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**GUAM CONSOLIDATED COMMISSION ON UTILITIES
RESOLUTION NO. 04-FY2017**

**RELATIVE TO SUPPORTING THE 2016 MEMORANDUM OF UNDERSTANDING
BETWEEN THE GUAM WATERWORKS AUTHORITY AND THE
DEPARTMENT OF DEFENSE, DEPARTMENT OF THE NAVY**

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

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

WHEREAS the Guam Waterworks Authority (GWA) has been working with the Department of the Defense, Department of the Navy to update the 2010 MOU between the GWA and the Department of the Navy Relative to the 2010 Military Build-up; and

WHEREAS the purpose of this updated MOU is to define the relationship between Joint Region Marianas (JRM), Naval Facilities Engineering Command Marianas (NAVFAC Marianas), Guam Waterworks Authority (GWA), and the Consolidated Commission on Utilities (CCU), while developing the “One-Guam” vision for water and wastewater needs expected to increase as a result of military and civilian population growth; and

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

WHEREAS, the updated MOU establishes objectives relating to the implementation of water and wastewater utility service solutions devised to address the projected additional requirements and/or re-capitalization efforts needed; and

WHEREAS, the updated MOU covers issues not identified in the 2010 MOU such as working with the Guam Water and Wastewater Intergovernmental Support Team on projects

1 identified under the Guam Water and Wastewater infrastructure Improvement Program,
2 working to resolve issues related to easements for utility access following all required real
3 estate procedures and protocols, developing cybersecurity procedures to ensure that
4 cybersecurity programs for Industrial Control systems (ICS) exist, and cooperate on other
5 issues related to water and/or wastewater such as development of a coordinated drought
6 response and water conservation plan, and ensuring emergency procedures are appropriately
7 followed when disasters are declared or emergency events occur; and

8 **WHEREAS**, the updated MOU has been reviewed and vetted by all parties, and has
9 been confirmed as final and acceptable to all parties thereto.

10 **NOW BE IT THEREFORE RESOLVED**, the Consolidated Commission on Utilities
11 does hereby approve and authorize the following:
12

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

15 **Section 2.** The Consolidated Commission on Utilities supports the intent of the
16 Updated Memorandum of Understanding (MOU) between the United States Navy and the
17 Guam Waterworks Authority (GWA) (Exhibit A).

18 **Section 3.** The CCU Chairman and GWA General Manager are hereby authorized
19 to execute the MOU.

20 **RESOLVED**, that the Chairman certified and the Board Secretary attests to the
21 adoption of this Resolution.
22

23 **DULY AND REGULARLY ADOPTED**, this 6th day of December, 2016.
24


25 Certified by:

26 

27 **JOSEPH T. DUENAS**

28 Chairperson

25 Attested by:

26 

27 **J. GEORGE BAMBA**

28 Secretary

29 //

30 //

31 //

32 //

1 I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities, as
2 evidenced by my signature above do hereby certify as follows:

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

6	AYES:	<u>4</u>
7		
8	NAYS:	<u>0</u>
9		
10	ABSTENTIONS:	<u>0</u>
11		
12	ABSENT:	<u>1</u>

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EXHIBIT A

Agreement Number: N61128-20161129-1859

ONE-GUAM WATER

MEMORANDUM OF UNDERSTANDING

(date)

JOINT REGION MARIANAS
NAVAL FACILITIES ENGINEERING COMMAND MARIANAS
GUAM WATERWORKS AUTHORITY
GUAM CONSOLIDATED COMMISSION ON UTILITIES

NFM
4000
Ser N00/

JTREGMARIANAS
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Ser J5/

MEMORANDUM OF UNDERSTANDING
BETWEEN
GUAM WATERWORKS AUTHORITY
AND
GUAM CONSOLIDATED COMMISSION ON UTILITIES
AND
NAVAL FACILITIES ENGINEERING COMMAND MARIANAS
AND
JOINT REGION MARIANAS

Subj: MEMORANDUM OF UNDERSTANDING TO EXPLORE MUTUALLY
BENEFICIAL OPPORTUNITIES

Ref: (a) MOU between the United States Navy and the Guam
Waterworks Authority dated 16 July 2010
(b) Framework for Discussion: Strategy for an Integrated
Water System for Guam, March 3, 2016 or later
(c) National Institute of Standards and Technology (NIST)
Special Publication (SP) 800-82, Revision 2, May 2016

Encl: (1) 2010 MOU Exhibit A: MOU on the Tumon Maui Well
Project dated 6 May 2016
(2) One-Guam Water Functional Overview Charts

1. Purpose. The purpose of this Memorandum of Understanding (MOU) is to define the relationship between Joint Region Marianas (JRM), Naval Facilities Engineering Command Marianas (NAVFAC Marianas), Guam Consolidated Commission on Utilities (CCU), and Guam Waterworks Authority (GWA) (hereafter referred to as the "Parties") while developing the "One-Guam" vision for water and wastewater needs expected to increase as a result of military and civilian population growth. The Parties desire to facilitate changes to both systems in a manner that is mutually beneficial and maximizes the effectiveness of the overall Department of Defense (DoD) and GWA water utility systems as a whole.

