



**GUAM WATERWORKS AUTHORITY**

## **Guam Waterworks Authority**

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GWA Presentation to Committee on Utilities,  
Transportation, Public Works and Veterans Affairs

Senator Tom Ada, Chairman

Thursday, January 26, 2012

6:30 p.m.

# **Presentation Agenda**

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- 1 GWA Overview**
- 2 Capital Improvement Plan & 2011 Federal Court Order**
- 3 How Do We Pay for all These Improvements**
- 4 Proposed Legislative Initiatives**
- 5 Conclusion**

# 1. GWA Overview



# GWA Overview

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**GWA still faces many challenges,** and is focused on accelerating improvements as affordable as possible.

- ❑ GWA is moving forward on Projects Impacting Customer Services:
  - New Water Meters and New Meter Test Bench on the Horizon.
  - Leak Repair Contracts Underway.
  - Line Replacement Contracts on the Horizon.
  - NDWWTP Construction in Progress.
  - Sewer System Evaluation Underway.
  - Water Production Projects in Progress.



# GWA Overview

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**GWA still faces many challenges, and is focused on accelerating improvements as affordable as possible.**

- ❑ Since 2005, GWA has spent \$83 million on upgrades related to the Stipulated Order.
- ❑ Over the next three years, GWA will spend another \$87M of 2010 bonds to fund major infrastructure upgrades.
- ❑ Working collaboratively with USEPA, GWA will invest an estimated \$300M over the next 10 years on major water and wastewater projects as a result of the amended 2011 Federal Court Order.
- ❑ When the military buildup occurs, DoD committed to about \$450M in water and wastewater infrastructure.

# GOALS

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- Continue workforce development and certification programs to insure GWA employees are adequately trained.
- Focus on the asset management programs, credit quality to secure the loans, generate the revenues to operate the utility, cover the debt payment, and make investments that have a high rate of return.

# Background

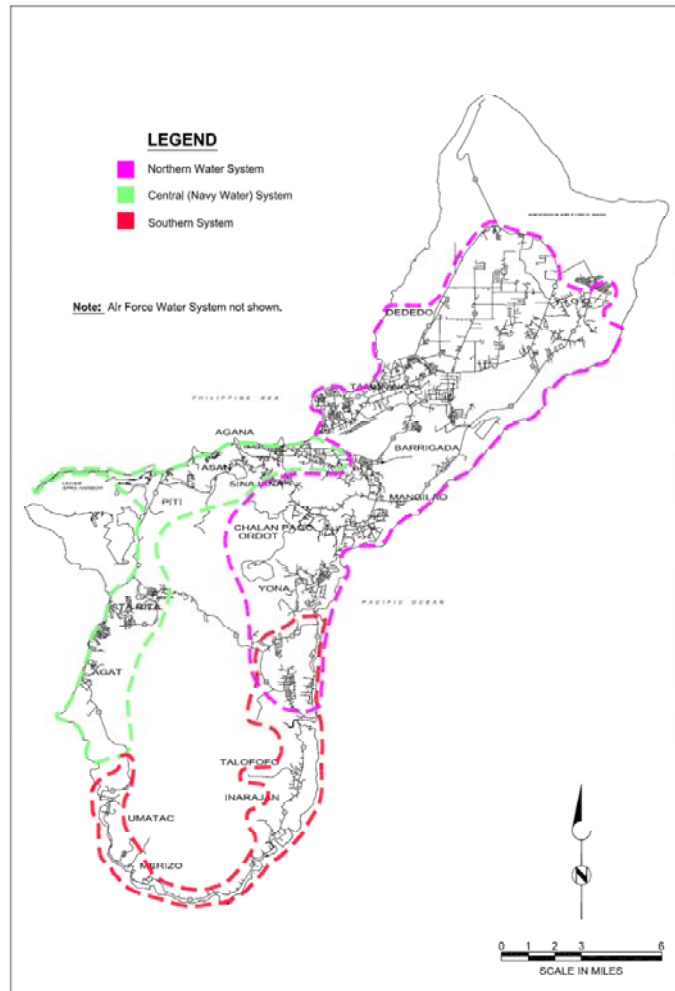
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## **GWA facts:**

- 300 full time employees**
- 40,800 customers**
- \$459 million in total assets**
- \$70M O&M Budget**
- \$73M Revenue FY2012**

