Revised Fiscal Plan

To Incorporate Modifications to the Certified Fiscal Plan as a Result of the Impact of Hurricanes Irma and Maria

Puerto Rico Aqueduct and Sewer Authority
GOVERNMENT OF PUERTO RICO

April 5, 2018

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Important Considerations

- The purpose of this submission is to comply with Oversight Board mandated deadline for submission of a draft amended and restated fiscal plan incorporating the recommendations received from the Oversight Board.
- Certain challenges make submission of a fully developed fiscal plan not possible at this stage. Therefore, this submission should be considered a draft for all intended purposes. PRASA, AAFAF and the Government of Puerto Rico reserve the right to make revisions and changes as necessary, at their entire discretion.
- The projections included herein are based on PRASA's, AAFAF and its consultants best estimates considering the information available, as well as the timeframe provided to prepare this amendment to the Certified Fiscal Plan.
- The assumptions applied to prepare the projections included herein, including macroeconomic forecast impacts, collection and electricity rates and other variables will be updated as more information becomes available. However, a minor change on any of the assumptions may significantly affect the projections included herein.
- At this time neither PRASA nor AAFAF can provide certainty on the total impact that Hurricanes Irma and Maria will have on the financial projections, specifically on the revenues, expenses and capital improvement program; nor of the funding amounts to be recovered from the insurance coverages and from FEMA. PRASA and AAFAF continue to assess and estimate the damages suffered, and PRASA currently working with its Insurance providers and FEMA.
- The projections included herein do not reflect the potential impact from the Tax Reform approved recently by the US Congress, nor from potential drought, new hurricanes or other natural disasters. In addition, the projections included herein do not reflect the potential impact from the disaster assistance funding to be provided to Puerto Rico approved on February 9, 2018, by the Federal government as there is still not sufficient certainty and information on the specific funding PRASA will receive in order to fully analyze and quantify its impact.
- Based on the amount of uncertainties of the impact of Hurricanes Irma and Maria to PRASA and to the economy of Puerto Rico, the projections presented herein are subject to material changes.
- This Fiscal Plan will be further amended after certification, if needed, to incorporate and reflect the final damage assessment results.

Contents

PRASA at a Glance

The Puerto Rico Aqueduct and Sewer Authority (PRASA) endeavors to provide high-quality water and wastewater services to the people of Puerto Rico at an affordable cost

SERVING
1,236,728 CUSTOMERS
96% WATER
59% SEWER

WITH
4,654 EMPLOYEES

PRASA has been characterized as the most complex water utility in the US and may be the most complex in the world

8 DAMS

114 FILTER PLANTS with 143 INTAKES PRODUCING 508 MGD

51 SEWER PLANTS TREATING 220 MGD

OVER 4,000 AUXILIARY FACILITIES:
TANKS - 1,723
PUMP STATIONS - 2,186
WATER WELLS - 299

OVER 20,000 MILES OF PIPES

Reference: Preliminary data for FY2017, subject to change

Background

- In recent years, PRASA has incorporated a series of initiatives to both:
  - **improve revenues**
  - **control expenses**

  with the ultimate goal of delivering **sustainable** and **high-quality services** to its customers.

- The results achieved are the product of **PRASA's commitment** to becoming a self-sustainable entity, regardless of Puerto Rico's economic situation

- PRASA has managed **to sustain its revenues and control its expenses.** Furthermore, PRASA's rate structure was designed to provide sufficient funds to cover all of its operating expenses and current and projected debt service, however the CIP has been historically funded with external financing, including federal funds.

- Recently PRASA faced the following major challenges:
  - **Critical drought** period experienced in FY2015 mandating island-wide water rationing programs
  - **Declining population and consumption**
  - **Lack of market access** to finance the Capital Improvement Program since 2012
  - PRASA's facilities and financial situation was severally affected by two **Major Hurricanes** ("the Hurricanes") affecting Puerto Rico on September 2017
    - **Hurricane Irma**
    - **Hurricane Maria**

Revised Fiscal Plan

- On **August 25, 2017**, the **Fiscal Oversight Management Board** (the Oversight Board) approved and certified PRASA's Fiscal Plan (the **Certified Fiscal Plan**) as modified to incorporate the Oversight Board's recommendations from the April 28, 2017 initial Fiscal Plan approval and certification (which was conditioned to the incorporation of three amendments submitted by PRASA on May 28, 2017).
- At the direction of the Oversight Board, PRASA with the advice of AAFAF and its legal and financial consultants, has prepared this **Revised Fiscal Plan,** which supersedes the ones presented in the past, to include updated available information and to reflect the projected impact of Hurricanes Irma and Maria on the projected revenues, expenses and Capital Improvement Plan and sources of funding, as well to include recommendations received from the Oversight Board on February 5, 2018
- This Revised Fiscal Plan covers a **6-year period**, starting on FY 2018, instead of 10-years as included in the prior certified Fiscal Plan
  - The timeframe reduction for the Revised Fiscal Plan was adopted to comply with the Oversight Board requirements
  - The Revised Fiscal Plan will be affected by many uncertainties surrounding the island's economy and PRASA's recovery process in the aftermath of the Hurricanes, therefore, PRASA, AAFAF and the Government of Puerto Rico reserve the right to make revisions and changes as necessary, at their entire discretion.

At the time of preparation of this Revised Fiscal Plan, there are still many uncertainties regarding the financial projections due to several unknowns, including, but not limited to: reduction in customer accounts and water consumption, collections behavior, total CIP requirements to restore the service and federal funding availability/appropriation

Fiscal Plan Objectives

The **Revised Fiscal Plan*** incorporates the best current estimated impact of Hurricanes Irma and Maria on the financial projections (which could materially change as additional and more certain information becomes available) and was developed to allow for:

the continued provision of a **safe and reliable supply of drinking water and treatment of wastewater**, complying with federal environmental regulations to safeguard the health of the population and the environment of the island, while avoiding potential penalties and criminal charges

the required **investment in necessary infrastructure to restore the system** and ensure compliance with required standards while promoting much needed economic growth throughout the island; **focused on improved water quality** and reduction of physical water losses

the inflow of **insurance and federal funds proceeds** expected to be available to partially cover the incremental financial needs related to PRASA's system recovery

PRASA's **long-term financial self-sustainability,** while guaranteeing an **affordable service** for all customers

* Includes best current estimated impact of Hurricanes Irma and Maria on the financial projections, which could materially change as additional and more certain information becomes available

Hurricanes Irma and Maria

- On **September 6, 2017**, Puerto Rico was affected by **Category 5 Hurricane Irma**, one of the strongest storms ever recorded in the Atlantic, with winds of up to 185 miles an hour
  - As a result of its passing through the north of Puerto Rico, PRASA suffered **damages** to **water treatment facilities and structures** across the Island.
  - Over **one million customers lost electric power** and over **1/3** of PRASA customers **did not have drinking water**
- On **September 20, 2017**, Puerto Rico was directly struck by **Category 4 Hurricane Maria**, with sustained winds of approximately **155 mph**, powerful rains in excess of **20 inches** (and over 40 inches in some isolated areas) and **widespread flooding** causing tremendous destruction, including further damage to Puerto Rico's electrical system (generation, transmission and distribution) and to the water and wastewater infrastructure island-wide
  - Hurricane Maria caused vast power outages, resulting in shutdowns of water and wastewater treatment plants across the island, and the inability to pump water and wastewater
- As a result of the Hurricanes, **PRASA suffered catastrophic direct physical losses, damages and the suspension of its billing/collections process** for about 2 months
- PRASA current focus is **to expedite the rebuilding and repairs process of its facilities** in order to promptly recover the safe drinking water and wastewater services for all the customers
- Largely as a result of the efficient management and operation of over 1,600 electric generators, **water service** has been restored to over **97% of PRASA's customers**

Hurricanes Impact Summary

REVENUES

Materially reduced billings and collections reflecting not only the consumption reduction for the period PRASA was not able to provide services, but also for the expected reduction in customer accounts and consumption due to the projected economy contraction and population migration

EXPENSES

Some expenses are expected to be reduced, as for example the electricity cost; but, on the other hand and at a greater scale, other expense categories will be materially increased including: diesel costs for power generators used to operate facilities, security, chemicals and overtime

CAPITAL IMPROVEMENT PROGRAM (CIP)

The CIP is expected to materially increase to incorporate the costs for system restoration and rebuild after the Hurricanes

INSURANCE & FEMA FUNDS

FEMA and insurance proceeds are expected to partially finance qualifying CIP projects as well as a portion of the incremental operating expenses

Contents

Major Water Industry Challenges

Inherent challenges of the capital intensive water industry and broader macroeconomic declines of the island have critically affected PRASA's financial situation even before the Hurricanes struck

Main Water Industry Challenges		Plan to address the identified challenges
ENVIRONMENTAL REGULATIONS HIGHER CAPITAL AND OPERATING COSTS	Water Quality	Through its revised Capital Improvement Program, PRASA intends to address these challenges, **renewing the infrastructure**, ensuring **water quality** as well as focusing on increasing the **system resiliency** to reduce its vulnerability, as fully addressed on the CIP Sub Section under the Baseline Projections Section
AGING INFRASTRUCTURE AND CAPITAL INTENSIVE OPERATION	System Renewal	
VULNERABILITY TO CLIMATE CHANGES AND NATURAL DISASTERS	System Resiliency	

Throughout this document the long term plan to address the major identified challenges is incorporated

Main PRASA Challenges

Main PRASA Challenges	Plan to address the identified challenges	
LARGE AND COMPLEX INFRASTRUCTURE LOW-DENSITY POPULATION, AND SIGNIFICANT VARIATIONS IN ELEVATION AND CLIMATE	System Consolidation	PRASA's CIP incorporates projects to **consolidate and simplify** the system but only to the extent it won't adversely affect the system resiliency
POPULATION AND BILLED WATER CONSUMPTION DECLINE 15% IN THE LAST 5 YEARS & 45% OF POPULATION LIVING BELOW POVERTY LEVEL	NRW Initiatives	PRASA intends to soften water consumption expected decline impact on revenue, through the **externalization of Commercial Services** Activities as well as the through the **reduction of physical water losses** across the system, as fully addressed in the New Initiatives Section
HIGH LEVELS OF NON-REVENUE WATER (NRW)		
INABILITY TO ACCESS THE CAPITAL MARKET CURRENT FISCAL ENVIRONMENT RESULTED IN THE CIP SUSPENSION	Financial Sustainability	The final goal of this Fiscal Plan is to achieve **long term financial sustainability** allowing for market access to fund the CIP

PRASA Long Term Vision

PRASA endeavors to provide **high-quality, reliable and affordable water and wastewater services** to the people of Puerto Rico protecting their health and environment

- Despite the Hurricanes impact, PRASA is focused on finding a way back to resume its positive trajectory as the bedrock of reliable water and sewer services

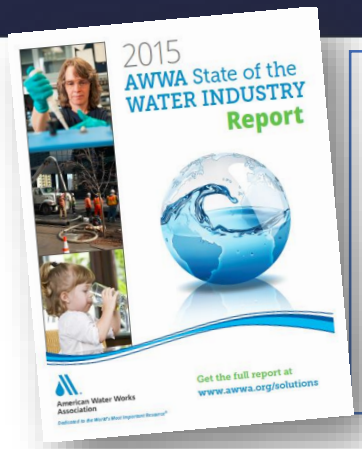
- In pursuing this vision and to achieve **long-term fiscal sustainability**, PRASA's key focus areas are:

Reduction of Non Revenue Water (NRW) losses, increasing operational efficiencies and revenues and reducing expenses allowing for the implementation of best practices of the industry, including partnerships with private companies willing to invest in PRASA's infrastructure, while **improving customer satisfaction**

Capital Improvement Program oriented toward **water quality** to provide for compliance with federal environmental regulations, safeguarding the health of the population and environment of the island, minimizing potential for service interruptions as well as to avoid incremental requirements and penalties from the environmental agencies

System **resiliency and anti-fragility improvement** to promptly and successfully address potential threats and adapt to changes (including climate changes) affecting PRASA's infrastructure, therefore reducing system vulnerability, guaranteeing revenue stability and reducing operating expenses volatility

Financial Sustainability



"On the path toward financial sustainability, water providers should strive to implement fair rates and fees that reflect the total cost of water services including infrastructure renewal and replacement."

- 2015 AWWA State of the Water Industry Report

PRASA main goal to achieve its vision is to become financially sustainable

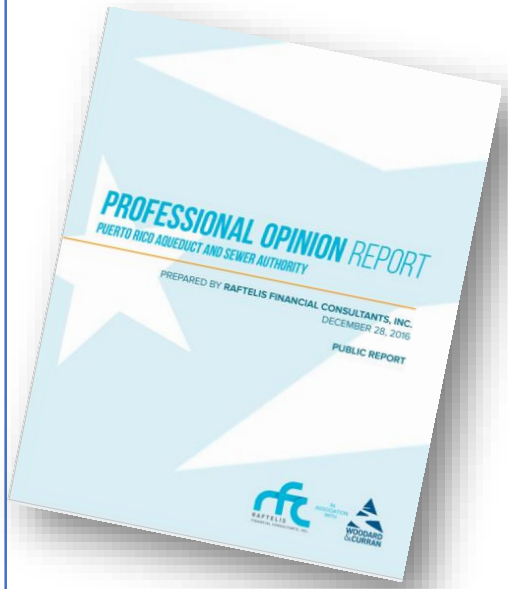
Long Term Plan

Debt versus Rate Revenue Financing for CIP

"…it is virtually unheard of for any utility (water, wastewater, electric, and natural gas) to fund all of its capital needs via 100% Pay-Go financing. ***The appropriate level of rate revenue funded capital improvements is unique for each utility****. As a result, there is no industry standard percentage that can be recommended in all situations."*

"RFC believes that a ***target of achieving 50% rate revenue financing within 10 years*** *is appropriate for PRASA in order to balance the conflicting objectives of minimizing required rate increase while, at the same time, reducing PRASA's overall level of default risk."*

- Professional Opinion Report , Raftelis Financial Consultant (December 2016)



Financial Sustainability Goal

- PRASA has defined Financial Sustainability as the ability to generate and **provide sufficient revenue** through an affordable rate structure **to provide quality and reliable service**, provide access to the capital markets and **meeting the following financial obligations**:
  - **operating expenses**
  - **debt service requirements**
  - **a portion of its Capital Improvement Program**
    - PRASA's objective is to start gradually self-funding:
      - The **Renewal and Replacement** investment, which reflect the annual regular needs to maintain the system in adequate condition for operation
      - On the long-term, other CIP projects, up to approximately 50% of the total CIP needs, excluding projects financed with federal funds
- The reminder of the CIP is expected to be financed through debt, which will allow to distribute the impact to customers ratably throughout the period in which the projects provides benefits and service to such customers

During the past, most if not all of the CIP was externally funded based on a rate structure planned to pay for debt service only.

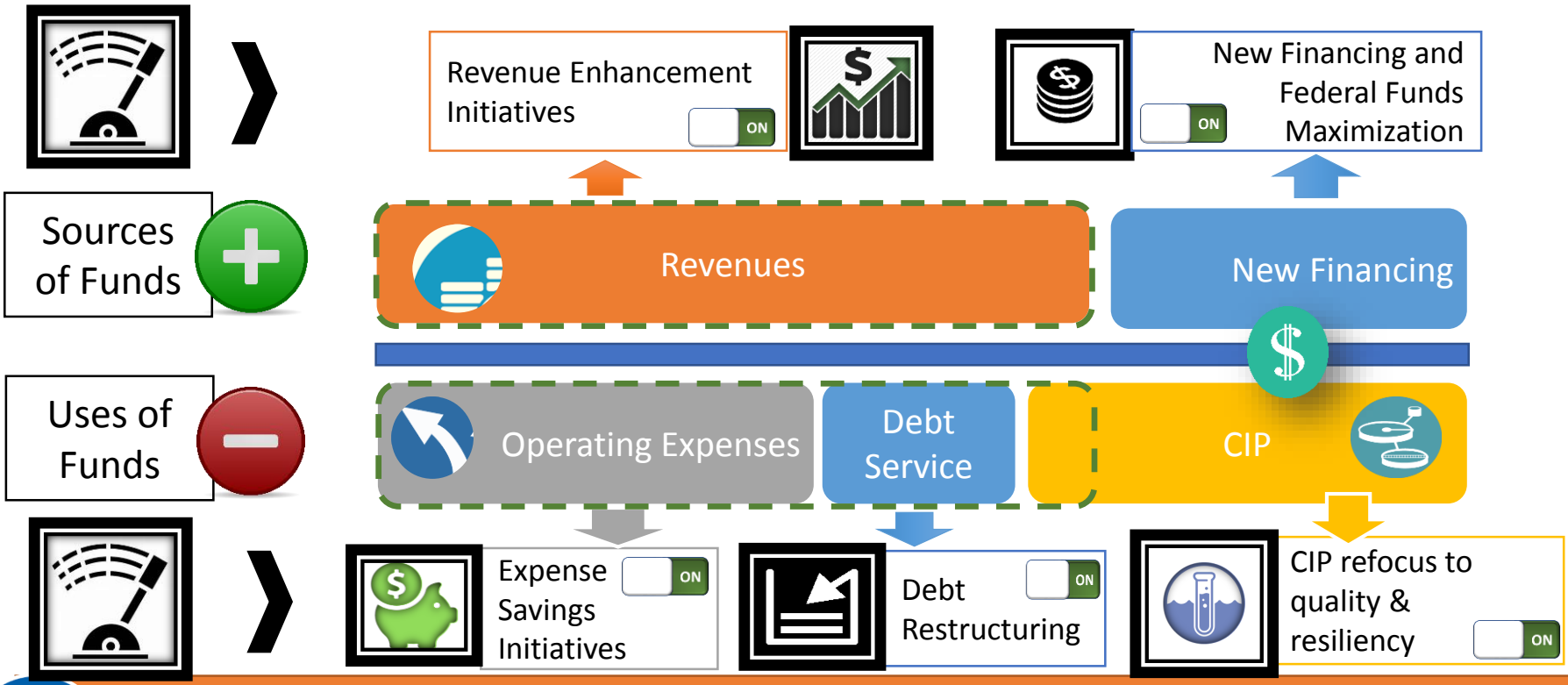
PRASA is now planning to implement gradual rate increases to start self funding the CIP but taking in consideration service affordability

Based on the capital intensive nature of PRASA's operations, a **reduction in current debt service as well as federal funds maximization** is key to reach this goal

Long Term Plan

Levers to Achieve Financial Sustainability

To achieve Financial Sustainability, PRASA is planning to make adjustments in each of its **financial projections components** to increase available resources (**revenues and financing**) and reduce the financial needs (**expenses, CIP and debt service**) to allow for gradually start CIP self funding



All levers included above are addressed throughout this document and, assuming the timely and successful implementation of the initiatives proposed herein, PRASA will be able to achieve long-term Financial Sustainability, while improving the system to provide for a reliable, and quality service through a resilient and modern infrastructure and allowing for an affordable service for the benefit of Puerto Rico as a whole

Long Term Vision

Financial Impact of Main Components (Subject to material change)

Lever Type	Initiatives	CIP Investment[1]	Funded By	Annual Operating Impact[2]	Modeled in FP
	Commercial Water Loss/P3	$300M	P3	+ $80M	☑ "New Initiatives" Section
	Physical Water Loss Reduction	$3M		+ $12M	☑ "New Initiatives" Section
	Water Quality & Other CIP	$1,964M		− ($50M)	☑ "Baseline Projections" Section
	Resiliency & Consolidation	$3,403M	FEMA/ CDBG	− TBD	☒ Conditioned to federal funds availability
	Hydroelectric	$100M	P3	+ TBD	☒ Not modeled due to current uncertainties
	Distributed Generation, Automation and Plants Best Practices	TBD	P3/	+ TBD	☒ Not modeled due to current uncertainties

The initiatives to be implemented will allow for an increase on cash available for debt service, therefore allowing for a viable debt restructuring and providing for potential new funding to minimize rate increases

- Long Term Funding
- CIP Self Funding

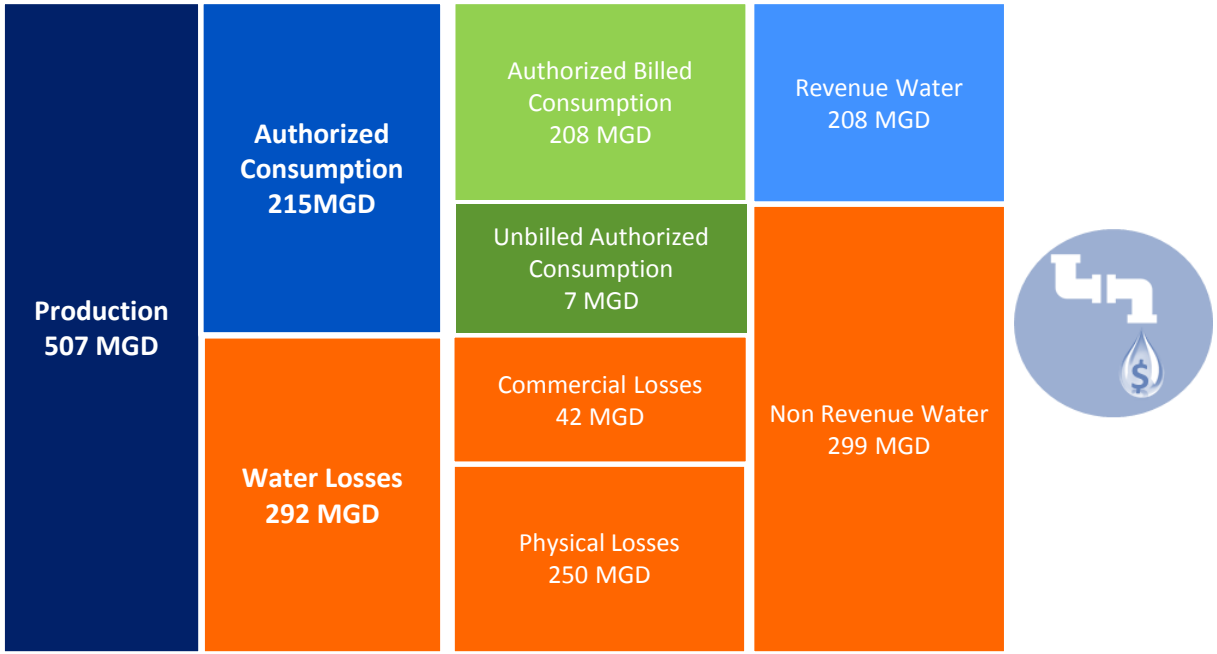
[1] Projected increase on 6-year CIP. For Resiliency and Consolidation projects the period may extend after FY2023.

[2] Estimated operating impact on the operating result, reflecting the net effect on revenue increase or expense reduction if positive (allowing for more cash available) and on expense increase if negative. Excludes the impact of debt service increase.

Understanding Non-Revenue Water

- Understanding and reducing water produced but not billed (NRW) is PRASA's high priority objective as it will have both a revenue enhancing and an expense reduction impact on its finances (as water production needs are reduced)
- Combined, physical and commercial losses make up the system's water losses.

FY 2017 Preliminary Water Audit Results



PRASA's Main Driver
NRW Reduction

NRW

	Main Causes	Potential
Commercial Losses	▪ Inaccurate meters/ outdated technology ▪ Unauthorized water consumption ▪ Water consumption estimation ▪ Incomplete and non precise database ▪ Lack of proactive collections	Revenue Increase Anticipated to be addressed by the **Commercial Service P3 Project***
Physical Losses	▪ Water leaks throughout the system ▪ Water tanks overflow ▪ Excessive water pressure ▪ Poor O&M practices ▪ Lack of adequate leaks controls ▪ Aged underground infrastructure (pipelines, valves, etc)	Variable Water Production Cost Reduction Anticipated to be addressed by the **Physical Losses Reduction Initiative***

Long Term Plan

* Refer to the New Initiatives Section for more detail

Water Quality

- PRASA is focused on the provision of safe drinking water and wastewater treatment to safeguard the island's population health and environment
- Since the signing of the 2006 Consent Decree with the EPA, the CIP's main goal has been to maintain water quality and assure health and environmental compliance
- Around **50% or $1 billion*** of PRASA's 6-year CIP is focused on projects for compliance and improvement of water quality and reliability through:
  - Potable water: improvement of filtration plants' processes as well as water transmission and distribution pipelines
  - Wastewater treatment: improvement to wastewater treatment processes as well as to trunk sewers and collection systems to guarantee these have adequate capacity, preventing overflows

- Moving to the future, PRASA's Prioritization System, as agreed in the 2015 Consent Decree with the EPA, establishes the Regulatory Compliance (Water Quality) category as the primary and most important consideration for project scoring
- Furthermore, PRASA **$551 million in Renewal & Replacement** CIP is expected to be partially allocated for unforeseen infrastructure repairs and additional water quality / non-mandatory compliance issues that may arise to ensure safeguarding health and the environment

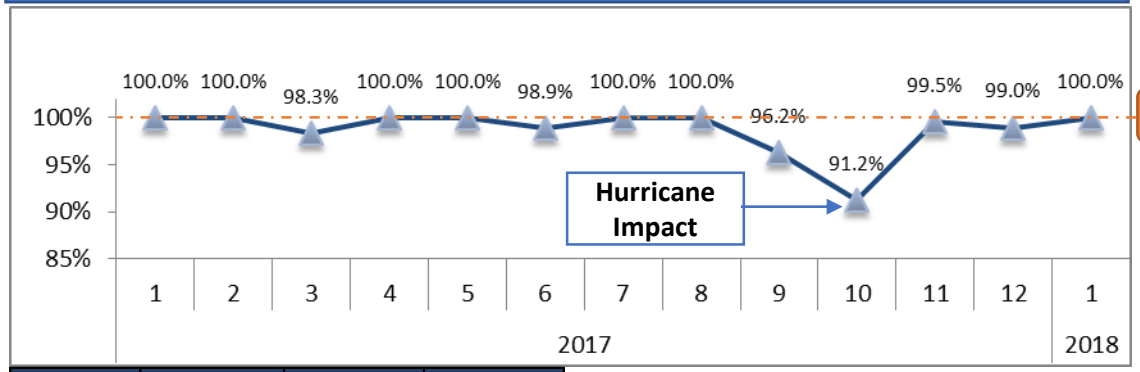
* Including all projects related to water quality as well as water reliability, which will end up granting a quality water service

Long Term Vision
KPIs to ensure water quality

- PRASA long term goal is to attain:
  - **Water** (Safe Drinking Water Act)**: 100%** compliance with the National Primary Standards
    - Approximately 98 parameters, including turbidity, thrihalomethanes, haloacetic acids, cryptosporidium and others, for all facilities.
  - **Wastewater** (Clean Water Act)**: 98%** compliance with the parameters of the National Pollutant Discharge Elimination System (NPDES)
    - Approximately 30 parameters (including enterococcus, coliforms, metals, BOD, TSS, phosphorus, nitrates among others) permits for all facilities.
- To attain the desired increase in environmental compliance, not only more investment will be needed but also incremental expenses on chemicals
  - For example, in the Sergio Cuevas water treatment plant, chemicals cost duplicated to achieve 100% compliance with DOH parameters related to disinfection by-products.
  - Also on Morovis Sur water treatment plant, the cost of electricity duplicated as ultraviolet reactors for water disinfection were installed to achieve Cryptosporidium inactivation requirements
- An investment of over $1B in water quality related project is projected, but also operating expenses are expected to increase by a range that could be as high as **$50M per year**
  - Assuming chemicals cost duplication and 50% increase on electricity consumption on water and wastewater plants based on the examples included above

Water Quality KPIs
Results

Compliance with SDWA Parameters (Water)*

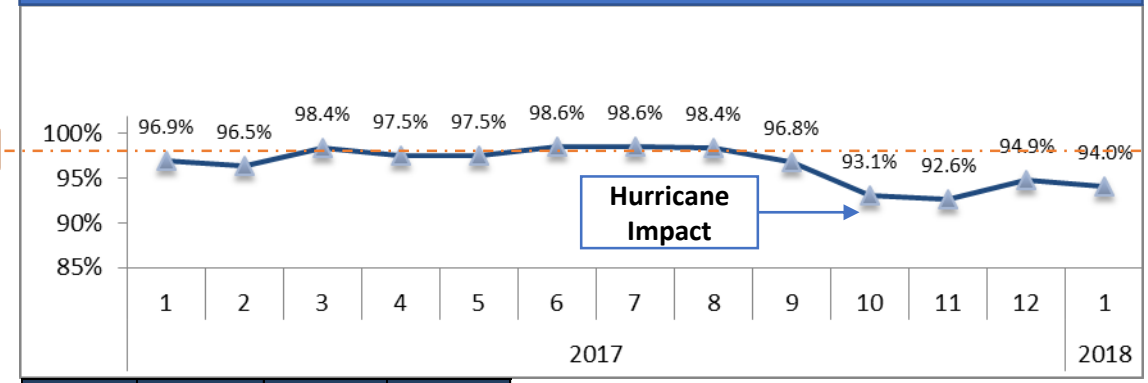


GOAL
100%

FY2015	FY2016	FY2017	FY2018 (Jul/Jan)
99.5%	99.1%	99.3%	99.3%

Compliance with CWA Parameters (Wastewater)*

GOAL
98%



FY2015	FY2016	FY2017	FY2018 (Jul/Jan)
97.2%	98.2%	97.9%	96.3%

*Preliminary information subject to change as results from prior samples are pending to be reported

System Resiliency

- Hurricanes Irma and Maria resulted in total devastation of what Puerto Rico knew as its infrastructure. The already aging infrastructure has suffered damages that will require not only rebuilding what was existing, but rethinking how it was built to be able to withstand hurricanes that will most likely be stronger and more frequent in the future. PRASA's systems are not exempt from this rethinking process.
- As PRASA continues to restore the water and wastewater service to all its clients, and in the process of assessing the damages sustained by the hurricanes, it has identified areas of opportunity where improvements can be made to be more resilient in the future.
- PRASA is projecting **$3.4 billion** in investments to improve resiliency, as further detailed in the CIP Sub-Section of the Baseline Projections Section
- These additional resiliency projects will be undertaken if federal funding is obtained and adequate contracting capacity exists (if PRASA needs to contribute 10% of the cost a **$340M contribution** may be required).
- Main focus for Resiliency CIP is hazard mitigation, safety, water quality and availability, redundancy, robust infrastructure, energy independence, management of critical assets and optimization.
- The results from this vision and a robust **resiliency program shall break the cycle of PRASA's infrastructure and systems risk and vulnerability**, which inevitably results in great economic losses and large costs for relief and rehabilitation as well as in environmental potential issues.