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2. Background. Reference (a) was developed in response to the pending U.S. Marine Corps relocation from Japan to Guam, and is the precursor to this document. Enclosure (1) is the first exhibit to reference (a) outlining a specific project. It will continue as an exhibit to this MOU for the life of the exhibit. Any future projects under this MOU will also be assigned exhibit identifiers, and will continue on future versions of this MOU for their life. Reference (b) was also developed as a result of reference (a), but as a living document which can be revised at any time. The current version as of the development of this MOU is dated 3 March 2016. The goal of all documents is sustainable, reliable, compliant and secure water delivery, followed with reliable and compliant wastewater removal.

3. Cancellation. MOU between the United States Navy and GWA dated 16 July 2010 (reference (a)).

4. Applicability. This MOU and the objectives, goals, and processes agreed upon are subject to applicable laws and regulations of the United States, the Government of Guam (GovGuam), and the Department of the Navy (DON). The Parties agree that legal requirements applicable to either Party take precedence over any understanding reflected in this MOU.

5. Objectives. To explore opportunities for partnering and integration of the water and wastewater utilities, and to address projected additional requirements and/or re-capitalization efforts needed, objectives related to the implementation of utility service solutions were established as follows:

a. Water

(1) Protect the Northern Guam Lens Aquifer (NGLA) and other drinking water sources from contamination and/or salt water intrusion.

(2) Share information relevant to water-related requirements and proposed solutions. This information may consist of facility technical descriptions, planning studies, requirements, designs, rates, schedules and forecasts.

(3) Support all efforts to improve the well-head protection and enforcement.

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(4) Cooperate to improve the NGLA Observation Well System used to study the changes in the NGLA via expansion of the current system, rehabilitation of existing wells, and proper abandonment of wells no longer intended for production to enhance monitoring and management of the NGLA in order to mitigate impacts to potable water resources. Share access to, and responsibilities for the maintenance of those wells.

b. Water and Wastewater

(1) Cooperate and partner on the following initiatives:

- (a) Interoperability
- (b) Geographic Information Systems (GIS)
- (c) Hydraulic Modeling
- (d) Cybersecurity

(2) Maintain cooperative and coordinated efforts to facilitate development of water resources and proper maintenance of water and wastewater infrastructures on Guam. Accomplish this in accordance with sound business practices and principles that respect the resource limitations, missions, authorities and responsibilities of the Parties to the MOU.

(3) Evaluate opportunities to integrate military and civilian water utility systems on Guam to meet the needs of the island's population including all population growth from the military buildup. Such integration may involve joint use of production and distribution assets, or future transfer of production, distribution, collection and treatment systems from DoD to GWA. The Parties understand that any transfer would require an agreement of terms and conditions acceptable to both DoD and GWA, subject to GWA meeting reasonable minimum reliability, security, and quality standards and possible legislative authorizations.

(4) Develop and utilize common standards to improve overall quality, security, reliability, interoperability, construction, and performance.

(5) Cooperate with federal and local agencies to resolve challenges and emerging concerns, including funding, for

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facility and infrastructure planning decisions to support capability improvements for the potable water and wastewater treatment and collection systems.

c. Wastewater

(1) Jointly work to locate and resolve inflow and infiltration issues for all wastewater collection systems, but particularly related to the Northern District and Hagatna systems that handle both local and military wastewater collections.

(2) Share information reports related to discharge certification or pretreatment permits for all Guam wastewater systems (Northern, Southern, and Hagatna).

(3) Cooperate to implement improvements to the Northern District Wastewater Treatment Plant (NDWWTP) which are expected to reduce negative impacts to near shore marine resources and protect the NGLA.

(4) Cooperate to complete the GWA Interceptor Sewer Refurbishment project for the existing sewer lines from Andersen Air Force Base (AAFB) to the NDWWTP to include manhole rehabilitation as necessary. This is to mitigate impacts to wastewater utilities and groundwater resources and ensure the relocation of military assets to Guam do not adversely affect the civilian infrastructure systems or resources.

d. Other

(1) Work closely with the Guam Water and Wastewater Intergovernmental Support Team (GWWIST) to ensure the timely and effective execution of water and wastewater projects designed to meet the demands associated with the proposed military buildup on Guam which are paid for by the Office of Economic Adjustment (OEA).

(2) Work to resolve issues related to easements for utility access following all required real estate procedures and protocols.

(3) Develop cybersecurity procedures to ensure that cybersecurity programs for Industrial Control Systems (ICS) exist which include the major security objectives. Develop

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defense-in-depth strategy and evaluate ICS security posture using reference (c).

(4) Cooperate on other issues related to water and wastewater such as development of a coordinated drought response and water conservation plan, and ensuring emergency procedures are appropriately followed when disasters are declared or emergency events occur.

