\$000)

	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>Total</u>
Capital Improvement Program⁽²⁾						
Water Production, Treatment, Distribution and Storage	\$104,774	\$64,794	\$69,500	\$53,915	\$50,500	\$343,483
Wastewater Collection and Treatment	\$18,081	\$41,384	\$57,576	\$58,826	\$78,367	\$254,234
Electrical, including Monitoring and Control	\$2,950	\$7,000	\$10,100	\$9,900	\$9,900	\$39,850
General Plant and Miscellaneous	\$26,073	\$33,800	\$26,150	\$17,800	\$9,950	\$113,773
Total⁽⁶⁾:	\$151,878	\$146,978	\$163,326	\$140,441	\$148,717	\$751,340
Sources of Funds						
Proceeds from Previous Bonds	\$106,397	--	--	--	--	\$106,397
Proceeds from Additional Debt	--	190,000	--	190,000	--	\$380,000
Prior Grant Proceeds	56,053	--	--	--	--	\$56,053
Future SRF Grants ⁽³⁾	27,000	27,000	27,000	27,000	4,000	\$112,000
Internally Funded CIP (PAY GO) ⁽⁴⁾	9,934	20,000	20,000	20,000	20,000	\$89,934
ARPA Grants	7,473	--	--	--	--	\$7,473
System Development Charge	500	500	500	500	500	\$2,500
Used (Unused) Reserves ⁽⁵⁾	(55,480)	(90,522)	115,826	(97,059)	124,217	(\$3,018)
Total⁽⁶⁾:	\$151,878	\$146,978	\$163,326	\$140,441	\$148,717	\$751,340

⁽¹⁾ The Interim Update is based on capital planning as of October 9, 2023. The Interim Update has not been updated since October 2023. The Interim Update has not been and will not be approved by the CCU. Calculation discrepancies may exist due to rounding.

⁽²⁾ Capital program subject to revisions and future approval based on the results of ongoing master planning efforts.

⁽³⁾ State Revolving Fund grants are administered by US EPA in U.S. territories such as Guam. Includes anticipated amounts from federal Infrastructure Investment and Jobs Act for Fiscal Years 2024-2027.

⁽⁴⁾ Fiscal Year 2024 Internally Funded CIP includes approximately \$1.15 million of unspent Internally Funded CIP from Fiscal Year 2023.

⁽⁵⁾ At the end of Fiscal Year 2028, approximately \$3.0 million remains in construction fund reserves for future capital projects.

⁽⁶⁾ Totals may not add due to rounding.

Source: Guam Waterworks Authority

Major projects in the “Water Production, Treatment and Distribution and Storage” category of the Interim CIP include distribution system valve and line replacement projects to improve pressure zone realignment, water loss and facilitate implementation of district metering. Major projects in the “Wastewater Collection and Treatment” category of the Interim CIP include projects to repair/rehabilitate gravity sewer and force main piping, expand the sewer network, and upgrade selected sewer pump stations. Major projects in the “Electrical” category of the Interim CIP include continued connection of the Authority’s water and wastewater facilities to the SCADA network, as well as attendant facility electrical system upgrades. Major projects in the “General Plant and Miscellaneous” category of the Interim CIP include replacement of the Authority’s vehicle maintenance facility, as well as repairs/upgrades to its main operations, customer service facility and warehouse complex.

Grants. American Rescue Plan Act (“ARPA”) grants for capital improvements benefitting disadvantaged communities were made available through the Governor and are allocated to water/wastewater infrastructure improvements in the Adacao area in northern Guam. The Authority anticipates future grants from the US EPA State Revolving Fund, including amounts from federal Infrastructure Investment and Jobs Act (“IIJA”) through Fiscal Year 2027, will fund approximately 14.9% of the Interim CIP. After Fiscal Year 2027, the five-year cycle of IIJA

funding through US EPA will cease, and SRF grants are anticipated to be reduced from prior years to approximately \$4 million annually as total EPA SRF program grant funding is subject to reduction for congressional earmarks.

Pending 2025-2029 CIP: The Authority is in the process of preparing its 2025-2029 Financial Plan, which will incorporate the Authority’s capital improvement program for Fiscal Years 2025-2029 (the “**2025-2029 CIP**”). The Authority anticipates that the 2025-2029 CIP will include the vast majority of projects included in the Interim CIP. Most notably, the 2025-2029 CIP is expected to include updated planning and engineering to address proposed federal regulations for emerging contaminants, such as PFAS, and selected water tank projects. The capital cost of implementing the 2025-2029 CIP is expected to be approximately \$900 million; however, the 2025-2029 CIP has not been finalized as of the date of this Preliminary Official Statement and the Authority can provide no assurance that the total cost of the 2025-2029 CIP will not be higher than currently estimated. See also “CERTAIN INVESTMENT CONSIDERATIONS – Implementation of Capital Improvement Program.”

The 2025-2029 Financial Plan is expected to be submitted to the CCU for consideration on or around February 27, 2024. If the CCU takes action with respect to the 2025-2029 Financial Plan on or around such date, the Authority expects to provide a supplement to this Preliminary Official Statement that will briefly summarize such action, which is expected to include information regarding major projects in the 2025-2029 CIP and the cost of implementing and anticipated funding sources for the 2025-2029 CIP.

U.S. Military Realignment

In 2010, the U.S. military planned to move approximately 8,600 military personnel and 9,000 dependents to Guam by 2013. The DOD subsequently altered its plans and completed a Supplementary Environmental Impact Statement (“**2015 SEIS**”) and released a Record of Decision (“**Record of Decision**”) for the military realignment in 2015. Based on the 2015 SEIS and Record of Decision, the DOD planned to relocate approximately 5,000 military personnel and 1,300 dependents to Guam over a 12-year period, which was expected to increase the military population on Guam by approximately 50% over levels at that time. The population increase was expected to peak at 9,721 people in calendar year 2023, including military personnel, dependents, construction and civilian personnel associated with the military realignment, and gradually reach a steady state of 7,411 people by calendar year 2028 as construction declines and construction personnel leave Guam. The 2015 SEIS and Record of Decision have not been updated since their initial publication. Based on reports from the Defense Manpower Data Center, as of September 2023, there were approximately 11,638 military personnel (consisting of active duty, reserves and civilian military workers), an increase of 2,254 military personnel since December 2015. See APPENDIX A – “GENERAL INFORMATION REGARDING THE TERRITORY OF GUAM – GEOGRAPHIC, DEMOGRAPHIC AND ECONOMIC INFORMATION – Military Activity – Military Personnel.”

The expected population growth set forth in the 2015 SEIS poses significant implications for Guam’s infrastructure, including the Authority’s System. Pursuant to the 2015 SEIS, the DOD estimates that the military realignment will result in increased wastewater generation of approximately 1.2 mgd and increased potable water demand of approximately 1.7 mgd. Such increases would result in a significant indirect impact on the aquifer lens and in a significant indirect impact on the Northern District wastewater system, respectively. To address the increased demands on the System, the DOD and the Authority have initiated several projects.

Three projects have been deemed critical to the military realignment: (i) upgrading the Northern District WWTP to secondary treatment and installing the related outfall diffuser, which was completed in 2022 (see “THE SYSTEM – The Wastewater System – Wastewater Treatment Plants – Northern District WWTP”); (ii) refurbishing the interceptor sewer that runs from the Andersen Air Force Base to the Northern District WWTP, which was completed in 2020; and (iii) expanding and rehabilitating the Northern Guam Lens Aquifer Monitoring System including in the northwest field area of the Andersen Air Force Base, which was completed in 2023 (together, the “**Water and Wastewater Infrastructure Improvements Program**”).

In addition, the Missile Defense Agency (“**MDA**”), a research, development and acquisition agency within the DOD, together with the U.S. Department of the Army, the Navy, the Air Force and the FAA as cooperating agencies, is currently preparing an environmental impact statement (“**EIS**”) to evaluate the potential environmental impacts and potential mitigation of deploying and operating an Enhanced Integrated Air and Missile Defense System to defend Guam against advanced missile threats. Certain support facilities are expected to be constructed in

support of the system components, including, among others, fire protection water systems/water storage. The EIS is expected to evaluate, among other things, the potential impacts of the project on water resources. Furthermore, MDA is expected to conduct certain surveys and studies to support the environmental impact analyses, including, among other things, a stormwater study and utilities and infrastructure studies. Such studies will also support required permitting and authorizations under federal regulations, including the CWA. A draft EIS is currently planned for spring 2024 with a final EIS and decision planned for early 2025. Whether the project will require the Authority's water and wastewater systems and any potential impacts to the System is currently unknown.

The Air Force, together with the Navy as a cooperating agency, has issued a notice of intent to prepare an EIS to assess the potential environmental impacts associated with a proposed project to beddown and support the mission of 12 Republic of Singapore Air Force F-15 fighter aircraft and construct new infrastructure upgrades adjacent to the northwest corner of the airfield and within the munitions storage area at Andersen Air Force Base. Construction of upgrades is expected to take place over approximately three to seven years and include airfield pavements, an aircraft hangar, maintenance and utilities buildings, fuel systems, fencing and utilities, roadways and parking, stormwater management infrastructure, and earth-covered magazines. A draft EIS is currently planned for mid-2024 with a final EIS and decision planned for mid-2025. Although the Andersen Air Force Base has their own water system, wastewater from the base is discharged to the Authority's wastewater collection system. The impact of the project on the Authority's wastewater system and whether a connection to the Authority's water system will be required are currently unknown.

Except as described above, the Authority does not currently expect the U.S. military build up to materially affect the Authority's future capital requirements and has not included any capital improvements relating to the U.S. military build-up in its capital planning. Based on the memorandum of understanding entered into in 2010 and updated in 2016 by the Authority and the DOD, the Authority expects that the DOD will provide appropriate and adequate funding sources for all direct and indirect impacts to the Authority's infrastructure resulting from any build-up in order to avoid rate pressure on the Authority's civilian customers. Although the 2016 MOU does not bind either party to any financial commitments, the 2016 MOU does reflect that, among other things, the parties will evaluate and fairly distribute agreed-upon costs associated with meeting DOD requirements.

For additional information about the military realignment, see APPENDIX A – "GENERAL INFORMATION REGARDING THE TERRITORY OF GUAM – GEOGRAPHIC, DEMOGRAPHIC AND ECONOMIC INFORMATION – Military Activity."

HISTORICAL AND PROJECTED OPERATING RESULTS

Historical Operating Results

The following table sets forth the Authority's historical operating results and debt service coverage for Fiscal Years 2019 through 2023. Information for Fiscal Year 2023 is unaudited.

(Remainder of Page Intentionally Left Blank)

Table 22
Historical Operating Results and Debt Service Coverage
Fiscal Years 2019 through 2023⁽¹⁾
(\$000)

	2019	2020	2021	2022	2023 (unaudited)
Operating Revenues ⁽¹⁾ :					
Water Sales Revenues	\$70,369	\$68,351	\$67,056	\$66,735	\$68,776
Wastewater Revenues	40,823	35,599	32,509	34,726	37,479
Other Revenues ⁽²⁾	679	589	502	464	567
Total Operating Revenues ⁽³⁾⁽⁴⁾	<u>\$111,871</u>	<u>\$104,539</u>	<u>\$100,067</u>	<u>\$101,925</u>	<u>\$106,822</u>
Operating Expenses:					
Water Purchases	\$6,278	\$5,551	\$6,616	\$5,656	\$7,039
Power Purchases	16,151	14,118	12,508	18,577	24,398
Salaries and Wages	22,138	23,168	22,800	22,827	24,196
Contractual ⁽⁵⁾	5,945	4,432	4,247	4,493	5,422
Retiree and Healthcare ⁽⁶⁾	2,857	2,557	2,527	2,595	2,887
Administrative and General ⁽⁷⁾	12,062	10,671	10,269	9,985	9,445
Total Operating Expenses	<u>\$65,431</u>	<u>\$60,497</u>	<u>\$58,967</u>	<u>\$64,133</u>	<u>\$73,387</u>
Amounts Available for Debt Service					
Net Operating Revenues	\$46,440	\$44,042	\$41,101	\$37,792	\$33,434
Transfer from Rate Stabilization ⁽⁸⁾	--	--	--	5,750	5,650
ARPA Grant ⁽⁹⁾	--	--	--	--	12,400
Investment Income – Other Funds ⁽¹⁰⁾	830	288	71	276	1,972
Current Revenues Available for Debt Service	<u>\$47,270</u>	<u>\$44,330</u>	<u>\$41,171</u>	<u>\$43,818</u>	<u>\$53,457</u>
Indenture Debt Service Coverage Covenant:					
Current Revenues Available for Debt Service	\$47,270	\$44,330	\$41,171	\$43,818	\$53,457
Debt Service on Outstanding Bonds ⁽¹¹⁾	31,368	34,175	31,437	33,458	39,037
Debt Service Coverage (1.25x) ⁽¹²⁾	1.51x	1.30x	1.31x	1.31x	1.37x

⁽¹⁾ Historical Water and Wastewater Revenues are as per the Statement of Operations and Retained Earnings Fiscal Year 2019 through Fiscal Year 2023.

⁽²⁾ “Other Revenue” items include revenues from illegal connection, installation fee, reconnection fee, insufficient fund check, meter tampering, direct service, miscellaneous, trouble report water, rent – GTA lease, miscellaneous admin, account analysis, reproduction copies bills, special reading, inspection fee, verification time test, bench test, meter relocation, plan and specs, cash shorts/overs, inspection fee, miscellaneous sewer revenues and honey buckets.

⁽³⁾ Water and Wastewater Revenues include Legislative Surcharges, which ranged from \$3.6 million in Fiscal Year 2019 to \$3.1 million in Fiscal Year 2023. See “THE SYSTEM – Rates and Charges – *Legislative Surcharge*.”

⁽⁴⁾ System Development Charge revenues are not included in Operating Revenues. These revenues ranged from \$.9 million in Fiscal Year 2019 to \$1.4 million in Fiscal Year 2023. See “THE SYSTEM – System Development Charges.”

⁽⁵⁾ “Contractual” expenses include audit and computer maintenance, engineering, legal, testing and other expenses, as well as building and equipment rental.

⁽⁶⁾ “Retiree and Healthcare” expenses include medical, dental and life insurance costs and supplemental annuities.

⁽⁷⁾ “Administrative and General” expenses include sludge removal, chemicals, materials and supplies, transportation, communication, claims, insurance, training & travel, advertising, miscellaneous, regulatory and bad debt expense.

⁽⁸⁾ In Fiscal Years 2022 and 2023, with CCU approval, the Authority transferred approximately \$5.75 million and \$5.65 million from the Rate Stabilization Fund to the Revenue Fund. See “THE SYSTEM – Rate Stabilization Fund.”

⁽⁹⁾ The Governor provided the Authority with \$12.4 million of ARPA funds to mitigate needed rate increases in Fiscal Year 2023.

⁽¹⁰⁾ “Other Income” includes interest on bond reserve funds.

⁽¹¹⁾ Amounts shown are net of capitalized interest.

⁽¹²⁾ Represents the Authority’s covenant to provide rates sufficient to ensure that its debt service coverage ratio equals at least 1.25x the aggregate annual debt service. See “THE SYSTEM – Debt Service Coverage.” Calculated based on Current Revenues Available for Debt Service divided by Debt Service on Outstanding Bonds (net of capitalized interest).

Source: Guam Waterworks Authority.

Projected Operating Results

General. The Authority does not as a matter of course make public projections as to future sales, earnings or other results. However, the Authority has prepared, based on capital planning as of October 2023, the prospective financial information as set forth in the following table to provide projected water sales and wastewater revenues, cost of services, operating results and debt service coverage. The Authority is in the process of preparing its 2025-2029 Financial Plan, which will incorporate the 2025-2029 CIP and is expected to include proposed annual rate increases for Fiscal Years 2025-2029. The 2025-2029 Financial Plan is expected to be submitted to the CCU for consideration on or around February 27, 2024. A draft of the 2025-2029 Financial Plan will be provided to the PUC for initial review on or around March 4, 2024, and formally submitted in June 2024 following completion of certain public notice requirements with respect to proposed annual rate increases in accordance with the Ratepayers' Bill of Rights. The Authority anticipates that the PUC will take action with respect to the 2025-2029 Financial Plan in September 2024. See "THE SYSTEM – Rates and Charges – 2025-2029 Rate Plan."

The accompanying prospective financial information was not prepared with a view toward complying with the guidelines established by the American Institute of Certified Public Accountants with respect to prospective financial information, but, in the view of the Authority's management, was prepared on a reasonable basis, reflects the currently available estimates and judgments, and presents, to the best of management's knowledge and belief, the expected course of action and the expected future financial performance of the Authority based on capital planning as of October 2023. However, this information is not fact and should not be relied upon as being necessarily indicative of future results, and readers of this Official Statement are cautioned not to place undue reliance on the prospective financial information. Neither the Authority's independent auditors nor any other independent accountants have compiled, examined, or performed any procedures with respect to the prospective financial information contained herein, nor have they expressed any opinion or any other form of assurance on such information or its achievability, and assume no responsibility for, and disclaim any association with, the prospective financial information. The assumptions and estimates underlying the prospective financial information are inherently uncertain and, though considered reasonable by the management of the Authority as of the date of its preparation, are subject to a wide variety of significant business, economic, and risks and uncertainties that could cause actual results to differ materially from those contained in the prospective financial information. Accordingly, there can be no assurance that the prospective results are indicative of the future performance of the Authority or that actual results will not differ materially from those presented in the prospective financial information. Inclusion of the prospective financial information in this Official Statement should not be regarded as a representation by any person that the results contained in the prospective financial information will be achieved.

(Remainder of Page Intentionally Left Blank)

Table 23
Projected Operating Results and Debt Service Coverage
Fiscal Years 2024 through 2028⁽¹⁾
(\$000)

	2024	2025	2026	2027	2028
Operating Revenues:					
Water Sales Revenues ⁽²⁾	\$80,480	\$92,670	\$103,398	\$112,005	\$121,472
Wastewater Revenues ⁽²⁾	43,389	49,045	54,204	58,561	63,420
Legislative Surcharge	4,198	4,637	5,224	5,700	6,227
Other Revenues ⁽³⁾	474	484	493	503	513
System Development Charges	1,224	1,248	1,273	1,299	1,325
Total Operating Revenues	\$129,764	\$148,084	\$164,593	\$178,068	\$192,957
Operating Expenses:					
Water Purchases	\$5,900	\$6,077	\$6,259	\$6,447	\$6,641
Power Purchases	23,222	23,918	24,636	25,375	26,136
Salaries and Wages	29,705	30,596	31,514	32,460	33,434
Contractual ⁽⁴⁾	7,464	7,688	7,919	8,157	8,401
Retiree and Healthcare ⁽⁵⁾	3,756	3,868	3,984	4,104	4,227
Administrative and General ⁽⁶⁾	11,950	14,059	18,230	18,777	19,341
Total Operating Expenses	\$81,997	\$86,207	\$92,543	\$95,319	\$98,179
Net Operating Revenues					
Investment Income – Other Funds	275	275	275	275	275
Cost-of-Living Allowance	730	752	774	797	821
System Development Charges	(1,224)	(1,248)	(1,273)	(1,299)	(1,325)
Rate Stabilization, Transfers From (To)	950	(2,500)	(2,500)	(2,500)	(2,500)
Capitalized Labor ⁽⁷⁾	4,159	3,780	3,894	4,011	4,131
Current Revenues Available for Debt Service	\$52,657	\$62,936	\$73,219	\$84,033	\$96,180
Indenture Debt Service Coverage Covenant⁽⁸⁾:					
Current Revenues Available for Debt Service	\$52,657	\$62,936	\$73,219	\$84,033	\$96,180
Senior Lien Debt Service ⁽⁹⁾	39,042	45,959	52,873	59,793	67,972
Indenture Debt Service Coverage (1.25x)	1.35x	1.37x	1.39x	1.4x	1.4x

⁽¹⁾ Projections are based in part on capital planning as of October 9, 2023, and reflect information from the Interim CIP for Fiscal Years 2024-2028. The 2025-2029 Financial Plan, which will incorporate the 2025-2029 CIP, is expected to include proposed annual rate increases for Fiscal Years 2025-2029. The 2025-2029 Financial Plan is expected to be submitted to the CCU for consideration on or around February 27, 2024. The base year for the revenue and expense forecast (Fiscal Year 2024) is based on the 2023 Order (see “THE AUTHORITY – The PUC Orders.”) Some calculation discrepancies may exist due to rounding.

⁽²⁾ Projected rate revenues based on PUC approved rate increase of 16.7% for all rate components in Fiscal Year 2024, followed by annual rate increases of 16%, 11.5%, 7.5%, and 7.5% in Fiscal Year 2025, Fiscal Year 2026, Fiscal Year 2027 and Fiscal Year 2028, respectively, for non-lifeline rate components; however, the Authority’s 2025-2029 Financial Plan is expected to include proposed annual rate increases for Fiscal Years 2025-2029 ranging from 10.0% to 30.0%. See “THE SYSTEM – Rates and Charges – 2025-2029 Rate Plan.”

⁽³⁾ “Other Revenue” items include revenues from illegal connection, installation fee, reconnection fee, insufficient fund check, meter tampering, direct service, miscellaneous, trouble report water, rent – GTA lease, miscellaneous admin, account analysis, reproduction copies bills, special reading, inspection fee, verification time test, bench test, meter relocation, plan and specs, cash shorts/overs, inspection fee, miscellaneous sewer revenues and honey buckets.

⁽⁴⁾ “Contractual” expenses include audit, meter reading and computer maintenance, engineering, legal, testing, program management fees, claims, insurance, training, advertising, building rental, equipment rental, regulatory and miscellaneous expenses, and other expenses.

⁽⁵⁾ Retiree and Healthcare expenses include medical, dental and life insurance costs, supplemental annuities, and cost of living allowance.

⁽⁶⁾ “Administrative and General” expenses include sludge removal, chemicals, materials and supplies, transportation expense, telephone, and communication and bad debt expense. This category also includes expenses for implementation of a Customer Assistance Program beginning in Fiscal Year 2025.

⁽⁷⁾ For purposes of calculating coverage, certain personnel costs related to the delivery of capital improvement projects are capitalized (deducted from O&M, which increases Current Revenues Available for Debt Service).

⁽⁸⁾ Represents the Authority’s covenant to provide rates sufficient to ensure that its debt service coverage ratio equals at least 1.25x the aggregate annual debt service. See “THE SYSTEM – Debt Service Coverage.” Calculated based on Current Revenues Available for Debt Service divided by Senior Lien Debt Service (net of capitalized interest).

⁽⁹⁾ Includes existing debt service and forecasted debt service for additional bonds. Additional bonds are assumed to be issued at an interest rate of 5.25 percent with 30-year terms, a 6.7% bond reserve, and issuance costs of 2% of par value.

Source: Guam Waterworks Authority.

CERTAIN INVESTMENT CONSIDERATIONS

The following discussion of considerations is not meant to be an exhaustive list of the risks associated with the purchase of the 2024AB Bonds and does not necessarily reflect the relative importance of the various risks. Potential purchasers of the 2024AB Bonds are advised to consider the following factors, among others, and to review all other information in this Official Statement in evaluating whether to purchase the 2024AB Bonds. Any one or more of the risks discussed, and others, could lead to a decrease in the market value of and/or in the ability to sell the 2024AB Bonds in the secondary market. No assurance can be given that other risk factors will not become material in the future. The 2024AB Bonds may not be suitable investments for all persons. Prospective purchasers should be able to evaluate the risks and merits of an investment in the 2024AB Bonds and should confer with their own legal and financial advisors before considering a purchase of the 2024AB Bonds.

General

The principal of and interest on the Bonds, including the 2024AB Bonds, is payable pursuant to the Indenture solely from the Revenues. The ability to pay debt service on the Bonds, including the 2024AB Bonds, will depend on the receipt of sufficient Revenues, pledged as payment for the Bonds. The Authority's ability to generate Revenues is dependent on several factors. To the extent the Authority is unable to make up for Revenue shortfalls, the Authority's ability to pay debt service on the Bonds, including the 2024AB Bonds, may be adversely affected.

Limitations on Remedies

The 2024AB Bonds are not subject to acceleration under any circumstances or for any reason, including without limitation on the occurrence or continuance of an Event of Default. Upon the occurrence or continuation of an Event of Default, a Bondowner would only be entitled to principal and interest payments on the 2024AB Bonds as they come due. Under certain circumstances, Holders of the 2024AB Bonds may not be able to pursue certain remedies or enforce covenants contained in the Indenture. The remedies available to the Holders of the 2024AB Bonds upon an Event of Default under the Indenture are in many respects dependent upon judicial actions which are often subject to discretion and delay. Under existing law, the remedies specified by the Indenture and the Bonds may not be readily available or may be limited. The various legal opinions to be delivered concurrently with the delivery of the 2024AB Bonds (including Bond Counsel's approving opinion) will be qualified, as to the enforceability of the various legal instruments, by limitations imposed by insolvency or other laws affecting the rights of creditors generally.

The federal Bankruptcy Code dictates which entities are eligible to seek relief as debtors under each chapter of that federal law. Neither the Government nor the Authority are legally able to seek bankruptcy relief under current federal law. No proposed debt restructuring legislation has been introduced in the Guam Legislature, nor to the Authority's knowledge is any such legislation being contemplated or discussed. The Authority can neither predict nor provide any assurances regarding any future changes in law or legislative proposals.

Uncertainties of Projections and Assumptions

This Official Statement contains certain assumptions, estimates, projections and other forward-looking statements. Demonstration of compliance by the Authority with certain of the covenants contained in the Indenture also may be based upon assumptions, estimates and projections. Actual results, however, may differ, perhaps materially, from those projected. In addition, certain assumptions with respect to future business and financing decisions, including the decision to undertake, or to postpone or cancel, future capital improvements of the System may not occur and are subject to change. No representation is made or intended, nor should any representation be inferred, with respect to the existence of any future set of facts or circumstances, and prospective purchasers of the 2024AB Bonds are cautioned not to place undue reliance upon any forecasts, estimates, plans or projections or requirements for forecasts or projections. If actual results are less favorable than the results projected or if the assumptions used in preparing projections prove to be incorrect, the ability of the Authority to make timely payment of the principal of and interest on the Bonds, including the 2024AB Bonds, may be materially and adversely affected.

Guam Economy; Impact of Tourism and Military Presence

General. The Authority's ability to generate Revenues depends in large measure on the local economy, which is heavily dependent on tourism and the U.S. military presence, both of which are dependent on world economic, social and political events.

Tourism. Tourism represents a significant share of the economic activity on Guam. Historically, the tourism industry, both worldwide and on Guam, has correlated closely with the state of the world's economies and levels of real disposable income. A weak economy, war, epidemic outbreaks, natural disasters or the threat of terrorist activity, among other influences that are beyond the Authority's control, can adversely affect the tourism industry. For example, the outbreak of COVID-19 in calendar year 2020 had a material impact on the tourism industry. See APPENDIX A – "GENERAL INFORMATION REGARDING THE TERRITORY OF GUAM – COVID-19 Pandemic" and "– GEOGRAPHIC, DEMOGRAPHIC AND ECONOMIC INFORMATION – Guam Tourism Industry." Currency exchange rates, trade balances, political relationships, and conflicts within and between countries are also increasingly important influences on tourism.

Economic, social and political conditions in South Korea, Japan and throughout the Pacific Rim, and the resulting effect on overseas travel from these countries, are a major determinant of tourism on Guam. For example, in response to the COVID-19 pandemic, many countries, including South Korea and Japan, issued shelter-in-place orders and travel warnings and restrictions. Total visitor arrivals decreased from a high of approximately 1.6 million in Fiscal Year 2019 to a low of approximately 61 thousand in Fiscal Year 2021. Total visitor arrivals in Fiscal Year 2023 were approximately 600 thousand. Any continued or future significant downturn in tourism, including a downturn related to South Korean or Japanese economic conditions or social policies, may result in reduced collection of Revenues. While the Guam Visitors Bureau expects visitor arrivals to rebound, no assurance can be given that Guam will not experience continued reductions in the number of visitors from South Korea, Japan and other visitor markets because of the COVID-19 pandemic or other economic, social or political conditions. See "– Worldwide Health Concerns" below and APPENDIX A – "GENERAL INFORMATION REGARDING THE TERRITORY OF GUAM – GEOGRAPHIC, DEMOGRAPHIC AND ECONOMIC INFORMATION – Guam Tourism Industry." In addition, lower levels of employment tend to reduce the revenue available to the Authority. To the extent the Authority is unable to make up for revenue shortfalls, the ability to pay debt service on the Bonds may be adversely affected.

U.S. Military Presence. Guam's economy and the Authority's level of Revenues are also affected by the U.S. military presence on Guam. The U.S. military presence affects economic activity on Guam in various ways, such as through individuals' demand for commercial, construction and other services. Expansions in the U.S. military presence, such as the expansions expected to occur over the next several years, can also have a direct, positive impact on the Guam economy and the Authority's level of Revenues by spurring new economic activity and attracting visitors to Guam. However, economic, geopolitical, and other influences that are beyond the Government and the Authority's control might result in a decision by the U.S. government to reduce the existing presence of the U.S. military on Guam or forego some or all of the planned enhancements to its presence on Guam.

Based on the 2015 SEIS and Record of Decision (see "FUTURE SYSTEM CAPITAL REQUIREMENTS – U.S. Military Realignment"), which has not been updated since its initial publication, the DOD planned to relocate approximately 5,000 military personnel and 1,300 dependents to Guam over a 12-year period, which was expected to increase the military population on Guam by approximately 50% over levels at that time. The population increase was expected to peak at 9,721 people in calendar year 2023, including military personnel, dependents, construction and civilian personnel associated with the military realignment, and gradually reach a steady state of 7,411 people by calendar year 2028 as construction declines and construction personnel leave Guam. However, based on reports from the Defense Manpower Data Center, as of September 2023, there were approximately 11,638 military personnel, an increase of 2,254 military personnel since December 2015. If the U.S. military changes its current plans with respect to staffing and other strategic improvements on Guam or if the planned population increase does not materialize, expected benefits may not be realized and the economy and the Authority's level of Revenues could be adversely affected. If the U.S. military elects to reduce or eliminate its presence on Guam, the economy and the Authority's level of Revenues could decline.

H-2B Visas. The anticipated relocation of U.S. Marines from Okinawa, Japan and other economic projects has generated a significant amount of additional construction activity on Guam. The construction industry is heavily dependent on skilled foreign workers that require H-2B visas to work on Guam. As of December 26, 2023, there were approximately 5,157 individuals with H-2B visas on Guam. From time to time, the U.S. Citizenship and Immigration Service (“USCIS”) has changed, amended or modified its policies with respect to approval of H-2B visas. Future approval of new H-2B visas or extensions of existing H-2B visas is uncertain and could impact future military construction, public infrastructure and private sector projects on Guam. The National Defense Authorization Act for federal fiscal year 2021 included a new provision that specifically allows Guam to bring in H-2B workers for civilian projects, which had not been allowed in previous years. For more information regarding the status of H-2B visas, see “APPENDIX A – GENERAL INFORMATION REGARDING THE TERRITORY OF GUAM – GEOGRAPHIC, DEMOGRAPHIC AND ECONOMIC INFORMATION – H-2B Visas.”

In the past, the Authority has had success in working with the DOD to secure H-2B visas for contractors working on U.S. military realignment projects under the National Defense Authorization Act. However, the denial of H-2B visas or the decline of available skilled construction workers in the future could negatively impact the Authority’s ability to construct its other capital projects by increasing construction timeframes and driving up costs.

Worldwide Health Concerns

A pandemic, epidemic or outbreak of an infectious disease can have significant adverse health and financial impacts on global and local economies, including Guam. For example, the COVID-19 pandemic significantly impacted Guam and resulted in prolonged stay-at-home orders that impacted the System. In addition to certain direct impacts on the operations and finances of the Authority, the COVID-19 pandemic had significant and varied impacts on general economy activity at the local, national and global levels, including supply chain and labor market disruptions. Such disruptions, among other effects, resulted in increases in materials, labor and other costs across a wide number of sectors, as well as delays in delivery of projects and equipment. The Authority has experienced, and may in the future experience, increases in certain costs, such as for bulk chemical supplies, and delays in the delivery of equipment as a result of a disruption of supply chains from the COVID-19 pandemic. Additionally, such disruptions may result in schedule delays for the Authority’s capital projects or increased costs for such projects. See “– Implementation of Capital Improvement Program” and APPENDIX A – “GENERAL INFORMATION REGARDING THE TERRITORY OF GUAM – COVID-19 Pandemic” and “– GEOGRAPHIC, DEMOGRAPHIC AND ECONOMIC INFORMATION – Guam Tourism Industry.”

Uncertainties Relating to Political and Military Actions

Guam is approximately 3,800 miles west-southwest of Honolulu, Hawaii, the nearest major city of the U.S. The significant U.S. military presence on Guam, its distance from locations in the U.S. and its location in relation to potential sites of political and military conflict in Asia make Guam both a location of great value to the U.S. militarily and a potential site of military conflict. Political events in Asia may create the risk of conflict for the region in general and, in some cases, for Guam. In response to threats in 2013 by North Korea to launch ballistic missile attacks against U.S. military targets, including targets on Guam, the U.S. military deployed a missile defense system to Guam. Threats by North Korea in 2017 contributed, in part, to the declining number of tourists visiting Guam in Fiscal Year 2018, which was approximately 2.0% below the total number of tourists in Fiscal Year 2017. No assurance can be given that these threats and any future military actions will not have an adverse effect on Guam tourist activity and, as a result, the availability of Revenues sufficient to pay debt service on the Bonds, including the 2024AB Bonds.

2011 Court Order with US EPA

The 2011 Court Order, which is being administered directly by US EPA through its regional office in San Francisco, California, contains a comprehensive list of requirements, including management, operations, financial administration, facilities construction and rehabilitation and training requirements to be completed in accordance with a strict schedule. Only one project remains under the 2011 Court Order. In June 2023, the Guam District Court granted an extension for completion of the last project until December 31, 2025. See “REGULATORY ENVIRONMENT – Environmental Regulations – 2003 Stipulated Order and 2011 Court Order.” Failure of the Authority to meet the scheduled requirements in connection with the final project may result in fines being assessed

against the Authority. Since the issuance of the 2011 Court Order, the Authority has not been assessed any fines for missed deadlines or received any formal notification regarding any such fines.

2024 Partial Consent Decree with US EPA

The 2024 Partial Consent Decree, which has been filed with the Guam District Court and is expected to be signed into order in spring 2024, contains a comprehensive list of requirements, including management, operations, financial administration, facilities construction and rehabilitation and training requirements to be completed in accordance with a strict schedule. Failure of the Authority to meet the scheduled requirements of the 2024 Partial Consent Decree may result in fines being assessed against the Authority. See “REGULATORY ENVIRONMENT – Environmental Regulations – 2024 Partial Consent Decree.”

Typhoons and Earthquakes

Because of its location on the southern end of the Marianas Islands chain, Guam is exposed to periodic typhoons, earthquakes and floods. Typhoons and floods have caused significant damage to the Authority’s facilities in the past. Damage to the Authority’s System from typhoons and flooding has included sewage spills at pump stations and collection piping, collapse of collection piping, and failure of treatment plant equipment. Damage from floods and typhoons have also damaged facilities of GPA, which provide electric power to the Authority’s System. To mitigate weather related service outages due to power interruption, back-up generators have been installed at a majority of the Authority’s water and wastewater pump stations. Typhoons and other significant storm events and other natural disasters occur periodically and can cause extensive damage to facilities and infrastructure, including to the Authority’s System. The Authority has previously reported property losses resulting from storms damage. The most recent typhoon that caused damage to the System was Typhoon Mawar in May 2023. See “THE AUTHORITY – Typhoon Mawar.”

Guam has established building codes that are specifically designed to ensure that structures be able to sustain strong typhoon winds and earthquakes. Existing Authority structures were designed to satisfy the building codes as then in effect; new structures, and existing structures undergoing structural rehabilitation, are designed or upgraded to comply with Guam’s current building codes. The Authority’s above-ground facilities are generally housed in concrete buildings designed to withstand typhoon conditions and its underground facilities are rarely affected by high winds or intense rain. Earthquakes have caused minimal damage to Authority facilities in the past, but damage to the underground pipe network may go unnoticed.

Although FEMA has historically provided disaster relief assistance after typhoon damage, there can be no assurance that future typhoons and/or earthquakes will not cause significant damage to the System, or that FEMA will provide disaster relief assistance if significant damage is experienced. There can also be no assurance that, even with FEMA assistance, damage that results from future typhoons or earthquakes will not adversely affect the operation of the System for an extended period of time and, as a result, Revenues sufficient to pay debt service on the Bonds, including the 2024AB Bonds.

Climate Change, Risk of Sea-Level Rise and Flooding Damage

Potential impacts of climate change, including rising sea levels, excessive rainfall, stronger tropical storms, drought, ocean acidification, coral bleaching, saltwater intrusion, storm surges, rising temperatures and increased migration, may threaten Guam’s security and resources and have detrimental socioeconomic impacts to Guam. The Government has started system-wide coordination and long-range planning efforts to mitigate the potential adverse environmental and socioeconomic impacts. For more information regarding such efforts, see “APPENDIX A – GENERAL INFORMATION REGARDING THE TERRITORY OF GUAM – GEOGRAPHIC, DEMOGRAPHIC AND ECONOMIC INFORMATION – Climate Change and Risk of Sea-Level Rise and Flooding Damage.”

The Authority has taken proactive steps to facilitate responsible management of Guam’s water resources through the development of the NGLA monitoring wells with the DOD and shared maintenance with the U.S. Navy pursuant to the One-Guam Initiative. See “THE SYSTEM – One-Guam Initiative.” The Authority’s Water Loss

Control Program is also being undertaken to reduce withdrawal rates from the NGLA and to reduce the likelihood of saltwater intrusion from climate change.

Based on “Water Resources on Guam – Potential Impacts of and Adaptive Response to Climate Change,” a report published by the USGS in 2019, climate change could negatively impact Guam’s water supply by 2080 and the Authority will need to begin considering mitigation strategies for the potential reduction in water supply and projected increase in drought conditions.

The Authority is unable to predict the level of damage, if any, to the System that may result from sea-level rise or other impacts of climate change. There can be no assurance that any such damage will not adversely affect the operation of the System for an extended period of time and, as a result, Revenues sufficient to pay debt service on the Bonds, including the 2024AB Bonds.

Rates

The Authority has covenanted in the Indenture to at all times, fix, prescribe and collect rents, fees and charges in connection with the services and facilities funded by the System which will be sufficient to comply with the Rate Covenant. The Indenture provides that if Revenues and Net Revenues in a Fiscal Year are insufficient to satisfy the Rate Covenant for such Fiscal Year, the Authority is required to promptly employ a consulting engineer to make recommendations as to a revision of rates, fees and charges or the methods of operation of the System, and to revise such rates, fees and charges or methods of operation and to take such other actions as will be in conformity with such recommendations, subject to applicable requirements or restrictions imposed by law and subject to a good faith determination of the Board that such recommendations, in whole or in part, are in the best interests of the Authority, the Owners and each Credit Provider, if any. The ability of the Authority to increase rates is subject to limitation, including review and approval by the PUC. Rates for water and wastewater services are regulated by the PUC. Although the PUC has historically approved rate adjustments requested by the Authority with modifications in some years, no assurance can be given that the PUC will approve any future rate adjustments requested by the Authority. See “SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Rate Covenant,” “THE SYSTEM – Debt Service Coverage” and “– Rates and Charges,” and “REGULATORY ENVIRONMENT – Regulation of Ratemaking.”

Cybersecurity

The Authority relies on a complex technology environment to conduct its operations and faces multiple cybersecurity threats, including, but not limited to, hacking, phishing, viruses, malware and other attacks on its computing and other networks and systems (collectively, “**Systems Technology**”). As a recipient and provider of personal, private or sensitive information, the Authority may be the target of cybersecurity incidents that could result in adverse consequences to the Authority’s Systems Technology, requiring a response action to mitigate the consequences.

Cybersecurity incidents could result from unintentional events or from deliberate attacks by unauthorized entities or individuals attempting to gain access to the Authority’s Systems Technology for the purposes of misappropriating assets or information or causing operational disruption and damage.

Cybersecurity breaches could damage the Authority’s Systems Technology and cause material disruption to the Authority’s finances and operations. The costs of remedying any such damage or protecting against future attacks could be substantial. Further, cybersecurity breaches could expose the Authority to material litigation and other legal risks which could cause the Authority to incur material costs related to such legal claims or proceedings.

To mitigate the risk of business operations impact and damage from cybersecurity incidents or cyber-attacks, the Authority and GPA have jointly initiated cybersecurity policies and protocols and conducted system testing and assessment to identify necessary security improvements. The Authority has developed an interim cybersecurity policy based on the “Framework for Improving Critical Infrastructure” prepared by the National Institute of Standards and Technology, and a cybersecurity awareness training program. In addition, the Authority has adopted new standard operating procedures on cybersecurity and continues to work to strengthen its capabilities

to protect against cybersecurity threats and attacks. However, no assurance can be given by the Authority that such measures will ensure against cybersecurity threats and attacks.

In 2018, 2022 and 2023, the Authority also completed a network security and vulnerability assessments, which included information technology general controls, operational technology network, site physical security, network architecture security, and penetration and vulnerability. Since 2022, external evaluations are scheduled and executed on an annual basis. The Authority has updated and expanded its cybersecurity standard operating procedures and is implementing critical redundancy solutions for its information technology network. In addition, the Authority has implemented a formal cyber security policy, has designated a cyber security coordinator for the utility and requires annual cyber security training for all employees.

Separate from the Authority, the Government has an in-house cybersecurity team that detects and responds to cybersecurity threats. The Government's cybersecurity team reports to the Guam Homeland Security Advisor (the "**Guam HSA**") and the Mariana Regional Fusion Center Director (the "**MRFC Director**"). The Guam HSA and MRFC Director oversee the management of a chief information security officer's cybersecurity program and initiatives to ensure compliance and protection from cybersecurity threats. In addition, the Government is currently working with the National Governors Association on strategies to enhance cybersecurity.

Insurance

The Authority maintains property insurance with a blanket coverage of up to \$30 million, including coverage of earthquakes, windstorms, floods, typhoons and tidal waves, business interruption and boiler and explosion and machinery breakdown. The Authority also maintains commercial automobile insurance with liability coverage up to \$2 million, crime insurance with coverage of up to \$1 million, and directors and officer's liability insurance with coverage up to \$2 million. In addition, the Authority maintains general liability insurance with coverage of \$25 million.

Government Regulation

The federal and local governments significantly regulate the operations of the Authority. Regulations and conditions affecting the acquisition, development, ownership and operation of the System could increase the operating expenses of the System or could otherwise have a material adverse effect on the operations and financial condition of the Authority.

Implementation of Capital Improvement Program

Successful and timely implementation of the Authority's capital improvement program will require careful planning and coordination as well as hiring additional experienced construction management and workers, and other staff and consultants, including off-island personnel and vendors. The Authority intends to enter into contracts with qualified construction management firms to manage a portion of its capital improvement projects.

The ability of the Authority to complete the capital improvement projects on time and on budget may be adversely affected by various factors including: (i) estimating errors, (ii) design and engineering errors, (iii) changes to the scope of the projects, (iv) delays in contract awards, (v) material and/or labor shortages (see also "CERTAIN INVESTMENT CONSIDERATIONS – Guam Economy; Impact of Tourism and Military Presence – *H-2B Visas*"), (vi) unforeseen site conditions, (vii) adverse weather conditions, earthquakes or other casualty events, (viii) contractor defaults, (ix) labor disputes, (x) unanticipated levels of inflation or significant increases in the costs of materials and (xi) environmental issues. Information regarding the Authority's Interim CIP is set forth under "FUTURE SYSTEM CAPITAL REQUIREMENTS – Capital Improvement Program – *Interim CIP*" based on evaluations conducted through the ongoing 2024 WRMP Update process from October 2023; however, the Interim CIP has not and will not be updated. The Authority is in the process of preparing the 2025-2029 CIP. See "FUTURE SYSTEM CAPITAL REQUIREMENTS – Capital Improvement Program – *Pending 2025-2029 CIP*." No assurance can be made that the capital improvement projects will not cost more than budgeted. Any schedule delays or cost increases could result in the need to issue Additional Bonds.

Funding for the Authority’s capital improvement program is expected from various sources, including proceeds of previously issued bonds, and Additional Bonds expected to be issued in Fiscal Years 2025 and 2027, as well as Authority operating revenues, revenues from System Development Charges, US EPA State Revolving Fund grants and other grants. In the event one or more of these funding sources is not available to the Authority in the amount or on the schedule described above under “FUTURE SYSTEM CAPITAL REQUIREMENTS,” the implementation of some of the 2025-2029 CIP projects may be delayed.

Secondary Treatment Requirements Under NPDES Permit

The NPDES permit issued by the US EPA includes secondary treatment requirements for four of the Authority’s wastewater treatment plants; however, the Hagåtña WWTP is not currently equipped to provide secondary treatment. The Authority originally estimated that the design and construction necessary to satisfy the secondary treatment requirements would take approximately five years, and the cost of upgrading the Hagåtña WWTP would be approximately \$268 million (in 2023 dollars) based on planning conducted as part of the Authority’s 2018 WRMP Update. Under the 2024 Partial Consent Decree, however, the Authority is required to submit a feasibility study for secondary treatment upgrades to the Hagåtña WWTP to the US EPA by January 2031 for review and approval. The feasibility study is required to include analyses of design options, alternative locations, climate change and sea level rise, and planning level construction cost estimates and construction timelines. See “THE SYSTEM – The Wastewater System – *Wastewater Treatment Plants – Hagåtña WWTP*” and “REGULATORY ENVIRONMENT – Environmental Regulations – *2024 Partial Consent Decree*.”

LITIGATION

No Litigation Relating to the 2024AB Bonds

There is no litigation or proceeding pending or, to the knowledge of the Authority, threatened and having merit (either in Guam, state or federal courts) seeking to restrain or enjoin the execution, issuance, sale or delivery of the 2024AB Bonds or the collection, pledge or payment of Revenues by the Authority under the Indenture, or in any way contesting or affecting the legal existence of the Authority or the titles of certain relevant officials of the Authority to their offices or the validity or enforceability of the 2024AB Bonds or the Indenture.

Core Tech International Corporation Litigation

In 2018, the Government’s Director of Land Management filed suit against Core Tech International Corporation (“CTI”) in the Superior Court of Guam (the “**Guam Superior Court**”) to rescind several certificates of title, which the Government has claimed were erroneously issued by the Deputy Civil Registrar to CTI’s predecessor-in-interest in 2014. The Authority intervened and asserted a quiet title action. The quiet title action addressed certificates of title for property upon which the Northern District WWTP is located (known as Lots 10193 and 10194), which have been continuously owned, used and occupied by the federal government, the Government and the PUAG (the Authority’s predecessor agency) through the construction and operation of the Northern District WWTP since 1979, and by the Authority since 1997. A 1997 grant deed recorded by the Department of Land Management shows ownership in the Authority. CTI has subsequently filed a crossclaim against the Authority, a counterclaim against the Government and another counterclaim against the Authority, seeking just compensation for inverse condemnation in the amount of \$220 million, as well as damages for trespass and encroachment by the Authority. As of January 2024, the matter remains in the pre-trial phase. Active motions before the Guam Superior Court to verify chains of title and conveyance of specific plots of land and the utilities continue.

Although the Authority and the Government believe the matters will be resolved in their favor, the Authority and the Government cannot predict the outcome of the case before the Guam Superior Court. In the event that the Guam Superior Court enters a judgment against the Authority and the Government, the resulting liability could have a material and adverse impact on the Authority’s financial position. The Authority and the Government intend to vigorously defend themselves against CTI’s claims, and the Authority intends to vigorously pursue the quiet title action.

Other Litigation Relating to the Authority and the System

Other than as disclosed elsewhere in this Official Statement, there are no pending claims or actions against the Authority arising from the operation and maintenance of the System that, if determinations or settlements were made adverse to the Authority, would have, in the opinion of the Authority's counsel, a material adverse effect on the Authority's financial position.

TAX MATTERS

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the Authority ("**Bond Counsel**"), based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2024AB Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the "**Code**"). Bond Counsel is of the further opinion that interest on the 2024AB Bonds is not a specific preference item for purposes of the federal individual alternative minimum tax. Bond Counsel observes that interest on the 2024AB Bonds included in adjusted financial statement income of certain corporations is not excluded from the federal corporate alternative minimum tax. Bond Counsel is also of the opinion that, under 48 U.S.C. Section 1423a, interest on the 2024AB Bonds is exempt from taxation by the Government of Guam, or by any state or territory of the United States or any political subdivision thereof, or by the District of Columbia. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual, or receipt of interest on, the 2024AB Bonds. Complete copies of the proposed forms of opinion of Bond Counsel are set forth in APPENDIX D hereto.

To the extent the issue price of any maturity of the 2024AB Bonds is less than the amount to be paid at maturity of such 2024AB Bonds (excluding amounts stated to be interest and payable at least annually over the term of such 2024AB Bonds), the difference constitutes "original issue discount," the accrual of which, to the extent properly allocable to each Beneficial Owner thereof, is treated as interest on the 2024AB Bonds which is excluded from gross income for federal income tax purposes and is exempt from taxation by the Government of Guam, or by any state or territory of the United States or any political subdivision thereof, or by the District of Columbia. For this purpose, the issue price of a particular maturity of the 2024AB Bonds is the first price at which a substantial amount of such maturity of the 2024AB Bonds is sold to the public (excluding bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). The original issue discount with respect to any maturity of the 2024AB Bonds accrues daily over the term to maturity of such 2024AB Bonds on the basis of a constant interest rate compounded semiannually (with straight-line interpolations between compounding dates). The accruing original issue discount is added to the adjusted basis of such 2024AB Bonds to determine taxable gain or loss upon disposition (including sale, redemption, or payment on maturity) of such 2024AB Bonds. Beneficial Owners of the 2024AB Bonds should consult their own tax advisors with respect to the tax consequences of ownership of 2024AB Bonds with original issue discount, including the treatment of Beneficial Owners who do not purchase such 2024AB Bonds in the original offering to the public at the first price at which a substantial amount of such 2024AB Bonds is sold to the public.

2024AB Bonds purchased, whether at original issuance or otherwise, for an amount higher than their principal amount payable at maturity (or, in some cases, at their earlier call date) ("**Premium Bonds**") will be treated as having amortizable bond premium. No deduction is allowable for the amortizable bond premium in the case of bonds, like the Premium Bonds, the interest on which is excluded from gross income for federal income tax purposes. However, the amount of tax-exempt interest received, and a Beneficial Owner's basis in a Premium Bond, will be reduced by the amount of amortizable bond premium properly allocable to such Beneficial Owner. Beneficial Owners of Premium Bonds should consult their own tax advisors with respect to the proper treatment of amortizable bond premium in their particular circumstances.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the 2024AB Bonds. The Authority has made certain representations and covenanted to comply with certain restrictions, conditions and requirements designed to ensure that interest on the 2024AB Bonds will not be included in federal gross income. Inaccuracy of these representations or failure to comply with these covenants may result in interest on the 2024AB Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the 2024AB

Bonds. The opinion of Bond Counsel assumes the accuracy of these representations and compliance with these covenants. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken), or events occurring (or not occurring), or any other matters coming to Bond Counsel's attention after the date of issuance of the 2024AB Bonds may adversely affect the value of, or the tax status of interest on, the 2024AB Bonds. Accordingly, the opinion of Bond Counsel is not intended to, and may not, be relied upon in connection with any such actions, events or matters.

Although Bond Counsel is of the opinion that interest on the 2024AB Bonds is excluded from gross income for federal income tax purposes and, under 48 U.S.C. 1423a, is exempt from taxation by the Government of Guam or by any state or territory of the United States or any political subdivision thereof, or by the District of Columbia, the ownership or disposition of, or the accrual or receipt of amounts treated as interest on, the 2024AB Bonds may otherwise affect a Beneficial Owner's federal, state or local tax liability. The nature and extent of these other tax consequences depends upon the particular tax status of the Beneficial Owner or the Beneficial Owner's other items of income or deduction. Bond Counsel expresses no opinion regarding any such other tax consequences.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the 2024AB Bonds to be subject, directly or indirectly, in whole or in part, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent Beneficial Owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislative proposals or clarification of the Code or court decisions may also affect, perhaps significantly, the market price for, or marketability of, the 2024AB Bonds. Prospective purchasers of the 2024AB Bonds should consult their own tax advisors regarding the potential impact of any pending or proposed federal or state tax legislation, regulations or litigation, as to which Bond Counsel expresses no opinion.

The opinion of Bond Counsel is based on current legal authority, covers certain matters not directly addressed by such authorities, and represents Bond Counsel's judgment as to the proper treatment of the 2024AB Bonds for federal income tax purposes. It is not binding on the Internal Revenue Service ("IRS") or the courts. Furthermore, Bond Counsel cannot give and has not given any opinion or assurance about the future activities of the Authority, or about the effect of future changes in the Code, the applicable regulations, the interpretation thereof or the enforcement thereof by the IRS. The Authority has covenanted, however, to comply with the requirements of the Code.

Bond Counsel's engagement with respect to the 2024AB Bonds ends with the issuance of the 2024AB Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend the Authority or the Beneficial Owners regarding the tax-exempt status of the 2024AB Bonds in the event of an audit examination by the IRS. Under current procedures, Beneficial Owners would have little, if any, right to participate in the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of tax-exempt bonds is difficult, obtaining an independent review of IRS positions with which the Authority legitimately disagrees, may not be practicable. Any action of the IRS, including but not limited to selection of the 2024AB Bonds for audit, or the course or result of such audit, or an audit of bonds presenting similar tax issues may affect the market price for, or the marketability of, the 2024AB Bonds, and may cause the Authority or the Beneficial Owners to incur significant expense.

Payments on the 2024AB Bonds generally will be subject to U.S. information reporting and possibly to "backup withholding." Under Section 3406 of the Code and applicable U.S. Treasury Regulations issued thereunder, a non-corporate Beneficial Owner of 2024AB Bonds may be subject to backup withholding with respect to "reportable payments," which include interest paid on the 2024AB Bonds and the gross proceeds of a sale, exchange, redemption, retirement or other disposition of the 2024AB Bonds. The payor will be required to deduct and withhold the prescribed amounts if (i) the payee fails to furnish a U.S. taxpayer identification number ("TIN") to the payor in the manner required, (ii) the IRS notifies the payor that the TIN furnished by the payee is incorrect, (iii) there has been a "notified payee underreporting" described in Section 3406(c) of the Code or (iv) the payee fails to certify under penalty of perjury that the payee is not subject to withholding under Section 3406(a)(1)(C) of the Code. Amounts withheld under the backup withholding rules may be refunded or credited against a Beneficial Owner's federal income tax liability, if any, provided that the required information is timely furnished to the IRS. Certain Beneficial Owners (including among others, corporations and certain tax-exempt organizations) are not subject to

backup withholding. The failure to comply with the backup withholding rules may result in the imposition of penalties by the IRS.

UNDERWRITING

The 2024A Bonds are to be purchased from the Authority by RBC Capital Markets, LLC (the “**Underwriter**”) pursuant to the terms of a bond purchase agreement (the “**2024A Bond Purchase Agreement**”) between the Underwriter and the Authority. The purchase price of the 2024A Bonds is \$ _____, representing the aggregate principal amount of the 2024A Bonds (\$ _____), [plus/less] [net] original issue [premium/discount] of \$ _____, and less an underwriter’s discount of \$ _____. The 2024A Bond Purchase Agreement provides that the Underwriter will purchase all of the 2024A Bonds if any are purchased and that the obligation to make such purchase is subject to certain terms and conditions set forth in the 2024A Bond Purchase Agreement, including the approval by counsel of certain legal matters.

The 2024B Bonds are to be purchased from the Authority by the Underwriter pursuant to the terms of a bond purchase agreement (the “**2024B Bond Purchase Agreement**”) between the Underwriter and the Authority. The purchase price of the 2024B Bonds is \$ _____, representing the aggregate principal amount of the 2024B Bonds (\$ _____), [plus/less] [net] original issue [premium/discount] of \$ _____, and less an underwriter’s discount of \$ _____. The 2024B Bond Purchase Agreement provides that the Underwriter will purchase all of the 2024B Bonds if any are purchased and that the obligation to make such purchase is subject to certain terms and conditions set forth in the 2024B Bond Purchase Agreement, including the approval by counsel of certain legal matters.

The Underwriter reserves the right to join with dealers and other underwriters in offering the 2024AB Bonds to the public. The Underwriter intends to offer the 2024AB Bonds for sale at the prices or yields set forth on the inside cover page hereof. Such initial public offering prices or yields may be changed from time to time by the Underwriter without prior notice. The Underwriter may offer and sell the 2024AB Bonds to certain dealers, unit investment trusts or money market funds at prices lower than or at yields higher than the public offering prices or yields stated on the inside cover page.

The Underwriter and its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. The Underwriter and its affiliates may have, from time to time, performed, and may in the future perform, various investment banking services for the Authority, for which they received or will receive customary fees and expenses.

In the ordinary course of its various business activities, the Underwriter and its respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the Authority.

In addition to its role as Underwriter, RBC Capital Markets, LLC is also serving as Dealer Manager for the tender offer. The Target Bonds are offered solely by means of the tender offer, as described herein. The Dealer Manager has entered into an exclusive dealer manager agreement with the Authority under which the Dealer Manager will be compensated in an amount equal to a percentage of the aggregate principal amount of the Purchased Bonds. See “PLAN OF REFUNDING.”

FINANCIAL STATEMENTS

The financial statements of the Authority for the Fiscal Year 2022 have been audited by Ernst & Young LLP, independent auditors, as stated in their report, appearing in APPENDIX B hereto. Reference should be made to the audited financial statements included in APPENDIX B for the independent auditors’ report and a complete understanding of the information provided therein.