Resiliency and Water Quality Integration

- PRASA's resiliency focus area and long term vision are linked also to water quality as follows:
  - Relocation of infrastructure in flood zones will allow for continued service during flood events and will reduce exposure to water contaminants.
  - Redesign of infrastructure at water bodies (i.e. intakes) will make infrastructure more robust and continue to operate during high flow events.
  - Structural safety of dams and reservoirs in order to have reliable water storage infrastructure that withstands disasters without presenting a potential risk to the population.
  - Improving potable water service zones' transfer capabilities, allowing PRASA to adapt to water shortages due to either drought, power interruptions or repairs to the water system as well as isolate potential water quality issues.
  - Off-grid renewable energy so that service can be provided even when there are power outages in the main grid.
  - Improve water treatment capabilities at plants to better handle high turbidity events so that effluent limits are always met and water quality is assured.
  - Develop an asset management program for large diameter pipes so that service interruptions are reduced when repairs are needed.
  - Optimize the metering system so that there's better knowledge of areas without service.
  - Operation of hydroelectric facilities, including the reservoirs and canal systems, would allow PRASA to better control this important raw water source and its quality.
  - Reservoirs dredging increasing water availability and reducing vulnerability to drought periods, providing for revenue stability

The primary challenge to overcome, in order to achieve a resilient future, is the financial capacity to execute the required projects. But at the same time, these projects will help to achieve and maintain financial sustainability, ensuring revenue stability and water quality

KPIs to ensure reliability and resiliency

- **To monitor water service reliability**, PRASA plans to develop KPIs to address the following:
  - Customers with service interruptions
  - Customers with service deficiencies
  - Water pressure adequacy
  - Customers served by more than one service area

- **To evaluate system resiliency** and to determine how the system recovers from service interruption events and to understand the reaction of the system to such events, PRASA plans to develop KPIs along the following resiliency dimensions, as recommended by the European Water Resources Association on July 2017 :
  - Absorptive (for example a plant capacity to absorb clients served by other service area)
  - Adaptive (for example allowing for operational adjustments to address service interruptions)
  - Restorative (for example resiliency projects)
- Each of PRASA's systems should be evaluated to determine if it has one or more of each of the 3 properties mentioned above
- The four attributes of this KPIs should be:
  - Robustness
  - Redundancy
  - Resourcefulness
  - Rapidity

"Nowadays, water utility managers require modelling tools to predict how the water distribution network (WDN) performs during disruptive events and to understand how the system can best absorb, successfully adapt, and recover from them."
European Water Resources Association Conference - July 2017

Resiliency Projects

$3.4B distributed in 38 resiliency projects

Priority	# of Projects	Estimated Cost ($M)	Project Categories	Overall Resiliency
1	19	$1,973	• Improvement of potable water transfer capabilities • Improvement of structural safety of dams/reservoirs • Relocation of Infrastructure in Flood Zones • Removal of key systems from PREPA grid	• Allows plants to impact more service areas • Extends service life of infrastructure difficult or impossible to replace • Reduces vulnerability and risk • Reduces vulnerability and dependence on external factors not controlled by PRASA
2	9	$1,110	• Redesign of infrastructure in rivers • Water availability increase	• Reduces vulnerability and risk
3	10	$320	• Improvement of water treatment capabilities • Remote operational capabilities	• Better preparedness for changes in raw water • Improves responsiveness for decision making and implementation

Top 5 "Priority 1" Projects:

1. Casey Reservoir and WTP ($553M)
2. Elimination of Dorado WWTP via regional plant ($277M)
3. New Lajas Reservoir and El Yunque WTP expansion to 28 MGD ($240M)
4. Valenciano Reservoir and WTP ($235M)
5. Off grid energy projects ($150M)

Top 5 "Priority 2" Projects:

1. Reservoirs dredging ($960M)
2. Improvements to Superaqueduct raw water intake ($125M)
3. Improvements to the Añasco raw water intake, relocation of intake ($6.3M)
4. Improvements to Cerro Gordo WTP raw water intake ($6.1M)
5. Improvements to Santa Rosa Raw Water Intake (Los Filtros WTP) ($4.4M)

Top 5 "Priority 3" Projects:

1. Remote operational capabilities ($150M)
2. Puerto Nuevo WWTP sanitary sewer improvements including flushing and cleaning equipment, camera inspections, cast in place pipe repairs ($100M)
3. New Salinas WTP to substitute well water ($23.6M)
4. New Dorado Trunk Sewer ($15.5M)
5. Phase IV of the Improvements to the Enrique Ortega WTP ($14.2M)

Long Term Vision
Main Components Interaction

1 Commercial Water Losses & Customer Satisfaction (P3)

Identifies opportunities to reduce:

2 Physical Water Losses

Allowing for:

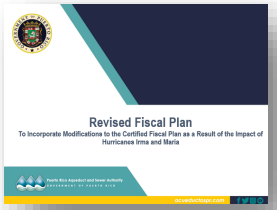
NRW Reduction

Increases water availability allowing for

A viable fiscal plan

Allowing for:

3 Hydroelectric Power Generation



Guaranteeing:

Fiscal sustainability allowing for a robust CIP focused on **water quality** to assure health and environment protection as well as increasing system **resiliency**, which also in turn improves PRASA's **financial health**

All initiatives will be integrated and monitored through:

1)The **PMO** office and specific **KPIs** to be included in the revised Strategic Plan

2) An optimized PRASA's modernization and innovation technology program **(INTEGRA)**

Long Term Plan

Long Term CIP Prioritization

Current CIP project prioritization

1. Projects needed to restore the infrastructure damaged by Hurricane Maria
2. Compliance projects included in the Consent Decree with the EPA and the Transactional Agreement with the Department of Health
   - Mandatory project prioritization is done following the guidelines under the Agreements (applying 4 prioritized weighed scores)
3. Projects which were stopped with the halt of the CIP
4. Priority list projects included in the EPA Consent Decree

Current CIP project prioritization pursues immediate restoration of all damaged infrastructure and continued compliance (water quality) with regulatory agencies in route to a resilient water and wastewater system that is economically sustainable.

Long Term CIP project prioritization

The CIP prioritization in the long term will be based on a system similar to the Prioritization System of the EPA's Consent Decree which has four main criteria that determine a project score:

1. Regulatory Compliance (Water Quality) (40%)
2. Quality of Service and Reliability (30%)
3. Operational Efficiency and Improvements (20%)
4. Population Impacted by Project (10%)

PRASA intends to use the prioritization system as a tool to establish the relative priority of all planned upcoming infrastructure projects with the objective of allocating its limited financial resources according to such priority.

System Consolidation and Simplification
Master Plan

- PRASA Water and Wastewater Infrastructure Master Plan (Master Plan) was last revised in 2014.
  - Provides a roadmap for the implementation of PRASA's future investments in water and wastewater infrastructure through year 2030.
  - Demand analysis, capacity analysis and compliance analysis are performed to determine the infrastructure needs of the system and identify new projects
  - The demand analysis considers US Census population demographics information and the Puerto Rico Planning Board official population projections
  - Reflect PRASA's needs and reflect new regulatory compliance commitments
- Infrastructure consolidation is analyzed in PRASA's Master Plan, which revised water service demand.
- The 2014 Master Plan is scheduled to be revised in 2021 to incorporate the impacts of Hurricane Maria, PRASA's updated needs, and the continued rapid population decline
- PRASA management is committed to review its infrastructure footprint optimization program and to incorporate in the updated Master Plan any further opportunities identified based on new demographic projections

During the past, PRASA has been proactive in working to consolidate systems and reduce facilities when possible. However, after Hurricanes Irma and Maria and the need identified to be more resilient to future similar events, PRASA will now need to include in any consolidation analysis the fact that some service areas need redundancy in order to reestablish service.

Long Term Plan

System Consolidation and Simplification
Current Initiatives

Infrastructure Consolidation

- PRASA CIP currently incorporates 15 projects to eliminate 9 WTP[1] and 4 WWTP[2] and 6 PS[3] during the next 25 years, with a total investment of **$66M**.
- Also under the **Resiliency projects, $277M** are included to eliminate the Dorado, Toa Alta, Vega Alta and Vega Baja WWTPs. This helps to reduce operational expenses while removing infrastructure from flood zones.

Interconnection and Reservoirs Infrastructure

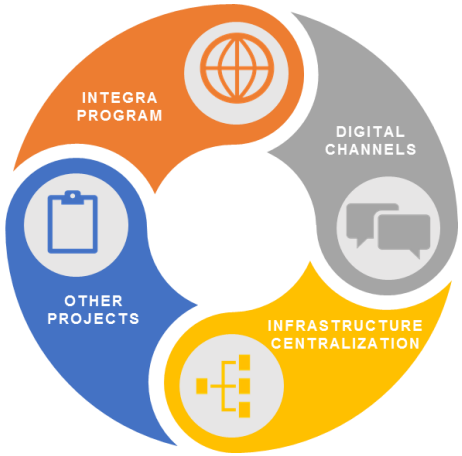
- PRASA incorporated **7 projects amounting to $857M** in its Resiliency CIP, oriented to:
  - system interconnections and
  - new infrastructure to provide potable water from more than one service area
- These project will allow for an increase water service reliability

There is a topographical and geographical reality that limits consolidation. Plants and/or pump stations in remote or mountain areas cannot be eliminated without adding new pump stations and transmission lines. Also system consolidation may add vulnerability to the system reducing water service reliability

[1] Water Treatment Plants [2] Wastewater Treatment Plants [3] Pumping Stations

Modernization

INTEGRA is an ongoing Program for Global Technological Innovation and continuous IT improvements



FUTURE INITIATIVES

SUPPORTING THE BUSINESS

- Field Service Upgrade (under P3 initiative)
- Smart Meters (under P3 initiative)
- Executive's KPIs Platform Implementation
- SAP / GIS / SCADA / SIM System Integration
- SAP HANA Implementation
- Finalize GIS Customer service digitalization
- Multiple customer channels for customer services (e.g. Chat, Virtual representative, etc.)

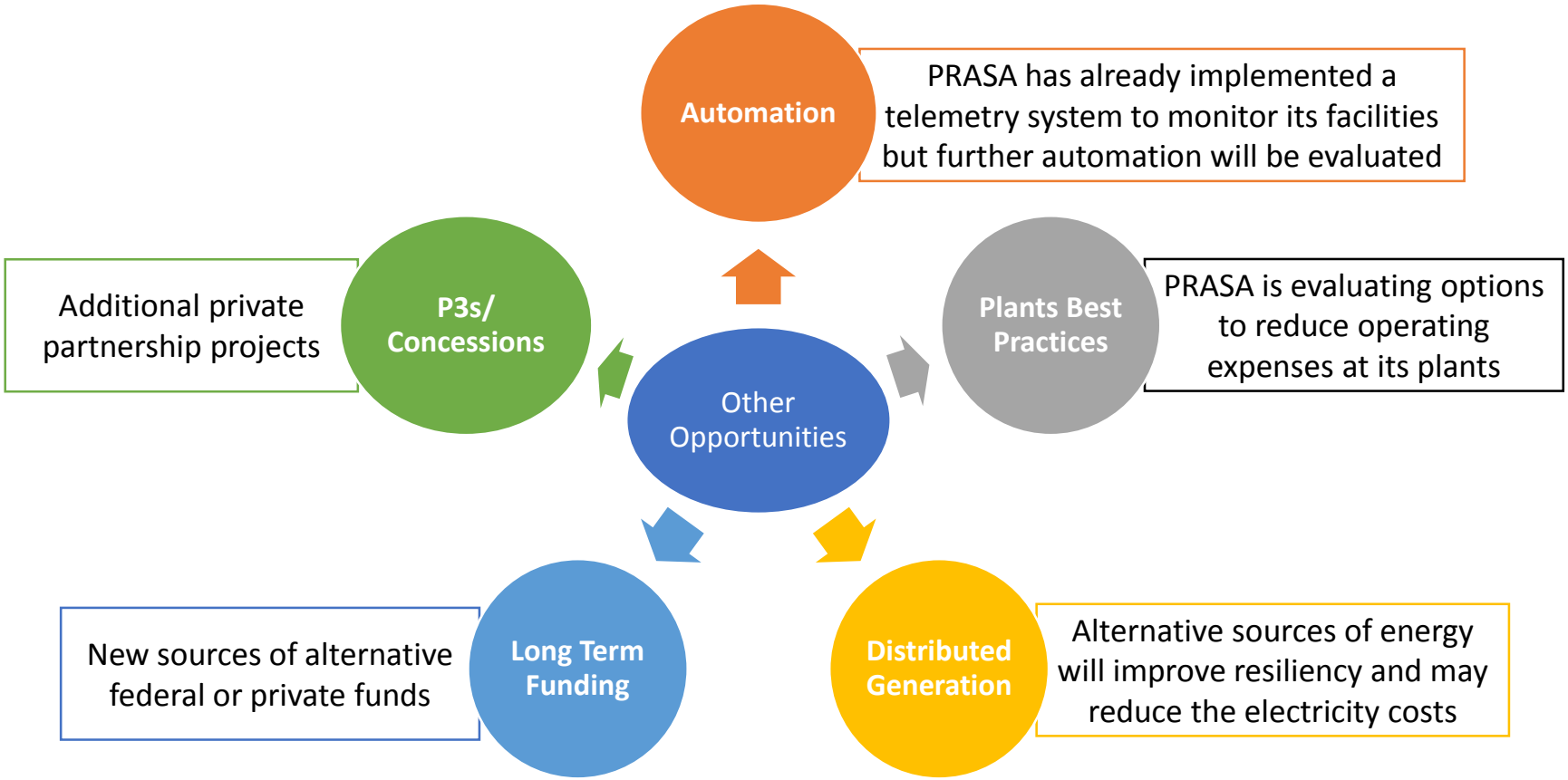
IT DEPARTMENT PROJECTS

- SAP Hardware Upgrade (Private Cloud or Cloud infrastructure)
- Cloud migration of stand alone servers
- PCs Replacement
- Satellite Emergency Network (emergencies)

The support and coordination from the IT initiatives is key to the successful implementation and monitoring of most of the initiatives, with the smart meters being the one oriented to PRASA's goal of NRW reduction

Other Long-Term Opportunities

On the long-term additional opportunities may be available on the following areas which will be further analyzed to determine its potential impact and timing



Plant Automation

Allowing to integrate technologies into daily operations

Automation

Automation of facilities

- **Current Situation:**
  - Plant monitoring platform (SCADA) partially implemented
  - Sensors/controls in place to allow for facilities monitoring
- **Further Automation Opportunities:**
  - Real time monitoring and reaction
  - Manual intervention maintained for reliable operation
  - Automatic alerts and shut-off to allow manual intervention
  - Full operation logs
- **Full Automation Implementation requirements:**
  - Approvals from the Department of Health
  - Case-by-case evaluation and technology adoption required
  - Trainings to operation crews to enable long-lasting impact

Benefits of automation

- Further improve water and wastewater service quality
- Improve operation stability, e.g. via faster adaptation to input turbulence
- Allow technology involvement for potential smart water opportunity
- Increased efficiencies
- Better preparation against climate change challenges

If approved by the DOH, full automation and control capabilities at PRASA's facilities can reduce tank overflows and water losses, reduce the manpower required to monitor the system, and provide information to more efficiently manage the system and assign maintenance resources.

Key considerations

- Automation opportunity needs to be evaluated case-by-case
- Plant prioritization for automation
- Automation projects financing options
- Regulatory agencies requirements (DOH, EPA)

Long Term Plan

Remote Operations
Potential for Full Automation

Automation

Long Term Plan

- DOH requested a plant should not be maintained without operators for more than 4 hours, therefore implemented the 8-4 shifts for those plants
  - Samples on the output of the plants and the equipment functionally verification are required at least each 4 hours.
  - Also if a plant is remotely visualized, some issues at the processing tanks without cameras may not be detected without operators at the site.
- An effective automation program should be designed to be properly operated from the "Remote Operating Center"(ROC) if the equipment is adequately calibrated
- Under its Resiliency projects list, PRASA is expecting to invest $150M for remote operational capabilities at its facilities
- The current Automation system as approved by the DOH is defined as an Interim Automation Program, which does not allow for actual remote operations of the facilities

The impact on operating expenses for a full automation system, even with the restriction of the DOH regarding shifts to be covered by operators can result in additional expense savings

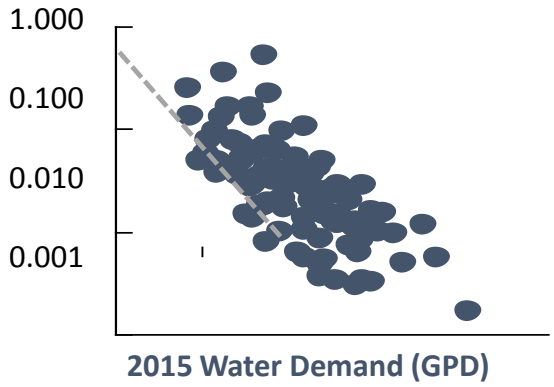
Plants Best Practices
Potential for OPEX Savings

- Potential additional operating expenses savings may be achieved by the implementation of best-practices policies and procedures as well as investment on more efficient equipment to reduce the spend across all plants by a range from 5% to 10% on the long term, representing annual cost reductions in the range from $5M to $10M

Illustrative: Plant-by-plant comparison can reveal variability in spending practices

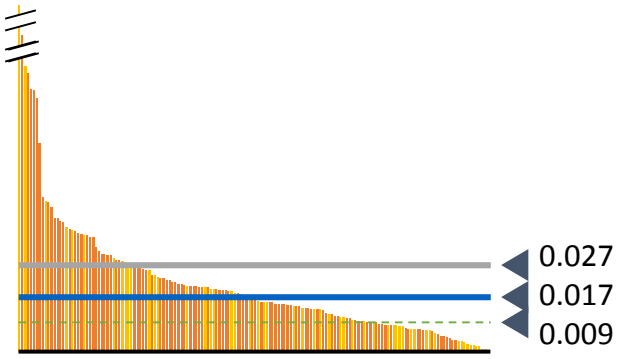
Plant Maintenance

Maintenance $ per GPD



Chemicals

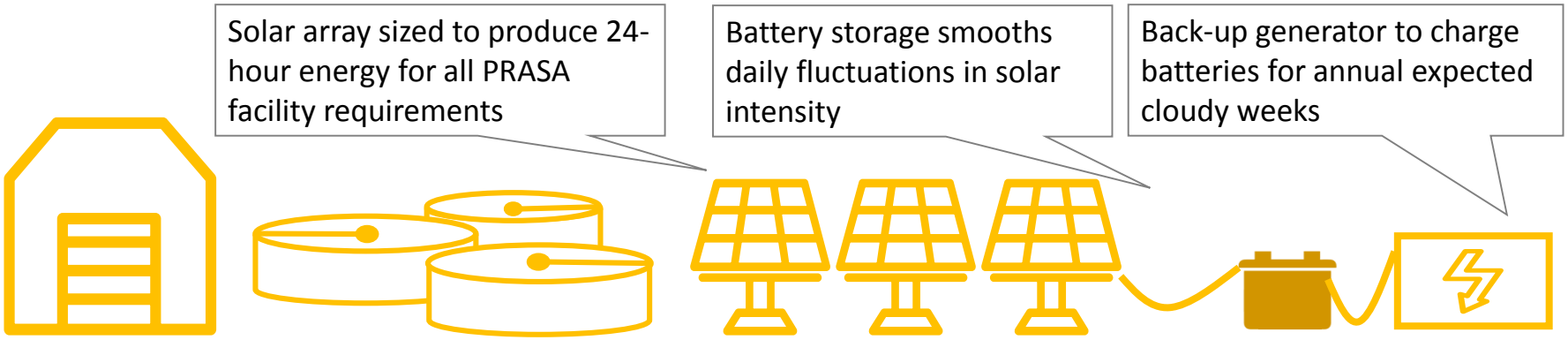
Total chemicals opex –normalized, USD/ m3



Distributed Generation

- Preliminary analysis suggests **distributed generation would carry significant resiliency benefits** and **could be a cost-saving initiative for larger plants**
- One potential solution is solar arrays, storage, and backup generation to provide complete off-grid capabilities
- Cost dynamics for solar and storage mean that **starting projects within the next 2-3 years could carry a cost benefit**
- Distributed generation could be provided by independent developers bidding for individual projects or a portfolio of projects
- Preliminary analysis did not take into account siting considerations (space availability), a key next step to determine feasibility of cost savings and resiliency benefits from large scale distributed generation

Example system



Long Term Funding Sources

New Sources of Private Funding

PRASA's strategy to achieve financial sustainability and maintain affordable rates incorporate the maintenance of external funding for a portion of its CIP, which is expected to come from:

1. Existing private creditors
2. New potential investors/partnerships
3. Investment firms
4. Other potential sources of funding

PRASA is currently negotiating its debt restructuring and expects as a result, not only debt service relief, but also new funds from creditors to allow for the execution of the Fiscal Plan and the CIP projects

Insurance Proceeds and Federal Funding *

PRASA aims to maximize insurance proceeds and Federal Funds to finance its Capital Improvement Program and Hurricanes related costs through the following programs:

1. Public Assistance and Hazard Mitigation Program (FEMA)
2. Community Development Block Grant Program (HUD)
3. State Revolving Funds (EPA)
4. Rural Development (USDA)

Additionally, as the Federal Government continues to obligate resources for storm-damage recovery and infrastructure resiliency, PRASA is planning to pursue possible grant funding opportunities through a wide array of federal agencies.

**More detail on these programs is provided in the following Sections*

P3s and Concessions

1) Water Production

20% of PRASA's water production is already managed by a private partner through the SuperAqueduct operation

2) Water Distribution

Key area of ensuring water distribution maximization and reducing the potential of service interruption to our clients through system interconnections should strategically stay under PRASA control

3) Customer Service

Higher potential for a P3 initiative providing cash inflow of over $300M on investment for new meters and improved technologies applying best practices of the industry. Please refer to the "New Initiatives" section for more detail

To be addressed by the **Commercial Service P3 Project** (refer to New Initiatives Section)

Full privatization of PRASA's operations has proven unsuccessful in the past, so now PRASA will focus the private partnerships on areas with higher benefits potential:

1) **Customer Service Activities**
2) **Hydroelectric Operation**

PRASA Next Milestones

The first steps to start the path to achieve PRASA's long term vision are included below, all of which are key for a successful implementation of this Fiscal Plan

H1 2018	*Continue post-hurricane repairs and liquidity management and FEMA damage assessment start*
H2 2018	*Complete consensual restructuring of PRASA's debt and insurance settlement*
H1 2019	*Start the CIP execution with FEMA/Insurance/New Funding proceeds*
H2 2019	*Implement revenue initiatives to enhance profitability and customer affordability*
H1 2020	*Pursuit of additional initiatives (e.g. other P3s and hydroelectric facilities operation)*
FY 2021	*Finalizing execution of system restoration projects funded by FEMA*
…	*Resiliency projects funding and execution*

Long Term Vision
Closing Remarks

- To achieve PRASA's long term vision and long term financial sustainability, after consideration of lessons learned after Hurricanes Irma and Maria, the **focus areas** will be:
  - Non Revenue Water reduction, allowing PRASA to improve its financial health and for CIP funding, including partnerships with the private sector
  - Water quality and environmental caring
  - Increasing system anti-fragility and resiliency
- Initiatives required to **support** the key focus areas are defined as:
  - Capital Improvement Program prioritization and implementation
  - System consolidation and simplification
  - Technology and modernization implementation
  - Obtaining funding to execute PRASA's CIP

Contents

Hurricanes Impact to Operations

Hurricanes General Effects

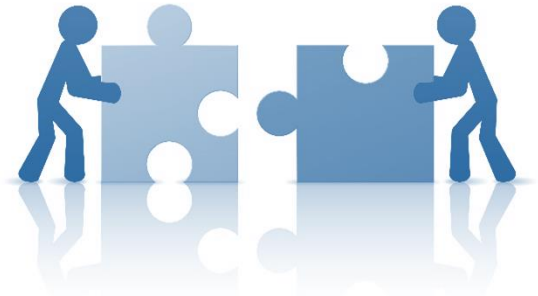
- PRASA effectively implemented its Emergency Management Response Program prior, during and after the Hurricanes
- Nevertheless, after the Hurricanes, PRASA confronted major challenges to stabilize its operations and to provide water and sewer services to its clients
- The hurricanes disrupted ordinary course of business tasks, such as:
  - **WATER PRODUCTION AND TREATMENT**
    - DRINKING WATER SERVICES
    - SEWER SERVICES
  - **METER READING**
  - **SERVICE BILLING & COLLECTIONS**
  - **TELEMETRY**
  - **NON REVENUE WATER PROGRAM**

PRASA's recovery efforts were a major challenge due to the large amount of facilities it operates and the topography where its distribution system is located. Great efforts were required to achieve high levels of service in the least amount of time

Top Challenges After the Hurricanes

Major challenges to reestablish water and sewer services

- PREPA's electric power system collapse, service interruption in most facilities
- Lack of fuel for emergency generating units and equipment
- Shortage of emergency generating units (EGUs) – too many affected facilities
- Loss of communications (internet, telecommunications, etc.)
- Electrical component damages due to wind and flooding
- Need of increased security services to ensure protection of facilities, including generators
- Reported and assessed damages (various levels) to most facilities and equipment
- Water intakes blocked or collapsed
- Collapsed trunk sewers and sewer collection pipelines
- Overflows
- Blocked access to installations
- Reservoir levels management
- Utilization of alternative water supply sources



Hurricanes Impact: Damages Examples

Typical Damages After the Hurricanes

PRASA infrastructure

- Flooded facilities
- Collapsed trunk sewers near rivers
- Wind damage to buildings, including roofs, electrical substations
- Eroded raw water intakes
- Collapsed potable water lines and sanitary force mains installed along bridges
- No power in all facilities, which resulted in an extraordinary need for EGUs and diesel