6. Organizational Components. The following defines the various organizations whose interactions are a result of this MOU. Enclosure (2) aids in following that interaction.

a. Guam CCU is the governing board for GWA. The members are elected by public vote and are responsible to the people of Guam.

b. GWA is the water and wastewater utility purveyor for the civilian community on Guam.

c. JRM provides executive level installation management support to all DoD components on Guam. JRM is also the official interface between DoD and the civilian community for the matter of coordinating utilities. For the purpose of the DoD water utilities, JRM is also known as the landowner. JRM oversees installation support for all military installations, structures and infrastructure in the Marianas to include, but not limited to:

(1) Naval Base Guam (NBG)

(2) AAFB

(3) Marine Corps Base Guam (when established)

d. NAVFAC Marianas is the Engineering Command responsible for planning, designing, constructing, altering, repairing, maintaining, and operating DoD utilities systems on Guam. NAVFAC Marianas delivers environmental, utilities, and other base operations support services in support of DoD commands.

e. NAVFAC Marianas Utilities and Energy Management (UEM) Product Line Coordinator (PLC) is JRM's parallel position to GWA's General Manager position.

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f. Public Utilities Commission (PUC). An independent regulatory commission consisting of seven members appointed by the Governor of Guam with confirmation by the Guam Legislature. The commission has oversight on rates for the water utility as well as any contracts it enters that may affect those rates.

g. Senior Advisory Group (SAG). Leaders who provide vision and guidance to the Parties for the development of Guam's water resources and infrastructure. SAG will likely consist of:

- (1) JRM Region Commander
- (2) JRM Deputy Region Commander
- (3) Speaker of the Guam Legislature
- (4) Guam Legislative Chair for Utilities and Infrastructure
- (5) Consolidated Commission on Utilities Chair

h. One-Guam Water and Wastewater Working Group hereafter referred to as the Working Group (WG). The WG will identify problems, make minor adjustments as needed to water resource sharing, develop a prioritized list of recommendations for SAG on proposed water resource infrastructure projects, and track and facilitate approved projects to meet water production, quality, security, and conservation standards and goals. This group will meet at least quarterly and will be co-chaired by GWA and NAVFAC Marianas. At least one WG member from each Party must be empowered to make decisions on behalf of that Party. If any member is unavailable to attend a meeting, a designated representative should be sent in their stead. WG will consist at a minimum of:

- (1) NAVFAC Marianas Commanding Officer
- (2) GWA General Manager
- (3) 36th Civil Engineering Squadron Commander
- (4) Marine Corps Activities Group Planning and Design
- (5) NBG Public Works Department

Subj: MEMORANDUM OF UNDERSTANDING TO EXPLORE MUTUALLY
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(6) NAVFAC Marianas UEM PLC

(7) GWA Chief Engineer

(8) NAVFAC Marianas Water Utility One-Guam Liaison

(9) Operations, engineering, cybersecurity, and compliance personnel from either/both Parties, as needed.

i. Technical Experts (TE). A group of experts in the field of water and wastewater who will maintain regular communication to share water resource data and raise concerns and issues to the WG. TE will develop and maintain all databases and technical tools to monitor and assess the health of the NGLA, and other fresh water resources of Guam. TE will identify problems and propose solutions to the WG. TE members may attend meetings of the WG by invitation, or by approved request. TE will consist, at a minimum, of:

(1) GWA Engineering/Operational Staff

(2) NAVFAC Marianas UEM/Environmental Staff

(3) Guam Environmental Protection Agency (GEPA)

(4) Water and Environmental Research Institute (WERI)

(5) United States Geological Survey (USGS)

j. GWWIST. This group works to meet the demands associated with the proposed military build-up by ensuring timely and effective execution of water and wastewater projects referred to in paragraph 5d(1). Note: The charts in enclosure (2) do not include this organization. Although this MOU addresses some of the One-Guam related work they bring, GWWIST has a separate agreement, and are not directly covered by this MOU. GWWIST members include:

(1) DoD OEA

(2) GWA/Guam CCU

(3) U.S. Environmental Protection Agency

(4) DON

Subj: MEMORANDUM OF UNDERSTANDING TO EXPLORE MUTUALLY
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(5) Office of the Governor of Guam

k. WERI, located at the University of Guam (UOG), is the designated repository of the water-related data the Parties wish to share. GWA and NAVFAC Marianas will maintain separate MOUs with WERI to define accepted protocols for the handling of the data to be shared. Additionally, as experts in the field of water, WERI performs technical studies related to our water resources.

7. Terms of Understanding

a. GWA will:

(1) Develop and/or upgrade water and wastewater distribution, collection, and treatment systems not located on DoD property, but necessary to support the increased DoD load. This will be contingent on appropriate and available funding sources, and must be in compliance with GWA's approved Capital Improvement Program.

(2) Follow all appropriate DoD requirements to obtain identification badges to ensure access to DoD facilities.