VERIFICATION OF ESCROW

The Arbitrage Group, Inc. (the “**Verification Agent**”) has been engaged to verify from the information provided to them (i) the mathematical accuracy as of the date of the closing on the 2024A Bonds of the computations contained in the provided schedules to determine that the anticipated receipts from the securities and/or cash deposits listed in the Underwriter’s schedules, to be held in escrow, will be sufficient to pay, when due, the principal or redemption price of and interest on the Refunded 2013 Bonds to be refunded with proceeds of the 2024A Bonds and (ii) the mathematical accuracy as of the date of the closing on the 2024B Bonds of the computations contained in the provided schedules to determine that the anticipated receipts from the securities and/or cash deposits listed in the Underwriter’s schedules, to be held in escrow, will be sufficient to pay, when due, the principal or redemption price of and interest on the Refunded 2014A Bonds to be refunded with proceeds of the 2024B Bonds. The Verification Agent will express no opinion on the reasonableness of the assumptions provided to them, the likelihood that the redemption price and principal of and interest on such Refunded 2013 Bonds and Refunded 2014A Bonds will be paid as described in the accompanying schedules, nor as to the exemption from taxation of the interest on the 2024A Bonds or the 2024B Bonds, as applicable.

CERTAIN LEGAL MATTERS

The issuance of the 2024A Bonds and the 2024B Bonds is subject to receipt of the respective approving opinion of Bond Counsel. The proposed forms of opinion of Bond Counsel with respect to the 2024A Bonds and the 2024B Bonds are included in this Official Statement as APPENDIX D-1 and D-2, respectively. Bond Counsel undertakes no responsibility for the accuracy, completeness or fairness of this Official Statement. From time to time Orrick, Herrington & Sutcliffe LLP serves as counsel to the Underwriter on matters that do not relate to the Authority or to the 2024AB Bonds.

Certain legal matters will be passed upon for the Authority by Theresa Rojas, general counsel for the Authority. Certain legal matters will be passed upon by Orrick, Herrington & Sutcliffe LLP, as Disclosure Counsel to the Authority. Certain legal matters will be passed upon for the Underwriter by their counsel, Hawkins Delafield & Wood LLP.

AVAILABLE INFORMATION

During the initial offering period for the 2024AB Bonds, copies of the Authority’s audited financial statements are available from the Authority at the Administration Office of the Guam Waterworks Authority, Gloria B. Nelson Public Services Building, 688 Route 15, Mangilao, Guam 96913, during normal business hours, Monday through Friday, excluding holidays. Copies of the Indenture may be obtained, upon written request, from the Underwriter.

RATINGS

Moody’s Investors Service, Inc. (“**Moody’s**”) and S&P Global Ratings (“**S&P**”) have assigned their ratings of “Baa2” and “A-,” respectively, to the 2024AB Bonds. The ratings reflect only the view of the rating agencies assigning such ratings at the time such ratings are given, and the Authority makes no representations as to the appropriateness of such ratings. Any explanation of the significance of such ratings may only be obtained from the rating agency furnishing the same. Certain information and materials not included in this Official Statement were furnished to the rating agencies concerning the 2024AB Bonds. Generally, rating agencies base their ratings on such information and materials and on investigation, studies and assumptions by the rating agencies. There is no assurance that the ratings mentioned above will remain for any given period of time or that any or all of them might not be lowered or withdrawn entirely by any rating agency if in the judgment of any or all rating agencies, circumstances so warrant. Any such downward change in or withdrawal of such ratings might have an adverse effect on the market price for and marketability of the 2024AB Bonds. A securities rating is not a recommendation to buy, sell or hold securities.

CONTINUING DISCLOSURE

The Authority will covenant for the benefit of the holders and beneficial owners of the 2024A Bonds and the 2024B Bonds to provide certain financial information and operating data relating to the Authority by not later than 270 days after the end of the Fiscal Year (presently September 30) to which such information pertains, commencing with the report for the Fiscal Year ending September 30, 2023 (each, an “**Annual Report**”) and to provide notices of the occurrence of certain enumerated events. Each Annual Report and any notices of enumerated events will be filed with the Municipal Securities Rulemaking Board, through its EMMA system. The specific nature of the information to be contained in each Annual Report or the notices of certain enumerated events is described in APPENDIX E – “PROPOSED FORMS OF CONTINUING DISCLOSURE AGREEMENTS” attached hereto. These covenants will be made in order to assist the Underwriter in complying with Rule 15c2-12.

In order to provide certain continuing disclosure with respect to the 2024A Bonds and the 2024B Bonds in accordance with Rule 15c2-12, the Authority has entered into a Continuing Disclosure Agreement relating to the 2024A Bonds (the “**2024A Continuing Disclosure Agreement**”), and a Continuing Disclosure Agreement relating to the 2024B Bonds (the “**2024B Continuing Disclosure Agreement**” and, together with the 2024A Continuing Disclosure Agreement, the “**Continuing Disclosure Agreements**”), each with Digital Assurance Certification, L.L.C. (“**DAC**”) for the benefit of the Holders of the applicable 2024A Bonds or 2024B Bonds under which the Authority has designated DAC as Dissemination Agent.

The Dissemination Agent has only the duties specifically set forth in the Continuing Disclosure Agreements. The Dissemination Agent’s obligation to deliver the information at the times and with the contents described in the Continuing Disclosure Agreements is limited to the extent the Authority has provided such information to the Dissemination Agent as required by the Continuing Disclosure Agreements.

(Remainder of Page Intentionally Left Blank)

MISCELLANEOUS

The attached Appendices are integral parts of this Official Statement and should be read in their entirety. The Authority has reviewed the information contained herein and has approved all such information for use in this Official Statement.

The execution and delivery of this Official Statement has been duly authorized by the Authority.

GUAM WATERWORKS AUTHORITY

By: _____
Miguel Bordallo, P.E.
General Manager

CONSOLIDATED COMMISSION ON UTILITIES

By: _____
Joseph T. Duenas
Chairman

[THIS PAGE INTENTIONALLY LEFT BLANK]

APPENDIX A

GENERAL INFORMATION REGARDING THE TERRITORY OF GUAM

Guam is the westernmost territory of the United States of America (the “U.S.”), as well as the largest and southernmost island of the Marianas archipelago, and the largest of the 2,000 islands in Micronesia. Located at 13 degrees north latitude, 144 degrees east longitude in the western Pacific Ocean, the island is about 30 miles long and varies from four to nine miles wide, with a total land area of approximately 212 square miles. Guam is approximately 3,800 miles west-southwest of Honolulu, Hawaii, 1,550 miles south-southeast of Tokyo, Japan and 1,600 miles east of Manila, Philippines. The Mariana Trench, which has the deepest known ocean depth (36,070 feet), extends from northeast to southwest of Guam. The U.S. Census Bureau estimated Guam’s population in 2020 was approximately 153,836 (the most recent date for which such information is available).

Guam was first settled approximately 4,000 years ago. Its strategic location in the western Pacific historically made it a desirable property for the world’s superpowers. The indigenous Chamorro people first came in contact with Europeans in 1521 when Ferdinand Magellan landed at Guam’s Umatac Bay. Miguel Lopez de Legazpi claimed the island for Spain in 1565. Spanish colonization of Guam began in 1668 and lasted until the end of the Spanish-American War in 1898. As outlined in the Treaty of Paris, signed in December 1898, Guam was ceded to the U.S. along with Cuba, Puerto Rico and the Philippines. Guam has since remained under U.S. administration, except for two and a half years of Japanese occupation during World War II. On July 21, 1944, U.S. forces recaptured Guam and reestablished a naval government. In 1950, the U.S. Congress passed the Organic Act of Guam (the “**Organic Act**”) granting the Chamorro people U.S. citizenship and establishing a civilian government.

Guam’s current political status is that of an unincorporated territory of the U.S. The organization and powers of the Government of Guam (the “**Government**” or “**GovGuam**”) are determined by the Organic Act. The Government consists of three branches: executive, legislative and judicial. A governor (“**Governor**”) and lieutenant governor, elected jointly at large every four years, head the executive branch. The Government maintains a staff of approximately 11,590 employees (as of June 2023, the most recent date for which such information is available) under the direction of the Governor and the Governor’s department heads. The unicameral legislature consists of 15 senators elected at large every two years. The judicial branch consists of the Superior Court of Guam, which is the court of general trial jurisdiction, and the Supreme Court of Guam, the court of highest appeal, established in 1996. Guam also has a Federal District Court and is within the jurisdiction of the Ninth Circuit U.S. Court of Appeals and the U.S. Supreme Court. Guam has one non-voting delegate to the U.S. House of Representatives elected at large every two years.

Tourism revenues and U.S. federal and military spending contribute to Guam’s economy. Guam’s location in the Pacific region, a three- to five-hour flight from many Asian countries, greatly contributes to the diversity of Guam’s population and its visitor industry. This geographic feature also provides U.S. military operations with significant flexibility compared to other locations in the Pacific and Asia.

Typhoon Mawar and Guam Restoration Efforts

On May 24, 2023, Typhoon Mawar struck Guam as a Category 4 storm, with strong winds of approximately 140 miles per hour and heavy rains as reported by the National Weather Services (NWS), Guam. Typhoon Mawar, the strongest tropical cyclone to hit the island in over 20 years, caused widespread damage on the island.

President Joseph R. Biden, Jr. approved an emergency declaration on May 25, 2023, stating that a major disaster exists in the territory of Guam and ordered federal aid to supplement territory and local recovery efforts in the areas affected by Typhoon Mawar. The declaration authorized the Federal Emergency Management Agency (“**FEMA**”) to respond to the disaster. Specifically, FEMA was authorized to identify, mobilize and provide, at its discretion, equipment and resources necessary to alleviate the impacts of the emergency. Emergency protective measures, limited to direct federal assistance, under the public assistance program, will be provided at 75% federal funding. On August 9, 2023, President Biden made additional disaster assistance available to Guam to supplement recovery efforts by authorizing the federal cost-share for the major disaster declaration to be increased from 75% to 90%.

Typhoon Mawar affected travelers and visitors who were on Guam during the typhoon. The Guam Visitors Bureau (“GVB”) provided assistance to almost 5,000 stranded visitors impacted by Typhoon Mawar. GVB reached out to tour agents, local bus companies, hotels, and industry partners to transport visitors and provide a sense of security by covering a portion of the cost of their lodging and meals as they waited for availability of seats on outbound airlines to their home country.

The Guam International Airport Authority (“GIAA”) closed all operations at the A.B. Won Pat International Airport (the “Airport”) on May 24, 2023, opened for humanitarian and essential cargo operations on May 27, 2023, and resumed normal operations on May 29, 2023.

The Guam Power Authority (“GPA”) restored power to all customers by July 2023. However, customers have been experiencing rotation outages since the typhoon if demand from customers between 4:00 p.m. to 11:00 p.m. exceeds GPA's available energy capacity. The critical Yigo Combustion Turbine (CT), responsible for supplying 20MW of power for Guam, was damaged during Typhoon Mawar. The specialized component needed to be shipped to Texas for repair, contributing to the prolonged outage. Yigo CT is anticipated to be fixed by March 2024.

The Guam Waterworks Authority (“GWA”) recovered quickly from Typhoon Mawar. The GWA water and wastewater system did not sustain major damage from the storm. Water service was restored to 62% of customers By June 6, 2023 (day 13), to 92% of customers by June 17, 2023 (day 24) and to all 19 municipalities by June 23, 2023 (day 29). See “THE AUTHORITY – Typhoon Mawar” in the front part of this Official Statement.

Historically, Guam has experienced short-term impacts of natural disasters. Since 2000, a total of 23 typhoons (including Typhoon Mawar) have tracked within 200 miles of Guam. In 2002, Typhoon Pongsona caused extensive damage to Guam, destroying 1,300 homes. Typhoon Pongsona passed to the east of the island with wind speeds of 150 mph — equivalent to a Category 4 storm. By contrast, according to reports by FEMA and the American Red Cross, Typhoon Mawar destroyed approximately 437 out of an estimated 55,000 homes.

COVID-19 Pandemic

Introduction. The outbreak of COVID-19, a respiratory disease caused by a new strain of coronavirus, was first detected in China and later spread globally, including to Guam. On March 11, 2020, the World Health Organization (“WHO”) declared the COVID-19 outbreak to be a pandemic. The COVID-19 pandemic dramatically altered the behavior of businesses and people in a manner that is having negative effects on the global and Guam economies. The pandemic, and governmental actions in response to the pandemic, caused, a significant disruption of daily life and business activity globally, nationally and on Guam. These disruptions included the mandatory quarantining of visitors to Guam, cancellation and prohibition of public gatherings, the prohibition of non-essential workers working outside of their homes, and the closure of some governmental buildings, schools, gyms, religious institutions, bars, dine-in restaurants and other commercial facilities. The COVID-19 pandemic and related consequences also disrupted supply chains and disrupted or delayed certain construction activities.

The Government and its agencies received substantial COVID-19 federal financial aid.

On March 13, 2020, then-President Donald J. Trump declared a national state of emergency as a result of the COVID-19 pandemic, and on March 14, 2020, the Governor declared a Public Health Emergency in Guam. On January 6, 2023, the Governor’s public health emergency ended. WHO declared the pandemic over as of May 5, 2023.

Federal Funding. The Government, Guam residents and Guam businesses received an estimated \$3.8 billion through various federal stimulus programs enacted following the start of the COVID-19 pandemic. Guam received \$1.8 billion under the Coronavirus Aid, Relief, and Economic Security Act (the “CARES Act”), the Government received its full share of the Coronavirus Response and Relief Supplemental Appropriations Act, 2021 (the “CRSSA”) (\$553.6 million) and Guam received \$1.5 billion from the American Rescue Plan Act of 2021 (the “ARP”).

GEOGRAPHIC, DEMOGRAPHIC AND ECONOMIC INFORMATION

Geography and Climate

The island of Guam was formed by an uplift of undersea volcanoes. It is surrounded by coral reefs near the shore and consists of two distinct areas of approximately equal size. The northern region of Guam is a high coralline limestone plateau rising up 850 feet above sea level. It contains the northern water lens, which is the main source of fresh water on the island. The southern region of Guam is mountainous with elevations of 700 to 1,200 feet above sea level. Apra Harbor, one of the largest protected deep-water harbors in the world, is located on the western side of Guam.

Guam's climate is warm year-round. The average annual temperature is 85 degrees Fahrenheit. The general temperature ranges from the low 70s to 80s degrees Fahrenheit. Annual rainfall averages 85 inches in the western coastal area to 110 inches in the highest mountain locations in the south. Three-quarters of the total annual rainfall occurs between the months of June and December.

Like other Pacific islands, Guam is periodically subject to typhoons and tropical storms. Guam lies in the path of typhoons and it is common for the island to be threatened by tropical storms and possible typhoons during the wet season. From 1962 to date, typhoons that have caused major damage on Guam include: Super Typhoon Karen in 1962, Typhoon Pamela in 1976, Super Typhoon Paka in 1997, Super Typhoon Pongsona in 2002 and Typhoon Mawar in 2023.

In 2002, Guam adopted the International Building Code, and subsequently adopted the 2009 Edition, requiring all new construction to be designed to tolerate wind velocities of 155 miles per hour. Due to its location near the Mariana Trench, Guam also occasionally experiences seismic activity, including earthquakes and tsunamis. Other than a major earthquake of 8.1 magnitude on August 8, 1993, which also created a minor tsunami, no recent earthquakes or tsunamis have caused significant damage on Guam.

Climate Change and Risk of Sea-Level Rise and Flooding Damage

Potential impacts of climate change, including rising sea levels, excessive rainfall, stronger tropical storms, drought, ocean acidification, coral bleaching, saltwater intrusion, storm surges, rising temperatures and increased migration, may threaten Guam's security and resources. Pursuant to a July 2019 study released by the University of Guam (the "UOG"), one-third of Guam's coral reefs died between 2013 and 2017 because of rising ocean temperatures caused by increased global carbon dioxide output. The impact of climate change and climate variability may also have detrimental socioeconomic impacts to Guam.

In 2016, the U.S. Department of the Interior granted \$450,000 to Guam for climate change action plan projects that support multi-sector collaboration and long-term planning. Funded projects include (i) a comprehensive report by the UOG of long-term climate change impacts on infrastructure and other assets; (ii) a visual demonstration by the Guam Office of Technology of existing conditions and different climate scenarios; (iii) sustainability planning workshops; (iv) workshops by the University of Guam to build resiliency and strengthen climate change adaptation measures; and (v) updates by the Department of Public Works ("DPW") to the Storm Water Management Plan and Storm Water Manual to account for climate change effects.

The Government has started system-wide coordination and long-range planning efforts to mitigate the potential adverse environmental and socioeconomic impacts of climate change. On August 8, 2019, pursuant to Executive Order No. 2019-19, a Climate Change Resiliency Commission (the "**Climate Change Resiliency Commission**") was established. The objective of the Climate Change Resiliency Commission is to develop an integrated strategy to build resiliency against the adverse effects of climate change and to reduce contributing factors such as greenhouse emissions. *The Guam Coral Reef Resilience Strategy ("GRRS")* was developed collaboratively by the Guam Coral Reef Initiative, which includes partners from local and federal agencies, research institutions, non-profit organizations, and the private sector. The goal of the GRRS is to enhance the resilience of Guam's coral reef ecosystems and human communities to the impacts of climate change by 2025.

In September 2019, Governor Lourdes Leon Guerrero and Lt. Governor Joshua F. Tenorio promulgated Executive Order 2019-23, creating a working group of government, academia, private sector, non-profit, and youth partners to transition Guam toward a sustainable future. The Guam Green Growth initiative is a public-private partnership that develops tangible solutions to sustainability challenges and contributes to a green economy for the island region and is facilitated by the University of Guam Center for Island Sustainability.

In November 2020, the Pacific Islands Regional Climate Assessment and the East-West Center published a report entitled *Climate Change in Guam: Indicators and Considerations for Key Sectors*. The report is one in a series of reports aimed at assessing the state of knowledge about climate change indicators, impacts and adaptive capacity of the U.S.-Affiliated Pacific Islands and the Hawaiian archipelago. Major challenges detailed in the report on climate change in Guam include hotter weather threatening human health risk, risks to freshwater supplies, increasing wildfire, and the potential for damage to infrastructure caused by future sea level rise and stronger typhoons.

Guam Economy

On November 2, 2022, the Bureau of Economic Analysis of the U.S. Department of Commerce (“BEA”) released its estimated gross domestic product (“GDP”) and gross domestic income for Guam for 2021 (the most recent data available). As set forth in Table A-4, the BEA’s estimates indicate that, after declining in Calendar Year 2020, Guam’s GDP grew from \$5.886 billion to \$6.123 billion in 2021. The 2021 GDP figure primarily consists of approximately \$3.801 billion in personal consumption expenditures, \$4.207 billion in government consumption expenditures and gross investment and \$1.596 billion in private fixed investment less \$3.481 billion in net export of goods and services.

**TABLE A-4
GUAM GROSS DOMESTIC PRODUCT
CALENDAR YEARS 2017 – 2021
(Millions of Dollars)**

<u>Calendar Year</u>	<u>Gross Domestic Product⁽¹⁾</u>
2017	\$6,013
2018	6,056
2019	6,366
2020	5,886
2021	6,123

⁽¹⁾ Estimates for 2018 to 2020 have been revised to incorporate improvements to source data and methods.
Source: U.S. Department of Commerce Bureau of Economic Analysis

The GDP by industry data reflected that the private sector was the source of decline in real GDP in 2020. The decline in the private sector was primarily caused by decreases in accommodations, food services, and amusements attributed to the COVID-19 pandemic. Due to COVID-19, visitor arrivals declined 80.3% in Calendar Year 2020. In relation, wholesale and retail trade decreased as nonessential businesses throughout the island were subject to mandatory restrictions affecting daily operations. The government sector increased by 1.4% in 2020 reflecting growth in compensation for federal government employees.

(Remainder of Page Intentionally Left Blank)

TABLE A-5
GUAM GROSS DOMESTIC PRODUCT VALUE ADDED BY INDUSTRY
CALENDAR YEARS 2016 – 2020
(Millions of Dollars)

<u>Calendar Year</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
<u>Private Industries</u>					
Construction	\$376	\$388	\$412	\$453	\$522
Wholesale and retail trade ⁽¹⁾	607	624	625	683	496
Accommodations, food services, and amusements ⁽²⁾	708	736	759	839	395
Other private	1,895	1,962	1,951	2,035	2,013
<u>Government</u>					
Federal	1,295	1,288	1,302	1,352	1,437
Territorial	1,020	1,016	1,007	1,003	1,023
Gross Domestic Product	\$5,901	\$6,013	\$6,056	\$6,366	\$5,886

⁽¹⁾ Previously labeled “distributive services.”

⁽²⁾ Previously labeled “accommodations and amusement” Includes arts, entertainment, and recreation (NAICS 71) and accommodations and food services (NAICS 72).

Source: U.S. Department of Commerce Bureau of Economic Analysis

The BEA also estimates that Guam’s real per capita GDP, measured in 2012 dollars adjusted for inflation, increased from \$5.554 billion in 2017 to \$5.653 billion in 2019 prior to the COVID-19 pandemic. An expected decrease in 2020 was reflected with real GDP at \$5.009 billion and now is estimated to have grown during the pandemic with the 2021 preliminary amount at \$5.062 billion.

The estimates of Guam’s real GDP – GDP adjusted to remove price changes – decreased by 11.4% in 2020 after increasing 2.6% in 2019, and is estimated to have grown by 1.1% in 2021. The increase in Guam’s economy in 2021 reflected increases in federal government spending by 0.5%, territorial government spending by 5.8% and private fixed investment by 6.8%.

The BEA reported that the increase in federal government spending reflected growth in construction spending and compensation of employees. U.S. Department of Defense construction was a notable source of growth, as progress continued on multiple U.S. military projects, including training and aircraft support facilities. Territorial government spending growth reflected an increase in government purchases of goods and services, construction spending, and compensation of employees. The growth in spending was supported by federal grant revenues, including COVID-19 relief payments. The increase in private fixed investment reflected growth in construction activity. Private-sector construction projects included the Tsubaki Tower Guam in Tumon Bay (a 340-room hotel), a multimillion-dollar cold storage facility, and various residential projects.

From 2019-2021, exports of goods and services decreased 86.8%, based on BEA’s 2021 estimates. Spending by tourists makes up the vast majority of Guam’s exports of services. Visitor arrivals declined 95% from 2019-2021 according to data from the Guam Visitors Bureau, due to the effects of the COVID-19 pandemic.

Guam’s real personal consumption expenditure of goods and services increased 0.4% in 2019, and decreased 5.0% in 2020, reflecting the mandatory reductions in operations for nonessential businesses throughout Guam due to the COVID-19 pandemic. Guam’s real personal consumption expenditure of goods and services increased 3.3% in 2021 from the prior year. According to the Guam’s Bureau of Statistics and Plans, Guam’s consumer price index in 2021 increased 5.3% compared to the same period one year earlier.

According to the U.S. Department of Labor Bureau of Labor Statistics, the average annual wage for residents of Guam increased from \$36,930 in 2019 to \$39,720 in 2021, a compounded annual growth rate of 2.4%.

Population

Guam's residents originate from all parts of the Asia-Pacific region in addition to the U.S. mainland. In addition to Guam's indigenous Chamorro people, who comprise approximately 47% of the population, mainland Americans, Filipinos, Chinese, Japanese and South Koreans constitute the bulk of Guam's population. There are also substantial numbers of Micronesian islanders, Vietnamese and East Indians. Guam's diverse population makes it one of the most cosmopolitan communities in the western Pacific.

The U.S. Census Bureau estimates that Guam's population in 2020 was approximately 153,836, the latest data available. Guam currently has 41 public schools (all accredited by the Western Association of Schools and Colleges), 24 private schools, four U.S. DOD schools, three charter schools, one community college and one university. For the school year 2022-2023, approximately 25,648 students attended Guam's public schools. The University of Guam reported an enrollment of 2,962 undergraduate and graduate students (as of December 2022), and the Guam Community College (the "GCC") reported 1,669 undergraduates enrolled (as of January 2023). The University of Guam and Guam Community College both are accredited by the Western Association of Schools and Colleges.

Employment

Prior to the COVID-19 pandemic, Guam had experienced steady job growth in all sectors, and the total number of jobs increased from 63,410 in Calendar Year 2016 to 67,580 in 2019, an increase of 6.5% over the four-year period. Employment in the private sector grew significantly between 2016 and 2019, due in part to the growth in tourism as well as new housing and commercial construction projects, including the 340-room Tsubaki Tower hotel.

The December 2022 preliminary current employment report released by the Guam Department of Labor ("GDOL"), Bureau of Labor Statistics indicated that a total of 65,380 individuals were employed on Guam. Of those employed, approximately 75% of Guam's workforce were in the private sector, with the remainder in government, both local and federal. The total number of jobs increased by 3,190 over December 2021. Employment in December 2022 increased in most sectors with the greatest in construction, services, retail trade and transportation and public utilities. Employment numbers began a moderate rebound in December 2020 with the recovery continuing through December 2022. As of December 2022, total employment had recovered to 97% of the pre-pandemic employment of 67,580 in December 2019.

Data as of December 2021 show the total number of jobs increased by 430 in the latest quarter and were up 2,240 over the prior December. Private sector employment increased 2,060 over the year. Total employment remained 5,390 jobs below the pre-pandemic employment of 67,580 in December 2019 despite an increase of 2,130 jobs in the construction industry. Federal employment was up slightly over 2020. Government of Guam employment declined in the Executive branch while autonomous and other agencies increased marginally.

The total number of jobs decreased by 7,590 between December 2019 and December 2020. Tourism industry and pandemic-related business reduction caused employment to begin to decline in March 2020 through September 2020 and employment began to rebound moderately in December 2020. Between December 2019 and December 2020, the construction industry showed the greatest increase with 980 jobs, followed by an increase of 70 jobs in the agriculture industry. Guam's individual and household incomes have fairly equal distributions, as compared to other nations, islands or territories in similar stages of economic development.

The distribution of civilian employment on Guam based on payrolls as of December 31 for Calendar Years 2019 through 2022 and through September 2023 for Calendar Year 2023 (the most recent date for which such information is available), is listed by industry in Table A-6. Excluded from the civilian employment estimates in Table A-6 are self-employed individuals, active-duty military personnel, proprietors, volunteers and unpaid family workers. The payroll survey in Table A-6 includes all civilian personnel on payroll, including multiple jobholders counted at each place of employment, and nonresident alien workers.

TABLE A-6
Civilian Employment ⁽¹⁾
(as of December for Calendar Years 2019 – 2022 and through September 2023 for Calendar Year 2023)

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u> ⁽³⁾
<u>Private sector:</u>					
Agriculture	230	300	310	320	250
Construction	7,350	8,330	9,480	10,820	12,080
Manufacturing	1,460	1,430	1,590	1,600	1,480
Transportation & Public Utilities	4,700	3,690	3,660	3,800	3,720
Wholesale Trade	2,520	2,410	2,270	2,290	2,230
Retail Trade	14,160	10,920	11,410	11,750	12,110
Finance, Insurance, and Real Estate	2,650	2,510	2,370	2,320	2,320
Services	<u>18,890</u>	<u>14,650</u>	<u>15,120</u>	<u>16,320</u>	<u>16,180</u>
Total private	51,960	44,150	46,210	49,220	50,370
<u>Public sector:</u>					
Federal Government	3,910	3,890	3,970	3,900	4,110
Government of Guam ⁽²⁾	<u>11,710</u>	<u>11,910</u>	<u>12,010</u>	<u>12,260</u>	<u>12,040</u>
Total public	15,620	15,800	15,980	16,160	16,150
Total Payroll Employment	67,580	59,950	62,190	65,380	66,520

⁽¹⁾ Data include both full-time and part-time employees who worked during any part of the pay period, temporary alien workers and employees less than 16 years of age. Data are based upon the number of paychecks issued by employers. Dual and multiple jobholders are counted once for each job held. Proprietors, unpaid family workers, domestic servants and military active-duty personnel are excluded.

⁽²⁾ Includes temporary contractual employees, autonomous agencies, Agency for Human Resources Development Disaster Recovery and senior/youth employment programs.

⁽³⁾ As of September 2023.

Source: *Current Employment Report, Department of Labor, Government of Guam*

The preliminary employment data as of September 2023 (the most recent date for which such information is available), showed an increase of total employment by industry division of 1,140 jobs from December 2022. Construction gained 1,260 jobs, retail trade gained 360 jobs and federal employment increased by 210 jobs from December 2022. The number of jobs increased by nearly 2,000 jobs with the increase in private sector employment by 1,840 jobs over September 2022.

Unemployment

The Government reports employment and unemployment separately. Prior to the COVID-19 pandemic, Guam's unemployment rate was 3.6% as of September 2019, flat from September 2018.

Table A-7 lists unemployment statistics for September 2019 to September 2023. Differences in the employment figures between Table A-6 and Table A-7 arise as a result of differences in the surveys' coverage and exclusions. For example, the household survey in Table A-7 excludes civilians living within military installations or in military housing, and employees under the age of 16 years.

Pursuant to a September 2020 unemployment report released by the GDOL, the unemployment rate on Guam for September 2020 was 17.9%, an increase of 14.3% from September 2019, reflecting the impact of the COVID-19 pandemic on Guam. The total number of persons unemployed in September 2020 was 12,650, as compared to 2,580 unemployed persons in September 2019.

In the September 2021 unemployment report, the unemployment rate in Guam was 8.8%, a decrease of 9.1% from September 2020 figure of 17.9%. The total number of persons unemployed in this period was 5,660, a decrease

from 12,650 in September 2020. The September 2021 figures demonstrate Guam’s recovery from the island’s closure due to the increase in COVID positive cases since the September 2020 report.

Guam’s labor market has been on a steady path to recovery with the unemployment rate falling to 4.6% in September 2022, a decrease of 0.4% from June 2022. This rate also represents a decline of 4.2% from September 2021, when the unemployment rate was 8.8%. According to the latest Unemployment Situation report, the total number of persons unemployed in September 2022 was 3,130, a substantial decrease of 2,530 from September 2021.

The September 2022 unemployment rate of 4.6% is 14.8% below the peak rate of 19.4% in December 2020, when unemployment rose in the U.S. overall due to the COVID-19 pandemic.

In the September 2023 unemployment report, the unemployment rate in Guam was 4.1%, a decreased of 0.3% from September 2022 figure of 4.4%. The total number of persons unemployed in this period was 2,980 from 3,130 in September 2022. The September 2023 figures continues to demonstrate Guam’s recovery from the COVID-19 pandemic.

The COVID-19 pandemic had a material adverse effect on employment in Guam. As described under “GENERAL INFORMATION REGARDING THE TERRITORY OF GUAM – COVID-19 Pandemic,” the Government received approximately \$1.06 billion from the federal government under the CARES Act for its Pandemic Unemployment Assistance program and the Federal Pandemic Unemployment Compensation program.

Table A-7 shows the annual unemployment statistics for Guam.

TABLE A-7
Unemployment Statistics ⁽¹⁾
September 2019 – 2023

<u>As of</u>	<u>Total Labor Force</u>	<u>Number of Unemployed</u>	<u>Unemployment Rate (%)</u>
September 2019	70,590	2,580	3.6%
September 2020	70,620	12,650	17.9%
September 2021	64,260	5,660	8.8%
September 2022	68,550	3,130	4.6%
September 2023	69,010	2,980	4.1%

⁽¹⁾ Data include civilian non-institutional population 16 years of age and older, but exclude non-immigrant aliens and civilians living within military installations or in military housing. Individuals with one or more jobs or dual jobs are counted once.
Source: Guam Department of Labor, Bureau of Labor Statistics

(Remainder of Page Intentionally Left Blank)

Construction

The number and value of building permits generally provide a measure of Guam's construction industry. Building permits constitute an important economic indicator of the type and level of construction activities planned as well as corresponding employment increases once the buildings are completed. Total construction activity in Guam has averaged approximately \$602.2 million annually over the past five years.

Table A-8 lists the dollar value of the construction permits issued during the period from Fiscal Years 2019 through 2023. Values given include permits for new construction and additions.

TABLE A-8
Fiscal Year Building and Construction Permits
Fiscal Years 2019 – 2023 (Dollars in Thousands)

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023⁽²⁾</u>
Residential	\$66,447	\$36,797	\$98,626	\$100,053	\$480,735
Commercial & Industrial	118,753	149,653	80,191	238,936	307,384
Government	125,047	147,293	100,041	82,250	174,077
Other ⁽¹⁾	<u>51,327</u>	<u>45,861</u>	<u>29,070</u>	<u>158,801</u>	<u>419,972</u>
Total	\$361,574	\$379,612	\$307,928	\$580,040	\$1,382,169

⁽¹⁾ Includes permit renewals, demolitions, relocations and church buildings.

⁽²⁾ Preliminary and unaudited.

Source: *Guam Bureau of Labor Statistics, Department of Labor*

In Fiscal Year 2019, construction permitting declined slightly by approximately \$4.0 million or 1.1% when compared to the previous year. Commercial and industrial projects increased by 35% and included a \$16.0 million foundation permit only phase II housing project in the central part of Guam, a \$1.2 million renovation of a commercial building, a \$18.0 million construction project for the Church of Latter-day Saints Temple, and a separate \$8.0 million meetinghouse project also for the Church of Latter-day Saints.

In Fiscal Year 2020, despite the COVID-19 pandemic, construction activity increased by approximately \$18.0 million or 4.8% compared to Fiscal Year 2019. Although residential construction declined compared to Fiscal Year 2019, a total of 124 permits for new homes were recorded. The total dollar value of commercial and industrial projects increased by 26.0% in Fiscal Year 2020 compared to the prior year. Government projects increased by 17.8% in Fiscal Year 2020 compared to Fiscal Year 2019.

In Fiscal Year 2021, construction permitting declined by approximately \$72 million or 18.9% compared to Fiscal Year 2020. The decline in construction permitting in Fiscal Year 2021 reflected a decline in commercial and industrial permitting by 46.4% and government construction permitting by 32.1%. Residential construction increased from \$36,797 to \$98,626 or 168.0% from the previous Fiscal Year 2020. In Fiscal Year 2021 a total of 295 permits for new homes were recorded.

In Fiscal Year 2022, construction permitting increased by approximately \$272 million or 88.4% compared to Fiscal Year 2021. Commercial and industrial projects included \$59.7 million for utility buildings, \$17 million for various hotel renovations, \$10 million parking lot for the new Don Don Donki Mall, a \$3.7 million fast food restaurant, a \$2.0 million new energy storage building, and a \$1.1 million new concrete warehouse. Residential increase included 64 housing units equating to \$16 million in construction costs, a 20-home subdivision totaling \$2.3 million and 8 townhomes totaling \$1.6 million.

In Fiscal Year 2023, construction permitting increased by approximately \$822 million or 1.38% compared to Fiscal Year 2022. Commercial and industrial projects included two new restaurants, a construction warehouse, construction of a parking lot for Don Don Donki Mall and a new commercial building. Residential projects included a new 8 building 64-unit apartment complex and the remaining were for single family dwellings.

The statistics in this section do not include construction on military bases. For that information, see “Military Procurement of Services and Constructions” and “Recent Military Project Awards” below.

Hotel and Residential Construction

Major ongoing hotel and residential construction projects and projects completed within the last five years are described below.

In support of Guam’s Tourism 2020 Strategic Plan introduced in 2014, the Government marketed Guam to new hotel developers leading to the development of several new hotel and condominium projects in the Tumon Bay area, the lodging area for a majority of the visitors to Guam. The Tsubaki Tower, a 26-story, 340-room five-star hotel, was constructed by P.H.R. Micronesia, Ken Corp. at an estimated cost of \$164 million. Construction was completed in April 2020 and the facility opened on July 1, 2020, following a delay in opening due to COVID-19. Adjacent to the tourist district of Tumon is Summer Towers, a \$100 million four-tower, 192-unit luxury condominium development completed in 2020.

There are a number of affordable and low-income housing projects currently under construction or in the planning phase. Located in the northern village of Dededo, a \$64.1 million, 240-unit Summer Town Estates is the first low-income housing tax credit development for senior citizens in Guam. Summer Town Estates Phases II, III and IV, a 399-unit low-income housing project financed in part by tax credits, was completed in 2018 (Phase II and III) and in 2020 (Phase IV). Villa Del Mar LLC completed a \$50 million 138-unit housing project off the Kanada-Toto Loop in the central village of Barrigada for low-income families as well as for homeless veterans on Guam, a project funded by federal tax credits.

Another announced project is the Wonderful Windward Hills Resorts, an approximately \$107 million investment for 488 single dwelling homes. Groundbreaking for the first 16 houses was held in May 2019. On November 26, 2021, Summer Breeze I, LLC was awarded a \$36.6 million contract over a ten-year period to build as many as 64 affordable housing units in Radio Barrigada utilizing federal tax credits.

In February 2018, a proposal for Dos Amantes Residences, which are six, 7-story condominium buildings in Dededo, received approval from the Hybrid Land Use Commission; however, no date of project commencement has been announced. Dos Amantes Residences will have a total of 420 residential units, with each building having 70 units. This development will be adjacent to Two Lovers Point, a popular tourist destination.

On November 17, 2020, a groundbreaking was held for a 16 three-bedroom home subdivision, Paradise Courts, in central Mangilao. Construction is ongoing.

Three subdivisions were announced to be constructed in Yigo, the northern part of Guam including Bay Gardens, a \$2.3 million 20-home subdivision, Songsong Hills Subdivision, with 72 homes and Tre Vista with 36 homes. In the central part of Guam, projects to be constructed include a \$4.0 million Palisades Subdivision at Tiyan Parkway and a \$1.6 million 8-unit townhomes in Mangilao.

Commercial, Retail and Office Space Construction

Major ongoing commercial, retail and office space construction projects and projects completed within the last five years are described below.

- A new Medical Arts Center, with an estimated cost of approximately \$25 million, was completed in 2022. The 50,000 square foot, three-story commercial building is located across from the Guam Regional Medical City Hospital in Dededo and houses medical offices, hospice care, senior care facilities, a hemodialysis center, a pharmacy, diagnostic and therapeutic services, and others.
- The Fishermen’s Co-Op project, estimated to cost approximately \$6 million and still in the planning phase, will include a 220-foot sea wall as docking area for larger vessels such as fishing, charter and dolphin watching vessels.

- Jollibee Foods Corp., a Manila-based fast-food company, re-opened a stand-alone restaurant in April 2019 in the Micronesia Mall Parking Lot in Dededo, and is currently building its second Guam restaurant at the Agana Shopping Center with a target opening date in the first half of 2024.
- In the area known as Tiyan, Barrigada, a new Guam Trades Academy Headquarters and Training Center opened in January 2021. Also, under construction in Tiyan is Guam's first purpose built cold storage and climate-controlled warehouse facility. The warehouse will provide supply chain management, frozen, chilled, and climate-controlled warehousing as well as third-party logistics and distribution services for commercial and military customers.
- Japanese retail store Don Quijote, a big-box retailer, broke ground on February 10, 2020, and is planning to open a large retail discount store as Don Don Donki by 2024 on property located near the Airport (Chalan Pasaheru Road) and Marine Corps Drive in Tamuning.
- The Texas chain restaurant LongHorn Steakhouse opened on May 17, 2021, in Tamuning.
- American Grocery opened a second location in Yigo in June 2021 and constructed a third location in Barrigada to be opened by April 2024.
- On March 24, 2021, Community First Guam Federal Credit Union ("**Community First**") held a groundbreaking ceremony for its new corporate office in Hagåtña. Community First opened on September 5, 2023.
- A groundbreaking was held on June 11, 2021 for the construction of the iLearn Academy Charter school to be located in Dededo. The construction was completed in August 2022. iLearn Academy Charter school provides academic curriculum for Grades K-5.
- Jack in the Box opened a second restaurant on Guam in the heart of Tamuning along Marine Corps Drive in August 2022.
- On September 17, 2021, Coast 360 Federal Credit Union held a groundbreaking ceremony for its new \$8.8 million member center in Upper Tumon. The new location opened on January 22, 2024.
- On April 2023, a \$3.8 million new single-story fast food restaurant is under construction in Mangilao.
- A groundbreaking was held on August 6, 2023, for a new \$37.3 million state-of-the-art facility for the Guam Army National Guard's 1224th Engineering Support Company in Barrigada. The project is estimated to be completed by late February 2025.
- On August 9, 2023, a groundbreaking was held for the construction of a new \$10 million Bank of Hawaii West Pacific Regional Headquarters in Tamuning. The planned completion date is by late 2025.

While the COVID-19 pandemic impacted many businesses, a number of new business enterprises opened and several announced expansions during the pandemic. New businesses that recently opened or announced expansions include Selfpix Café, a new coffee and milk tea café, opened in Mangilao on November 2, 2020. Island Falafel & More, serving health-conscious meals out of the Chamorro Village in Hagåtña, opened on December 1, 2020 and Savage Sandwich Co. opened on December 28, 2020 and is operated by the same owners that opened Primo Pizzakaya, a Tumon-based venture.

In January 2021, Hafa Tea opened at the East West Business Center in Upper Tumon. Max's Restaurant, a popular Philippine-based multinational restaurant chain that serves fried chicken and other Filipino dishes, opened at the Micronesian Mall in February 2021. California Pizza Kitchen opened a second location in Hagatna in May 2021 and Jamaican Grill opened a fourth Guam location in Mangilao in September 2021. King's Restaurant has plans to double its operations with two new locations in Dededo and Mangilao. Construction dates have yet to be disclosed.

On March 4, 2022 Ross Dress for Less opened a third 22,500 sq. ft. store at the Agana Shopping Center.

On April 29, 2023 Auntie Anne's franchise opened its first location at Guam Premier Outlets and has plans to open a second location in the food court of the Don Don Donki store in Tamuning once construction is completed.

Dream Galaxy, a new 5,000 square foot state of the art arcade for adults and kids, opened its doors at the Guam Premier Outlet in January 2024 with an estimated investment of over \$2 million.

Government Construction Projects

Major ongoing government construction projects and projects completed within the last five years are described below. Ongoing or recently completed Government construction projects include approximately \$1.09 billion of new capital improvements.

- On November 17, 2023, UOG held a groundbreaking of two new buildings. One part of the groundbreaking is for the construction of a new three-story research facility for the Water and Environmental Research Institute (WERI) of the Western Pacific. The second project will build the Margaret Perez Hattori-Uchima School of Health Nursing Annex. The WERI and Nursing Annex construction projects are expected to cost \$22.7 million and be funded through grants from the U.S. Department of Commerce's Economic Development Administration, Department of the Interior funds, the UOG Endowment Foundation, and the University of Guam. The two buildings are expected to be completed in 2025. On December 15, 2023, UOG broke ground for the construction of its \$7.9 million first school of Engineering Building. The project's estimated completion date is March 2025. On January 10, 2024, the University of Guam broke ground for the \$22.9 million Dr. Lucio Chan Tan Student Success Center ("**Center**"). The Center features 45,000 square feet over two stories and is funded by the USDA Rural Development and a \$1 million gift from Lucio Chua Tan. The Center is expected to be completed in April 2025.
- In 2018, the UOG received a sub-award of \$12,000,000 from the Office of the Governor which relates to the Guam Cultural Repository ("**GCR**") grant award of the Department of Defense Office of Economic Adjustment. The grant is for the construction of a cultural repository to enhance capacity of curatorial services and provide storage for historical artifacts discovered during the military buildup. The construction of the GCR was completed in June 2022.
- The Guam Community College closed on a \$6 million USDA Community Facilities Direct Loan in December 2016 to finance the construction, expansion and/or hardening of the Guam Community College Gregorio G. Perez Crime Lab (completed in February 2022); the Guam Community College Building #100 was completed in September 2019. GCC's Building 300, a \$4.5 million project that houses a multipurpose auditorium, opened on August 31, 2023. The project is partially funded through the Federal Emergency Management Agency.
- The Guam Department of Education is in the planning stage for the reconstruction of the Simon Sanchez High School in Yigo.
- GWA has recently completed construction of several improvements to its water and wastewater system that include projects related to water production, treatment, distribution and storage, wastewater collection and treatment. Three projects were deemed critical to the military realignment: (i) upgrading the Northern District wastewater treatment plant (the "**Northern District WWTP**") to secondary treatment and installing the related outfall diffuser; (ii) refurbishing the interceptor sewer that runs from the Andersen Air Force Base to the Northern District WWTP; and (iii) expanding and rehabilitating the Northern Guam Lens Aquifer Monitoring System including in the northwest field area of the Andersen Air Force Base. See "FUTURE SYSTEM CAPITAL REQUIREMENTS – U.S. Military Realignment" in the front part of this Official Statement.

- GPA awarded a \$534 million project to a consortium led by Korea Electric Power Corporation (KEPCO) as the engineering, procurement and construction turnkey operator for a 198-megawatt combined cycle plant in Dededo. The 198 MW combined-cycle units are estimated to be commissioned by late 2025 (delayed from previous estimates of late 2022 as a result of the pandemic). The new facility will replace the two Cabras power plants, located in Piti near the Jose D. Leon Guerrero Commercial Port (the “Port”), which were left inoperable by an explosion and fire in August 2015. The new facility will allow integration of existing solar photovoltaic sources of renewable energy and an additional 120 megawatts from planned solar photovoltaic farms.
- DPW awarded a \$42.6 million contract to widen Route 3 between Route 28 and Chalan Kareta in Dededo in 2018. This new road expansion project is located between the new Marine Corps base in Finegayan, Dededo and the new back gate of Andersen Air Force Base. Work entailed reconstructing and widening Route 3 from a two-lane roadway to a four-lane highway (two lanes in each direction plus a median lane). A groundbreaking ceremony was held on March 22, 2018 and construction was completed in February 2021. Hawaiian Rock was awarded a \$7.2 million contract for a complete resurface of Route 1 in Tamuning to the airport road intersection. The complete resurfacing of the major road will impact all seven lanes. The project also includes reconstruction of the median and a complete reconstruction of the International Trade Center intersection in Tamuning. Construction on-going.
- GIAA’s Third Floor International Arrivals Corridor project consisted of construction of a new international arrivals corridor that separates arriving non-Transportation Security Administration (“TSA”)-screened passengers from departing TSA-screened passengers, as well as seismic upgrades to the passenger terminal building infrastructure to support the new Third Floor International Arrivals Corridor. The west concourse was completed and operational in December 2021, and the east concourse was completed and operational in April 2022. Total project costs were approximately \$135 million. Sources of funding for this project included proceeds from GIAA bonds, GIAA funds and FAA grants.
- GIAA’s Aircraft Rescue and Firefighting facility project consists of construction of a new aircraft rescue and firefighting facility that will improve response time to potential emergencies. The facility was opened in August 2022. Total project costs were approximately \$23.4 million and were 90% funded with FAA discretionary funds and 10% funded with GIAA funds.
- GIAA’s Runway 6L/24R Rehabilitation (Phase 1a and 1b). This project includes the rehabilitation and reconstruction of over 1,550 linear feet of runway (Phase 1a) and the rehabilitation and reconstruction of an additional 1,450 linear feet of runway (Phase 1b). Phase 1a and Phase 1b were completed in May 2022. Total project costs were approximately \$21 million. Sources of funding for this project included FAA grants (90%) and GIAA funds (10%).
- In June 2018, the Port Authority of Guam issued revenue bonds to fund approximately \$47.5 million of capital projects at the Port. Projects include rehabilitation of Hotel Wharf and access road, relocation of waterlines, repair of the Equipment Maintenance & Repair Building, repair of Warehouse 1 and repair and upgrades of Golf Pier and construction of an annex building and bridge to the Administration Building.
- A \$2.5 million construction project for the Central Police Precinct Command Facility was completed in June 2019 in Sinajana, funded with a U.S. Department of Housing and Urban Development grant.
- In October 2019, Core Tech International, a Guam-based firm, was awarded a \$27.2 million contract to build a new cell at the Guam Layon Landfill, which was completed in 2021. The project was funded by proceeds from general obligation bonds issued by the Government in July 2019.
- On August 5, 2020, a groundbreaking was held for a two-story Central Community Arts Hall in Sinajana. The \$660,000 construction project was funded by a 2019 grant from the U.S. Department of Housing and Urban Development. The Central Community Art Hall officially opened on October 18, 2022.
- A \$10.3 million Chalan Pago-Ordod Multipurpose Center is expected to be completed by December 2024.

- A groundbreaking ceremony was held on March 30, 2021, for a \$2.35 million Salvation Army's Lighthouse Recovery Center for Women a collaboration with the Guam Housing and Urban Renewal Authority. The construction was completed in January 2023.
- The National Defense Authorization Act ("NDAA") for Fiscal Year 2021 authorized the expenditure of \$19.0 million for the construction of a public health laboratory.
- The Guam Housing and Urban Renewal Authority broke ground on February 23, 2023, for a total of 96 one, two- and three-bedroom units in the 12 building Summer Vista 1 housing development in Dos Amantes in Dededo (the northern part of Guam) and plans to construct a new Guam Police Department station in Talo'fo'fo (the southern part of Guam).

H-2B Visas

The H-2B program in Guam has allowed employers to bring skilled foreign workers into the U.S. to fill temporary jobs in sectors other than agriculture. Employers of all sizes, primarily in construction but also in a variety of other industries, use the H-2B program when they cannot identify enough skilled U.S. workers to hire.

The denial of nearly all H-2B visas by the U.S. Citizenship and Immigration Service ("USCIS") in Fiscal Years 2016 and 2017 resulted in a labor shortage for Guam. In October 2016, 11 Guam-based companies and the Guam Contractors Association ("GCA") initiated a class-action lawsuit against USCIS and other federal agencies, alleging that, starting in 2016, USCIS began rejecting their H-2B visa petitions for work during exceptionally busy periods at a rate approaching 99% compared to a prior Guam average approval rate of approximately 95% through 2015. In January 2018, the U.S. District Court of Guam preliminarily enjoined USCIS from relying on the failure to satisfy peak-load or one-time occurrence conditions as grounds for denying H-2B visa petitions and ordered USCIS to reconsider H-2B visa petitions that were previously denied (the "**2018 Preliminary Injunction Order**").

In April 2018, the U.S. District Court of Guam certified a class of businesses in Guam, thereby permitting Guam employers who believed they had unlawful denials of H-2B visa petitions by USCIS to seek temporary relief under the 2018 Preliminary Injunction Order. On May 20, 2022, the District Court of Guam dismissed the case. According to the court order, federal laws passed since the lawsuit was filed have rendered the case moot, and none of the remaining plaintiffs want to pursue the case further. For more information on the federal laws passed, see "National Defense Authorization Act (NDAA)" below.

As of February 5, 2024, there were approximately 5,394 H-2B workers on Guam, the highest it has been in over 30 years. It is expected that higher numbers will be seen for at least the next two years as construction volume is expected to increase in the short term and remain high at least through Fiscal Year 2026 without any significant decrease below current levels.

National Defense Authorization Act (NDAA)

The 2019 NDAA eliminated the annual cap of 4,000 H-2B workers and further built on the authorization in the 2018 NDAA by providing further flexibility for the U.S. Customs and Immigration Services to administer the H-2B visa program on Guam, specifically, the exemption from the temporary work recruitment until December 31, 2023. It further allows for the admittance of healthcare workers to Guam through the H-2B visa program to augment the increased need for skilled healthcare supporting the military build-up at medical facilities that joint serve members of the armed forces, dependents, and civilians on Guam.

The 2021 National Defense Authorization Act ("**2021 NDAA**") broadened the options under which a project may qualify under the NDAA provisions, opening the recruiting of foreign labor for smaller contractors and related businesses for their projects that have been left out from previous years NDAA's. The 2021 NDAA included a new provision that specifically allows Guam to bring in H-2B workers for civilian projects, which had not been allowed in previous years.

On February 8, 2022, the USCIS issued updated policy guidance to clarify how petitioners may demonstrate that they qualify for an exemption from the temporary need requirement for a nonimmigrant visa petition for H-2B workers. The new policy states that GDOL will be able to write letters supporting civilian construction contractors' applications for H-2B visa workers in response to the military buildup. A letter from GDOL will validate the contractors need for workers to support the military realignment, such as building more housing. The letter will further validate, upon GDOL review, that the contractors are adversely affected by factors such as worker shortages, for non-military projects. For more information on the annual NDAA, see "Military Procurement of Services and Constructions."

The 2024 NDAA, extended the H-2B visa program admission in Guam for a period of up to three years until December 31, 2029.

Other Economic Activity

The Government is seeking, through legislative and regulatory efforts, to streamline business and construction permitting processes, to obtain an exemption from the Jones Act (a federal law that governs domestic shipping, which would expand the market for shipments to Guam and reduce the cost of imports), to develop the captive insurance market for the Asian market, and to continue the pursuit of the visa waiver program for Chinese tourists.

Other developments being pursued by the Government, private enterprise or both, include a bonded warehouse on Guam as a consolidation and customs clearance center, a hub for the collection and transshipment of recyclable materials in the region, a redevelopment of the Hagåtña area, light domestic manufacturing of construction materials, expanded eco and sports tourism, and television and commercial film production for Asian producers. In May 2019, filmmakers with Netflix were on Guam filming a movie called "Operation Christmas Drop," which was released in December 2020.

Economic Expansion Initiatives

Agriculture

There are many opportunities available to agricultural producers including establishing a land lease between landowners and agricultural producers to accommodate and identify unique pathways for sustained future in agricultural production. Governor Leon Guerrero is exploring initiatives including developing agriculture incubator programs, establishing a slaughterhouse and creating an agriculture master plan.

Aquaculture and Fisheries

As part of the integrated economic strategy, Governor Leon Guerrero plans to advance the growth of aquaculture and fishing to create jobs and keep more local dollars circulating in the economy instead of being spent on imports. In April 2019, the Governor signed an executive order creating the Guam Aquaculture Task Force, which is intended to reinvigorate efforts to develop a potentially \$7 billion aquaculture industry, starting with shrimp farming. As part of the task force, the Guam Economic Development Authority ("GEDA") in March 2022, released its Guam Aquaculture Industry Feasibility Study, funded by the U.S. Economic Development Administration. The study provides a comprehensive analysis of Guam's aquaculture industry and serves as a roadmap for policymakers and stakeholders to support the industry.

Telecommunication

Guam is equipped with 3G, 4G and 5G broadband coverage and is considered to be the most technologically connected among the surrounding islands in the Pacific. There are three major companies providing fixed lines and mobile services to meet the needs of Guam. Mobile broadband has rapidly grown since the launch of the High Speed Packet Access and Long Term Evolution service. DOCOMO PACIFIC, through its parent company NTT DOCOMO INC., officially began operations of its DOCOMO 5G Open Lab Guam on March 27, 2019 at its Tamuning headquarters. The DOCOMO 5G Open Lab Guam is NTT DOCOMO INC.'s first 5G verification center outside of Japan.

Governor Leon Guerrero plans to take advantage of the connectivity capacity on Guam to expand efforts to establish an information technology eco-system and create a “Silicon Village” with the goals of establishing educational and training programs, creating higher paying jobs, growing small business and attracting industry.

On December 29, 2020, Governor Leon Guerrero, in partnership with the Guam Economic Development Authority and the Guam Chamber of Commerce, established the Governor's Economic Diversification Working Group, a group charged with executing new industries to rebound from the adverse effects of the COVID-19 pandemic. Proposed alternative industries included:

- Aquaculture and Agriculture
- Alternative Dispute Resolution
- Guam Captive Insurance / Trust Incentives Act Program
- Relocation of High Wealth Businesses/Individuals from Asia
- Pharmaceutical Manufacturing
- Construction & Labor
- Ship Repair
- Safe Haven Port
- Silicon Village Initiative
- Satellite Launching

On January 18, 2024, Google announced the construction of two new undersea cables from Guam to Fiji and to French Polynesia. For Guam, the cables are expected to greatly increase Internet connectivity speeds and reduce latency. According to Google, more than 90 percent of the world's Internet traffic passes through subsea cables. Google has a leading role in building the capacity. Guam plays a part in landing those cables, which in turn will help bridge the digital divide throughout the Pacific. The cost of the projects is currently unknown. The projects are expected be completed by 2026.

(Remainder of Page Intentionally Left Blank)

Guam Tourism Industry

Tourism represents a large source of income for Guam’s economy. Annual visitor arrivals rose to over 1,000,000 travelers for the first time in 1994 and, prior to the COVID-19 pandemic, had remained above that level. The COVID-19 pandemic, however, had a material adverse effect on tourism in Guam, as global travel restrictions led to significant decreases in tourism. See “COVID-19 Pandemic” herein.

Table A-9 sets forth the annual number of visitors to Guam for Fiscal Years 2019 through 2023. Fiscal Year 2019 was the highest year for visitor arrivals on record with 1.63 million. Fiscal Year 2020 and Fiscal Year 2021 visitor arrivals dropped to 757,385 and 61,607, respectively due to the COVID-19 pandemic. Fiscal Year 2022 visitor arrivals of 216,915 improved when compared to Fiscal Year 2021 visitor arrivals of 61,607. Total visitor arrivals for Fiscal Year 2023 (preliminary and unaudited) was 602,594 which was 177.8% from Fiscal Year 2022 and 63% of 2019.

TABLE A-9
Annual Visitor Arrivals to Guam
Fiscal Years 2019 – 2023

<u>Fiscal Year</u>	<u>Visitor Arrivals</u>
2019	1,631,049
2020	757,385
2021	61,607
2022	216,915
2023	602,594 ⁽¹⁾

⁽¹⁾ Preliminary and unaudited.

Source: *Guam Visitors Bureau*

Table A-10 (which is presented by calendar year as opposed to Table A-9, which is presented in fiscal year) provides a comparison of visitor arrivals by month to Guam for Calendar Years 2019 through 2023. The growth in arrivals since 2018 was directly related to the overall increase in available airline seats to Guam. Calendar Year 2019 arrivals were comprised of 45% of visitors from South Korea and 41% of visitors from Japan. The slowdown in arrivals from February 2020 to December 2021 is related to the impact of the COVID-19 pandemic, but Guam slowly has regained traction, with Calendar Year 2022 arrivals exceeding Calendar Year 2020 arrivals by 273 visitors. Calendar Year 2022 visitor arrivals improved when compared to Calendar Year 2021.