Hurricane Maria - Photos

Flood Debris at Dorado WWTP

Morovis Sur Raw Water Intake

Hurricane Maria - Photos

Buena Vista Tank, Humacao

Hurricane Maria - Photos

Manati Trunk Sewer

Caonillas 16” Pipe

Hurricane Maria - Photos

Access to Utuado Advanced WWTP

Temporary Access Construction

Hurricane Maria - Photos

Humacao Operational Office

Arecibo Customer Service Building

San Juan Headquarters Office

Hurricane Maria - Photos

Caguas Central Lab

Hurricane Maria - Photos

North Region Laboratory and Monitoring Station

Example of recovery efforts underway

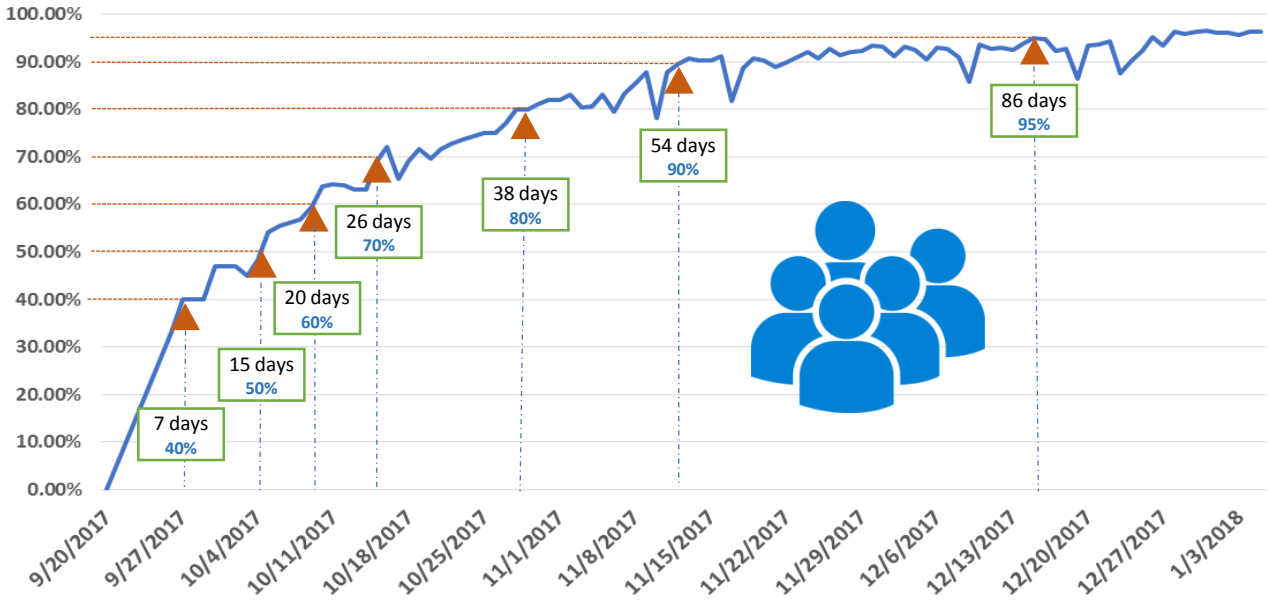
Repair to 16" Potable Water Line
La Virgencita

Hurricanes Impact: Recovery Status

Clients with service

Immediately after Hurricane Maria all PRASA systems were out, no clients had service (except for clients with water storage tanks or served by PRASA water tanks, which had service for the period the tank water level allowed)

Evolution of Clients with Service



Evolution of clients with service shown intermittences are due to power service interruptions

1,229,365

total PRASA clients

1,192,484

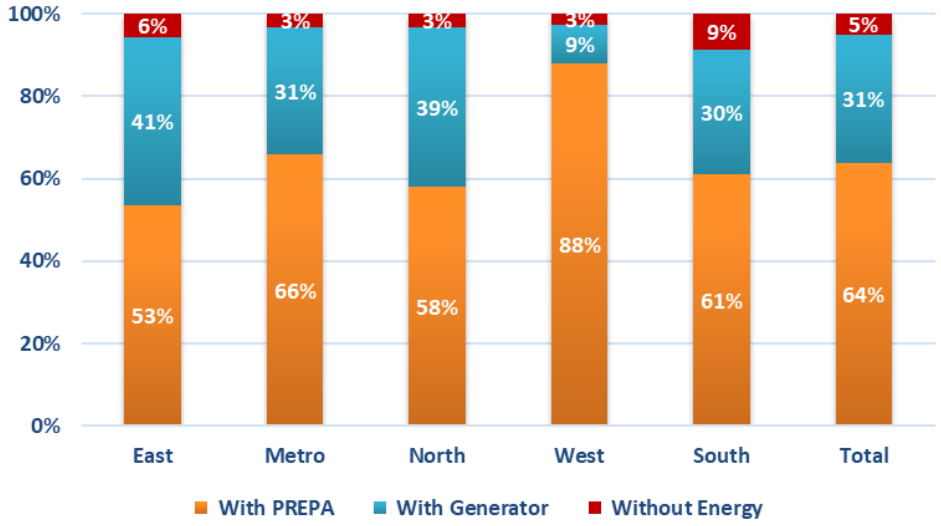
clients with service

97%

As of 2/25/2018

Energy Status by Facility

Facilities with and without Energy by Region

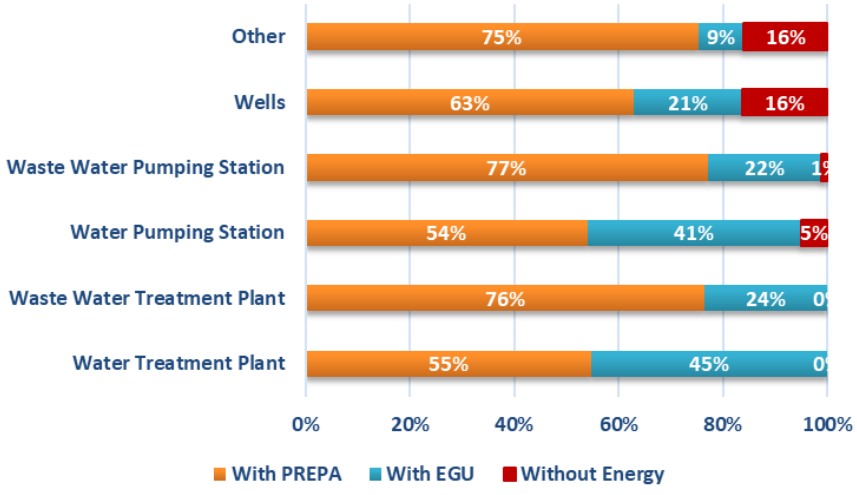


Without PREPA: 36%

Without Energy: 5%

PRASA's recovery efforts were a major challenge due to the large amount of facilities it operates and the topography where its distribution system is located.
Great efforts were required to achieve high levels of service in the least amount of time and still over **31% of our facilities are still dependent on generators** (EGUs).

Energy Status per Facility Type



As of 2/26/2018

Emergency Generator Units

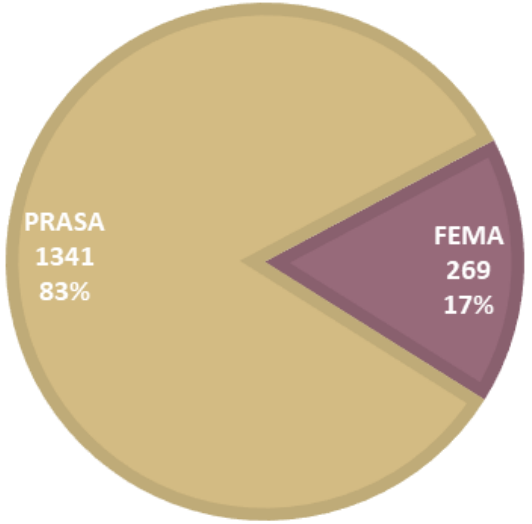
EGUs are key to energize facilities and provide service, presenting the following challenges which PRASA successfully addressed:

- Identification of critical installations (FEMA)
- Fuel supply logistics (FEMA and private entities)
- Coordinating security for critical installations
- Coordinating operations and infrastructure resources to identify priorities

1,610 EGUs in total

Providing for around **18%** of PRASA's electricity consumption needs

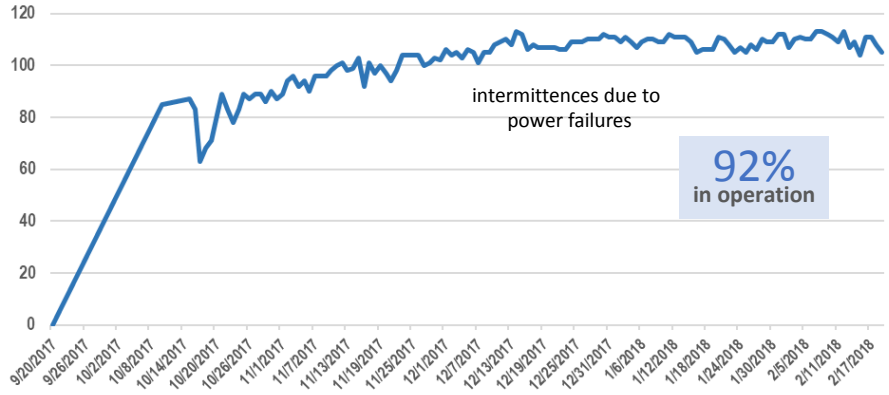
FEMA and USACE are collaborating in providing EGUs to continue the operation at the facilities



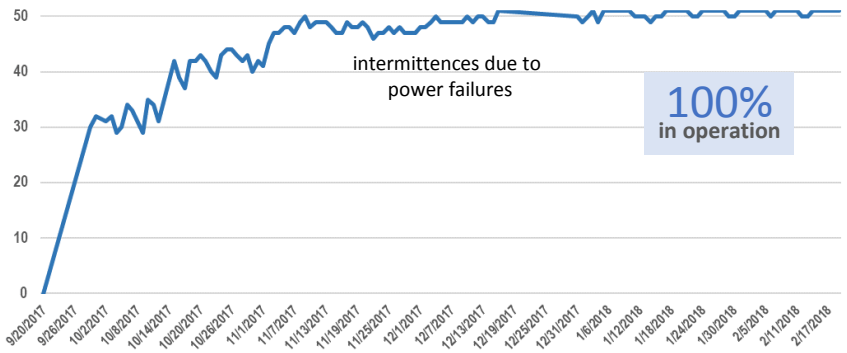
System Recovery

As of 2/19/2018

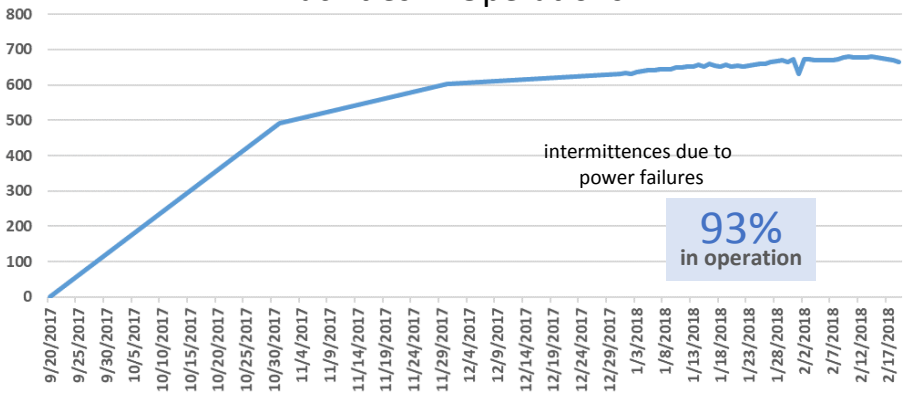
Water Treatment Plants
Facilities in Operations

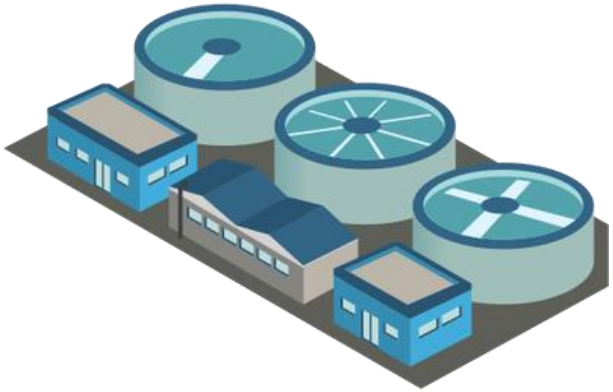


Wastewater Treatment Plants
Facilities in Operations



Wastewater Pump Stations
Facilities in Operations





Note: Information for water pumps recovery is not currently available as the information is being gathered for around 1,000 sites

Hurricanes Impact

Commercial Services

As of 2/26/2018

The operation of the commercial offices is critical to normalize billing and collection activities

1 Still Closed Commercial Office

11 Open Commercial Offices

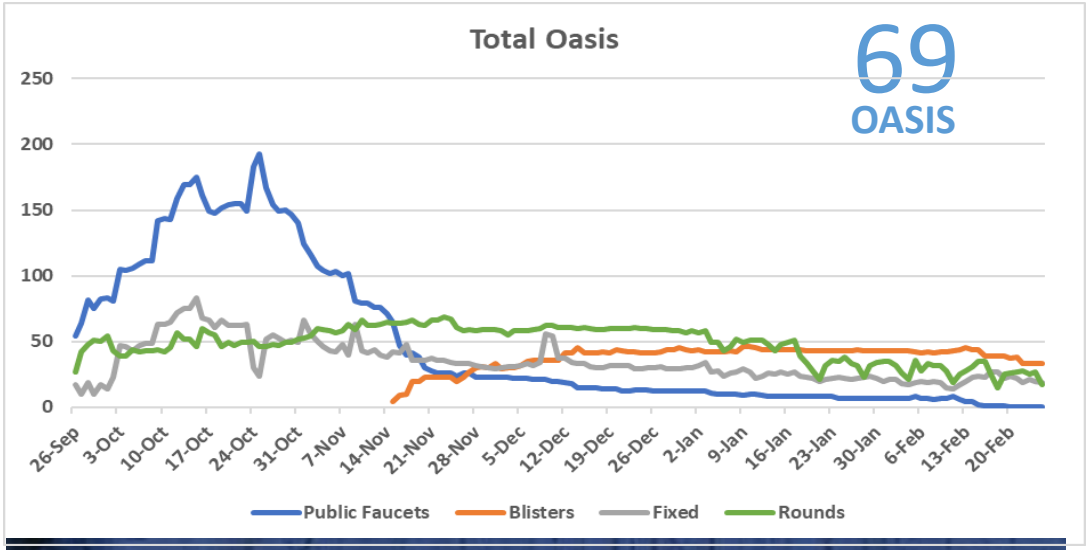
Hurricanes Impact

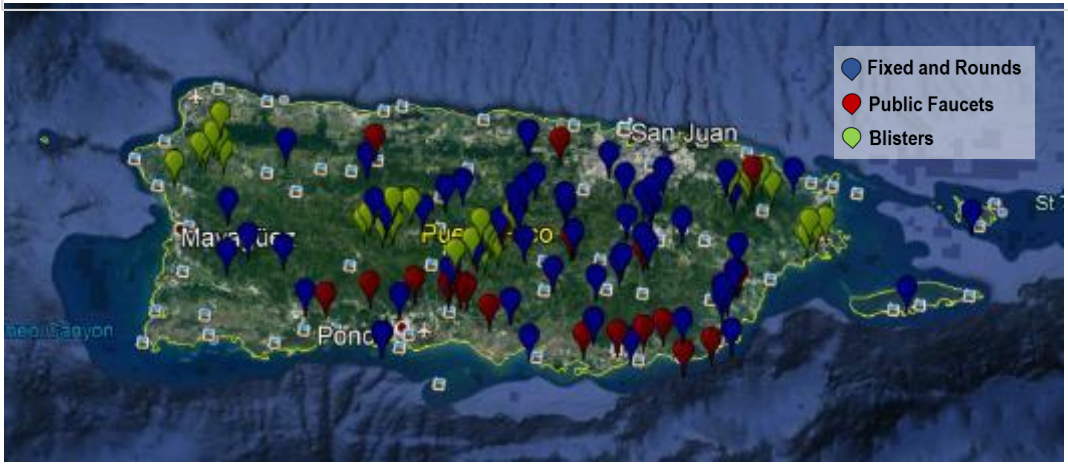
Oasis

Water Distribution to Customers in need

As of 2/25/2018

One of PRASA's priorities during and after the emergency was to supply water to the population in need





MAXIMUM

304

OASIS

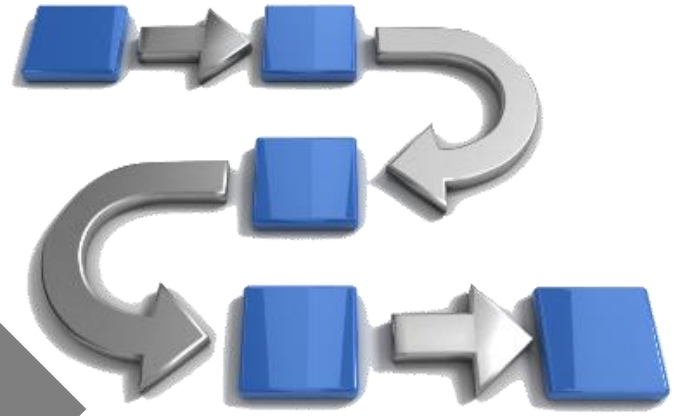
in the peak period
(Oct 15, 2017)

OVER **650K**

customers served during the emergency

Next Recovery Steps

- Continue Recovery phase to sustain and resume operations
- Complete damage assessment
- Continue efforts to obtain all information needed for FEMA and insurance claims
- Continue EGU logistics
- Continue efforts to repair all damaged infrastructure
- Establish a timeframe to normalize operations



Hurricanes Impact: Environmental Compliance

EPA Wastewater Consent Decree

- In accordance with the provisions of Section XXVII, **Force Majeure**, Paragraph 108 of the **Consent Decree (CD)**, PRASA notified EPA and DOJ on **September 5** and **September 18, 2017** of force majeure events related to Hurricanes Irma and Maria, respectively
- PRASA stated that said events could potentially cause delays and compliance concerns regarding PRASA facilities, projects and activities
- Pursuant to Paragraph 107 of Section XXVII, PRASA informed that to mitigate non-compliance with the CD, **PRASA's Emergency Response Plan (ERP)** had been activated
- PRASA cautioned that despite the activation of the ERP, the effects of the hurricanes may affect its ability to respond promptly and efficiently

September 5, 2017
Hurricane Irma Force Majeure Notifications (DOH, EPA and EQB)

September 6, 2017
3,788 clients without water service

September 7, 2017
Over 300,000 clients without water service

September 17, 2017
Hurricane Maria and activation of ERP Phase 119.2 – Initial Alert

September 18, 2017
Hurricane Maria Force Majeure Notifications (DOH, EPA and EQB)

EPA Wastewater Consent Decree

Reporting

PRASA has submitted notifications and reporting where possible and sometimes subject to delay. Nonetheless, PRASA invoked force majeure for any delays or failures to submit information or reports as a result of the hurricane events

Programs

Projects and programs priority and scheduling require review and changes as a result of hurricanes impact and need to develop new and/or modified projects

1. Remedial Measures
2. Sewer System Operation & Maintenance (S2OMP)
3. Caño Martin Peña
4. Puerto Nuevo RWWTP Sewer System Evaluations and Repairs Areas of Concern
5. Areas of Concern
6. Interim Effluent Limits for WWTPS and WWTPS
7. Integrated Maintenance Program (IMP)
8. Training and additional requirements for Operators
9. Continued Implementation of a Process Control System (PCS)
10. Spill Response Control Program (SRCP)

EPA Wastewater Consent Decree (CD)
Current Status

Penalties
No penalties are expected due to hurricanes because of force majeure invocation

Consent Decree
PRASA expect to negotiate new due dates with EPA considering the Hurricanes impact on previously agreed timelines and the current emergency priorities. Extensions to the due dates will be requested individually by Program or requirement

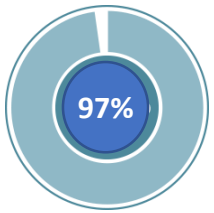
Reporting and Process Control
All activities related to daily based compliance procedures are expected to be normalized during the current fiscal year

On February 16, 2018, PRASA held a meeting with EPA and the Department of Justice representatives to discuss PRASA's request to extend the due dates of certain programs and requirements, which should be formally submitted for EPA and DOJ's consideration

Financial Impact of the Hurricanes

Hurricanes Impact on FY2018
Revenues

- Meter Readings and Invoicing
  - Meter readings were suspended on September 16, 2017 to focus all resources on emergency recovery tasks
  - Meter readings reinstated on November 16, 2017, after reaching a level of 90% of clients with water service as of that date (**97%** as of Feb 26 2018)
  - Billings processing and issuance started shortly after November 16, 2017
- For FY2018, **revenues are expected to be substantially lower than budgeted** due to, among other things, population migration, decline in economic activity and lower consumption for the period when clients did not have service and lower collections rate
- In addition, as stipulated in PRASA's regulation, based on the days without service, certain clients are eligible to receive a **deficient service credit**
- Starting on FY2019, PRASA expects a gradual recovery of revenues, but not to the levels projected in the previously certified fiscal plan
- For revenue projections, PRASA applied the methodology and assumptions explained in detail in the following section

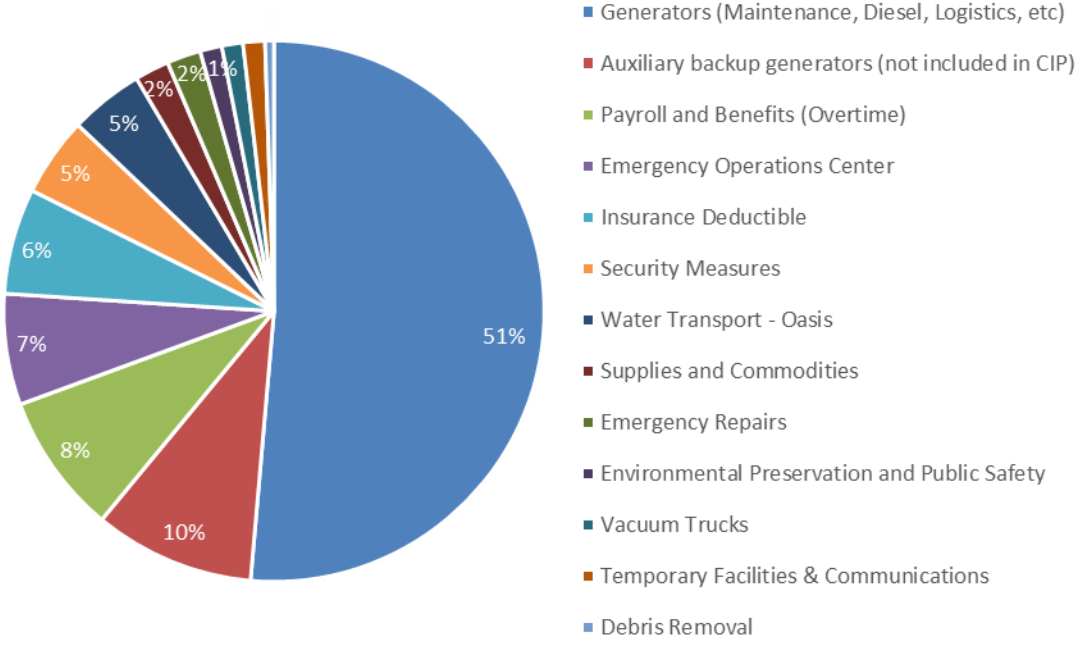


$271M*
FY2018

* Preliminary estimate of revenue reduction in FY2018, subject to several uncertainties and material change

Hurricanes Impact on Expenses

- Operating expenses were directly affected by the Hurricanes
- Most incremental expenses are expected to be recovered from insurance proceeds or FEMA funding
- The composition of the estimated incremental disbursements related to the emergency is included below:



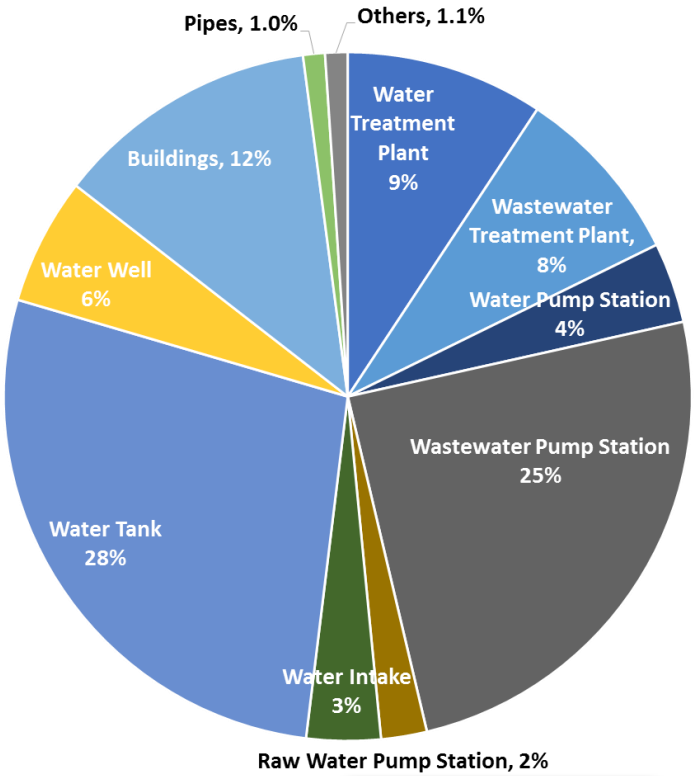
$396M*
FY2018

* Preliminary estimate of increase in disbursements classified as categories A&B under FEMA Public Assistance Program for FY2018, excluding capital expenditures (included under the CIP projections). Amount subject to several uncertainties and material change

Hurricanes Impact on CIP
Preliminary Assessment

- Most of PRASA's facilities suffered significant damages
- As part of PRASA's damage inventory some 374 facilities have been visited (including all water plants, wastewater treatment plants and raw water intakes) as of December 15, 2017, estimating the total repair and restoration cost for these at over $250M
  - *The estimate of $250M does not account for hidden damages at each damaged facility, nor does it account for mitigation elements that may be added to each facility to increase protection/resiliency mitigation actions*
- Extrapolating current estimates to account for potential damages in unvisited ancillary facilities, the estimated amount for **total damages** is approximately **$769M** to be incurred on or before FY2021

Percent of Estimated Repair Costs by Asset Type



Estimated cost to **build back the system to Pre-Hurricanes condition**

$769M*
FY2018 thru 2023

* Preliminary estimate, subject to several uncertainties and material change

Hurricanes Impact
Damage Assessment

- In an effort to accelerate PRASA's recovery, management has continue to perform damage assessments on its infrastructure along with contracted consultants.
- A preliminary inventory listing of damages should be provided to FEMA mid-May* detailing facilities an estimate on damages.
- With the implementation of Section 428 of the Stafford Act, FEMA requires that estimates to restore the damages facilities to their pre-disaster design and function, including applicable and federally required codes and standards will be conducted by FEMA's contracted professionals
  - In the event that FEMA maintains their effort to initiate the permanent restoration grant funding, assessments for permanent work may start formalizing soon.
  - Acceleration to develop damage assessments will depend on FEMA's and their resources ability and timelines

*May 15, 2018 is the formal deadline to identify and report all disaster-related damages

Hurricanes Impact
Damage Assessment Timeline

Damage Assessment and Recovery Timeline

- On February PRASA started joint visits with the insurance company adjusters to settle values on the inspected assets
- With the assistance of specialized consultants, along with the findings/assessments of our Public Adjuster, PRASA will implement strategies to maximize funds.
- PRASA is expecting to perform all its CIP for system recovery prior to the end of FY2021 (in 3 years)
- A settlement with the insurance company is expected during the current calendar year
- FEMA funds for restoration are expected to be gradually received during the next 3 years

Month 1 – 9

- *Submission of insurance damage assessments, and estimate & proof of loss*
- *Funding of insurance proceeds*
- *FEMA Category A and B damage inventory assessments*
- *FEMA funding on Category A and B projects*

Month 6 – 18

- *Continued FEMA Category A and B damage assessments and FEMA reimbursement funding*
- *Planning for long-term recovery as assessment moves toward permanent projects (Categories C-G)*

Month 12 – 36

- *Long-term mitigation and capital project development*
- *Permanent repair & replacement damage assessment and FEMA funding*

Hurricanes Impact Summary

	Projected Impact $'Million	Potential Source of Funds
Revenue Reduction	$271M	
Incremental Expenses	$396M	
Capital Improvement Program	$769M*	
Total Projected Impact	**$1,436M***	

The total impact including Resiliency projects also is estimated at **$4.8 billion**

* Excluding Resiliency Projects impact which will be executed to the extent federal funds are available