(3) Comply with all DoD requirements, policies, and procedures when performing work on DoD property, whether operational or construction in nature. (An example of such a requirement is munitions and explosives procedures.)

b. NAVFAC Marianas will evaluate costs associated with meeting DoD requirements and address them on a case-by-case basis.

c. JRM will provide GWA personnel access to facilities wherein GWA has operational oversight. GWA will follow all appropriate DoD requirements to obtain identification badges (and escort as required) to ensure access to those facilities. DoD reserves the right to restrict access due to operational requirements.

d. All Parties will:

(1) Cooperate in determining the most cost effective and timely source(s) of funding to facilitate solutions proposed by the working group.

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(2) Cooperate in completing studies related to meeting the drinking water needs of Guam including NGLA sustainability studies. Future studies will be coordinated between GWA, DoD and other Federal and GovGuam agencies (such as GEPA, USGS and UOG/WERI) that may have a stake or required expertise in these matters. The Parties will coordinate the development of the objectives and methodology to accomplish such studies.

(3) Coordinate the selection of future water well sites with GEPA, USGS, and UOG/WERI.

(4) Cooperate in developing appropriate plans for the integration of new water production and distribution infrastructure with existing water systems.

(5) Share water resources as needed to address urgent needs.

(6) Cooperate to assess potential impacts to other wastewater infrastructure and identify options for mitigating the impacts.

(7) Cooperate in all aspects of drinking water resource development, protection, and management on Guam to ensure the long-term sustainability. In order to accomplish this objective, the Parties will designate representatives to convene an advisory team known as the WG to make recommendations on priorities and issues.

(8) Cooperate to facilitate resolution of mutually agreeable appropriate standards for water quality and water production targets based on current assessment of the aquifer and other water resources; and undertake such other roles and responsibilities deemed appropriate for fostering interagency cooperation.

(9) Evaluate current and proposed laws, service rules, and contracts for DoD contributions to system development and determine if such provisions are adequate and fair to both Parties.

(10) Evaluate and monitor timelines required to implement proposed solutions relative to timelines required to meet demand increases resulting from military and civilian population growth.

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(11) Continue to develop agreements to formalize the concepts provided herein.

(12) Communicate concerns, issues and problems in a timely manner to provide Parties the time to pursue reasonable and executable courses of action (COAs) to mitigate adverse impacts.

8. Other Provisions

a. Enforceability

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

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

(3) Contingency Clause. In the event of an emerging national security requirement, DoD can unilaterally exit the MOU for the duration of the situation, as required. Such situation will be validated by military orders and DoD will inform the other Parties to the MOU as soon as practical.

b. Resolution of Disagreements

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

(2) Notification of areas of disagreement by any Party will be submitted, in writing, by and between the GWA General Manager and the NAVFAC Marianas UEM PLC.

Subj: MEMORANDUM OF UNDERSTANDING TO EXPLORE MUTUALLY
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(3) If there is no resolution at the WG level, the Parties may elevate the issue to their respective leadership for resolution at the SAG level.

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

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

11. Effective Date. This MOU is effective upon the date of final signature and shall remain in effect for a period of nine years. This MOU may be terminated by any of the Parties upon providing 30 days written notification to all Parties.

APPROVED:

JOSEPH T. DUENAS
Chairman
Guam Consolidated Commission
on Utilities

Date: _____

B. BOLIVAR
Rear Admiral, U.S. Navy
Commander
Joint Region Marianas

Date: _____

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

Date: _____

S. M. JONES
Captain, U.S. Navy
Commanding Officer
Naval Facilities Engineering
Command Marianas

Date: _____

2010 MEMORANDUM OF UNDERSTANDING
Exhibit A

May 2016

**MEMORANDUM OF UNDERSTANDING
BETWEEN
GUAM WATERWORKS AUTHORITY
AND
THE UNITED STATES NAVY**

Subj: MEMORANDUM OF UNDERSTANDING ON THE TUMON MAUI WELL PROJECT

This document details the Tumon Maui Well (TMW) and related interties project developed as part of the "Strategy for an Integrated Water System for Guam" framework and the Memorandum of Understanding (MOU) between the United States Navy and the Guam Waterworks Authority (GWA) dated 16 July 2010.

1. INTRODUCTION

a. The 2010 MOU between the Department of the Navy (DoN, or the Navy) and GWA addresses expected water and wastewater needs for the proposed military buildup. Section V, Future Objectives, of the MOU states that DoN and GWA "...will agree to evaluate opportunities to integrate military and civilian water on Guam. Such integration may involve the future transfer of production, distribution, collection and treatment systems from DoN to GWA. The parties understand that such transfer would require agreement of terms and conditions acceptable to both DoN and GWA, subject to GWA meeting reasonable minimum reliability and quality standards and possible legislative authorizations."

b. Section VII of the 2010 MOU states that the parties agree to have further discussions. Item 5 of that section lists the development of agreements to formalize the concepts of the MOU. Since March 2015, Naval Facilities Engineering Command (NAVFAC) Marianas and GWA have been partnering to evaluate opportunities towards integrating military and civilian water systems on Guam. The joint water working group holds bi-weekly meetings that include the NAVFAC Marianas Commanding Officer, General Manager of GWA, and key members of their utilities, operational, environmental and business staffs.

c. The working group developed a draft "Strategy for an Integrated Water System for Guam" that was coordinated with the Guam Consolidated Commission on Utilities (CCU) in August 2015 and October 2015. The CCU approved the working group's framework document which is a living document that will be periodically updated to address the current objectives. The framework is a plan to lead the organizations through actions working toward a potential future integration of Navy and GWA water systems. This integration effort will require close coordination with Guam EPA and U.S. EPA (Region IX).