(Remainder of Page Intentionally Left Blank)

TABLE A-10
VISITOR ARRIVALS TO GUAM BY MONTH
CALENDAR YEARS 2019 – 2023

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023⁽¹⁾</u>
January	147,507	157,479	4,526	9,060	56,687
February	137,244	116,746	3,478	7,096	56,253
March	146,332	35,310	3,716	9,401	65,603
April	121,004	1,557	3,814	11,323	55,354
May	120,411	1,502	4,352	20,008	44,347
June	123,528	2,221	7,438	28,278	17,310
July	136,878	1,385	12,860	41,091	52,154
August	159,856	2,048	8,675	37,835	67,842
September	137,680	2,912	5,735	28,028	52,286
October	134,830	2,331	6,416	40,934	54,099
November	143,987	2,562	9,615	39,852	60,862
December	157,408	2,120	8,764	55,540	73,173
Total	1,666,665	328,173	79,389	328,446	655,970

⁽¹⁾ Preliminary Monthly Visitor Arrival Statistics are compiled from the Guam Customs and Quarantine Mandatory Customs Declaration forms and may exclude Armed Forces Sea arrival statistics. Annual numbers are updated once Armed Forces information is received.

Source: *Guam Visitors Bureau*

Guam Visitors Bureau

The Guam Visitors Bureau is a nonprofit membership corporation that has existed in its current form since 1984. GVB’s mission is to efficiently and effectively promote Guam as a safe and satisfying destination for visitors and to derive maximum benefits for the people of Guam. Policy for GVB is set by a 12-member board of directors, consisting of five directors appointed by the Governor with the advice and consent of the Guam Legislature, two directors appointed by the Speaker of the Guam Legislature, four directors elected by the other members, and one director selected by at least a two-thirds vote of the other 11 directors. A board-appointed President and Chief Executive Officer administers the activities of GVB. Membership in GVB is not restricted to any particular group. The Guam Legislature appropriates funding for GVB’s operations from amounts available in the Tourist Attraction Fund.

Recent promotions by GVB include a Guam branding initiative; efforts to expand visitor markets through expansion of the visa waiver program and similar initiatives; encouraging longer stays and repeat visits by enhancing and promoting tourist and cultural destinations and events in Guam and working with travel agents to market group-travel initiatives and coordination of more focused familiarization (“fam”) tours. In April 2019, GVB welcomed familiarization tours and meetings, incentives, conventions and events groups from different markets. In February 2022, GVB welcomed three groups of ambassadors to the island for a fam tour that re-introduced Guam’s activities and attractions to a recovering Japan market.

Prior to the COVID-19 pandemic, GVB hosted international media, influencers, celebrity runners and travel agents during the United Airlines Guam Marathon weekend, where 4,000 participants from Guam and 20 countries around the world drew valuable exposure for the race and Guam. Tours and meetings included the Globus Travel Agent FAM tour from Novobirsk, Russia, the Golden Insurance Brokers Ltd. from Taiwan, the Mapua Group and the PRU-LIFE group from the Philippines. The GVB team also promoted Guam at the MATTA Travel Exchange in Malaysia, at events in Japan and through the Guam Cultural Wave Inspection in South Korea. In July 2019, Guam hosted the 31st Annual Guam Micronesia Island Fair, Pride Month events and the Electrical Island Festival, which contributed to the July 2019 increase in arrivals compared to the same time period from the prior year.

As part of the COVID-19 recovery effort and further easing of travel restrictions, for Fiscal Year 2023, GVB’s marketing campaign included major markets such as South Korea, Japan, North America and other main markets. GVB’s recent marketing efforts included in October 2022 the Tourism EXPO Japan to showcase Guam’s current offerings to thousands of attendees in the Japan market. GVB is also focusing on the return of the Guam Island Fiesta

Tour (“GIFT”). The GIFT program began more than 10 years ago as a way to introduce visitors into the homes of local families during various village fiestas. GVB also participated in ITB Asia (Asia's Leading Travel Trade Show) that was hosted at the same time and location as the Meetings, Incentives, Conventions & Exhibitions (MICE) Show Asia and Travel Tech Asia.

In November 2022, GVB re-established ties with Kashiwa City in the Chiba prefecture of Japan as part of its ongoing tourism recovery efforts. In December 2022, in an effort to enhance cooperation with targeted market segments in South Korea, GVB signed a Memorandum of Understanding (“MOU”) with CHA University and Baekseok University during its end-of-the-year mission to the country. Under these MOUs, both universities have agreed to strengthen medical tourism, cultural exchange programs, and tourism-related jobs between Guam and South Korea.

In January 2023, GVB marked an important milestone in the shared history of Taiwan and Guam in celebrating the 50th anniversary of a significant sister city agreement. Guam signed the sister city agreement with Taipei City on January 12, 1973, by the island’s first elected Governor Carlos Camacho and then Taipei Mayor Chang Feng-hsu. The sister city agreement with Taipei City is a celebration of Guam’s role in diplomatic relations and cultural ties with the Taiwanese people over the last several decades. According to GVB, overall, this is the third sister city agreement that was signed between Taipei City and the United States.

Recent Events in Guam’s Visitor Market

In November 2020, Guam was included in National Geographic’s ‘Destinations on the Rise for 2021’ – a list of “25 amazing places to inspire future journeys and remind us why we love to travel.” The National Geographic article noted that these 25 “timeless places” including Guam would define future itineraries. The list was made by the global editors of National Geographic Travel and framed by five categories (Adventure, Culture and History, Nature, Family, Sustainability).

Following the start of the COVID-19 pandemic, Guam’s visitor market started to experience a decline in visitor arrivals starting in February 2020 which saw arrivals decrease from 137,244 in February 2019 to 116,746 in February 2020, representing a 14.9% decrease. Visitor arrivals totaled 1,631,049 in Fiscal Year 2019, 757,385 in Fiscal Year 2020 (a 53.6% decline compared to Fiscal Year 2019), 61,607 in Fiscal Year 2021 (a 91.9% decline compared to Fiscal Year 2020), and 216,915 in Fiscal Year 2022 (a 252.1% increase compared to Fiscal Year 2021). In Fiscal Year 2022, there was a 277.0% increase in visitor arrivals from Japan, a 5157.1% increase in visitor arrivals from South Korea, a 81.2% decrease in visitor arrivals from Taiwan, a 235.5% increase in visitor arrivals from China, a 56.6% increase in visitor arrivals from U.S. mainland/Hawaii, a 175.4% increase in visitor arrivals from the Philippines, and a 145.6% increase in visitor arrivals from other markets combined. Although visitor arrivals increased in Fiscal Year 2022, GVB considers Fiscal Year 2019 the benchmark for recovery efforts. Visitor arrivals totaled 602,594 based on preliminary data for Fiscal Year 2023, a 177.8% increase from Fiscal Year 2022 but still a fraction or 36.9% of the pre-pandemic 1.631 million arrivals in Fiscal Year 2019. In Fiscal Year 2023, there was a 651.2% increase in visitor arrivals from Japan, a 230.6% increase in visitor arrivals from South Korea, a 1169.7% decrease in visitor arrivals from Taiwan, a 386.8% increase in visitor arrivals from China, a 28.2% increase in visitor arrivals from U.S. mainland/Hawaii, a 118.2% increase in visitor arrivals from the Philippines, and a 78.3% increase in visitor arrivals from other markets combined.

Historically, Guam has experienced short-term impacts of various economic downturns, natural disasters, geopolitical situations and epidemic outbreaks, among others. For example, in 2003, during the Severe Acute Respiratory Syndrome (SARS) outbreak, which followed Typhoon Pongsona in 2002 and the September 11, 2001 terrorist attacks, visitor arrivals to Guam declined from 1.06 million arrivals in 2002 to approximately 909,000 in 2003, a decrease of 14%. However, in 2004, visitor arrivals to Guam increased to 1.16 million, an increase of 27.5%. Similarly, in 2009, a combination of the Influenza A virus subtype H1N1 and a global recession resulted in a decline in visitor arrivals from 1.14 million in 2008 to 1.05 million in 2009. In the following year, 2010, visitor arrivals to Guam rebounded to 1.197 million, an increase of 13.7%. The data listed herein is based on historical information and is not meant to be a forecast, projection or the basis thereof regarding future visitor arrivals as travel resumes after the COVID-19 pandemic.

On April 29, 2023, the government of Japan officially lifted its last remaining requirements for travelers entering Japan; travelers no longer are required to submit a vaccination certificate or negative COVID-19 test to enter

Japan. South Korea dropped its COVID-19 quarantine requirements and ended testing recommendations for international arrivals on June 1, 2023, after the World Health Organization declared the end of the global health emergency.

While most hotels on Guam were closed following the onset of the COVID-19 pandemic in March 2020 and the subsequent closure of non-essential businesses, several hotels remained open for Government and military use, including the Sheraton (now the RIHGA Royal), Dusit Thani, Hyatt, Wyndham, the Pacific Islands Club, Days Inn, Nikko, Lotte, Dusit Beach Resort (formerly the Outrigger Guam Resort), and the Reef. The aircraft carrier the USS Theodore Roosevelt docked in Guam on March 27, 2020, after a growing number of U.S. Navy sailors tested positive for COVID-19. In the first week of April 2020, the first group of USS Theodore Roosevelt sailors who tested negative for COVID-19 were shuttled to off-base Guam hotels to be quarantined. Although the USS Theodore Roosevelt has departed Guam, hotel rooms continue to be reserved for rotational military personnel.

According to the Guam Hotel and Restaurant Association there are about 3,000 military and federal government personnel that are permanently staying in Guam's hotels at any given point in time due to a variety of reasons including Permanent Change of Status orders, temporary housing for individuals moving to Guam or individuals working on temporary assignment.

In December 2021, the United States Navy's Nimitz-class aircraft carrier USS Vinson, along with other ships assigned to the Carl Vinson Carrier Strike Group, the Ticonderoga-class guided-missile cruiser USS Lake Champlain and Arleigh Burke-class guided-missile destroyer USS Stockdale arrived at Naval Base Guam for a port visit, relaxation and an opportunity to celebrate during the holidays for its 5,000 sailors. This marked the strike group's second visit to Guam during deployment to the U.S. 7th Fleet area of operations, with the first visit occurring over Veterans Day weekend in 2021.

Guam military exercises and military visits provide an instant economic boost to Guam as the crew members stay in the hotels, eat at local restaurants and tour the island. For Calendar Year 2022, Exercise Sea Dragon 22, the first among the planned military exercises, was held from January 5 through January 20, 2022. Six Indo-Pacific nations participated in the exercise: Australia, Canada, India, Japan, South Korea and the United States. Preliminary visitor arrivals in January 2022 totaled 6,066 visitors compared to 2,439 in January 2021, a 148.7% increase. Exercise Cope North 2022 was held at Andersen Air Force Base, Guam, from February 5, 2022 through February 18, 2022. Exercise Cope North is the U.S. Pacific Air Forces' largest multilateral exercise and includes more than 2,500 U.S. Airmen, Marines, and Sailors working alongside 1,000 combined Japan Air Self-Defense Force and Royal Australian Air Force counterparts. The GIAA served as a support airport for this exercise. On February 9, 2022 more than 220 airmen and four B-52s from the 96th Expeditionary Bomb Squadron in Barksdale Air Force Base, Louisiana, arrived on Guam to conduct Bomber Task Force missions in support of Pacific Air Forces' training efforts with allies, partners and joint forces. On March 2, 2022, the USS Abraham Lincoln and the guided missile destroyer USS Spruance arrived on Guam with 5,100 crew members for a port visit, resupply and refuel. On December 12, 2022, the Republic of Korea Navy's training ship, ROKS Hansando, and the multipurpose fast combat support ship, ROKS Daecheong docked at Naval Base Guam for four days on Guam with 164 midshipmen in the class.

For Calendar Year 2023, Exercise Cope North 2023 was held at Andersen Air Force Base, Guam, from February 5, 2023 through February 24, 2023. Exercise Cope North is the U.S. Pacific Air Forces' largest multilateral exercise and includes more than 1,000 U.S. Airmen, Marines, and Sailors working alongside 1,000 combined Japan Air Self-Defense Force and Royal Australian Air Force and French Air and Space Force service members. In April 2023, the United States hosted a two-week joint military exercise in Guam with military units from Japan, Korea, India and Canada. On July 12, 2023, the United States Army Pacific hosted six South Asian countries in the region's first-ever Disaster Response & Exchange Exercise ("DREE"). The 10-day DREE focused on disaster management and response operations. Military and civil representatives from the U.S. and partner countries throughout South Asia, including Singapore, India, Nepal, Laos, Sri Lanka, and Myanmar converge with the purpose of enhancing regional cooperation and camaraderie, strengthening disaster response capabilities, and improving overall strategies, mechanisms, and coordination efforts. In October 2023, the U.S. and the Republic of Korea navies completed the biennial combat theater anti-submarine warfare exercise, "Silent Shark". This exercise reflects the United States' commitment to the Indo-Pacific region, and complements the manu exercises, training, operations and other military cooperation activities conducted by U.S. submarine forces with the Republic of Korea navy.

For Calendar Year 2024, Exercise Cope North 2024 (“CN24”) is currently ongoing at Andersen Air Force Base, Guam, from February 5, 2024 through February 23, 2024. Approximately 1700 U.S. Airmen, Marines, and Sailors will train alongside 700 Japan Air Self-Defense Force, Royal Australian Air Force, French Air and Space Force, Royal Canadian Air Force and Republic of Korea Air Force service members in CN24. About 85 aircraft from the United States, Australia, Japan, France, and South Korea will fly 1400 missions across three islands and six airfields.

Key Visitor Markets

Guam receives visitors from a variety of countries and GVB has historically made efforts to further diversify Guam’s visitor base. Prior to the COVID-19 pandemic, four of Guam’s top five visitor markets included South Korea, Japan, Taiwan and China. See “Recent Events in Guam’s Visitor Market” and “COVID-19 Pandemic” herein. The remainder of this section provides historical information regarding key visitor markets in Guam prior to the COVID-19 pandemic.

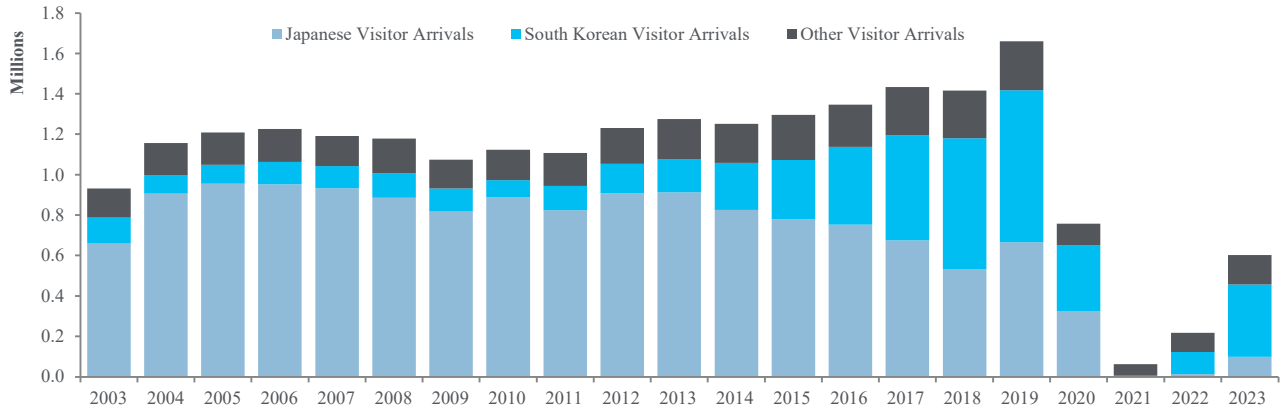
Fiscal Year 2019 was Guam’s best year on record for tourism, with 1,631,049 visitor arrivals to Guam. Japanese visitor arrivals totaled 664,784, an increase of 25.4% for Fiscal Year 2019 compared to Fiscal Year 2018. The South Korea market, which had been Guam’s top visitor market for the preceding two fiscal years, declined by 2.4% from 752,715 in Fiscal Year 2018 to 734,339 in Fiscal Year 2019. According to GVB, this was mainly due to the loss of Korean Air’s non-stop flight to Busan and a decrease of seasonal oversupply from Incheon compared to the prior year. Other markets that showed growth in Fiscal Year 2019 included the U.S. mainland/Hawaii (5.3%), Taiwan (2.9%), the Commonwealth of the Northern Mariana Islands (“CNMI”) (9.0%) and the Philippines (8.8%).

Fiscal Year 2018 was the third best year on record for total visitor arrivals, with Guam welcoming 1,525,219 visitors. The South Korea market grew to become Guam’s top source market in Fiscal Year 2018. Guam welcomed 752,715 South Korean visitors in Fiscal Year 2018, making up almost 50% of the market share. The Japan market remained the second largest visitor market and accounted for 35% of visitor arrivals in Fiscal Year 2018. Other markets that showed growth in Fiscal Year 2018 included the U.S. mainland/Hawaii (5.8%), Taiwan (1.8%), the CNMI and Micronesia (1.35%), the Philippines (1.2%) and China (1.1%). Total civilian air arrivals decreased by 2.8%, while total sea arrivals, which account for less than 1.0% of Guam’s visitor arrivals, increased by 60.6% during Fiscal Year 2018 over the previous Fiscal Year 2017.

(Remainder of Page Intentionally Left Blank)

Figure 1

Historical Fiscal Year Japanese and S. Korea Visitor Arrivals as a Percentage of Total Visitor Arrivals



Fiscal Year 2003 to Fiscal Year 2022

Country	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Other	18%	14%	14%	12%	14%	15%	15%	14%	16%	16%	14%	17%	15%	16%	15%	16%	14%	14%	91%	44%	24%
S. Korea	11%	8%	9%	9%	10%	10%	8%	10%	13%	13%	17%	22%	28%	34%	42%	49%	45%	43%	3%	50%	60%
Japan	71%	78%	77%	79%	76%	75%	77%	76%	72%	71%	68%	62%	57%	50%	43%	35%	41%	43%	6%	3%	16%

Source: Guam Visitors Bureau

Visitor arrivals from South Korea grew significantly over the five fiscal years preceding the start of the COVID-19 pandemic, with much of the increase attributed to additional flight service from South Korea.

Visa Waiver Program.

In November 2009, the United States updated its policies relating to the visa waiver program available for travel to Guam for tourism or business. The current program allows visitors holding passports from Australia, Brunei, Hong Kong, Japan, Malaysia, Nauru, New Zealand, Papua New Guinea, Republic of Korea, Singapore, Taiwan and the United Kingdom to visit Guam and/or Commonwealth of the Northern Mariana Islands without a visa for a period of up to 45 days.

Although a visa waiver has not been granted for Chinese tourists to travel to Guam, in November 2014, the U.S. and China agreed to extend visa validity from a one-year, single-use visa to a 10-year, multi-use visa. This greatly reduces time and cost required for a U.S. visa and removes one of the roadblocks to attracting Chinese tourists to Guam. Visitor arrivals from China to Guam peaked at 23,239 in Fiscal Year 2017 but dropped to 12,588 in Fiscal Year 2019. The loss in seat capacity from Taiwan and limited charter opportunities normally operated by Dynamic Air (due to regional competition) from secondary cities in China such as Guangzhou, Chengdu, Dalian, Nanjing, Shenyang, and Zhengzhou, contributed to the decline in seats from these two potentially large markets for Guam.

(Remainder of Page Intentionally Left Blank)

Table A-11 sets forth a comparison of visitor arrivals to Guam by country for Fiscal Years 2019-2023.

TABLE A-11
Fiscal Year Visitor Arrivals by Country
Fiscal Years 2019– 2023

	2019		2020		2021		2022		2023 ⁽³⁾	
	<u>Arrivals</u>	<u>Percent of Total</u>	<u>Arrivals</u>	<u>Percent of Total</u>	<u>Arrivals</u>	<u>Percent of Total</u>	<u>Arrivals</u>	<u>Percent of Total</u>	<u>Arrivals</u>	<u>Percent of Total</u>
Japan	664,784	40.76%	324,574	42.85%	3,454	5.61%	13,022	6.00%	97,823	16.23%
South Korea	734,339	45.02%	325,109	42.93%	2,063	3.35%	108,454	50.00%	358,570	59.50%
U.S.Mainland/Hawaii	94,141	5.77%	48,263	6.37%	41,239	66.94%	64,572	29.77%	82,794	13.74%
Taiwan	28,346	1.74%	10,691	1.41%	2,253	3.66%	423	0.20%	5,371	0.89%
China P.R.C.	12,588	0.77%	4,287	0.57%	124	0.20%	416	0.19%	2,025	0.34%
CNMI	22,566	1.38%	10,318	1.36%	3,178	5.16%	12,625	5.82%	14,383	2.39%
Micronesia ⁽¹⁾	19,788	1.21%	9,858	1.30%	2,849	4.62%	5,290	2.44%	15,903	2.64%
Philippines	20,708	1.27%	9,344	1.23%	2,262	3.67%	6,230	2.87%	13,593	2.26%
Australia	2,250	0.14%	1,297	0.17%	360	0.58%	1,079	0.50%	1,253	0.21%
Europe	2,340	0.14%	1,116	0.15%	697	1.13%	826	0.38%	1,485	0.25%
Hong Kong	6,395	0.39%	1,226	0.16%	31	0.05%	125	0.06%	708	0.12%
Russia	5,189	0.32%	996	0.13%	67	0.11%	63	0.03%	148	0.02%
Singapore	1,525	0.09%	493	0.07%	914	1.48%	562	0.26%	853	0.14%
Others/Unknown	5,995	0.37%	4,290	0.57%	1,192	1.93%	2,241	1.03%	4,088	0.68%
Total Air⁽²⁾	1,620,954	99.38%	751,862	99.27%	60,683	98.50%	215,928	99.54%	598,997	99.40%
Total Sea	10,095	0.62%	5,523	0.73%	924	1.50%	987	0.46%	3,597	0.60%
Total Air & Sea	1,631,049	100.00%	757,385	100.00%	61,607	100.00%	216,915	100.00%	602,594	100.00%

⁽¹⁾ Includes the Republic of Palau (“Palau”), Federated States of Micronesia (“FSM”) and the Republic of the Marshall Islands (“RMI”).

⁽²⁾ Includes military air arrivals.

⁽³⁾ Preliminary and unaudited.

Source: Guam Visitors Bureau

(Remainder of Page Intentionally Left Blank)

Table A-12 highlights the percentage change in annual visitor arrivals to Guam by country for Fiscal Years 2019 through 2023.

TABLE A-12
Percentage Change in Annual Visitor Arrivals by Country
Fiscal Years 2019-2023

	<u>2019</u>	<u>2020</u>	<u>% Change From 2019</u>	<u>2021</u>	<u>% Change From 2020</u>	<u>2022</u>	<u>% Change From 2021</u>	<u>2023 ⁽³⁾</u>	<u>% Change From 2022</u>
Japan	664,784	324,574	-51.2%	3,454	-98.9%	13,022	277.0%	97,823	-651.2%
South Korea	734,339	325,109	-55.7%	2,063	-99.4%	108,454	5157.1%	358,570	-230.6%
U.S. Mainland / Hawaii	94,141	48,263	-48.7%	41,239	-14.6%	64,572	56.6%	82,794	-28.2%
Taiwan	28,346	10,691	-62.3%	2,253	-78.9%	423	-81.2%	5,371	-1169.7%
China P.R.C.	12,588	4,287	-65.9%	124	-97.1%	416	235.5%	2,025	-386.8%
CNMI	22,566	10,318	-54.3%	3,178	-69.2%	12,625	297.3%	14,383	-13.9%
Micronesia ⁽¹⁾	19,788	9,858	-50.2%	2,849	-71.1%	5,290	85.7%	15,903	-200.6%
Philippines	20,708	9,344	-54.9%	2,262	-75.8%	6,230	175.4%	13,593	-118.2%
Australia	2,250	1,297	-42.4%	360	-72.2%	1,079	199.7%	1,253	-16.1%
Europe	2,340	1,116	-52.3%	697	-37.5%	826	18.5%	1,485	-79.8%
Hong Kong	6,395	1,226	-80.8%	31	-97.5%	125	303.2%	708	-466.4%
Russia	5,189	996	-80.8%	67	-93.3%	63	-6.0%	148	-134.9%
Singapore	1,525	493	-67.7%	914	85.4%	562	-38.5%	853	-51.8%
Others / Unknown	<u>7,520</u>	<u>4,290</u>	<u>-43.0%</u>	<u>1,192</u>	<u>-72.2%</u>	<u>2,241</u>	<u>88.0%</u>	<u>4,088</u>	<u>-82.4%</u>
Total Air ⁽²⁾	<u>1,622,479</u>	<u>751,862</u>	<u>-53.7%</u>	<u>60,683</u>	<u>-91.9%</u>	<u>215,928</u>	<u>255.8%</u>	<u>598,997</u>	<u>-177.4%</u>
Total Sea ⁽³⁾	<u>10,095</u>	<u>5,523</u>	<u>-45.3%</u>	<u>924</u>	<u>-83.3%</u>	<u>987</u>	<u>6.8%</u>	<u>3,597</u>	<u>-264.4%</u>
Total Air & Sea	<u>1,632,574</u>	<u>757,385</u>	<u>-53.6%</u>	<u>61,607</u>	<u>-91.9%</u>	<u>216,915</u>	<u>252.1%</u>	<u>602,594</u>	<u>-177.8%</u>

⁽¹⁾ Includes the Republic of Palau (“Palau”), Federated States of Micronesia (“FSM”) and the Republic of the Marshall Islands (“RMI”).

⁽²⁾ Includes military air arrivals.

⁽³⁾ Preliminary and unaudited.

Source: Guam Visitors Bureau

(Remainder of Page Intentionally Left Blank)

Cruise Industry

The cruise industry has historically been a modest visitor market for Guam. In May 2018, Carnival Cruise Line announced that it would expand its service to include a 24-day trans-Pacific crossing, which included a port call in Guam. In November 2018, the arrival of the Coral Princess cruise ship helped to boost visitor arrivals by bringing in 1,900 visitors to Guam. A Carnival Splendor Cruise, carrying 3,000 passengers and 1,200 crewmembers, visited Guam on October 20, 2019 and spent twelve (12) hours in Guam. Although Guam's economy benefits from large cruise ships like the Carnival Splendor, the cruise industry sustainability goal is to target small cruise ships, with no more than 500 passengers at a time allowing for a manageable influx of tourists at the Port.

Governor Leon Guerrero tasked the government and private sector partners to expand the small cruise ship industry by appointing government and private sector leaders to spearhead an initiative to make Guam a home-base for a small cruise ship that will take visitors throughout the Micronesian islands. In August 2019, Guam joined the South Pacific Cruise Alliance (“SPCA”), becoming its ninth member. Guam's location in the northern Pacific and close proximity to Asia makes it an ideal cruising destination from the eastern markets and a potential homeport for cruising around Micronesia. SPCA members include American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Pitcairn Islands, Samoa, Tonga and Wallis & Futuna. In 2020, 723 cruise ships had been expected to call on these SPCA ports and destinations; however, the global cruise industry was adversely impacted by the COVID-19 pandemic, significantly reducing the number of cruises.

Since the onset of the pandemic, two cruise liners have visited Guam. The Diamond Princess, the second cruise liner to come to Guam since the beginning of the COVID-19 pandemic, arrived on March 3, 2023, carrying 1,545 passengers and 1,097 crew. Passengers were greeted by cultural dancers and various local food trucks staged at the Port for the day as they disembarked from the vessel.

On January 3, 2024, Guam welcomed MSC Bellissima cruise ship which brought 5,494 passengers and crew, the first of potentially 12 total cruise ship visits in 2024.

Hotels

Tumon Bay, located on the west coast of the island, is the heart of Guam's tourist industry. The hotels in Tumon Bay provide lodging to the majority of visitors to Guam. During the 1990s and early 2000s, Guam's inventory of hotel rooms increased over 100%, with substantial growth in the number of hotel rooms occurring from 1991 to 1993 and from 1995 to 2001. As of September 2023, there were 32 hotels in Guam, including many notable international hotel operators, with an inventory of approximately 8,722 rooms.

Pursuant to Section 30101(b), Title 11, Guam Code Annotated, the Hotel Occupancy Tax is an excise tax levied and imposed by the Government against transient occupants of a room or rooms in a hotel, lodging house or similar facility located in Guam. The Hotel Occupancy Tax has been levied at the rate of 11% of the rental price charged or paid per occupancy per day since April 1, 1995.

Table A-13 below shows the amount of Hotel Occupancy Tax revenues collected for Fiscal Years 2019 through 2023. Hotel Occupancy Tax revenues in Fiscal Year 2023 were \$26.3 million, a 44.8% increase from Fiscal Year 2022 but 41% lower than Fiscal Year 2019 prior to the onset of the COVID-19 pandemic. Hotel Occupancy Tax revenues in Fiscal Year 2022 were \$18.2 million, a 47% increase from Fiscal Year 2021 but 59% lower than Fiscal Year 2019 prior to the onset of the COVID-19 pandemic. Hotel Occupancy Tax Revenues in Fiscal Year 2021 were \$12.4 million, a 72% decrease from Fiscal Year 2019 due to the closure of hotels on island and the global travel restrictions as a result of the COVID-19 pandemic. In Fiscal Year 2019, total Hotel Occupancy Tax revenues were \$44.7 million. Fiscal Year 2019 is the highest year for visitor arrivals on record.

TABLE A-13
Annual Hotel Occupancy Tax Revenues
Fiscal Years 2019 – 2023

Fiscal Year	Taxes Collected (\$)
2019	44,701,482
2020	26,366,511
2021	12,372,113
2022	18,168,635
2023 ⁽¹⁾	26,310,551

⁽¹⁾ Preliminary and unaudited.

Sources: Tourist Attraction Fund Audited Financial Statements for Fiscal Years 2018-2022

Table A-14 lists the weighted average hotel occupancy and weighted average room rates from Fiscal Years 2019 through 2023.

TABLE A-14
Weighted Average Hotel Occupancy and Room Rates
Fiscal Year 2019-2023

Year	Weighted Average Hotel Occupancy Rate (%)	Weighted Average Room Rate (\$)
2019	88	211
2020	56	189
2021	45	157
2022	53	173
2023 ⁽¹⁾	65	197

⁽¹⁾ Preliminary and unaudited.

Source: Guam Visitors Bureau

(Remainder of Page Intentionally Left Blank)

Table A-15 lists the top 15 hotel operators by number of existing rooms as of September 2023.

TABLE A-15
Top 15 Hotel Operations in Guam
As of September 2023

<u>Hotel/Resort</u>	<u>Year Opened</u>	<u>Location</u>	<u>Number of Rooms</u> ⁽¹⁾
Pacific Islands Club	1980	Tumon	777
Hilton Guam Resort & Spa	1972	Tumon	646
Dusit Beach Resort Guam ⁽²⁾	1999	Tumon	604
Guam Plaza Hotel	1983	Tumon	505
Hotel Nikko Guam	1992	Tumon	470
Hyatt Regency Guam	1994	Tumon	450
Westin Resort Guam	1996	Tumon	428
Hoshino Resorts RISONARE Guam ⁽³⁾	1992	Tamuning	430
Guam Reef & Olive Spa Resort	1974	Tumon	426
Dusit Thani Guam	2015	Tumon	419
Leo Palace Resort Guam	1993	Yona	380
Tsubaki Tower	2020	Tumon	340
Crowne Plaza Resort Guam ⁽⁴⁾	1971	Tumon	321
RIHGA Royal Laguna Guam Resort ⁽⁵⁾	2007	Tamuning	318
Holiday Resort & Spa Guam	1996	Tumon	252
Top 15 Total			6,766
Other Hotel Rooms			1,506
Total Hotel Rooms			8,272

⁽¹⁾ Numbers may not reflect actual capacity as hotel management may make rooms unavailable at any given time.

⁽²⁾ Formerly the Outrigger Guam Resort.

⁽³⁾ Formerly the Onward Beach Resort.

⁽⁴⁾ Formerly the Fiesta Resort Guam.

⁽⁵⁾ RIHGA Royal acquired Sheraton Laguna Guam Resort; reopened as RIGHA Royal Laguna Guam Resort on April 21, 2022.

Source: Guam Visitors Bureau

Over the past few years, several existing hotels have undertaken significant renovations. The Tsubaki Tower, a 26-story, 340-room luxury five-star hotel located in Tumon, opened on July 2020.

In April 2020, the Fiesta Resort Guam closed for an extensive, \$45 million refurbishment renovation to transform the Tumon hotel into a luxurious getaway and reopened as Crowne Plaza Resort Guam in 2023. The beachfront hotel has rebranded with globally renowned hotel management firm InterContinental Hotels Group, or IHG. Crowne Plaza Resort held its grand opening in April 2023.

Pacific Star Hotel closed in 2020, due to foreclosure.

Airlines

The Airport is operated by GIAA, which is a public corporation and autonomous instrumentality of the Government. The Airport has approximately 874,000 square feet of terminal space, which includes the recently completed Third Floor International Arrivals Corridor, along with approximately 250,000 square feet of adjacent facilities, including hangars, maintenance facilities, warehouse space, storage facilities, office space and expansive ground space.

The Airport is the only commercial air carrier airport serving Guam and is the principal air carrier airport serving the surrounding Micronesian islands. The Airport's passenger base was historically over 90% international from all originating markets prior to the COVID-19 pandemic. Fiscal Year 2019 enplanements were the best year on record for GIAA, with 1.9 million enplaned passengers versus 1.7 million in Fiscal Year 2018. Approximately 3.6 million total passenger movements were processed through the commercial airport for Fiscal Year 2019 via approximately 55,000 aircraft operations. In Fiscal Year 2021, due primarily to the COVID-19 pandemic, the Airport had its lowest activity in 30 years, with approximately 135,566 enplanements and approximately 233,603 passenger movements through the Airport via approximately 12,408 aircraft operations.

As of January 2024, 12 airlines provide service at the Airport, including one major U.S.-flag air carrier, six foreign-flag air carriers, one regional/commuter airlines that provides inter-island service and four cargo airlines. In addition, the Airport was served by other charter flights, including military charter flights, operated by various airline carriers. Prior to the COVID-19 pandemic, through September 2019, the signatory airlines at the Airport provided service to 22 destinations in Asia, the Pacific and the U.S Mainland/Hawaii.

Airports in the United States, including the GIAA, were acutely impacted by the broad-based economic shutdown resulting from the efforts to stop the spread of COVID-19, including reductions in flights and declines in passenger volumes. The outbreak adversely affected domestic and international travel and travel-related industries. Airlines reported unprecedented downturns in passenger volumes during the pandemic and experienced and continue to experience reduced levels of passenger volumes which, in turn, have resulted in a significant reduction in scheduled service. The impact of the COVID-19 pandemic began to affect Guam's tourism sector in February 2020 along with many of its airline partners.

On April 7, 2021, the Airport received the International Health Accreditation, becoming the first U.S. airport in the Micronesian and Polynesian region to receive this international recognition by the Airports Council International ("ACI") Airport Health Accreditation – an independent, third-party review of the Airport's protocols and processes in providing a safe experience for all travelers. The ACI provided an independent review and assessment of new health and safety measures and procedures implemented as a result of the global pandemic.

United Airlines is the largest air carrier serving the Airport. In Fiscal Year 2019, prior to the COVID-19 pandemic, United provided service to 15 destinations accounting for an estimated 36.4% of the total enplaned passengers at the Airport. As of January 2024, United remains the largest air carrier serving the Airport. The Airport serves as a hub in United's global route network. United's Guam hub serves: (1) regional origin & destination passengers on short-haul flights to and from Guam, (2) origin & destination passengers on long-haul flights, primarily tourists visiting Guam, and (3) transit passengers on connecting or through flights.

Like many international airports, the GIAA saw a significant reduction in both enplanements and revenue, dropping 84.7% and 81% in Fiscal Year 2021 as many of Guam's key markets such as South Korea, Japan, Taiwan and China restricted their residents from international travel in an effort to decrease community spread and contain the pandemic. Air service travel demand increased following the lifting of COVID-19 protocols in Guam and travel restrictions in key tourism origin markets.

A portion of revenue lost was partially offset by funds received from the federal government under the CARES Act, pursuant to which GIAA received \$20.7 million, of which \$14.7 million was utilized in Fiscal Year 2020. GIAA implemented a budget reduction of over 20% in operating and maintenance costs and reduced terminal operations due to decreased flight activity to help offset the remaining revenue loss. For Fiscal Year 2021, GIAA received \$6.0 million from the federal government under CRSSA, which was used for operating expenses. GIAA

also was allocated approximately \$15.8 million from the federal government under the ARP, which was used to pay for operating expenses and debt service in Fiscal Years 2021 and 2022.

In May 2023, prior to Typhoon Mawar, there were approximately 760 monthly flights with monthly seat capacity of approximately 137,309, approximately 85% and 83%, respectively, of monthly flights and monthly seat capacity in May 2019, prior to the COVID-19 pandemic.

Air service development remains a priority. Diversification is a key objective, and the largest potential visitor base is the Chinese market. Regional resort destinations such as Guam are capitalizing on the increasing Chinese outbound market due to visa waiver authority (which Guam does not have) or more liberal entry requirements. As the COVID-19 pandemic recovery continues, the Airport intends to resume a more active and aggressive role in gaining China visa waiver authority.

Seaport

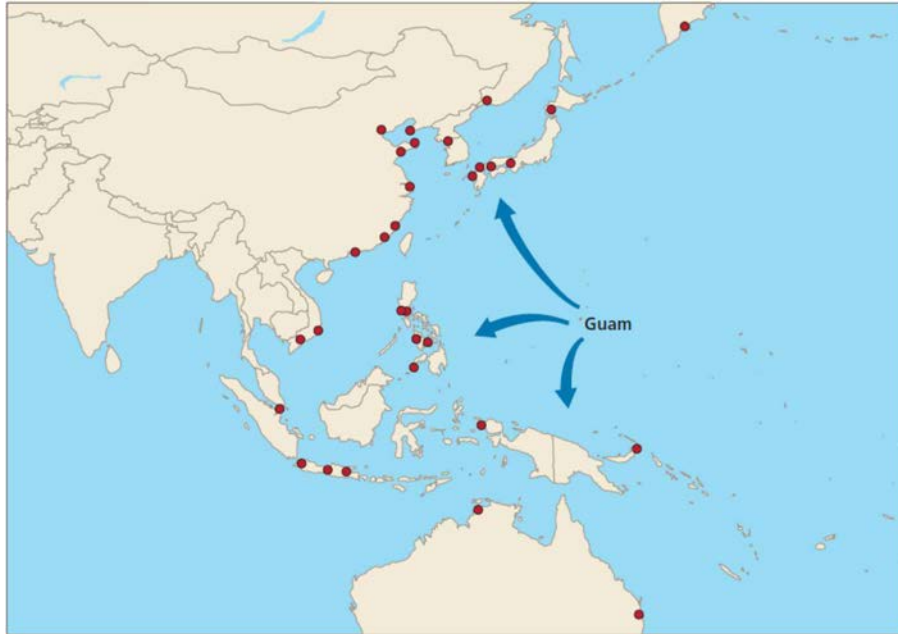
The Port Authority of Guam is the only commercial seaport on Guam and the primary seaport in Micronesia. The Port consists of a cargo terminal, industrial terminal, four berths, cargo handling equipment and numerous support buildings and facilities. The Port's facilities are located on Cabras Island along the northern shoreline of the Outer Apra Harbor, a natural lagoon enclosed by a submerged coral bank and a barrier reef enhanced with a breakwater. The Port receives and processes more than 90% of the total volume of goods and supplies needed to support activities on Guam, making it vital to Guam's future development and sustainability.

The U.S. flag carriers serving Guam include Matson (which is fully compliant with the Jones Act), American President Lines, Seabridge and Waterman Steamship Corporation. The foreign flag carriers include Marianas Express Lines Limited and Kyowa Shipping Co. Ltd. These foreign flag carriers provide the majority of transshipment services to other ports in the region including the Port of Saipan, the Port of Majuro and other smaller ports.

The COVID-19 pandemic did not materially impact operations at the Port, as the demand for imported products increased with residents increasing their purchases following the announcement of the first confirmed cases of COVID-19 on Guam. The Port initially closed following Typhoon Mawar, but reopened on May 28, 2023, four days after Typhoon Mawar.

(Remainder of Page Intentionally Left Blank)

The map below identifies major ports that can be reached from Guam via sea in five days or less.



Political Self-Determination

Guam’s political status and ability to self-govern have been discussed for decades. In the 1970s, Guam’s leaders created special commissions to discuss political status. These commissions recognized the desires of Guam’s people and examined Guam’s political conditions and the status options available to Guam. There has been no change to Guam’s political status yet and Guam remains an unincorporated territory of the U.S.

In 1997, the Commission on Decolonization (the “**Commission**”) was established for the implementation and exercise of Chamorro Self-Determination. The Commission was tasked with educating Guam on the three status options available: free association, independence and statehood. However, the Commission was inactive for most of the early 2000s and was re-launched in 2011. Since then, more native inhabitants have been registered to vote. Governor Leon Guerrero appointed a new Commission in February 2019.

In 2011, a non-Chamorro resident of Guam was denied from registering to vote for the political status plebiscite and subsequently sued the Government. In 2017, the U.S. District Court of Guam ruled in favor of the plaintiff and banned the Government from holding a plebiscite that limits voters to “native inhabitants of Guam.” In July 2019, the U.S. Court of Appeals for the Ninth Circuit affirmed the District Court’s decision.

On December 26, 2019, the Government filed an appeal with the U.S. Supreme Court to overturn the Ninth Circuit’s decision striking down the Guam law authorizing a non-binding political status plebiscite. On May 4, 2020, the U.S. Supreme Court announced it would not review a case that could affect the political status of Guam. The order issued means a July 2019 federal appeals court ruling will stand and Guam’s native inhabitants cannot participate in a political status plebiscite. Governor Leon Guerrero is currently reviewing options to move forward with the Commission.

Military Activity

World events over the last several years have increased recognition of Guam’s strategic military value and could result in increased military presence on Guam, bolstering the military’s contribution to the Guam economy. A strong U.S. presence in the Pacific demonstrates active support for Japan, South Korea, Australia and other Pacific Rim allies and supports U.S. economic and security interests. Guam is positioned geographically to constitute an

extended homeland defense perimeter, protecting the U.S. west coast and Hawaii from acts of aggression, and has the only substantial military facilities on U.S. soil in the Western Pacific Ocean. Military bases and defense systems on Guam can support forward deployed capabilities in Asia and allow rapid response to any threat to the stability of the Asian region or any threat to the U.S. originating in the Asian region. Other military considerations regarding Guam's location include:

- Geographic Location: Closer to potential flashpoints of conflict in Asia and the Middle East.
- U.S. Sovereign Territory: No need for host nation consent to pre-position war munitions, deploy weapons or conduct operations.
- U.S. Air Force, Navy, Marine Corps, Coast Guard, National Guard and Reserve facilities with substantial munitions, fuel supply, communications, command and control capabilities.
- Unencumbered air and sea space for live fire and special operations training including Explosive Ordnance Disposal and Sea, Air & Land (SEAL) elements and other joint military special operational readiness initiatives.
- Deep-water harbor with 17,000 linear feet of wharfage with ability to handle three million pounds of ordnance (net explosive weight – the actual weight in pounds of explosive mixtures or compounds, including the trinitrotoluene equivalent of energetic material, that is used in determination of explosive limits and explosive quantity data arcs).
- Significant airfield capability including dual, two-mile-long runways with contingency, mobilization and surge capable civilian airfields on Guam and the CNMI.
- Repair capabilities for surface vessels, submarines, aircraft and combat equipment at the Intermediate Maintenance Facility, the privatized ship repair facility, the submarine tender, Naval Base Guam, Andersen Air Force Base and civilian facilities.

The map below shows Guam's location in the Pacific and relative distances between major cities in the Pacific Rim.



Military Personnel

In late July 2010, the Joint Guam Program Office of the Department of the Navy released its Final Environmental Impact Statement (“EIS”) pertaining to the proposed U.S. military build-up on Guam, and in September 2010 the DOD issued its Record of Decision pertaining to the EIS. At the time the EIS was released, it

was anticipated that the military build-up would have three major parts: (i) relocation of part of the Third Marine Expeditionary Force from Okinawa, Japan, (ii) creation of the infrastructure for an aircraft carrier berthing and (iii) installation of an Army Air and Missile Defense Task Force.

In July 2015, the DOD released its Supplemental Environmental Impact Statement (“SEIS”), which identified potential impacts associated with several alternatives for the cantonment/family housing component of this relocation, as well as for the live firing training range complex. According to the Navy, the SEIS showed a significantly decreased footprint and a significant decrease in the potential strain on Guam’s infrastructure. Rather than the initially contemplated seven years of construction, the SEIS stated there would be 13 years of moderate construction with a gradual phase-out to follow.

The 2015 Record of Decision identified the final locations for additional bases and facilities to accommodate the Marines. The National Defense Authorization Act for federal Fiscal Year 2015 set the maximum cost of moving the Marines from Japan to Guam at \$8.6 billion, of which \$3.1 billion of the cost will be provided by Japan, and the remaining cost will be provided by the United States.

The expected impact from the military build-up on Guam’s population is highlighted in Table A-16. These projections have not been updated since their initial publication, so the estimates shown in Table A-16 are not intended to reflect actual results.

TABLE A-16
ESTIMATED TOTAL POPULATION INCREASE BY CALENDAR YEAR ⁽¹⁾
2015-2028

<u>Year</u>	<u>Direct DOD</u>	<u>Indirect and Induced</u>	<u>Off Island Construction</u>	<u>Civilian Military Workers</u>	<u>Dependents</u>	<u>Total</u>
2015	33	89	161	4	60	347
2016	46	254	1,071	5	348	1,724
2017	46	531	2,301	38	702	3,618
2018	46	663	3,227	75	910	4,921
2019	505	686	2,871	113	767	4,942
2020	3,898	897	2,587	150	660	8,192
2021	4,327	1,082	3,175	188	814	9,586
2022	4,327	1,046	2,978	225	810	9,386
2023	5,582	915	2,205	263	756	9,721
2024	5,582	716	1,350	300	636	8,584
2025	6,079	612	618	338	499	8,146
2026	6,300	513	46	338	335	7,532
2027	6,300	455	0	338	320	7,413
2028	6,300	453	0	338	320	7,411

⁽¹⁾ Estimates shown are not additions from year to year; they represent the aggregate project related increase as of any given year relative to base year of 2015. Estimates for 2015 through 2022 have not been updated to reflect actual increases.

Sources: 2015 Final Supplemental Environmental Impact Statement (SEIS), Guam and CNMI Military Relocation Report

Based on reports from the Defense Manpower Data Center, as of September 2023, there were approximately 11,638 military personnel (consisting of active duty, reserves and civilian military workers), an increase of 2,254 military personnel since December 2015.

The U.S. government may choose to relocate military fleets, equipment and personnel from time to time to either increase or decrease the U.S. military presence on Guam, and the Government cannot predict whether or when such adjustments may occur. However, the military presence on Guam is generally expected to increase due to the factors discussed above.

Table A-17 lists active-duty military personnel on Guam from September 2018 through 2022.

TABLE A-17
Active Duty Military Personnel on Guam
Fiscal Years 2018-2022⁽¹⁾

Year	Air Force	Army	Coast Guard	Marines	Navy	Total
2018	2,048	192	0	27	3,975	6,242
2019	2,006	167	0	25	3,362	5,560
2020	2,108	183	0	48	3,801	6,140
2021	2,165	211	0	133	3,764	6,273
2022 ⁽²⁾	2,169	207	0	290	4,001	6,667

⁽¹⁾ Excludes Reservists.

⁽²⁾ Includes Space Force.

Source: Defense Manpower Data Center (DMDC)

Marines

The major Marine facility on Guam is Marine Corps Base Camp Blaz, which was activated on October 1, 2020, and is the first new Marine Corps base activated since 1952. The SEIS and 2015 Record of Decision anticipate that approximately 5,000 Marines and 1,500 Marine Corps family members from Okinawa and other locations will be relocated to Guam by Fiscal Year 2028, with the first 2,500 Marines moving to a new Marine Corps Base Camp Blaz by Fiscal Year 2026. To support plans of strengthening defense on Guam, construction is currently underway at several locations including: the newly activated Marine Corps Base Camp Blaz – Main Cantonment at Finegayan, Apra Harbor United States Marine Corps (“USMC”) Sea Embarkation, AAFB Northwest Field – Mason Live Fire Training Range Complex, USMC ACE Ramp at Andersen, Family Housing at Andersen AFB and AAFB South – Skaggs Urban Combat Training Complex.

Airforce

Andersen Air Force Base on the northern tip of Guam operates a major airfield that is a potential hub for the Air Force. North of Andersen Air Force Base’s primary airfield, the Air Force also maintains an austere airfield, known as the Northwest Field, which was built during World War II. Northwest Field is currently used for training, but the Airforce has plans to develop it to provide more capacity for high-volume operations to include fighter, tanker, and cargo aircraft. Permanent air assets based at Andersen Air Force Base include Navy unmanned reconnaissance aircraft (MQ-4 and RQ-4 Global Hawks) and Navy helicopters (MH-60S Seahawks). The Republic of Singapore Air Force (“RSAF”) is planning to base a permanent rotational presence of fighter jets (F-15Gs, F-16C/Ds and possible F-35Bs) starting in 2029.

Also in Anderson Air Force Base, the U.S. Space Force maintains the Guam Tracking Station, operated by the 21st Space Operation Squadron, Detachment 2. This unit is part of the Air Force Satellite Control Network, which provides support to military operations. Two military members and 35 contractors execute the 24/7 mission enabling real-time Satellite C2 in support of the war fighter.

Navy

Navy Base Guam in Apra Harbor operates a port that can accommodate the largest Navy warships, including aircraft carriers. Within the harbor, Polaris Point Submarines Base is the homeport for five Los Angeles-class nuclear-power fast attack submarines on Guam: the USS Annapolis, USS Asheville, USS Jefferson City, the USS Key West, and the USS Springfield. Also based out of Naval Base Guam are two Navy tender ships the USS Frank Cable and the USS Emory S. Land, which are surface vessels that provide support and services for the submarines’ forward-deployed operations. The submarines and tenders are maintained as part of the U.S. Navy’s forward-deployed submarine force and are readily capable of meeting global operational requirements.

Army

Permanent U.S. Army presence on Guam consist of two organizations, an active-duty Terminal High Altitude Area Defense (“**THAAD**”) battery and the Guam Army National Guard. The Army deployed a THAAD battery on Guam in 2013. The THAAD anti-missile defense system is designed to shoot down short-, medium-, and intermediate-range ballistic missiles by intercepting them in their final phase of flight. The THAAD is located on a military site known as Finegayan South and is manned by about 100 soldiers and consists of six launchers each with eight interceptor missiles. In October 2022, the U.S. Missile Defense Agency (“**MDA**”) said that Indo-Pacific Command issued new requirements to upgrade Guam’s missile defense. MDA is developing the Enhanced Integrated Air and Missile Defense System for the defense of Guam. Current plans aim to have certain elements of the new missile defense system in place by the end of Fiscal Year 2024. The MDA is planning on spending \$1.7 billion to implement the integrated missile defense system on Guam. The new missile defense architecture for Guam, according to MDA budget documents, is projected to demonstrate “initial capability” in 2024, followed by “enhanced capability” in 2029, and to continue to develop into the 2030s.

Coast Guard

The U.S. Coast Guard (“**USCGC**”) has been present in Guam since 1905, however, the U.S. Coast Guard Base Guam (“**Coast Guard**”) was established on Guam on November 8, 2023 as part of the Consolidated Appropriations Act of 2023 and expands the U.S. Coast Guard's mission support in the Indo-Pacific region. The Coast Guard operates out of Naval Base Guam. The unit is home to the USCGC Sequoia, the USCGC Myrtle Hazard, the USCGC Oliver Henry, the USCGC Frederick Hatch and the USCGC Washington. U.S. Coast Guard Forces Micronesia/Sector Guam comprises more than 300 dedicated members based in Guam and the Commonwealth of the Northern Mariana Islands.

Military Procurement of Services and Construction

The Department of Defense (“**DOD**”) is planning to make additional investment in military infrastructure on Guam and to increase the number of service members on Guam. DOD’s five-year plan outlined in the Future Years Defense Program calls for spending about \$7.3 billion on Military Construction on Guam from Fiscal Year 2024 through Fiscal Year 2028. Overall spending plans for Military Construction (“**MILCON**”) on Guam between Fiscal Year 2015 and Fiscal Year 2028 total more than \$10 billion. This includes enhancing Navy and Air Force infrastructure to support air and sea operations, the new Marine Corps Base and installation of a new missile defense system and support for the personnel needed to operate the missile defense system. Congress appropriated more than \$3.4 billion for MILCON projects on Guam between Fiscal Year 2015 and Fiscal Year 2023. MILCON spending on Guam is expected to peak in Fiscal Year 2025, as major construction for the planned missile defense system is executed.

Congressional authorizations for appropriations for military construction and family housing projects are depicted in Table A-18.

TABLE A-18
U.S. Military Construction Authorizations for Guam
Fiscal Years 2020-2024

<u>Fiscal Year</u>	<u>Total Authorizations</u>
2020	290,457,000
2021	571,205,000
2022	765,217,000
2023	1,691,325,000
2024	4,233,723,000

Source: The Committee on Armed Services, National Defense Authorization Acts

The 2020 NDAA was signed into law on December 20, 2019 and included approximately \$290.5 million for military construction on Guam. Major projects included the funding of the Machine Gun Range (\$91.3 million), an Explosive Ordnance Disposal Compound (\$61.9 million) and Bachelor Enlisted Quarters (\$34.1 million).

The 2021 NDAA was signed into law on January 1, 2021 and included approximately \$571.2 million for military construction on Guam. The 2021 NDAA included an important provision specific to Guam that authorized H-2B labor for civilian projects on Guam (see “GEOGRAPIC, DEMOGRAPHIC AND ECONOMIC INFORMATION – Guam Economy- H-2B Visas”).

The 2022 NDAA was signed into law on December 27, 2021 and included approximately \$765.2 million for construction projects on Guam. The 2022 NDAA budget prioritized a “360-degree integrated air and missile defense system” to defend Guam from advanced cruise, ballistic and hypersonic missile threats. According to the Joint Region Marianas, the Missile Defense Agency is evaluating 18 to 20 parcels of military-owned land in Guam for the different elements of a defense system. Planning for the missile defense is ongoing.

The 2023 NDAA, passed in December 2022, included up to \$1.7 billion of appropriations as part of the military buildup on Guam. The 2023 NDAA extended the Pacific Deterrence Initiative (“PDI”) through Fiscal Year 2023, identified an additional \$11.5 billion in investments to support PDI objectives, and authorized an additional \$1 billion to address unfunded requirements identified by the Commander of United States Indo-Pacific Command. PDI is a set of prioritized defense investments and activities established by Congress to enhance U.S. deterrence and defense, assure allies and partners, and counter adversary threats in the Indo-Pacific region in response to China's growing military power.

The 2024 NDAA, passed in December 2023, includes over \$4.2 billion of appropriations as part of the military buildup. The 2024 NDAA directs the assessment of the infrastructure, capacity, resources, and personnel requirements for Guam during fiscal year 2024 through 2029 to meet United States strategic objectives and directs the development of a comprehensive strategy for developing, acquiring, and operationally establishing integrated air and missile defense architecture. The 2024 NDAA also extended the H-2B visa program admission in Guam for a period of up to three years until December 31, 2029. See “H-2B VISAS” above in this Appendix A.

The projects funded in the 2024 NDAA are listed in the following Table A-19.

TABLE A-19
2024 NDAA Projects Located in Guam (\$000s)

<u>Navy</u>	<u>(\$000s)</u>
Construction projects inside Naval Base Guam	\$950,656
Family Housing - Improvement	290,365
Replace Andersen Housing (AF) Phase 7	83,126
Replace Andersen Housing (AF) Phase8	121,906
Extension of 2021 Project Joint Communication Upgrade	166,000
Child Development Center	55,220
Joint Consol Communication Center	107,000
Joint Communication Upgrade	31,330
Missile Integration Test Facility	56,140
9th ESB Training Complex	27,536
Artillery Battery Facilities	137,550
Consolidated MEB HQ/NCIS PhII	19,740
Recreation Center	34,740
Religious Ministry Services Facility	46,350
Satellite Communications Facility (INC)	56,159
Training Center	<u>89,640</u>
Total Navy Appropriations	\$2,273,458
<u>Airforce</u>	<u>(\$000s)</u>
Construction projects inside Anderson Airforce Base Guam	\$497,620
Construction and Land Acquisition Project	411,000
Air Force Reserve Facilities Aerial Port Facility	27,000
North Aircraft Parking Ramp	109,000
Total Airforce	\$1,044,620
<u>Army National Guard</u>	<u>(\$000s)</u>
Extension of 2021 Project Space Control Facility #5	\$20,000
Cost to Complete National Guard Readiness Center	<u>6,900</u>
Total Army National Guard	\$26,900
<u>Defense-Wide</u>	<u>(\$000s)</u>
Construction projects for Joint Region Marianas	\$174,540
Guam Defense Development	544,578
Defense on Guam Procurement	169,627
Total Defense-Wide Appropriations	\$888,745
Total 2024 NDAA Appropriation for Guam	\$4,233,723

Recent Military Project Awards

The Federal Procurement Data System indicates that \$1.0 billion of U.S. DOD procurement contracts was awarded in Fiscal Year 2018; \$1.0 billion was awarded in Fiscal Year 2019; \$1.2 billion was awarded in Fiscal Year 2020 and \$2.0 billion was awarded in Fiscal Year 2021; and \$1.7 billion was awarded in Fiscal Year 2022. Procurement contracts awarded for \$1.0 million and above vary in areas from telecommunications, construction related activities and materials, and contracting for professional services (architects, engineers, medical laboratories, armored guards, janitors and technicians).

Table A-20 reflects the U.S. Department of Defense Procurement Contract Awards from Fiscal Years 2019 through 2023.