# GWA's Water System

GWA provides all water service to the civilian population on Guam

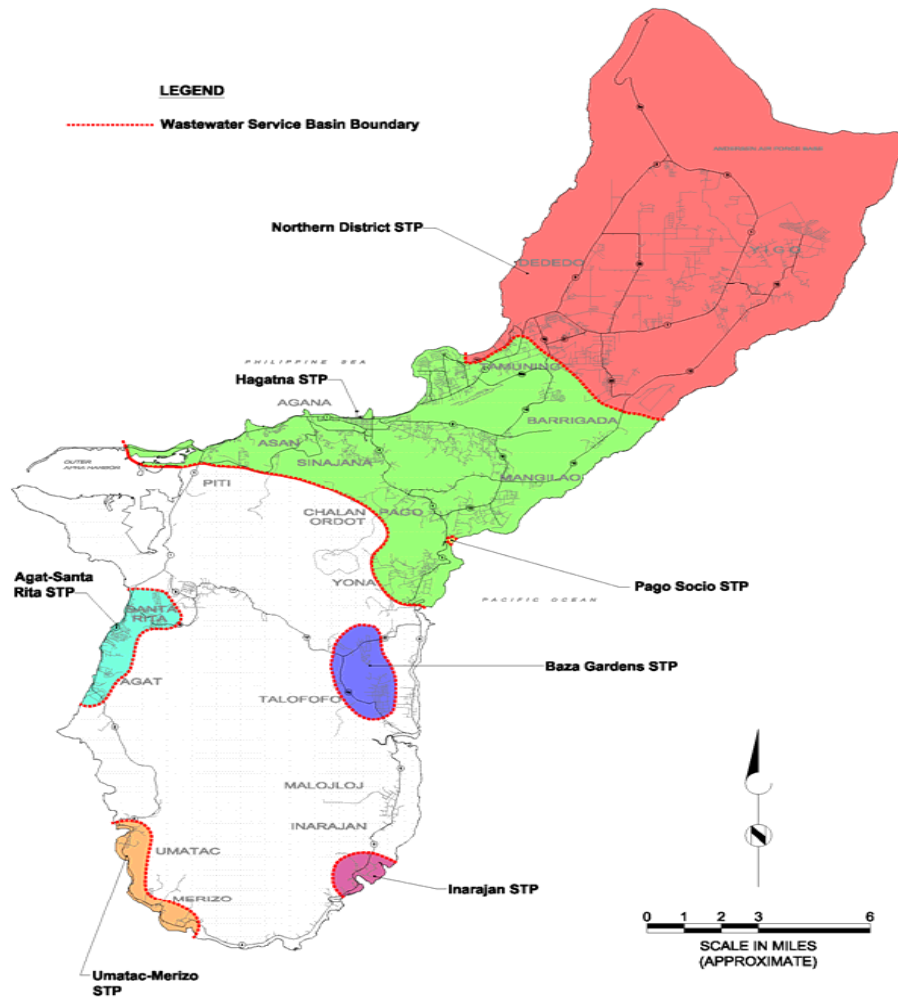


- Three water systems
  - Extensive facilities
  - 108 operable wells, 2 springs
  - 1 treatment plant
  - 29 reservoirs
  - 26 booster stations
  - 800 miles of pipe
- Population served
  - 156,000 (civilian)
  - Department of Defense maintains separate system
  - GWA buys some of its water from Department of Defense



# GWA's Wastewater System

GWA collects and treats wastewater throughout the island



7 service basins

Extensive facilities

- 250 miles of pipe
- 72 pumping stations
- 7 treatment plants
- 3 ocean outfalls

Population served

- 100,000 (civilian)
- Treats all Air Force and parts of Navy wastewater

## **2. Capital Improvement Plan & 2011 Federal Court Order**

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## What the 2011 Court Order Means to GWA Ratepayers

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- All of Guam's 7 wastewater plants have been out of compliance since the 1980's and as a result GWA was sued by USEPA in 2002. The amended Court Order will require GWA to bring all our Wastewater plants into compliance by 2018. After these improvements, GWA will no longer discharge untreated sewage into the ocean.  
**Estimated cost: \$156M**
- GWA will modernize and upgrade/repair 29 water tanks to insure clean water is always available and to improve water pressure to customers. **Estimated cost: \$130M**
- In addition, GWA will spend an **Estimated \$22 million** on a variety of water system upgrades required by the 2011 Court Order.