Subj: MEMORANDUM OF UNDERSTANDING ON THE TUMON MAUI WELL PROJECT

2. PURPOSE

a. Exhibit A is the detailed agreement between the Navy and GWA related to the Tumon Maui Well license. It specifies the responsibilities and expectations for both parties in the operation and maintenance of the Tumon Maui Well.

b. Exhibit A ensures that all agreed upon services are documented and that all maintenance and operational responsibilities are clearly defined.

c. Navy and GWA will enter into a License Agreement authorizing GWA to operate the Tumon Maui Well to include the extraction of up to 800 gallons per minute (GPM) of water. Requirements for the operation and maintenance of the Tumon Maui Well are contained in the License Agreement.

d. Additionally, the intertie at Route 3 and Potts Junction is a critical component in this water integration pilot in that a trade agreement will be employed to provide an additional water supply to the USMC cantonment facilities (to be located at NCTC Finegayan) via GWA lines from Tumon Maui Well. This exhibit documents GWA's commitment to construct the required infrastructure for a new waterline intertie along Route 3 at Potts Junctions and their commitment to provide a maximum of 210 GPM to Navy via the intertie during the initial license term. The amount may be revisited and subject to change in the future as needs change.

3. BACKGROUND

a. The Tumon Maui Well is a significant component of the water system on Guam. Constructed in 1947, it accounted for a large portion of the water supply until its initial closure in 1995 because of chemical pollution. The Tumon Maui Well has the capacity to provide up to 900 GPM. When the well was in operation, it was one of the highest capacity wells of the Northern Guam Lens Aquifer (NGLA) system. NGLA is the primary source of Guam's fresh water. The well is also significant as an example of a Maui-type water well that operates to skim underground fresh water from the thin basal layer. It is the only Maui-type well on Guam that is capable of producing reliable fresh water. After 1995, it was placed back into service for a short time and then closed again in 1999. As part of the 2010 Military Build Up preparation, the well was rehabilitated. The well is connected to a 24 inch water line (GWA water main) along Marine Corps Drive. Activating the well and putting it into service will require minimal resources for GWA due to the close proximity of their existing infrastructure. Operating the Tumon Maui Well will enable the Navy and GWA to work together in protecting the NGLA, potentially reduce the levels of chlorides in the overall water well systems, mitigate adverse impacts to the NGLA, provide additional water supply for GWA's customers, and support growth and responsible development for the island. This additional capacity will enable GWA to shut down four of its smaller wells where chloride readings have been high.

Subj: MEMORANDUM OF UNDERSTANDING ON THE TUMON MAUI WELL PROJECT

b. Navy and GWA agree that this effort will improve the island's water system capability by taking advantage of existing infrastructure which will provide interoperability opportunities leading to improved water security for both parties. This project improves Guam's capability to provide an uninterrupted supply of potable water to civilian and military customers by the most cost effective means possible.

c. As part of this agreement, GWA will provide to the Navy a water connection from Route 3 and Potts Junction in support of the USMC cantonment located at NCTS Finegayan. This connection will allow for water to be supplied from an existing GWA waterline to a Navy connection in support of USMC facilities.

d. The issuance of a real estate license without collection of "fair market value" is allowed because the following four conditions are met:

(1) The license is for one year or less.

(2) The license results in minimal costs to the installation.

(3) The license is issued to a not-for-profit organization / charity / service entity / state or local government to support a public interest activity.

(4) The license is advantageous to DoN.

e. Because water resources are considered a public asset on Guam, GWA may withdraw the water from the aquifer at will. GWA will be licensed to operate the existing Navy facilities, but must provide the power to withdraw the water and the means to treat and distribute it. Any water GWA then distributes to the military will be taken in trade for water the Navy distributes to GWA customers located elsewhere on the island.

4. PILOT PROJECT

a. The Tumon Maui Well project provides GWA with an opportunity to demonstrate their ability to operate and maintain DoD owned water treatment facilities and provide sustainable, reliable, compliant and secure potable water generation. Success in the operation of this project will afford Joint Region Marianas several potential benefits which can reinforce the concept of an integrated system to better serve all parties. One benefit is the opportunity for GWA to operate Navy utility assets to produce potable water and deliver it via GWA transmission systems to DoD facilities, specifically the USMC cantonment being constructed at NCTS Finegayan. Another benefit is that with the additional capacity to support GWA customers, GWA will be able to place in standby, four of its existing wells.

(1) Plan of Action and Milestones (POAM). A plan of action and milestones has developed for the transition of operation of the Tumon Maui Well to GWA.