TABLE A-20
U.S. Department of Defense Procurement Contract Awards for Guam
Fiscal Years 2019-2023

Fiscal Year	U.S. Department of Defense Procurement Contracts
2019	\$1,001,494,343
2020	1,203,871,558
2021	2,008,919,859
2022	1,744,690,711
2023	2,747,380,305

Source: Federal Procurement Data System-Next Generation (FPDS-NG)

Naval Facilities Engineering Systems Command (“NAVFAC”) Marianas has announced that the Department of Defense workload is scheduled to issue contract awards of over \$1.4 billion in Fiscal Years 2023 and 2025 and will taper down to a normal construction schedule of \$200 million in FY 2029.

Recent construction awards further demonstrate that the military build-up is underway. According to the Interagency Coordination Group of Inspectors General for Guam Realignment Annual Report from January 2022, for Fiscal Year 2021, the DOD identified 270 military construction projects and programs that incurred costs, totaling \$447 million, with estimated completion cost of \$1.9 billion. DOD also reported a total of 222 contracts, grants, agreements, or other funding mechanism that obligated \$1.2 billion.

Federal activity on Guam continues with large contracts awarded on Guam since 2019. Some of the most recent military projects awarded can be found on Table A-21 on the next page.

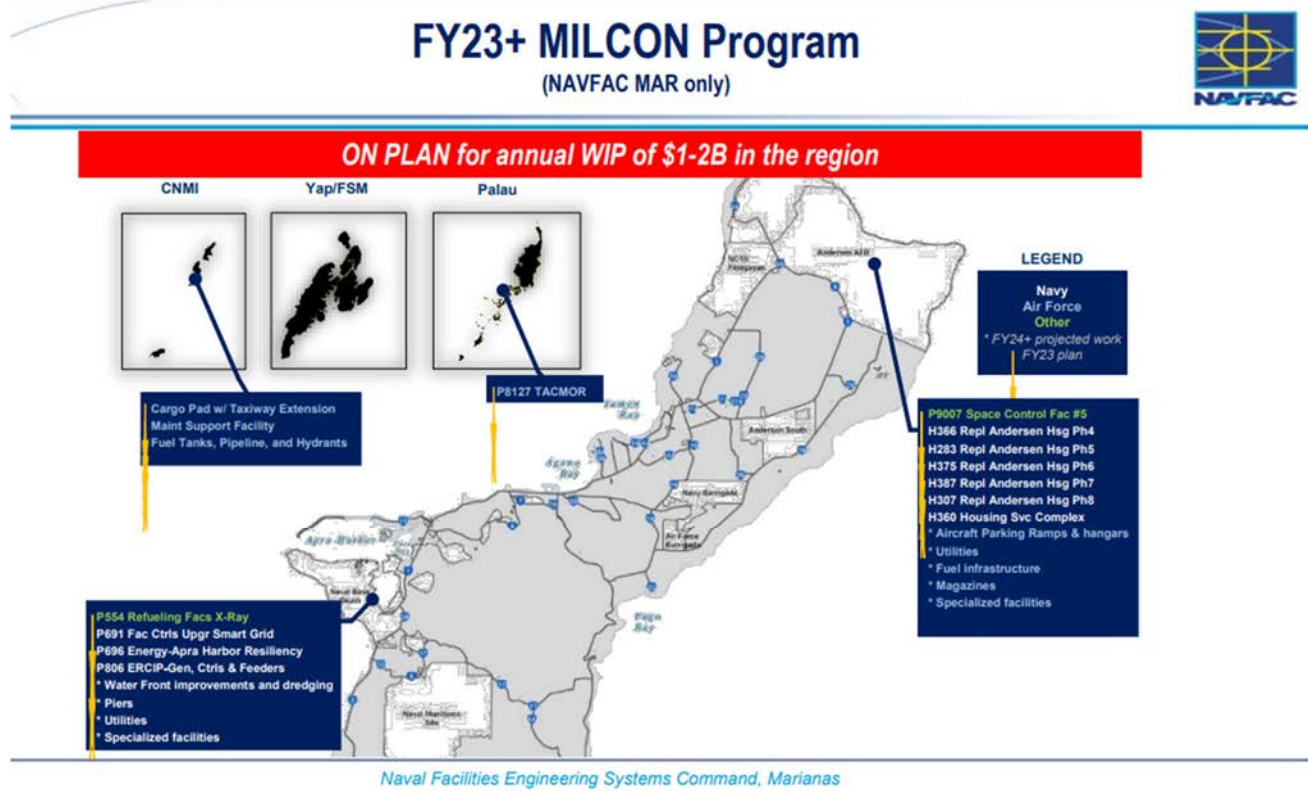
(Remainder of Page Intentionally Left Blank)

**Table A-21
Military Projects Awarded on Guam 2021-2023**

Navv Awarded	Company	Amount (\$)	Project	Anticipated Completion
March 2021	Core Tech-HDCC-Kajima LLC.	75,600,000	Design and Construction of a Distribution Warehouse and a Central Issue Facility	March 2024
August 2021	Core Tech-HDCC-Kajima LLC.	546,000,000	For the construction of five multi-story bachelors enlisted quarters complexes at the Marine Base Camp Blaz	May 2026
August 2021	Black Construction-Tutor Perini Joint Venture	98,000,000	Bachelors Officer Quarters at Marine Base Camp Blaz	May 2024
January 2022	APTIM Construction JF LLC	38,700,000	Construction of a Police Station at Marine Base Camp Blaz	March 2024
February 2022	Environmental Chemical Corporation	44,000,000	Construction of a water well field at Andersen Air Force Base	March 2024
April 2022	Hensel Phelps Construction Co.	36,000,000	Warehouse at U.S. Naval Support Activity, Marine Corps Base Camp Blaz	July 2024
April 2022	Black Construction-Tutor Perini Joint Venture	106,000,000	Bachelors Officer Quarters Tower at Marine Base Camp Blaz	December 2024
April 2022	Gilbane SMCC ECC LCC	35,000,000	Armory Facility Marine Corps Base Camp Blaz	August 2024
April 2022	Gilbane SMCC ECC LCC	62,000,000	Marine Expeditionary Brigade Enablers Facility Marine Corps Base Camp Blaz	September 2024
April 2022	Gilbane SMCC ECC LCC	40,000,000	Two Infantry Battalion Company Headquarters Marine Corps Base Camp Blaz	August 2024
April 2022	Granite Construction Co. Guam	35,990,000	Hardening of overhead roof structure, Joint Region Marianas	July 2024
May 2022	Gilbane SMCC ECC LCC	75,196,267	Permanent Maintenance Building, Administrative Building and other facilities for Maine Air Ground Combat Task Force	September 2024
May 2022	Black Construction-Tutor Perini Joint Venture	73,020,113	Low-rise facilities to support the 4 th Marine Regiment	August 2024
May 2022	Black Construction-Tutor Perini Joint Venture	48,919,252	Permanent Aviation Administration Building	August 2024
May 2022	Black Construction Corp.	83,733,445	For Design and Construction of Wharf Improvements at Naval Base Guam	September 2024
August 2022	RMA Architects Inc	35,000,000	IDIQ for AE Services for NAVFAC Pacific Housing Projects	August 2027
August 2022	Lockheed Martin Corporation	7,238,885,000	Design/Develop/Deliver HDR-G Radar System to Guam	2028
September 2022	Design Partners Inc	34,300,000	IDIQ for AE Services for NAVFAC Pacific Housing Projects	September 2027
September 2022	Global Pacific Design Builders LLC	33,184,524	Construct Guam Army National Guard Readiness Center	February 2025
October 2022	Design Partners Inc.	49,000,000	Indefinite-delivery/indefinite-quality architect-engineer contract	September 2027
October 2022	Black Construction-Tutor Perini Joint Venture	26,000,000	Design and construction of a communications facility at Joint Regions Marianas, Anderson Air Force Base	February 2025
Air Force Awarded	Company	Amount (\$)	Project	Anticipated Completion
August 2020	DZSP 21	48,000,000	Base Operating Support Services	April 2028
December 2021	Relyant Globall LLC	28,992,210	Design and construction of eight new earth-covered munitions storage magazines at Andersen Air Force Base, Guam	February 2025
April 2022	Back Construction – Tutor Perini	106,000,000	Construction of a bachelor officer quarters with a multi-story housing tower, attached common area wing and detached utility building.	December 2024
May 2022	Reliable Builders Inc.	43,444,038	Munitions Storage Igloo	July 2025
July 2023	Core Tech International Corp.	216,876,249	design and construction (design-build) for the replacement of Andersen Housing, Naval Support Activity Andersen.	October 2026

Figure 2 below lists all planned Military construction activity tied to the buildup, and as reported as of November 14, 2022, by the Naval Facilities Engineering Systems Command (NAVFAC) Marianas demonstrating the growing activity of military construction on the island going forward for all military branches.

Figure 2
Recent Military Construction Activity



Source: NAVFAC Marianas

[THIS PAGE INTENTIONALLY LEFT BLANK]

APPENDIX B

FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2022

[THIS PAGE INTENTIONALLY LEFT BLANK]

*Financial Statements, Required Supplementary
Information, and Supplementary and Other Information*

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

*Year ended September 30, 2022
with Report of Independent Auditors*



Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Financial Statements, Required Supplementary Information,
and Supplementary and Other Information

Year ended September 30, 2022

Contents

Report of Independent Auditors	1
Management’s Discussion and Analysis	5
Audited Basic Financial Statements	
Statement of Net Position	23
Statement of Revenues, Expenses and Changes in Net Position	25
Statement of Cash Flows	27
Notes to Financial Statements	29
Required Supplementary Information	
Schedule 1 – Schedule of Proportionate Share of the Net Pension Liability – Defined Benefit Plan	66
Schedule 2 – Schedule of Proportionate Share of the Net Pension Liability – Ad Hoc COLA/Supplemental Annuity Plan for DB Retirees	67
Schedule 3 – Schedule of Proportionate Share of the Net Pension Liability – Ad Hoc COLA Plan for DCRS Retirees	68
Schedule 4 – Schedule of Pension Contributions	69
Schedule 5 – Schedule of Proportionate Share of the Total OPEB Liability	70
Schedule 6 – Schedule of OPEB Contributions	71
Schedule 7 – Notes to Required Supplementary Information	72
Supplementary and Other Information	
Schedule 8 – Schedule of Certain Operating and Maintenance Expenses	73
Schedule 9 – Schedule of Construction Work in Progress	74
Schedule 10 – System Development Charge Fund Schedules of Net Position, Revenue, Expenses and Changes in Net Position	75
Schedule 11 – Schedule of Operating Revenues	76
Schedule 12 – Schedule of Employee and Other Data	77



Ernst & Young LLP
231 Ypao Road
Suite 201 Ernst & Young Building
Tamuning, Guam 96913

Tel: +1 671 649 3700
Fax: +1 671 649 3920
ey.com

Report of Independent Auditors

Commissioners
Consolidated Commission on Utilities

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of Guam Waterworks Authority (the Authority), a component unit of the Government of Guam, as of and for the year ended September 30, 2022, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the Authority at September 30, 2022, and the changes in financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States (*Government Auditing Standards*). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Authority, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 5 through 22 as well as the Schedules of Proportionate Share of the Net Pension Liability on pages 66 through 68, the Schedule of Pension Contributions on page 69, the Schedule of Proportionate Share of the Total OPEB Liability on page 70, the Schedule of OPEB Contributions on page 71, and the Notes to Required Supplementary Information on page 72 be presented to supplement the financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Authority's basic financial statements. The Schedule of Certain Operating and Maintenance Expenses, the Schedule of Construction Work in Progress, the Schedules of Net Position, Revenue, Expenses and Changes in Net Position for the System Development Charge Fund, and the Schedule of Operating Revenues on pages 73 through 76 are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Certain Operating and Maintenance Expenses, the Schedule of Construction Work in Progress, the Schedules of Net Position, Revenue, Expenses and Changes in Net Position for the System Development Charge Fund, and the Schedule of Operating Revenues are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the financial statements. The other information comprises the Schedule of Employee and Other Data on page 77 but does not include the financial statements and our auditor's report thereon. Our opinion on the financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated August 18, 2023, on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

Ernst + Young LLP

August 18, 2023

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis

Years Ended September 30, 2022 and 2021

As management of the Guam Waterworks Authority (GWA), we offer readers of GWA's financial statements this narrative overview and analysis for the fiscal year ending September 30, 2022. This discussion has been prepared by GWA management to provide an overview of the Authority's financial activities for the fiscal year (FY) ending September 30, 2022. It is based on the financial statements provided in the annual audit report. Selected comparable financial data from the prior year may also be provided.

The following Management's Discussion and Analysis (MD&A) should be read in conjunction with GWA's basic financial statements and related notes to enhance understanding of the Authority's financial performance.

Introduction

Guam Waterworks Authority (GWA) provides water and wastewater services to the majority of Guam's civilian population and some military facilities. In 2002, pursuant to Public Law 26-76, the Authority was converted from a government agency to a Guam public corporation governed by the Consolidated Commission on Utilities (CCU).

The CCU is an elected non-partisan body with five staggered positions. The five-member commission assumed policy responsibility and decision-making authority over GWA operations. Their roles include the development of operating and financial budgets and overall management strategy and direction. Two seats will be up for election on November 8, 2024. The CCU hires the General Manager, the Legal Counsel, and the Chief Financial Officer for GWA. The CCU also oversees the Guam Power Authority (GPA).

GWA's main offices are co-located with GPA at the Gloria B. Nelson Public Service Building in Fadian, Mangilao. Satellite offices in Hagåtña and Upper Tumon serve both GWA and GPA customers. Operations and Maintenance personnel also work out of water and wastewater treatment plants as well as field offices in various locations. At the end of FY2022, GWA had a staff of 366 full-time equivalent (FTE) employees.

GWA owns and operates a variety of facilities that provide water and wastewater services. These facilities represent a significant investment of ratepayer funds and include substantial visible and underground infrastructure assets. The condition and performance of GWA's existing utility system assets were reviewed in the 2018 Water Resources Master Plan Update; the next update to the Master Plan is scheduled to be completed in FY2023.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

Introduction, continued

Water sources on the island of Guam include groundwater, surface water, and springs. Groundwater supplies about 90 percent of the drinking water for Guam's residents and visitors. Deep wells are used to extract groundwater for use. GWA owns 120 wells, of which 95 were operational (though all were not in use) on September 30, 2022. GWA's water system includes a network of transmission and distribution pipelines, booster pump stations, pressure regulating valve stations, reservoirs, tanks, and fire hydrants, all supporting the agency's effort to provide more efficient and reliable service to its customers while meeting regulatory requirements. At the end of FY2022, GWA had over 43,400 water customers.

GWA provides wastewater services for Guam's general population, Andersen Air Force Base, and other military installations in Northern Guam. At the end of FY2022, GWA had more than 30,600 wastewater customers. The wastewater system is separated into seven wastewater basins, served by six wastewater treatment plants, and an extensive collection system. The GWA wastewater collection systems are comprised of gravity sewer pipes, manholes, pump stations, ejector stations, force mains, and siphons.

GWA has undergone a significant transformation over the last several years by working to improve its management and operations through streamlining expenditures, decreasing leak repair times, implementing a meter replacement program, launching a computerized maintenance management system that includes mobile capabilities, and upgrading its financial management system. These efforts have all contributed to significantly improved operating results despite the need for cost containment and deferred maintenance given the effect of the COVID pandemic on the economy.

Regulatory Oversight

The Guam Public Utilities Commission (PUC) has the responsibility and authority to regulate rates set by GWA as well as approve all revenue-funded contracts over \$1 million. The PUC is governed by seven commissioners who serve six-year terms under appointment by the Governor and confirmation by the legislature.

On July 6, 2019, GWA petitioned the PUC for approval of the Five-Year Financial Plan and rate relief spanning FY2020 through FY2024. The PUC approved GWA Docket 19-08 on February 27, 2020, approving 5% rate increases effective March 1, 2020, and October 1, 2020, substantially less than the requested rate relief. Additionally, GWA was required to provide a comprehensive review and update of the financial plan for FY2022 -FY2024 along with an updated rate model on or before May 1, 2021. The PUC also required that the update be informed by a number of analytical studies. The studies, due on March 31, 2021, included demand forecasting, water loss reduction, cost-of-service, rate design, affordability, capital financing alternatives, capitalized labor, and cesspool and septic tank elimination.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

Regulatory Oversight, continued

The studies, updated financial plan, and rate model were filed as required; the impact of the COVID-19 pandemic on customer demand and revenues was also taken into consideration in the update of the financial plan. However, PUC action on the requested rate increases did not take place until September 2022 resulting in no rate increases for FY2022 and 5.5% rate increases effective October 1, 2022, and October 1, 2023; the FY2024 increase is subject to a true-up projection which was provided, as required, on June 1, 2023. The requested change in rate design was not authorized in the rate order and the proposed Customer Assistance Program was deferred. GWA advised the PUC at the time of their action that the approved FY2024 increase would not likely be sufficient and a greater increase would be sought.

GWA must adhere to Guam and federal regulations for both water and wastewater treatment and services. Water standards are based on the requirements established by the Safe Drinking Water Act (SDWA), while wastewater treatment and disposal are governed by the Clean Water Act (CWA). The US Environmental Protection Agency (USEPA) issues NPDES (National Pollutant Discharge Elimination System) permits for GWA facilities when required and is responsible for monitoring its compliance. The Guam Environmental Protection Agency is the territorial agency in charge of monitoring GWA water system operations as well as SDWA compliance.

GWA is currently under a 2011 Court Order to address USEPA complaints and has completed all but one element, which involves repairing or replacing potable water reservoirs. In January 2021, the District Court approved a request to extend the deadline for completion of the projects to June 30, 2023. Because of the impacts to the construction capabilities on Guam resulting from the pandemic, global supply chain issues and related inflationary pressures, GWA has filed and was granted a request to extend the deadline to December 31, 2025.

In further regulatory enforcement efforts, over the last five years, GWA has been negotiating with USEPA on a consent decree to address its wastewater collection and conveyance systems; GWA believes these negotiations will conclude sometime in 2023.

Debt Service Coverage and Financing

As part of the PUC Docket 19-08, GWA agreed to work to harmonize the debt service coverage (DSC) policy requirements set by the CCU and the PUC and align the DSC calculation with bond covenants. GWA Resolution 17-FY2020 adopted a debt service coverage target of 1.4X for FY2021 and a near-term goal of 1.5X beginning in FY2022 calculated on the same basis as is called for in the GWA Revenue Bond Indenture and dissolved the Working Capital Reserves for Debt Services. However, in response to financial pressures created by the impacts of the global pandemic on Guam's economy, the PUC authorized a debt service coverage ratio of 1.3X for the remainder of the Five-year Financial Plan, i.e., through FY2024, in its September 2022 rate order.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

Debt Service Coverage and Financing, continued

The PUC-mandated Capital Financing Alternatives Study recommended a Tax-Exempt Commercial Paper (TECP) Program to be used during initial construction periods to reduce interest expense. GWA has worked with bond counsel to propose legislation to establish a TECP Program. Additionally, the proposed legislation seeks to increase GWA's debt authorization in anticipation of issuance of a long-term, take-out bond to retire the short-term TECP. Additional financing will be required to address the consent decree requirements that have been proposed. GWA will work to get these pieces of legislation introduced and approved in the 37th Guam Legislature.

Rate Stabilization Fund

CCU Resolution 11-FY2021 authorized the establishment of a Rate Stabilization Fund to address the financial risk associated with utility operations and capital financing. A transfer in September 2021 of \$11.4 million previously in the dissolved Working Capital Reserves for Debt Services, was made to the Rate Stabilization Fund. Transfers of \$5.75 million from the Rate Stabilization Fund were made into the Operating Fund in FY2022 due to PUC inaction on GWA's requested rate increase as well as COVID-related impacts to revenues and inflationary effects on expenses.

Federal Assistance

US Department of Defense

GWA received \$173.2 million in grants from the U.S. Department of Defense Office of Economic Adjustment, renamed Office of Local Defense Community Cooperation (OLDCC), to make water and wastewater system improvements related to the Marine relocation from Okinawa to Guam. In FY2022, there were \$27.9 million in OLDCC grant-related expenditures. The projects funded include:

- Route 9/3 sewer collection main rehabilitation stretching from Andersen AFB to Northern District Wastewater Treatment Plant
- Northern District Wastewater Treatment Plant Upgrade to secondary treatment
- Monitoring wells construction and rehabilitation which will be used to gauge the health of the Northern Aquifer

U.S. Environmental Protection Agency (USEPA)

The USEPA provides \$9.9 million annually through the State Revolving Fund (SRF). Funds must be obligated within three years and are used for a number of water and wastewater capital projects including sewer line upgrades, sewer force main improvements, and water distribution system pressure zone realignments. USEPA SRF expenditures totaled \$7.8 million in FY2022.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

Federal Assistance, continued

Federal Emergency Management Agency (FEMA)

GWA received \$87,000 in FEMA grants to reimburse expenditures resulting from 2018 damages related to Typhoon Mangkhut.

Department of Interior (DOI)

GWA was awarded grants through the DOI Office of Insular Affairs through the Maintenance Assistance Program (MAP) to fund \$248,000 in operator training and equipment and the Technical Assistance Program (TAP) to fund \$124,000 in financial management training and operational capacity building for finance, water, and wastewater personnel. The DOI Energizing Insular Communities Grant provided \$438,000 for the purchase of electric vehicles. Additionally, \$1 million of DOI funds were provided through the Governor's Office to fund retrofitting of wells affected by PFOS (perfluorooctane sulfuric acid). No expenditures were made in FY2022.

Ratepayer Assistance Programs

The Guam Emergency Rental Assistance Program (GERAP), funded through the second federal relief act, is administered by the Guam Department of Administration, and is targeted at renters. Total GERAP payments received in FY2022 to assist ratepayers with water and wastewater billings were approximately \$893,000. Additionally, GWA received approximately \$350,000 from eligible homeowners as part of the Guam Homeowners Assistance Fund (GHAFP), as well as approximately \$75,000 in payments from eligible Low Income Household Water Assistance Program (LIHWAP) in FY2022.

COVID-19 Public Health Emergency

Although schools and businesses stayed open, Governor Lourdes Leon Guerrero kept Guam in a Public Health State of Emergency throughout FY2022 due to the Novel Coronavirus (COVID-19) pandemic. Guam began the fiscal year with 90% of the eligible population fully vaccinated against the virus. Additional vaccines and boosters along with COVID tests were made available to the community at various locations throughout the island free of charge.

All essential services provided by GWA continued to be performed through the pandemic emergency. Supply chains for the most part have continued the provision of needed supplies to ensure sustained water and wastewater operations, with only marginal delays in the supply of wastewater treatment chemicals. Service disconnections suspended through most of this emergency period, resumed in June 2021. The COVID pandemic continued to affect FY2022 revenues with demand beginning to rebound in the last quarter of the fiscal year.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

COVID-19 Public Health Emergency, continued

Revenues were continuously monitored, the cost containment plan remained in effect, and management made course corrections to ensure continuity of services to our customers while keeping the safety of our staff at the highest priority. GWA also worked to maintain the timely execution of on-going CIP projects to enhance critical water and wastewater infrastructure systems, and to sustain economic activity related to these significant construction projects.

Overview of the Financial Statements

This MD&A is intended to serve as an introduction to the GWA's basic financial statements. GWA's basic financial statements are for a single proprietary fund and include the financial statements, notes to those financial statements, and other supplementary and statistical information.

Proprietary Fund Financial Statements

GWA's operations are accounted for as a single proprietary fund using the full accrual basis of accounting. In this regard, GWA operations are accounted for in a manner similar to a private enterprise. Within this one proprietary fund, GWA segregates revenues and expenses for various purposes such as operations, debt service, and capital improvements, but that segregation does not create separate proprietary funds.

Notes to the Financial Statements

The notes provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes to the financial statements can be found beginning on page 29 of this report.

Other Information

In addition to the basic financial statements and accompanying notes, this report also presents supplementary and statistical information. Supplementary and statistical information can be found beginning on page 65 of this report.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

Financial Condition and Results

The Authority's total net position increased by \$12.5 million during the fiscal year primarily due to the \$35.8 million in capital contributions (see table below).

Summary Statement of Net Position

	September 30, 2022	September 30, 2021	<u>2022 to 2021 Comparison</u>	
			Increase (Decrease)	% Change
Current and other assets	\$ 327,050,310	\$ 367,169,585	\$(40,119,275)	-10.9%
Property, plant and equipment, net	813,964,616	767,223,631	46,740,985	6.1%
Deferred outflows of resources	<u>80,679,601</u>	<u>94,965,533</u>	<u>(14,285,932)</u>	-15.0%
Total assets and deferred outflows	<u>\$1,221,694,527</u>	<u>\$1,229,358,749</u>	<u>\$(7,664,222)</u>	-0.6%
Current and other liabilities	\$ 205,224,088	\$ 206,642,888	\$(1,418,800)	-0.7%
Long-term debt	662,573,147	674,194,335	(11,621,188)	-1.7%
Deferred inflows of resources	<u>31,668,558</u>	<u>38,804,923</u>	<u>(7,136,365)</u>	-18.4%
Total liabilities and deferred inflows	<u>899,465,793</u>	<u>919,642,146</u>	<u>(20,176,353)</u>	-2.2%
Net Position:				
Net investment in capital assets	322,499,972	286,341,746	36,158,226	12.6%
Restricted	99,393,423	28,019,130	71,374,293	254.7%
Unrestricted	<u>(99,664,661)</u>	<u>(4,644,273)</u>	<u>(95,020,388)</u>	2,046.0%
Total net position	<u>322,228,734</u>	<u>309,716,603</u>	<u>12,512,131</u>	4.0%
Total liabilities, deferred inflows and net position	<u>\$1,221,694,527</u>	<u>\$1,229,358,749</u>	<u>\$(7,664,222)</u>	-0.6%

The net increase in property, plant, and equipment of \$46.7 million is due primarily to completed and on-going construction projects related to wastewater treatment plant upgrades, sewer line rehabilitation/replacements transmission lines, reservoir replacements, deep well rehabilitations, fire hydrant replacements, meters, acquisition of mechanical and electrical equipment and general plant improvements.

The Authority's net investment in capital assets represents 100.1% of total net position. The net amount invested in capital assets increased by \$36.2 million compared to the previous year.

Operating revenues for FY2022 increased over the prior fiscal year by 1.5% or \$1.5 million. Wastewater was the biggest driver, reflecting a 6.2% increase or \$2.1 million. Operating expenses increased by 4.0% or \$3.7 million over FY2021 with power purchases increasing by nearly 50% or \$6.1 million due to increasing power rates. Decreases in other expense categories helped to defray any negative impacts including reductions to salaries, wages, and benefits by -8.5% or \$2.0 million, retiree health costs by -8.7% or \$800,000, water purchases by -14.5% or \$1 million and sludge disposal fees by -53.5% or \$800,000.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

Financial Condition and Results, continued

Overall, operating income decreased over the prior fiscal year by -31.5% or \$2.3 million. Despite the continued implementation of cost containment measures to reduce operating expenses in order to mitigate the financial impacts of the increased power costs, GWA had to rely on Rate Stabilization Funding policies to stabilize the revenue shortfalls to cover these unforeseen increases. About \$5.8 million of rate stabilization funds were utilized in FY2022.

Net non-operating expenses increased by \$2.9 million and interest expense decreased by \$900,000.

A comparative analysis of Revenues, Expenses, and Changes in Net Position for FY2022 and FY2021, are illustrated in the Table below:

Results of Operations / Statement of Revenues, Expenses and Changes in Net Position

	September 30, 2022	September 30, 2021	2022 to 2021 Comparison	
			Increase (Decrease)	% Change
Revenues:				
Water	\$ 67,271,841	\$ 67,797,404	\$ (525,563)	-0.8%
Wastewater	35,434,169	33,364,098	2,070,071	6.2%
Other	464,488	502,315	(37,827)	-7.5%
Bad debts	(2,028,510)	(1,991,300)	(37,210)	1.9%
Total operating revenue	<u>101,141,988</u>	<u>99,672,517</u>	<u>1,469,471</u>	1.5%
Expenses:				
Power purchases	18,577,440	12,507,537	6,069,903	48.5%
Water purchases	5,656,471	6,615,983	(959,512)	-14.5%
Sludge (waste) disposal fees	658,813	1,415,293	(756,480)	-53.5%
Salaries, wages and benefits	22,191,629	24,240,266	(2,048,637)	-8.5%
Depreciation	28,462,573	26,869,495	1,593,078	5.9%
Administrative and general	7,297,610	6,861,923	435,687	6.3%
Contractual	4,492,845	4,247,073	245,772	5.8%
Retiree healthcare costs and other benefits	<u>8,864,985</u>	<u>9,707,749</u>	<u>(842,764)</u>	-8.7%
Total operating expenses	<u>96,202,366</u>	<u>92,465,319</u>	<u>3,737,047</u>	4.0%
Net operating income	4,939,622	7,207,198	(2,267,576)	-31.5%
Non-operating revenue (expenses)	941,435	4,731,813	(3,790,378)	-80.1%
Less: Interest expense	(29,175,309)	(30,075,496)	900,187	-3.0%
Total non-operating revenues (expenses), net	<u>(28,233,874)</u>	<u>(25,343,683)</u>	<u>(2,890,191)</u>	11.4%
Loss before capital contributions	(23,294,252)	(18,136,485)	(5,157,767)	28.4%
Capital contributions	<u>35,806,383</u>	<u>64,592,719</u>	<u>(28,786,336)</u>	-44.6%
Change in net position	12,512,131	46,456,234	(33,944,103)	-73.1%
Net position – beginning year	<u>309,716,603</u>	<u>263,260,369</u>	<u>46,456,234</u>	17.6%
Net position – end of year	<u>\$322,228,734</u>	<u>\$309,716,603</u>	<u>\$12,512,131</u>	4.0%

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

Financial Condition and Results, continued

In FY2022, water revenues (excluding System Development Charges) decreased by \$300,000 or -0.5% over the prior fiscal year. A shift in consumption behavior occurred in the various customer classes between FY2022 and FY2021 as the pandemic conditions improved. The residential sector dropped -5.3% or \$2.1 million which was offset by increases in the government sector by 18.2% or \$1.2 million, the commercial sector by 3.5% or \$500,000, and the hotel sector by 2.3% or \$200,000. This indicates the move from home use slowly back to normal working and business conditions due to the lifting of quarantine protocols. Because non-residential wastewater revenues are driven by water consumption, wastewater revenues showed similar improvements over FY2021 in the government, commercial, and hotel sectors.

The tables below illustrate the distribution of water and wastewater revenues, as well as water demand and wastewater flow among major customer classes:

Annual Water Revenues (Excluding System Development Charges)

<u>Class Type</u>	<u>FY22</u>	<u>FY21</u>	<u>2022 to 2021 Comparison</u>	
			<u>Increase (Decrease)</u>	<u>% Change</u>
Agricultural	\$ 431,070	\$ 444,892	\$ (13,822)	(3.1%)
Golf Course	70,280	56,152	14,128	25.2%
Commercial	13,720,269	13,251,332	468,937	3.5%
Federal	28,145	38,596	(10,451)	(27.1%)
Government	7,611,024	6,437,468	1,173,556	18.2%
Hotel	7,125,401	6,968,351	157,050	2.3%
Irrigation	39,113	43,360	(4,247)	(9.8%)
Residential	<u>37,709,793</u>	<u>39,816,286</u>	<u>(2,106,493)</u>	<u>(5.3%)</u>
Total	<u>\$66,735,095</u>	<u>\$67,056,437</u>	<u>\$ (321,342)</u>	<u>(0.5%)</u>

Annual Wastewater Revenues (Excluding System Development Charges)

<u>Class Type</u>	<u>FY22</u>	<u>FY21</u>	<u>2022 to 2021 Comparison</u>	
			<u>Increase (Decrease)</u>	<u>% Change</u>
Commercial	\$ 8,373,667	\$ 7,760,006	\$ 613,661	7.9%
Federal	6,110,211	5,944,514	165,697	2.8%
Government	4,391,010	3,617,134	773,876	21.4%
Hotel	6,523,248	6,091,381	431,867	7.1%
Residential	<u>9,327,418</u>	<u>9,095,570</u>	<u>231,848</u>	<u>2.5%</u>
Total	<u>\$34,725,554</u>	<u>\$32,508,605</u>	<u>\$2,216,949</u>	<u>6.8%</u>

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

Financial Condition and Results, continued

Water Demand by Rate Class
(in '000 gallons)

<u>Class Type</u>	<u>FY22</u>	<u>FY21</u>	<u>2022 to 2021 Comparison</u>	
			<u>Increase</u>	<u>% Change</u>
Agricultural	65,719	68,805	(3,086)	(4.5%)
Golf Course	3,796	2,855	941	33.0%
Commercial	818,460	786,157	32,303	4.1%
Federal	1,389	2,069	(680)	(32.9%)
Government	471,943	404,026	67,917	16.8%
Hotel	462,757	448,034	14,723	3.3%
Irrigation	4,888	5,404	(516)	(9.5%)
Residential	<u>3,450,574</u>	<u>3,622,514</u>	<u>(171,940)</u>	<u>(4.7%)</u>
Total	<u>5,279,526</u>	<u>5,339,864</u>	<u>(60,338)</u>	<u>(1.1%)</u>

Wastewater Flow by Rate Class
(in '000 gallons)

<u>Class Type</u>	<u>FY22</u>	<u>FY21</u>	<u>2022 to 2021 Comparison</u>	
			<u>Increase</u>	<u>% Change</u>
Commercial	585,512	566,044	19,468	3.4%
Federal	508,438	493,841	14,597	3.0%
Government	365,856	303,587	62,269	20.5%
Hotel	318,491	297,738	20,753	7.08%
Residential	<u>2,051,330</u>	<u>2,150,617</u>	<u>(99,287)</u>	<u>(4.6%)</u>
Total	<u>3,829,627</u>	<u>3,811,827</u>	<u>17,800</u>	<u>0.5%</u>

Capital Assets

The Authority had \$814.0 million (net of accumulated depreciation) invested in a broad range of utility capital assets as of September 30, 2022. The table below highlights the various categories where these investments in capital assets were made.

In the current fiscal year 2022, capital assets increased by \$46.7 million (net) or 6.1% over the prior fiscal year. The increase is attributable to ongoing major capital improvement projects associated with a 2011 Federal Court Order, the Authority's 5-year Capital Improvement Program, and the Water Resources Master Plan Update, August 2018.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

Capital Assets, continued

The Authority's revenue, long-term debt, and grants-in-aid are used to finance capital investments. This year's major capital additions included:

<u>Wastewater</u>	
Sewer lines	\$ 963,034
Treatment plants	<u>61,909,060</u>
	62,872,094
 <u>Water</u>	
Deepwells	744,723
Fire Hydrants	896,657
Water lines	1,829,573
Meters	1,051,680
Reservoirs	<u>1,180,660</u>
	5,703,293
 General Plant Improvements	 <u>1,119,429</u>
 Total	 <u>\$69,694,816</u>

Capital Assets, Net of Accumulated Depreciation

	September 30,	September 30,	<u>2022 to 2021 Comparison</u>	
	<u>2022</u>	<u>2021</u>	Increase (Decrease)	% Change
Plant, buildings and equipment, net	\$635,401,060	\$594,394,314	\$41,006,746	6.9%
Land	5,287,305	5,240,187	47,118	0.9%
Construction in progress	<u>173,276,251</u>	<u>167,589,130</u>	<u>5,687,121</u>	<u>3.4%</u>
 Total	 <u>\$813,964,616</u>	 <u>\$767,223,631</u>	 <u>\$46,740,985</u>	 <u>6.1%</u>

Beginning in the fall of 2016, the Department of Defense (DoD) through the Office of Local Defense Community Cooperation (OLDCC), formerly the Office of Economic Adjustment, provided GWA with over \$173 million in grant funding for various water/wastewater system upgrades to support the DoD realignment of forces in the Pacific. This included grant funding for the ocean outfall diffuser serving the Northern District Wastewater Treatment Plant (NDWWTP) and the upgrade of the NDWWTP to secondary treatment. As of March 18, 2022, the new secondary treatment processes at the upgraded NDWWTP have been initiated. Substantial completion of construction activities occurred by the end of FY2022.

For additional information concerning capital assets, please refer to Note 5 to the financial statements.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management’s Discussion and Analysis, continued

Debt

As of September 30, 2022, the Authority had total long-term debt outstanding of \$623.8 million, which is a decrease of \$9.8 million or -1.5% over the prior year.

Long-Term Debt

	September 30, <u>2022</u>	September 30, <u>2021</u>	<u>2022 to 2021 Comparison</u>	
			Increase (Decrease)	% Change
2013 Bond Series	\$ 21,510,000	\$ 24,500,000	\$(2,990,000)	(12.2%)
2014 Refunding Bond Series	64,055,000	64,610,000	(555,000)	(0.9%)
2016 Bond Series	134,975,000	139,030,000	(4,055,000)	(2.9%)
2017 Refunding Bond Series	103,180,000	105,325,000	(2,145,000)	(2.0%)
2020A Bond Series	134,000,000	134,000,000	---	---
2020B Refunding Bond Series	<u>166,075,000</u>	<u>166,075,000</u>	<u>---</u>	<u>---</u>
 Total	 <u>\$623,795,000</u>	 <u>\$633,540,000</u>	 <u>\$(9,745,000)</u>	 <u>(1.5%)</u>

Bond covenants require that GWA maintain its principal, interest, and reserve funds for outstanding bond issues. In addition, the Authority is required to set rates and charges to yield earnings equal to at least 125% of the current annual debt service requirements of the outstanding 2013, 2016, and 2020A revenue bond series and 2014, 2017, and 2020B refunding bond series.

As of the end of FY2022, Moody’s Investor Services and Standard & Poor’s maintained their existing GWA bond rating of Baa2, and A-, respectively. The ratings are important benchmarks of an issuer’s ability to meet its financial obligation. Each rating agency incorporates a rating scale indicating the credit quality of the issuer. The scales are comprised of alphabetical symbols such as “AAA”, “AA”, “A”, “BBB”, “BB”, and “B.” For example, categorical ratings in the “AAA,” “AA” and “A” ranges denote high credit quality meaning the issuer has a high capacity to meet its financial commitments whereas categorical ratings in the “BBB,” “BB” and “B” ranges denote average credit quality. The lower the number of alpha characters assigned indicates the issuer is more susceptible to adverse effects or changes in circumstances and economic conditions than those with a higher number of alpha characters.

For more information concerning debt, please refer to Note 6 to the financial statements.

Please refer to the MD&A in the FY2021 GWA Financial Audit for additional information related to FY2021. A copy of the audit is posted on the GWA website at www.guamwaterworks.org/finance/ or can be obtained by contacting the Chief Financial Officer.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

Looking Forward

Outlook, Challenges, and Opportunities

On May 24, 2023, Guam was hit by Typhoon Mawar, one of the strongest storms to hit Guam in decades. GWA is working as swiftly and as safely as possible to restore water services to our customers and is collaborating with the Guam Power Authority (GPA) to energize water wells and pump stations as well as wastewater lift stations, including repairing generators or deploying FEMA-provided generators where necessary. President Biden issued an emergency declaration prior to the Typhoon, triggering federal assistance to aid in recovery efforts. While there appears to be minimal damage to GWA facilities, assessments are ongoing.

GWA's outlook for the coming year was cautiously optimistic as pandemic-induced impacts have lessened and COVID-related restrictions in Guam and the surrounding region are being gradually lifted. Business was beginning to rebound as tourists return to Guam, but Typhoon Mawar will slow the return to pre-pandemic levels. While progress in meeting regulatory compliance priorities remains a focused and achievable goal, the pace of capital project implementation for necessary system improvements may continue to be impacted by regulatory and permitting delays and the recent storm. Additionally, the ongoing military buildup will affect the availability of companies bidding on construction contracts and resultant costs.

Similarly, operational maintenance activities may be hampered by the persistence of needed cost-containment measures, resulting in deferred maintenance expenses in order to ensure financial performance does not endanger debt service coverage metrics. Despite a continuing increase in construction spending that bolsters the local economy, GWA revenues will continue to be impacted by the pace of recovery in the tourism market and operating expense increases for oil-related expenditures (fuel and power), both of which are expected to put pressure on containing operations and maintenance costs. GWA plans to counter these pressures through the judicious use of American Rescue Plan Act (ARPA) funds made available by the Office of the Governor to offset revenue losses and mitigate rate increases granted by the PUC.

Challenges persist in GWA's efforts to resolve various legal and administrative matters that affect our financial and operational planning and execution. A decision on the *Comprehensive Review & Update to GWA's FY2020 – FY-2024 5-Year Financial Plan* (CR&U), submitted on May 1, 2021, was not made until September 2022, resulting in a full year without needed rate relief to fund revenue requirements. The FY2024 True-Up Projection was submitted as required on June 1, 2023, but is unknown whether the PUC will act to adjust rates prior to the beginning of FY2024. GWA also seeks resolution in a quiet-title action for its NDWWTP, which is still in litigation in the Superior Court of Guam. The on-going litigation against Badger Meter over the performance of meters sold to GWA was finally settled in July 2023. Additionally, with the election of a new Attorney General, questions on the designation of GWA's legal counsel as a Special Assistant to the Attorney General for procurement matters may adversely affect timelines related to procurements over \$500,000.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

Looking Forward, continued

Outlook, Challenges, and Opportunities, continued

GWA will also be challenged by the anticipated promulgation of proposed federal rules relating to per- and polyfluoroalkyl substances (PFAS) as a regulated contaminant. If promulgated, the rules will have an impact on GWA's water production and treatment operations, potentially requiring significant additional capital investment in transmission lines and centralized treatment systems, and subsequent on-going operation and maintenance costs.

Despite these challenges, GWA continues to make improvements in customer service levels through the implementation of process improvements resulting from the recent upgrades in its enterprise resource planning / financial management system. GWA is also advancing needed capital improvement projects with funding from grants and GWA's successful Series 2020A revenue bonds, which will enhance both water and wastewater service levels for our customers. In the coming year, GWA will continue to work on its water distribution system to improve pressures and reduce losses through the implementation of District Metered Areas, an increase in its leak detection capabilities, additional work under its pressure zone realignment program, and expansion of production well meter enhancements.

Court Order Compliance

The 2011 U.S. District Court Order deadline was extended from June 30, 2023, to December 31, 2025. The 2011 Court Order established deadlines for completing outstanding projects that were identified in a previous Stipulated Order originally issued in 2003 and subsequently amended in 2004 and 2006. The last remaining compliance requirement involves the repair, rehabilitation, and replacement of water storage tanks. GWA has several tanks currently under construction, and several more in the process of repair and rehabilitation. Funding for the completion of all remaining work in the 2011 Court Order is in place, and GWA will work diligently to complete all work by the extended deadline despite the challenges from impacts on the construction market caused by the on-going military buildup.

Secondary Treatment

USEPA issued new NPDES permits for the Northern District, Hagåtña, Agat-Santa Rita, and Umatac-Merizo WWTPs that became effective on January 1, 2020. The new NPDES permits include secondary treatment standards, some of which the Hagåtña WWTP is unable to meet until a secondary treatment process is implemented at the facility.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

Looking Forward, continued

Secondary Treatment, continued

The Hagåtña WWTP is currently meeting the requirements of the Court Order with chemically enhanced primary treatment but is not in compliance with the secondary treatment standards and will require significant upgrades to comply with the permit. GWA has executed a pilot study for interim disinfection as part of on-going Consent Decree discussions with EPA. While such discussions were stalled by uncertainties created by COVID-19 and PUC inaction on GWA's CR&U, negotiations have resumed and GWA continues to move forward with planning and design for capital replacement for major equipment and process upgrades to achieve improved treatment performance until Secondary Treatment can be implemented.

Capital Project Risk

In 2018, GWA completed a comprehensive update to its 20-year master planning document. The *2018 Water Resources Master Plan* was adopted by the CCU and subsequently formed the basis of GWA's third and current 5-year Capital Improvement Plan for FY2020-FY2024. Since 2006, GWA has demonstrated improved performance in planning and implementation of capital projects for system improvements required by the 2011 Court Order and more recent regulatory priorities resulting from on-going negotiations with USEPA. The current update of the plan should be completed in 2023.

The pace of implementation of GWA's CIP projects has been affected by the increased construction demand created by the DoD's buildup on Guam and the persistence of pandemic-induced backlogs in regulatory review and permitting activities, particularly with respect to reviews and approvals by the State Historic Preservation Office (SHPO). Although federal limitations on H-2B visa for construction labor were recently lifted, continued affects to GWA construction projects persist, leading to decreased bid participation, schedule delays, and increased costs. It is anticipated that these impacts will continue in the future until well beyond the peak in DoD construction activity.

Water Loss Control

In March of 2021, GWA completed its analytical study on water loss control and issued a *Water Loss Control Program Development Final Report*. The recommendations in the final report included the implementation of permanent District Metered Areas (DMAs) to monitor the supply and demand within discrete, defined areas across GWA's entire distribution system, as well as expanding GWA's in-house leak detection capabilities to provide complete inspections of the entire distribution system three times per year. The report also included a revision to GWA's water loss control metrics to align with changes within the industry away from % water loss. GWA is in year two (through August 2023) of a three-year implementation of island-wide DMAs. As of FY2022, 18 of 36 DMAs have been established. GWA has deployed two dedicated leak detection teams and is actively engaged in detection and repairs within the established DMAs to curb water losses.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

Looking Forward, continued

Water Loss Control, continued

To complement the Water Loss Control Program, GWA has included pipe replacement programs in its 5-Year CIP. As the completion of Court Order projects proceeds, resources will be adjusted to advance these programs so that regular, annual investments are made to renew piping infrastructure on an on-going basis, in addition to targeted capacity-related pipe upgrades. GWA has several line replacement projects currently under construction and nearing completion. GWA has also initiated procurements and awarded multiple contracts for engineering design services to execute additional projects under the pipe replacement programs identified in the 5-Year (FY2020-FY2024) CIP.

In addition, GWA continues to maintain performance in prompt leak repair to address surface leaks and main breaks, those instances where losses are easy to detect and report. GWA also continues to make progress in the completion of its Pressure Zone Realignment project to address background leaks, those instances where losses occur at pipe joints and other locations in quantities/flow rates which do not surface and are therefore not visually detectable or reported. The re-alignment of pressure zones within GWA's water system will employ piping and pressure-control valve installations in distinct zones across the water distribution network to reduce background water losses. Construction of Phase 1 of the Pressure Zone Realignment project is 77% complete, and Construction Management services for Phase 2 have been procured. Phase 2 will be issued for bid within the next few weeks.

Five-Year Financial Plan

The PUC in its September 2022 order deferred acting on proposed changes in rate design which included going from two tiers of residential consumption to three tiers and changing residential wastewater billing from a flat fee to one based on consumption derived from water use. GWA has resubmitted its request for these rate design changes to be used in the next five-year financial plan, FY2025 through FY2029, which will be filed in 2024.

Financial Management System

In FY2023, GWA will start Phase 2 of its Financial Management System upgrade. The overall objective of the project is to support the efficient execution of CIP projects, including digitizing procurement, CIP planning, and engineering document management. The project goals are to deliver:

- Operational Efficiency through reduced negotiation cycle times and workflow automation to reduce processing costs.
- Cost Management by reducing the cost of supply with digital go to market and contracting, negotiated agreements for preferred suppliers and accurate CIP forecasting.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

Looking Forward, continued

Financial Management System, continued

- Contractor Collaboration to share accurate documentation and online collaboration services for each step in the procurement lifecycle.
- Governance and Control through improved risk management by enforcing CIP procurement policies and segregation of duties. The system will also improve visibility to data, auditable spend record for capital projects and manage supplier qualifications and performance.

GWA will continue to leverage Oracle's Content and Experience Cloud (CEC) to assist with document storage, management, and collaboration. The CEC will be more widely implemented in the next year.

Salary Study

A salary survey is being conducted which may result in recommendations to adjust compensation in the near term to meet market conditions. Additionally, the implementation of a 22% pay adjustment in the Government of Guam's General Pay Plan may influence these recommendations.

COVID-19

As a result of Guam's high vaccination rate and low number of new COVID cases, Governor Leon Guerrero ended the COVID-related Public Health Emergency in January 2023. Additionally, COVID-related travel protocols in the region have been relaxed, making it easier for tourists to travel to Guam.

The pace of economic recovery of Guam's tourism sector will affect the Authority's sales and revenues within related rate classes. Residential consumption has decreased as schools and businesses opened but increases in hotel and commercial consumption have not been enough to offset the reduction in residential consumption. Accordingly, GWA continues its strategy to contain costs, reduce production and improve water loss control while monitoring the effect of the economic rebound on its revenues.

Sewer Loan Revolving Fund

The FY2023 Budget Act, Public Law 36-107, appropriated \$2 Million to the GWA Sewer Loan Revolving Fund for loans to residents to connect to the public wastewater system. CCU Resolution 08-FY2023 approved the update of the Rules and Regulations for this program to encourage more customers to obtain a loan. GWA will follow the Administrative Adjudication procedures to amend the Rules and Regulations as required.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Management's Discussion and Analysis, continued

Looking Forward, continued

Federal Assistance

The Guam Department of Administration (DOA) will continue to provide utility assistance to renters and homeowners using funding from the second US Stimulus package. DOA will also continue to aid qualified families through the Low-Income Household Water Assistance Program (LIHWAP) to pay for water and sewer services.

In November 2022, GWA received American Rescue Plan Act (ARPA) funds of \$12.4 million through the Office of the Governor to mitigate needed rate increases in FY2023. An additional \$8.6 million in ARPA funding was received for water and wastewater upgrades in Adacao to enhance utility services to underserved areas impacted by the COVID-19 pandemic.

The Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law, was signed into law on November 15, 2021. This has resulted in GWA's allotment received through the USEPA State Revolving Fund increasing as much as \$26 million per year for the next five years beginning in FY2023 (Federal Fiscal Year 2022) to total about \$34.2M annually. However, GWA has been advised that the upcoming consolidated environmental program will be funded at \$28.7M. While the additional funds are significant in the short term, GWA's existing CIP spending targets more than double the newly available grant funding. However, GWA does see potential benefits in reducing the amount of debt financing that may be required for the current 5-year CIP period (through FY2024).

Furthermore, GWA has been granted \$1 million of USEPA funding to assist the Guam Department of Public Works storm drainage planning efforts.

GWA, in March 2023, also received approval for reimbursement of almost \$38,000 of COVID-related expenses through the FEMA Public Assistance Program.

Request for Information

This financial report is to provide interested parties with a general overview of GWA's finances. If you have any questions about this report or need additional information, you may submit a request in writing to: Chief Financial Officer (CFO), Guam Waterworks Authority, Gloria B. Nelson Public Service Building, 688 Route 15, Mangilao, Guam 96913, email to finance@guamwaterworks.org, or telephone (671) 300-6862.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Statement of Net Position

September 30, 2022

Assets and deferred outflows of resources

Current assets:

Cash and cash equivalents:

 Unrestricted \$ 38,823,824

 Restricted 29,987,985

Receivables, net of allowance for doubtful accounts of \$9,753,074 16,901,464

Materials and supplies inventory, net of an allowance
for obsolescence of \$122,856 4,667,734

Prepaid expenses 1,733,017

 Total current assets 92,114,024

Property and equipment:

Utility plant in service:

 Water system 420,470,606

 Wastewater system 576,276,943

Non-utility property 33,353,690

1,030,101,239

Less accumulated depreciation (394,700,179)

635,401,060

Land and land rights 5,287,305

Construction work in progress 173,276,251

 Property, plant and equipment, net 813,964,616

Lease assets 532,824

Other noncurrent assets:

 Restricted cash and cash equivalents 234,403,462

 Total assets 1,141,014,926

Deferred outflows of resources:

 Debt defeasance loss on refunding 29,229,855

 Deferred outflows from pension 7,405,025

 Deferred outflows from OPEB 41,247,962

 Regulatory assets 2,796,759

 Total deferred outflows of resources 80,679,601

 Total assets and deferred outflows of resources \$1,221,694,527

See accompanying notes.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Statement of Net Position, continued

Liabilities, deferred inflows of resources and net position

Current liabilities:	
Current maturities of revenue bonds payable	\$ 10,235,000
Accounts payable:	
Guam Power Authority	2,396,370
Trade	2,111,279
Accrued interest	7,200,420
Accrued payroll and employee benefits	1,118,809
Current portion of employee annual leave	725,007
Current portion of lease liabilities	234,824
Payable to contractors	23,351,921
Customer deposits	2,275,313
Other liabilities	<u>827,057</u>
Total current liabilities	50,476,000
Revenue bonds payable, less current maturities	652,338,147
Employee annual leave, less current portion	995,913
DCRS sick leave liability	1,376,504
Lease liabilities	300,279
Net pension liability	46,038,335
OPEB liability	<u>116,272,057</u>
Total liabilities	<u>867,797,235</u>
Deferred inflows of resources:	
Regulatory liabilities	638,875
Deferred outflows from pension	5,176,746
Deferred outflows from OPEB	<u>25,852,937</u>
Total deferred outflows of resources	<u>31,668,558</u>
Net position:	
Net investment in capital assets	322,499,972
Restricted	99,393,423
Unrestricted	<u>(99,664,661)</u>
Total net position	<u>322,228,734</u>
Total liabilities, deferred inflows of resources and net position	<u>\$1,221,694,527</u>

See accompanying notes.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Statement of Revenues, Expenses and Changes in Net Position

Year ended September 30, 2022

Operating revenues:	
Water:	
Private	\$ 57,230,980
Government	7,376,219
Legislative surcharge	2,127,896
System development charge	<u>536,746</u>
	<u>67,271,841</u>
Wastewater:	
Private	23,701,033
Government	10,141,643
Legislative surcharge	882,878
System development charge	<u>708,615</u>
	<u>35,434,169</u>
Other	<u>464,488</u>
Bad debts expense	<u>(2,028,510)</u>
Total operating revenues	<u>101,141,988</u>
Operating and maintenance expenses:	
Power purchases	18,577,440
Water purchases	5,656,471
Waste disposal fees	<u>658,813</u>
	24,892,724
Depreciation	28,462,573
Salaries, wages and benefits	22,191,629
Administrative and general	7,297,610
Contractual	4,492,845
Retiree healthcare costs and other benefits	<u>8,864,985</u>
Total operating and maintenance expenses	<u>96,202,366</u>
Operating income	<u>\$ 4,939,622</u>

See accompanying notes.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Statement of Revenues, Expenses and Changes in Net Position, continued

Nonoperating revenues (expenses):	
Interest income	\$ 1,542,233
Others, net	70,011
Interest expense	(29,175,309)
Bond issuance costs	(180,594)
Loss on property, plant and equipment disposals	(<u>490,215</u>)
Total non-operating expenses, net	(<u>28,233,874</u>)
Loss before capital contributions	(23,294,252)
Capital contributions:	
Grants from the U.S. Government	<u>35,806,383</u>
Change in net position	12,512,131
Net position at beginning of year	<u>309,716,603</u>
Net position at end of year	<u>\$322,228,734</u>

See accompanying notes.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Statement of Cash Flows

Year ended September 30, 2022

Cash flows from operating activities:	
Cash received from customers	\$101,805,519
Cash payments to supplies for goods and services	(37,793,021)
Cash payments to employees for services	(26,428,874)
Cash payments for retiree healthcare costs	<u>(3,216,922)</u>
Net cash provided by operating activities	<u>34,366,702</u>
Cash flows from capital and related financing activities:	
Federal grants received	41,774,056
Acquisition of property, plant and equipment	(74,034,091)
Principal paid on revenue bond maturities	(9,745,000)
Interest paid on revenue bonds	<u>(29,296,403)</u>
Net cash used for capital and related financing activities	<u>(71,301,438)</u>
Cash flows from investing activity – Interest income received	<u>1,542,233</u>
Net change in cash and cash equivalents	(35,392,503)
Cash and cash equivalents at beginning of year	<u>338,607,774</u>
Cash and cash equivalents at end of year	<u>\$303,215,271</u>
Reconciliation of cash and cash equivalents to the statement of net position:	
Current assets:	
Cash and cash equivalents	\$ 38,823,824
Restricted cash and cash equivalents	29,987,985
Noncurrent assets:	
Restricted cash and cash equivalents	<u>234,403,462</u>
	<u>\$303,215,271</u>

See accompanying notes.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Statement of Cash Flows, continued

Reconciliation of operating income to net cash provided by operating activities:	
Operating income	\$ 4,939,622
Adjustments to reconcile operating income to net cash provided by operating activities:	
Depreciation	28,462,573
Bad debts expense	2,028,510
Capitalized labor and benefits	(3,699,767)
Non-cash pension costs	(635,119)
Non-cash OPEB costs	5,648,063
Increase in assets:	
Receivables	(1,462,007)
Materials and supplies inventory	(383,398)
Prepaid expenses	(883,150)
Regulatory assets	(802,595)
Increase (decrease) in liabilities:	
Accounts payable	1,870,234
Accrued payroll and employee benefits	185,363
Employee annual leave	(125,018)
Customer deposits	38,303
Other liabilities	(852,208)
DCRS sick leave liability	<u>37,296</u>
Net cash provided by operating activities	<u>\$34,366,702</u>
Supplemental information on noncash capital activities:	
Right-of-use assets	\$ 782,682
Lease liabilities	<u>(782,682)</u>
	<u>\$ ---</u>

See accompanying notes.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements

Year ended September 30, 2022

1. Reporting Entity

The Guam Waterworks Authority (GWA), a component unit of the Government of Guam (GovGuam), is subject to the regulations of the Public Utilities Commission of Guam (PUC). GWA became an autonomous agency in 1996 under Public Law 23-119 and derives its revenues mainly from its water and wastewater system. The water system is engaged in the production, treatment, and distribution of water to villages and communities of Guam. The wastewater system is engaged in the collection and treatment of wastewater from residences and industries in the villages of Guam. GWA is governed by a five-member elected Consolidated Commission on Utilities (CCU). PUC determines such matters as rates and charges for services.

2. Summary of Significant Accounting Policies

Basis of Accounting

GWA utilizes the flow of economic resources measurement focus. The financial statements are prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) as applied to governmental units using the accrual basis of accounting. Revenues are recognized when earned and expenses are recognized when incurred. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles.