Funding Sources - Insurance

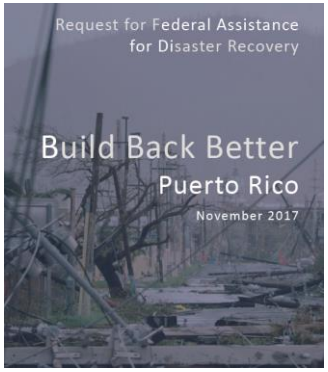
- PRASA's understanding of its insurance policy is that it covers business interruption and property loss caused by Hurricane Maria, as follows:
  - Initial limit of liability of $150 million, subject to a $25 million deductible for windstorm and flood damages.
  - Additional cover of $150 million after the first limit is surpassed, for losses related to flood damage only
  - Maximum insurance coverage is $300 million, less the deductible
- PRASA expects to be able to access insurance funds to cover part of the loss in revenues and a portion of the cost to restore and repair the damaged infrastructure, up to the maximum coverage of $300 million
- In addition, PRASA has another insurance claim from Hurricane Irma, with the same limit of $300 million

Funding Sources - FEMA

- Emergency Work through the initial 180 days following the Incident Period for DR-4339 (Maria) is expected to be 100% Federally funded
- PRASA expects to be able to recover most of its qualifying incremental expenses not covered by insurance proceeds, from federal funds (FEMA Programs)
- The cost to restore and repair the damaged infrastructure not covered by insurance proceeds is expected to be covered by FEMA Public Assistance funds at a federal cost share of 90%
- Additional funding through the Hazard Mitigation Grant Program may be available for mitigation projects in 2018 (typically 9 months post disaster), which are not included in the financial projections

Resiliency Projects

- In addition to the critical projects that are the immediate needs of PRASA's System ($769M), to build back the system to its prior state condition, other projects are being considered as necessary to make the system resilient to future potential impacts from storms or hurricanes
- The ***Build Back Better Puerto Rico Plan*** *(BBB Plan)* presented by Puerto Rico's Governor included $2.7B for water and sewer projects from which $2.2B are under PRASA's responsibility
  - *PRASA is also projecting an additional **$1.2B** for other projects not included in the Build Back Better Plan for a total of **$3.4B in Resiliency Projects***
    - *From this total, $93M were already included in the 6-year CIP presented in the prior slide*
  - *The **resiliency projects**, except for the $93M included in the 6-year CIP, **will be executed only if federal funding is obtained** and as long there is enough contracting capacity to complete those projects, therefore **no impact was included in this Revised Fiscal Plan***
  - *If PRASA should contribute a **10% state match**, the financial need would increase by **$340M***



Incremental CIP cost to **build back better** PRASA's System

$3,310M*

* Preliminary rounded estimate for Resiliency Project ($2.2B in BBB Plan + $1.2B PRASA additional projects - $93M already included in the 6-year CIP), subject to several uncertainties and material change

Hurricanes Impact
Closing Remarks

- From a meteorological standpoint, Irma and then Maria were nearly a worst-case scenario for Puerto Rico. The Hurricanes has wreaked havoc on the island, **causing a level of widespread destruction and challenges** paralleled by **few storms in American history**.
- PRASA **readiness capabilities** (prior CIP investments, operations planning and interconnections and emergency plans) allowed to react and normalize operations in a short term period after hurricanes Irma and Maria.
- Due to those atmospheric events, **PRASA financial situation had worsened** in terms of incremental cost, lost of revenues and infrastructure damages, estimated at **$1.4 billion**
    - The total impact is expected to increase to **$4.8 billion** when including the estimated cost for resiliency projects.
- Significant **uncertainties still remains** regarding the full extent of the Hurricanes damages as more than half of PRASA's asset value is underground infrastructure

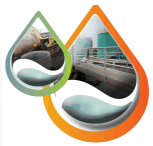
Contents

Ongoing Initiatives

PRASA maintains its commitment to continue improving its efficiency and has implemented several initiatives which are already being realized and generating benefits

PRASA Ongoing Initiatives

Non-Revenue Water Reduction Program	• Reduced over 100 MGD in water production since FY2012 (507MGD on FY2017)
Measuring and Reporting KPIs	• Developed a Strategic Plan and standardized KPI system and metrics to increase efficiency
Headcount Optimization	• $30M in savings through over 1,000 headcount reduction since FY2008
Electric Power Expense Reduction	• Over 50M kWh reduction in annual consumption since FY2014 through energy savings management initiatives and the Energy Performance Contracts • 12M kWh from PPAs
Continued Reduction in Number of Facilities	• Reduction of 14 WTPs and 9 WWTPs since FY 2010 • Closing of 13 commercial offices



Past Measures

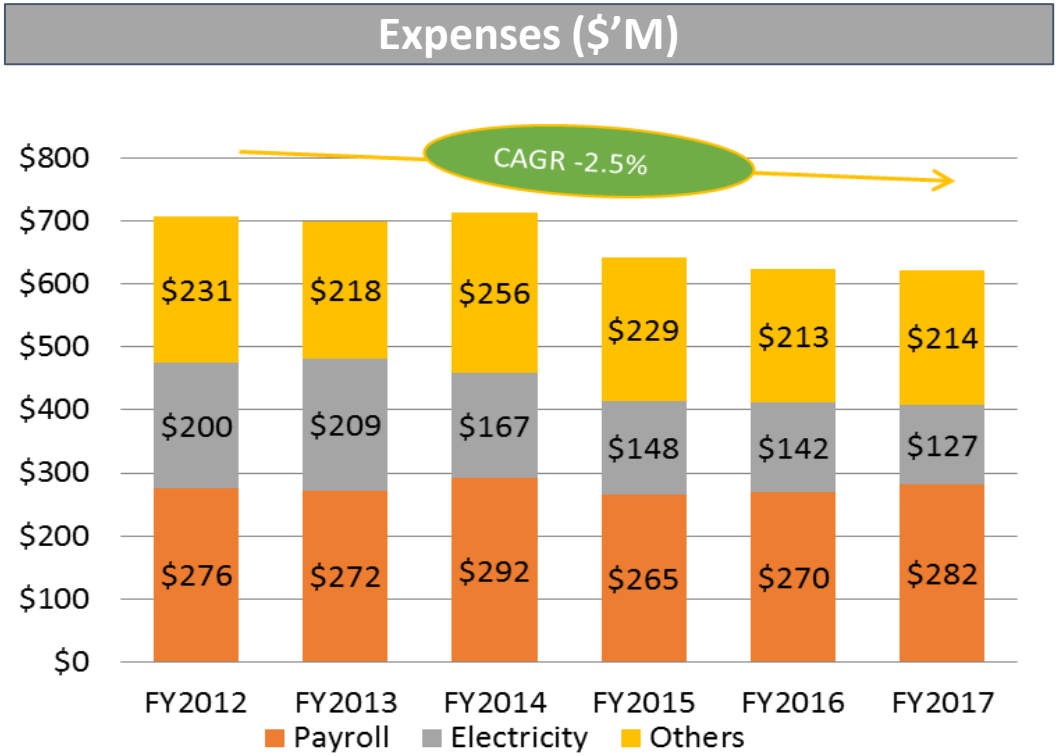
Note: For more detail on the implemented initiatives please refer to the Fiscal Plan as certified by the Oversight Board on August 25, 2017

PRASA's Operating Expenses

Since fiscal year 2012, PRASA has reduced its operating expenses at a compound annual growth rate (CAGR) of 2.5% demonstrating that it can effectively control its expenses.

Expenses decreased, even after assuming incremental costs by inflation/legislation

$84M in cost saving since FY 2012



Note: Information for FY2012 thru FY2016 based on Audited Financial Statements. FY2017 results are preliminary and are subject to change

Measures to reduce Payroll Costs

- PRASA aggressively reduced its headcount by over **1,000 employees** or around 20% during the last 10 years to become more lean and efficient.
- In 2014, a workforce capacity analysis was performed by Vision to Action (V2A) to determine the optimal headcount for every department based on workload and capacity to enhance workforce productivity and reduce labor costs.

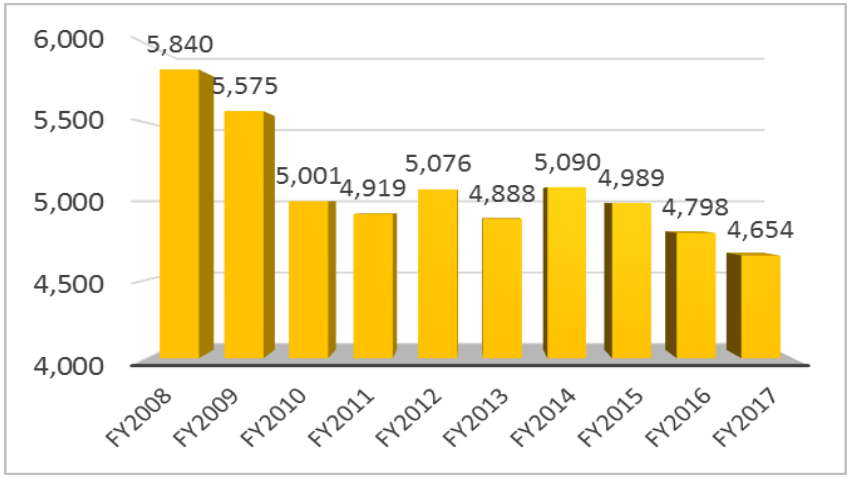
V2A's recommended optimal PRASA FTE level = 4,935

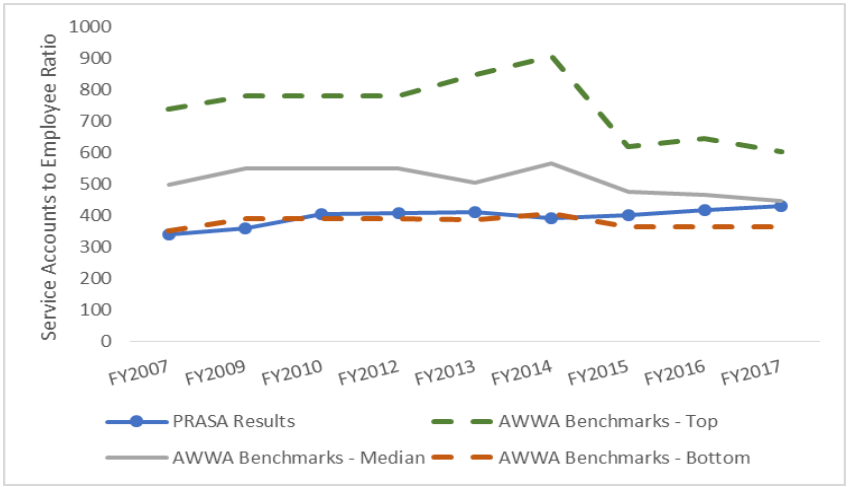
PRASA is projecting a total of **4,900 employees** through FY2023

- Also, PRASA is comparable to other utilities as surveyed by AWWA in terms of the service accounts to employees ratio. Results show PRASA improvement on this benchmark and on FY2017 the median of the utilities surveyed was reached

Headcount reduction was achieved by system consolidation and optimization as well as by technology implementation and system automation plus personnel reclassification

Historical Headcount Reduction

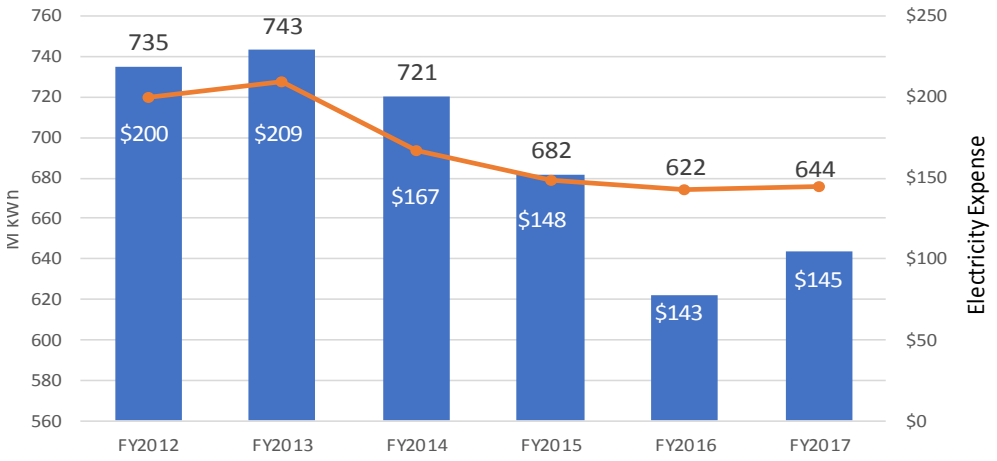




Past Measures

Measures to reduce Electricity Costs

- Electricity expense is mainly driven by energy consumption and the electric power costs.
- Up until FY2014, PRASA's electric power costs had historically increased mainly because of price, while consumption decreased. However, because of the preferential electric energy tariff approved by PREPA in effect during FY2014 thru FY2016, PRASA's electric power costs decreased, lowering the recent 10-yr CAGR from 8% to 6%. Nonetheless, as of July 1, 2016, PREPA's preferential electric energy tariff was revoked.
- Moving forward, PRASA projects to continue with its Comprehensive Energy Management Program to reduce the electricity bought from PREPA by purchasing alternate sources of energy through Power Purchase Agreements (PPAs), as well as consumption reduction through regional efforts in conservation and Energy Performance Contracts (EPCs).



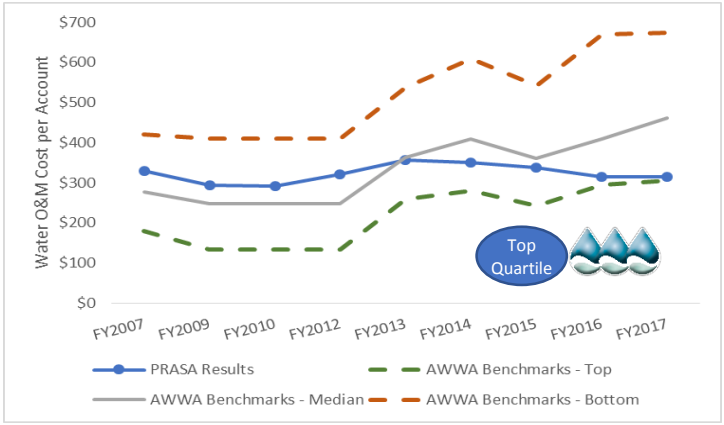
Electricity consumption has decreased at a 3% compound annual rate

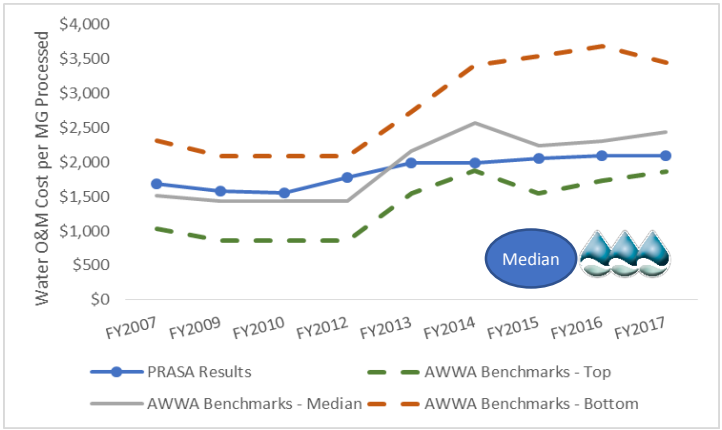
As of FY2017, PRASA has reduced a total of 2.4 million kWh in annual consumption through EPC projects and 11 million kWh from solar energy was used at an average cost of $0.15/kWh

PRASA vs Utility Benchmarks

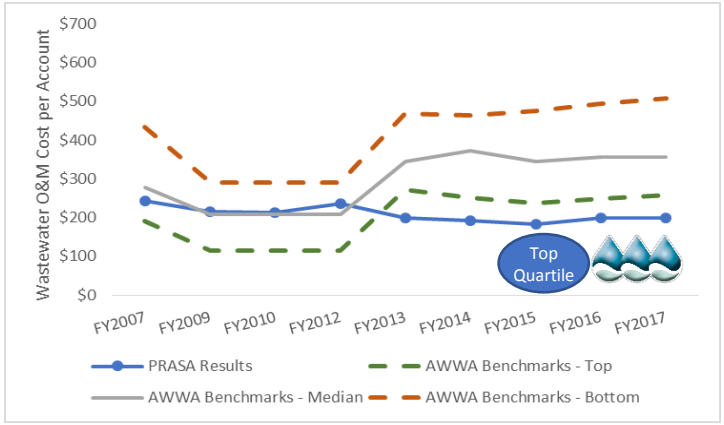
PRASA's O&M expenses results as compared to the industry's benchmarks also shows how PRASA has successfully reduced its expenses even when the system at Puerto Rico is considered as one of the more complex systems in the world

Water O&M





Wastewater O&M

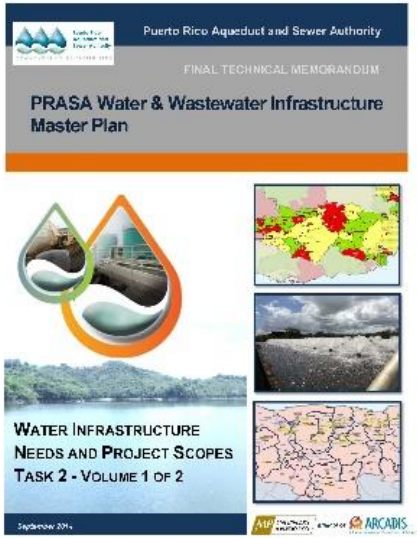


As the industry's benchmarks have in the most part steadily increased over the past 10 years, PRASA has reduced its O&M and has remained within the median/top percentile of the utilities surveyed

Source: AWWAs Benchmarking Performance Indicators for Water and Wastewater Utilities

System Consolidation

- Since 2003, PRASA has simplified its water and wastewater system by **consolidating 16 WTPs and 18 WWTPs** for a total of 34 plants.
- Considering a declining population with a declining consumption, one of PRASA's main focus in terms of infrastructure is system optimization, quality assurance and resiliency.



WTP and WWTPs Consolidation Timeline

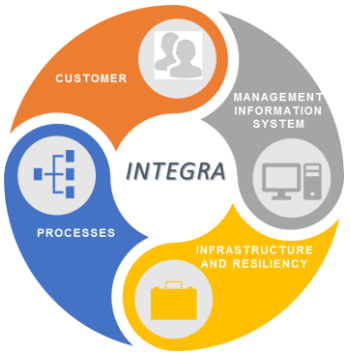
2003	2010	2014	2018
130 WTPs 69 WWTPs	128 WTPs 60 WWTPs	119 WTPs 52 WWTPs	114 WTPs 51 WWTPs

Modernization Initiatives

In 2004, PRASA started a Program allowing the Authority to modernize and integrate its systems and applications in order to support business needs and industry best practices, including the following:

- SAP ERP Implementation (R3 & ISU)
- Website Implementation (acueductospr.com)
- SCADA **(Telemetry System)**
- Compliance Continuous Monitoring
- IVR Implementation (Interactive Voice Recognition)
- Virtual Cashier System
- Pay by Phone
- Disaster Recovery Plan
- VOIP Telephone System
- KRONOS Implementation (Time Attendance/ Biometrics)
- QPlus Implementation (Field Service)
- LIMS System Upgrade (Laboratory)
- Mobile Application for commercial services
- Commercial Offices Webcams Implementation
- Compliance's KPIs System Implementation
- Office Virtualization

PRASA has been continuously improving the technology available to support its operations, increase efficiencies and reduce costs, while improving reporting and data availability to allow for improved monitoring and controls



Successful Cost Control

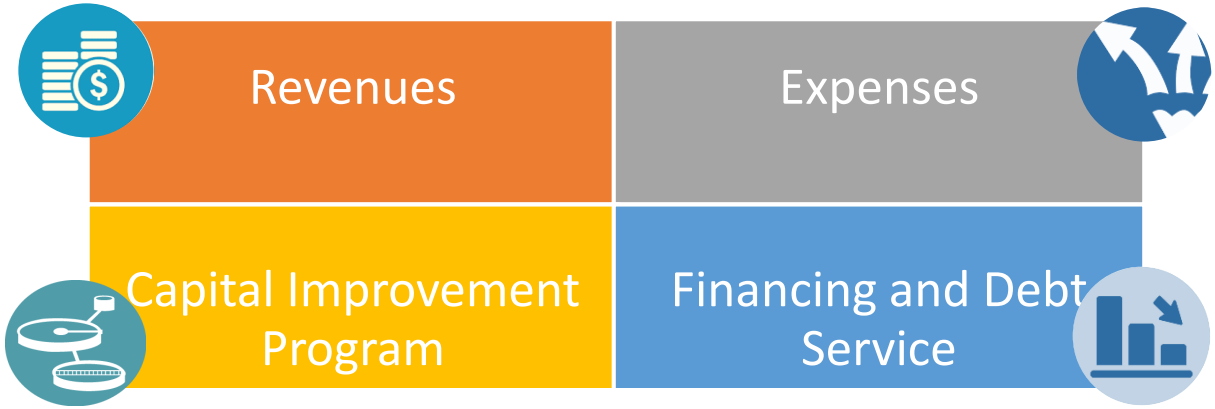
- PRASA successfully managed to reduce its expense by an average of 2.5% per year even when inflation and new legislation and regulations required PRASA to incur incremental costs, for a total of a **12% reduction over 5 years**
- PRASA level of expenses is already in the top quartile or the median when comparing to the FY2017 AWWA benchmarks, showing a **positive historic trend**

Further material reductions in expenses may place risk on the health of PRASA's clients as well as the environment, which is non acceptable for PRASA. Also will negatively affect the already deteriorated economic situation of the Island

Contents

Baseline Financial Projections

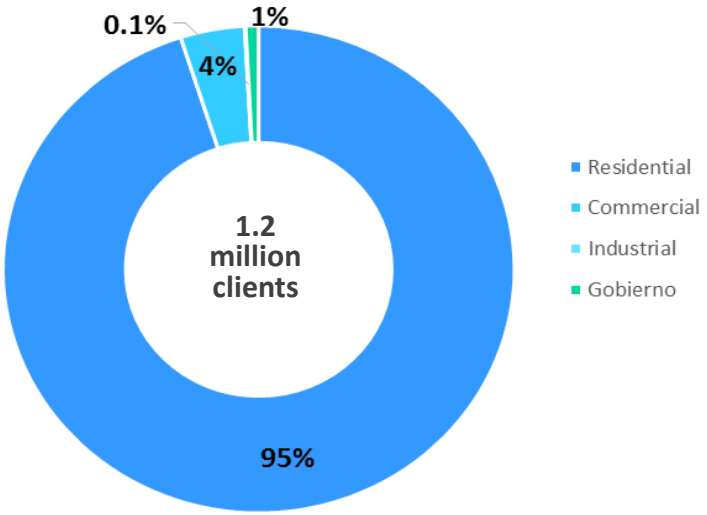
- As presented in the prior Section, PRASA has not been a passive spectator to the negative trends on Puerto Rico's economy and during the last years, several measures were implemented to improve efficiency and minimize costs
- The Baseline Financial Projections include:
  - the expected impact of the Hurricanes
  - all the ongoing initiatives as well as the impact of the cost control measures already implemented as modified to include the impact of the Hurricanes.
- The main assumptions used to determine the projections for the four components of PRASA's model are explained throughout this Section, comparing the assumptions from the Certified Fiscal Plan (Pre Hurricanes) to the proposed Revised Fiscal Plan (Post Hurricanes)



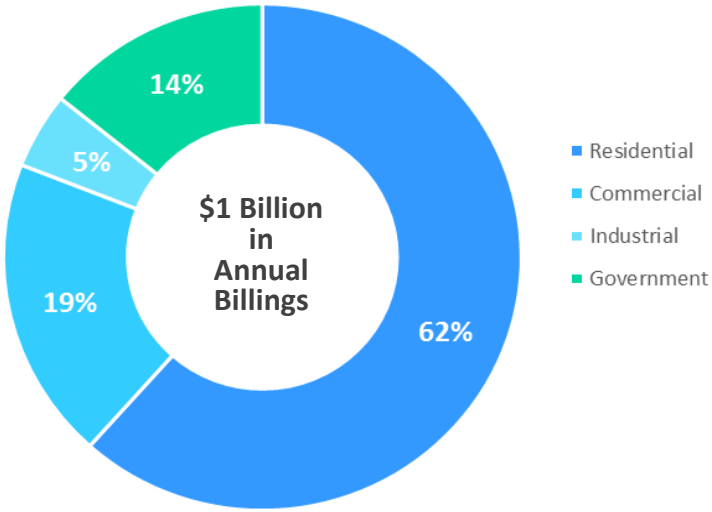
Baseline Projections - Revenues

Revenue and Customer
Base FY 2017

FY2017 Customers Breakdown



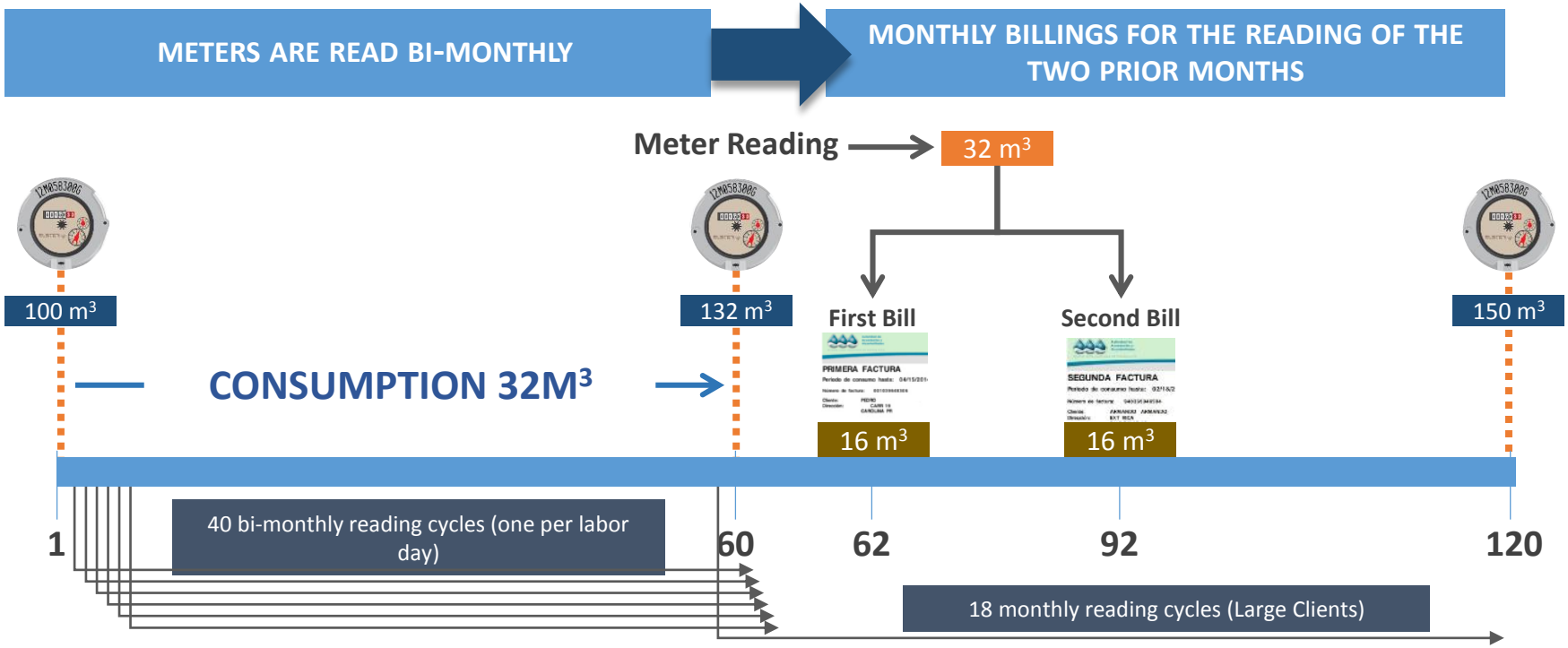
FY2017 Revenue Breakdown



After the Hurricanes, revenue projections have been materially affected, not only for FY2018, but there is also a significant reduction in subsequent years as a result of the expected decline in population and also, to a lesser extent, by the contraction of the economy and its impact on the collections rate, among other things.