## **Estimate Cost of 2011 Court Order**

<b>Project</b>	<b>Cost(M)</b>
Groundwater Chlorination	\$6.30
Water Metering	\$5.00
Ugum Surface Water Treatment Plant	\$1.90
Sinajana Water System	\$9.00
Storage Tank / Rehabilitation & Replacement	\$130.40
Northern District WWTP Upgrades	\$10.20
Agana WWTP Interim Measures	\$13.00
Agat / Santa Rita WWTP Improvements	\$64.30
Baza Gardens WWTP Improvements	\$33.00
Umatac-Merizo WWTP Improvements	\$33.00
SSES and I&I / SSES Work Plan	\$2.10
<b>Total Cost (Million Dollars)</b>	<b>\$308.2</b>

## Storage Tank \$130M

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- 29 Tanks will be repaired or replaced by 2021.
- 10 tanks will be repaired or replaced by 2016.
- New Barrigada Tank (concrete), 2 Million Gallon scheduled to be completed April 2013.
- Chaot & Agana Heights Tanks, scheduled to be completed April 2013.
- Major repairs of Yigo #1 & Mangilao #2, scheduled to be completed by October 2013.
- Improve system pressure and reliability. Will reduce water outages on Guam.

## Wastewater Treatment Plant \$153M

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Northern Wastewater Treatment Plant (NWWTP): The capacity limitation of NWWTP will restrict development and negatively impact the economy of the island. Without this infrastructure, GWA will not be able to support new development. **GWA will spend \$10 million from Bond funds over the next two years** to upgrade this plant and increase its capacity.

Agana WWTP Primary Treatment Upgrades: **GWA will spend \$13 million from Bond funds over the next two years** to upgrade the Agana WWTP to meet environmental compliance standards. This is scheduled to be completed June 2013.

## Other CIP Projects to improve service:

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- Baza Gardens, Agat / Santa Rita, Umatac-Merizo WWTPs: **GWA will spend \$130 million** from Bond funds over the next 6 years on major improvements to the southern wastewater treatment plants and system. GWA will perform a study to evaluate the best alternative to bring these plants into compliance with secondary treatment standards.
- Leak Repairs and Line Replacement: GWA must improve its response time to leaks and begin replacing entire lines that chronically leak. The 2010 bond will greatly enhance how quickly we repair leaks and replace distribution lines. **GWA will spend \$4,000,000 over the next 2 years** from bond proceeds to repair or replace pipes.

## Other CIP projects to improve service:

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- Preventing Sewer Spills: Although substantially reduced, sewer spills continue to occur. GWA is working on cleaning sewer lines and conducting a video survey of sewer lines. GWA has begun an education campaign to reduce dumping of Fats, Oil and Grease (FOG) into the sewer system.
- Water Production: Lack of production leads directly to temporary water outages and related low pressure. **GWA will spend \$3,000,000** from bond funds to increase water production. GWA will bring 10 wells on line with this project.



## Other CIP projects to improve service:

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### Meter Issue:

GWA's "low-reading" meters have caused problems for GWA's revenues and back billing complaints from our customers.

GWA is pursuing new meters suppliers to replace "low-reading" meter,

GWA has also improved how we handle back billing by better explaining to our customers why and how we back bill. We have also allowed customers to pay the back bill over a longer period of time.

**GWA will spend \$6,000,000 from bond funds on meters over the next two years.**

## Guam Groundwater Availability Study

- The study will develop a 3-D subsurface model to help GWA manage the island's aquifer.
- The 3-D subsurface model is considered the industries best management practice.
- The study will take 3.5 years at a cost of \$1.2M. The study is ~50% complete.
- This study will provide a tool for studying capacity of the aquifer and identifying the best location for future wells.

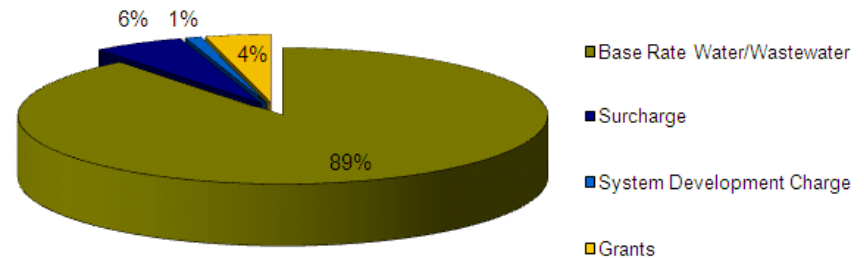
### **3 How Do We Pay for all These Improvements**

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# FY 2012 Projected Sources and Uses of Funds