Net Position

Net position represents the residual interest in GWA's assets and deferred outflows of resources after liabilities and deferred inflows of resources are deducted and consists of the following categories:

Net investment in capital assets – consists of capital assets, net of accumulated depreciation, and reduced by outstanding debt attributable to the acquisition, construction, or improvement of those assets, net of debt service reserve. Deferred outflows of resources that are attributable to related debt are also included in this component.

Restricted nonexpendable - net position subject to externally imposed stipulations that require GWA to maintain them permanently.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

2. Summary of Significant Accounting Policies, continued

Net Position, continued

Restricted expendable - net position whose use is subject to externally imposed stipulations that can be fulfilled by actions of GWA pursuant to those stipulations or that expire with the passage of time.

At September 30, 2022, restricted net position consists of the following:

Restricted for debt service	\$60,881,220
Restricted for service operations	<u>38,512,203</u>
	<u>\$99,393,423</u>

Unrestricted - net position that is not subject to externally imposed stipulations. Unrestricted net position may be designated for specific purposes by action by management or the CCU or may otherwise be limited by contractual agreements with outside parties.

When both restricted and unrestricted resources are available for use, generally it is GWA's policy to use restricted resources first and the unrestricted resources when they are needed.

Estimates

The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and deferred outflows of resources, liabilities and deferred inflows of resources, and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Risk Management

GWA is exposed to various risks of loss; theft of, damage to, and destruction of assets; operation liability; errors and omissions; employee injuries and illnesses; natural disasters and employee health, dental and accident benefits. There is commercial insurance coverage obtained to provide for claims arising from most of these matters. No material losses have been sustained as a result of GWA's risk management practices during the past three years.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

2. Summary of Significant Accounting Policies, continued

Allowance for Doubtful Accounts

The allowance for doubtful accounts is stated at an amount which management believes will be adequate to absorb possible losses on accounts receivable that may become uncollectible based on evaluations of the collectability of these accounts and prior collection experience. The allowance is established through a provision for bad debts charged to revenues. Bad debts are written-off against the allowance based on the specific identification method.

Materials and Supplies Inventory

Materials and supplies inventory is stated at the lower of cost or market with cost determined by the weighted average costing method.

Prepaid Expenses

Certain payments made to vendors or persons for services reflect costs applicable to future accounting periods and are recorded as prepaid expenses in the accompanying statements of net position.

Property, Plant and Equipment

Plant in service of \$324,988,118 is stated at estimated historical cost as determined by an independent engineering consultant at September 30, 1998. Plant in service acquired subsequent to that date is stated at cost. Non-utility property and equipment are stated at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the respective assets. Current policy is to capitalize items over \$5,000.

Noncurrent Restricted Cash and Cash Equivalents

The purpose of noncurrent restricted cash and cash equivalents is for long-term capital improvements and bond related activities.

Deferred Outflows of Resources

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of net position that applies to a future period and so will not be recognized as an outflow of resources (deduction of net position) until then. GWA has determined the loss on defeasance of the 2005, 2010 and 2013 series bonds, regulatory assets, the difference between expected and actual experience with regard to economic or demographic factors in the measurement of the total pension liability, the net difference between projected and actual earnings on pension plan investments, changes of assumptions, pension and OPEB contributions made subsequent to the measurement date, and changes in proportion and difference between GWA pension and OPEB contributions and proportionate share of contributions qualify for reporting in this category.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

2. Summary of Significant Accounting Policies, continued

Deferred Inflows of Resources

In addition to liabilities, the statements of net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net position that applies to a future period and so will not be recognized as an inflow of resources (additions to net position) until then. GWA has determined regulatory liabilities, the difference between expected and actual experience with regard to economic or demographic factors in the measurement of the total pension and OPEB liabilities, the net difference between projected and actual earnings on pension plan investments, changes of assumptions, and changes in proportion and differences between GWA pension and OPEB contributions and proportionate share of contributions qualify for reporting in this category.

Compensated Absences

Vesting annual leave is accrued and reported as an expense and a liability in the period earned. No liability is accrued for non-vesting sick leave benefits. Annual leave expected to be paid out within the next fiscal year is accrued and is included in current liabilities. The maximum accumulation of annual leave convertible to pay upon termination of employment is limited to 320 hours. Pursuant to Public Law 27-106, employees who have accumulated annual leave in excess of three hundred twenty (320) hours as of February 28, 2003, may carry over their excess and shall use the excess amount of leave prior to retirement or termination from service. Any unused leave over 320 hours shall be lost upon retirement.

Public Law 26-86 allows members of the Defined Contribution Retirement System (DCRS) to receive a lump sum payment of one-half of their accumulated sick leave upon retirement. A liability is accrued for estimated sick leave to be paid out to DCRS members upon retirement.

Pensions

Pensions are required to be recognized and disclosed using the accrual basis of accounting. GWA recognizes a net pension liability for the defined benefit pension plan in which it participates, which represents GWA's proportionate share of excess total pension liability over the pension plan assets – actuarially calculated – of a single employer defined benefit plan, measured one year prior to fiscal year-end and rolled forward. The total pension liability also includes GWA's proportionate share of the liability for ad hoc cost-of-living adjustments (COLA) and supplemental annuity payments that are anticipated to be made to defined benefit plan members and for anticipated future COLA payments to DCRS members. Changes in the net pension liability during the period are recorded as pension expense, or as deferred inflows of resources or deferred outflows of resources depending on the nature of the change, in the period incurred. Those changes in net pension liability that are recorded as deferred inflows of resources or deferred outflows of resources that arise from changes in actuarial assumptions or other inputs and differences between expected or actual experience are amortized over the weighted average remaining service life of all participants in the qualified pension plan and recorded as a component of pension expense

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

2. Summary of Significant Accounting Policies, continued

Pensions, continued

beginning with the period in which they are incurred. Projected earnings on qualified pension plan investments are recognized as a component of pension expense. Differences between projected and actual investment earnings are reported as deferred inflows of resources or deferred outflows of resources and are amortized as a component of pension expense on a closed basis over a five-year period beginning with the period in which the difference occurred.

Other Postemployment Benefits (OPEB)

OPEB is required to be recognized and disclosed using the accrual basis of accounting. GWA recognizes an OPEB liability for the defined benefit OPEB plan in which it participates, which represents GWA's proportionate share of total OPEB liability - actuarially calculated - of a single employer defined benefit plan, measured one year prior to fiscal year-end and rolled forward. An OPEB trust has not been established, thus the OPEB plan does not presently report OPEB plan fiduciary net position. Instead, the OPEB plan is financed on a substantially "pay-as-you-go" basis.

Changes in the total OPEB liability during the period are recorded as OPEB expense, or as deferred inflows of resources or deferred outflows of resources depending on the nature of the change, in the period incurred. Those changes in total OPEB liability that are recorded as deferred inflows of resources or deferred outflows of resources that arise from changes in actuarial assumptions or other inputs and differences between expected or actual experience are amortized over the weighted average remaining service life of all participants in the qualified OPEB plan and recorded as a component of OPEB expense beginning with the period in which they are incurred.

Bond Premiums and Discounts

Bond premiums and discounts are amortized using the straight-line method, which approximates the effective yield method, over the life of the related bond issue.

Contribution in Aid of Construction

Contribution in aid of construction represents contributions received by GWA from consumers for improvement of water services and assets owned by GWA. These amounts are recorded as a deferred inflow of resources net of amortization.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

2. Summary of Significant Accounting Policies, continued

Revenue Recognition

Customer water meters are read on a cyclical basis throughout a monthly period based on the route schedules of GWA. Revenue is recognized in the period that meters are read. Wastewater treatment is billed at a flat rate of \$27.54 per month for residential accounts and 80% of current water consumption for commercial and government accounts. At the end of each month, unbilled revenues are accrued for each cycle based on the most recent cycle billing. Unbilled receivables at September 30, 2022 is \$3,180,073 and is included in receivables in the accompanying statement of net position.

Cash and Cash Equivalents

For purposes of the statements of net position and of cash flows, cash and cash equivalents is defined as cash deposits in banks, time certificates of deposit, and short-term investments in U.S. Treasury obligations with original maturities of three months or less.

Operating and Non-Operating Revenue and Expenses

Operating revenues and expenses generally result directly from GWA's ongoing operations. Non-operating revenues and expenses result from capital and financing activities, costs and related recoveries from natural disasters, and certain other non-recurring income and expenses.

Grants and Contributions

Grants and contributions consist of government mandated and voluntary nonexchange transactions.

Recently Adopted Accounting Pronouncement

In June 2017, GASB issued Statement No. 87, *Leases*. The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and as inflows of resources or outflows of resources recognized based on the payment provisions of the contract. The adoption of GASB Statement No. 87 did not have an effect on beginning net position. GWA recorded lease assets and lease liability of \$782,681 at October 1, 2021 .

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

2. Summary of Significant Accounting Policies, continued

Recently Adopted Accounting Pronouncement, continued

In June 2018, GASB issued Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*. The objectives of this Statement are (1) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) to simplify accounting for interest cost incurred before the end of a construction period. Starting October 1, 2021, no interest was capitalized. Prior to the adoption of this statement, GWA capitalized interest on construction in progress based on the weighted average interest rate.

In January 2020, GASB issued Statement No. 92, *Omnibus 2020*. The objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics and includes specific provisions about the effective date of Statement No. 87, *Leases*, and Implementation Guide No. 2019-3, *Leases*, for interim financial reports, the terminology used to refer to derivative instruments and the applicability of certain requirements of Statement No. 84, *Fiduciary Activities*, to postemployment benefits. The adoption of this statement did not have a material effect on the financial statements.

In June 2020, GASB issued Statement No. 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans - an amendment of GASB Statements No. 14 and No. 84, and a supersession of GASB Statement No. 32*. The primary objectives of this Statement are to (1) increase consistency and comparability related to the reporting of fiduciary component units in circumstances in which a potential component unit does not have a governing board and the primary government performs the duties that a governing board typically would perform; (2) mitigate costs associated with the reporting of certain defined contribution pension plans, defined contribution other postemployment benefit (OPEB) plans, and employee benefit plans other than pension plans or OPEB plans (other employee benefit plans) as fiduciary component units in fiduciary fund financial statements; and (3) enhance the relevance, consistency, and comparability of the accounting and financial reporting for Internal Revenue Code (IRC) Section 457 deferred compensation plans (Section 457 plans) that meet the definition of a pension plan and for benefits provided through those plans. The adoption of this statement did not have a material effect on the financial statements.

In October 2021, GASB issued Statement No. 98, *The Annual Comprehensive Financial Report*. This Statement establishes the term annual comprehensive financial report and its acronym ACFR. That new term and acronym replace instances of comprehensive annual financial report and its acronym in generally accepted accounting principles for state and local governments. The adoption of this statement did not have a material effect on the financial statements.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

2. Summary of Significant Accounting Policies, continued

Upcoming Accounting Pronouncements

In May 2019, GASB issued Statement No. 91, *Conduit Debt Obligations*. The primary objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. This Statement achieves those objectives by clarifying the existing definition of a conduit debt obligation; establishing that a conduit debt obligation is not a liability of the issuer; establishing standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations; and improving required note disclosures. Management does not believe that this statement, upon implementation, will have a material effect on the financial statements. In accordance with GASB Statement No. 95, GASB Statement No. 91 will be effective for fiscal year ending September 30, 2023.

In March 2020, GASB issued Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*. The primary objective of this statement is to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements. This statement also provides guidance for accounting and financial reporting for availability payment arrangements. Management does not believe that this statement, upon implementation, will have a material effect on the financial statements. GASB Statement No. 94 will be effective for fiscal year ending September 30, 2023.

In May 2020, GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements*. This Statement provides guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITAs) for government end users (governments). This Statement (1) defines a SBITA; (2) establishes that a SBITA results in a right-to-use subscription asset - an intangible asset - and a corresponding subscription liability; (3) provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA; and (4) requires note disclosures regarding a SBITA. Management does not believe that this statement, upon implementation, will have a material effect on the financial statements. GASB Statement No. 96 will be effective for fiscal year ending September 30, 2023.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

2. Summary of Significant Accounting Policies, continued

Upcoming Accounting Pronouncements, continued

In April 2022, GASB issued Statement No. 99, Omnibus 2022. The requirements of this Statement will enhance comparability in the application of accounting and financial reporting requirements and will improve the consistency of authoritative literature. Consistent authoritative literature enables governments and other stakeholders to locate and apply the correct accounting and financial reporting provisions, which improves the consistency with which such provisions are applied more easily. The comparability of financial statements also will improve as a result of this Statement. Better consistency and comparability improve the usefulness of information for users of local government financial statements. GASB Statement No. 99 will be effective for fiscal year ending September 30, 2024.

In June 2022, GASB issued Statement No. 100, *Accounting Changes and Error Corrections – An Amendment of GASB Statement No. 62*. The primary objective of this Statement is to enhance accounting and financial reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessing accountability. The requirements of this Statement will improve the clarity of the accounting and financial reporting requirements for accounting changes and error corrections, which will result in greater consistency in application in practice. In turn, more understandable, reliable, relevant, consistent, and comparable information will be provided to financial statement users for making decisions or assessing accountability. In addition, the display and note disclosure requirements will result in more consistent, decision useful, understandable, and comprehensive information for users about accounting changes and error corrections. GASB Statement No. 100 will be effective for fiscal year ending September 30, 2024.

In June 2022, GASB issued Statement No. 101, *Compensated Absences*. The objective of this Statement is to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. That objective is achieved by aligning the recognition and measurement guidance under a unified model and by amending certain previously required disclosures. The unified recognition and measurement model in this Statement will result in a liability for compensated absences that more appropriately reflects when a government incurs an obligation. In addition, the model can be applied consistently to any type of compensated absence and will eliminate potential comparability issues between governments that offer different types of leave. The model also will result in a more robust estimate of the amount of compensated absences that a government will pay or settle, which will enhance the relevance and reliability of information about the liability for compensated absences. GASB Statement No. 101 will be effective for fiscal year ending September 30, 2025.

GWA is currently evaluating the effects the above upcoming accounting pronouncements might have on its financial statements.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

3. Cash and Cash Equivalents

The bond indenture agreements for the 2013, 2014, 2016, 2017, 2020A and 2020B series revenue bonds require the establishment of special funds to be held and administered by trustees and by GWA. In addition, proceeds from borrowings to fund capital improvements are maintained by GWA in construction accounts. Funds in these accounts are required by loan agreement or public law to be used to fund capital improvements.

The deposits and investment policies of GWA are governed by 15 GCA 21, *Investments and Deposits*, in conjunction with applicable bond indentures. Authorized investments include obligations issued or guaranteed by the U.S. government or agencies of the U.S. government; bonds, notes or other indebtedness rated in the highest rating by Moody's Investors Service (Moody's) or Standard & Poor's Corporation (S&P); obligations issued by the Federal National Mortgage Association or the Federal Home Loan Mortgage Corporation with remaining maturities of not more than three years; any bonds or other obligations of any state of the U.S. or any agency, instrumentality or local government unit of such state which are rated in the highest rating category of either Moody's or S&P; demand and time deposits in or certificates of deposit or bankers acceptances with U.S. domestic banks which have a rating of their short term certificates of deposit of A-1 or better by S&P and P-1 by Moody's and mature no more than 360 days after purchase; commercial paper which is rating in the highest classification by S&P and Moody's; and money market funds rated AAA or better by S&P.

Custodial credit risk is the risk that in the event of a bank failure, GWA's deposits may not be returned to it. Such deposits are not covered by depository insurance and are either uncollateralized, collateralized with securities held by the pledging financial institution, or held by the pledging financial institution but not in the depositor-government's name. GWA does not have a deposit policy for custodial credit risk.

As of September 30, 2022, the carrying amount of GWA's total cash and cash equivalents was \$303,209,342, and the corresponding bank balance was \$306,120,630. Of the bank balance amount, \$18,837,414 is maintained in financial institutions subject to Federal Deposit Insurance Corporation (FDIC) insurance. As of September 30, 2022, the remaining amount of \$287,283,216 represents short-term investments held and administered by GWA's trustees in GWA's name in accordance with various trust agreements and bond indentures. As of September 30, 2022, bank deposits in the amount of \$576,042 were FDIC insured.

GWA does not require collateralization of its cash deposits; therefore, deposit levels in excess of FDIC insurance coverage are uncollateralized. At September 30, 2022, \$18,261,372 of cash and cash equivalents are subject to custodial credit risk.

Unrestricted cash and cash equivalents at September 30, 2022 in the amount of \$19,565,501 are subject to internally imposed restrictions by the CCU to provide additional liquidity to assist GWA in addressing unforeseen obligations and unexpected short-term cash flow demands and \$7,219,224 are subject to internally imposed restrictions by the CCU to fund capital expenditures.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

3. Cash and Cash Equivalents, continued

Restricted cash and cash equivalents consist of cash received for specific capital projects and for bond indenture related accounts. The working capital funds are internally imposed restrictions and are not subject to externally imposed stipulations.

The composition of restricted cash and cash equivalents is as follows:

Current restricted:	
Sewer Hook-up Revolving Fund	\$ 64,373
Legislative Surcharge Fund	93,776
Bid Escrow Fund	843,058
Customer Deposit Fund	2,108,598
Revenue Trust and Revenue Fund	8,898,996
System Development Fund	7,408,420
Working Cap – Reserved for CAPEX	7,487,283
Working Cap – Reserved for O&M	<u>3,083,481</u>
	<u>29,987,985</u>
Noncurrent restricted:	
2010 Bond Indenture Funds:	
Construction Fund	4,133,026
Bond Reserve Fund	7,566,460
2013 Bond Indenture Funds:	
Construction Fund	4,236,835
Bond Reserve Fund	12,031,688
Reserved for Debt Service	1,400,508
2014 Bond Indenture Funds:	
Operations, Maintenance, Renewal and Replacement Reserve Fund	17,423,213
Bond Reserve Fund	7,792,925
Reserved for Debt Service	1,907,253
2016 Bond Indenture Funds:	
Construction Fund	38,621,743
Bond Reserve Fund	7,591,999
Reserved for Debt Service	1,967,736
2017 Bond Indenture Funds:	
Reserved for Debt Service	1,907,628

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

3. Cash and Cash Equivalents, continued

Noncurrent restricted, continued

2020A Bond Indenture Funds:	
Construction Fund	\$118,006,420
Bond Reserve Fund	6,659,700
Capitalized Interest Fund	1,245
Reserved for Debt Service	1,678,906
2020B Bond Indenture Funds	
Bond Reserve Fund	<u>1,476,177</u>
	<u>234,403,462</u>
Total restricted cash and cash equivalents	<u>\$264,391,447</u>

4. Receivables

Receivables at September 30, 2022 are as follows:

Customers:	
Private	\$16,575,526
Government	<u>3,407,067</u>
	19,982,593
Federal grants receivable	5,468,327
Guam Power Authority	303,282
Other	<u>900,336</u>
	<u>26,654,538</u>
Less allowance for doubtful accounts	(<u>9,753,074</u>)
	<u>\$16,901,464</u>

During the year ended September 30, 2022, GWA has written off \$935,767 of long outstanding receivables against the allowance for doubtful accounts.

Substantially all customer receivables are from individuals, businesses and government agencies located on Guam.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

5. Capital Assets

Capital assets activities for the year ended September 30, 2022 are as follows:

	Estimated Useful Lives in Years	Beginning Balance October 1, 2021	Transfers and Additions	Transfers and Deletions	Ending Balance September 30, 2022
Depreciable:					
Utility Plant in Service					
Water	25-50	\$415,123,284	\$ 5,973,315	\$(625,993)	\$ 420,470,606
Utility Plant in Service					
Wastewater	25-50	513,741,066	62,792,686	(256,809)	576,276,943
General Fixed Assets	25-50	<u>33,051,603</u>	<u>881,697</u>	<u>(579,610)</u>	<u>33,353,690</u>
		961,915,953	69,647,698	(1,462,412)	1,030,101,239
Less: Accumulated					
Depreciation		<u>367,521,639</u>	<u>28,212,716</u>	<u>(1,034,176)</u>	<u>394,700,179</u>
		594,394,314	41,434,982	(428,236)	635,401,060
Non-depreciable:					
Land		5,240,187	47,118	---	5,287,305
Construction Work in Progress		167,589,130	73,997,349	(68,310,228)	173,276,251
Lease assets	1-4	<u>782,682</u>	<u>---</u>	<u>(249,858)</u>	<u>532,824</u>
		<u>\$768,006,313</u>	<u>\$115,479,449</u>	<u>\$(68,988,322)</u>	<u>\$ 814,497,440</u>

6. Long-Term Debt

Long-term debt at September 30, 2022 is as follows:

Revenue Bonds

2013 Series revenue bonds, interest at 5.25% per annum, payable semiannually in January and July, principal and mandatory sinking fund payments in varying annual installments commencing with a payment of \$2,695,000 in July 2020, increasing to \$4,045,000 in July 2028. On August 26, 2020, these bonds were partially refunded through the issuance of \$166,075,000 2020B refunding bonds. \$ 21,510,000

2014 Series refunding bonds, interest at 5% per annum, payable semiannually in January and July, principal and mandatory sinking fund payments in varying annual installments commencing with a payment of \$2,900,000 in July 2015, maturity date in July 2035. 64,055,000

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

6. Long-Term Debt, continued

Revenue Bonds, continued

2016 Series revenue bonds, interest at 5% per annum, payable semiannually in January and July, principal and mandatory sinking fund payments in varying annual installments commencing with a payment of \$420,000 in July 2020, maturity date in January 2046.	134,975,000
2017 Series refunding bonds, interest at 5% per annum, payable semiannually in January and July, principal and mandatory sinking fund payments in varying annual installments commencing with a payment of \$55,000 in July 2019, maturity date in July 2040.	103,180,000
2020A Series revenue bonds, interest at 5% per annum, payable semiannually in January and July, principal and mandatory sinking fund payments in varying annual installments commencing with a payment of \$30,880,000 in July 2047, maturity date in January 2050.	134,000,000
2020B Series refunding bonds, interest at varying rates from 2.75% to 3.70% per annum, payable semiannually in January and July, principal and mandatory sinking fund payments in varying annual installments commencing with a payment of \$1,260,000 in July 2028, maturity date in July 2043.	<u>166,075,000</u>
Total revenue bonds payable	623,795,000
Less current maturities	<u>(10,235,000)</u>
	613,560,000
Bond premium – 2020A series bonds	10,150,215
Bond premium – 2017 series bonds	10,940,717
Bond premium – 2016 series bonds	14,225,502
Bond premium – 2014 series bonds, net	<u>3,461,713</u>
	<u>\$652,338,147</u>

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

6. Long-Term Debt, continued

Revenue Bonds, continued

Annual debt service requirements to maturity for principal and interest are as follows:

<u>Year ending September 30,</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2023	\$ 10,235,000	\$ 28,801,678	\$ 39,036,678
2024	10,760,000	28,282,065	39,042,065
2025	11,305,000	27,735,778	39,040,778
2026	11,875,000	27,161,815	39,036,815
2027	12,470,000	26,568,065	39,038,065
2028 through 2032	81,070,000	122,948,350	204,018,350
2033 through 2037	100,990,000	103,657,838	204,647,838
2038 through 2042	127,065,000	78,895,000	205,960,000
2043 through 2047	154,905,000	48,182,900	203,087,900
2048 through 2050	<u>103,120,000</u>	<u>9,607,500</u>	<u>112,727,500</u>
	<u>\$623,795,000</u>	<u>\$501,840,989</u>	<u>\$1,125,635,989</u>

Changes in GWA's long-term debt for the year ended September 30, 2022 are as follows:

	Outstanding October 1, <u>2021</u>	<u>Increases</u>	<u>Decreases</u>	Outstanding September 30, <u>2022</u>	<u>Current</u>
Revenue Bonds:					
2013 series A bonds	\$ 24,500,000	\$ ---	\$(2,990,000)	\$ 21,510,000	\$ 3,145,000
2014 series A and B bonds	64,610,000	---	(555,000)	64,055,000	4,005,000
2016 series A bonds	139,030,000	---	(4,055,000)	134,975,000	835,000
2017 series A bonds	105,325,000	---	(2,145,000)	103,180,000	2,250,000
2020 series A bonds	134,000,000	---	---	134,000,000	---
2020 series B bonds	166,075,000	---	---	166,075,000	---
Unamortized premium on bonds	<u>40,654,335</u>	<u>---</u>	<u>(1,876,188)</u>	<u>38,778,147</u>	<u>---</u>
	<u>\$674,194,335</u>	<u>\$ ---</u>	<u>\$(11,621,188)</u>	<u>\$662,573,147</u>	<u>\$10,235,000</u>

Series 2013, Water and Wastewater System Revenue Bonds, dated December 12, 2013, were issued in the original principal amount of \$172,630,000 to finance capital improvement projects in connection with the financing of its 5-year Capital Improvement Plan. A portion of the bond proceeds was used to fund certain bond reserves, pay for capitalized interest and costs in connection with the issue but, for the most part, the proceeds are to be used to fund capital improvements. Total bond proceeds were \$171,097,017, net of a bond discount of \$1,532,983, with closing costs of \$2,961,409. The bond discount has been deferred and amortized on a straight-line basis over the average remaining life of the 2013 bonds.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

6. Long-Term Debt, continued

Revenue Bonds, continued

Series 2014, Water and Wastewater System Revenue Bonds, dated August 7, 2014, were issued in the original principal amount of \$85,600,000 to refund all of GWA's outstanding Guam Waterworks Authority Water and Wastewater Revenue Bonds, Series 2005, and to pay costs of issuing the 2014 Bonds. The proceeds for the refunding were transferred to an escrow agent who used the proceeds to purchase U.S. Treasury Securities which are to be held by the escrow agent in an irrevocable trust to pay the redemption price of the 2005 bonds and interest thereon to become due on or prior to July 1, 2015 (redemption date). The advance refunding met the requirements of an in-substance defeasance and the 2005 bonds were removed from the accompanying financial statements. The advance refunding resulted in a loss on defeasance of \$2,468,670 representing the difference between the reacquisition price and the carrying amount of the 2005 bonds. Although the advance refunding resulted in the recognition of an accounting loss, GWA in effect reduced its aggregate debt service payments by \$13,873,732 over twenty years and obtained an economic gain (difference between the present values of the old debt and the new debt service payments) of \$8,352,503. The unamortized balance of the deferred loss on refunding of the 2005 Series bonds as of September 30, 2022 totals \$1,032,424. Total bond proceeds were \$92,533,037, and included a bond premium of \$5,648,970 and funds from deposit in 2005 Bond Fund and Bond Reserve Fund of \$1,284,068, with closing costs of \$1,536,177. The bond premium has been deferred and amortized on a straight-line basis over the average remaining life of the 2014 bonds.

Series 2016, Water and Wastewater System Revenue Bonds, dated February 9, 2016, were issued in the original principal amount of \$143,310,000 to finance capital improvement projects in connection with the financing of its 5-year Capital Improvement Plan. A portion of the bond proceeds was used to fund certain bond reserves, pay for capitalized interest and costs in connection with the issue but, for the most part, the proceeds are to be used to fund capital improvements. Total bond proceeds were \$161,534,842, including a bond premium of \$18,224,842, with closing costs of \$2,467,854. The bond premium has been deferred and amortized on a straight-line basis over the average remaining life of the 2016 bonds.

Series 2017, Water and Wastewater System Revenue Bonds, dated December 13, 2017, were issued in the original principal amount of \$107,660,000 to refund a portion of the outstanding Series 2010 bonds. The proceeds for the refunding were transferred to an escrow agent who used the proceeds to purchase U.S. Treasury Securities which are to be held by the escrow agent in an irrevocable trust to pay the redemption price of the 2010 bonds and interest thereon to become due on or prior to July 1, 2019 (redemption date). The advance refunding met the requirements of an in-substance defeasance and the 2010 bonds were removed from the accompanying financial statements. The advance refunding resulted in a loss on defeasance of \$11,791,115 representing the difference between the reacquisition price and the carrying amount of the 2010 bonds. Although the advance refunding resulted in the recognition of an accounting loss, GWA in effect reduced its aggregate debt service payments by \$14,870,141 over twenty-three years and obtained

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

6. Long-Term Debt, continued

Revenue Bonds, continued

an economic gain (difference between the present values of the old debt and the new debt service payments) of \$10,438,103. The unamortized balance of the deferred loss on refunding of the 2010 Series bonds as of September 30, 2022 totals \$8,479,938. Total bond proceeds were \$122,155,917 and included a bond premium of \$13,854,833 and funds from deposit in 2010 Bond Fund and Bond Reserve Fund of \$2,532,528, with closing costs of \$1,775,257. The bond premium has been deferred and amortized on a straight-line basis over the average remaining life of the 2017 bonds.

Series 2020A, Water and Wastewater System Revenue Bonds, dated June 4, 2020, were issued in the original principal amount of \$134,000,000 to finance capital improvement projects in connection with the financing of its 5-year Capital Improvement Plan. A portion of the bond proceeds was used to fund certain bond reserves, pay for capitalized interest and costs in connection with the issue but, for the most part, the proceeds are to be used to fund capital improvements. Total bond proceeds were \$145,017,480, including a bond premium of \$11,017,480, with closing costs of \$2,218,134. The bond premium has been deferred and amortized on a straight-line basis over the average remaining life of the 2020A bonds.

Series 2020B, Water and Wastewater System Revenue Bonds, dated August 26, 2020, were issued in the original principal amount of \$166,075,000 to refund a portion of the outstanding Series 2013 bonds. The proceeds for the refunding were transferred to an escrow agent who used the proceeds to purchase U.S. Treasury Securities which are to be held by the escrow agent in an irrevocable trust to pay the redemption price of the 2013 bonds and interest thereon to become due on or prior to July 1, 2023 (redemption date). The advance refunding met the requirements of an in-substance defeasance and the 2013 bonds were removed from the accompanying financial statements. The advance refunding resulted in a loss on defeasance of \$22,348,953 representing the difference between the reacquisition price and the carrying amount of the 2013 bonds. Although the advance refunding resulted in the recognition of an accounting loss, GWA in effect reduced its aggregate debt service payments by \$13,533,562 over twenty-three years and obtained an economic gain (difference between the present values of the old debt and the new debt service payments) of \$11,931,575. The unamortized balance of the deferred loss on refunding of the 2013 Series bonds as of September 30, 2022 totals \$19,717,493, respectively. Total bond proceeds were \$167,376,076, and included funds from deposit in 2013 Bond Fund and Bond Reserve Fund of \$1,301,076, with closing costs of \$2,124,298.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

6. Long-Term Debt, continued

Pledged Revenues

The 2010, 2013, 2014, 2016, 2017, 2020A and 2020B Series Bonds are limited obligations of GWA and are payable solely from, and secured solely by a lien on and pledge of, GWA system revenues (excluding legislative surcharges and system development charges) to secure the payment of principal and interest on the Bonds. As of September 30, 2022, total principal and interest remaining on these bonds is \$1,125,635,989 payable through January 2050. For the year ended September 30, 2022, debt service paid on these bonds was \$39,041,402 and total pledged GWA system revenues were \$98,449,875.

Prior-Year Defeasance of Debt

In prior years, GWA defeased certain revenue bonds by placing the proceeds of new bonds in an irrevocable trust to provide for all future debt service payouts on the old bonds. Accordingly, the trust account assets and the liabilities for the defeased bonds are not included in GWA's financial statements. At September 30, 2022, bonds outstanding of \$142,595,000, are considered defeased, which represents a portion of the Series 2013 bonds.

Bond Covenants

The General Indenture, dated December 1, 2005, as updated by supplemental indentures, sets forth the establishment of accounts, the application of revenues, and certain other covenants to ensure proper operation and maintenance of the water and wastewater system and payment of debt service. Management believes GWA was in compliance with all bond covenants as of and for the year ended September 30, 2022. The primary requirements of the General Indenture are summarized below:

Rate Covenant - GWA has covenanted to at all times fix, prescribe and collect rates, fees and charges in connection with the services furnished by the water and wastewater system which will be sufficient to yield the sum of net revenues during each fiscal year equal to at least 125% of the annual debt service for such fiscal year. Net revenues are defined generally as all GWA system revenues (excluding legislative surcharges, system development charges and Federal grants) less operating and maintenance expenses (excluding depreciation and amortization charges and certain extraordinary, nonrecurring expenses).

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

6. Long-Term Debt, continued

Bond Covenants, continued

Operation and Maintenance Funds - the General Indenture creates an Operation and Maintenance Fund, available for working capital purposes, and the Operation, Maintenance, Renewal and Replacement Reserve Fund, available for emergency renewals, replacements and other contingency items. With respect to the Operation and Maintenance Fund, GWA must maintain a balance in such account equal to the amount of operation and maintenance expenses budgeted by GWA to be paid from revenues during the next succeeding calendar month. With respect to the Operation, Maintenance, Renewal and Replacement Reserve Fund, GWA must maintain a balance in such account equal to one-fourth of the budgeted sum for the then current fiscal year.

Debt Service Fund - the General Indenture creates a Debt Service Fund available for the purpose of: (1) paying interest on bonds as it shall become due and payable; (2) paying the principal of Serial Bonds when due and payable; (3) purchasing or redeeming or paying at maturity Term Bonds; (4) paying Parity Payment Agreement Payments due and payable; and (5) paying Credit Agreement Reimbursement Payments due and payable. As of September 30, 2022, GWA is not currently a party to any Parity Payment Agreements.

Bond Reserve Fund - the General Indenture created a Bond Reserve Fund available for the purpose of paying debt service on Bonds (including Payment Agreement Payments) in the event of a deficiency in the Debt Service Fund. GWA is required to maintain an amount within the Bond Reserve Fund equal to the maximum annual debt service for the then current or future fiscal year on all outstanding bonds.

Events of default with finance related consequences - the General Indenture specifies a number of Events of Default and related remedies. In the event that the amount in any Fund or Account is insufficient for the purposes for which such Fund or Account was established, the Trustee shall transfer such amount as is necessary to satisfy such deficiency. If after making all such transfers, the amount in the Debt Service Fund is insufficient, the Trustee shall promptly issue a notice of default to Bondholders.

Acceleration - the remedies granted to the Trustee and the Bondholders under the General Indenture do not include any right to accelerate the payment of the outstanding bonds. The Trustee is authorized to take certain actions upon the occurrence of an event of default, including proceedings to enforce the rights of Bondholders as outlined in the General Indenture.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

7. Change in Other Long-Term Liabilities

Changes in GWA's other long-term liabilities for the year ended September 30, 2022 are as follows:

	Outstanding October 1, <u>2021</u>	<u>Increases</u>	<u>Decreases</u>	Outstanding September 30, <u>2022</u>	<u>Current</u>
Other:					
Employee annual leave	\$ 1,845,938	\$ 1,446,247	\$(1,571,265)	\$ 1,720,920	\$725,007
DCRS sick leave liability	1,339,208	37,296	---	1,376,504	---
Lease liabilities	782,682	2,587	(250,166)	535,103	234,824
Net pension liability	56,364,779	---	(10,326,444)	46,038,335	---
OPEB liability	<u>106,433,894</u>	<u>9,838,163</u>	<u>---</u>	<u>116,272,057</u>	<u>---</u>
	<u>\$166,766,501</u>	<u>\$11,324,293</u>	<u>\$(12,147,875)</u>	<u>\$165,942,919</u>	<u>\$959,831</u>

8. Pensions

GWA is statutorily responsible for providing pension benefits for GWA employees through the GovGuam Retirement Fund (GGRF).

A. General Information About the Pension Plans

Plan Description: GGRF administers the GovGuam Defined Benefit (DB) Plan, a single-employer defined benefit pension plan, and the Defined Contribution Retirement System (DCRS). The DB Plan provides retirement, disability, and survivor benefits to plan members who enrolled in the plan prior to October 1, 1995. Article 1 of 4 GCA 8, Section 8105, requires that all employees of GovGuam, regardless of age or length of service, become members of the DB Plan prior to the operative date. Employees of a public corporation of GovGuam, which includes GWA, have the option of becoming members of the DB Plan prior to the operative date. All employees of GovGuam, including employees of GovGuam public corporations, whose employment commences on or after October 1, 1995, and prior to January 1, 2018 are required to participate in the Defined Contribution Retirement System (DCRS) Plan. Hence, the DB Plan became a closed group.

Members of the DB Plan who retired prior to October 1, 1995, or their survivors, are eligible to receive annual supplemental annuity payments. In addition, retirees under the DB and DCRS Plans who retired prior to September 30, 2020 are eligible to receive an annual ad hoc cost of living allowance (COLA).

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

8. Pensions, continued

A. General Information About the Pension Plans, continued

A single actuarial valuation is performed annually covering all plan members and the same contribution rate applies to each employer. GGRF issues a publicly available financial report that includes financial statements and required supplementary information for the DB Plan. That report may be obtained by writing to the Government of Guam Retirement Fund, 424 A Route 8, Maite, Guam 96910, or by visiting GGRF's website – www.ggrf.com.

Benefits Provided: The DB Plan provides pension benefits to retired employees generally based on age and/or years of credited service and an average of the three highest annual salaries received by a member during years of credited service, or \$6,000, whichever is greater. Members who joined the DB Plan prior to October 1, 1981 may retire with 10 years of service at age 60 (age 55 for uniformed personnel); or with 20 to 24 years of service regardless of age with a reduced benefit if the member is under age 60; or upon completion of 25 years of service at any age. Members who joined the DB Plan on or after October 1, 1981 and prior to August 22, 1984 may retire with 15 years of service at age 60 (age 55 for uniformed personnel); or with 25 to 29 years of service regardless of age with a reduced benefit if the member is under age 60; or upon completion of 30 years of service at any age.

Members who joined the DB Plan after August 22, 1984 and prior to October 1, 1995 may retire with 15 years of service at age 65 (age 60 for uniformed personnel); or with 25 to 29 years of service regardless of age with a reduced benefit if the member is under age 65; or upon completion of 30 years of service at any age. Upon termination of employment before attaining at least 25 years of total service, a member is entitled to receive a refund of total contributions including interest. A member who terminates after completing at least 5 years of service has the option of leaving contributions in the GGRF and receiving a service retirement benefit upon attainment of the age of 60 years. In the event of disability during employment, members under the age of 65 with six or more years of credited service who are not entitled to receive disability payments from the United States Government are eligible to receive sixty six and two-thirds of the average of their three highest annual salaries received during years of credited service. The DB Plan also provides death benefits.

Supplemental annuity benefit payments are provided to DB retirees in the amount of \$4,238 per year, but not to exceed \$40,000 per year when combined with their regular annual retirement annuity. Annual COLA payments are provided to DB and DCRS retirees in a lump sum amount of \$2,000. Both supplemental annuity benefit payments and COLA payments are made at the discretion of the Guam Legislature, but are funded on a "pay-as-you-go" basis so there is no plan trust. It is anticipated that ad hoc COLA and supplemental annuity payments will continue to be made for future years at the same level currently being paid.

On September 20, 2016, the Guam Legislature enacted Public Law 33-186, which created two new government retirement plans; the DB 1.75 Plan and the Guam Retirement Security Plan (GRSP).

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

8. Pensions, continued

A. General Information About the Pension Plans, continued

On February 4, 2020, the Guam Legislature terminated the GRSP. Commencing April 1, 2017, eligible employees elected, during the “election window”, to participate in the DB 1.75 Plan with an effective date of January 1, 2018.

The DB 1.75 Plan is open for participation by certain existing employees, new employees, and reemployed employees who would otherwise participate in the DC Plan and who make election on a voluntary basis to participate in the DB 1.75 Plan by December 31, 2017. Employee contributions are made by mandatory pre-tax payroll deduction at the rate of 9.5% of the employee’s base salary while employer contributions are actuarially determined. Members of the DB 1.75 Plan automatically participate in the GovGuam deferred compensation plan, pursuant to which employees are required to contribute 1% of base salary as a pre-tax mandatory contribution. Benefits are fully vested upon attaining 5 years of credited service.

Members of the DB 1.75 Plan may retire at age 62 with 5 years of credited service, or at age 60 with 5 years of credited service without survivor benefits, or at age 55 with 25 years of credited service but the retirement annuity shall be reduced $\frac{1}{2}$ of 1% for each month that the age of the member is less than 62 years (6% per year). Credited service is earned for each year of actual employment by the member as an employee. Upon retirement, a retired member is entitled to a basic retirement annuity equal to an annual payment of 1.75% of average annual salary multiplied by years of credited service. Average annual salary means the average of annual base salary for the three years of service that produce the highest average.

Contributions: Plan members of the DB Plan are required to contribute a certain percentage of their annual covered salary. The contribution requirements of the plan members and GWA are established and may be amended by the GGRF.

GWA’s statutory contribution rates were 28.32% for the year ended September 30, 2022. Employees are required to contribute 9.5% of their annual pay for the year ended September 30, 2022.

GWA’s contributions to the DB Plan for the year ended September 30, 2022 was \$5,180,477 which was equal to the statutorily required contributions for the year then ended.

GWA’s contributions for supplemental annuity benefit and COLA payments for the year ended September 30, 2022 was \$558,000 which was equal to the statutorily required contributions for the year then ended.

Members of the DCRS plan, who have completed five years of government service, have a vested balance of 100% of both member and employer contributions plus any earnings thereon.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

8. Pensions, continued

A. General Information About the Pension Plans, continued

Contributions into the DCRS plan by members are based on an automatic deduction of 6.2% of the member's regular base pay. The contribution is periodically deposited into an individual annuity account within the DCRS. Employees are afforded the opportunity to select from different annuity accounts available under the DCRS.

Statutory employer contributions for the DCRS plan for the year ended September 30, 2022 is determined using the same rates as the DB Plan. Of the amount contributed by the employer, only 6.2% of the member's regular pay is deposited into the DCRS. The remaining amount is contributed towards the unfunded liability of the defined benefit plan.

GWA's contributions to the DCRS Plan for the year ended September 30, 2022 was \$3,953,604 which was equal to the required contributions for the respective years then ended. Of this amount, \$2,531,814 was contributed towards the unfunded liability of the DB Plan for the year ended September 30, 2022.

B. Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

Pension Liability: At September 30, 2022, GWA reported a net pension liability for its proportionate share of the net pension liabilities measured as of September 30, 2021 which is comprised of the following:

Defined Benefit Plan	\$32,556,486
Ad Hoc COLA/supplemental Annuity Plan for DB	11,715,208
As Hoc COLA Plan for DCRS retirees	<u>1,766,641</u>
	<u>\$46,038,335</u>

GWA's proportion of the GovGuam net pension liabilities was based on GWA's expected plan contributions relative to the total expected contributions received by the respective pension plans for GovGuam and GovGuam's component units. At September 30, 2022, GWA's proportionate shares of the GovGuam net pension liabilities were as follows:

Defined Benefit Plan	3.38%
Ad Hoc COLA/supplemental Annuity Plan for DB	3.80%
Ad Hoc COLA Plan for DCRS retirees	2.50%

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

8. Pensions, continued

B. Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions, continued

Pension Expense (Benefit): For the year ended September 30, 2022, GWA recognized pension expense (benefit) for its proportionate share of plan pension expense from the above pension plans as follows:

Defined Benefit Plan	\$2,722,613
Ad Hoc COLA/supplemental Plan for DB retirees	907,657
Ad Hoc COLA Plan for DCRS retirees	<u>152,277</u>
	<u>\$3,782,547</u>

Deferred Outflows and Inflows of Resources: At September 30, 2022, GWA reported total deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Defined Benefit Plan</u>		<u>Ad Hoc COLA/ Supplemental Annuity Plan for DB Retirees</u>		<u>Ad Hoc COLA Plan for DCRS Retirees</u>	
	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Difference between expected and actual experience	\$ 52,255	\$ 331,030	\$ ---	\$162,751	\$194,282	\$ 34,403
Net difference between projected and actual earnings on pension plan investments	---	3,932,804	---	---	---	---
Changes of assumptions	---	---	319,222	34,739	358,832	116,527
Contributions subsequent to the measurement date	5,180,477	---	558,000	---	64,000	---
Changes in proportion and difference between GWA contributions and proportionate share of contributions	<u>506,418</u>	<u>116,263</u>	<u>28,616</u>	<u>252,637</u>	<u>142,922</u>	<u>195,592</u>
	<u>\$5,739,150</u>	<u>\$4,380,097</u>	<u>\$905,838</u>	<u>\$450,127</u>	<u>\$760,036</u>	<u>\$346,522</u>

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

8. Pensions, continued

B. Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions, continued

Deferred outflows resulting from contributions subsequent to measurement date will be recognized as reduction of the net pension liability in the following year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions at September 30, 2022 will be recognized in pension expense as follows:

<u>Year Ending September 30</u>	<u>Defined Benefit Plan</u>	<u>Ad Hoc COLA/ Supplemental Annuity Plan for DB Retirees</u>	<u>Ad Hoc COLA Plan for DCRS Retirees</u>
2023	\$(368,582)	\$(57,205)	\$ 28,396
2024	(545,065)	(57,205)	28,396
2025	(1,111,790)	(57,205)	28,396
2026	(1,638,584)	27,766	48,378
2027	(32,593)	20,043	46,559
Thereafter	<u>(115,810)</u>	<u>21,526</u>	<u>169,389</u>
	<u>\$(3,821,424)</u>	<u>\$102,280</u>	<u>\$349,514</u>

Actuarial Assumptions: The actuarial assumptions used are based upon recommendations from the actuarial experience study for the period October 1, 2011 through September 30, 2015. A summary of actuarial assumptions applied to all periods included in the measurement is shown below.

Actuarial cost method:	Entry age normal
Total payroll growth:	2.75%
Salary increases:	Graduated based on service with the GovGuam ranging from 4.0% for service in excess of 15 years to 7.5% for service from zero to five years.
Disability:	1974-78 SOA LTD Non-Jumbo, with rates reduced by 50% for males and 75% for females.
Retirement age:	5% per year from age 55 to 64, 10% per year from age 65 to 74, 100% at age 75.
Mortality:	Based on the RP-2000 combined mortality table, set forward 3 years for males and 2 years for females.
Amortization method:	Level percentage of payroll, closed.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

8. Pensions, continued

B. Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions, continued

Expected Rate of Return and Asset Allocation: The Fund has a target asset allocation based on the investment policy adopted by the GGRF Board of Trustees. The target allocation and best estimates of the expected nominal return for each major asset class are summarized as follows:

<u>Asset Class</u>	<u>Target Asset Allocation</u>	<u>Nominal Return</u>	<u>Component Return</u>
U.S. Equities (large cap)	26.0%	7.44%	1.93%
U.S. Equities (small cap)	4.0%	9.23%	0.37%
Non-U.S. Equities	17.0%	9.28%	1.58%
Non-U.S. Equities (emerging markets)	3.0%	11.32%	0.34%
U.S. Fixed Income (aggregate)	22.0%	3.89%	0.86%
Risk Parity	8.0%	5.92%	0.47%
High Yield Bonds	8.0%	6.42%	0.51%
Global Real Estate (REITs)	2.5%	8.55%	0.21%
Global Equity	7.0%	8.20%	0.57%
Global Infrastructure	2.5%	7.58%	0.19%
Expected average return for one year			7.04%
Expected geometric mean (30 years)			6.36%

Discount Rate: The discount rate used to measure the total pension liability for the DB Plan was 7.0%, which is equal to the expected investment rate of return. The expected investment rate of return applies to benefit payments that are funded by plan assets (including future contributions), which includes all plan benefits except supplemental annuity payments to DB retirees and ad hoc COLA to both DB and DCRS retirees. The discount rate used to measure the total pension liability for the supplemental annuity and ad hoc COLA payments was 2.26%, which is equal to the rate of return of a high quality bond index.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

8. Pensions, continued

B. Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions, continued

Discount Rate Sensitivity Analysis: The following presents the sensitivity of the net pension liability to changes in the discount rate. The sensitivity analysis shows the impact to GWA's proportionate share of the net pension liability if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current discount rate:

Defined Benefit Plan:

	1% Decrease in Discount Rate <u>6.0%</u>	Current Discount Rate <u>7.0%</u>	1% Increase in Discount Rate <u>8.0%</u>
Net Pension Liability	<u>\$41,106,836</u>	<u>\$32,556,486</u>	<u>\$21,966,602</u>

Ad Hoc COLA/Supplemental Annuity Plan for DB Retirees:

	1% Decrease in Discount Rate <u>1.26%</u>	Current Discount Rate <u>2.26%</u>	1% Increase in Discount Rate <u>3.26%</u>
Net Pension Liability	<u>\$12,847,535</u>	<u>\$11,715,208</u>	<u>\$10,726,690</u>

Ad Hoc COLA Plan for DCRS Retirees:

	1% Decrease in Discount Rate <u>1.26%</u>	Current Discount Rate <u>2.26%</u>	1% Increase in Discount Rate <u>3.26%</u>
Net Pension Liability	<u>\$2,005,493</u>	<u>\$1,766,641</u>	<u>\$1,562,863</u>

C. Payables to the Pension Plans

As of September 30, 2022, GWA recorded payables to GGRF of \$109,537 representing unremitted statutorily required contributions.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

9. Other Post Employment Benefits (OPEB)

GWA participates in the retiree health care benefits program. GovGuam’s Department of Administration is responsible for administering the GovGuam Group Health Insurance Program, which provides medical, dental, and life insurance benefits to retirees, spouses, children and survivors. Active employees and retirees who waive medical and dental coverage are considered eligible for the life insurance benefit only. The program covers retirees and is considered an OPEB plan.

A. General Information About the OPEB Plan

Plan Description: The OPEB plan is a single-employer defined benefit plan that provides healthcare benefits to eligible employees and retirees who are members of the GovGuam Retirement Fund. No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75. The Governor’s recommended budget and the annual General Appropriations Act enacted by the Guam Legislature provide for a premium level necessary for funding the program each year on a “pay-as-you-go” basis. GovGuam issues a publicly available financial report that includes financial statements and required supplementary information for the OPEB Plan. That report may be obtained by writing to the Government of Guam Department of Administration, Suite 224, 2nd Floor, ITC Building, 590 South Marine Corps Drive, or by visiting the Guam Department of Administration website – <https://da.doa.guam.gov/reports/guam-other-post-employment-benefits-opeb-reports/>.

Benefits: GovGuam provides postemployment medical, dental and life insurance benefits to retirees, spouses, children and survivors. Active employees and retirees who waive medical and dental coverage are considered eligible for the life insurance benefit only.

Contributions: No employer contributions are assumed to be made since an OPEB trust has not been established. Instead, the OPEB Plan is financed on a substantially “pay-as-you-go” basis whereby contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

9. Other Post Employment Benefits (OPEB), continued

B. Total OPEB Liability:

Total OPEB liability at the fiscal year presented for the OPEB Plan was measured on and was determined by actuarial valuations as of the following dates:

Reporting date:	September 30, 2022
Measurement date:	September 30, 2021
Valuation date:	September 30, 2020

Total OPEB liability as of September 30, 2022 is \$112,253,488.

Proportionate share of total OPEB liability at September 30, 2022 is 4.19%.

Actuarial Assumptions: A summary of actuarial assumptions applied to all periods included in the measurement is shown below:

Inflation:	2.75%
Healthcare cost trend rate:	19 percent and 31 percent for FY2021 Non-Medicare and Medicare plans, respectively. 6 percent for FY2022 through FY2023, decreasing 0.25 percent per year to an ultimate rate of 4.25 percent for FY2030 and later years.
Dental trend rates:	4.25% per year, based on a blend of historical retiree premium rate increases as well as observed U.S. national trends. Year 1 trend is assumed to be -3.11%.
Healthy retiree mortality rates:	Head-count weighted PUB-2010 Table, set forward 4 years for males and 2 years for females, respectively, projected generationally using 50% of MP-2020.
Disabled mortality rates:	PUB-2010 Disabled Retiree Amount Weighted mortality table set forward 4 years for males and 2 years for females, respectively, using 130% of the rates before age 80 and projected generationally from 2010 using 50% of mortality improvement scale MP-2020.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

9. Other Post Employment Benefits (OPEB), continued

B. Total OPEB Liability, continued

Discount rate: The discount rate used to measure the total OPEB liability was 2.26%. The projection of cash flows used to determine the discount rate assumed that contributions from the Government will be made in accordance with the plan's funding policy. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be insufficient to make all projected benefit payments of current plan members. Therefore, the 2.26% municipal bond rate was applied to all periods to determine the total OPEB liability.

OPEB plan fiduciary net position: As of September 30, 2022, an OPEB trust has not been established thus the OPEB Plan does not presently report OPEB plan fiduciary net position.

Sensitivity of the total OPEB liability to changes in the discount rate: The following presents the sensitivity of the total OPEB liability to changes in the discount rate. The sensitivity analysis shows the impact to GWA's proportionate share of the total OPEB liability if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current discount rate:

	1% Decrease in Discount Rate <u>1.26%</u>	Current Discount Rate <u>2.26%</u>	1% Increase in Discount Rate <u>3.26%</u>
Total OPEB Liability	<u>\$133,698,788</u>	<u>\$116,272,057</u>	<u>\$96,352,478</u>

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates: The following presents the sensitivity of the total OPEB liability to changes in the healthcare cost trend rate. The sensitivity analysis shows the impact to GWA's proportionate share of the total OPEB liability if it were calculated using a healthcare cost trend rate that is 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rate:

	<u>1% Decrease</u>	Healthcare Cost Trend Rates	<u>1% Increase</u>
Total OPEB Liability	<u>\$93,467,674</u>	<u>\$116,272,057</u>	<u>\$138,348,064</u>

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

9. Other Post Employment Benefits (OPEB), continued

C. OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended September 30, 2022, GWA reported total OPEB expense of \$6,927,940 for its proportionate share of the GovGuam total OPEB expense. At September 30, 2022, GWA reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Changes of assumptions	\$13,575,416	\$6,176,160
Difference between expected and actual experience	10,131,991	16,348,358
Contributions subsequent to the measurement date	2,155,206	---
Changes in proportion and difference between employer contributions and proportionate share of contributions	<u>15,385,349</u>	<u>3,328,419</u>
	<u>\$41,247,962</u>	<u>\$25,852,937</u>

Deferred outflows resulting from contributions subsequent to measurement date will be recognized as reduction of the total OPEB liability in the following year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB at September 30, 2022 will be recognized in OPEB expense as follows:

<u>Year Ending September 30</u>	
2023	\$(517,982)
2024	4,133,168
2025	6,163,689
2026	2,837,146
2027	<u>623,798</u>
	<u>\$ 13,239,819</u>

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

10. Leases

Leased assets at September 30, 2022 are as follows:

<u>Lease Description</u>	<u>Classification</u>	<u>Gross Balance</u>	<u>Accumulated Amortization</u>	<u>Net Balance</u>
Dump trucks	Equipment	\$435,767	\$132,051	\$303,716
Backhoe loaders	Equipment	259,297	79,784	179,513
Backhoe trailers	Equipment	65,144	20,044	45,100
Ground level storage	Building	<u>22,473</u>	<u>17,978</u>	<u>4,495</u>
		<u>\$782,681</u>	<u>\$249,857</u>	<u>\$532,824</u>

Guam Power Authority (GPA)

In February 2015, GWA moved to a building owned by GPA. GWA does not currently have a signed lease agreement with GPA but pays for its share of building maintenance costs. GWA's use of the building did not amount to a lease as the resolution passed by the CCU did not convey the right to use an underlying asset. For the year ended September 30, 2022, GWA's share of building maintenance cost totaled \$241,668.

Morrigo Equipment, LLC (Morrigo)

GWA and Morrigo have an equipment lease agreement with lease term of five (5) years for dump trucks, backhoe loaders and backhoe trailers, with various inception dates based on the delivery dates of the equipment. The lease agreement may be terminated for convenience by GWA with penalty.

GWA recorded the related right-of-use assets at cost of \$760,208, less accumulated amortization of \$231,879.

The future lease payments for this transaction are as follows:

<u>Year ending September 30,</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2023	\$230,325	\$1,841	\$232,166
2024	231,324	841	232,165
2025	<u>68,955</u>	<u>58</u>	<u>69,013</u>
	<u>\$530,604</u>	<u>\$2,740</u>	<u>\$533,344</u>

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

11. Agreements with the United States Navy

Pursuant to a Memorandum of Agreement, the U.S. Navy supplies water through its water system to GWA for distribution and resale to non-military customers. Total purchases from the U.S. Navy for the year ended September 30, 2022 amount to \$5,656,471.

12. Commitments and Contingencies

Merit System

Public Law 21-59, enacted the Uniform Position Classification and Salary Administration Act of 1991 for employees of GovGuam, autonomous and semi-autonomous agencies, public corporations and other public instrumentalities of GovGuam. The Act included a merit bonus, calculated at 3.5% of the employee's base salary, for employees who earn a superior performance grade. On September 17, 2013, the CCU, in GWA Resolution 42-FY2013, authorized the payment of merit bonuses in the years succeeding the CCU's approval to all eligible classified employees in accordance with the laws of Guam.

On October 20, 2017, CCU Resolution 01-FY2018 approved the creation and addition of GWA Certified, Technical and Professional (CTP) positions and the implementation of a Strategic Pay Scale for such positions as authorized by Public Law 28-159. The conversion to the CTP positions and pay scale from the unified system of position classification and compensation eliminated merit bonuses. GWA believes that no liability may ultimately arise from this matter and therefore no liability has been recognized in the accompanying financial statements.

Claims

Due to the nature of its operations, GWA is subject to various claims by private and governmental customers and vendors for various alleged losses. Because an estimate of the amount or range of potential loss cannot be determined at this time, no provision for any liability that may result from such claims has been made in the accompanying financial statements.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

12. Commitments and Contingencies, continued

Litigation

The Authority is seeking to quiet title in property listed in a current court action brought by the Government of Guam, Department of Land Management to rescind and correct certificates of title. Although the private party holding certificates of title that the Government of Guam seeks to rescind and correct has claimed \$220 million in compensation, no judgement on damages or compensation has been made and Management is of the opinion that based on the current status of the litigation, and courses of actions still available to it, liabilities of a material nature will not be realized, and therefore no related provision has been recorded in the accompanying financial statements for the potential impact, if any, of this matter. This case is in Superior Court and on August 14, 2023, the court issued a Decision and Order that GWA will either seek reconsideration on or appeal to the Guam Supreme Court. A status hearing is next scheduled for September 2023 which may lead to a trial, further review (for reconsideration), an appeal, or new motion filings.