Billing Process

- PRASA reads most of its meters on a bi-monthly basis, except for certain clients that are read on a monthly basis (defined mostly as large clients, including customers with meters with a diameter of 1 ½" or more, condominiums and others).
- As PRASA bills on a monthly basis, for clients with bi-monthly readings, the consumption read is divided into two bills, the first issued two days after the reading day, and the second one ("second bill") is issued 30 days after the first bill, as presented in the following chart:



General Assumptions

- Revenues for the months of July 2017 through March 2018 reflect actual collections
- Projected revenues were estimated applying the following factors to the pre-hurricane billings level:

1. **Delayed billing** process and projected impact on extended collections period (on January 17, 2018 PRASA completed its first full billing cycle after the Hurricanes – See prior page)
2. **Projected consumption reduction** as a result of: (a) remaining clients without service and (b) expected decrease in population and changes in GNP indicators considering the new macroeconomic indicators provided by AAFAF
3. Expected **deficient service credit**
4. Expected increase in **claims** due to:
   a) Higher percentage of estimated water consumption (as a result of lack of access to meters or damaged meters)
   b) Application of deficient service credit, as may be isolated clients who may experience service deficiencies for a longer period than the ones in their service area for specific interruption in certain areas

1 Delayed Billings

Pre-Maria Readings:

- On November 2017, PRASA issued the Second Bills outstanding from meter readings reflecting water consumption from mid-August to mid-September which were due to be issued between mid-September and mid-October
- **Payment term** was extended from 21 to **30 days** for these bills


SEGUNDA FACTURA

Período de consumo hasta: 08/26/2017
NÚMERO DE FACTURA: 0010059107306
CLIENTE: CLIENTE PARTE 8
DIRECCIÓN: DIRECCION CLIENTE PARTE 8

El cargo corriente de esta mes refleja la segunda mitad del consumo en metros cúbicos, segun lo indicamos en la factura anterior. En la factura anterior se le facturó la primera mitad del cargo. El Total a Pagar de esta factura incluye la otra mitad, y además puede incluir ajustes, cualquier balance vencido y otras transacciones financieras del período.

Contador	Fecha/Lect. Anterior	Fecha/Lect. Actual	Consumo	Consumo Facturado
05111856	06/25/2017 1872	08/26/2017 1901	29 M3 L	14.5 M3

NUMERO DE CUENTA: 0002190234 7 0
FECHA DE FACTURA: 11/16/2017
FECHA DE VENCIMIENTO: 12/16/2017

UN METRO CÚBICO EQUIVALE A 264.11458 GALONES / SU CONSUMO EN GALONES ES 3,829.66

RESUMEN DE CARGOS CORRIENTES

CARGOS POR AGUA: $16.23
CARGOS POR ALCANTARILLADO: $13.70

CONSUMO PRE–MARÍA

NOTA: EL PERÍODO DE CONSUMO DE ESTA FACTURA ES ANTERIOR AL EVENTO DEL HURACÁN MARÍA. HEMOS AMPLIADO LA FECHA DE VENCIMIENTO A 30 DÍAS.

Post-Maria Readings:

- PRASA restarted its meter reading two months after the last bill cycle issued before the emergency
- After meter readings restarted, the bi-monthly clients bills covered a 120-day consumption period.
- As usual, the billing was divided into two bills, for example:
  - Clients with meters last read on July 20, 2017 were not read on September 20, 2017 and were read again on November 20, 2017, covering a period from July 21 to November 20 (120 days)
- The full reading cycle has been completed on January 17, 2018, as it takes PRASA 60 days to read all its meters
- Payment term was extended from 21 to 45 days temporarily (only for bills issued up to January 2018)

BASE BILLING TREND ADJUSTMENT

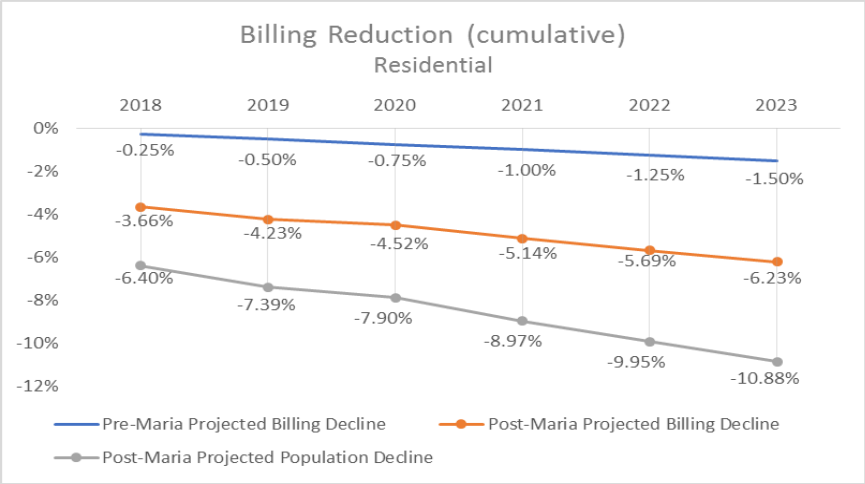
- Based on economic indicators provided by the Central Government economists, the billing trend was adjusted as follows:

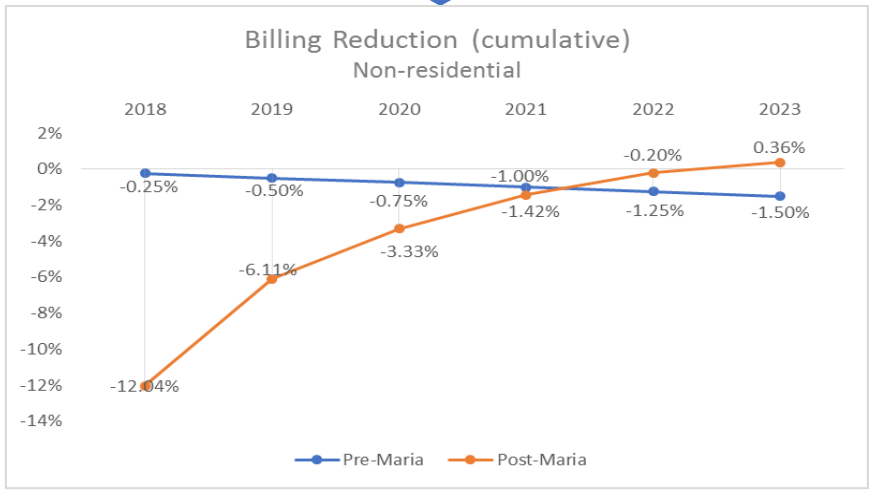
Residential Accounts

The annual billing reduction was modified from 0.25% reduction per year to the numbers included below reaching around **6%** reduction by FY2023 based on the expected population trend and its impact on projected billings

Non Residential* Accounts:

The annual reduction was modified from 0.25% reduction per year to the projected GNP which is expected to decrease by around **12%** on FY2018 and gradually recover thereafter



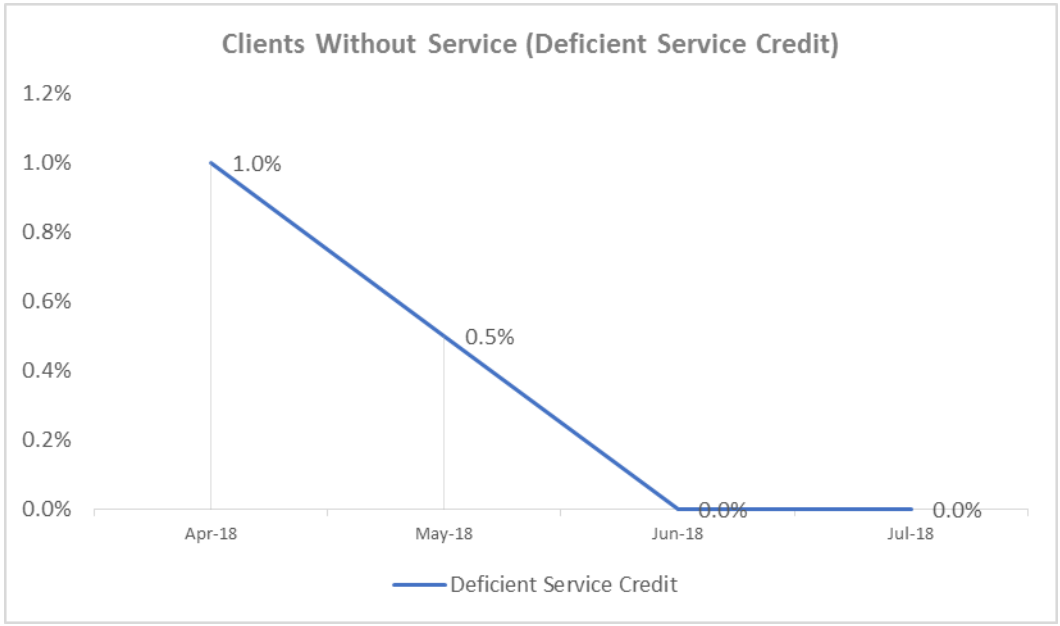


This information is subject to revision based on updates to macroeconomic projections

* Commercial, Government and Industrial Accounts

3 Deficient Service Credit

- As required by PRASA's regulations, a deficient service credit is applied to clients without service
- The credit is projected based on the number of days without water service
- PRASA assumed the following billing reductions based on the projected credit to be applied to customers.
  - The gradual reduction reflects PRASA's expectancy of level of service recovery
  - The credit was estimated at 3% and a gradual reduction thereafter



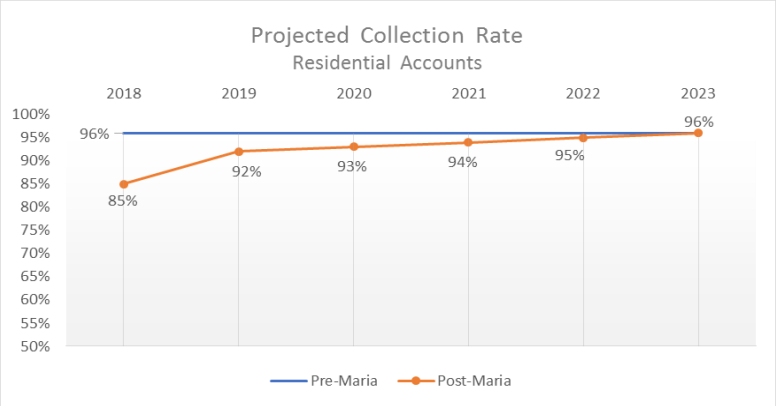
4 Expected Claims

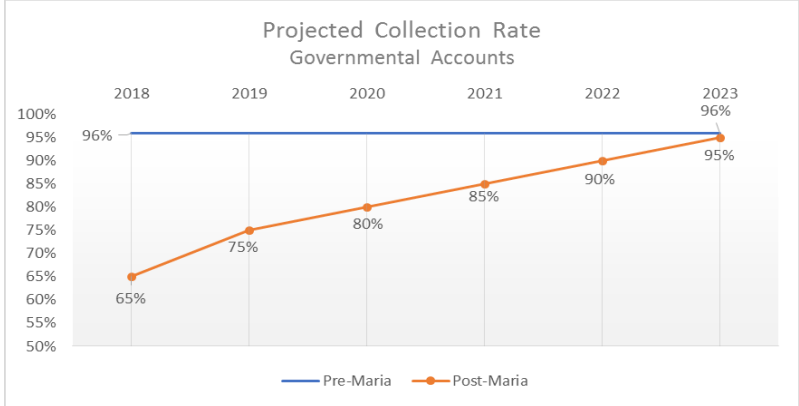
- A higher amount of claims is projected during FY2018 as a result of **potential**:
  a) Higher percentage of estimated water consumption (due to lack of access to meters or damaged meters)
     - PRASA conducted an assessment of a sample size of customer meters in the Metro Region to determine the conditions of these assets post-Hurricanes
     - Results of this sample show that approximately 1.5% of its meters may not be functional
  b) The deficient service credit was calculated based on water service reestablishment date to the different service areas. As some isolated clients may experience service deficiencies for a longer period than the ones in their service area, an adjustment to the deficient service credit may be applicable

- The level of claims expected to be resolved in favor of PRASA's clients is estimated at 2% for April billings and to gradually reduce thereafter during FY2018 to 1%

Projected Collections

- For the certified Fiscal Plan and as recommended by the Oversight Board consultants, the collection rate applied for all customers was 96%
- For the Revised Fiscal Plan the collections rates were adjusted to reflect current economic situation and the liquidity crisis for most of the Government accounts, as follows:

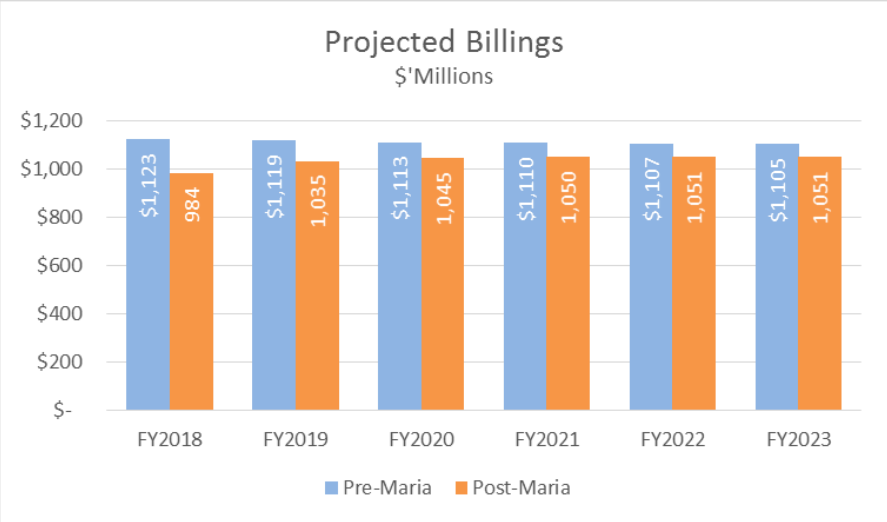




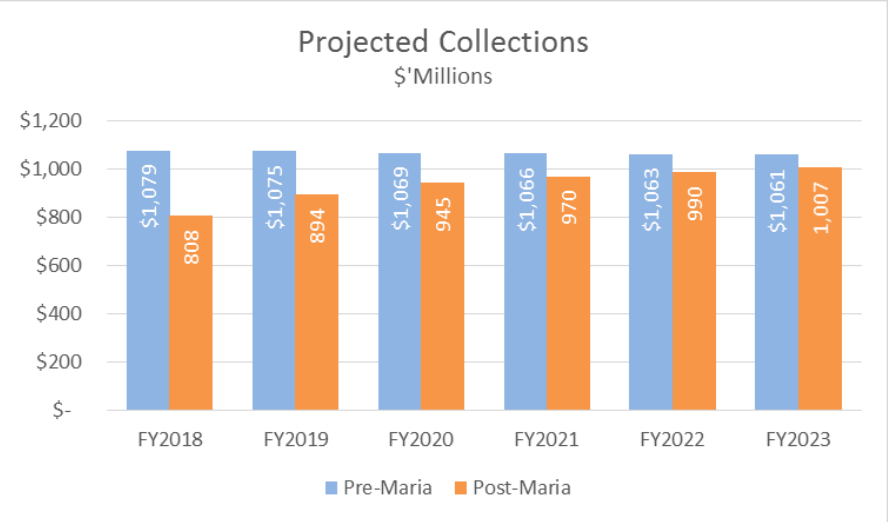
- The collection rate was applied based on a collection curve considering the extension of the payment terms mentioned previously
  - PRASA anticipates full recovery of the projected collections rate in a 3-month period for the remaining of FY 2018 and 2-months thereafter
- Under the **P3 initiative** for customer services activities a further improvement in the collections rate by 2% is expected for non-government accounts and also a **government collections improvement program** is included under the New Initiatives Section

Service Revenues

Net Billings



Collections



Reduction in Billings for the 6-year period

$462M	7%

Reduction in Collections for the 6-year period

$799M	12%

Insurance Proceeds

- PRASA's insurance policy provides a $150 million initial limit of liability, subject to a $25 million deductible for windstorm and flood damage for both, property and business interruption combined
- After the initial $125 million is used up, an additional cover of $150 million for both, property and business interruption losses is applied but only in respect to flood damages
- There may be other sources of funds, including federal programs to cover the Business Interruption losses
- At this moment PRASA is projecting **$50M** proceeds to cover revenue reduction as well as incremental expenses related to the Hurricanes
- The amount will be adjusted once more certainty is obtained on the final impact and causes of the business interruption losses

Total Operating Revenues

in $'Millions	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	6-year total
Pre-Maria	**$ 1,079**	**$ 1,075**	**$ 1,069**	**$ 1,066**	**$ 1,063**	**$ 1,061**	**$ 6,413**
Post-Maria	808	894	945	970	990	1,007	5,614
Insurance Proceeds	25	25	-	-	-	-	50
Post-Maria Op. Revenues	$ 833	$ 919	$ 945	$ 970	$ 990	$ 1,007	$ 5,664
Change $	$ (246)	$ (156)	$ (123)	$ (96)	$ (74)	$ (54)	$ (749)
Change %	-23%	-14%	-12%	-9%	-7%	-5%	-12%

After applying the assumptions explained throughout this Sub-Section, revenues are projected to be **$749M less** than expected for the 6-year period under the previously Certified Fiscal Plan, even after netting the insurance proceeds

Major drivers for revenue reduction:

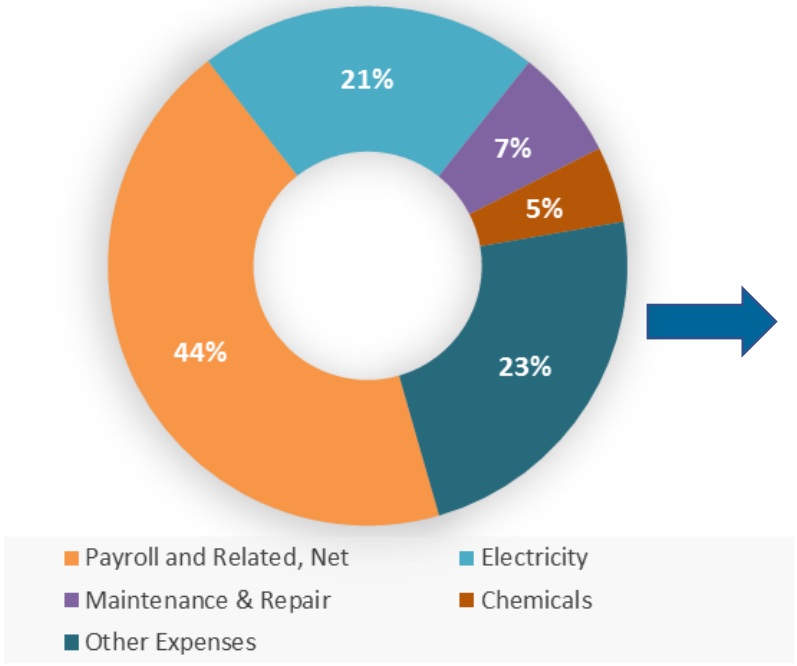
1) Population and consumption projected decline
2) Adjustment for deficient service
3) Increase in uncollectible accounts

Baseline Projections - Expenses

PRASA Expenses Composition

Expenses Distribution

Based on FY2019 Projections

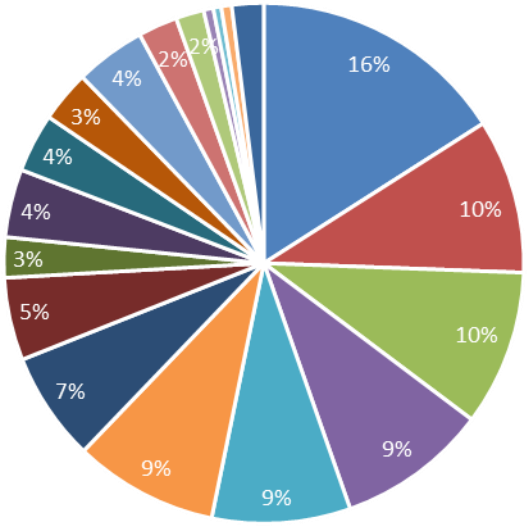


2/3 of the budget is for Payroll and Electricity Costs

When adding Maintenance and Chemicals, the four categories represent 77% of the total budget

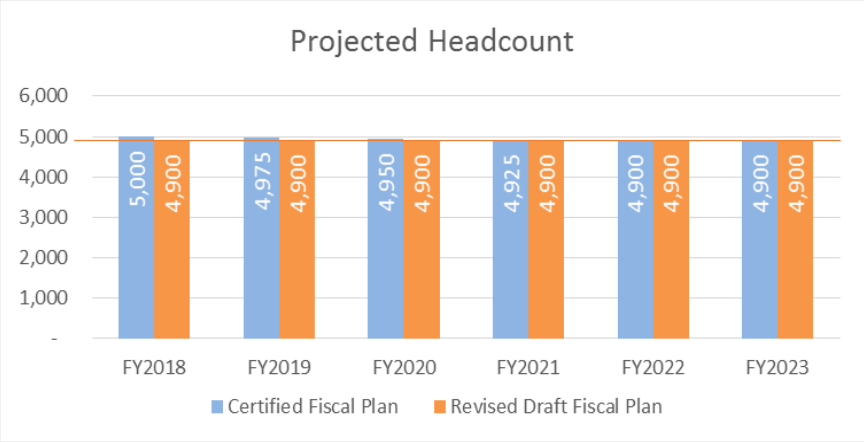
- Professional Services
- Materials & Supplies
- Insurance
- Billings & Collections
- IT Services / Licenses
- Technical Assistance
- Water Purchase
- Security
- Asphalt materials and services*
- Fuels and Oils
- Rentals
- Waste Treatment & Disposal
- Third Party Vendors
- Superaqueduct Operation
- Telephone and Network
- Minor purchases
- Water Transport
- Office Supplies
- Other Expenses

Other Expenses Breakdown



Expenses Assumptions
Payroll

Headcount

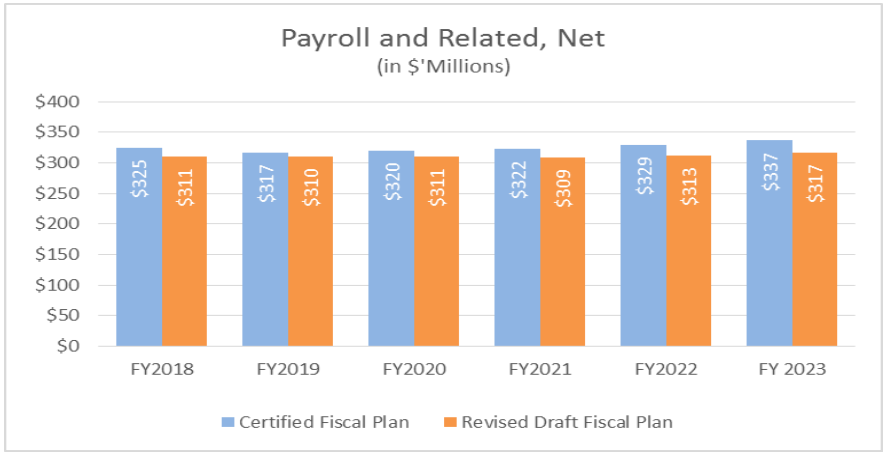


Projected number of employees was reduced to **4,900** by the end of FY2018 for the revised Fiscal Plan based on current headcount levels and positions to be covered to address PRASA initiatives as well to guarantee a quality and reliable service

Payroll Cost

$79M[1] in savings during the 6-year projected period mainly as a result of the pension cost Pay-Go revision based on updated information

Increase in Overtime as a consequence of the Hurricanes impact is presented under a separate line (Hurricanes Impact on OPEX)



[1] Presented net of expense capitalization

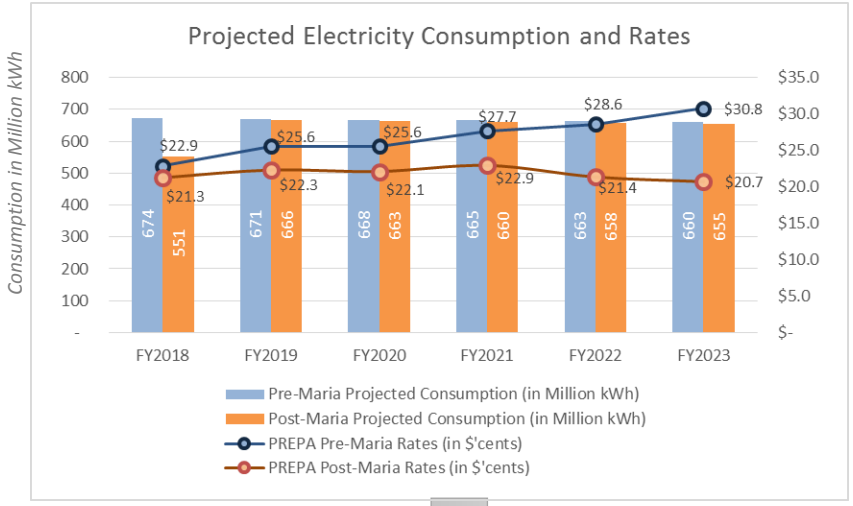
Expenses Assumptions
Payroll

Compensation and Benefits

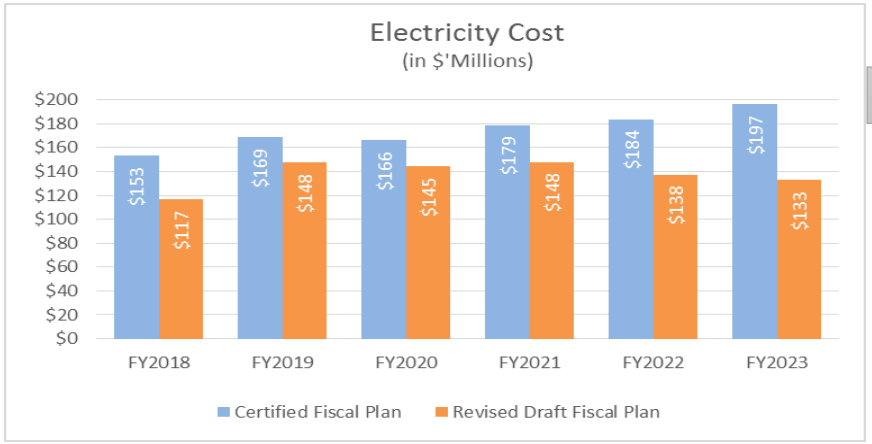
- Implementation of Act 26-2017, including the following change in benefits:
  - Starting in FY 2018:
    - Elimination of all bonuses, except for the Christmas Bonus, reduced to $600 for all employees
    - Maximum overtime factor of 1.5 times
    - Accrual of 15 days of vacation per year
    - Accrual of 18 days of sick leave per year, eliminating the payment of accumulated sick leave under any circumstance
  - Starting in FY 2019:
    - Reduction of the employer contribution for the health medical plan to $125 per employee per month, except for employees (or employee's dependents) under a preexistent illness classified as catastrophic, chronic or terminal, for whom the employer contribution will remain unaltered during the time of their employment.
- "Pay Go" for pension costs starting in FY2018, eliminating any contribution to the ERS
- Presented net of capitalized expenses at a 3.7% rate

Expenses Assumptions
Electricity

Assumptions



Projected Total Cost



Key Assumptions:

- ✓ **PREPA Projected Rate:** Based on PREPA's projections of the blend of rates applicable to PRASA starting from FY2019 to FY2023 (FY2018 rate was estimated at the average of FY2017 and FY2019 rates)
- ✓ **Consumption:** Adjusted to reflect the reduction in (i) electricity usage in FY2018 as a result of electric service interruption and (ii) internal energy savings initiatives resulting in an estimated total consumption reduction of 0.5% per year
- ✓ Energy from **PPA** is projected to increase to 38M kWh by FY2023

$220M or **21%** in savings for the 6-year period as a result of:

1) Reduction in consumption for FY2018 as a result of the service interruption after the Hurricanes
2) Change in PREPA projected rates

PRASA's electricity cost is highly sensitive to PREPA rates
$0.01 variation in PREPA rate = approximately $7M per year impact on PRASA's expenses