Subj: MEMORANDUM OF UNDERSTANDING ON THE TUMON MAUI WELL PROJECT

(2) Bi-lateral Use Agreement Documentation. A License Agreement and MOU are required to authorize GWA to operate, maintain and consume water from the Tumon Maui Well. A draft copy of the license with the conditions of agreement was provided by NAVFAC Marianas to GWA on 23 October 2015. The final agreement package will be reviewed and signed by GWA General Manager and NAVFAC Marianas Commanding Officer.

(3) Re-commissioning of the Plant. Because the Tumon Maui Well water treatment plant has not been in operation for over a year, NAVFAC Marianas will make the repairs necessary to get the well operationally compliant to permit standards. GWA operators and maintenance personnel will be engaged during the repair and re-commissioning process to receive hands-on training and gain knowledge and experience with the system equipment.

(4) GWA Staffing Plan. In January 2016, GWA reached an agreement with Guam Environmental Protection Agency (GEPA) to use Level II Certified Water Operators.

(5) Startup and Operational Testing. Prior to official turn-over of the Tumon Maui Well, Navy and GWA will complete a joint inspection and document the condition of the premises as well as compile an inventory of the major items on site.

(6) Connections Between GWA and Navy Water Systems. GWA committed to making the necessary modifications to their delivery system to provide the USMC cantonment site on NCTS Finegayan with an initial supply of a maximum of 210 GPM when required. The water system connection design was developed by GWA, and submitted to the Navy for review and approval.

(7) Water Delivery. The delivery of water to the USMC cantonment will be a water for water trade. The amount GWA delivers to the USMC cantonment will be counted as a credit toward purchases made by GWA from the Navy to provide water service to customers at other locations.

Based On The Representation And Agreement Contained Herein, The Agreed Upon Consideration, The Parties Agreed As Follows:

5. ROLES AND RESPONSIBILITIES.

a. Tumon Maui Well:

(1) GWA:

(a) Pay the initial administrative fee of \$4,800 required for the development of the license to NAVFAC Marianas and subsequent annual license fees. The license will be for the period of one year and may be renewed annually for the first five years. The license fee is recurring and must be paid with each renewal.

Subj: MEMORANDUM OF UNDERSTANDING ON THE TUMON MAUI WELL PROJECT

(b) Provide routine operational preventive maintenance of equipment and replacement of major equipment as required not covered under the manufacturer's warranty as part of the lifecycle of the component.

(c) Provide the Operation and Maintenance Agreement and staffing plan to the Navy for their review and comment. Address issues the Navy may bring up.

(d) Ensure all regulatory permits are kept up to date and current.

(e) Ensure operators working at the site are appropriately certified.

(f) Provide GWA's updated Chlorine Spill Response Plan and Spill Prevention, Control and Countermeasure Plan, to include the chlorine cylinders stored at the site, to the Navy for approval.

(g) Develop and submit to the Navy regular monthly production reports with daily logs, and annual monitoring and performance standards reports.

(h) GWA will record all operational costs and share this data with the Navy for use in possible future rate setting.

(i) Maintain the security of the Tumon Maui Well compound which includes the well, the tunnel, the vent house, and all the property and facilities along Marine Corps Drive and in the area below by the entrance to the tunnel contained within the perimeter of the existing fencing. The property will not be left unsecured for any length of time. GWA will bear any liability for issues relating to security breaches.

(j) Maintain the grass according to Navy requirement between 2 to 12 inches, or less if the GEPA operating permit requires at GWA expense. Any violation of the permit requirement will be the responsibility of GWA.

(k) GWA will not allow the use of any portion of the property in any manner not approved by the Navy.

(l) GWA will not make any modification to the system without prior Navy approval.

(m) Provide up to 210 GPM of potable water, for use at the Marine Corps Cantonment via Potts Junction intertie whenever needed.

(n) Provide open access to the Navy to conduct inspections of the facility.

(2) Navy:

(a) Provide GWA a baseline survey of the existing Environmental Condition of the Property (ECP).

Subj: MEMORANDUM OF UNDERSTANDING ON THE TUMON MAUI WELL PROJECT

(b) Provide GWA with copies of all available as-built drawings, design documents, maintenance records, and so forth related to the facility.

(c) Provide GWA full right of entry to the Tumon Maui Well facility for the duration of the license.

(d) Provide a fully functional and permitted well facility.

(e) Issue a license for the use of the property, to include the facilities and equipment within the specified boundaries.

(f) Allow GWA to operate the Tumon Maui Well system to withdraw water at up to a rate of 800 GPM at GWA expense and for the benefit of GWA customers.

(g) Require the reservation of 210 GPM, potable water, for use at the Marine Corps Cantonment via Potts Junction intertie whenever needed.

(h) Maintain the right to conduct inspections of the facility, and will provide 24-hour courtesy notice to GWA, except in emergencies.

(i) Provide technical support and assistance when requested.

(j) Allow GWA to connect to the existing SCADA system at the facility when GWA's SCADA is operational, provided the existing SCADA units at Tumon Maui Well are compatible with GWA's system.

(k) Assess GWA's operation and maintenance of the system monthly for use in future decision making regarding the Tumon Maui Well.