Contract Commitments

Contract commitments in connection with projects currently in construction approximate \$51,348,293 at September 30, 2022, of which \$15,584,277 will be funded by federal grants from the U.S. Government.

Program Management Office Services

On January 31, 2017, GWA entered into a separate contract for Program Management/Construction Management (PM/CM) to manage the implementation and execution of projects related to the military buildup, financed primarily by the Office of Economic Adjustment and to provide support services related to project management, design construction and operational needs as part of the execution of these projects. On June 17, 2019, GWA entered into a separate contract to provide Indefinite Delivery/Indefinite Quantity (ID/IQ) professional project/construction management and utility consulting services for various types of water and wastewater utility projects and utility management activities, as well as consulting engineering services in support of municipal planning, utility management analysis and regulatory compliance. Contract commitments for these services approximate \$1,059,971 as of September 30, 2022.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

12. Commitments and Contingencies, continued

Medicare

The Government of Guam and its component units, including GWA, began withholding and remitting funds to the U.S. Social Security System for the health insurance component of its salaries and wages effective October 1998. Prior to that date, the Government of Guam did not withhold or remit Medicare payments to the U.S. Social Security System. If the Government is found to be liable for Medicare payments on salaries and wages prior to October 1998, an indeterminate liability could result. It has been the practice of GWA and all other component units of the Government of Guam that payment of this health insurance component is optional prior to October 1998. Therefore, no liability for any amount which may ultimately arise from this matter has been recorded in the accompanying financial statements.

Court Order

In 2002, the US Government filed a complaint against GWA and the Government of Guam for alleged violations under the Federal Clean Water Act (CWA) and the Safe Drinking Water Act (SDWA). Because of GWA's non-compliance with the National Primary Drinking Water Regulations, the U.S. Government sought both civil penalties and injunctive relief to address such non-compliance. Both GWA and the U.S. Department of Justice, Environmental and Natural Resources Division, mutually agreed in the form of a Court Order to resolve the violation issues.

In 2003, a Court Order for Preliminary Relief was filed before the District Court of Guam. The Stipulation required implementation of short-term projects and initial planning measures by GWA. GWA was required to submit a final financial plan in the Master Plan that generates sufficient revenue to cover the cost of all compliance activities and deliverables required by the Court Order for Preliminary Relief, as well as any other anticipated expenses, including any measures necessary to ensure compliance with the CWA and the SDWA and costs related to the infrastructure improvements identified in the Master Plan.

In 2006, the Court Order was amended, which required GWA to perform approximately \$220 million of capital improvement projects and perform other actions to bring GWA's system into compliance. However, GWA was unable to meet all deadlines set out in the amended Court Order. The District Court ordered the parties to stipulate as to the scope of the remaining projects and project completion dates. The parties were unable to reach an agreement on all items. As a result, on November 10, 2011, the District Court issued an order setting new deadlines for the unfinished projects and included new projects that were not part of the amended Court Order. As of September 2021, of the 93 items required by the Court Order, 92 are either complete or in progress (e.g., continuous reporting requirement). GWA continues to make progress in completing the one remaining item, using 2020A Series Bond Revenue to repair, rehabilitate or replace water storage reservoirs by the revised 2023 deadline.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

12. Commitments and Contingencies, continued

Court Order, continued

GWA filed an unopposed motion in the U.S. District Court to extend the final completion deadline to June 23, 2023 from December 30, 2020. The Court approved the extension and GWA continues its work to complete the sole remaining compliance requirement by the new deadline.

Primary Treatment Permits

In 2011, the United States Environmental Protection Agency (USEPA) informed GWA that its waiver request for primary treatment plants for Hagåtña and Northern District Wastewater Treatment Plants (WWTP) had been denied and that GWA would be required to upgrade the plants to secondary treatment. The upgrades were initially estimated to cost approximately \$300 million. New National Pollutant Discharge Elimination System (NPDES) permits were issued to these treatment plants effective January 1, 2020 which included secondary treatment standards, some of which these two plants are unable to meet.

In 2016 and 2017, the Office of Economic Adjustment, Department of Defense, awarded GWA \$55.3 and \$117.9 million, respectively, for projects to upgrade water and wastewater infrastructure, most specifically to upgrade the Northern District WWTP to full secondary treatment capabilities. The construction of the upgrades is scheduled to be completed by October 2022.

GWA continues discussions with USEPA regarding the timing of required upgrades to the Hagåtña WWTP as part of a negotiated consent decree.

13. Supplemental Annuities/COLA

As required by GovGuam's Annual Appropriation's Act, GWA must reimburse GovGuam's Department of Administration for certain supplemental and healthcare benefits paid to retirees. During the year ended September 30, 2022, GWA levied a surcharge amounting to \$3,010,774 in order to satisfy this legislative mandate. Effective October 1, 2021 the surcharge was reduced from 3.60% to 3.50% as approved by the Guam PUC.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Financial Statements, continued

14. System Development Charge (SDC)

In 2010, PUC approved the implementation of a water and sewer SDC, which authorized GWA to charge water and wastewater SDC to applicable customers on and after March 2, 2010. SDC revenues generated and collected are to be expended for costs associated with the construction, expansion, upgrade, and repair of water and wastewater facilities for users who are for the first time connecting property into the Guam water or wastewater system or for builders if the density of the existing connection is increased. SDC revenues may also be used to pay the principal sum and interest and other finance costs on bonds, notes or other obligations issued by or on behalf of GWA to finance such capital improvements or facilities expansion or renovations. During the year ended September 30, 2022, SDC revenues were \$1,245,362.

15. Related Party Transactions

GWA receives electrical and administrative services from GPA, a component unit of the Government of Guam also governed by the CCU. Electricity purchases from GPA for the year ended September 30, 2022 were \$18,577,440, and GWA was also charged \$555,086 for administrative services provided by GPA. Outstanding payables for power purchases, administrative expenses and cost reimbursements owed by GWA to GPA were \$2,327,605 as of September 30, 2022.

For the year ended September 30, 2022, GWA billed GPA a total of \$165,788 for water and sewer charges on the facilities transferred by the Navy to GPA. The amount due from GPA as of September 30, 2022 was \$303,282 which is included in receivables in the accompanying statements of net position.

15. Related Party Transactions, continued

GWA receives waste disposal services from Guam Solid Waste Authority (GSWA). Waste disposal fees for the year ended September 30, 2022 were \$658,813. Outstanding payables for waste disposal fees owed by GWA to GSWA were \$26,430 as of September 2022 and were included in trade accounts payable in the accompanying statements of net position.

16. Subsequent Events

On May 24, 2023, the island of Guam suffered severe damages caused by super typhoon Mawar. As of the date of this report, the Company is unable to reasonably estimate the potential impact on its future financial statements.

Required Supplementary Information

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Required Supplementary Information (Unaudited)
Schedule of Proportionate Share of the Net Pension Liability
Last 10 Fiscal Years*

Defined Benefit Plan

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
GWA's proportionate share of the net pension liability	\$32,556,486	\$42,300,716	\$40,222,332	\$37,292,034	\$33,100,479	\$38,799,923	\$40,053,650
GWA's proportion of the net pension Liability	3.38%	3.39%	3.31%	3.16%	2.90%	2.83%	2.79%
GWA's covered-employee payroll**	\$18,724,804	\$17,738,557	\$16,874,281	\$16,251,058	\$14,729,699	\$14,353,805	\$14,388,631
GWA's proportionate share of the net pension liability as percentage of its covered-employee payroll	173.87%	238.47%	238.36%	229.47%	224.72%	270.31%	278.37%
Plan fiduciary net position as a percentage of the total pension liability	70.14%	61.48%	62.25%	63.28%	60.63%	54.62%	52.32%

*This date is presented for those years for which information is available.

**Covered-employee payroll data from the actuarial valuation date with one-year lag.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Required Supplementary Information (Unaudited)
Schedule of Proportionate Share of the Net Pension Liability
Last 10 Fiscal Years*

Ad Hoc COLA/Supplemental Annuity Plan for DB Retirees

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
GWA's proportionate share of the net pension liability	\$11,715,208	\$12,486,188	\$12,866,333	\$11,195,277	\$10,909,240
GWA's proportion of the net pension liability	3.80%	3.88%	3.97%	3.86%	3.79%
GWA's covered-employee payroll**	\$19,210,070	\$20,273,487	\$20,220,585	\$19,846,017	\$19,244,239
GWA's proportionate share of the net pension liability as percentage of its covered-employee payroll	60.98%	61.59%	63.63%	56.41%	56.69%

*This date is presented for those years for which information is available.

**Covered-employee payroll data from the actuarial valuation date with one-year lag.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Required Supplementary Information (Unaudited)
Schedule of Proportionate Share of the Net Pension Liability
Last 10 Fiscal Years*

Ad Hoc COLA Plan for DCRS Retirees

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
GWA's proportionate share of the net pension liability	\$1,766,641	\$1,577,875	\$1,299,011	\$1,105,860	\$1,441,633
GWA's proportion of the net pension liability	2.50%	2.38%	2.17%	2.24%	2.31%
GWA's covered-employee payroll**	\$12,167,634	\$6,162,019	\$5,108,575	\$5,927,414	\$8,698,580
GWA's proportionate share of the net pension liability as percentage of its covered-employee payroll	14.52%	25.61%	25.43%	18.66%	16.57%

*This date is presented for those years for which information is available.

**Covered-employee payroll data from the actuarial valuation date with one-year lag.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Required Supplementary Information (Unaudited)
Schedule of Pension Contributions
Last 10 Fiscal Years*

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Actuarially determined contribution	\$ 4,263,160	\$ 4,116,086	\$ 3,998,221	\$ 4,029,190	\$ 3,491,479	\$ 3,524,561	\$ 3,759,121
Contributions in relation to the actuarially determined contribution	<u>5,180,477</u>	<u>4,038,242</u>	<u>4,025,886</u>	<u>4,296,287</u>	<u>3,630,252</u>	<u>3,527,186</u>	<u>3,749,595</u>
Contribution deficiency (excess)	\$(<u>917,317</u>)	\$(<u>77,844</u>)	\$(<u>27,665</u>)	\$(<u>267,097</u>)	\$(<u>138,773</u>)	\$(<u>2,625</u>)	\$(<u>9,526</u>)
GWA's covered-employee payroll**	\$ <u>18,724,804</u>	\$ <u>17,738,557</u>	\$ <u>16,874,281</u>	\$ <u>16,251,058</u>	\$ <u>14,729,699</u>	\$ <u>14,353,805</u>	\$ <u>14,388,631</u>
Contributions as a percentage of covered employee payroll	27.67%	22.77%	23.86%	26.44%	24.65%	24.57%	26.06%

*This date is presented for those years for which information is available.

**Covered-employee payroll data from the actuarial valuation date with one-year lag.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Required Supplementary Information (Unaudited)
Schedule of Proportionate Share of the Total OPEB Liability
Last 10 Fiscal Years*

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
GWA’s proportionate share of the OPEB liability	\$116,272,057	\$106,433,894	\$84,163,331	\$62,656,405	\$88,950,661
GWA’s proportion of the OPEB liability	4.19%	4.23%	3.30%	3.34%	3.66%
GWA’s covered-employee payroll**	\$22,504,297	\$18,203,494	\$17,546,110	\$13,011,086	\$14,150,906
GWA’s proportionate share of the OPEB liability as percentage of its covered-employee payroll	516.67%	584.96%	479.67%	481.56%	628.59%

*This date is presented for those years for which information is available.

**No assets accumulated in a trust to pay the benefits.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Required Supplementary Information (Unaudited)
Schedule of OPEB Contributions
Last 10 Fiscal Years*

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
Actuarially determined contribution	\$8,511,831	\$7,175,899	\$5,617,770	\$7,776,105	\$8,045,954
Contributions in relation to the actuarially determined contribution	<u>1,966,259</u>	<u>1,598,791</u>	<u>1,745,004</u>	<u>1,795,850</u>	<u>1,617,515</u>
Contribution deficiency	<u>\$6,545,572</u>	<u>\$5,577,108</u>	<u>\$3,872,766</u>	<u>\$5,980,255</u>	<u>\$6,428,439</u>
GWA's covered-employee payroll	\$22,504,297	\$18,203,494	\$17,546,110	\$13,011,086	\$14,150,906
Contributions as a percentage of covered-employee payroll	8.74%	8.78%	9.95%	13.80%	11.43%

*This date is presented for those years for which information is available.

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Notes to Required Supplementary Information (Unaudited)

Changes in Assumptions – Pension Plans

Amounts reported in 2021 actuarial valuation reflected an assumption related to administrative expenses to increase to \$6,565,000 per year.

Amounts reported in 2020 actuarial valuation reflected an assumption related to administrative expenses to decrease to \$6,439,000 per year.

Amounts reported in 2019 actuarial valuation reflected an assumption related to administrative expenses to decrease to \$6,860,000 per year.

Amounts reported in 2018 actuarial valuation reflected an assumption related to administrative expenses to increase to \$7,082,000 per year.

Amounts reported in the 2017 actuarial valuation reflect a change in assumption of payroll growth to 2.75% rather than 3%. The mortality, retirement age and disability assumption were changed to more closely reflect actual experience. Assumption related to administrative expense reflected an increase to \$6,344,000 per year and a revised allocation to the various pension plans to reflect actual experience.

Amounts reported in 2016 actuarial valuation reflect a change in assumption of administrative expenses to \$6,078,000 per year rather than \$5,806,000.

Amounts reported in 2015 actuarial valuation reflect a change in assumption of payroll growth to 3% rather than 3.5% which was used to determine amounts reported prior to 2015. Amounts reported in 2014 reflect an adjustment of the expectations of salary increases, disability and retirement age to more closely reflect actual experience. The amounts reported in the 2011 actuarial valuation reflect an expectation of retired life mortality based on the RP-2000 Mortality Table rather than the 1994 U.S. Uninsured Pensioners Table, which was used to determine amounts reported prior to 2011. Amounts reported in 2011 also reflect a change in assumption on valuation of assets to a 3-year phase in for gains/losses relative to interest rate assumption from market value, with fixed income investments at amortized costs which was used to determine amounts reported prior to 2011.

Supplementary and Other Information

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Schedule of Certain Operating and Maintenance Expenses

Year ended September 30, 2022

Salaries, wages and benefits:	
Regular, differential and hazardous pay	\$16,055,989
Pension costs and other benefits	5,726,543
Overtime pay	<u>409,097</u>
Total salaries, wages and benefits	<u>\$22,191,629</u>
Administrative and general:	
Materials and supplies	\$ 1,923,816
Chemicals	1,506,895
Insurance	1,299,193
Transportation	696,392
Miscellaneous	628,488
Merchant fees	625,606
Public Utility Commission	203,851
Communications	156,595
Training	95,939
Liability claims	92,335
Advertising	<u>68,500</u>
Total administrative and general	<u>\$ 7,297,610</u>
Contractual:	
Labor, materials and others	\$ 1,627,464
Accounting	1,411,843
Legal	563,305
Property rental	510,840
Equipment rental	192,456
Testing	<u>186,937</u>
Total contractual	<u>\$ 4,492,845</u>
Other expense:	
Interest expense	\$29,175,309
Retiree healthcare costs and other benefits	8,864,985
Bond issuance costs	<u>180,594</u>
Total other expense	<u>\$38,220,888</u>

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Schedule of Construction Work in Progress

Year ended September 30, 2022

Project Title	Type	Beginning Balance FY2022	Additions and Adjustments	Closed out during FY2022	Ending Balance FY2022
Asan Springs Rehabilitation	Water	\$ 815,421	\$ 65,921	\$ -	\$ 881,342
Deepwell New Wells Site Development and Rehabilitation	Water	1,847,079	87,075	-	1,934,154
Equipment Purchases	Water/Wastewater	-	634,143	(608,333)	25,810
Facilities Improvement	Water/Wastewater	689,669	51,780	-	741,449
Fire Hydrant Replacements	Water	523,484	304,587	(828,071)	-
Hydraulic Modeling	Water/Wastewater	641,533	2,539	-	644,072
I&I SSES for Central/Northern/Southern Sewer Systems	Wastewater	2,976,045	182,988	-	3,159,033
Information Technology	Water/Wastewater	158,526	190,271	(190,271)	158,526
Island Wide Real Property Survey & Mapping	Water/Wastewater	779,387	-	-	779,387
Island Wide Water Reservoirs	Water	25,046,832	19,900,708	(1,227,777)	43,719,763
Meters and related	Water	856,846	376,117	(274,571)	958,392
Pressure Zone Realignment	Water	2,841,545	2,159,499	(81,280)	4,919,764
Program Management Office	Water/Wastewater	3,507,754	585,867	(86,583)	4,007,038
Pumps, Motors, Cables and related Replacements	Water/Wastewater	28,774	872,204	(559,373)	341,605
Route 1 Sanitary Sewer Rehabilitation and Replacement (Asan-Adelup-Hagatna)	Wastewater	4,657,972	5,861,592	(690,252)	9,829,312
SCADA System for Water and Wastewater	Water/Wastewater	1,343,089	382,877	-	1,725,966
Sewer Pump Station Improvements	Wastewater	1,514,564	1,364,948	(272,782)	2,606,730
Tamuning Hot Spots Sewer Line Rehabilitation and Replacement	Wastewater	1,589,166	676,605	-	2,265,771
Tumon Hot Spots Sewer Line Rehabilitation	Wastewater	432,574	-	-	432,574
Ugum Water Treatment Plant Rehabilitation	Water	227,554	44,609	(107,423)	164,740
Upgrade to Secondary Treatment at NDWWTP	Wastewater	102,394,392	31,832,104	(56,184,398)	78,042,098
Wastewater Collection Systems	Wastewater	757,829	361,713	-	1,119,542
Water and Wastewater Infrastructure Improvements	Water/Wastewater	11,341,987	3,103,422	(6,137,538)	8,307,871
Water BPS Improvements	Water	366,341	153,929	(28,649)	491,621
Water Distribution Systems	Water	2,250,767	4,801,851	(1,032,927)	6,019,691
		\$ <u>167,589,130</u>	\$ <u>73,997,349</u>	\$ <u>(68,310,228)</u>	\$ <u>173,276,251</u>

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

System Development Charge Fund
Schedules of Net Position, Revenue, Expenses and Changes in Net Position

September 30, 2022

Assets

Current assets:

Restricted cash	\$ 7,408,420
Receivables	<u>1,275,981</u>
	<u>\$ 8,684,401</u>

Liabilities and Net Position

Current liabilities:

Due to GWA	\$ <u>1,109,470</u>
------------	---------------------

Net position

Restricted	<u>7,574,931</u>
------------	------------------

\$ 8,684,401

Revenues, Expenses and Changes in Net Position

Revenues:

System development charge	\$ 1,245,362
Other revenues	<u>22,322</u>
	1,267,684

Expenses:

Transfer out	<u>3,290,280</u>
--------------	------------------

Change in net position (2,022,596)

Net position at beginning of year 9,597,527

Net position at end of year \$ 7,574,931

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Schedule of Operating Revenues

Year Ended September 30, 2022

Water	\$ 64,607,199
Wastewater	33,842,676
Surcharges:	
Legislative	3,010,774
System development charge	1,245,361
Other	464,488
Bad debts expense	(<u>2,028,510</u>)
Total operating revenues	<u>\$101,141,988</u>

Guam Waterworks Authority
(A Component Unit of the Government of Guam)

Schedule of Employee and Other Data

Year ended September 30, 2022

Cost Category	Full-Time Employees	Personnel Services	Contractual Services	Materials and Supplies	Total
Administration and Support	80	\$ 4,858,540	\$ 1,469,284	\$ 68,596	\$ 6,396,420
Compliance & Safety	19	1,640,735	193,504	78,703	1,912,942
Engineering	28	631,201	4,941	8,622	644,764
Executive Management	46	3,554,686	1,649,503	23,432	5,227,621
Operations: Construction & Maintenance	31	1,926,392	44,502	160,960	2,131,854
Operations: Water Distribution	51	2,906,465	401,310	934,617	4,242,392
Operations: Water Production & Treatment	36	1,917,626	125,650	419,686	2,462,962
Operations: Wastewater Collection	45	2,969,685	449,148	162,422	3,581,255
Operations: Wastewater Treatment	30	1,786,299	155,002	66,778	2,008,079
Total	366	\$ 22,191,629	\$ 4,492,844	\$ 1,923,816	\$ 28,608,289

[THIS PAGE INTENTIONALLY LEFT BLANK]

APPENDIX C

SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

DEFINITIONS

The following are summaries of definitions of certain terms used in this Summary of the Indenture. All capitalized terms used but not defined in the Official Statement will have the meanings set forth in the Indenture.

“Account” means each account established and given a designation pursuant to the Indenture.

“Accreted Value” means, with respect to any particular Bonds as of any given date of calculation, an amount equal to the sum of the principal amount of such Bonds plus accrued and unpaid interest on such Bonds as of such date, but not including interest payable on a current basis at least annually.

“Act” means Chapter 14 of Title 12 of the Guam Code Annotated, as amended, and as it may from time to time hereafter be amended or supplemented.

“Additional Bonds” means bonds, notes or other obligations of the Authority payable from Revenues and ranking on a parity with the Bonds then outstanding and authorized to be issued under and pursuant to the Indenture.

“Aggregate Annual Debt Service” means, for any year, Annual Debt Service for such year on all Bonds.

“Annual Debt Service” means, for any year, and with respect to any Bonds (A) the sum of (1) the interest falling due on such Bonds then Outstanding (assuming that all then Outstanding Serial Bonds are retired on their respective maturity dates and that all then Outstanding Term Bonds are retired at the times of and in amounts provided for by the Mandatory Sinking Account Payments applicable to such Term Bonds), but not including Capitalized Interest, plus (2) the principal amount of such Bonds then Outstanding that are Serial Bonds falling due by their terms, plus (3) the aggregate amount of all Mandatory Sinking Account Payments falling due with respect to such Bonds then Outstanding that are Term Bonds, plus (4) the aggregate amount of Payment Agreement Payments under Related Parity Payment Agreements then Outstanding falling due, minus (B) the aggregate amount of Payment Agreement Receipts under Related Payment Agreements then Outstanding falling due; all as calculated for said year and provided that for purposes of determining the interest payable on Variable Rate Bonds, any obligation of the Authority to make Payment Agreement Payments based on a variable rate under Parity Payment Agreements and any obligation of a Qualified Counterparty to make payments under a Payment Agreement to the Authority based on a variable rate, the following assumptions shall be made:

(i) for purposes of determining the interest payable on Variable Rate Bonds, the interest rate used in making such determination shall be (a) for periods for which such rate has been determined, the actual interest rate on such Bonds; (b) for purposes of calculations relating to issuance of refunding Bonds for any other period, a rate equal to 1.1 times the highest rate of interest borne by such Bonds, or if such Bonds were not Outstanding during any portion of any such period bonds with similar ratings and terms, during the next preceding twelve months; or (c) for any other period or purpose, the prevailing interest rate on such Bonds as of the date of such determination;

(ii) for purposes of determining the amount of Payment Agreement Payments based on a variable rate under Parity Payment Agreements, the rate used in making such determination shall be assumed to be (a) for periods for which such rate has been determined, the actual rate used to calculate such payments, (b) for purposes of calculations relating to issuance of refunding Bonds for any other period, a rate equal to 1.1 times the highest such rate during the next preceding twelve months, and (c) for any other period or purpose, the prevailing rate being used to determine such payment obligation as of the date of such determination; in each such case without regard to the occurrence of any event that, under the provisions of such Payment Agreement, would permit or require the Authority to make payments on any basis other than such rates;

(iii) for purposes of determining the amount of payments by a Qualified Counterparty under a Payment Agreement to the Authority based on a variable rate, the rate used in making such determination shall be (a) if such Payment Agreement obligates a Qualified Counterparty to make payments to the Authority based on a variable rate that is equal to the actual rate on the Related Bonds, the actual rate on such Bonds; and (b) if such Payment Agreement obligates a Qualified Counterparty to make payments to the Authority based on a variable rate other than the actual rate on the Related Bonds (1) for periods for which such rate has been determined, the actual rate used to calculate such payments, (2) for purposes of calculations relating to issuance of refunding Bonds for any other period, a rate equal to 1.1 times the highest such rate during the next preceding twelve months, and (3) for any other period or purpose, the prevailing rate being used to determine such payment obligation as of the date of such determination; in each such case without regard to the occurrence of any event that, under the provisions of such Payment Agreement, would permit or require the Qualified Counterparty to make payments on any basis other than such rates.

“Authority” means the Guam Waterworks Authority, a public corporation of the Government of Guam, or any successor to the rights, powers, functions and duties with respect to the management, administration and control of the System which are now or hereafter vested in the Authority.

“Authorized Officer” of the Trustee means and includes the chairperson of the board of directors, the president, every vice president, every assistant vice president, every trust officer and any other officer or assistant officer of the Trustee, other than those specifically above mentioned, designated by a certificate of an Authorized Officer of the Trustee as an Authorized Officer for purposes of the Indenture.

“Board” means the Consolidated Commission on Utilities established in Chapter 79 of Title 12 of the Guam Code Annotated or any other governing board of the Authority hereafter provided for pursuant to law.

“Bond Counsel” means an attorney or firm of attorneys designated by the Authority and having a national reputation for expertise in matters relating to governmental obligations the interest on which is excluded from gross income for federal income tax purposes under Section 103 of the Code.

“Bond Reserve Fund Requirement” means, as of any particular date of calculation, an amount equal to the Maximum Annual Debt Service for the then current or any future Fiscal Year on all Outstanding Bonds; provided, however, that if upon issuance of a Series of Bonds, such amount would require moneys to be credited to the Bond Reserve Fund from such Bond proceeds in an amount in excess of the maximum amount permitted from tax-exempt bond proceeds under the Code, the Bond Reserve Fund Requirement shall mean an amount equal to the sum of the Bond Reserve Fund Requirement immediately preceding issuance of such Bonds plus the maximum amount permitted under the Code to be deposited therein from the proceeds of such Bonds, as specified by Certificate of the Authority.

“Bond Reserve Fund” means the fund by that name established pursuant to the Indenture.

“Bond Year” means, with respect to any Series, the period of twelve consecutive months ending on the day in each year specified in the Supplemental Indenture authorizing the issuance of such Series if Bonds are or will be Outstanding in such twelve-month period, and, with respect to the Series 2024AB Bonds, the first Bond Year shall commence on the respective date of delivery of the Series 2024AB Bonds.

“Bondowner or Owner or Holder” means any person who shall be the registered owner of any Outstanding Bond, or, if such Outstanding Bond shall have a maturity of one year or less and shall have been issued in bearer form, shall mean the bearer of such Bond.

“Bonds” means the Guam Waterworks Authority Water and Wastewater System Revenue Bonds authorized by, and at any time Outstanding pursuant to, the Indenture, including any Additional Bonds authorized by, and at any time Outstanding pursuant to, the Indenture.

“Business Day” means any day other than a Saturday, Sunday or other day upon which banks in the cities in which the Principal Offices of the Trustee, the Co-Trustee, each Depository, each Paying Agent and each Credit Provider are located are authorized or required to be closed.

“Capital Improvement” means any addition, betterment, improvement or extension of the System having costs in excess of \$100,000 and a useful life in excess of five years.

“Capital Improvement Fund” means the fund by that name established pursuant to the Indenture for the purposes provided in the Indenture.

“Capitalized Interest” means interest to be paid from the original proceeds of Bonds (including proceeds constituting accrued interest on the Bonds) and from income derived from the investment of such proceeds.

“Certificate of the Authority” means an instrument in writing signed by the Chairperson or by the General Manager or by any other officer of the Authority duly authorized by resolution of the Board for that purpose. Any such instrument and supporting opinions or representations, if any, may, but need not, be combined in a single instrument with any other instrument, opinion or representation, and the two or more so combined shall be read and construed as a single instrument. If and to the extent required by relevant provisions of the Indenture, each Certificate of the Authority shall include the statements provided for in such provisions.

“Certified Public Accountant” means (i) any nationally recognized U.S. certified public accountant or accounting firm or (ii) any other U.S. certified public accountant or accounting firm approved by each Credit Provider, if any, not then in default of its obligations under a Credit Facility.

“Chairperson” means the chairperson of the Board.

“Chief Financial Officer” means the Chief Financial Officer of the Authority.

“Code” means the Internal Revenue Code of 1986 or any similar or successor federal law.

“Construction Account” means an account by that name established pursuant to the Indenture.

“Construction Fund” means the Guam Waterworks Authority Construction Fund established pursuant to the Act.

“Consulting Engineer” means an Independent architect, engineer, consultant, or architectural, engineering, or consulting firm experienced in water and sewer system design, construction, or operation, having a favorable reputation with respect thereto and retained by the Authority to perform the acts and carry out the duties of a Consulting Engineer under the Indenture and, in any case, nationally recognized as being experienced in the preparation of feasibility studies for use in connection with the financing of water and sewer systems.

“Costs of Issuance” means all items of expense directly or indirectly payable by or reimbursable to the Authority and related to the authorization, issuance, sale and delivery of the Bonds, including but not limited to advertising costs, Bond and official statement printing costs, costs of preparation and reproduction of documents, filing and recording fees, initial fees and charges of the Trustee, the Co-Trustee, and any Depository, Paying Agent or Registrar, legal fees and charges, fees and disbursements of consultants and professionals, fees and expenses of any Credit Provider, rating agency fees, fees and charges for preparation, execution, transportation and safekeeping of Bonds and any other cost, charge or fee in connection with the original issuance of Bonds.

“Co-Trustee” means U.S. Bank Trust Company, National Association, successor-in-interest to U.S. Bank National Association, appointed by the Authority as Co-Trustee and acting as an independent trustee with the duties and powers provided in the Indenture, its successors and assigns, and any other corporation or association which may at any time be substituted in its place as provided in the provisions of the Indenture relating to the Co-Trustee.

“Credit Agreement” means any agreement between the Authority and a Credit Provider pursuant to which such Credit Provider agrees to provide a Credit Facility or pursuant to which the Authority agrees to reimburse a Credit Provider for draws or advances under or claims made against a Credit Facility.

“Credit Agreement Payments” means Credit Agreement Reimbursement Payments and Other Credit Agreement Payments.

“Credit Agreement Reimbursement Payments” means any payment obligation of the Authority pursuant to a Credit Agreement designated as such in a Supplemental Indenture.

“Credit Facility” means any letter of credit, insurance policy, surety bond or other instrument designated by a Supplemental Indenture as providing supplemental credit support for a Series of Bonds (including by substituting for a deposit in a Bond Reserve Fund).

“Credit Provider” means any person, firm or entity designated in a Supplemental Indenture as providing a Credit Facility for a Series of Bonds, and any successor thereto.

“Date of Completion” means, for any particular Project, the date on which such Project is projected to be available for use by the Authority for the purposes for which it is intended to be used.

“Debt Service Fund” means the fund by that name established pursuant to the Indenture.

“Depository” means, with respect to any particular fund or account, the bank or trust company or other financial institution with similar powers designated by a Supplemental Indenture or a Statement of the Authority to act as the Depository under the Indenture for such fund or account, its successors and assigns, and any other bank or trust company or financial institution which may at any time be substituted in its place, as provided in the provisions of the Indenture relating to the Depository.

“DTC” means The Depository Trust Company, New York, New York, and its successors and assigns.

“Event of Default” means an event of that name described in the Indenture.

“Federal Securities” means (1) direct obligations of the United States of America for which the full faith and credit of the United States of America are pledged for the payment of principal and interest (including obligations issued or held in book-entry form on the books of the Department of the Treasury of the United States of America); (2) obligations for which the payment of principal and interest is guaranteed directly by the full faith and credit of the United States of America of the following types issued by the following agencies: U.S. Export-Import Bank (direct obligations or fully guaranteed certificates of beneficial ownership), Farmers Home Administration (certificates of beneficial ownership), Federal Financing Bank, General Services Administration (participation certificates), U.S. Maritime Administration (guaranteed Title XI financing), U.S. Department of Housing and Urban Development (project notes, local authority bonds, new communities debentures--U.S. government guaranteed debentures, or U.S. public housing notes and bonds--U.S. government guaranteed public housing notes and bonds); (3) obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state (collectively, “Municipal Obligations”) (a) which are fully secured as to principal and interest and redemption premium, if any, by an escrow or trust fund consisting only of cash or obligations of the character described in clauses (1) or (2) of this definition (“Government Obligations”), which fund may be applied only to the payment of interest on such municipal obligations when due and principal of and redemption premium, if any, on such municipal obligations on the maturity date or dates thereof or the redemption date or dates specified in an irrevocable notice, as appropriate, (b) as to which the cash and the principal of and interest on the Government Obligations in such escrow or trust fund will be sufficient to pay such interest, principal and redemption premium on such date or dates, and (c) which at the time of purchase are rated in the highest rating category by each Rating Agency; (4) certificates which evidence ownership of the right to the payment of any specified portion of the principal of and interest on obligations described in clause (1) of this definition, provided that such obligations have been stripped by the Treasury of the United States of America; and (5) the interest component of Resolution

Funding Corp. stripped securities, which have been stripped by request to the Federal Reserve Bank of New York, in book entry form.

“Fiduciaries” means the Trustee, the Co-Trustee, each Depository, each Registrar and each Paying Agent.

“Financial Newspaper or Journal” means, collectively, The Wall Street Journal, The Bond Buyer or any one or more other newspapers or journals publishing financial news and selected by the Trustee, whose decision shall be final and conclusive, printed in the English language, customarily published on each business day and circulated in New York, New York, San Francisco, California, and Hagatña, Guam.

“Fiscal Year” means the period beginning on October 1 of each year and ending on the next succeeding September 30, or such other fiscal year as may be adopted by the Authority.

“Fund” means each fund established and given a designation pursuant to the Indenture or any Supplemental Indenture.

“General Manager” means the person appointed by the Board under the Act to supervise the administration of the Authority as its chief executive officer.

“Government” means the Government of Guam or any successor to the rights, powers and obligations thereof under the Act with respect to the Bonds.

“Indenture” means the Indenture, as originally executed or as it may from time to time be supplemented, modified or amended by any Supplemental Indenture.

“Independent” means, when used with respect to any given person, that such person (who may be selected and paid by the Authority or the Government) (1) is in fact independent and not under domination of the Authority or the Government; (2) does not have any substantial interest, direct or indirect, with the Authority or the Government; and (3) is not connected with the Authority or the Government as an officer or employee of the Authority or the Government, but who may be regularly retained to provide services to the Authority or the Government.

“Interest Accrual Period” means, for any particular Bond, each period between successive Interest Payment Dates for such Bond, including in each case in such period the concluding Interest Payment Date but not the beginning Interest Payment Date, and treating the day prior to the date of original issuance of such Bond as if it were an Interest Payment Date for such Bond for this purpose.

“Interest Payment Date” means, for any particular Bond, each date specified as an Interest Payment Date for such Bond by the Supplemental Indenture authorizing the issuance of such Bond and, for all Bonds, all such dates.

“Investment Securities” means any of the following which at the time are legal investments under the laws of Guam for moneys held under the Indenture and then proposed to be invested therein (the Trustee and the Co-Trustee shall be entitled to rely upon a Request of the Authority directing investments under the Indenture as a determination that such investment constitutes a legal investment): (1) Federal Securities; (2) obligations, debentures, notes or other evidence of indebtedness issued or guaranteed by any of the following: Federal Home Loan Banks, Federal National Mortgage Association, Government National Mortgage Association, Federal Housing Administration or Federal Home Loan Mortgage Corporation; (3) interest-bearing demand or time deposits (including certificates of deposit) which are continuously and fully insured by the Bank Insurance Fund or the Savings Association Insurance Fund; (4) obligations, including deposits, federal funds borrowings and banker’s acceptances, of any bank, or of the subsidiary lead bank of any bank holding company, which has an unsecured, uninsured and unguaranteed obligation of equivalent maturity rated at least the second highest major rating category by each Rating Agency; (5) commercial paper rated at least the second highest rating category by each Rating Agency; (6) money market funds which are (a) restricted to Federal Securities or (b) registered under the Investment Company Act of 1940 and the shares of which are registered under the Securities Act of 1933, and have a rating by

S&P of AAAM-G; AAA-m; or AA-m and Moody's of Aaa, Aa1 or Aa2; (7) repurchase agreements, the underlying securities of which are specifically designated and are obligations described in clause (1) or (2) of this definition, provided that, (a) the agreement is between the municipal entity and a dealer bank or securities firm; (b) such dealer bank or securities firm is either a primary dealers on the Federal Reserve reporting dealer list rated "A" or better by Standard & Poor's and Moody's, or a bank rated "A" or better by Standard & Poor's and Moody's; (c) the agreement provides that the securities be delivered to the Authority, the Trustee, the Co-Trustee or third party acting as agent for either (if the Trustee or Co-Trustee is supplying the collateral) before payment or on a delivery versus payment basis; (d) the securities must be valued weekly, marked-to-market at current market price plus accrued interest; (e) the value of collateral must be equal to 104% (or 105% if the collateral is comprised of obligations of Federal National Mortgage Association or Federal Home Loan Mortgage Corporation) of the amount of cash transferred to the dealer bank or security firm plus accrued interest; and (f) the Authority receives a legal opinion that the agreement is a legal investment under the laws of Guam; (8) subject to the provisions of any Supplemental Indenture, investment agreements (a) with corporations, associations or financial institutions which have general obligations, or whose holding companies have general obligations, rated at least the second highest rating category by each Rating Agency, or (b) which agreements are continuously secured by obligations described in clause (1) or (2) of this definition which have a market value (valued at least weekly) not less than 103% of the amount so invested; and (9) any other investment approved in writing by each Credit Provider then providing a Credit Facility for Bonds not then in default of its obligations thereunder. None of the Trustee, the Co-Trustee nor any Depository shall be deemed, by entering into the Indenture, to have agreed to make the valuation required by clauses (7) and (8) of this definition, but such agreement by or on behalf of the Trustee, the Co-Trustee or a Depository shall be a condition precedent to investment in obligations of the type described in such clauses.

"Legislature" means the Legislature of Guam or any successor to the rights, powers and obligations thereof under the Act with respect to the Bonds.

"Mandatory Sinking Account Payment" means, as of any date of calculation with respect to any Series of Bonds, the amount required by the Indenture and any Supplemental Indenture to be paid by the Authority on a given date for the retirement of Term Bonds of such Series.

"Maximum Annual Debt Service" means, for any particular Bonds as of any particular date of calculation, Annual Debt Service on such Bonds for the Bond Year including or commencing on or after such date for which such sum shall be largest.

"Net Revenues" means, for any particular period, (a) the sum of (i) all of the Revenues (other than Payment Agreement Receipts) received during such period plus (ii) the aggregate amount of all transfers from the Rate Stabilization Fund to the Revenue Fund during such period, less (b) the sum of (x) all Operation and Maintenance Expenses incurred during such period plus (y) the amount of all transfers from the Revenue Fund to the Rate Stabilization Fund during such period.

"Ninth Supplemental Indenture" means the Supplemental Indenture, to be dated as of March 1, 2024, providing for the issuance of the Series 2024A Bonds.

"Operation and Maintenance Expenses" means such reasonable and necessary current expenses of the Authority, paid or accrued, for operation, maintenance and repair of the System as may be determined by the Board, and the term may include at the Board's option, except as limited by contract or otherwise limited by law, without limiting the generality of the foregoing: (a) legal and overhead expenses of the Authority directly related and reasonably allocable to the administration of the System; (b) fidelity bond and insurance premiums appertaining to the System or a reasonably allocable share of a premium of any blanket bond or policy pertaining to the System; (c) contractual services, professional services, salaries, administrative expenses, and costs of labor appertaining to System, including fees and expenses of the Trustee; (d) the costs incurred in the collection of all or any part of the Revenues; and (e) any costs of utility services furnished to the System by the Authority or otherwise. However, the term "Operation and Maintenance Expenses" as used in the Indenture does not include: (i) any allowance for depreciation; (ii) any costs of System capital renewals, replacements, major repairs, reconstruction, improvements, extensions or betterments; (iii) any accumulation of reserves for System capital renewals, replacements, major repairs or reconstruction; (iv) any reserves for operation, maintenance or repair of the System; (v) any liabilities incurred in the acquisition or improvement of any properties comprising the System or any combination thereof;

(vi) any other legal liability not based on contract; and (vii) payments made by the Authority to Guam Power Authority for power delivered prior to the Fiscal Year commencing October 1, 2003.

“Operation and Maintenance Fund” means the fund by that name established pursuant to the Indenture.

“Operation, Maintenance, Renewal and Replacement Reserve Fund” means the fund by that name established pursuant to the Indenture.

“Opinion of Counsel” means a written opinion of counsel (who may be counsel for the Authority) retained by the Authority. If and to the extent required by relevant provisions of the Indenture, each Opinion of Counsel shall include the statements provided for in such provisions.

“Order of the Authority, Request of the Authority, Requisition of the Authority, or Statement of the Authority” mean, respectively, a written order, request, requisition or statement signed by or on behalf of the Authority by the Chairperson or the General Manager or by any person (whether or not an officer of the Authority) who is specifically authorized by resolution of the Board to sign or execute such a document on behalf of the Authority.

“Other Credit Agreement Payments” means any payment obligation of the Authority pursuant to a Credit Agreement designated as such in a Supplemental Indenture.

“Outstanding”, when used as of any particular time with reference to: (A) Bonds, means (subject to the provisions of the Indenture relating to discharge of liability on Bonds) all Bonds theretofore executed, issued and delivered by the Authority under the Indenture except --(1) Bonds theretofore cancelled by the Trustee or surrendered to the Trustee for cancellation, (2) Bonds for the payment or redemption of which funds or securities in the necessary amount (as set forth in the Indenture) shall have theretofore been deposited with the Trustee (whether upon or prior to the maturity or redemption date of such Bonds), provided that, if such Bonds are to be redeemed prior to the maturity thereof, notice of such redemption shall have been given as in the Indenture provided or provision satisfactory to the Trustee shall have been made for the giving of such notice, and (3) Bonds in lieu of or in substitution for which other Bonds shall have been executed, issued and delivered by the Authority pursuant to the Indenture; (B) Payment Agreements, means all Payment Agreements which have not been paid or otherwise satisfied as provided in the proceedings and instruments pursuant to which such Payment Agreements have been incurred; provided that Payment Agreements shall not be Outstanding if the Authority or the Qualified Counterparty with respect thereto is in default thereunder; and (C) Credit Agreements, means all Credit Agreements which have not been paid or otherwise satisfied as provided in the proceedings and instruments pursuant to which such Credit Agreements have been incurred; provided that a Credit Agreement shall not be Outstanding during any period in which the Credit Provider with respect thereto is in default on its payment obligations thereunder.

“Parity Payment Agreement” means a Payment Agreement which is designated as such in a Supplemental Indenture, the payment of which constitutes a charge and lien on Revenues equal to and on a parity with the charge and lien upon the Revenues for the payment of the Bonds.

“Parity Payment Agreement Payments” means Payment Agreement Payments under a Parity Payment Agreement.

“Paying Agent” means any paying agent appointed pursuant to a Supplemental Indenture, and its successors and assigns as provided in the provisions of the Indenture regarding the Paying Agent.

“Payment Agreement” means any contract entered into by the Authority with a Qualified Counterparty in connection with, or incidental to, the issuance of Bonds, or the carrying of any investment or program of investment or entering into or maintaining any agreement which secures Bonds, which the Authority determines to be necessary or appropriate to place the obligation or investment of the Authority, as represented by such Bonds, investment, program of investment or agreement and the contract or contracts, in whole or in part, on the interest rate, currency, cash-flow, or other basis desired by the Authority, including, without limitation, contracts commonly known as interest rate swap agreements or contracts providing for payments based on levels of, or changes in, interest rates, or

contracts to exchange cash flows or a series of payments, or contracts, including, without limitation, interest rate floors or caps, options, put or call to hedge payment, rate, spread, or similar exposure and which is designated as such and as Related to particular Bonds in a Supplemental Indenture.

“Payment Agreement Payment Accrual Period” means, for any Payment Agreement, each period between successive Payment Agreement Payment Dates for such Payment Agreement, including in each case in such period the concluding Payment Agreement Payment Date but not the beginning Payment Agreement Payment Date, and treating the day prior to the effective date of such Payment Agreement as if it were a Payment Agreement Payment Date for such Payment Agreement for this purpose.

“Payment Agreement Payment Date” means, for any particular Payment Agreement, each date specified as a payment date in such Payment Agreement.

“Payment Agreement Payments” means amounts required to be paid periodically by the Authority to any Qualified Counterparty pursuant to a Payment Agreement, but not including (i) Termination Payments or (ii) such other payments as may be specified in a Supplemental Indenture.

“Payment Agreement Receipts” means amounts required to be paid periodically by a Qualified Counterparty to the Authority pursuant to a Payment Agreement, but not including Termination Payments.

“Principal Office” means, with respect to the Trustee, the Co-Trustee and any other Fiduciary, the office at the respective address set forth in the Indenture or at such other address as the respective party may have designated for such purpose. The Principal Office of any Credit Provider shall be as specified by such Credit Provider pursuant to its Credit Facility or Credit Agreement.

“Principal Payment Period” means, for any particular Bond, each period so designated by the Supplemental Indenture authorizing the issuance of such Bond.

“Project” means any particular additions, enlargements, betterments, extensions and other improvements to or related to, and the equipping of, the System, including, without limitation, the acquisition of land and furnishings therefor or the payment of any claims or judgments relating thereto, as specified and described by the Supplemental Indenture authorizing issuance of the first Series of Bonds for such Project, and as such specification and description may be modified in accordance with the Indenture.

“Project Costs” means, with respect to any given Project, all costs which are chargeable to the capital account of such Project, including, but not limited to, the following: (1) costs of the Authority and all contractors for land (including franchises, licenses or other interests in land), labor, materials, machinery, equipment and furnishings in connection with the acquisition, construction, reconstruction, installation and equipping of the Project or otherwise attributable to the Project; (2) the cost of relocation and installation of utilities, environmental cleanup and noise abatement; (3) the cost of contract bonds and insurance of all kinds that may be required or necessary during the construction of the Project; (4) all costs of architectural and engineering services, including the costs of test borings, surveys, estimates, plans and specifications and preliminary investigation therefor, and for inspecting and supervising construction, as well as for the performance of all other duties required by or consequent upon the proper construction of the Project; (5) relocation costs and any claims, awards or judgments relating to the Project; (6) Capitalized Interest; and (7) all amounts required to reimburse the Authority for advances made by it for any of the above items or for any other costs incurred and for work done, whether before or after the date of the Indenture, which are properly chargeable to the Project.

“Qualified Counterparty” means the party, other than the Authority, to a Payment Agreement; provided that any such party must satisfy the following requirements: (1) either (a) the obligations of such party under the Payment Agreement (or obligations of such type) must be rated in one of the three highest rating categories of each of the Rating Agencies then rating the Bonds (without regard to any gradations within a rating category), or (b) the obligations of such party under the Payment Agreement are guaranteed by a bond insurer or other institution, in each case the obligations of such type of which must be rated in one of the three highest rating categories of each of the Rating Agencies then rating the Bonds (without regard to any gradations within a rating category); and (2) such

party must be otherwise qualified to act as the other party to a Payment Agreement with the Authority under any applicable laws.

“Rate Stabilization Fund” means the fund by that name established pursuant to the Indenture.

“Rating Agency” means, as of any given date, each nationally recognized securities rating agency designated by the Indenture or any Supplemental Indenture as a Rating Agency under the Indenture and then rating any Series of Bonds.

“Rebate Fund” means the fund by that name established pursuant to the Indenture.

“Record Date” means, for any particular payment of principal of or interest or premium on particular Bonds, each date specified as a Record Date for such Bonds by the Supplemental Indenture authorizing the issuance of such Bonds.

“Redemption Price” means, with respect to any Bond (or portion thereof if less than all of a Bond is to be redeemed) the principal amount of such Bond (or portion) plus the applicable premium, if any, payable upon redemption thereof pursuant to the provisions of such Bond and the Indenture.

“Registrar” means any registrar appointed pursuant to a Supplemental Indenture, and its successors and assigns as provided in the Indenture.

“Related” means, with respect to any particular Payment Agreement, having been designated as such with respect to any particular Bonds pursuant to a Supplemental Indenture.

“Renewal and Replacement Costs” means the costs of System capital renewals, replacements, major repairs or reconstruction.

“Revenue Fund” means the Guam Waterworks Authority Revenue Fund established pursuant to the Act.

“Revenues” means all gross income and other amounts received or receivable by the Authority as revenues of any kind from the ownership or operation of any part of the System, including all rates, fees and charges (including ground water, surface water and treated water charges and all sewer and wastewater service charges), received by the Authority for providing water and sewer services (but excluding development charges and assessments and hook-up fees and other special charges such as penalties and fines), all Payment Agreement Receipts, and all proceeds of insurance or grants covering business interruption loss (and related losses and expenses) relating to the System, and all other income and revenue howsoever derived by the Authority from the ownership or operation of, or arising from, the System, together with all interest, profits or other income derived from the investment of amounts in the Revenue Fund, but not including: (1) amounts received as insurance proceeds (except as provided above) or from the sale, transfer or other disposition of, or upon the taking by or under the threat of eminent domain of, all or any part of the System (which moneys shall be received and disposed of pursuant to the relevant provision of the Indenture), (2) proceeds from any securities issued by the Authority or proceeds from loans obtained by the Authority, (3) the proceeds of any court or arbitration award or settlement in lieu thereof received by the Authority, (4) amounts received by the Authority as gifts or as grants (except as provided above), whether restricted or unrestricted; and (5) other amounts (except as provided above), the use of which is restricted by the donor or grantor.

“Serial Bonds” means Bonds designated as Serial Bonds in the Supplemental Indenture providing for the issuance of such Series and for which no Mandatory Sinking Account Payments are provided.

“Series or Series of Bonds” means and refers to all Bonds of like designation and described as such in a Supplemental Indenture authenticated and delivered on original issuance at the same time pursuant to the Indenture, and any Bonds thereafter delivered in lieu of or substitution for any of such Bonds pursuant to the Indenture.

“Series 2024A Bonds” means the Guam Waterworks Authority Water and Wastewater System Revenue Refunding Bonds, Series 2024A.

“Series 2024A Costs of Issuance Account” means the account by such name as established by the Ninth Supplemental Indenture.

“Series 2024AB Bonds” means, together, the Series 2024A Bonds and the Series 2024B Bonds.

“Series 2024B Bonds” means the Guam Waterworks Authority Water and Wastewater System Revenue Refunding Bonds, Series 2024B.

“Series 2024B Costs of Issuance Account” means the account by such name as established by the Tenth Supplemental Indenture.

“Sinking Accounts” means any special account or accounts established by any Supplemental Indenture or Indentures in the Debt Service Fund for the payment of Term Bonds.

“Subordinate Securities” means any obligations of the Authority payable from the Subordinate Securities Fund and having a lien, if any, on Revenues subordinate to the pledge and lien of the Indenture securing the payment of the Bonds.

“Subordinate Securities Fund” means the fund by that name established pursuant to the Indenture for the purposes provided in the Indenture.

“Supplemental Indenture” means any indenture duly authorized under and in compliance with the Act, entered into by and between the Authority, the Trustee and the Co-Trustee and accepted by each Depository, Paying Agent and Registrar the duties of which are affected thereby, supplementing, modifying or amending the Indenture; but only if and to the extent that such Supplemental Indenture is specifically authorized under the Indenture.

“System” means the water and sewer systems, now or hereafter existing, owned and/or operated by the Authority or its contractors, agents or subcontractors.

“Tax Certificate” means a Certificate of the Authority concerning the calculation of any amount to be paid to the United States of America pursuant to Section 148(f) of the Code and any other matters relating to the exclusion of interest on Bonds from gross income for federal income tax purposes.

“Tenth Supplemental Indenture” means the Supplemental Indenture, to be dated as of April 1, 2024, providing for the issuance of the Series 2024B Bonds.

“Term Bonds” means Bonds designated as Term Bonds in the Supplemental Indenture providing for the issuance of such Series and which are payable at or before their specified maturity date or dates from Mandatory Sinking Account Payments established for that purpose and calculated to retire such Bonds on or before their specified maturity date or dates.

“Termination Payments” means amounts required to be paid by the Authority or a Qualified Counterparty pursuant to a Payment Agreement in connection with a termination of all or any portion thereof.

“Trustee” means Bank of Guam, appointed by the Authority as Trustee in the Indenture and acting as an independent trustee with the duties and powers provided in the Indenture, its successors and assigns, and any other corporation or association which may at any time be substituted in its place as provided in the Indenture.

“Variable Rate Bonds” means Bonds which bear interest at a variable rate of interest.

THE BONDS

Authorization of Bonds

Bonds may be issued under the Indenture from time to time in order to obtain funds for the purposes authorized in the Indenture. The Bonds shall be issued under the Act for the purpose of financing or refinancing the acquisition, construction, reconstruction, improvement, betterment, extension, financing and refinancing of the System. The aggregate principal amount of Bonds which may be issued under the Indenture is not limited (subject, however, to the right of the Authority, which is reserved under the Indenture, to limit or restrict the aggregate principal amount of Bonds which may at any time be issued and Outstanding under the Indenture) and consists or may consist of one or more Series of varying denominations, dates, maturities, interest rates and other provisions, all issued and to be issued pursuant to the Indenture and the Act, subject to the limitations on the issuance of Bonds contained in the Indenture. The Bonds are designated as the “Guam Waterworks Authority Water and Wastewater System Revenue Bonds.” The Bonds may be issued in such Series as from time to time shall be established and authorized by the Authority by Supplemental Indenture, subject to the provisions and conditions contained in the Indenture.

Payment of Bonds

The principal of and premium, if any, on each Series 2024AB Bond shall be payable in lawful money of the United States of America to the Owner of such Bond, upon the surrender of such Bond at the Principal Office of any Paying Agent for such Bond. The interest on each Series 2024AB Bond shall be payable in like lawful money to the person whose name appears on the bond registration books of the Registrar for such Bond as the Owner of such Bond as of the close of business on the Record Date for such Bond preceding the Interest Payment Date, whether or not such Record Date is a Business Day, such interest to be paid by check or mailed by first class mail to such Owner at such address as appears on such registration books or at such address as such Owner may have filed with the Registrar for that purpose. Upon the written request of a registered owner of \$1,000,000 or more in aggregate principal amount of Series 2024AB Bonds, payment of interest on and principal (including Redemption Price) of such Bonds shall be made by wire transfer from the Paying Agent to the registered owner of such Bonds. Any such principal payment by wire transfer shall nevertheless be subject to prior surrender of the Series 2024AB Bonds with respect to which such payment is made. Each payment of interest or principal on Series 2024AB Bonds, whether by check, draft or wire transfer, shall be accompanied by information specifying for each maturity of such Bonds with respect to which such payment is being made, the amount and the CUSIP number (if available).

Execution of Bonds

The Bonds shall be executed on behalf of the Authority by the manual or facsimile signature of the Chairperson, and countersigned by the manual or facsimile signature of the Chief Financial Officer. The Bonds shall then be delivered to the applicable Registrar for authentication by it. In case any of the officers who shall have signed or countersigned any of the Bonds shall cease to be such officer or officers before the Bonds so signed or countersigned shall have been authenticated or delivered by the Registrar or issued by the Authority, such Bonds may nevertheless be authenticated, delivered and issued and, upon such authentication, delivery and issue, shall be as binding upon the Authority as though those who signed and countersigned the same had continued to be such officers of the Authority, and also any Bond may be signed and countersigned on behalf of the Authority by such persons as on the actual date of the execution of such Bond shall be the proper officers of the Authority although at the nominal date of such Bond any such person shall not have been such officer of the Authority.

Except as may be provided in any Supplemental Indenture, only such of the Bonds as shall bear thereon a certificate of authentication in the form recited in the Indenture, manually executed by the applicable Registrar, shall be valid or obligatory for any purpose or entitled to the benefits of the Indenture, and such certificate of the Registrar shall be conclusive evidence that the Bonds so authenticated have been duly authenticated and delivered under the Indenture and are entitled to the benefits of the Indenture.

Transfer of Bonds

Any Bond may, in accordance with its terms, be transferred, upon the books required to be kept pursuant to the Indenture, by the person in whose name it is registered, in person or by its duly authorized attorney, upon surrender of such Bond for cancellation, accompanied by delivery of a duly executed written instrument of transfer in a form approved by the applicable Registrar.

Whenever any Bond or Bonds shall be surrendered for transfer, the Authority shall execute and the applicable Registrar shall authenticate and deliver a new Bond or Bonds of the same Series and maturity, for a like aggregate principal amount of authorized denominations. The Registrar shall require the payment by any Bondowner requesting any such transfer of any tax or other governmental charge required to be paid with respect to such transfer.

No transfer or exchange of any Bond of any Series shall be required during the period established by the applicable Registrar for the selection of Bonds of such Series for redemption or at any time after selection of such Bond for redemption.

ISSUANCE OF BONDS; ISSUANCE OF A SERIES OF BONDS; PARITY PAYMENT AGREEMENTS

Issuance of Bonds

At any time after the execution of the Indenture and one or more appropriate Supplemental Indentures, the Authority may sell and execute one or more Series of Bonds and the Registrar for each such Series of Bonds is required to authenticate and, upon the Order of the Authority, deliver such Series of Bonds. The proceeds received by the Authority from the sale of each Series of Bonds are required to be deposited with the Trustee or the Co-Trustee, who shall forthwith set aside such proceeds in such respective funds and accounts as are directed by a Request of the Authority, subject to the requirements of the Indenture.

Establishment and Application of Construction Accounts; Modification of Projects

With respect to each Project or Series, as determined by the Authority, the Depository for the Construction Account for such Project or Series shall establish within the Construction Fund and maintain and hold in trust under the Indenture a separate account designated as the “_____ Construction Account” (inserting therein the Project or Series designation). Amounts in each Construction Account shall be used and withdrawn, as provided in the Indenture, solely for the payment of Project Costs of such Project (or of the Project or Projects for which such Series is being issued), including by (1) direct payment, (2) payment of any debt obligations issued by the Authority, or repayment of any advances made from any source, to finance temporarily such Project Costs, (3) payment of Capitalized Interest accruing on Bonds issued for such Project as specified in the Supplemental Indenture relating thereto, and (4) payment of Costs of Issuance of such Bonds. A Depository shall disburse moneys in a Construction Account only upon Requisition of the Authority stating the person to whom payment is to be made, the amount to be paid, the purpose for which the obligation was incurred and that such payment is a proper and lawful charge against such account.