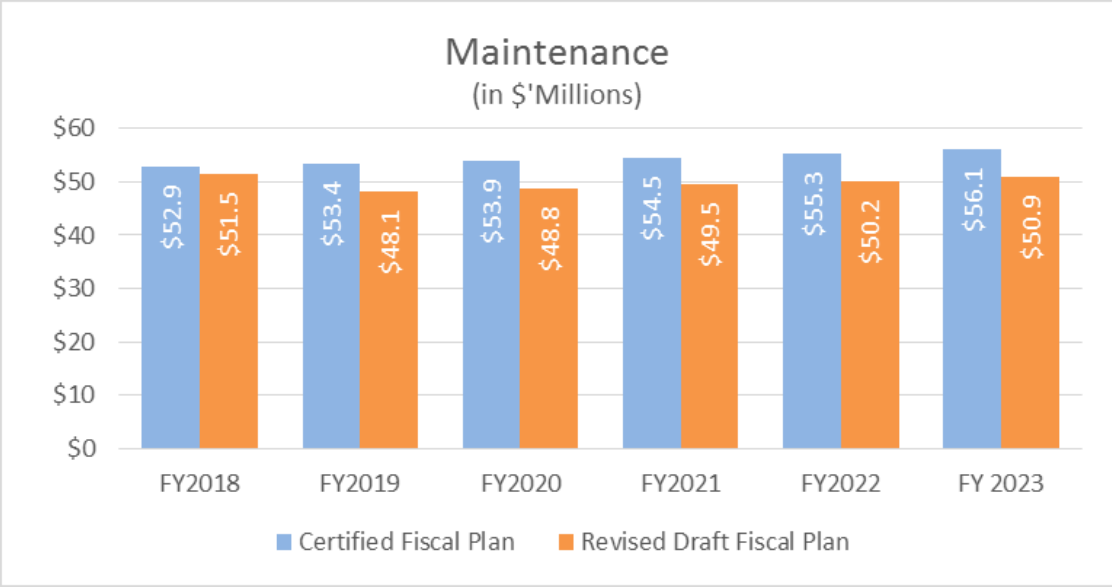
Expenses Assumptions
Maintenance

Key Assumptions:

- ✓ For FY2018 the maintenance cost was reduced based on the assumption that a portion of the maintenance works will be performed as part of the emergency work
- ✓ Future reduction in this category reflecting the improvements to the System after the increased capital requirements resulting from Hurricane damages

$27M or 8% in savings for the 6-year period as a result of:

1) Performance of emergency repair and maintenance under the Hurricanes Impact line
2) Increase in CIP requirements to restore the System which is expected to reduce the maintenance costs



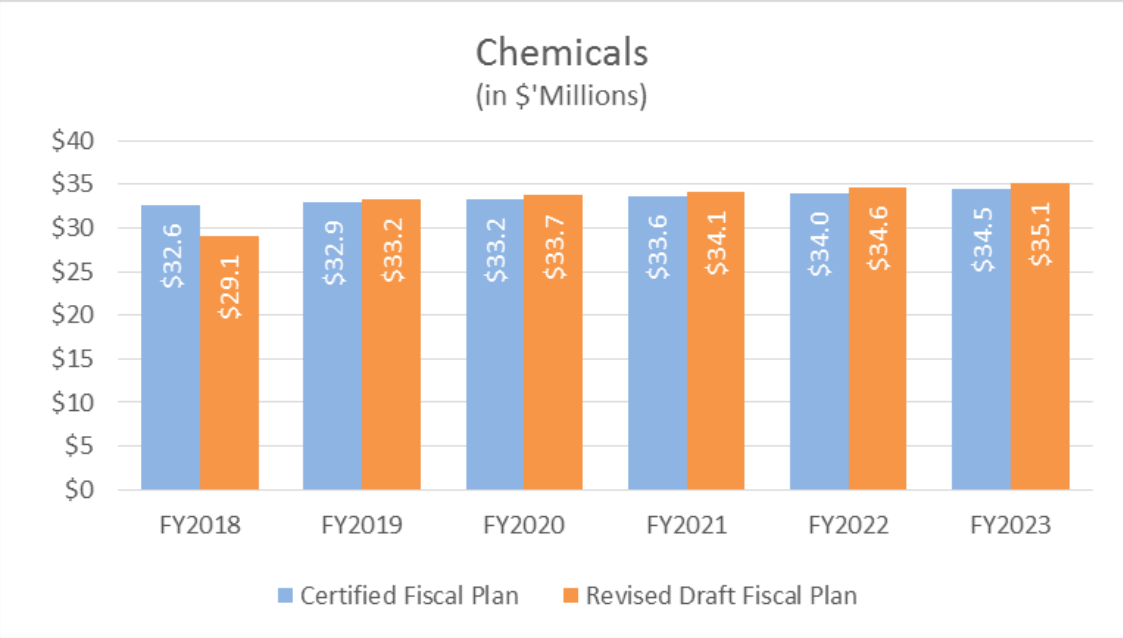
Increase in maintenance cost as a result of the Hurricanes impact is presented under a separate line (Hurricanes Impact on OPEX)

Expenses Assumptions
Chemicals

Key Assumptions:

✓ For FY2018 the chemicals cost reflect a net reduction based on lower volume of water treatment, despite the incremental chemicals costs resulting from the Hurricanes impacts, which are presented on a separate line

$4M decrease or 11% in FY2018 as a result of the projected reduction in production netted by increases in costs due to inflation thereafter



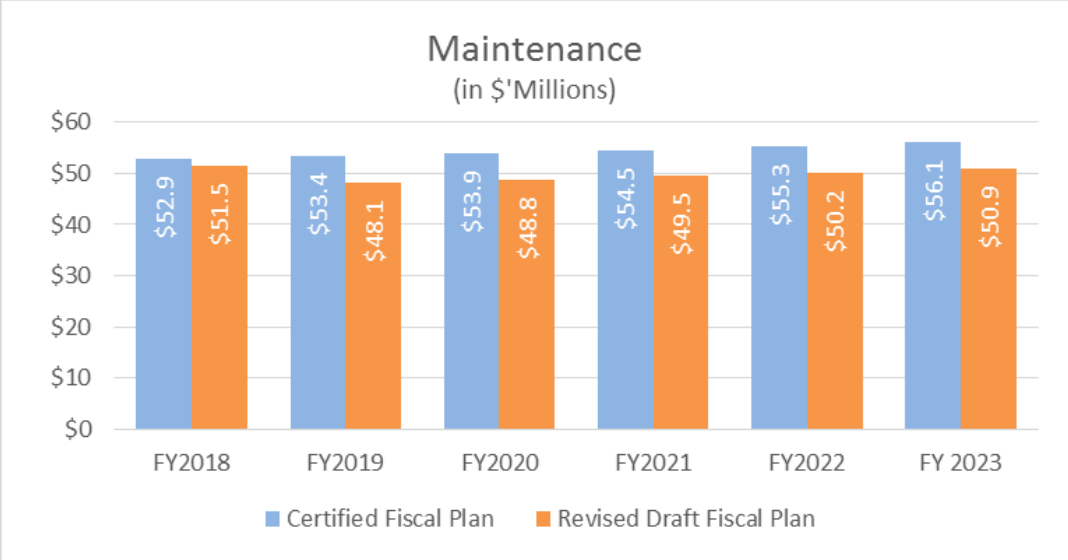
Increase in chemicals cost as a result of the Hurricanes impact is presented under a separate line (Hurricanes Impact on OPEX)

Expenses Assumptions
Other Expenses

- Other expenses were revised, adjusting FY2018 based on year-to-date results under the current situation and then adjusting FY2019 assuming return to normal level of operations and requirements

Reduction of **$96M** or **9%** during the 6-year period as a result of:

1) Reduction by $36 million in FY2018 as a result of the Hurricanes impact (services delayed or refocused to the emergency and included in the Hurricanes Impact on OPEX line)
2) Reduction in FY2019/23 by an average of $12M per year



Increase in Other Expenses as a consequence of the Hurricanes impact is presented under a separate line (Hurricanes Impact on OPEX)

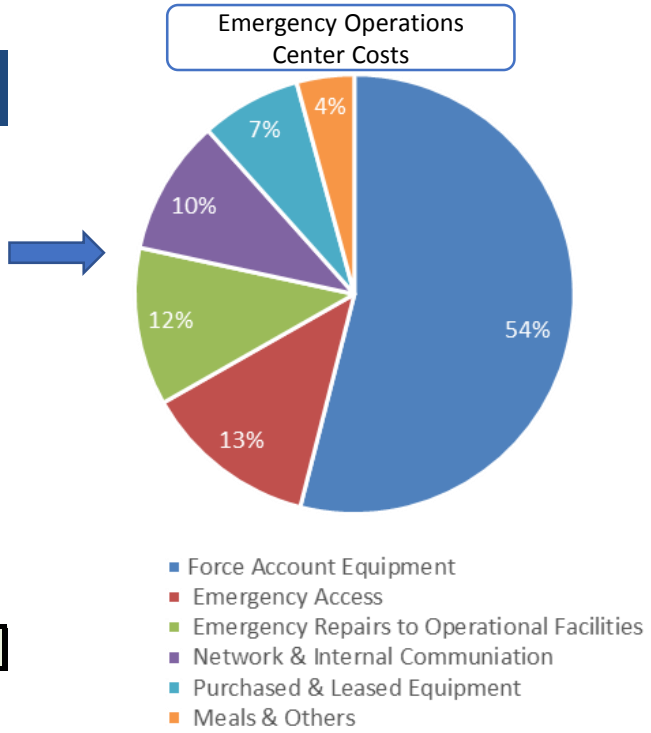
Hurricanes Impact on Expenses

- Operating expenses were materially impacted by the hurricane, as explained previously, some expense categories have been reduced while others increased significantly
- For the financial projections a **90% recovery rate** of incremental expenses from insurance proceeds or by FEMA funding was considered
- The projection of the total incremental expenses reflect the best estimate as of January 31, 2018 based on information submitted or to be submitted to FEMA
  - Many uncertainties and unknown information may materially change the estimation presented herein
- As presented in the Hurricanes Impact section, the major components of the incremental expenses are:
  - Electric generators costs, including maintenance, diesel logistic and supply for facilities
  - Overtime for employees working on tasks related to the emergency
  - Costs of the Emergency Operations Centers, including equipment costs (fleet and others)
  - Insurance deductible
  - Security services at facilities
  - Water distribution services, including oasis

Hurricanes Impact on Expenses

- A summary of the projected incremental emergency (categories A&B) expenses is included below:

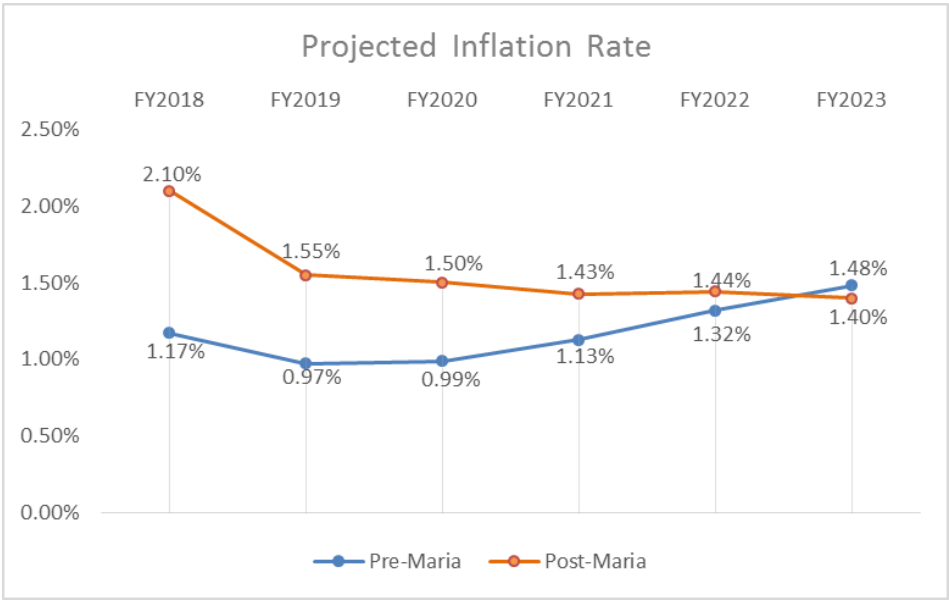
Expense Group	FY2018 (in $'000)
Generators (Maintenance, Diesel, Logistics, etc)	$ 203,246
Auxiliary backup generators (not included in CIP)	38,009
Payroll and Benefits (Overtime)	33,258
Emergency Operations Center	26,266
Insurance Deductible	25,000
Security Measures	18,701
Water Transport - Oasis	17,489
Supplies and Commodities	8,119
Emergency Repairs	8,035
Environmental Preservation and Public Safety	5,174
Vacuum Trucks	5,000
Temporary Facilities & Communications	5,178
Debris Removal	2,075
	$ 395,550



- The total amount is included on FY2018 under the line **Hurricanes Impact on OPEX**, which is then netted by the expected level of reimbursement from FEMA/Insurance proceeds, projected at **90%**
- Therefore the net impact was modeled at around $40 million

Inflation Rate

- Except for Payroll and Electricity cost, all other expenses for FY2019 thru FY2023 were projected applying the inflation rate, as provided by the Government
- Some specific categories were then further adjusted based on their specific particularities, for example:
  - Insurance premiums which are expected to materially increase after the Hurricanes
  - Maintenance and repairs, as the cost may increase as a consequence of the hurricanes impact on on underground pipelines for which a higher amount of breakages is expected
  - Professional, technical, IT and consulting services required to comply with the increased information, reporting and environmental requirements



Baseline Expenses Projections

- The baseline expenses are projected as follows:

in $'Millions	Projected FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	Revised 6-year Total	Certif FP 6-year Total	6-year Change	%
Payroll and Related, Net	$ 311.0	$ 310.4	$ 311.0	$ 309.2	$ 312.6	$ 316.6	$ 1,870.8	$ 1,949.4	$ (78.6)	-4%
Electricity	116.6	147.7	144.6	147.9	137.5	133.0	827.3	$ 1,047.3	$ (220.0)	-21%
Maintenance & Repair	51.5	48.1	48.8	49.5	50.2	50.9	299.0	$ 326.1	$ (27.1)	-8%
Chemicals	29.1	33.2	33.7	34.1	34.6	35.1	199.8	$ 200.8	$ (1.0)	0%
Other Expenses	138.1	163.1	165.6	167.9	170.3	172.7	977.7	$ 1,074.0	$ (96.3)	-9%
Hurricane Impact on OPEX	395.6	-	-	-	-		395.6	$ -	$ 395.6	N/A
FEMA/Insurance Reimbursement	(356.0)	-	-	-	-		(356.0)	$ -	$ (356.0)	N/A
Operating Expenses	**$ 685.9**	**$ 702.5**	**$ 703.7**	**$ 708.6**	**$ 705.2**	**$ 708.3**	**$ 4,214.2**	**$ 4,597.6**	**$ (383.4)**	**-8%**

Total Operating Expenses projections reflect a reduction of **$383M** or **8%**, mainly as a result of:

1) Lower level of headcount and revised Pensions Pay-Go cost
2) Reduction in electricity consumption and cost
3) Reduction in Other Expenses, including maintenance, professional services and third party service costs, mostly in FY2018
4) Net increase of expenses related to the Hurricanes impact

Level of Expenses

- PRASA has already implemented several initiatives to reduce its operating costs
- This Revised Fiscal Plan show **additional reductions by $383M or 8%** when compared to the Certified Fiscal Plan
- Favorable comparison with industry benchmarks, shows PRASA is performing in the Top or Median of the industry relating to the O&M expense level
- The headcount level has been consistently reduced and PRASA has reached the median related to accounts per employee, which will be further improved after the implementation of the initiatives proposed in New Initiatives Section
- PRASA incorporated in this Revised Fiscal Plan most of the initiatives as proposed by recognized firms specialized in the water industry as well financial consultant, as presented under the New Initiatives Section
  - PRASA even went further by incorporating the externalization of the Service Customer area which was evaluated as the less efficient activity at PRASA
  - These additional initiatives are expected to generate incremental cost saving

Baseline Projections:
Capital Improvement Program

Capital Improvement Program

"Beginning shortly after the turn of the century and extending to 2040, the water utility sector will see a rapid increase in capital needs due to replacement of aging infrastructure, regulatory requirements and growth needs."
Improving Water Utility Capital Efficiency, Water Research Foundation & EPA (2009)

SUSTAINABILITY

- QUALITY OF SERVICE
- RELIABILITY
- RESILIENCY

MANDATORY ENVIRONMENTAL REGULATIONS

- ENVIRONMENTAL COMPLIANCE
  - 2015 EPA CONSENT DECREE (CLEAN WATER ACT)
  - 2006 DRINKING WATER AGREEMENT, UNDER RENEGOTIATION (SAFE DRINKING WATER ACT)

AGING INFRASTRUCTURE

- RENEWAL & REPLACEMENT

PRASA CIP is focused on achieving a more **resilient water and wastewater system and improved water quality**

CIP Projections
Assumptions

Revenues | **Expenses**
Capital Improvement | Financing and Debt Service

- For simplified presentation purposes, the CIP included in the Baseline Projections already incorporates:
  - Raftelis Financial Consultants recommendation regarding increase in the Renewal and Replacement Program
  - Elimination of the small meters replacement (as it will be financed by the Customer Service P3 Project as proposed in the following section)
- The total CIP presented in the baseline projections:
  - Reflect the Hurricanes impact by $769M for the projected period. These projects are expected to be concluded by FY2021
  - Includes the payment of $60M owed to contractors during FY2018
  - Assume projects will start in FY2019, except for the ones already being executed and the actual emergency being covered under the Renewal & Replacement category

Baseline Projections

CIP Revisions
FY 2018 thru FY 2023

Revenues	**Expenses**
Capital Improvement	Financing and Debt Service

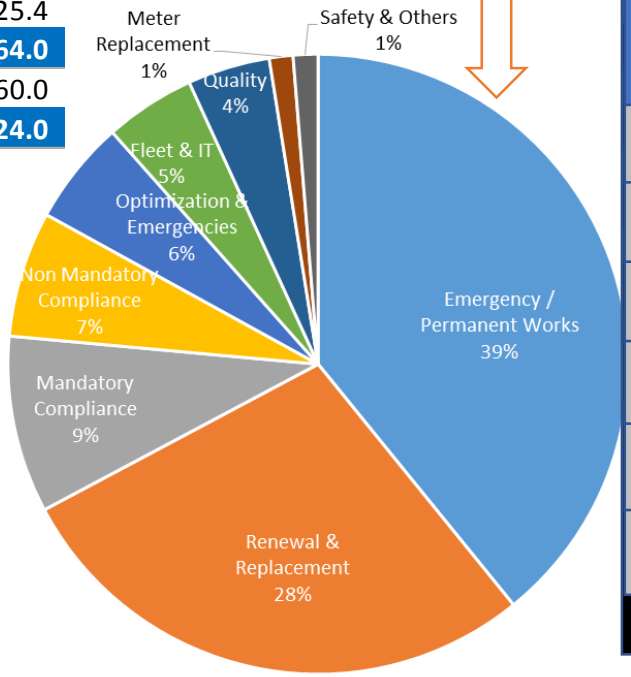
- PRASA's CIP was revised to incorporate the impact of the Hurricanes, assuming assets will be restored to the prior-Hurricanes condition, increasing the required investment by **$769M**
- The revised CIP, excluding the projects related to the Hurricanes mentioned above, reflects a **21% reduction** (**$340 million**) in investment when compared to the same period included in the Certified Fiscal Plan
- The **damages created by Hurricanes do not have a direct effect on reducing the CIP originally projected**, as it did not include most of the new projects to replace pipelines that were washed away by rising flood levels that toppled bridges, electrical damages caused by flood or rain in a facility where compliance improvements were required and repairs to facilities not previously needed. By comparing the scope of the projects included in the CIP with the preliminary estimation of damages performed by Arcadis, the new projects do not substitute the prior programmed CIP
  - Certain facilities with programmed **and** hurricane damage repairs investments requirements, both may be performed concurrently, but this will materially advance the cash flow requirements during the next 3 years.
  - Assuming some of the equipment included in the **Renewal & Replacement** lines may be replaced as a result from the Hurricanes, this category was **reduced by over $80 million or 15%**

Revised CIP

In $'Millions	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	6-year Total
Emergency / Permanent Works	$ 29.0	$ 421.4	$ 308.5	$ 10.0	$ -	$ -	$ 768.9
Renewal & Replacement	29.6	78.4	84.8	83.9	131.1	143.4	551.3
Mandatory Compliance	15.5	6.1	43.5	61.1	38.5	16.6	181.3
Non Mandatory Compliance	2.8	2.7	5.0	21.0	49.4	48.0	128.8
Optimization & Emergencies	3.9	22.5	20.8	18.7	20.3	20.7	106.9
Fleet & IT	6.1	17.9	19.1	17.4	16.2	16.0	92.7
Quality	0.5	3.6	8.3	17.2	29.4	25.4	84.4
Meter Replacement	1.8	4.5	4.5	4.5	4.5	4.5	24.3
Safety & Others	0.8	3.6	1.2	3.1	5.5	11.3	25.4
Subtotal	**$ 90.0**	**$ 560.7**	**$ 495.7**	**$ 236.9**	**$ 294.8**	**$ 285.9**	**$ 1,964.0**
Outstanding Debt Payment	60.0	-	-	-	-	-	60.0
Total	**$ 150.0**	**$ 560.7**	**$ 495.7**	**$ 236.9**	**$ 294.8**	**$ 285.9**	**$ 2,024.0**

Direct impact of the Hurricanes

In addition to the Quality projects, most of the Environmental Compliance related projects are intended to improve water quality, as well as almost 90% of the Emergency/Permanent Work, which are related to WTP or WWTP rehabilitation



Major CIP Changes

- The CIP presented herein, as adjusted, incorporates the following changes when compared to the CIP included in the certified Fiscal Plan (for the 6- year period):

In $'Millions	# Projects with Cash Flow	FY2018 thru 2023
CIP - Certified Fiscal Plan (8/25)	312	$ 1,529.9
Additions to restore the system	179 [1]	743.9 [2]
Other additions	10	10.5
Eliminated Projects	-5	(7.8)
Postponed/ Delayed Projects	-59	(107.9)
Change in Estimates		(39.7)
Reduction due to project delay		(164.3)
Revised Fiscal Plan	**432**	**$ 1,964.6**

Includes categories C thru D for FEMA Public Assistance Program. This estimate does not account for hidden damages to PRASA's assets, nor does it account for mitigation elements that may be added to each facility to increase protection/resiliency.

Reduction of $309M or 20% (54 projects less)

[1] 178 projects identified and one project for the estimation of damages at facilities not inspected yet, until more information becomes available

[2] Excluding $25M of Emergency/Permanent works already in the CIP but classified as Renewal and Replacement or Emergencies & Contingencies works

PRASA's CIP has been re-evaluated to maximize use of FEMA funding and to ensure consistency with PRASA's long-term goals.

CIP Funding

- For the baseline projections the CIP is assumed to be fully funded by PRASA Operating Revenues except for:
  - FEMA/Insurance Proceeds for projects to restore the system, estimated at 90% of the projected capital costs included in the Emergency/Permanent works line
  - This assumptions will be updated once more information is available to segregate emergency works from permanent works
- A summary of the projected required sources for the CIP by year is included below:

In $'Millions

Sources of Funds	AF2018	AF2019	AF2020	AF2021	AF2022	AF2023	6-year Total	%
FEMA/Insurance	26.1	379.3	277.6	9.0	-	-	692.0	34%
SRF	-	-	-	-	-	-	-	0%
RD	-	-	-	-	-	-	-	0%
Operating Revenues	123.9	181.4	218.1	227.9	294.8	285.9	1,332.0	66%
Total	**$150.0**	**$560.7**	**$495.7**	**$236.9**	**$294.8**	**$285.9**	**$ 2,024.0**	**100%**

Additional federal funds for the CIP are included under the New Initiatives Section

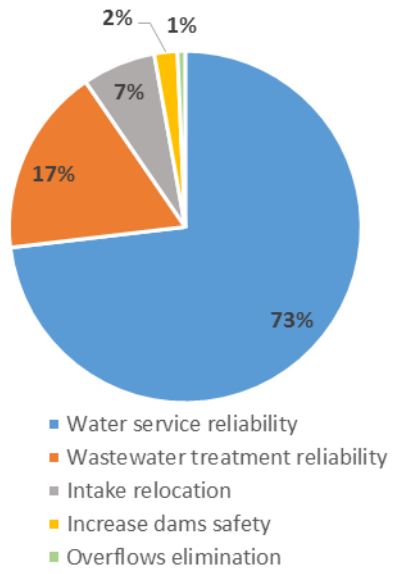
Improving Resiliency

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- Climate related disasters directly impact PRASA's capabilities to provide continued reliable service
- PRASA has developed a list of projects that would increase water and wastewater infrastructure resiliency to address concerns resulting from Hurricane Maria, also including projects resulting from the 2015-2016 drought
- PRASA has estimated that it would take at least **$3.4 billion** to reduce climate related risks and vulnerability
  - This amount does not include projects to address Combined Sewer Overflows (CSO), in addition to the Puerto Nuevo System budgeted at $100M
- Most of the projects addressing resiliency are focused to increase the water and wastewater service reliability
- At the end, all investment in CIP will result in a more robust and resilient infrastructure, which is evidenced by PRASA's faster recovery after the hurricane when compared to other utilities, including private utilities, as a result of increased investments in infrastructure since FY2005
- Refer to the Long Term Plan Section for more detail on PRASA's plan to improve resiliency

PRASA's historic investment of $3.7B on the CIP during the last 10-years resulted in a more resilient infrastructure as proved by the prompt recovery of the system

Resiliency Projects by Objective



Baseline Projections

Example of Resiliency Project
Reducing Dependency on PREPA

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- Vieques and Culebra WWTP are powered with solar energy and the excess is net metered into PREPAs grid; however, the Hurricane impacted PRASA's capability to generate, store and use solar power
- As a prompt response to the after Hurricanes situation, PRASA recently entered into an agreement with Solar City Corporation (Tesla Energy), to provide the solar power storage needed to operate these facilities
- All installations were provided with enough Tesla Powerpack units and the associated inverters to meet the power storage needs of the facilities allowing the solar system to become fully operational without the need for the PREPA grid
- In the case of Vieques facilities, which generate less energy that the energy consumed, additional temporary and ground mounted photovoltaic panels were installed by Tesla

Vieques WWTP

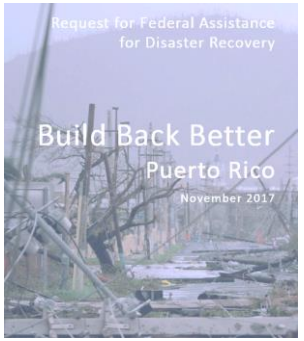
Culebra WWTP

Fully independent from PREPA grid

Facility	Gallons per Day (GPD) Production	Photovoltaic Panels Production (kWh/Month)	Facility Consumption (kWh per Month)	% of consumption covered by Solar Energy
Vieques WWTP	500,000	27,409	59,667	46%
Culebra WWTP	200,000	44,731	31,491	142%
Arcadia (Vieques) WPS		18,117	63,346	29%

Build Back Better Projects

Project Type *In $' Millions*	Water & Water Control	Wastewater	Projected Cost
Water service reliability	$ 1,608.8	$ -	$ 1,608.8
Wastewater treatment reliability	-	380.6	380.6
Intake relocation	148.3	-	148.3
Increase dams safety	46.8	-	46.8
Overflows elimination	-	15.5	15.5
Total BBB Plan Projects	**$ 1,803.9**	**$ 396.2**	**$ 2,200.0**
Provide and install power generators			50.0
Rehabilitation of Bayamon transmission lines			42.6
Reservoirs dredging			960.0
Remote operational capabilities			150.0
Total Resiliency Projects			**$ 3,402.6**



Other projects pursued by PRASA not included in the BBB Plan

From the total, **$93M are included in the 6-year CIP**, mainly for:

- Valenciano WTP: $20M
- Enrique Ortega WTP Improvement: $19M
- Dorado Sewer Trunk: $18M
- Improvements to Añasco Intake and degritter: $9M

Resiliency Projects will be executed only if federal funding is available for 100% of the amount

If PRASA should contribute a 10% state match, the financial need would increase by $340M (not included in the financial projections included herein)

Capital Improvement Program
Water Quality Projects

- PRASA has to comply at all times with the EPA, Department of Health (DOH) and Environmental Quality Board's rules and regulations, whose primary purpose is to pursue water quality in order to safeguard public health and the environment.
- Around 50% or $1 billion of PRASA's CIP investment is focused on compliance with water quality through:

Potable Water

- Filtration plants, transmission and distribution pipelines improvements to keep up with strict standards established in the National Primary Drinking Water Regulations, including limits for microorganisms, disinfectants, disinfection by-products, inorganic chemicals, organic chemicals and radionuclides
- Improvement of treatment processes in filtration plants to better manage high turbidity events as well as reduce total organic carbon prior to chlorination to prevent disinfection by-products and assure elimination or deactivation of Cryptosporidium and Giardia, among other water quality concerns.