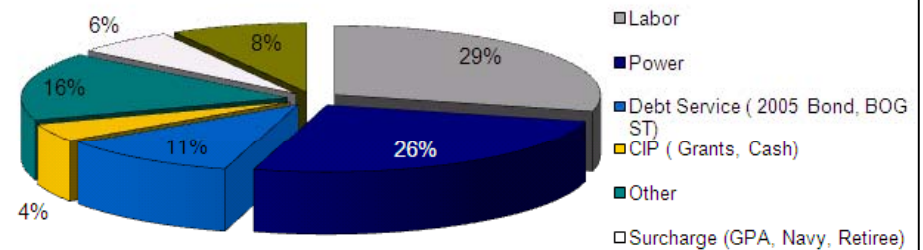
## FY 2012 Income Sources

Base Rate Water/Wastewater	\$67,365,286
Surcharge	4,198,174
System Development Charge	750,000
Grants	3,000,000
<b>Total</b>	<b>\$75,313,460</b>



## FY 2012 Uses of Funds

Labor	\$20,180,837
Power	17,867,616
Debt Service	7,707,794
CIP	3,000,000
Other	11,166,841
Surcharge	4,198,174
Purchased Water	5,797,699
<b>Total</b>	<b>\$69,918,961</b>



# GWA's Customer Base

GWA has a well-diversified customer base

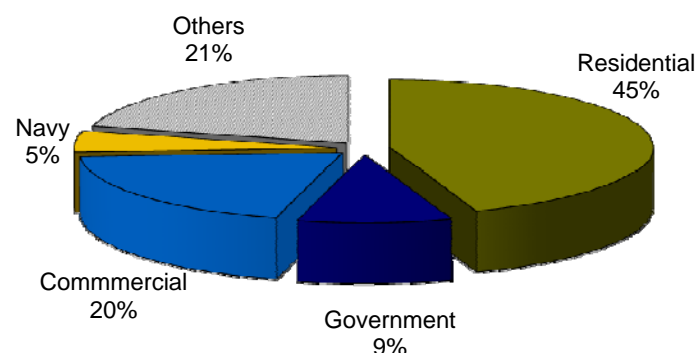
- GWA serves over 40,000 customers
- No one class of customers represents over 50% of GWA's revenues
- Share of revenues by customer rate class has remained stable over the past several years

Annual Water/Wastewater Sales*	
Rate Class	FY2011
Residential	\$29,024,806
Government	6,123,588
Commercial	12,932,757
Navy	3,245,828
Other	13,646,035
<b>Total</b>	<b>\$64,973,014</b>

\* Unaudited

Source: Guam Waterworks Authority

GWA Revenues By Customer Class for FY2011\*



## PUC Rate History

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Beginning in 2004, the PUC has approved base rate increases totaling 73% to support GWA

Effective Date	Water	Wastewater	Principal Reason
April 1, 2004	7.50%	7.50%	Rate increases by PUC for funding Stipulated Order Projects
October 14, 2004	6.50%	6.50%	Rate increases by PUC for funding Stipulated Order Projects
February 1, 2006	3.00%	3.00%	Rate base adjustment
September 1, 2007	14.24%	14.24%	Base rate adjustment for debt service payments on 2005 GWA revenue bonds
April 1, 2009	6.60%	6.60%	Base rate adjustment due to increases in power and water purchases costs
August 1, 2009	14.00%	14.00%	Base rate adjustment
October 1, 2010	8.00%	8.00%	Base rate adjustment

## PUC Rate History

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- Effective October 2011, the PUC approved another 12.77% base rate increase
- Due to GWA's successful payoff of its pre-CCU power bill, the PUC REDUCED a surcharge from 9.6% to 2%
- GWA will continue to pursue annual rate adjustments to comply with the revised USEPA court order. This new Order is expected to require GWA to raise over \$300 million in the next seven years.

## **4. Proposed Legislative Initiatives**

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# Policy Issues Requiring Legislative Help

- ❖ Authorization for additional bond issuance in 2013 to begin to implement 2011 Federal Court Order, other Capital Improvement Projects, and other operating needs.
- ❖ Authorization to extend the time that developers and customers can receive credit for infrastructure improvements which they fund from the current credit of 5 years to 20 years.
- ❖ Amend GWA Enabling Legislation to allow for adoption and implementation of a New Procurement Code.
- ❖ Amend current Law so the Lifeline Rate should be based on financial need only.

## 6. Conclusion

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# GWA Conclusion

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# Questions / Comments