The Authority may modify the specifications or description of any Project or Projects by filing with the Trustee and each Depository for each Construction Account for such Project or Projects a Certificate of the Authority describing such modification, together with a written report of a Consulting Engineer to the effect that such modification will have no material adverse effect on the Authority’s ability to comply with the rate covenant contained in the Indenture and an opinion of Bond Counsel to the effect that such modification and the use of amounts in such Construction Accounts for such modified Project or Projects will not adversely effect the exclusion, if any, of interest on any Bonds from gross income for federal income tax purposes.

Upon receipt of a Certificate of the Authority that amounts in any Construction Account are no longer required for the purpose of such account, said amounts shall be transferred to the Capital Improvement Fund or any other fund or account designated by the Authority in such Certificate; provided, however, that any such transfer shall be subject to receipt by the Trustee of an opinion of Bond Counsel to the effect that such transfer and the use of such

amounts for the purposes intended by the Authority after such transfer will not adversely affect the exclusion, if any, of interest on any Bonds from gross income for federal income tax purposes.

All interest and other profits derived from the investment of moneys in each Construction Account shall be retained therein.

Establishment and Application of 2024A Costs of Issuance Account and 2024B Costs of Issuance Account

Pursuant to the Ninth Supplemental Indenture and the Tenth Supplemental Indenture, the Trustee is required to establish within the Construction Fund separate accounts (the “Series 2024A Costs of Issuance Account” and “Series 2024B Costs of Issuance Account”) to be used and withdrawn, as provided in the Indenture, solely for the payment of Costs of Issuance of the Series 2024A Bonds and the Series 2024B Bonds, respectively. Any moneys remaining on deposit in the Series 2024A Costs of Issuance Account after the date specified in the Ninth Supplemental Indenture and the Series 2024B Costs of Issuance Account after the date specified in the Tenth Supplemental Indenture are to be transferred and deposited in the Revenue Fund.

Issuance of Additional Series of Bonds

In addition to the initial Series of Bonds, the Authority may by Supplemental Indenture establish one or more other Series of Bonds payable from Revenues on a parity with the initial Series of Bonds and Parity Payment Agreements and secured by a lien upon and pledge of Revenues equal to the lien and pledge securing the initial Series of Bonds and Parity Payment Agreements, and the Authority may issue Bonds of any Series so established, in such principal amount and for such lawful purpose or purposes (including refunding of any Bonds issued under the Indenture and then Outstanding) as shall be specified by the Authority in said Supplemental Indenture, but only upon compliance by the Authority with the relevant provisions of the Indenture and subject to the following specific conditions, which are conditions precedent to the issuance of any such additional Series of Bonds: (1) no Event of Default shall have occurred and then be continuing; (2) the Supplemental Indenture providing for the issuance of such additional Series of Bonds shall specify the purposes for which such Series is being issued, which shall be one or more of the following (a) to provide moneys for deposit into a Construction Account and withdrawal therefrom in accordance with law for purposes other than the refunding of Bonds, or (b) to refund all or part of the Bonds of any one or more Series then Outstanding, by depositing with the Trustee, in trust, moneys or noncallable Federal Securities in the necessary amount to discharge all liability of the Authority with respect to the Bonds to be refunded as provided in the Indenture and to make any payment necessary or desirable in connection with the termination of any Related Payment Agreement in connection with such refunding; (3) the Supplemental Indenture providing for the issuance of such additional Series of Bonds shall require that the amount in the Bond Reserve Fund be increased, if and to the extent necessary, to an amount at least equal to the Bond Reserve Fund Requirement for such Series. Said deposit may be made from such proceeds or any other source, as provided in the Indenture; (4) the aggregate principal amount of Bonds issued under the Indenture shall not exceed any limitation imposed by law or by the Indenture; and (5) the representations and estimates set forth in the certificates and written reports required by the Indenture for such Series shall have been made by the parties required to give such certificates and written reports.

Additional Parity Payment Agreements

The Authority may enter into Parity Payment Agreements payable from Revenues on a parity with the Bonds and other Parity Payment Agreements and secured by a lien upon and pledge of Revenues equal to the lien and pledge securing the Bonds and other Parity Payment Agreements, but only upon compliance by the Authority with the relevant provisions of the Indenture, and subject to the following specific conditions, which are conditions precedent to the entering into by the Authority of any Parity Payment Agreement: (1) no Event of Default shall have occurred and then be continuing; (2) the representations and estimates set forth in the certificates and written reports required by the Indenture shall have been made by the parties required to give such certificates and written reports; and (3) the Authority, the Trustee and the Co-Trustee shall have executed and delivered a Supplemental Indenture designating such agreement as a Parity Payment Agreement and the Bonds to which such Parity Payment Agreement is Related.

Other Payment Agreements

In addition to Parity Payment Agreements, the Authority may enter into Payment Agreements payable from Revenues after and subordinate to the payment from Revenues of payments with respect to the Bonds and Parity Payment Agreements, but only upon compliance by the Authority with any applicable provisions of the Indenture and any such agreement shall constitute a Payment Agreement upon execution and delivery by the Authority, the Trustee and the Co-Trustee of a Supplemental Indenture designating such agreement as a Payment Agreement and the Bonds to which such Payment Agreement is Related.

Proceedings for the Issuance of a Series of Bonds; Parity Payment Agreements.

Whenever the Authority shall determine to issue a Series of Bonds, the Authority shall execute and deliver a Supplemental Indenture providing for the issuance of such Series of Bonds and specifying the terms and conditions of such Series of Bonds, including the following: (1) the authorized principal amount of such Series; (2) the purpose or purposes for which such Series is being issued and, if such purpose is the deposit of moneys in a Construction Account, the Project or Projects for which such Series is being issued (including any appropriate modifications to any previously specified or described Project or Projects); (3) the amount of the Bond Reserve Fund Requirement upon the issuance of such Series; (4) the amount to be deposited (or otherwise available) in the Bond Reserve Fund upon the issuance of such Series, the source or sources of such amount (which may be proceeds of such Series, a Credit Facility or other amounts available for such purpose); (5) the amount, if any, to be deposited in the applicable Construction Account, if any, upon the issuance of such Series, and the source or sources of such deposit (which may be the proceeds of such Series or other amounts available for such purpose); (6) the amounts, if any, to be reserved within the applicable Construction Account to pay Costs of Issuance and Capitalized Interest of such Series and the source or sources of such amounts (which may be the proceeds of such Series or other amounts available for such purpose); (7) the amount, if any, to be deposited in the Debt Service Fund as accrued interest upon the issuance of such Series; (8) the Credit Facility and Credit Provider, if any, for such Series and any special provisions not inconsistent with the terms of the Indenture relating to such Credit Facility and designating any Credit Agreement Payments with respect thereto; (9) the Related Payment Agreement, if any, and Qualified Counterparty with respect thereto and any provisions not inconsistent with the terms of the Indenture relating to such Payment Agreement; (10) the appointment of the Registrar and any Paying Agents for such Series and, if necessary, any Depositary for any Funds or Accounts relating to such Series; (11) the form, title and designation of, and the manner of numbering and lettering, Bonds of such Series; (12) the denomination or denominations of Bonds of such Series; (13) the date or dates of maturity and Principal Payment Periods of Bonds of such Series and the manner of payment of principal of such Bonds; (14) the rate or rates of interest or the manner of determining such rate or rates borne by the Bonds of such Series and the Record Dates and Interest Payment Dates for such Bonds; (15) the Bonds of such Series which are Serial Bonds (if any) and the Bonds of such Series which are Term Bonds (if any); (16) the terms of redemption, if any, of Bonds of such Series; (17) the date and amount of each Mandatory Sinking Account Payment (if any) required to be paid by the Authority for the retirement of Term Bonds of such Series; (18) the designation of any accounts to be established pursuant to the Indenture and any other accounts deemed advisable by the Authority; (19) any tax or other covenants which, in the judgment of the Authority, are designed to insure that interest on such Series of Bonds will be excludable from gross income for federal income tax purposes and which are not inconsistent with the provisions of the Indenture; provided, however, that the Authority may, in its sole and absolute discretion, determine in connection with the authorization of a Series of Bonds that it will not make any such covenants because interest on such Series is not intended to be excludable from gross income for federal income tax purposes; and (20) any other provisions deemed advisable by the Authority, not in conflict with or in substitution for the provisions of the Indenture (except as expressly permitted in the Indenture).

Before any Series of Bonds shall be issued and delivered and before any Parity Payment Agreements are entered into, the Authority shall file the following documents with the Trustee:

(a) If and to the extent that an additional Series of Bonds is being issued, an Opinion of Counsel setting forth (i) that such counsel has examined the Supplemental Indenture; (ii) that the execution and delivery of the additional Series of Bonds have been duly authorized by the Authority; and (iii) that said additional Series of Bonds, when duly executed by the Authority and, if required, authenticated and delivered by the Registrar for such Bonds, will be valid and binding special obligations of the Authority, payable from Revenues as provided in the Indenture;

(b) A Certificate of the Authority that no Event of Default has occurred and is then continuing; and

(c) (i) If and to the extent that an additional Series of Bonds is being issued for the purpose of providing moneys for deposit in a Construction Account, the following certificates:

(A) A certificate of a Consulting Engineer setting forth (I) the projected Date of Completion for the Project or Projects for which such Series of Bonds is being issued and for any other uncompleted Projects, and (II) an estimate of the cost of construction of such Projects;

(B) A written report of a Consulting Engineer setting forth for each Fiscal Year from the then current Fiscal Year through the later of (I) the first Fiscal Year commencing at least five years after the date of original issuance of such additional Series, or (II) the first Fiscal Year commencing at least three years after the Date of Completion projected by the Consulting Engineer pursuant to subparagraph (A) above, estimates of Revenues, Operation and Maintenance Expenses and Net Revenues; and

(C) A Certificate of the Authority (I) setting forth (a) the estimates of Revenues, Operation and Maintenance Expenses and Net Revenues, as set forth in the written report of a Consulting Engineer pursuant to subparagraph (B) above, for each of the Fiscal Years covered by such report, and (b) the Aggregate Annual Debt Service and Capitalized Interest for each of such Fiscal Years, including Annual Debt Service and Capitalized Interest on all future Series of Bonds, if any, which such Certificate of the Authority shall estimate (based on the estimate of the Consulting Engineer of the cost of construction of such Projects) are required to complete payment of the cost of construction of such Projects, and (II) demonstrating that for each of such Fiscal Years (a) Revenues are projected to be at least equal to the aggregate amount of all transfers required to be made to the Operations and Maintenance Fund, the Debt Service Fund, the Bond Reserve Fund, the Subordinate Securities Fund, and the Operation, Maintenance, Renewal and Replacement Reserve Fund for such Fiscal Year and, to the extent applicable, otherwise required to provide for the payment of all obligations of the Authority to be paid from Revenues, and (b) Net Revenues are projected to be at least equal to 1.25 times Aggregate Annual Debt Service.

(ii) In lieu of the certificates and reports described above in subparagraphs (i)(A), (B) and (C) above, the Authority may deliver to the Trustee a Certificate of the Authority to the effect that for the last complete Fiscal Year or any period of 12 consecutive calendar months out of the 18 calendar months next preceding the original issuance of such Series of Bonds, Net Revenues for such Fiscal Year or 12-month period equaled at least 1.25 times the Maximum Annual Debt Service on all Bonds then Outstanding plus the Series of Bonds being issued.

(iii) In addition, a Series of Bonds may be issued for the sole purpose of depositing in a Construction Account the amounts necessary to complete any one or more Projects without filing with the Trustee of the certificates and reports described in subparagraphs (i)(B) and (C), if such certificates and reports demonstrating compliance with such subparagraphs were filed in connection with the issuance of the prior Series of Bonds for each of such Projects and if the principal amount of such Bonds to be issued for completion purposes does not exceed ten percent (10%) of the principal amount of Bonds previously issued for and allocable to such Projects.

If and to the extent that an additional Series of Bonds is being issued for the purpose of refunding Bonds, either (i) a certificate of an Independent Certified Public Accountant that Aggregate Annual Debt Service for each Fiscal Year thereafter will be less than or equal to Aggregate Annual Debt Service for each such Fiscal Year in the absence of such refunding, or (ii) the certificates and reports described in paragraphs (A) (if any one or more of the Projects for which the Bonds being refunded is not then completed), (B) and (C) above; provided that in lieu of the certificates and reports described in paragraphs (A), (B) and (C) above, the Authority may deliver to the Trustee the certificate described in paragraph (ii) above.

If and to the extent that a Parity Payment Agreement, other than a Parity Payment Agreement all payments pursuant to which have been taken into account for purposes of determining that the requirements have been satisfied with respect to the issuance of the Related Bonds, is being entered into, either (i) a certificate of an Independent Certified Public Accountant that Aggregate Annual Debt Service for each Fiscal Year thereafter will be less than or equal to Aggregate Annual Debt Service for each such Fiscal Year in the absence of such Parity Payment Agreement, or (ii) the certificates and reports described in paragraphs (B) and (C) above, in each case

treating such Payment Agreement as in effect for purposes of any calculations; provided that in lieu of the certificates and reports described in said paragraphs (B) and (C), the Authority may deliver to the Trustee the certificate described in paragraph (ii) above, treating such Payment Agreement as in effect for purposes of any calculations.

In connection with the issuance of an additional Series of Bonds, upon the delivery to the Trustee of the foregoing instruments, the applicable Registrar is required to authenticate and deliver said additional Series of Bonds, in the aggregate principal amount specified in such Supplemental Indenture, to, or upon the Order of, the Authority, when such additional Series of Bonds shall have been presented to it for that purpose.

Validity of Bonds

The validity of the authorization and issuance of the Bonds shall not be dependent on or affected in any way by any proceedings taken by the Authority for the improvement of the System, or by any contracts made by the Authority in connection therewith, or the failure to construct the System or any part thereof. The recital contained in the Bonds that the same are regularly issued pursuant to the Act shall be conclusive evidence of their validity and of compliance with the provisions of law in their issuance.

REDEMPTION OF BONDS

Terms of Redemption

Any Series of Bonds may be made subject to redemption prior to maturity, as a whole or in part, at such time or times, and upon payment of the principal amount thereof plus such premium or premiums, if any, as may be determined by the Authority at the time such Series is authorized and as shall be set forth in the Supplemental Indenture authorizing such Series; provided, however, that such Supplemental Indenture shall provide that the Authority shall have the right, on any date, to redeem the Bonds of any such Series, as a whole, or in part so that the reduction in Annual Debt Service for the Bonds of such Series for each Bond Year after such redemption shall be as nearly proportional as practicable, from and to the extent of proceeds received by the Authority due to a governmental taking of the System or portions thereof by eminent domain proceedings, if such amounts are not used for additions, improvements or extensions to the System, under the circumstances and upon the conditions and terms set forth in the provisions of the Indenture relating to eminent domain proceeds, at the principal amount thereof plus interest accrued thereon, without premium.

Selection of Bonds for Redemption. For purposes of selecting Bonds for redemption, Bonds shall be deemed to be composed of portions equal to their respective minimum authorized denomination, and any such portion may be separately redeemed. The applicable Registrar shall promptly notify the Authority, the Trustee and the Co-Trustee in writing of the Bonds or portions thereof selected for redemption.

Notice of Redemption. A copy of any notice of redemption shall be sent by first class mail to each Owner of \$1,000,000 or more in aggregate principal amount of Bonds to be redeemed and to each of the Fiduciaries, each of the Credit Providers, the Securities Depositories (as defined in the Indenture) and two or more Information Services (as defined in the Indenture); provided, however, that failure to give notice pursuant to this sentence by certified mail to any Bondowners, to any Fiduciaries, to any Credit Providers or to any Securities Depositories or Information Services, or the insufficiency of any such notices, shall not affect the sufficiency of the proceedings for redemption of any Bonds. A second notice shall be sent by first class mail to the registered owner of any Bond which has been called for redemption in whole or in part, and is not surrendered for payment within 60 days after the date fixed for redemption; provided, however, that failure to send any such second notice, or any deficiency of any such notice, shall not affect the sufficiency of the proceedings for redemption of any Bonds.

Partial Redemption. Upon surrender of any Bond redeemed in part only, the Authority shall execute and the applicable Registrar shall authenticate and deliver to the registered owner thereof, at the expense of the Authority, a new Bond or Bonds of authorized denominations, and of the same Series, maturity and tenor, equal in aggregate principal amount to the unredeemed portion of the Bond surrendered.

Effect of Redemption

Notice of redemption having been duly given as aforesaid, and moneys being held by the Trustee, the Co-Trustee or Paying Agents for payment of the Redemption Price of, and interest accrued to the redemption date on, the Bonds (or portions thereof) so called for redemption on the redemption date designated in such notice, such Bonds (or such portions) shall become due and payable at the Redemption Price specified in such notice plus interest accrued thereon to the date fixed for redemption, interest on the Bonds so called for redemption shall cease to accrue, said Bonds (or portions thereof) shall cease to be entitled to any benefit or security under the Indenture, and the Owners of said Bonds shall have no rights in respect thereof except to receive payment of said Redemption Price and accrued interest.

All Bonds purchased or redeemed pursuant to the provisions of the Indenture shall be cancelled upon surrender thereof and delivered to or upon the Order of the Authority.

REVENUES AND FUNDS

Revenue Fund

The Authority shall deposit all Revenues upon the receipt thereof in the Revenue Fund. Subject only to the provisions of the Indenture permitting the application thereof for or to the purposes and on the terms and conditions set forth in the Indenture, the Trustee and the Depositary shall be entitled to and shall collect and receive all of the Revenues, and any Revenues collected or received by the Authority shall be deemed to be held, and to have been collected or received, by the Authority as the agent of the Trustee, the Co-Trustee and the Depositary for the Revenue Fund and shall forthwith be paid by the Authority to such Depositary.

All moneys at any time deposited with the Trustee, the Co-Trustee or any Depositary, as the case may be, are required to be held by the Trustee, the Co-Trustee or such Depositary, as the case may be, in trust for the benefit of the Owners at any time of the Bonds (and, to the extent any Credit Agreement Payment is due and payable, for the benefit of the applicable Credit Provider), and the Authority is to have no beneficial right or interest in any of such moneys, except as in the Indenture provided. All Revenues and other moneys so deposited shall be held, disbursed, allocated and applied only as provided in the Indenture.

Rebate Fund, Series 2024A Rebate Account and Series 2024B Rebate Account

The Trustee, as Depositary for the Revenue Fund, shall establish and maintain within the Rebate Fund separate subaccounts designated as the "Series 2024A Rebate Account" and the "Series 2024B Rebate Account." There shall be deposited in the Series 2024A Rebate Account and the Series 2024B Rebate Account from amounts in the Operation and Maintenance Fund or other lawfully available moneys such amounts as are required to be deposited therein pursuant to the Tax Certificate delivered by the Authority in connection with the issuance of the Series 2024A Bonds and the Series 2024B Bonds. All money at any time deposited in the Series 2024A Rebate Account or the Series 2024B Rebate Account is required to be held by the Trustee in trust, to the extent required to satisfy the Rebate Requirement for the Series 2024A Bonds and the Series 2024B Bonds (as defined in such Tax Certificate), for payment to the United States of America, and the United States of America is granted a first lien on such money until such payment. All amounts required to be deposited into or on deposit in the Series 2024A Rebate Account and the Series 2024B Rebate Account will be governed exclusively by the Indenture and by such applicable Tax Certificate.

In the event that the amount in the Series 2024A Rebate Account or the Series 2024B Rebate Account exceeds the Rebate Requirement for the Series 2024A Bonds and the Series 2024B Bonds, upon the Request of the Authority, the Trustee is required to transfer the excess from the Series 2024A Rebate Account or the Series 2024B Rebate Account to the Revenue Fund.

Notwithstanding any provisions of the Indenture relating to the Rebate Fund or Rebate Accounts, if the Authority shall provide to the Trustee an opinion of Bond Counsel that any specified action required under such provisions is no longer required or that some further or different action is required to maintain the exclusion from

federal income tax of interest on any Series of Bonds, the Trustee and the Authority may conclusively rely on such opinion in complying with the requirements of the Indenture relating to the Rebate Fund, and, notwithstanding the requirements of the Indenture for modifications to the Indenture, the covenants under the Indenture shall be deemed to be modified to that extent.

Application of Debt Service Fund

Subject to the provisions of the next paragraph, on each Mandatory Sinking Account Payment date, the Co-Trustee shall apply the Mandatory Sinking Account Payment or Payments required on that date to the redemption (or payment at maturity, as the case may be) of the applicable Term Bonds upon the notice and in the manner provided in the Indenture. At any time prior to giving such notice of such redemption, the Co-Trustee, upon the Request of the Authority, shall apply moneys in the Debt Service Fund, in an amount not in excess of such Mandatory Sinking Account Payment, to the purchase of the applicable Term Bonds at public or private sale, as and when and at such prices (including brokerage and other charges) as are specified in such Request, except that the purchase price (excluding accrued interest) shall not exceed the price that would be payable for such Bonds upon redemption by application of such Mandatory Sinking Account Payment.

If (1) during the twelve-month period immediately preceding a Mandatory Sinking Account Payment date the Co-Trustee purchases the applicable Term Bonds with moneys in the Debt Service Fund, or (2) during said period and prior to giving notice of redemption the Authority otherwise deposits the applicable Term Bonds with the Co-Trustee (together with a Request of the Authority to apply such Bonds so deposited to the Mandatory Sinking Account Payment due on said date), the amount of Bonds so purchased or deposited shall be credited at the time of such purchase or deposit, to the extent of the full principal amount thereof, to reduce such Mandatory Sinking Account Payment. All Bonds purchased or deposited pursuant to this paragraph are required be cancelled and destroyed by the Co-Trustee.

With respect to each series of Bonds for which proceeds of the sale thereof are required to be set aside to pay interest on the Bonds, the Co-Trustee (if so instructed by the Supplemental Indenture providing for the issuance of such series) shall transfer from the Construction Fund and deposit in the Debt Service Fund the amounts at the times specified in the Supplemental Indenture providing for the issuance of such Series.

Application of Bond Reserve Fund

All amounts in the Bond Reserve Fund shall be used and withdrawn by the Co-Trustee solely for the purpose of paying debt service on Bonds (including Payment Agreement Payments to the extent provided in any Supplemental Indenture) in the event of a deficiency in the Debt Service Fund, in the manner and to the extent set forth in the Indenture. So long as the Authority is not in default under the Indenture, any amount in the Bond Reserve Fund in excess of the Bond Reserve Fund Requirement shall be transferred to the Revenue Fund. A Supplemental Indenture providing for the issuance of a Series of Bonds may provide that income derived from the investment of the proceeds of such Series in the Bond Reserve Fund prior to the completion of each Project for which such Bonds were issued shall be deposited in the Construction Account for such Project. Otherwise, such income shall be deposited in the Revenue Fund.

If and to the extent provided by a Supplemental Indenture, and subject to certain provisions of the Indenture, the Bond Reserve Fund Requirement may be wholly or partially satisfied by a Credit Facility.

Application of Operation, Maintenance, Renewal and Replacement Reserve Fund

All amounts in the Operation, Maintenance, Renewal and Replacement Reserve Fund shall be used and withdrawn upon Requisition of the Authority solely for the purposes of (A) paying Operation and Maintenance Expenses if and to the extent that amounts on deposit in the Operation and Maintenance Fund are insufficient for such purpose, (B) paying Renewal and Replacement Costs budgeted by the Authority, pursuant to the budget, as revised, filed in accordance with the Indenture, for the then current Fiscal Year, and (C) paying the costs of repair or replacement of loss or damage caused by or resulting from fire or from action of the elements (including loss from typhoons, earthquakes, floods and tidal waves), whether or not such costs are Operation and Maintenance Expenses

or Renewal and Replacement Costs. For purposes of this Section, any check, draft, warrant or purchase order of the Authority executed by an officer or employee of the Authority duly authorized by resolution of the Board of Directors of the Authority to execute such instruments shall be treated as a Requisition.

Application of Rate Stabilization Fund

All amounts in the Rate Stabilization Fund shall be transferred by the Authority from time to time to the Revenue Fund in the amounts specified by a Certificate of the Authority which also certifies that such amount is consistent with the annual budget established by the Authority pursuant to the Indenture.

Application of Capital Improvement Fund

Except as may be otherwise set forth in a Supplemental Indenture, all amounts in the Capital Improvement Fund may be used and withdrawn by the Authority for any lawful purpose of the Authority or may be transferred to the Revenue Fund, in each case upon Request of the Authority. The Authority may direct the appropriate Depository to establish accounts within the Capital Improvement Fund for appropriate purposes, and may restrict the purposes for which amounts in any such account may be used and withdrawn so long as such purposes are lawful purposes.

Application of Subordinate Securities Fund

All amounts in the Subordinate Securities Fund may be used and withdrawn, as directed by a Request of the Authority, for the purpose of paying debt service due on Subordinate Securities, amounts due pursuant to Payment Agreements (including Termination Payments), funding or replenishing reasonable reserves and meeting other requirements of the instrument pursuant to which such Subordinate Securities are issued.

Investment of Moneys in Funds

All Investment Securities and any other investments acquired with moneys held under the Indenture shall be acquired subject to the limitations of any covenant relating to the exclusion of interest on Bonds from gross income for federal income tax purposes, to the limitations as to maturities set forth in the Indenture and to such additional limitations or requirements consistent with the foregoing as may be established by Request of the Authority. No Investment Security which is subject to redemption at the option of the issuer may be purchased at a premium above the amount of the premium payable upon any such redemption.

Moneys in the Construction Accounts, the Rebate Fund, the Debt Service Fund and the Bond Reserve Fund shall be invested solely in Investment Securities to maximize investment income, with proper regard for the preservation of principal, pursuant to a Request of the Authority as to such investment. In the absence of any different instruction, such moneys shall be invested in Investment Securities described in clause (6) of the definition thereof.

Moneys in the Revenue Fund, the Operation and Maintenance Fund, the Subordinate Securities Fund, the Operation, Maintenance, Renewal and Replacement Reserve Fund and the Capital Improvement Fund may be invested in any investment designated by Request of the Authority.

Notwithstanding any other provision of the Indenture, moneys in the Revenue Fund and the Bond Reserve Fund shall be invested only in Investment Securities having at least an investment grade rating from the Rating Agency.

Subject to the provisions of any Supplemental Indenture, moneys in all Funds and Accounts established under the Indenture shall be invested in investments paying interest and maturing not later than the dates on which it is estimated that such moneys will be required by the Trustee, the Co-Trustee, the applicable Depository or the Authority.

All interest and other profit derived from such investments shall be deposited in the Revenue Fund when received, except that interest and other profit derived from the investment of moneys in the Construction Accounts, the Capital Improvement Fund and the Rebate Fund shall be retained in such respective Fund or Account, and except that interest and other profit derived from the investment of moneys in the Bond Reserve Fund shall be deposited as provided in the Indenture. Investments acquired as an investment of moneys in any Fund or Account established under the Indenture shall be credited to such Fund or Account.

Subject to the provisions of any Supplemental Indenture, for the purpose of determining the amount in any Fund or Account, except the Rebate Fund, the amount of any obligation allocable to such Fund or Account shall be equal to the purchase price of such obligation (not including accrued interest, if any, paid on the purchase of such obligation) plus the amount of any discount below par accounting for any such discount ratably each year over the term of such obligation (i.e., by dividing the amount of such discount by the number of interest payments remaining to maturity and by multiplying the amount so calculated by the number of interest payment dates having passed since the date of purchase) (“amortized value”); provided, however, that the amount of any accrued interest on any obligation may be credited to the Revenue Fund or to any Fund or Account to which such amount or any portion thereof may have been transferred from the Revenue Fund.

The Trustee, the Co-Trustee or the applicable Depository may sell at the best price obtainable, or present for redemption, any security purchased under the Indenture whenever it shall be necessary in order to provide moneys to meet any required payment, transfer, withdrawal or disbursement from the Fund or Account to which such security is credited, and the Trustee, the Co-Trustee and such Depository shall not be liable or responsible for any loss resulting from such investment.

CERTAIN COVENANTS

Payment of Principal and Interest

The Authority will punctually pay or cause to be paid the principal and interest (and premium, if any) to become due in respect of every Bond issued under the Indenture at the times and places and in the manner provided in the Indenture and in the Bonds, in strict conformity with the terms of the Bonds and of the Indenture, but solely from Revenues and other moneys held in trust under the Indenture, as provided in the Indenture.

Against Encumbrances

Subject to any rights of the United States of America or as otherwise set forth in the Indenture, the Authority will not mortgage or otherwise encumber, pledge or place any charge upon the System or any part thereof, or upon any of the Revenues, prior to or on a parity with the Bonds, the Parity Payment Agreements and Credit Agreement Payments. So long as any Bonds are Outstanding, the Authority will not issue any bonds or obligations payable from Revenues or secured by a pledge, lien or charge upon Revenues prior to or on a parity with the Bonds, the Parity Payment Agreements and the Credit Agreement Payments, other than the Bonds, the Parity Payment Agreements and the Credit Agreement Payments. Except as may be otherwise set forth in a Supplemental Indenture, nothing in the Indenture, and particularly nothing in the preceding two paragraphs, shall prevent the Authority from authorizing and issuing bonds, notes, warrants, certificates or other obligations or evidences of indebtedness which as to principal or interest, or both, (1) are payable from Revenues after and subordinate to the payment from Revenues of the principal of and interest on the Bonds, the Parity Payment Agreement Payments and Credit Agreement Payments, or (2) are payable from moneys which are not Revenues as such term is defined in the Indenture.

Sale or Other Disposition of Property

The Authority will not sell or otherwise dispose of the System or any part thereof, or permit others to sell or otherwise dispose of the System or any part thereof, essential to the proper operation of the System or to the collection of Revenues sufficient to pay debt service on the Bonds, Parity Payment Agreement Payments and Credit Agreement Payments and otherwise comply with the rate covenant contained in the Indenture. The Authority will not enter into any agreement which impairs the operation of the System or impedes the collection of Revenues

sufficient to pay debt service on the Bonds, Parity Payment Agreement Payments and Credit Agreement Payments and otherwise comply with the rate covenant contained in the Indenture.

Any real or personal property which has become nonoperative or which is not needed for the efficient and proper operation of the System, or any material or equipment which has worn out, may be sold at a price not less than the fair market value thereof if such sale will not reduce Net Revenues and if the net proceeds of such sale are deposited in the Revenue Fund.

Operation and Maintenance of the System

The Authority will maintain and preserve the System in good repair and working order at all times from the Revenues available for such purposes, in conformity with prudent management and standards customarily followed in the industry for systems of like size and character. The Authority will from time to time make all necessary and proper repairs, renewals, replacements and substitutions to the properties of the System, so that at all times business carried on in connection with the System shall and can be properly and advantageously conducted in an efficient manner and at reasonable cost. The Authority will operate the System in an efficient and economical manner, consistent with the protection of the Owners of the Bonds and so as to assure that the System shall be financially self-sufficient and self-sustaining. The Authority shall not commit or allow any waste with respect to the System. Nothing in the Indenture shall prohibit the Authority from subcontracting any part of the maintenance and operation of the System.

Liens and Claims

Subject to any rights of the United States of America, the Authority shall keep the System and all parts thereof free from judgments, from mechanics' and materialmen's liens and from all liens and claims of whatsoever nature or character, to the end that the security provided pursuant to the Indenture may at all times be maintained and preserved, and the Authority shall keep the System and the Revenues free from any liability which might hamper the Authority in conducting its business or operating the System. The Trustee or and Co-Trustee at its option (after first giving the Authority ten days' written notice to comply therewith and failure of the Authority to so comply within said ten-day period) may defend against any and all actions or proceedings in which the validity of the Indenture is or might be questioned, or may pay or compromise any claim or demand asserted in any such actions or proceedings; provided, however, that, in defending against such actions or proceedings or in paying or compromising such claims or demands, the Trustee or the Co-Trustee shall not in any event be deemed to have waived or released the Authority from liability for or on account of any of its covenants and warranties contained in the Indenture, or from its liability under the Indenture to defend the validity of the Indenture and the pledge made in the Indenture and to perform such covenants and warranties.

Insurance

The Authority will maintain or cause to be maintained insurance on the System with responsible insurers in such amounts and against such risks (including accident to or destruction of the System) as are usually maintained by prudent operators of systems similar and similarly situated to the System and which it shall deem advisable or necessary to protect its interests and the interests of the Bondowners so long as such insurance is available to the Authority on the open market from responsible insurers at reasonable cost. In the event of any damage to or destruction of the System caused by the perils covered by such insurance, the proceeds of such insurance shall be applied to the repair, reconstruction or replacement of the damaged or destroyed portion of the System; and the Authority shall cause such repair, reconstruction or replacement to begin promptly after such damage or destruction shall occur and to continue and to be properly completed as expeditiously as possible. If the proceeds received by reason of any such loss shall exceed the costs of such repair, reconstruction or replacement, the Authority shall deposit such excess in the Capital Improvement Fund. Notwithstanding the foregoing, if the proceeds of such insurance, together with other moneys available for such purpose, are sufficient to enable the Authority to retire all Outstanding Bonds, whether at maturity or on redemption prior to maturity or any combination thereof, and to pay the Parity Payment Agreement Payments and any Termination Amount payable by the Authority pursuant to Parity Payment Agreements in connection with a termination thereof, and to pay any Credit Agreement Payments then due and payable the Authority may elect not to repair, reconstruct or replace the damaged or destroyed portion of the System, and thereupon, the proceeds of such insurance shall be applied by the Authority and the Trustee to the

payment when due of the interest to become due on all Outstanding Bonds on and prior to the maturity date or redemption date thereof, as the case may be, to the payment of the principal of and redemption premiums, if any, on all Outstanding Bonds at maturity or on redemption prior to maturity, as the case may be, and to the payment of such Parity Payment Agreement Payments and any such Termination Amounts, as the case may be, when due and to pay any Credit Agreement Payments then due and payable.

The Authority will maintain such other insurance which it shall deem advisable or necessary to protect its interests and the interests of the Bondowners, which insurance shall afford protection in such amounts and against such risks as are usually maintained by prudent operators of systems similar to the System.

Any insurance required under the Indenture may be maintained under a self-insurance program so long as such self-insurance is maintained in the amounts and manner customarily maintained by prudent operators of systems similar to the System. The Authority shall, every third year, engage an insurance consultant to review the Authority's self-insurance program and to make recommendations for any necessary modifications, including, but not limited to, any modifications necessary to comply with these provisions. Each such report shall be filed with the Trustee.

Books and Accounts; Financial Statements

The Authority will keep proper books of record and accounts, separate from all other records and accounts, in which complete and correct entries shall be made of all transactions relating to the System. Such books of record and accounts shall at all times during business hours be subject to the inspection of the Trustee, the Co-Trustee or any Owner of Bonds then Outstanding or their representatives authorized in writing, at reasonable hours and under reasonable conditions.

The Authority will prepare and file with the Trustee and the Co-Trustee annually within nine months after the close of each Fiscal Year so long as any of the Bonds are Outstanding: (1) financial statements for the preceding Fiscal Year, prepared in accordance with (i) the accounting requirements of the Indenture and (ii) generally accepted accounting principles applied on a consistent basis from year to year, including a balance sheet, statement of income, statement of retained earnings, and statement of changes in financial position (including a statement of revenue, expenditures and fund balances for each of the Funds and Accounts established pursuant to the Indenture), and including a reconciliation between the bases of accounting required under clauses (i) and (ii) above, which financial statements shall be examined by and include the certificate or opinion of an Independent Certified Public Accountant, such certificate or opinion to include a statement as to the manner and extent to which the Authority has complied with the provisions of the Indenture as it relates to said financial statements; and (2) a statement as to all insurance carried by the Authority as of the end of such Fiscal Year, including a brief description of the amount and coverage of each insurance policy and the name of the insuring company.

The Authority will furnish a copy of the aforesaid statements to any Credit Provider and to any Bondowner upon request, and will furnish to the Trustee such reasonable number of copies thereof (not exceeding 100 copies) as may be required by the Trustee for distribution to investment bankers, securities dealers and others interested in the Bonds and to the Owners of Bonds requesting copies thereof. The Trustee shall not be required to incur any nonreimbursable expenses in making such distribution.

Authority Budgets

Prior to the commencement of each Fiscal Year, the Authority shall prepare and adopt an annual budget for such Fiscal Year. Such budget shall set forth in reasonable detail the Revenues anticipated to be derived in such Fiscal Year and the expenditures anticipated to be paid or provided for therefrom in such Fiscal Year including, without limitation, the amounts required to provide for the payment of the principal of, interest and redemption premium, if any, on the Bonds during such Fiscal Year, to pay or provide for Operation and Maintenance Expenses for such Fiscal Year, to pay or provide for Renewal and Replacement Costs for such Fiscal Year, to make up any deficiencies in any Fund or Account anticipated for the then current Fiscal Year, to transfer to or from the Rate Stabilization Fund each month, and to pay or provide for the payment of all other claims or obligations required to be paid from Revenues in such Fiscal Year, and shall show that Net Revenues shall be at least adequate to satisfy the rate covenant contained in the Indenture. The Authority shall supply to the Trustee, the Co-Trustee, the Revenue

Fund Depository, any Credit Provider and any Bondowners who shall so request in writing a copy of the annual budget for the then current Fiscal Year. Such budget shall also be open for inspection by any Owner during normal business hours. The Authority may at any time adopt a revised annual budget and shall supply copies as aforesaid.

Payment of Taxes, Etc.

The Authority will pay and discharge, or cause to be paid and discharged, all taxes, assessments and other governmental charges which may hereafter be lawfully imposed upon the Authority on account of the System or any portion thereof or upon any Revenues and which, if unpaid, might impair the security of the Bonds, when the same shall become due, but nothing contained in the Indenture shall require the Authority to pay any such tax, assessment or charge so long as it shall in good faith contest the validity thereof. The Authority will duly observe and conform with all valid requirements of any governmental authority having jurisdiction over the Authority or the System or any part thereof.

Acquisition and Construction of Improvements

The Authority will commence and will continue to completion the acquisition and construction of the improvements to the System proposed to be financed from any Series of Bonds, and said improvements will be acquired, constructed and completed in a sound and economical manner and in conformity with law.

Eminent Domain Proceeds

If all or any part of the System shall be taken by or under threat of eminent domain proceedings, the net proceeds realized by the Authority therefrom (excluding any portion thereof payable to the United States of America or required by the United States of America to be deposited in a restricted fund) shall be deposited by the Chief Financial Officer in a special fund in trust and applied and disbursed by the Chief Financial Officer subject to the following conditions:

(A) If such proceeds are sufficient to provide for the payment of the entire amount of principal due or to become due upon all of the Bonds, together with all of the interest due or to become due thereon and any redemption premiums, and all amounts payable under Parity Payment Agreements (including Termination Amounts) and all Credit Agreement Payments then due and payable so as to enable the Authority to retire all of the Bonds, either by redemption at the then current redemption prices or by payment at maturity or partly by redemption prior to maturity and partly by payment at maturity, and terminate such Parity Payment Agreements and discharge such obligations with respect to such Credit Agreement Payments, the Chief Financial Officer shall transfer such moneys to the Trustee who shall apply such moneys to such retirement and to the payment of such amounts. The balance of such moneys, if any, shall be transferred back to the Authority and shall be deposited in the Capital Improvement Fund.

(B) If such proceeds are insufficient to provide the moneys required for the purposes described in the foregoing paragraph (A), the Authority shall by resolution determine to apply such proceeds for one of the following purposes, subject to the conditions described in this paragraph (B):

(1) The Authority may determine to apply such proceeds to the purchase or redemption of Bonds then Outstanding and to the payment of Credit Agreement Payments then due and payable. In that event, the Chief Financial Officer shall transfer such proceeds to the Trustee, who shall apply such proceeds pro rata to the redemption or purchase of Bonds of each Series then Outstanding in the proportion which the principal amount of outstanding Bonds of each Series bears to the aggregate principal amount of all Bonds then Outstanding.

(2) The Authority may determine to apply such proceeds to the cost of additions or improvements to or extensions of the System if the Authority first secures and files with the Trustee a report of an Independent Consulting Engineer (a) showing (i) the loss in annual Revenues, if any, suffered or to be suffered, by the Authority by reason of such eminent domain proceedings, (ii) a general description of the additions, improvements or extensions then proposed to be acquired by the Authority from such proceeds, and (iii) an estimate of the additional Revenues to be derived from such additions, improvements or

extensions; and (b) determining that such eminent domain proceedings will not substantially impair the ability of the Authority to meet the rate covenant contained in the Indenture. The Authority shall then promptly proceed with the construction of the additions, improvements or extensions substantially in accordance with such report. Payments for such construction shall be made by the Authority from such proceeds. Any balance of such proceeds not required by the Authority for the purposes aforesaid shall be deposited in the Capital Improvement Fund.

Rate Covenant

The Authority shall at all times fix, prescribe and collect rates, fees and charges in connection with the services furnished by the System which will be sufficient to yield the sum of Net Revenues during each Fiscal Year equal to at least 1.25 times the Aggregate Annual Debt Service for such Fiscal Year and to yield Revenues during each Fiscal Year equal to at least the aggregate amount of all transfers required to be made to the Operations and Maintenance Fund, the Debt Service Fund, the Bond Reserve Fund, the Subordinate Securities Fund, and the Operation, Maintenance, Renewal and Replacement Reserve Fund for such Fiscal Year.

The debt service coverage ratio specified in this covenant shall be the debt service coverage ratio used by the PUC, together with other appropriate factors, in setting rates.

If the financial statements prepared pursuant to the Indenture reflect that (or if the Authority's other books and records at the time such statements are due under the Indenture reflect that) at the end of a Fiscal Year the sum of Net Revenues shall have been less than 1.25 times Aggregate Annual Debt Service for such Fiscal Year, or if Revenues shall have been less than the aggregate amount of all transfers required to be made to the Operations and Maintenance Fund, the Debt Service Fund, the Bond Reserve Fund, the Subordinate Securities Fund, and the Operation, Maintenance, Renewal and Replacement Reserve Fund for such Fiscal Year, the Authority shall promptly employ a Consulting Engineer to make recommendations as to a revision of such rates, fees and charges or the methods of operation of the System. The Authority shall, promptly upon its receipt of such recommendations, subject to applicable requirements or restrictions imposed by law and subject to a good faith determination of the Board that such recommendations, in whole or in part, are in the best interests of the Authority, the Owners and each Credit Provider, revise such rates, fees and charges or methods of operation and will take such other actions as shall be in conformity with such recommendations.

If the Authority complies in all material respects with the reasonable recommendations of the Consulting Engineer with respect to said rates, fees, charges and methods of operation or collection, or makes a good faith determination that such recommendations are not in the best interests of the Authority, the Authority will be deemed to have complied with the rate covenant contained in the Indenture for such Fiscal Year; provided, that Net Revenues shall in no event have been less than Aggregate Annual Debt Service for such Fiscal Year.

The Authority may make adjustments from time to time in its rates, fees and charges and may make such classification thereof as it deems necessary, but shall not reduce such rates, fees and charges below those then in effect unless the Revenues from such reduced rates, fees and charges will at all times be sufficient to meet the requirements of the Indenture.

Compliance with Indenture

The Authority (and the Government as to its covenant summarized below) will faithfully observe and perform all the covenants, conditions and requirements of the Indenture, and will not suffer or permit any default to occur under the Indenture, or do or permit to be done, in, upon or about the System, or any part thereof, anything that might in any way weaken, diminish or impair the security intended to be given pursuant to the Indenture.

Observance of Laws and Regulations

The Authority shall comply promptly, fully and faithfully with and abide by any contract relating to or affecting the availability of any grant or other similar assistance and any statute, law, ordinance, order, rule, regulation, judgment, decree, direction or requirement now in force or hereafter enacted, adopted or entered by any

competent governmental authority or agency applicable or with respect to or affecting the acquisition, construction or reconstruction of the System or any part thereof or applicable or with respect to or affecting the operation, manner, use or condition of the System or any part or parcel thereof or adjoining public ways or relating to the imposition of charges or collection of Revenues; provided that the Authority need not comply with any such contract, statute, law, ordinance, rule, regulation, judgment, decree, direction or requirement if and so long as the Authority in good faith shall be contesting or permitting or causing to be contested the applicability or validity thereof by appropriate proceedings diligently prosecuted, even though such contest may result in the imposition of a lien or charge against the System or the Revenues, if (1) the Authority shall effectively prevent foreclosure or enforcement of any such lien or charge and (2) the foreclosure or enforcement of any such lien or charge shall be stayed, and if said stay thereafter expires, the Authority shall forthwith discharge such lien or charge or cause the same to be discharged, so that pending such proceedings the System and the Revenues thereof shall not be affected thereby, and the security of the Bonds shall not be impaired.

Prosecution and Defense of Suits

The Authority shall promptly from time to time take such action as may be necessary or proper to remedy or cure any defect in or cloud upon the title to the System hereafter developing, and shall prosecute all such suits, actions and other proceedings as may be appropriate for such purposes and, to the extent permitted by law, shall indemnify and save the Trustee and every Bondowner harmless from all loss, cost, damage and expense, including attorneys' fees, which they or any of them may incur by reason of any such defect, cloud, suit, action or proceeding. The Authority shall defend against every suit, action or proceeding at any time brought against the Trustee or any Bondowner upon any claim arising out of the receipt, application or disbursement of any of the Revenues or involving the rights of the Trustee or any Bondowner under the Indenture; provided, that the Trustee or any Bondowner at its or his election may appear in and defend any such suit, action or proceeding. The Authority shall, to the extent permitted by law, indemnify and hold harmless the Trustee and the Bondowners against any and all liability claimed or asserted by any person arising out of such receipt, application or disbursement, and shall indemnify and hold harmless the Bondowners against any attorneys' fees or other expenses which any of them may incur in connection with any litigation to which any of them may become a defendant by reason of its ownership of Bonds. The Authority, to the extent permitted by law, shall promptly reimburse any Bondowner in the full amount of any attorneys' fees or other expenses which such Bondowner may incur in litigation or otherwise in order to enforce its rights under the Indenture or the Bonds, if such litigation is concluded favorably to such Bondowner's contentions therein. Notwithstanding any contrary provision of the Indenture, this paragraph will remain in full force and effect, even though all indebtedness and obligations issued under the Indenture may have been fully paid and satisfied, until the Authority shall have been dissolved.

Pledge of the Government

The Government pledges to the holders of all Bonds the following: while any Bonds remain outstanding and not fully performed or discharged (A) to maintain the rights, powers and duties of the Board and the Guam Public Utilities Commission, or their respective successors in accordance with law, to fulfill the terms of Bonds and the Indenture, (B) to maintain the rights and remedies of Bondholders provided in the Act and the Indenture, (C) to protect the exclusive right of the Authority to operate or maintain within Guam any water or wastewater system operated by the government or its designees by preventing the acquisition, operation, maintenance or permitting of any instrumentality of the Government or any other public or private agency, entity or person to operate a separate and competitive water and/or wastewater system, and (D) not to transfer any additional non-system operating responsibilities or other unfunded mandates to the Authority without providing for the payment of the costs of such additional responsibilities, with the exception of annual supplemental annuity and COLA contributions paid by the Authority on behalf of retired employees of the Authority (or its lawful predecessors) as may be required by other laws of Guam. The Authority includes a pledge and agreement of the Government in the Indenture as authorized by Section 14229 of the Act.

Tax Covenants for Series 2024AB Bonds

The Authority intends that interest on the Series 2024AB Bonds be excluded from gross income for federal income tax purposes. The Authority reserves the right to determine the desired tax status of any additional Series of Bonds.

The Authority has covenanted that it shall not use or permit the use of any proceeds of the Series 2024AB Bonds or any other funds of the Authority, directly or indirectly, to acquire any securities or obligations, and shall not use or permit the use of any amounts received by the Authority in any manner, and shall not take or permit to be taken any other action or actions, which would cause any such Bond to be an “arbitrage bond” within the meaning of Section 148 of the Code or to be “federally guaranteed” within the meaning of Section 149(b) of the Code, and to at all times do and perform all acts and things permitted by law and the Indenture which are necessary or desirable in order to assure that interest paid on the Series 2024AB Bonds (or on any of them) shall be excluded from gross income for federal income tax purposes.

EVENTS OF DEFAULT AND REMEDIES OF BONDOWNERS

Events of Default

Any one or more of the following events shall be an “Event of Default” under the Indenture:

(1) if default shall be made in the due and punctual payment of the principal of, or the premium (if any) on, any Bond when and as the same shall become due and payable, whether at maturity as therein expressed, by proceedings for redemption, or otherwise, or if default shall be made in the redemption or payment at maturity from any Sinking Account of any Term Bonds in the amounts and at the times provided therefor;

(2) if default shall be made in the due and punctual payment of any installment of interest on any Bond or any Parity Payment Agreement Payment when and as such interest installment or Parity Payment Agreement Payment shall become due and payable;

(3) if default shall be made by the Authority in the observance of any of the other covenants, agreements or conditions on its part in the Indenture or in the Bonds contained or by the Government in the observance of its covenant in summarized above, and such default shall have continued for a period of 30 days after notice thereof, specifying such default and requiring the same to be remedied, shall have been given to the Authority by the Trustee, the Co-Trustee or a Credit Provider, or to the Authority, the Trustee and the Co-Trustee by the Owners of not less than twenty-five percent in aggregate principal amount of the Bonds at the time Outstanding; or

(4) if the Authority shall file a petition or answer seeking reorganization or arrangement under the federal bankruptcy laws or any other applicable law of the United States of America, or if a court of competent jurisdiction shall approve a petition, filed with or without the consent of the Authority, seeking reorganization under the federal bankruptcy laws or any other applicable law of the United States of America, or if, under the provisions of any other law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of the Authority or of the whole or any substantial part of its property.

Remedies

In each and every case during the continuance of an Event of Default, the Trustee in its own name and as Trustee of an express trust, on behalf and for the benefit and protection of the Bondowners, after notice to the Authority, and upon the request of the Owners of a majority in Accreted Value of the Bonds then Outstanding, shall proceed to protect and enforce any rights of the Trustee and, to the full extent that the Bondowners themselves might do, the rights of such Bondowners under the Indenture and under the laws of the Government by such of the following remedies as such majority shall deem most effectual to protect and enforce such rights:

(a) by mandamus or other suit, action or proceeding at law or in equity, to enforce all rights of the Bondowners, including the right to require the Authority to charge, prescribe and collect Revenues adequate to comply with the covenants and agreements made in the Indenture, and to require the Authority to carry out any other covenant or agreement with the Bondowners and to perform its duties under the Act;

(b) by bringing suit upon the Bonds;

(c) by action or suit in equity, to require the Authority to account as if it were the trustee of an expressed trust for the Bondowners;

(d) by realizing or causing to be realized through sale or otherwise upon the moneys, securities and other assets pledged under the Indenture;

(e) by action or suit in equity, to enjoin any acts or things which may be unlawful or in violation of the rights of the Bondowners;

(f) by requiring the Authority to endorse all checks and other negotiable instruments representing Revenues to the order of the Trustee immediately upon the receipt thereof and to deliver such endorsed instruments daily to the Trustee;

(g) by notifying any or all account debtors of the Authority to pay any amounts representing Revenues, when due, directly to the Trustee as Trustee; and

(h) by commencing proceedings for the appointment of a receiver or receivers of the System and of the Revenues, with such powers as the court making such appointment confers.

Application of Funds Upon Default

All of the Revenues, all amounts in certain of the Funds and Accounts established under the Indenture (except any escrow fund established for the payment of any refunded obligations), upon the date of the declaration of an Event of Default as provided in the Indenture and all Revenues thereafter received by the Authority, the Trustee, the Co-Trustee or any Depositary under the Indenture, shall be transmitted to the Trustee and be applied by the Trustee as and in the order of priority provided in the Indenture; provided, however, that (A) if amounts in the Debt Service Fund are insufficient to pay, when due, all interest on, principal of, and Mandatory Sinking Account Payments on all Bonds then Outstanding, all Parity Payment Agreement Payments pursuant to Parity Payment Agreements then Outstanding and all Credit Agreement Reimbursement Payments due and payable pursuant to Credit Agreements then Outstanding, then such amounts in the Debt Service Fund shall be used first to pay all installments of interest then due and owing without preference or priority of any such installment of interest over any other installment of interest, then to pay installments of principal and Mandatory Sinking Account Payments then due and owing, without preference or priority of any installment of principal or Mandatory Sinking Account Payments over any other such installment, then to pay all Credit Agreement Reimbursement Payments then due and payable, and then to pay Parity Payment Agreement Payments then due and owing, without preference or priority of any Parity Payment Agreement Payment over any other such Parity Payment Agreement Payment; and (B) amounts in Construction Accounts may be used for the purposes for which such Construction Accounts were created and funded if the Trustee determines, in accordance with relevant provisions of the Indenture, that such use is in the best interests of the Bondholders and the Credit Providers.

If any installment of interest, principal or Redemption Price is only partially paid, such payment shall occur only upon presentation of the several Bonds and the recording thereon of a record of such partial payment.

Representation of Bondowners by Trustee

In case one or more of the Events of Default shall happen, then and in every such case the Owner of any Bond at the time Outstanding shall be entitled to proceed to protect and enforce the rights vested in such Owner by the Indenture by such appropriate judicial proceeding as such Owner shall deem most effectual to protect and enforce any such right, either by suit in equity or by action at law, whether for the specific performance of any covenant or agreement contained in the Indenture, or in aid of the exercise of any power granted in the Indenture, or to enforce any other legal or equitable right vested in the Owners of Bonds by the Indenture or by law; provided, however, that no such Bondowner shall have the right to institute any such judicial proceeding pursuant to this paragraph unless (A) such Owner shall have previously given to the Trustee notice of the occurrence of an Event of Default under the Indenture; (B) the Owners of at least a majority in Accreted Value of the Bonds then Outstanding shall have made request to the Trustee to exercise the powers granted in the Indenture or to institute such action, suit

or proceeding in its own name; (C) such Owner or said Owners shall have tendered to the Trustee reasonable indemnity against the costs, expenses and liabilities to be incurred in compliance with such request; and (D) the Trustee shall have refused or omitted to comply with such request for a period of sixty days after such request shall have been received by, and said tender of indemnity shall have been made to, the Trustee. The provisions of the Indenture shall constitute a contract with the Owners of the Bonds, and such contract and duties of the Authority and of the Authority members, officers and employees thereof shall be enforceable by any Bondowner by mandamus or other appropriate suit, action or proceeding in any court of competent jurisdiction.

Nonwaiver

Nothing in the Indenture, or in the Bonds, shall affect or impair the obligation of the Authority, which is absolute and unconditional, to pay the principal of and the interest (and premium, if any) on the Bonds to the respective Owners of the Bonds at the respective dates of maturity, or upon call for redemption, as provided in the Indenture, but only out of the Revenues pledged in the Indenture for such payments, or affect or impair the right of action, which is also absolute and unconditional, of such Owners to institute suit to enforce such payment by virtue of the contract embodied in the Bonds.

A waiver of any default or breach of duty or contract by any Bondowner shall not affect any subsequent default or breach of duty or contract, or impair any rights or remedies on the subsequent default or breach. No delay or omission of the Trustee or of any Owner of any of the Bonds to exercise any right or power arising upon the happening of any Event of Default shall impair any such right or power or shall be construed to be a waiver of any such Event of Default or an acquiescence therein, and every power and remedy given by the Act or relevant provisions of the Indenture to the Trustee or to the Owners of Bonds or any Credit Provider may be exercised from time to time and as often as shall be deemed expedient by the Trustee or the Owners of Bonds or any such Credit Provider.

If a suit, action or proceeding to enforce any right or exercise any remedy is abandoned or determined adversely to the Bondowners, the Authority, the Trustee and the Bondowners and each Credit Provider shall be restored to their former positions, rights and remedies as if such suit, action or proceeding had not been brought or taken.

Actions by Trustee as Attorney-in-Fact

Any suit, action or proceeding which any Owner of Bonds shall have the right to bring to enforce any right or remedy under the Indenture may be brought by the Trustee for the equal benefit and protection of all Owners of Bonds similarly situated (notwithstanding any conditions upon the bringing of any such action, suit or proceeding set forth in the Indenture) and the Trustee is appointed (and the successive respective Owners of the Bonds issued under the Indenture, by taking and holding the same, shall be conclusively deemed so to have appointed it) the true and lawful attorney-in-fact of the respective Owners of the Bonds for the purpose of bringing any such suit, action, or proceeding and to do and perform any and all acts and things for and on behalf of the respective Owners of the Bonds as a class or classes, as may be necessary or advisable in the opinion of the Trustee as such attorney-in-fact.

Except as may be set forth in a Supplemental Indenture, anything in the Indenture to the contrary notwithstanding, the Owners of a majority in Accreted Value of the Bonds at any time Outstanding shall have the right, by an instrument or concurrent instruments in writing executed and delivered to the Trustee, to direct the method and place of conducting all remedial proceedings to be taken by the Trustee under the Indenture, provided that such direction shall be in accordance with law and the provisions of the Indenture.

Remedies Not Exclusive

No remedy conferred upon or reserved to the Trustee or to the Owners of Bonds or to any Credit Provider is intended to be exclusive of any other remedy. Every such remedy shall be cumulative and shall be in addition to every other remedy given under the Indenture or now or hereafter existing, at law or in equity or by statute or otherwise and may be exercised without exhausting and without regard to any other remedy conferred by the Act or any other law.