Wastewater Treatment

- Wastewater treatment plants improvements to keep up with the effluent limits established in each plant's National Pollutant Discharge Elimination System permits (parameters vary from one facility to the next based on the type of receiving water body, which can be the ocean or a small creek in the mountains).
- Sanitary trunk sewers and collection systems improvements to prevent sewage overflows.

Water Quality Projects Focus

Revenues	**Expenses**
Capital Improvement	Financing and Debt Service

- To address the water quality concerns expressed by the Oversight Board, some of the CIP's project categories have been identified as initiatives that purse continued water quality to PRASA's clients in both the water and the wastewater treatment areas, as follows:
  - **Mandatory Compliance:** these projects are included in the CIP because there is an existing or upcoming regulation, normally tied to the Clean Water Act, for which PRASA has to improve its infrastructure in order to meet the regulatory requirements. This category has been identified as having a direct link to water quality and projects in this category are identified as such.
  - **Non Mandatory Compliance:** these projects are included in the CIP because there is potential for systems to be in risk of not complying with existing regulations and improvements to the infrastructure are required to maintain compliance and therefore protect water quality. This category has been identified as having a direct link to water quality and projects in this category are identified as such.
  - **Quality:** these projects pursue continued water quality and service. This category has been identified as partially having a direct link to water quality and projects in this category which pursue water quality are identified as such.
  - **Renewal and Replacement**: these projects consider renewal of infrastructure and replacement of equipment that need to be immediately performed without going though the typical project development and execution. This category has been identified as partially having a direct link to water quality and projects in this category which pursue water quality are identified as such.
  - These projects should result in an **improvement of the compliance KPIs** presented in the Long Term Plan Section

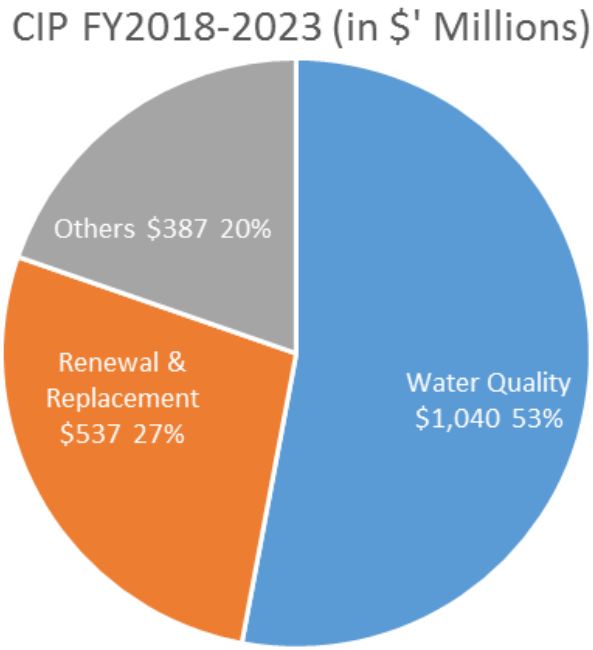
Capital Improvement Program
Focus on Water Quality

Revenues	**Expenses**
Capital Improvement	Financing and Debt Service

- The renewal and replacement category also addresses the need to provide continued service for unforeseen infrastructure repairs, as well as water quality and non-mandatory compliance issues that may arise and that need to be immediately addressed to ensure safeguarding health and the environment.
  - This renewal and replacement category also allows PRASA to conduct short term solutions to meet regulatory concerns which need major capital investment and execution time for its long term solution

- On the operations side, PRASA's laboratories ensure water quality by performing over 200,000 tests annually and are recognized as one of the best laboratories in Puerto Rico by the private industry
  - PRASA laboratory is the only one certified in Puerto Rico and the Caribbean region to perform Cryptosporidium analysis

$1 billion in CIP addressing water quality and service reliability



Baseline Projections

Capital Improvement Program
Examples of Projects Pursuing Water Quality

Revenues	**Expenses**
Capital Improvement	Financing and Debt Service

- Compliance Improvements to the Ponce Nueva Water Filter Plant (4-58-6069)
  - To guarantee compliance with the Long Term 2 Enhanced Surface Water Treatment Rule and other compliance issues required by the DOH's Amended Transaction Agreement by: improving mechanical components such as pumps, blowers, flash mixers and valves; changing the pre-chlorination and coagulant injection points; upgrading flocculation and clarification processes; replacing filter media and retrofitting the filter underdrain; and installation of a UV reactor.

Total investment $11M

- Compliance Improvements to the Dorado Wastewater Treatment Plant (2-26-5006)
  - To guarantee compliance with the NPDES permit by: rehabilitate a 0.8 MGD module; repair the anaerobic tank and install instrumentation equipment; increase sludge holding capacity; new sludge conveyor for transfer of sludge between the belt filter press and the waste bins; new crane to service the UV units; improvements to an existing aerobic sludge tank.
  - Final goal: Treatment capacity improvement, increased sludge holding and treatment capacity and improve flow control and process operation by installing new mechanical and instrumentation equipment.

Total investment $6M

Baseline Projections

CIP Execution Capabilities

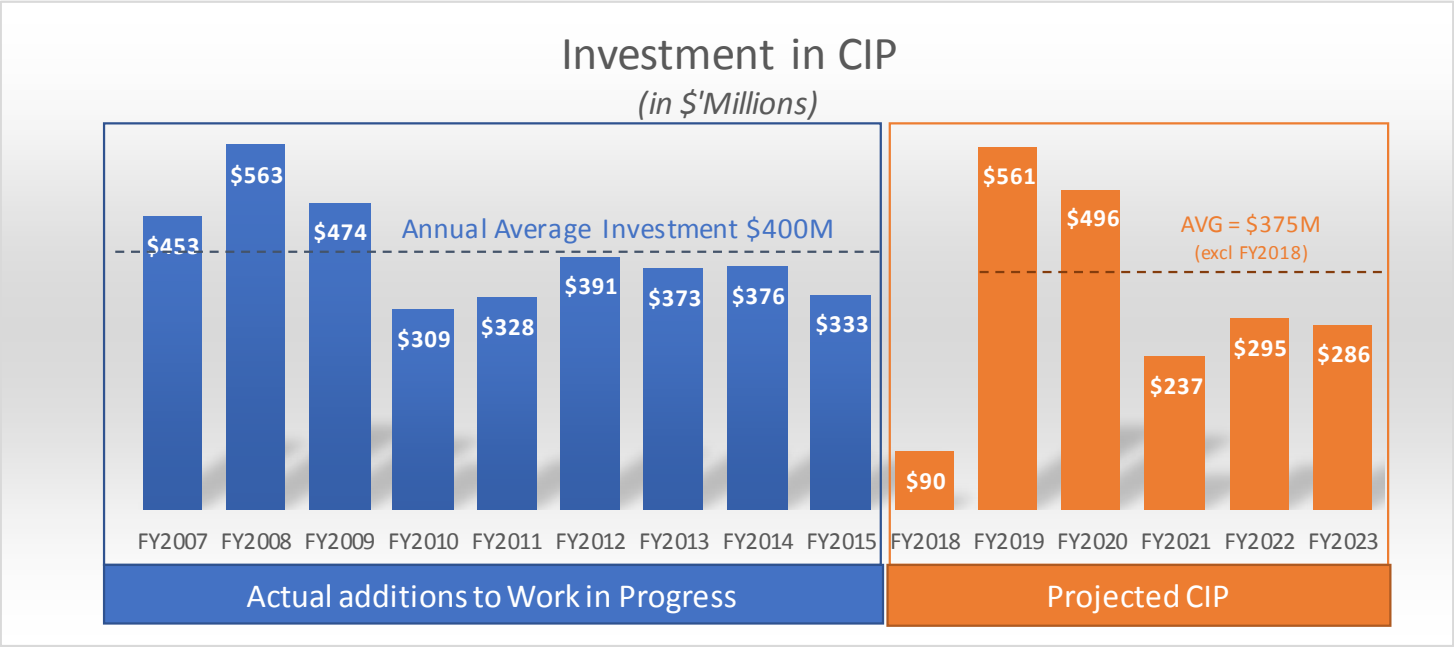
Revenues	**Expenses**
Capital Improvement	Financing and Debt Service

HISTORIC INVESTMENT

- In the past, PRASA successfully executed CIP projects with total annual investments of up to **$563M in FY 2008 and $474M in FY2009**
- From FY2007 thru FY2015 PRASA issued **517 bids**, reaching 126 bids in FY2013 resulting in eventual construction contracts

PROJECTED INVESTMENT

- Current CIP higher projections are **$561 million for FY2019 and $496 million for FY2020**, similar to the level of CIP executed on FY2008 and 2009
- The projected average investment is below the historic average

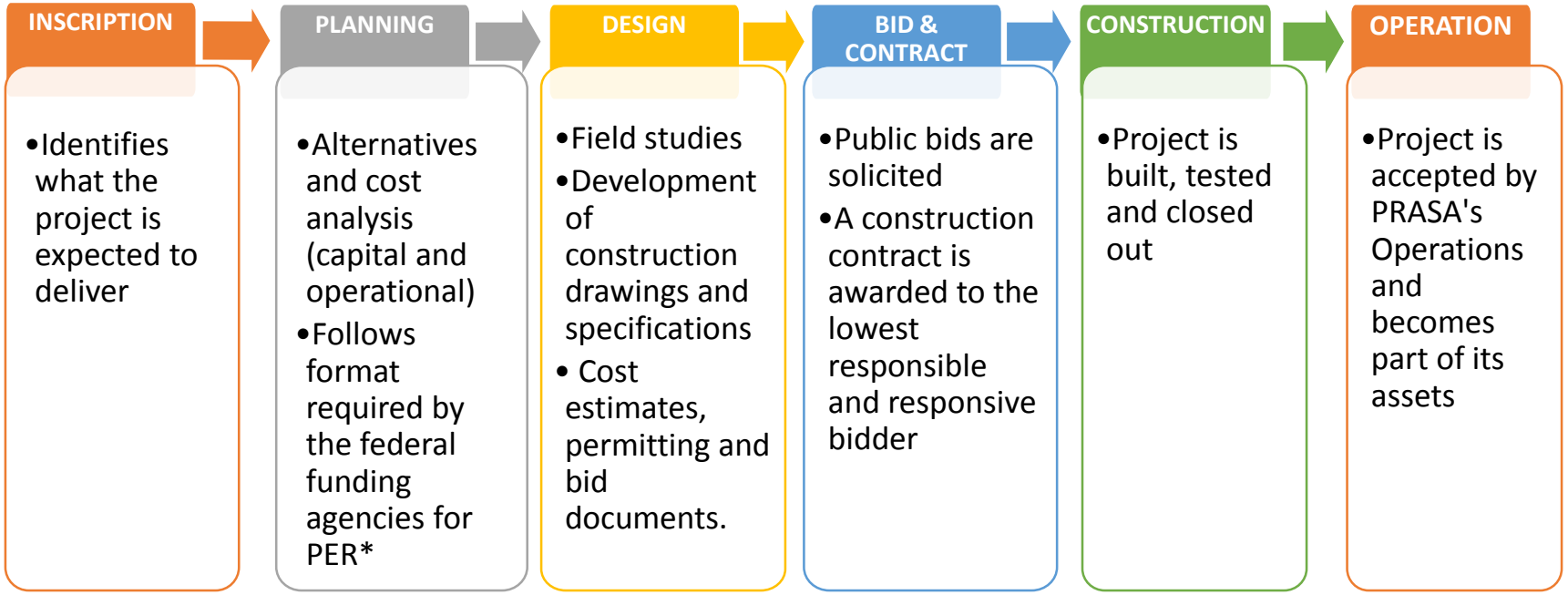


Note: Investment for FY 2016 ($152M) and FY2017 ($47M subject to audit) is not presented on the chart as they are not representative as a result of the lack of market access and the unsustainable minimum level of CIP executed

CIP Phases

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- CIP construction projects have the following typical phases:



- The four **most critical and high level milestones** are: Start of Design; Start of Bidding; Start of Construction and Start of Operation.
- **Metrics** established at these milestones can be used for **high level** tracking of the CIP.

*PER: Preliminary Engineers Reports

CIP Implementation Plan
Contractors Availability

Revenues	**Expenses**
Capital Improvement	Financing and Debt Service

- The CIP projected cost include the following support services:
  - Planning documents (engineering reports, facilities plan, etc.)
  - Studies (survey, geotechnical, archeological, environmental, etc.)
  - Engineering design and design management
  - Construction management and inspection
  - Services during construction

In FY2008, PRASA has demonstrated it is capable of executing a CIP level over $500M, and has retained the internal expertise and institutional knowledge to repeat this level of spending

- The work needed to complete projects from their planning phase all the way to close out will require both internal and external personnel resources as done in the past
- PRASA contracted internationally-recognized engineering firms (for example, Black & Veatch, CH Caribe, CDM Smith and CSA) to provide assistance to CIP project managers since FY2007 to allow for the efficient management of funds received after the bond issuances on 2008 and 2012.
  - PRASA is pursuing similar engineering contracts to execute the projected CIP

CIP Implementation Plan

Contractors and Materials Availability

Revenues	**Expenses**
Capital Improvement	Financing and Debt Service

- Engineering firms dedicated to the water and wastewater industry in Puerto Rico are specialized firms that typically have PRASA as their main and sometimes only client
  - Potential use of external firms for highly specialized projects is always an alternative, however local firms generally have the know how and the experience to successfully support PRASA in its CIP implementation.
- At the contractors requests, PRASA meets periodically with these firms to keep them informed on the CIP restart
  - Local construction contractors and the industry has shown interest in PRASA's CIP as it has been a cornerstone of the local construction industry for the past 10-13 years.
- Regarding materials and supplies availability PRASA does not foresee any issue and the construction time estimation includes the expected time to receive the required materials

Even with the higher demand for contractors and materials throughout the island after the Hurricanes, PRASA expects to be able to have sufficient resources available to execute its CIP with the support of mainland engineer firms.

CIP Implementation Plan
Milestones

Revenues	**Expenses**
Capital Improvement	Financing and Debt Service

Milestones prior to CIP Execution

- Fiscal Plan Approval
- Complete Damage Inventory
- Debt Renegotiation
- Obtain Financing, Federal Funds and Insurance Proceeds
- Consent Decree Renegotiation

Define CIP Project Management Strategy and Resources

Execution Milestones

Establish metrics per CIP project → CIP Tracking Tool Review → **CIP Execution** → CIP Control and Monitoring

Baseline Projections

CIP Tracking Tool

Revenues	Expenses
Capital Improvement	Financing and Debt Service

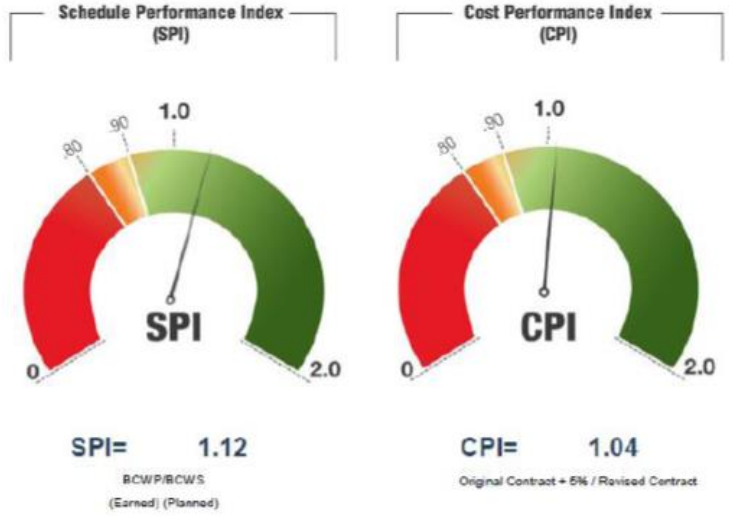
- For a detailed tracking of the CIP, PRASA has historically used a Track Tool to:
  - Perform project time management.
  - Develop a detailed project baseline and track the actual progress on a monthly basis.
  - Keep track of project on target and off target.
  - Identify gap root causes for delays.
  - Applicable to all phases of projects in the CIP.

CIP Totals ==========>	48		48			Jul-14		Aug-14		Sep-14	
Project Description	Phase	% Comp	Phase	% Comp		Phase	% Comp	Phase	% Comp	Phase	% Comp
Transmission System Guaynabo - Caguas	BID	15%	CON	0%	Baseline	BID	35%	BID	50%	BID	65%
					RevBaseline	BID	15%	BID	15%	BID	15%
					Actual	BID	15%	BID	15%	BID	15%
Carraizo Hydroelectric Project Redevelopment	BID	0%	CON	0%	Baseline	BID	0%	BID	15%	BID	35%
					RevBaseline	BID	0%	BID	15%	BID	35%
					Actual	BID	0%	BID	15%	BID	15%

PRASA will review and update its current tracking tool to ensure compliance with the expected execution schedules

Key Performance Indicators

- Typically the construction phase is the one with the most potential for deviations in cost and time. To maintain control of these, PRASA keeps track of two KPIs:
  - The **Cost Performance Index** (CPI) measures the cost efficiency of resources. A project's CPI of 1.0 means that the project is on budget. Above 1.0 means it is proceeding better than planned and below 1.0 means is not proceeding as well as planned.
  - The **Schedule Performance Index** (SPI) measures the relationship between the executed work versus the planned work. A project's SPI should theoretically be 1.0, however PRASA's project typically range between 0.9 and 1.0.
- The established **metrics** allow for high level planning of the CIP, while the **Track Tool**, **CPI**, and **SPI** allow for detailed tracking of CIP compliance with what was planned versus what is being executed.



Risks and Opportunities

Revenues	Expenses
Capital Improvement	Financing and Debt Service

Risks

- **The occurrence of force majeure situations and/or major emergencies that will require capital expenditures not contemplated in the CIP, which become more evident after Hurricanes Irma & Maria**
- CIP has been on hold for almost three years with minimum renewal and replacement. If the situation continues for a prolonged period of time, higher investments than the ones projected may be required
- If the projected sources of funds are not obtained, the execution of the proposed CIP will need to be revised and time extensions will need to be requested for mandatory projects, and delays in hurricane damage repairs will likely happen
- Investment of meter replacement assumes the execution of the Customer Service P3 which will include small meter replacement
- Higher project costs due to the history of late payment from PRASA to its contractors and suppliers as well as the higher demand of construction services after the Hurricanes

Opportunities

- Further renegotiation of existing regulatory requirements may allow for additional investments in other category projects (i.e., increasing renewal and replacement rate).
- Maximization of federal funding

PRASA has already renegotiated consent decree requirements with the EPA and is in negotiation with PR Department of Health regarding the Transactional Agreement.

Additionally, PRASA has implemented a CIP prioritization process to objectively rank projects.

After the Hurricanes, changes to specific requirements of the environmental agreements will be needed

Capital Improvement Sizing

PRASA's CIP vs Other US Utilities' CIP

Utility	Program Period	Investment (B)	Projects	Service Population (M)
PRASA	5 years (FY2018-FY2022)	$1.7*	394	3.4
Miami Dade	10 years (FY2015-2021)	$13.5	876	2.3
DC Water	10 years (FY2017-FY2026)	$3.75	N/A	0.67

* Including $769M related to recovery projects after Hurricanes Irma and Maria from FY2018 to FY2021

Since FY2016 only the minimum of projects were executed (mainly renewal and replacement). If the situation continues for a prolonged period of time, higher investments than the ones projected may be required.

PRASA's CIP is considerably below the level of investment projected by other water utilities in the US, even so when PRASA has one of the bigger and most complex systems in the US

PRASA serves almost 50% more population than Miami-Dade and its projected investment is 4 times PRASA's projected CIP needs, even considering the recovery projects, demonstrating the CIP cannot be further decreased

CIP Further Reduction
Potential Risks

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- Delaying CIP investment can result in degrading water service, increasing water service disruptions, and increasing expenditures for emergency repairs
- Deferred maintenance resulting from over reduction of O&M budgets and deferred renewal and replacement lead to:
  - System integrity issues that could lead to water quality problems and catastrophic failures of infrastructure
  - Higher CIP costs in the future requiring excessive financing needs and rate increases
  - Unbalanced CIP planning (valleys and peaks)

Considering its financial situation, PRASA has already reduced the R&R projects included in the CIP, but strongly considers that reducing the CIP further will not be positive for the system

	Raftelis Financial Consultants, Inc[1]	PRASA's Fiscal Plan CIP
Level of Annual R&R	$125M-$300M	$30M-$143M

[1] *PRASA contracted Raftelis Financial Consultants in 2016 to perform a Professional Opinion Evaluation on PRASA's management, operations, capital and financing.*

Deferred Maintenance & CIP

Lessons from the Past and Current Focus

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- PRASA's low CIP investments prior to 2008 led to various negative impacts, such as:
  - WTPs and WWTPs compliance violations
  - Criminal charges and fines due to the violations
  - Sewer bans for new connections to WWTP
  - The requirement of entering into a Consent Decree with Regulatory Agencies
  - Over 50,000 clients with deficient service

Over the past 10 years, PRASA has significantly improved the condition of its assets and compliance with Regulatory Agencies, overcoming this situation

- PRASA's current focus is to **comply with all environmental regulations** protecting the health of PRASA's clients and the environment of Puerto Rico:

Area of Regulation	Agencies[1]	Law/Act
Wastewater Treatment Plants	EPA / EQB	Clean Water Act
Drinking Water Sludge Discharge Permits	EPA / EQB	Clean Water Act
Air Emissions	EPA / EQB	Clean Air Act
Chlorine, Bioterrorism	EPA / DOJ / Homeland Security	Patriot Act
Potable Water Production	PR DOH	Safe Drinking Water Act
Plant Safety	PROSHA	–

[1] EPA (Environmental Protection Agency), EQB (Environmental Quality Board), DOJ (Department of Justice), PR DOH (Puerto Rico Department of Health), PROSHA (Puerto Rico Occupational Safety and Health Agency)

Baseline Projections: Financing and Debt Service

Financing

- Since PRASA has not been able to access capital markets to obtain financing for its CIP due to both internal and external factors, no additional financing for the CIP (including federal funds) are projected to determine the Initial Financial Need or Baseline Financial Projections, except for FEMA and insurance proceeds projected to pay for:
  - 90% of incremental operating expenses due to the Hurricanes Impact
  - 90% of emergency and permanent works included in the CIP (until FEMA approves the classification of each project)
- The CIP maximizes the use of federal funds through the expected Federal Emergency Management Agency assistance for disaster related projects. Also EPA's State Revolving Funds program were considered when applicable (which are included under the initiatives section).
  - It is important to note that federal funding programs require some costs to be covered by the recipient and that programs' funds availability is based on a percentage formula that generally allocates funds that are lower than PRASA's needs
- As previously discussed, in the past, the Authority use to receive around $60 million in federal funds per year, on average, to fund its CIP from USEPA State Revolving Fund (SRF) and from USDA Rural Development Programs
- Currently, the availability of such funds is frozen, as PRASA's debt with both programs is subject to Forbearance Agreements

FEMA/Insurance Funding

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- Since Hurricane Maria hit, PRASA has been in continued conversations with FEMA to:
  - Report damages and request funds for Category A (Debris) and Category B (Emergency Works)
  - Complete damage inventory for PRASA assets
  - Assure funding for Permanent Works through Section 428
  - Request supplemental funds for resiliency projects
- Also PRASA will keep looking for other potential federal assistance

The maximization of FEMA and Insurance proceeds, as well as obtaining other federal assistance is one of the current PRASA's management main focus, to allow for the prompt and efficient recovery of the system

Debt Service

- The Baseline Financial Projections assume the full payment of all the current debt outstanding, except for the GDB Term Loan:

Lien Level	Debt	Balance as of June 30, 2017	%	FY 2017 Debt Service	%
Senior and Sr Sub	2008 Revenue Bonds - Series A	$ 1,276.3	26.7%	$ 89.2	0%
	2008 Revenue Bonds - Series B	22.4	0.5%	1.4	0%
	2012 Revenue Bonds - Series A	1,768.4	37.1%	91.8	28%
	2012 Revenue Bonds - Series B	230.5	4.8%	48.4	15%
	Popular Auto Loan	1.6	0.0%	1.4	0%
		3,299.3	**69.9%**	**232.2**	72%
Commonwealth Guaranteed Indebtedness	Rural Development Bonds [1]	392.6	8.2%	25.3	8%
	State Revolving Fund [2]	581.3	12.2%	37.9	12%
	2008 Ref Bonds - Series A&B	284.8	6.0%	17.2	5%
		1,258.7	**26.7%**	**80.4**	25%
CSO	Superaqueduct Debt [3]	**162.7**	**3.4%**	**9.0**	3%
	Total prior PFC & GDB	**4,720.7**	**100%**	**$ 321.6**	**100%**
Debt not covered by MAT	GDB Term Loan [4]	65.5			
	PFC Debt [5]	248.5			
	Total Debt	**$ 5,034.8**			

[1] Debt held by US Department of Agriculture

[2] Debt held by the Environmental Protection Agency

[3] PRASA agreed to pay this debt, issued by Public Finance Corporation (PFC) if sufficient funds were available. However, this is not a general obligation of the Authority and is otherwise payable from appropriations received from the Government

[4] GDB term loan is subordinated to all other PRASA's debt and therefore no payment was considered for the Baseline Projections. At the same time, PRASA has $14.3M deposited at GDB, mainly restricted funds, which are also not considered to be available under the Fiscal Plan

[5] Debt issued by PFC not paid by the Authority and is serviced directly by PFC. PRASA accounts its portion for accounting purposes only, but has no responsibility for its payment

Baseline Projections Summary
Pre-Initiatives Financial Projections

Financial Projections

The initial Financial Need for the projected period, including all PRASA outstanding obligations, amounts to over **$1.97 billion**, an increase of **$78M** or **4%** when compared with the prior Fiscal Plan

in $'Millions	FY2018	FY2019	FY2020	FY2021	FY2022	FY 2023	Revised FP (4/5/18)	Certified FP (8/25/17)	6-year Change	% Var
Operating Revenues	833.0	919.2	945.3	970.3	989.7	1,006.6	5,664.1	6,412.8	(748.7)	-12%
Senior and Senior Sub Debt [1]	(232.2)	(230.8)	(230.8)	(230.8)	(230.8)	(230.8)	(1,386.1)	(1,386.1)	-	0%
Total Net Operating Expenses	(685.9)	(702.5)	(703.7)	(708.8)	(705.3)	(708.4)	(4,214.6)	(4,597.7)	383.1	-8%
Operating Reserve Fund [2]	(33.7)	(36.8)	(35.4)	(36.5)	0.9	(0.8)	(142.2)	(167.2)	25.0	-15%
Capital Improvement Fund [3]	(123.9)	(181.4)	(218.1)	(227.9)	(294.8)	(285.9)	(1,332.0)	(1,594.9)	262.9	-16%
Commonwealth Payment Fund [1]	(89.4)	(90.7)	(89.6)	(97.0)	(97.1)	(97.0)	(560.8)	(560.8)	-	0%
Initial Financial Need	**(332.1)**	**(323.0)**	**(332.2)**	**(330.6)**	**(337.4)**	**(316.3)**	**(1,971.6)**	**(1,893.8)**	**(77.8)**	**4%**

NOTES:

[1] Debt service for debt currently outstanding, assuming full payment of all obligations

[2] Operating Reserve Fund as requirement by the Master Agreement of Trust of 3 months of Operating Expenses, assumed to be funded at 1/5 or 20% each year (starting on FY2017)

[3] Capital Improvement Fund reflect the requirements for the CIP after deducting the portion of the system restoration expected to be funded by FEMA funds, assumed at 90%.

Contents

New Initiatives

- To define and incorporate the New Initiatives into its Fiscal Plan, PRASA evaluated and considered the following:
  - Recommendations received from specialized independent firms which evaluated PRASA's operations and performance to identify areas of opportunities (refer to the following page)
  - Recommendations received by the Oversight Board
  - Projected impact on the financial projections
  - Improvements in efficiency
  - Execution viability
  - Rates affordability
  - Initiative capital needs and potential for private funding
  - Customer satisfaction increase

- After the analysis of the variables presented above, PRASA decided to pursue 12 initiatives which are addressed throughout this Section.