(3) Navy and GWA Jointly:

(a) Perform startup operating and testing of the Tumon Maui Well with NAVFAC Marianas' Base Operating Support (BOS) Contractor, and conduct preliminary dual operation for a period of 60-90 days which includes the 45 days for startup/testing to ensure functionality and understanding of the facility and the equipment in place.

(b) Conduct a joint inspection and inventory assessment to document the condition of the premises after the start up and testing plan is completed; the subsequent Joint Inspection and Inventory Report (JIIR) will be signed by both parties.

(c) Meet quarterly to review and discuss the status of operations and issues related to the operation of the Tumon Maui Well. Within 2 months of the signing of this agreement, the

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parties will develop and agree upon the format and the materials to be reviewed during quarterly reviews prior to coming together.

b. Route 3 and Potts Junction Connection:

(1) GWA:

(a) Design, construct, and maintain a water intertie along the federally owned property adjacent to Route 3 and Potts Junction. Provide all material and services to install an appropriate connection valve and lateral line terminating into a fire hydrant, at GWA expense, for future direct connection to Navy's water distribution system. Construction is to be completed during the first year's license.

(b) Install and maintain a meter on the Government of Guam easement adjacent to the federally owned property.

(2) Navy:

(a) Provide and maintain the connection line from the meter to the Navy water system.

(b) Provide and maintain a back flow preventer which meets GWA standards to be placed on DoD property.

The Parties hereby affix signatures of offices duly appointed and authorized to make the commitments contained in this Agreement.

FOR GUAM WATERWORKS AUTHORITY:

By: _____

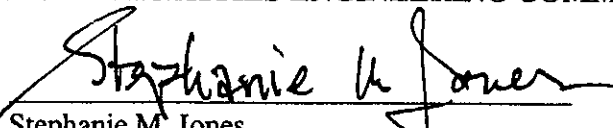

Miguel C. Bordallo, P.E.
General Manager

Date: _____

5.6.14

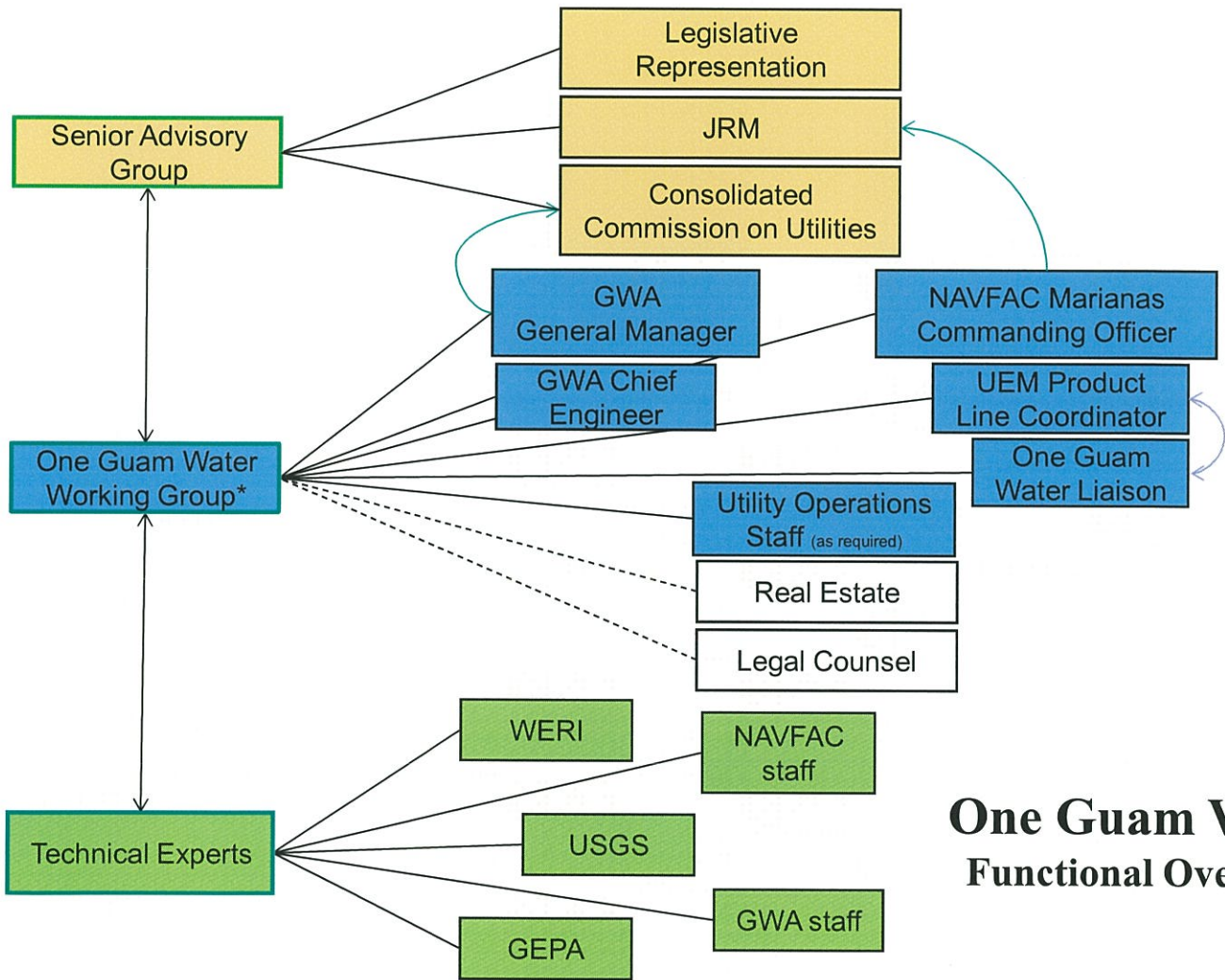
FOR NAVAL FACILITIES ENGINEERING COMMAND MARIANAS

By: _____


Stephanie M. Jones
Captain, Civil Engineer Corps, U.S. Navy
Commanding Officer

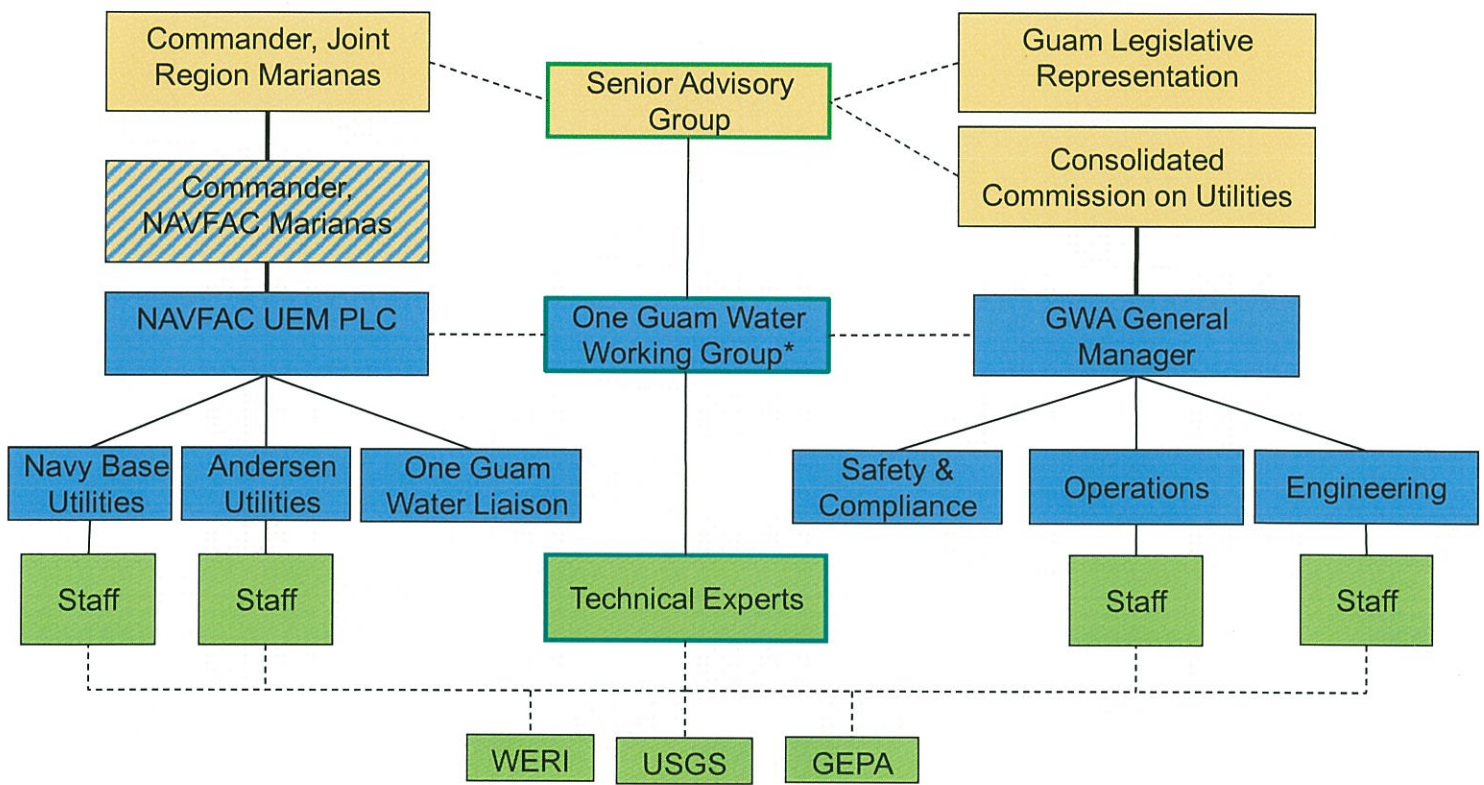
Date: _____

6 MAY 2016



One Guam Water Functional Overview

One-Guam Water Functional Overview



* Note that other subject matter experts not specified above (e.g., Counsel, Real Estate, etc.) from Navy and/or GWA may be called to participate at the working group level as needed.