MODIFICATION OR AMENDMENT OF THE INDENTURE

Amendments Permitted

The Indenture and the rights and obligations of the Authority and of the Owners of the Bonds and of the Trustee and Co-Trustee may be modified or amended at any time by a Supplemental Indenture which shall become binding when the consents of the Owners of at least 60% in Accreted Value of the Bonds then Outstanding, exclusive of Bonds disqualified as provided in the Indenture; provided that if such modification or amendment will, by its terms, not take effect so long as any bonds of any particular maturity or Series remain Outstanding, the consent of the Owners of Bonds of such maturity or Series shall not be required and such Bonds shall not be deemed to be Outstanding for the purpose of any calculation of Outstanding Bonds relative to such modification or amendment; and provided further that the consent of a Credit Provider for any Bond shall be deemed to be the consent of the Owner of such Bond if specified in the Supplemental Indenture pursuant to which such Credit Provider is designated as providing a Credit Facility for such Bond.

No such modification or amendment shall (a) extend the fixed maturities of the Bonds, or extend the time for making any Mandatory Sinking Account Payments, or reduce the rate of interest thereon, or extend the time of payment of interest, or reduce the amount of principal thereof, or reduce any premium payable on the redemption thereof, without the consent of the Owner of each Bond so affected, (b) reduce the aforesaid percentage of Owners of Bonds whose consent is required for the execution of any amendment or modification of the Indenture or permit the creation of any lien on the Revenues prior to or on a parity with the lien created by the Indenture or deprive the Owners of the Bonds of the lien created by the Indenture upon such Revenues, without in each case the consent of the Owners of all of the Bonds then Outstanding.

No such modification or amendment shall modify any of the rights or obligations of any Fiduciary without its consent thereto.

The Indenture and the rights and obligations of the Authority and of the Owners of the Bonds may also be modified or amended at any time by a Supplemental Indenture which shall become binding upon adoption, without the consent of any Bondowners, but only to the extent permitted by law and only for any one or more of the following purposes: (1) to add to the covenants and agreements of the Authority in the Indenture contained other covenants and agreements thereafter to be observed or to surrender any right or power reserved to or conferred upon the Authority in the Indenture; (2) to cure, correct or supplement any ambiguous or defective provision contained in the Indenture or in regard to questions arising under the Indenture, as the Authority may deem necessary or desirable and not inconsistent with the Indenture, and which shall not materially adversely affect the interests of the Owners of the Bonds or any Credit Provider; (3) to provide for the issuance of Additional Bonds, and to provide the terms and conditions under which such Additional Bonds may be issued, subject to and in accordance with the provisions of the Indenture; (4) to provide for any other matters for which a Supplemental Indenture is expressly permitted or required under the Indenture; and (5) to make any other amendment or modification which shall not materially adversely affect the interests of the Owners of the Bonds or any Credit Provider.

Any Supplemental Indenture providing for the issuance of a Series of Bonds may require, in addition to or in lieu of any consents described in the foregoing provisions, the consent of any Credit Provider for such Bonds in order for any amendment to the Indenture affecting such Bonds to be effective, and may set forth appropriate procedures for obtaining and evidencing such consent.

Procedure for Amendment with Consent of Bondowners

The Authority may at any time adopt a Supplemental Indenture amending the provisions of the Bonds or of the Indenture, to the extent that such amendment is permitted by the Indenture, to take effect when and as provided. A copy of the Supplemental Indenture, together with a request to Bondowners for their consent thereto, shall be mailed by the Authority to each Owner of Bonds, but failure to receive any such copies of such Supplemental Indenture and request shall not affect the validity of the Supplemental Indenture when assented to as provided.

Such Supplemental Indenture shall not become effective unless there shall be filed with the Trustee the consents of the Owners of 60% in Accreted Value of the Bonds then Outstanding (exclusive of Bonds disqualified as provided in the Indenture) and a notice shall have been published as hereafter provided. Each such consent shall be effective only if accompanied by proof of ownership of the Bonds for which such consent is given, which proof shall be such as is permitted by the Indenture. Any such consent shall be binding upon the Owner of the Bonds giving such consent and on any subsequent Owner (whether or not such subsequent Owner has notice thereof) unless such consent is revoked in writing by the Owner giving such consent or a subsequent Owner by filing such revocation with the Trustee prior to the date when the notice provided for has been published.

After the Owners of the required percentage of Bonds shall have filed their consents to the Supplemental Indenture, the Authority shall mail a notice to the Bondowners in the manner provided for the mailing of the Supplemental Indenture and publication of the notice of adoption thereof, stating in substance that the Supplemental Indenture has been consented to by the Owners of the required percentage of Bonds and will be effective as provided in the Indenture (but failure to receive copies of said notice shall not affect the validity of the Supplemental Indenture or consents thereto). A record, consisting of the papers required to be filed with the Trustee, shall be proof of the matters therein stated until the contrary is proved.

In lieu of obtaining any demand, request, direction, consent or waiver in writing, the Trustee may call and hold a meeting of the Bondowners upon such notice and in accordance with such rules and regulations as the Trustee considers fair and reasonable for the purpose of obtaining any such action.

DEFEASANCE

Discharge of Indenture

If the Authority shall pay and discharge the entire indebtedness on all Bonds Outstanding in any one or more of the following ways—

(A) by well and truly paying or causing to be paid the principal of (including redemption premiums, if any) and interest on all Bonds Outstanding, as and when the same become due and payable (but this clause shall not include Bonds the principal of or interest on which has been paid by a Credit Provider until said principal and interest shall have been paid by the Authority); or

(B) by depositing with the Co-Trustee, in trust, at or before maturity, money which, together with the amounts then on deposit in the Debt Service Fund and the Bond Reserve Fund, is fully sufficient to pay or redeem all Bonds Outstanding, including all principal, interest and redemption premiums, if any; or

(C) by delivering to the Co-Trustee, for cancellation by it, all Bonds Outstanding; or

(D) by depositing with the Co-Trustee, in trust, non-callable Federal Securities in such amount which, in the determination of an Independent Certified Public Accountant, who shall certify such determination to the Co-Trustee and, if so provided in a Supplemental Indenture, any Credit Provider, shall, together with the income or increment to accrue thereon and any other moneys of the Authority made available for such purpose, be fully sufficient to pay and discharge the indebtedness on all Bonds (including all principal, interest and redemption premiums, if any) at or before their respective maturity dates;

and if the Authority shall also pay or cause to be paid all other sums payable under the Indenture by the Authority (including all Parity Payment Agreement Payments and any Termination Payments payable in connection with a termination of a Parity Payment Agreement and any Credit Agreement Payments then due and payable) and deliver or have delivered to the Trustee, the Co-Trustee and each Credit Provider an Opinion of Counsel to the effect that upon satisfaction of the other requirements of the Indenture all obligations of the Authority under the Indenture have ceased, terminated and been completely discharged, then and in that case, at the election of the Authority (evidenced by a Certificate of the Authority signifying its intention to pay and discharge all such indebtedness and that the Indenture and all other obligations of the Authority under the Indenture shall cease and terminate, which shall be filed with the Trustee and the Co-Trustee), and notwithstanding that any Bonds shall not have been surrendered for

payment, the pledge of the Revenues and other funds provided for in the Indenture and all other obligations of the Authority under the Indenture are required to cease, terminate and be completely discharged, and the Owners of the Bonds not so surrendered and paid would thereafter be entitled to payment only out of the money or Federal Securities deposited with the Co-Trustee as aforesaid for their payment; subject, however, to the provisions of the Indenture.

The Authority may at any time surrender to the Co-Trustee for cancellation by it any Bonds previously issued and delivered, which the Authority may have acquired in any manner whatsoever, and such Bonds, upon such surrender and cancellation, are required to be deemed to be paid and retired.

Discharge of Liability on Bonds

Upon the deposit with the Co-Trustee, in trust, at or before maturity, of money or Federal Securities in the necessary amount to pay or redeem Outstanding Bonds (whether upon or prior to their maturity or the redemption date of such Bonds), provided that if such Bonds are to be redeemed prior to the maturity thereof, notice of such redemption shall have been given as in the Indenture provided or provision satisfactory to the Co-Trustee shall have been made for the giving of such notice, then all liability of the Authority in respect of such Bonds is required to cease, determine and be completely discharged and the Owners thereof would thereafter be entitled only to payment out of the money or Federal Securities deposited with the Trustee as aforesaid for their payment, subject, however, to the provisions of the Indenture.

Payment of Bonds after Discharge of Indenture

Notwithstanding any provisions of the Indenture, any moneys deposited with the Co-Trustee in trust for the payment of the principal of, or interest or premium on, any Bonds and remaining unclaimed for two years after the principal of all the Outstanding Bonds has become due and payable (whether at maturity or upon call for redemption or by declaration as provided in the Indenture) are required to then be repaid to the Authority upon its Request, and the Owners of such Bonds would thereafter be entitled to look only to the Authority for payment thereof, and all liability of the Co-Trustee with respect to such moneys would thereupon cease; provided, however, that before the repayment of such moneys to the Authority as aforesaid, the Co-Trustee may (at the cost of the Authority) first publish at least once in a Financial Newspaper or Journal and in a newspaper of general circulation in Guam a notice, in such form as may be deemed appropriate by the Co-Trustee, with respect to the Bonds so payable and not presented and with respect to the provisions relating to the repayment to the Authority of the moneys held for the payment thereof. In the event of the repayment of any such moneys to the Authority as aforesaid, the Owners of the Bonds in respect of which such moneys were deposited would thereafter be deemed to be general creditors of the Authority for amounts equivalent to the respective amounts deposited for the payment of such Bonds and so repaid to the Authority (without interest thereon).

[THIS PAGE INTENTIONALLY LEFT BLANK]

APPENDIX D

PROPOSED FORMS OF OPINION OF BOND COUNSEL

[THIS PAGE INTENTIONALLY LEFT BLANK]

PROPOSED FORM OF OPINION OF BOND COUNSEL (2024A BONDS)

[Dated Date]

Guam Waterworks Authority
Mangilao, Guam

Guam Waterworks Authority
Water and Wastewater System Revenue Refunding Bonds Series 2024A
(Final Opinion)

Ladies and Gentlemen:

We have acted as bond counsel to the Guam Waterworks Authority (the “Authority”) in connection with the issuance of \$ _____ aggregate principal amount of Guam Waterworks Authority Water and Wastewater System Revenue Refunding Bonds, Series 2024A (the “2024A Bonds”) issued pursuant to an indenture, dated as of December 1, 2005, as heretofore supplemented and amended, and as supplemented by the Ninth Supplemental Indenture, dated as of March 1, 2024 (as so supplemented, the “Indenture”), among the Authority, Bank of Guam, as trustee (the “Trustee”) and U.S. Bank Trust Company, National Association, as co-trustee (the “Co-Trustee”). Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Indenture.

In such connection, we have reviewed the Indenture, the Tax Certificate of the Authority, dated the date hereof (the “Tax Certificate”), certificates of the Authority, the Trustee, the Co-Trustee and others, opinions of counsel to the Authority, the Trustee, the Co-Trustee and others, and such other documents, opinions and matters to the extent we deemed necessary to render the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions may be affected by actions taken or omitted or events occurring after original delivery of the 2024A Bonds on the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after original delivery of the 2024A Bonds on the date hereof. Accordingly, this letter speaks only as of its date and is not intended to, and may not, be relied upon or otherwise used in connection with any such actions, events or matters. Our engagement with respect to the 2024A Bonds has concluded with their issuance, and we disclaim any obligation to update this letter. We have assumed the genuineness of all documents and signatures provided to us and the due and legal execution and delivery thereof by, and validity against, any parties other than the Authority. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents, and of the legal conclusions contained in the opinions, referred to in the second paragraph hereof. Furthermore, we have assumed compliance with all covenants and agreements contained in the Indenture and the Tax Certificate, including (without limitation) covenants and agreements compliance with which is necessary to assure that future actions, omissions or events will not cause interest on the 2024A Bonds to be included in gross income for federal income tax purposes. We call attention to the fact that the rights and obligations under the 2024A Bonds, the Indenture and the Tax Certificate and their enforceability may be subject to bankruptcy, insolvency, receivership, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors’ rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against governmental entities such as the Authority in Guam. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinion with respect to the state or quality of title to or interest in any of the property described in or as subject to the lien of the Indenture or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such property. Our services did not include financial or other non-legal advice. Finally, we undertake no responsibility for the accuracy, completeness or fairness of the Official Statement or other offering material relating to the 2024A Bonds and express no view with respect thereto.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions:

1. The 2024A Bonds constitute the valid and binding limited obligations of the Authority payable solely from the Revenues of the System.

2. The Indenture has been duly executed and delivered by, and constitutes the valid and binding agreement of, the Authority.

3. The Indenture creates a valid pledge, to secure the payment of the principal of, premium, if any, and interest on the Bonds, Credit Agreement Payments and Parity Payment Agreement Payments, of the Revenues, subject to the provisions of the Indenture permitting the application thereof for the purposes and on the terms and conditions set forth in the Indenture.

4. Interest on the 2024A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the "Code"). Interest on the 2024A Bonds is not a specific preference item for purposes of the federal individual alternative minimum tax. We observe that interest on the 2024A Bonds included in adjusted financial statement income of certain corporations is not excluded from the federal corporate alternative minimum tax. Under 48 U.S.C. Section 1423a, interest on the 2024A Bonds is exempt from taxation by the Government of Guam, or by any state or territory of the United States or any political subdivision thereof or by the District of Columbia. We express no opinion regarding other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2024A Bonds.

Faithfully yours,

ORRICK, HERRINGTON & SUTCLIFFE LLP

per

PROPOSED FORM OF OPINION OF BOND COUNSEL (2024B BONDS)

[Dated Date]

Guam Waterworks Authority
Mangilao, Guam

Guam Waterworks Authority
Water and Wastewater System Revenue Refunding Bonds Series 2024B
(Final Opinion)

Ladies and Gentlemen:

We have acted as bond counsel to the Guam Waterworks Authority (the “Authority”) in connection with the issuance of \$ _____ aggregate principal amount of Guam Waterworks Authority Water and Wastewater System Revenue Refunding Bonds, Series 2024B (the “2024B Bonds”) issued pursuant to an indenture, dated as of December 1, 2005, as heretofore supplemented and amended, and as supplemented by the Tenth Supplemental Indenture, dated as of April 1, 2024 (as so supplemented, the “Indenture”), among the Authority, Bank of Guam, as trustee (the “Trustee”) and U.S. Bank Trust Company, National Association, as co-trustee (the “Co-Trustee”). Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Indenture.

In such connection, we have reviewed the Indenture, the Tax Certificate of the Authority, dated the date hereof (the “Tax Certificate”), certificates of the Authority, the Trustee, the Co-Trustee and others, opinions of counsel to the Authority, the Trustee, the Co-Trustee and others, and such other documents, opinions and matters to the extent we deemed necessary to render the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions may be affected by actions taken or omitted or events occurring after original delivery of the 2024B Bonds on the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after original delivery of the 2024B Bonds on the date hereof. Accordingly, this letter speaks only as of its date and is not intended to, and may not, be relied upon or otherwise used in connection with any such actions, events or matters. Our engagement with respect to the 2024B Bonds has concluded with their issuance, and we disclaim any obligation to update this letter. We have assumed the genuineness of all documents and signatures provided to us and the due and legal execution and delivery thereof by, and validity against, any parties other than the Authority. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents, and of the legal conclusions contained in the opinions, referred to in the second paragraph hereof. Furthermore, we have assumed compliance with all covenants and agreements contained in the Indenture and the Tax Certificate, including (without limitation) covenants and agreements compliance with which is necessary to assure that future actions, omissions or events will not cause interest on the 2024B Bonds to be included in gross income for federal income tax purposes. We call attention to the fact that the rights and obligations under the 2024B Bonds, the Indenture and the Tax Certificate and their enforceability may be subject to bankruptcy, insolvency, receivership, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors’ rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against governmental entities such as the Authority in Guam. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinion with respect to the state or quality of title to or interest in any of the property described in or as subject to the lien of the Indenture or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such property. Our services did not include financial or other non-legal advice. Finally, we undertake no responsibility for the accuracy, completeness or fairness of the Official Statement or other offering material relating to the 2024B Bonds and express no view with respect thereto.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions:

1. The 2024B Bonds constitute the valid and binding limited obligations of the Authority payable solely from the Revenues of the System.

2. The Indenture has been duly executed and delivered by, and constitutes the valid and binding agreement of, the Authority.

3. The Indenture creates a valid pledge, to secure the payment of the principal of, premium, if any, and interest on the Bonds, Credit Agreement Payments and Parity Payment Agreement Payments, of the Revenues, subject to the provisions of the Indenture permitting the application thereof for the purposes and on the terms and conditions set forth in the Indenture.

4. Interest on the 2024B Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the "Code"). Interest on the 2024B Bonds is not a specific preference item for purposes of the federal individual alternative minimum tax. We observe that interest on the 2024B Bonds included in adjusted financial statement income of certain corporations is not excluded from the federal corporate alternative minimum tax. Under 48 U.S.C. Section 1423a, interest on the 2024B Bonds is exempt from taxation by the Government of Guam, or by any state or territory of the United States or any political subdivision thereof or by the District of Columbia. We express no opinion regarding other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2024B Bonds.

Faithfully yours,

ORRICK, HERRINGTON & SUTCLIFFE LLP

per

APPENDIX E

PROPOSED FORMS OF CONTINUING DISCLOSURE AGREEMENTS

[THIS PAGE INTENTIONALLY LEFT BLANK]

PROPOSED FORM OF 2024A BONDS CONTINUING DISCLOSURE AGREEMENT

March __, 2024

This Continuing Disclosure Agreement (this “Disclosure Agreement”) is executed and delivered by the Guam Waterworks Authority (the “Authority”) and Digital Assurance Certification, L.L.C., as dissemination agent (the “Dissemination Agent”), in connection with the issuance of \$ _____ Guam Waterworks Authority Water and Wastewater System Revenue Refunding Bonds, Series 2024A (the “Bonds”) pursuant to the Indenture, dated as of December 1, 2005 (the “General Indenture”), as amended and supplemented from time to time, including as supplemented by the Ninth Supplemental Indenture, dated as of March 1, 2024 (the “Ninth Supplemental Indenture”), among the Authority, Bank of Guam, as trustee, and U.S. Bank Trust Company, National Association, as successor to U.S. Bank National Association, as co-trustee. The General Indenture, as amended and supplemented, including as supplemented by the Ninth Supplemental Indenture, is referred to herein as the “Indenture.” The Authority and the Dissemination Agent covenant and agree as follows:

SECTION 1. Purpose of this Disclosure Agreement. This Disclosure Agreement is being executed and delivered by the Authority for the benefit of the Holders and Beneficial Owners of the Bonds and in order to assist the Participating Underwriter in complying with Securities and Exchange Commission Rule 15c2-12(b)(5).

SECTION 2. Definitions. In addition to the definitions set forth in the Indenture, which apply to any capitalized term used in this Disclosure Agreement unless otherwise defined in this Section 2, the following capitalized terms shall have the following meanings:

“Annual Report” means any Annual Report provided by the Authority pursuant to, and as described in, Sections 3 and 4 of this Disclosure Agreement.

“Annual Filing Date” means the date, set forth in Section 3(a), by which the Annual Report is to be filed with the MSRB.

“Beneficial Owner” means any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any Bonds (including persons holding Bonds through nominees, depositories or other intermediaries).

“Business Day” means any day other than a Saturday, Sunday or other day on which Authority offices generally are not open for business.

“Certification” means a written certification of compliance signed by the Disclosure Representative stating that the Annual Report, Listed Event notice, or Failure to File Event notice, as applicable, delivered to the Dissemination Agent is the Annual Report, Listed Event notice or Failure to File Event notice, as applicable, required to be submitted to the MSRB under this Continuing Disclosure Agreement. A Certification shall accompany each such document submitted to the Dissemination Agent by the Authority and include the full name of the Bonds and the 9-digit CUSIP numbers for all Bonds to which the document applies.

“Disclosure Representative” means such person as the Authority shall designate in writing to the Dissemination Agent from time to time as the person responsible for providing Information to the Dissemination Agent.

“Dissemination Agent” means Digital Assurance Certification, L.L.C. (“DAC”), or any successor Dissemination Agent designated in writing by the Authority and which has filed with the Authority a written acceptance of such designation.

“Failure to File Event” means the Authority’s failure to file an Annual Report on or before the Annual Filing Date.

“Financial Obligation” means, for purposes of the Listed Events set out in Sections 5(a)(10) and (5)(b)(8), a (i) debt obligation; (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (iii) guarantee of (i) or (ii). The term “Financial Obligation” shall not include municipal securities (as defined in the Securities Exchange Act of 1934, as amended) as to which a final official statement (as defined in the Rule) has been provided to the MSRB consistent with the Rule.

“Force Majeure Event” means: (i) acts of God, war, or terrorist action; (ii) failure or shut-down of the Electronic Municipal Market Access system maintained by the MSRB; or (iii) to the extent beyond the Dissemination Agent’s reasonable control, interruptions in telecommunications or utilities services, failure, malfunction or error of any telecommunications, computer or other electrical, mechanical or technological application, service or system, computer virus, interruptions in Internet service or telephone service (including due to a virus, electrical delivery problem or similar occurrence) that affect Internet users generally, or in the local area in which the Dissemination Agent or the MSRB is located, or acts of any government, regulatory or any other competent authority the effect of which is to prohibit the Dissemination Agent from performance of its obligations under this Disclosure Agreement.

“Holder” means the person in whose name any Bond shall be registered.

“Information” means, collectively, the Annual Reports, the Listed Event notices and the Failure to File Event notices.

“Listed Events” means any of the events listed in Sections 5(a) or 5(b) of this Disclosure Agreement.

“MSRB” means the Municipal Securities Rulemaking Board or any other entity designated or authorized by the Securities and Exchange Commission to receive reports pursuant to the Rule. Until otherwise designated by the MSRB or the Securities and Exchange Commission, filings with the MSRB are to be made through the Electronic Municipal Market Access (EMMA) website of the MSRB, currently located at <https://emma.msrb.org/>.

“Official Statement” means the Official Statement, dated _____, 2024, as supplemented, relating to the Bonds.

“Participating Underwriter” means the original underwriter(s) of the Bonds required to comply with the Rule in connection with the offering of the Bonds.

“Rule” mean Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

SECTION 3. Provision of Annual Reports.

(a) The Authority shall, or shall cause the Dissemination Agent to, not later than 270 days after the end of each fiscal year of the Authority (presently September 30) (the “Annual Filing Date”), commencing with the report for the fiscal year ending September 30, 2023, provide to the MSRB an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Agreement; provided that the audited financial statements of the Authority may be submitted separately from the balance of the Annual Report and later than the date required above for the filing of the Annual Report if they are not available by that date, subject to the requirement in Section 4(a) of this Disclosure Agreement to file the unaudited financial statements. If the Authority’s fiscal year changes, it shall give notice of such change in the same manner as for a Listed Event under Section 5(a).

(b) The Authority shall provide, annually, an electronic copy of the Annual Report and Certification to the Dissemination Agent, not later than fifteen (15) days prior to the Annual Filing Date. Promptly upon receipt of an electronic copy of the Annual Report and the Certification, the Dissemination Agent shall provide an Annual Report to the MSRB not later than the Annual Filing Date. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may cross reference other information as provided in Section 4 of this Disclosure Agreement.

(c) If on the fifteenth (15th) day prior to the Annual Filing Date, the Dissemination Agent has not received a copy of the Annual Report and Certification, the Dissemination Agent shall contact the Disclosure Representative by telephone and in writing (which may be by e-mail) to remind the Authority of its undertaking to provide the Annual Report pursuant to subsection 3(a). Upon such reminder, the Disclosure Representative shall either (i) provide the Disclosure Dissemination Agent with an electronic copy of the Annual Report and the Certification no later than two (2) business days prior to the Annual Filing Date, or (ii) instruct the Dissemination Agent in writing that the Authority will not be able to file the Annual Report within the time required under this Disclosure Agreement, state the date by which the Annual Report for such year will be provided and instruct the Dissemination Agent that a Failure to File Event has occurred and to immediately send a notice to the MSRB in substantially the form attached as Exhibit A, accompanied by a cover sheet completed by the Dissemination Agent.

(d) If the Dissemination Agent has not received an Annual Report and Certification by 6:00 p.m. Eastern time on the Annual Filing Date (or, if such Annual Filing Date falls on a Saturday, Sunday or holiday, then the first business day thereafter) for the Annual Report, a Failure to File Event shall have occurred and the Authority irrevocably directs the Dissemination Agent to immediately send a notice to the MSRB in substantially the form attached as Exhibit A without reference to the anticipated filing date for the Annual Report, accompanied by a cover sheet completed by the Dissemination Agent.

(e) If the Authority adjusts the Annual Filing Date upon change of its fiscal year, it shall provide written notice of such change and the new Annual Filing Date to the Dissemination Agent and the MSRB, provided, however, that the period between the existing Annual Filing Date and new Annual Filing Date shall not exceed one year.

(f) Any Information received by the Dissemination Agent before 6:00 p.m. Eastern time on any business day that it is required to file with the MSRB pursuant to the terms of this Disclosure Agreement and that is accompanied by a Certification and all other information required by the terms of this Disclosure Agreement will be filed by the Dissemination Agent with the MSRB no later than 11:59 p.m. Eastern time on the same business day; provided, however, the Dissemination Agent shall have no liability for any delay in filing with the MSRB if such delay is caused by a Force Majeure Event provided that the Dissemination Agent uses reasonable efforts to make any such filing as soon as possible.

SECTION 4. Content of Annual Reports. The Annual Report shall contain or include by reference the following:

(a) the audited financial statements of the Authority for the prior fiscal year, prepared in accordance with generally accepted accounting principles as promulgated to apply to governmental entities from time to time by the Governmental Accounting Standards Board; provided that if the Authority's audited financial statements are not available by the time the Annual Report is required to be filed pursuant to Section 3(a), the Annual Report shall contain unaudited financial statements for such entity in a format similar to the financial statements contained in the Official Statement, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available; and

(b) operating results of the water and wastewater systems (the "System"), debt service coverage ratios, sources and uses of water, largest water and wastewater customers, data on collection of payments from customers of the System, and new water and sewer installations, to the extent that such information is historical and not projected.

The Authority has not undertaken in this Disclosure Agreement to provide all information an investor may want to have in making decisions to buy, hold or sell the Bonds, but only to provide the information specified above. Any or all of the items listed above may be included by specific reference to other documents, including official statements of debt issues of the Authority, which have been submitted to the MSRB or the Securities and Exchange Commission. If the document included by reference is a final official statement, it must be available from the MSRB. The Authority shall clearly identify each such other document so included by reference.

SECTION 5. Reporting of Significant Events.

(a) The Authority shall give, or cause to be given, to the MSRB notice of the occurrence of any of the following events with respect to the Bonds in a timely manner not later than ten (10) business days after the occurrence of the event:

- (1) Principal and interest payment delinquencies;
- (2) Unscheduled draws on debt service reserves reflecting financial difficulties;
- (3) Unscheduled draws on credit enhancements reflecting financial difficulties;
- (4) Substitution of credit or liquidity providers, or their failure to perform;
- (5) Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability or Notices of Proposed Issue (IRS Form 5701-TEB);
- (6) Tender offers;
- (7) Defeasances;
- (8) Rating changes;
- (9) Bankruptcy, insolvency, receivership or similar event of the Authority; or
- (10) Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the Authority, any of which reflect financial difficulties.

Note: for the purposes of the event identified in subparagraph (9), the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for the Authority in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Authority, or if such jurisdiction has been assumed by leaving the existing governmental body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Authority.

(b) The Authority shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the Bonds, if material, to the MSRB in a timely manner not later than ten business days after the occurrence of the event:

- (1) Non-payment related defaults;
- (2) Unless described in paragraph 5(a)(5), other material notices or determinations by the Internal Revenue Service with respect to the tax status of the Bonds or other material events affecting the tax status of the Bonds;
- (3) Modifications to rights of Bond holders;
- (4) Optional, unscheduled or contingent Bond calls;
- (5) Release, substitution, or sale of property securing repayment of the Bonds;

(6) The consummation of a merger, consolidation, or acquisition involving the Authority or the sale of all or substantially all of the assets of the Authority, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms;

(7) Appointment of a successor or additional trustee or the change of name of a trustee; or

(8) Incurrence of a Financial Obligation of the Authority, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Authority, any of which affect Bond holders.

(c) Whenever the Authority obtains knowledge of the occurrence of a Listed Event under subsection 5(b), the Authority shall as soon as practicable determine if such event is material under applicable federal securities laws. If the Authority determines that the occurrence of such Listed Event would be material under applicable federal securities laws, the Authority shall promptly notify the Dissemination Agent in writing of the occurrence of the Listed Event. Such notice shall instruct the Dissemination Agent to report the occurrence pursuant to subsection 5(e) and shall be accompanied by a Certification. Such notice or Certification shall identify the Listed Event that has occurred (which shall be any of the categories set forth in subsections 5(a) or 5(b) of this Disclosure Agreement), include the text of the disclosure that the Authority desires to make, contain the written authorization of the Authority for the Dissemination Agent to disseminate such information, and identify the date the Authority desires for the Dissemination Agent to disseminate the information.

(d) The Dissemination Agent is under no obligation to notify the Authority or the Disclosure Representative of an event that may constitute a Listed Event. In the event the Dissemination Agent so notifies the Disclosure Representative, the Disclosure Representative will promptly instruct the Dissemination Agent that either (i) a Listed Event has not occurred and no filing is to be made or (ii) a Listed Event has occurred and the Dissemination Agent is to report the occurrence pursuant to subsection 5(e), which instructions relating to this clause (ii) to be accompanied by a Certification. Such Certification shall identify the Listed Event that has occurred (which shall be any of the categories set forth in subsections 5(a) or 5(b)), include the text of the disclosure that the Authority desires to make, contain the written authorization of the Authority for the Dissemination Agent to disseminate such information, and identify the date the Authority desires for the Dissemination Agent to disseminate the information.

(e) If the Dissemination Agent has been instructed by the Authority as prescribed in subsections 5(c) or 5(d)(ii) to report the occurrence of a Listed Event, the Dissemination Agent shall file a notice of such occurrence with the MSRB within the time frame set forth in Section 3(f). This notice will be filed with a cover sheet completed by the Dissemination Agent.

(f) The Authority intends to comply with the Listed Events described in subsections 5(a)(10) and 5(b)(8), and the definition of “Financial Obligation” in Section 2, with reference to the Rule, any other applicable federal securities laws and the guidance provided by the Securities and Exchange Commission in Release No. 34-83885 dated August 20, 2018 (the “2018 Release”), and any further amendments or written guidance provided by the Securities and Exchange Commission or its staff with respect the amendments to the Rule effected by the 2018 Release.

SECTION 6. Termination of Reporting Obligation. The Authority’s obligations under this Disclosure Agreement shall terminate upon the legal defeasance, prior redemption or payment in full of the Bonds.

SECTION 7. Dissemination Agent. The Authority has appointed Digital Assurance Certification, L.L.C. as exclusive Dissemination Agent under this Disclosure Agreement. The Authority may, upon thirty days’ prior written notice to the Dissemination Agent, replace or appoint a successor Dissemination Agent. Upon termination of DAC’s services as Dissemination Agent, whether by notice of the Authority or DAC, the Authority agrees to appoint a successor Dissemination Agent or, alternately, agrees to assume all responsibilities of Dissemination Agent under this Disclosure Agreement for the benefit of the holders of the Bonds. Notwithstanding any replacement or appointment of a successor, the Authority shall remain liable until payment in full for any and all sums owed and payable to the Dissemination Agent. The Dissemination Agent may resign at any time by providing thirty days’ prior written notice to the Authority.

SECTION 8. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Agreement, the Authority and the Dissemination Agent may amend this Disclosure Agreement, and any provision of this Disclosure Agreement may be waived, provided that the following conditions are satisfied:

(a) If the amendment or waiver relates to the provisions of Sections 3(a), 4, 5(a) or 5(b), it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of the Authority with respect to the Bonds, or the type of business conducted;

(b) The undertaking, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) The amendment or waiver either (A) is approved by the Holders of a majority in aggregate principal amount of the affected Bonds, or (B) does not, in the opinion of nationally recognized bond counsel or another independent third party, materially impair the interests of the Holders or Beneficial Owners of the Bonds.

In the event of any amendment or waiver of a provision of this Disclosure Agreement, the Authority shall describe such amendment in the next Annual Report, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or in the case of a change of accounting principles, on the presentation) of financial information or operating data being presented by the Authority. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements, (A) notice of such change shall be given in the same manner as for a Listed Event under Section 5(a), and (B) the Annual Report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

SECTION 9. Additional Information. Nothing in this Disclosure Agreement shall be deemed to prevent the Authority from disseminating any other information, using the means of dissemination set forth in this Disclosure Agreement or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Agreement. If the Authority chooses to include any information in any Annual Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Agreement, the Authority shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

SECTION 10. Default. In the event of a failure of the Authority to comply with any provision of this Disclosure Agreement, the sole remedy for any Holder or Beneficial Owner of the Bonds shall be to take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause or compel the Authority to comply with its obligations under this Disclosure Agreement. A default under this Disclosure Agreement shall not be deemed an event of default under the Indenture.

SECTION 11. Duties, Immunities and Liabilities of Dissemination Agent.

(a) The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement. The Dissemination Agent's obligation to deliver the information at the times and with the contents described herein shall be limited to the extent the Authority has provided such information to the Dissemination Agent as required by this Disclosure Agreement. The Dissemination Agent shall have no duty with respect to the content of any disclosures or notice made pursuant to the terms hereof. The Dissemination Agent shall have no duty or obligation to review or verify any Information or any other information, disclosures or notices provided to it by the Authority and shall not be deemed to be acting in any fiduciary capacity for the Authority, the Holders of the Bonds or any other party. The Dissemination Agent shall have no responsibility for the Authority's failure to report to the Dissemination Agent a Listed Event or a duty to determine the materiality thereof. The Dissemination Agent shall have no duty to determine, or liability for failing to determine, whether the Authority has complied with this Disclosure Agreement. The Dissemination Agent may conclusively rely upon Certifications of the Authority at all times.

The obligations of the Authority under this Section 11 shall survive resignation or removal of the Dissemination Agent and defeasance, redemption or payment of the Bonds.

(b) The Dissemination Agent may, from time to time, consult with legal counsel (either in-house or external) of its own choosing in the event of any disagreement or controversy, or question or doubt as to the construction of any of the provisions hereof or its respective duties hereunder, and shall not incur any liability and shall be fully protected in acting in good faith upon the advice of such legal counsel. The reasonable fees and expenses of such counsel shall be payable by the Authority.

SECTION 12. Format for Filings with MSRB. All documents, reports, notices, statements, information and other materials provided to the MSRB under this Disclosure Agreement shall be provided in an electronic format and accompanied by identifying information as prescribed by the MSRB necessary to file such information in accordance with this Disclosure Agreement.

SECTION 13. Beneficiaries. This Disclosure Agreement shall inure solely to the benefit of the Authority, the Dissemination Agent, the Participating Underwriter and Holders and Beneficial Owners from time to time of the Bonds, and shall create no rights in any other person or entity.

Dated as of the date first written above.

GUAM WATERWORKS AUTHORITY

By: _____
Authorized Officer

DIGITAL ASSURANCE CERTIFICATION, L.L.C.

By: _____
Authorized Officer

EXHIBIT A

**NOTICE TO MUNICIPAL SECURITIES RULEMAKING BOARD
OF FAILURE TO FILE ANNUAL REPORT**

Name of Issuer: Guam Waterworks Authority

Name of Bond Issue: Water and Wastewater System Revenue Refunding Bonds, Series 2024A

Date of Issuance: March __, 2024

NOTICE IS HEREBY GIVEN that the Authority has not provided an Annual Report with respect to the above-named Bonds as required by Section 3 of the Continuing Disclosure Agreement, dated March __, 2024. [The Authority anticipates that the Annual Report will be filed by _____.]

Dated: _____

GUAM WATERWORKS AUTHORITY

By: [to be signed only if filed] _____

Title: _____

PROPOSED FORM OF 2024B BONDS CONTINUING DISCLOSURE AGREEMENT

April __, 2024

This Continuing Disclosure Agreement (this “Disclosure Agreement”) is executed and delivered by the Guam Waterworks Authority (the “Authority”) and Digital Assurance Certification, L.L.C., as dissemination agent (the “Dissemination Agent”), in connection with the issuance of \$ _____ Guam Waterworks Authority Water and Wastewater System Revenue Refunding Bonds, Series 2024B (the “Bonds”) pursuant to the Indenture, dated as of December 1, 2005 (the “General Indenture”), as amended and supplemented from time to time, including as supplemented by the Tenth Supplemental Indenture, dated as of April 1, 2024 (the “Tenth Supplemental Indenture”), among the Authority, Bank of Guam, as trustee, and U.S. Bank Trust Company, National Association, as successor to U.S. Bank National Association, as co-trustee. The General Indenture, as amended and supplemented, including as supplemented by the Tenth Supplemental Indenture, is referred to herein as the “Indenture.” The Authority and the Dissemination Agent covenant and agree as follows:

SECTION 1. Purpose of this Disclosure Agreement. This Disclosure Agreement is being executed and delivered by the Authority for the benefit of the Holders and Beneficial Owners of the Bonds and in order to assist the Participating Underwriter in complying with Securities and Exchange Commission Rule 15c2-12(b)(5).

SECTION 2. Definitions. In addition to the definitions set forth in the Indenture, which apply to any capitalized term used in this Disclosure Agreement unless otherwise defined in this Section 2, the following capitalized terms shall have the following meanings:

“Annual Report” means any Annual Report provided by the Authority pursuant to, and as described in, Sections 3 and 4 of this Disclosure Agreement.

“Annual Filing Date” means the date, set forth in Section 3(a), by which the Annual Report is to be filed with the MSRB.

“Beneficial Owner” means any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any Bonds (including persons holding Bonds through nominees, depositories or other intermediaries).

“Business Day” means any day other than a Saturday, Sunday or other day on which Authority offices generally are not open for business.

“Certification” means a written certification of compliance signed by the Disclosure Representative stating that the Annual Report, Listed Event notice, or Failure to File Event notice, as applicable, delivered to the Dissemination Agent is the Annual Report, Listed Event notice or Failure to File Event notice, as applicable, required to be submitted to the MSRB under this Continuing Disclosure Agreement. A Certification shall accompany each such document submitted to the Dissemination Agent by the Authority and include the full name of the Bonds and the 9-digit CUSIP numbers for all Bonds to which the document applies.

“Disclosure Representative” means such person as the Authority shall designate in writing to the Dissemination Agent from time to time as the person responsible for providing Information to the Dissemination Agent.

“Dissemination Agent” means Digital Assurance Certification, L.L.C. (“DAC”), or any successor Dissemination Agent designated in writing by the Authority and which has filed with the Authority a written acceptance of such designation.

“Failure to File Event” means the Authority’s failure to file an Annual Report on or before the Annual Filing Date.

“Financial Obligation” means, for purposes of the Listed Events set out in Sections 5(a)(10) and (5)(b)(8), a (i) debt obligation; (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (iii) guarantee of (i) or (ii). The term “Financial Obligation” shall not include municipal securities (as defined in the Securities Exchange Act of 1934, as amended) as to which a final official statement (as defined in the Rule) has been provided to the MSRB consistent with the Rule.

“Force Majeure Event” means: (i) acts of God, war, or terrorist action; (ii) failure or shut-down of the Electronic Municipal Market Access system maintained by the MSRB; or (iii) to the extent beyond the Dissemination Agent’s reasonable control, interruptions in telecommunications or utilities services, failure, malfunction or error of any telecommunications, computer or other electrical, mechanical or technological application, service or system, computer virus, interruptions in Internet service or telephone service (including due to a virus, electrical delivery problem or similar occurrence) that affect Internet users generally, or in the local area in which the Dissemination Agent or the MSRB is located, or acts of any government, regulatory or any other competent authority the effect of which is to prohibit the Dissemination Agent from performance of its obligations under this Disclosure Agreement.

“Holder” means the person in whose name any Bond shall be registered.

“Information” means, collectively, the Annual Reports, the Listed Event notices and the Failure to File Event notices.

“Listed Events” means any of the events listed in Sections 5(a) or 5(b) of this Disclosure Agreement.

“MSRB” means the Municipal Securities Rulemaking Board or any other entity designated or authorized by the Securities and Exchange Commission to receive reports pursuant to the Rule. Until otherwise designated by the MSRB or the Securities and Exchange Commission, filings with the MSRB are to be made through the Electronic Municipal Market Access (EMMA) website of the MSRB, currently located at <https://emma.msrb.org/>.

“Official Statement” means the Official Statement, dated _____, 2024, as supplemented, relating to the Bonds.

“Participating Underwriter” means the original underwriter(s) of the Bonds required to comply with the Rule in connection with the offering of the Bonds.

“Rule” mean Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

SECTION 3. Provision of Annual Reports.

(a) The Authority shall, or shall cause the Dissemination Agent to, not later than 270 days after the end of each fiscal year of the Authority (presently September 30) (the “Annual Filing Date”), commencing with the report for the fiscal year ending September 30, 2023, provide to the MSRB an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Agreement; provided that the audited financial statements of the Authority may be submitted separately from the balance of the Annual Report and later than the date required above for the filing of the Annual Report if they are not available by that date, subject to the requirement in Section 4(a) of this Disclosure Agreement to file the unaudited financial statements. If the Authority’s fiscal year changes, it shall give notice of such change in the same manner as for a Listed Event under Section 5(a).

(b) The Authority shall provide, annually, an electronic copy of the Annual Report and Certification to the Dissemination Agent, not later than fifteen (15) days prior to the Annual Filing Date. Promptly upon receipt of an electronic copy of the Annual Report and the Certification, the Dissemination Agent shall provide an Annual Report to the MSRB not later than the Annual Filing Date. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may cross reference other information as provided in Section 4 of this Disclosure Agreement.

(c) If on the fifteenth (15th) day prior to the Annual Filing Date, the Dissemination Agent has not received a copy of the Annual Report and Certification, the Dissemination Agent shall contact the Disclosure Representative by telephone and in writing (which may be by e-mail) to remind the Authority of its undertaking to provide the Annual Report pursuant to subsection 3(a). Upon such reminder, the Disclosure Representative shall either (i) provide the Disclosure Dissemination Agent with an electronic copy of the Annual Report and the Certification no later than two (2) business days prior to the Annual Filing Date, or (ii) instruct the Dissemination Agent in writing that the Authority will not be able to file the Annual Report within the time required under this Disclosure Agreement, state the date by which the Annual Report for such year will be provided and instruct the Dissemination Agent that a Failure to File Event has occurred and to immediately send a notice to the MSRB in substantially the form attached as Exhibit A, accompanied by a cover sheet completed by the Dissemination Agent.

(d) If the Dissemination Agent has not received an Annual Report and Certification by 6:00 p.m. Eastern time on the Annual Filing Date (or, if such Annual Filing Date falls on a Saturday, Sunday or holiday, then the first business day thereafter) for the Annual Report, a Failure to File Event shall have occurred and the Authority irrevocably directs the Dissemination Agent to immediately send a notice to the MSRB in substantially the form attached as Exhibit A without reference to the anticipated filing date for the Annual Report, accompanied by a cover sheet completed by the Dissemination Agent.

(e) If the Authority adjusts the Annual Filing Date upon change of its fiscal year, it shall provide written notice of such change and the new Annual Filing Date to the Dissemination Agent and the MSRB, provided, however, that the period between the existing Annual Filing Date and new Annual Filing Date shall not exceed one year.

(f) Any Information received by the Dissemination Agent before 6:00 p.m. Eastern time on any business day that it is required to file with the MSRB pursuant to the terms of this Disclosure Agreement and that is accompanied by a Certification and all other information required by the terms of this Disclosure Agreement will be filed by the Dissemination Agent with the MSRB no later than 11:59 p.m. Eastern time on the same business day; provided, however, the Dissemination Agent shall have no liability for any delay in filing with the MSRB if such delay is caused by a Force Majeure Event provided that the Dissemination Agent uses reasonable efforts to make any such filing as soon as possible.

SECTION 4. Content of Annual Reports. The Annual Report shall contain or include by reference the following:

(a) the audited financial statements of the Authority for the prior fiscal year, prepared in accordance with generally accepted accounting principles as promulgated to apply to governmental entities from time to time by the Governmental Accounting Standards Board; provided that if the Authority's audited financial statements are not available by the time the Annual Report is required to be filed pursuant to Section 3(a), the Annual Report shall contain unaudited financial statements for such entity in a format similar to the financial statements contained in the Official Statement, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available; and

(b) operating results of the water and wastewater systems (the "System"), debt service coverage ratios, sources and uses of water, largest water and wastewater customers, data on collection of payments from customers of the System, and new water and sewer installations, to the extent that such information is historical and not projected.

The Authority has not undertaken in this Disclosure Agreement to provide all information an investor may want to have in making decisions to buy, hold or sell the Bonds, but only to provide the information specified above. Any or all of the items listed above may be included by specific reference to other documents, including official statements of debt issues of the Authority, which have been submitted to the MSRB or the Securities and Exchange Commission. If the document included by reference is a final official statement, it must be available from the MSRB. The Authority shall clearly identify each such other document so included by reference.

SECTION 5. Reporting of Significant Events.

(a) The Authority shall give, or cause to be given, to the MSRB notice of the occurrence of any of the following events with respect to the Bonds in a timely manner not later than ten (10) business days after the occurrence of the event:

- (1) Principal and interest payment delinquencies;
- (2) Unscheduled draws on debt service reserves reflecting financial difficulties;
- (3) Unscheduled draws on credit enhancements reflecting financial difficulties;
- (4) Substitution of credit or liquidity providers, or their failure to perform;
- (5) Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability or Notices of Proposed Issue (IRS Form 5701-TEB);
- (6) Tender offers;
- (7) Defeasances;
- (8) Rating changes;
- (9) Bankruptcy, insolvency, receivership or similar event of the Authority; or
- (10) Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the Authority, any of which reflect financial difficulties.

Note: for the purposes of the event identified in subparagraph (9), the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for the Authority in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Authority, or if such jurisdiction has been assumed by leaving the existing governmental body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Authority.

(b) The Authority shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the Bonds, if material, to the MSRB in a timely manner not later than ten business days after the occurrence of the event:

- (1) Non-payment related defaults;
- (2) Unless described in paragraph 5(a)(5), other material notices or determinations by the Internal Revenue Service with respect to the tax status of the Bonds or other material events affecting the tax status of the Bonds;
- (3) Modifications to rights of Bond holders;
- (4) Optional, unscheduled or contingent Bond calls;
- (5) Release, substitution, or sale of property securing repayment of the Bonds;

(6) The consummation of a merger, consolidation, or acquisition involving the Authority or the sale of all or substantially all of the assets of the Authority, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms;

(7) Appointment of a successor or additional trustee or the change of name of a trustee; or

(8) Incurrence of a Financial Obligation of the Authority, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Authority, any of which affect Bond holders.

(c) Whenever the Authority obtains knowledge of the occurrence of a Listed Event under subsection 5(b), the Authority shall as soon as practicable determine if such event is material under applicable federal securities laws. If the Authority determines that the occurrence of such Listed Event would be material under applicable federal securities laws, the Authority shall promptly notify the Dissemination Agent in writing of the occurrence of the Listed Event. Such notice shall instruct the Dissemination Agent to report the occurrence pursuant to subsection 5(e) and shall be accompanied by a Certification. Such notice or Certification shall identify the Listed Event that has occurred (which shall be any of the categories set forth in subsections 5(a) or 5(b) of this Disclosure Agreement), include the text of the disclosure that the Authority desires to make, contain the written authorization of the Authority for the Dissemination Agent to disseminate such information, and identify the date the Authority desires for the Dissemination Agent to disseminate the information.

(d) The Dissemination Agent is under no obligation to notify the Authority or the Disclosure Representative of an event that may constitute a Listed Event. In the event the Dissemination Agent so notifies the Disclosure Representative, the Disclosure Representative will promptly instruct the Dissemination Agent that either (i) a Listed Event has not occurred and no filing is to be made or (ii) a Listed Event has occurred and the Dissemination Agent is to report the occurrence pursuant to subsection 5(e), which instructions relating to this clause (ii) to be accompanied by a Certification. Such Certification shall identify the Listed Event that has occurred (which shall be any of the categories set forth in subsections 5(a) or 5(b)), include the text of the disclosure that the Authority desires to make, contain the written authorization of the Authority for the Dissemination Agent to disseminate such information, and identify the date the Authority desires for the Dissemination Agent to disseminate the information.

(e) If the Dissemination Agent has been instructed by the Authority as prescribed in subsections 5(c) or 5(d)(ii) to report the occurrence of a Listed Event, the Dissemination Agent shall file a notice of such occurrence with the MSRB within the time frame set forth in Section 3(f). This notice will be filed with a cover sheet completed by the Dissemination Agent.

(f) The Authority intends to comply with the Listed Events described in subsections 5(a)(10) and 5(b)(8), and the definition of “Financial Obligation” in Section 2, with reference to the Rule, any other applicable federal securities laws and the guidance provided by the Securities and Exchange Commission in Release No. 34-83885 dated August 20, 2018 (the “2018 Release”), and any further amendments or written guidance provided by the Securities and Exchange Commission or its staff with respect the amendments to the Rule effected by the 2018 Release.

SECTION 6. Termination of Reporting Obligation. The Authority’s obligations under this Disclosure Agreement shall terminate upon the legal defeasance, prior redemption or payment in full of the Bonds.

SECTION 7. Dissemination Agent. The Authority has appointed Digital Assurance Certification, L.L.C. as exclusive Dissemination Agent under this Disclosure Agreement. The Authority may, upon thirty days’ prior written notice to the Dissemination Agent, replace or appoint a successor Dissemination Agent. Upon termination of DAC’s services as Dissemination Agent, whether by notice of the Authority or DAC, the Authority agrees to appoint a successor Dissemination Agent or, alternately, agrees to assume all responsibilities of Dissemination Agent under this Disclosure Agreement for the benefit of the holders of the Bonds. Notwithstanding any replacement or appointment of a successor, the Authority shall remain liable until payment in full for any and all sums owed and payable to the Dissemination Agent. The Dissemination Agent may resign at any time by providing thirty days’ prior written notice to the Authority.

SECTION 8. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Agreement, the Authority and the Dissemination Agent may amend this Disclosure Agreement, and any provision of this Disclosure Agreement may be waived, provided that the following conditions are satisfied:

(a) If the amendment or waiver relates to the provisions of Sections 3(a), 4, 5(a) or 5(b), it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of the Authority with respect to the Bonds, or the type of business conducted;

(b) The undertaking, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) The amendment or waiver either (A) is approved by the Holders of a majority in aggregate principal amount of the affected Bonds, or (B) does not, in the opinion of nationally recognized bond counsel or another independent third party, materially impair the interests of the Holders or Beneficial Owners of the Bonds.

In the event of any amendment or waiver of a provision of this Disclosure Agreement, the Authority shall describe such amendment in the next Annual Report, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or in the case of a change of accounting principles, on the presentation) of financial information or operating data being presented by the Authority. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements, (A) notice of such change shall be given in the same manner as for a Listed Event under Section 5(a), and (B) the Annual Report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

SECTION 9. Additional Information. Nothing in this Disclosure Agreement shall be deemed to prevent the Authority from disseminating any other information, using the means of dissemination set forth in this Disclosure Agreement or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Agreement. If the Authority chooses to include any information in any Annual Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Agreement, the Authority shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

SECTION 10. Default. In the event of a failure of the Authority to comply with any provision of this Disclosure Agreement, the sole remedy for any Holder or Beneficial Owner of the Bonds shall be to take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause or compel the Authority to comply with its obligations under this Disclosure Agreement. A default under this Disclosure Agreement shall not be deemed an event of default under the Indenture.

SECTION 11. Duties, Immunities and Liabilities of Dissemination Agent.

(a) The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement. The Dissemination Agent's obligation to deliver the information at the times and with the contents described herein shall be limited to the extent the Authority has provided such information to the Dissemination Agent as required by this Disclosure Agreement. The Dissemination Agent shall have no duty with respect to the content of any disclosures or notice made pursuant to the terms hereof. The Dissemination Agent shall have no duty or obligation to review or verify any Information or any other information, disclosures or notices provided to it by the Authority and shall not be deemed to be acting in any fiduciary capacity for the Authority, the Holders of the Bonds or any other party. The Dissemination Agent shall have no responsibility for the Authority's failure to report to the Dissemination Agent a Listed Event or a duty to determine the materiality thereof. The Dissemination Agent shall have no duty to determine, or liability for failing to determine, whether the Authority has complied with this Disclosure Agreement. The Dissemination Agent may conclusively rely upon Certifications of the Authority at all times.

The obligations of the Authority under this Section 11 shall survive resignation or removal of the Dissemination Agent and defeasance, redemption or payment of the Bonds.

(b) The Dissemination Agent may, from time to time, consult with legal counsel (either in-house or external) of its own choosing in the event of any disagreement or controversy, or question or doubt as to the construction of any of the provisions hereof or its respective duties hereunder, and shall not incur any liability and shall be fully protected in acting in good faith upon the advice of such legal counsel. The reasonable fees and expenses of such counsel shall be payable by the Authority.

SECTION 12. Format for Filings with MSRB. All documents, reports, notices, statements, information and other materials provided to the MSRB under this Disclosure Agreement shall be provided in an electronic format and accompanied by identifying information as prescribed by the MSRB necessary to file such information in accordance with this Disclosure Agreement.

SECTION 13. Beneficiaries. This Disclosure Agreement shall inure solely to the benefit of the Authority, the Dissemination Agent, the Participating Underwriter and Holders and Beneficial Owners from time to time of the Bonds, and shall create no rights in any other person or entity.

Dated as of the date first written above.

GUAM WATERWORKS AUTHORITY

By: _____
Authorized Officer

DIGITAL ASSURANCE CERTIFICATION, L.L.C.

By: _____
Authorized Officer

EXHIBIT A

**NOTICE TO MUNICIPAL SECURITIES RULEMAKING BOARD
OF FAILURE TO FILE ANNUAL REPORT**

Name of Issuer: Guam Waterworks Authority
Name of Bond Issue: Water and Wastewater System Revenue Refunding Bonds, Series 2024B
Date of Issuance: April __, 2024

NOTICE IS HEREBY GIVEN that the Authority has not provided an Annual Report with respect to the above-named Bonds as required by Section 3 of the Continuing Disclosure Agreement, dated April __, 2024. [The Authority anticipates that the Annual Report will be filed by _____.]

Dated: _____

GUAM WATERWORKS AUTHORITY

By: [to be signed only if filed] _____
Title: _____

APPENDIX F

DTC AND ITS BOOK-ENTRY ONLY SYSTEM

The Depository Trust Company (“DTC”), New York, NY, will act as securities depository for the 2024AB Bonds. The 2024AB Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC’s partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered 2024AB Bond certificate will be issued for each maturity of each series of the 2024AB Bonds in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world’s largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code, and a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC’s participants (“Direct Participants”) deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants’ accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation (“DTCC”). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly (“Indirect Participants”). The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of 2024AB Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2024AB Bonds on DTC’s records. The ownership interest of each actual purchaser of each 2024AB Bond (“Beneficial Owner”) is in turn to be recorded on the Direct and Indirect Participants’ records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the 2024AB Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in 2024AB Bonds, except in the event that use of the book-entry system for the 2024AB Bonds is discontinued.

To facilitate subsequent transfers, all 2024AB Bonds deposited by Direct Participants with DTC are registered in the name of DTC’s partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of 2024AB Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the 2024AB Bonds; DTC’s records reflect only the identity of the Direct Participants to whose accounts such 2024AB Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of 2024AB Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the 2024AB Bonds, such as redemptions, tenders, defaults, and proposed amendments to the 2024AB Bond documents. For example, Beneficial Owners of 2024AB Bonds may wish to ascertain that the nominee holding the 2024AB Bonds for their benefit has agreed to obtain and transmit notices to

Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the 2024AB Bonds within a series and maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such series and maturity to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to 2024AB Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts 2024AB Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payment of principal of, redemption price and interest on the 2024AB Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the Authority or the Trustee on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Authority, the Trustee or the Co-Trustee, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal of, redemption price or interest on the 2024AB Bonds to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Authority or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such, payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the 2024AB Bonds at any time by giving reasonable notice to the Authority. Under such circumstances, in the event that a successor depository is not obtained, 2024AB Bond certificates are required to be printed and delivered. The Authority may decide to discontinue use of the system of book-entry only transfers through DTC (or a successor securities depository). In that event, 2024AB Bond certificates will be printed and delivered.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that the Authority believes to be reliable, but the Authority takes no responsibility for the accuracy thereof.

The preceding information in this APPENDIX F is supplied by DTC for inclusion herein, and has not been independently verified by the Authority or the Underwriter. No representation is made by the Authority as to the completeness or the accuracy of such information or as to the absence of material adverse changes in such information subsequent to the date hereof.

The Authority cannot and does not give any assurances that DTC will distribute to the Participants, or that the Participants or others will distribute to the Beneficial Owners, payments of debt service on the 2024AB Bonds or any redemption or other notices or that they will do so on a timely basis or will serve and act in the manner described in this Official Statement. The Authority is not responsible or liable for the failure of DTC or any Direct Participant or Indirect Participant to make any payments or give any notice to a Beneficial Owner with respect to the 2024AB Bonds or any error or delay relating thereto.

None of the Authority, the Trustee and the Co-Trustee shall have any responsibility or obligation to any DTC Participant, any beneficial owner or other persons claiming a beneficial ownership interest in the 2024AB Bonds under or through DTC or any DTC Participant, with respect to (i) the accuracy of any records maintained by DTC or any DTC Participant with respect to any beneficial ownership interest in the 2024AB Bonds; (ii) the payment by DTC or any DTC Participant of any amount in respect of the principal of and premium, if any, or interest on the 2024AB Bonds to any beneficial owner or other person for the 2024AB Bonds; or (iii) the delivery to any beneficial owner of the 2024AB Bonds, or any other person of any notice which is permitted or required to be given to owners under the Indenture. None of the Authority, the Trustee and the Co-Trustee shall have any responsibility with respect to obtaining consents from anyone other than the registered owners.



GUAM WATERWORKS AUTHORITY



Printed by: ImageMaster, LLC
www.imagemaster.com