Third Parties Opinion

Several experienced international consulting firms have consistently agreed on the reasonability and adequacy of PRASA's proposed initiatives and also evaluated PRASA's execution as positive; but concur in that **higher capital investments and rate increases shall be projected**

ARCADIS Design & Consultancy for natural and built assets

- PRASA's Consulting Engineer since FY2008 (as required by the MAT) and have assisted PRASA in other programs and projects including the CIP
- In general terms, FY2015 CER concluded that, although most facilities were classified as adequate or good condition, when compared to the prior year's results, there was a noticeable **increase in facilities classified as poor condition**
- Although PRASA's efforts to reduce **NRW** demonstrates a positive trend since 2012, significant capital investments and R&R are required

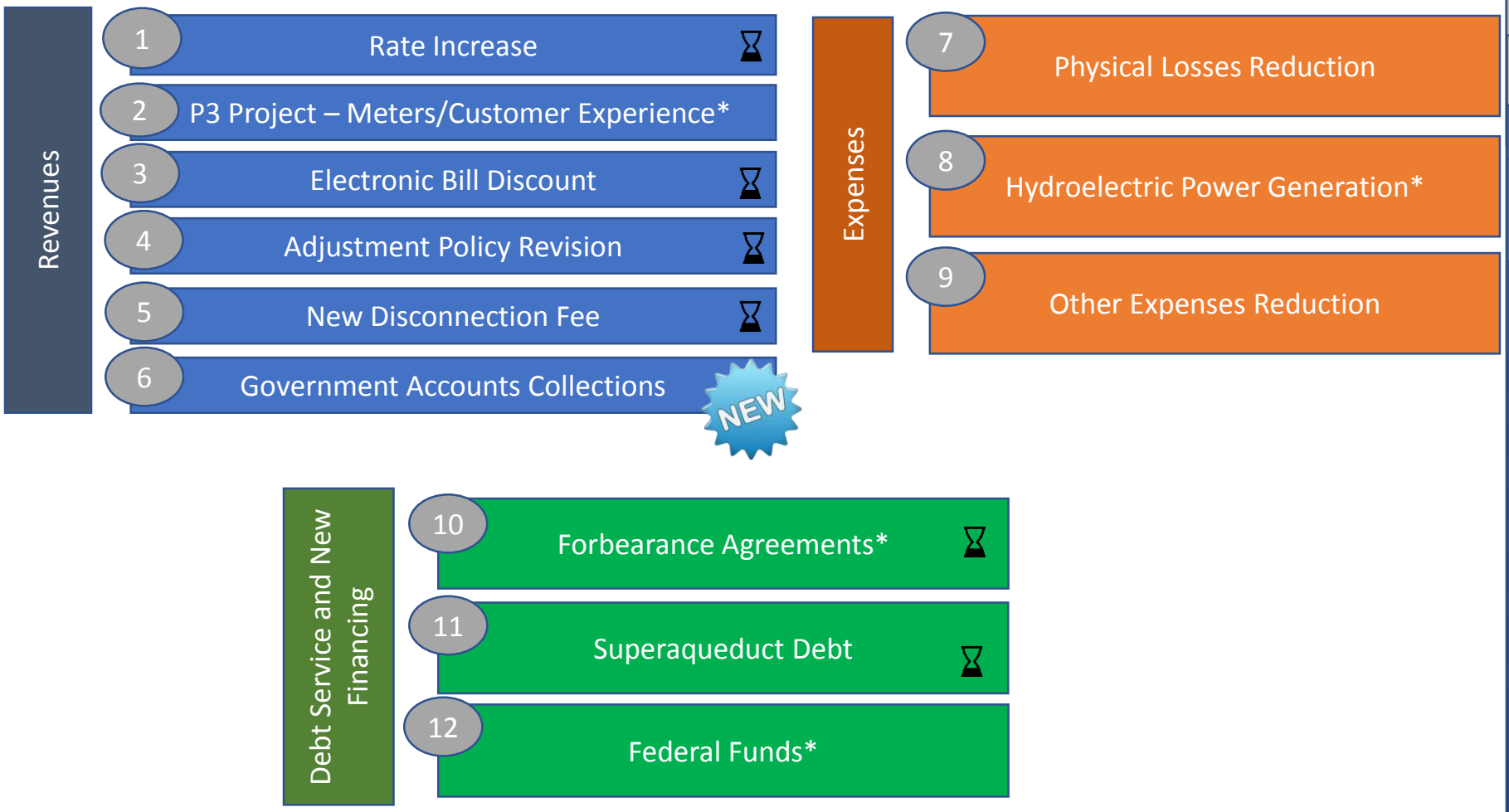
FTI CONSULTING™

- In 2014, GDB retained FTI to provide financial advisory and consulting services for PRASA, focusing on PRASA's five-year forecast period, including the CIP
- FTI concluded that PRASA's historical financial information is a reliable base to future financial projections, which were concluded as reasonable by FTI
- FTI makes clear **PRASA needs to access the capital market** to finance its CIP and that a customer **rate increase** and additional expenses reductions may be needed

RAFTELIS FINANCIAL CONSULTANTS, INC.

- In 2016, PRASA retained RFC to provide an assessment and recommendations on PRASA's management, operations, capital investments and financing to identify new initiatives to increase revenues or reduce expenses
- RFC's assessment found that **PRASA has undertaken necessary steps and has developed impressive programs to address its challenges**
- Even when the RFC recommendations are implemented, absent the successful implementation of Act 68-2016, PRASA will likely require substantial revenue/rate increases over the next 10 years

Proposed Initiatives



⌛ Ongoing Initiatives

* Initiatives not fully under PRASA control, please refer to the specific initiative for more detail

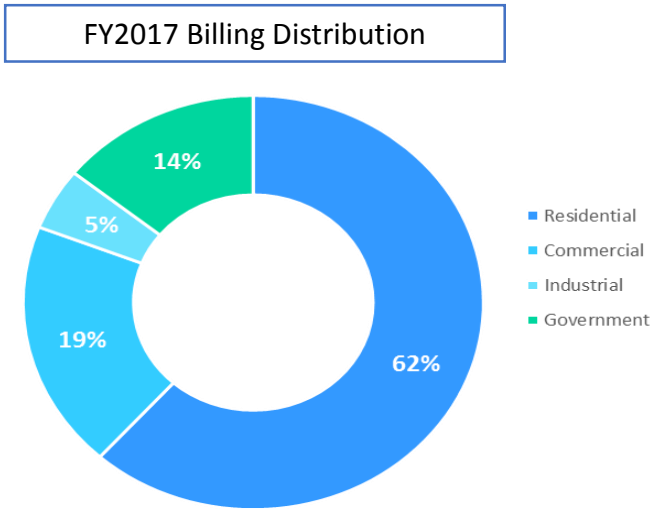
1 Rate Increase

- The certified Fiscal Plan, as well as this Revised Fiscal Plan, incorporates the Oversight Board's request and condition for certification, which is to:
  1. Include moderate but consistent rate increases, and
  2. Distribute the impact amongst all customer categories

- For the financial projections the following annual rate increases were assumed to be applied starting FY2018 **(January 1, 2018)** and then **on July 1 of each year** (including 2018) through FY2022:
  - Residential: 2.5%
  - Commercial: 2.8%
  - Industrial: 3.5%
  - Government: 4.5%

Rate increase due on January 1, 2018 already implemented following the Certified Fiscal Plan

IMPLEMENTED



1 Rate Increase

2.5% Rate Increase Impact on Residential Customers Monthly Bill (Year 1)

Residential Clients Distribution | **Calculated for 5/8" meters**

Consumtion Range (cubic meters)	% of Accounts	Accum Bills	# of Accounts*	Cubic Meters for Bill Calculation	Current Bill Water Only	Monthly Increase	Current Bill W&S	Monthly Increase Year #1	Electronic Bill Discount	Net Change for Clients subscribed to Electronic Bill
0-10	38%		408,736	10	$ 13.60	$ 0.34	$ 23.71	$ 0.59	$ (1.00)	$ (0.41)
11-15	19%	57%	204,368	15	$ 25.35	$ 0.63	$ 46.06	$ 1.15	$ (1.00)	$ 0.15
16-20	23%	80%	247,393	20	$ 39.30	$ 0.98	$ 71.96	$ 1.80	$ (1.00)	$ 0.80
>20	20%	100%	215,124	25 (90%)	$ 49.25	$ 1.23	$ 89.86	$ 2.25	$ (1.00)	$ 1.25
			1,075,621							

2.8% Rate Increase Impact on Commercial Customers Monthly Bill (Year 1)

Commercial Clients Distribution | **Calculated for 5/8" meters (85% of Commercial Clients)**

Consumtion Range (cubic meters)	% of Accounts	# of Accounts	Cubic Meters for Bill Calculation	Current Bill Water Only	Monthly Increase	Current Bill W&S	Monthly Increase Year #1
0-4	25%	11,977	4	$ 38.05	$ 1.07	$ 67.83	$ 1.90
5-15	25%	11,977	15	$ 70.17	$ 1.96	$ 126.57	$ 3.54
16-52	25%	11,977	52	$ 178.21	$ 4.99	$ 324.15	$ 9.08
>52	25%	11,977	100 (94%)	$ 318.37	$ 8.91	$ 580.47	$ 16.25
		47,906					

* Number of accounts based on bills issued on January 2017 excluding Public Housing clients

1 Rate Increase

3.5% Rate Increase Impact on Industrial Customers Monthly Bill (Year 1)

Industrial Clients Distribution

Consumtion Range (cubic meters)	% of Accounts	# of Accounts
0-18	25%	205
19-67	25%	205
68-466	25%	205
>466	25%	205
		820

Calculated for 2" meters (84% of Industrial Clients = meters of 2" or less)

Cubic Meters for Bill Calculation	Current Bill Water Only	Monthly Increase	Current Bill W&S	Monthly Increase Year #1
18	$ 265.20	$ 9.28	437.24	$ 15.30
67	$ 451.89	$ 15.82	$ 772.89	$ 27.05
466	$ 1,972.08	$ 69.02	$ 3,506.04	$ 122.71
2,400 (90%)	$ 9,340.62	$326.92	$16,753.94	$ 586.39

4.5% Rate Increase Impact on Government Customers Monthly Bill (Year 1)

Government Clients Distribution

Consumtion Range (cubic meters)	% of Accounts	# of Accounts
0-13	25%	2,523
14-70	25%	2,523
71-325	25%	2,523
>325	25%	2,523
		10,091

Calculated for 5/8" meters (55% of Government Clients)

Cubic Meters for Bill Calculation	Current Bill Water Only	Monthly Increase	Current Bill W&S	Monthly Increase Year #1
13	$ 64.33	$ 2.89	$ 115.89	$ 5.22
79	$ 257.05	$ 11.57	$ 468.33	$ 21.07
325	$ 1,168.87	$ 52.60	$ 2,118.72	$ 95.34
360 (90%)	$ 1,312.37	$ 59.06	$ 2,378.07	$ 107.01

1 Rate Increase

Rate Increase - Current Legal Process

Increase > 4.5%

Act 21-1985

Public Hearings Requirement

PRASA's Governing Board Approval

Increase =< 4.5%

Rate Resolution - Automatic Increase

No further requirements

PRASA's Governing Board Approval

Rate Increase Proposed Process

- As the proposed rate increase is less than 4.5%, PRASA may implement the change through the Automatic Increase allowed by its existing Rate Resolution
- The rate increases included in the certified Fiscal Plan until FY2022 were approved by PRASA's Governing Board on August 2017

PRASA Governing Board approved a permanent, multi-year rate increase complying with the Fiscal Plan, until FY2022 inclusive, incorporated in this Revised Fiscal Plan and extended by an additional year to cover the 6-year projected period

2 P3 Project – Optimizing PRASA's Metering System and Customer Experience

OBJECTIVE

Improve customers experience and satisfaction through a P3 contract including performance incentives to allow PRASA to focus on its core activities: provide a reliable water and wastewater service exceeding environmental requirements The P3 partnership will leverage private sector capabilities and capital to address these challenges

BENEFITS

Efficiency and Customer Service Optimization

Private Funding for Meter Replacement

Commercial Water Loss Reduction

SCOPE

- Improve customer service operations and client satisfaction
- Increase commercial activities efficiency

- Replacement of all water meters to improve metering accuracy
- Implementation of new technologies (automation)

- Capture lost revenue applying private sector best practices for:
  - Unauthorized water consumption detection
  - Geodatabase update
  - Improved collections rate
- Water leaks reporting

References:

 Customer satisfactions

 Revenue increase

 Cost savings

 New financing

 Water availability increase

 Leaks reduction

New Initiatives

2 P3 Project – Optimizing PRASA's Metering System and Customer Experience

Project timeline and status after Hurricanes Impact

- This initiative was delayed after the Hurricanes impact, but was already restarted and the Desirability and Convenience Study will soon be released
- Based on the new timeline, the project is expected to start generating benefits for PRASA by July 2019 (FY 2020)

If the P3 Project cannot be implemented as expected, as many factors involved are outside PRASA's control, the projections would need to be revised, including the investment required for meter replacement

Net estimated cash flow benefit to PRASA for FY2020-FY2023 period:

$93M

(Nominal Amount)

Benefits

- Expected increase in collections for non governmental accounts by 2% (of 96% pre-Hurricane base collection level)
- Increase in billed consumption through more accurate meters to be installed and financed by the private operator
- Detection of unauthorized consumption and potential new accounts not connected to the system increasing the clients base
- Reduction of payroll cost assuming improved resources efficiency under the private operation and PRASA resources reallocation
- Improving data quality and customer satisfaction
- Implementation of new technologies (AMR/AMI)

3 Electronic Bill Discount

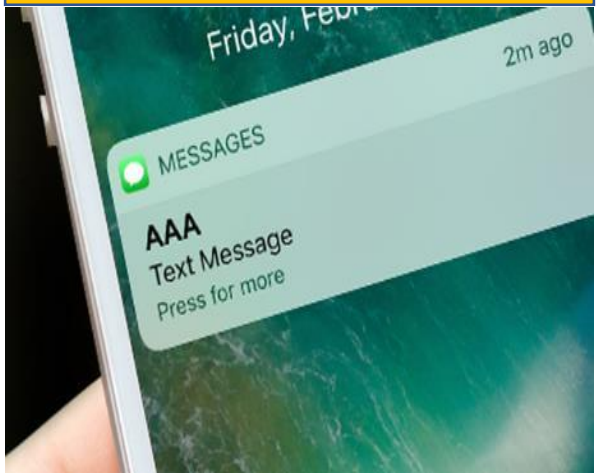
- PRASA has created a “virtual office” allowing customers to now perform all of their transactions using internet. Additionally, a mobile application for smart phones has been launched
- Also, PRASA has developed the capacity to send electronic bills to customers
- The initiative consist on implementing a discount of $1 per month to each client subscribed to the electronic bill (which impact is netted from the rate increase initiative)

Expected financial benefits and key assumptions:

- The discount will be applied to all customers opting to receive an electronic bill
- The discount was implemented on January 2018, as proposed in the Certified Fiscal Plan

IMPLEMENTED

PRASA has already over 90,000 (7%) “paperless” customers



New Initiatives

4 Adjustment Policy Revision

PRASA's Governing Board approved a regulation, which states that adjustments made for bills where a hidden leak is detected will only apply to the sewer bill portion (not water and sewer) as the water has already been consumed or lost and PRASA has already incurred in its production cost.

- In the past, both the water and sewer charges were adjusted. With the new regulation, only the sewer portion will be adjusted.

This type of adjustment amounts to approximately $3.5M per year. This policy revision is expected to reduce current adjustments by 60% or $2M per year starting on FY2018

IMPLEMENTED

5 New Disconnection Fee

- PRASA currently disconnects approximately 200,000 accounts per year.
- This initiative consists on the implementation of a new $15 charge for the cost of disconnecting the service (in addition to the reconnection fee already in place).

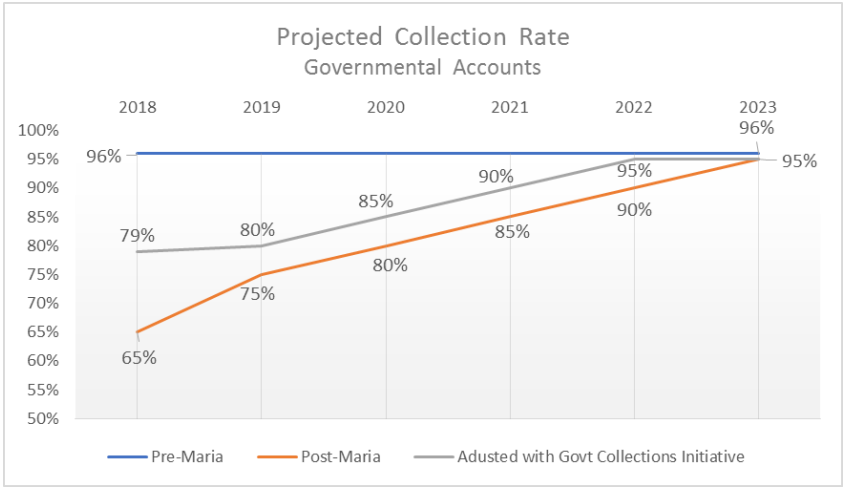
Expected financial benefits and key assumptions:

- The fee was implemented on January 1, 2018
- The maximum revenue with current disconnections was estimated at $3M per year (200,000 disconnection multiplied by the $15 charge)
- Projections show a lower number of disconnections as this new fee is expected to discourage service disconnections need

IMPLEMENTED

6 Government Accounts Collections

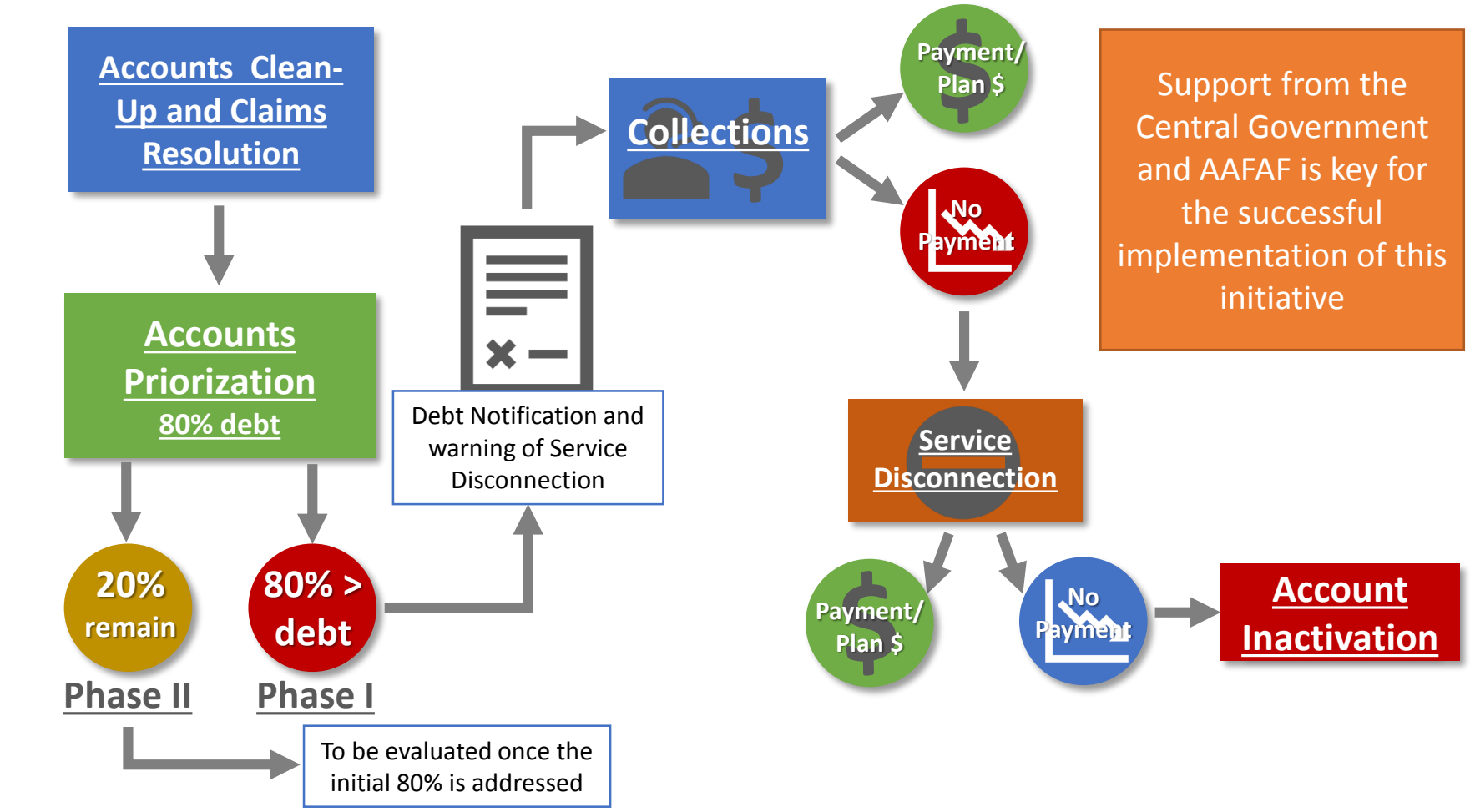
- PRASA's level of collections from Government Accounts was around 60% prior to the Hurricanes impact
  - PRASA assumed a 65% collection rate on its Baseline Projections
- Following the Oversight Board recommendations, the level of collections for Government Account was increased by:
  - **$25M during FY2018**, which represent over 80% of the outstanding balance from Central Government Accounts as of December 31, 2017
  - **5% collections rate improvement** equivalent to around $9M per year during FY2019 through FY2022 when a maximum assumed collection level of 95% is reached
- To achieve the proposed increase in government accounts collections PRASA:
  - Is working with the Puerto Rico Treasury Department on a memorandum of understanding to collect government billings from January through June 2018
  - Will implement an aggressive program to enforce collections from government accounts, which is included on the following page



New Initiatives

6 Government Accounts Collections

In order to enforce the cash management process for Government Accounts, PRASA will follow the process included below



7 Physical Losses Reduction

OBJECTIVE

Reduce water production needs and its variable cost, while maintaining and ensuring a reliable water service, applying appropriate and efficient pressures, maximizing water availability during drought periods

BENEFITS

Increase efficiency and water production reduction

Variable operating costs reduction

Physical losses reduction

SCOPE

- Tank telemetry and level monitoring
- Reduction in water production estimation by installing meters at most of the WTP

- Electricity consumption reduction
- Decreased chemicals consumption

- Water leaks detection program
- Efficiently addressing reported leaks (reduction leaks repair time)
- Water pressure management and optimization

UNDER IMPLEMENTATION

References:

- Leaks reduction
- Customer satisfactions
- Cost savings
- Water availability increase

New Initiatives

7 Physical Losses Reduction

Tank telemetry, monitor and pressure reduction

- PRASA has undertaken initiatives to install telemetry monitoring equipment at tanks.
- This initiative will require a capital investment in monitoring/communication equipment of approximately **$3 million** during the projected period
- Will allow for the reduction of overflows and reduction of physical water losses.
- Tanks with functional remote water level monitoring has been reduced after the Hurricanes and delayed the initiative

PRASA's Goal:

65% of tanks with remote water level monitoring by FY2020

New Initiatives

7 Physical Losses Reduction

Water leaks detection and reduction in repair time

- NRW can be reduced by implementing operational tactics such as reactive leak detection efforts (by using equipment to detect leaks) and shortening repair times for addressing/repairing leaks.
- PRASA is currently using leak detection techniques to proactively identify leaks, is monitoring system pressure to optimize flows, and is reducing the number of days required to repair leaks to reduce the recurrence of leaks and water losses trough them.
- PRASA has estimated the cost savings from these initiatives by analyzing average flow rates for leaks and the impact on water loss from reducing repair time.
- The cost savings projected reflect the net benefit PRASA will incur in labor costs and other operating costs to detect and address leaks sooner, but will save on electricity and chemical costs used for water production that is no longer produced and lost.

7 Physical Losses Reduction

- The NRW office has a goal of reducing water production in the System to **450 MGD or 11% of current production (507MGD) by 2023**
  - PRASA already reduced its production by 140MGD since FY2012
- Since achieving this goal will reduce the amount of water produced, PRASA will be able to reduce its operational costs.
- The total cost savings from reducing physical losses is estimated to be approximately **$50 million**, or an average of **$8 million per year** (reaching $11M by FY2024).
- The objective for water production reduction and savings was modified under this Revised Fiscal Plan based on the uncertain condition of the underground assets and the delay in the implementation of the initiatives to address physical losses after the Hurricanes affected the island.

The net impact of reducing physical losses through the leak detection and tank telemetry initiatives is estimated to generate a benefit **of $50M in net cost savings** during the 6-year projected period included in this Revised Fiscal Plan

8 Hydroelectric Power Generation

OBJECTIVE

PRASA is planning to assume the upgrading and operation of the hydroelectric generation units (expected to be by a partnership with the private sector) and all of their related equipment, to increase the hydroelectric production and reach at least **40% of PRASA energy consumption needs.** The final objective is to reduce PRASA's energy costs, its second largest expense category

BENEFITS

Reduce electricity cost, minimizing impact to clients through increased service rates

Control and management of water resource to avoid water rationing and maximize water availability

Current infrastructure maximization with private funding

SCOPE

- Hydroelectric facilities operation by a private party, improving efficiencies and reducing costs
- Dredge plan to maximize water availability and water service reliability
- Private investment to improve facilities and allow to increase the hydroelectric production

References:

- Customer satisfactions
- Cost savings
- New Financing
- Water availability increase

Hydroelectric power provides for only 2% of PREPA production but it has the potential to reach at least 40% of PRASA's energy needs.

New Initiatives

8 Hydroelectric Power Generation

The structure, terms and conditions are still under consideration by PREPA and PRASA management. An Unsolicited Proposal to upgrade and operate the hydroelectric facilities was received by the P3 Authority and is currently being evaluated, therefore no financial impact is included in the financial projections at this time

Hydroelectric Sites with PREPA owned assets

Active facilities include:

- Yauco 1 & 2 (35 MW)
- Dos Bocas (15 MW)
- Caonillas (23 MW)
- Garzas (12 MW)
- Rio Blanco (5 MW)
- Toro Negro (10.5 MW)

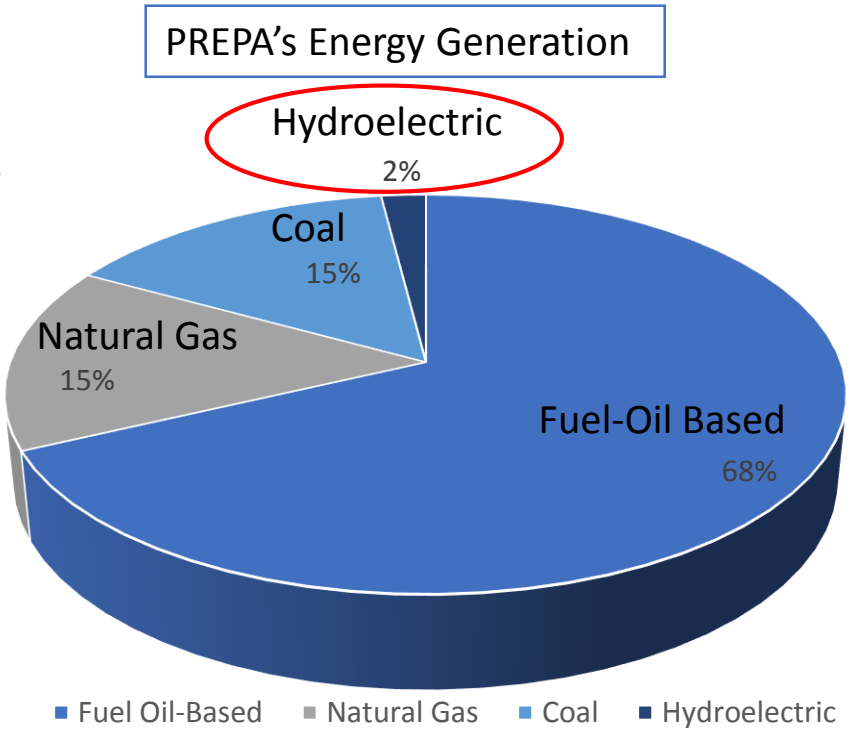
Inactive facilities include:

- Patillas (1.4 MW)
- Isabela (3 MW)
- Carite (3 MW)
- Comerio (4 MW)

This initiative will also allow PRASA to be more resilient upon atmospheric events such as the recent Hurricanes

8 Hydroelectric Power Generation

- Hydroelectric facilities currently owned and operated by PREPA
  - 21 hydroelectric units (at 11 sites) and 3 irrigation systems
  - Capacity of 100 MW
  - Operational status and asset condition vary across facilities
- PRASA plans to upgrade and maximize hydroelectric generation through:
  - Optimization of operations
  - Capital improvements



Source: PREPA Website www.prepa.com

Between 2009-2013, hydroelectric facilities generated an average:

129 M kWh/yr

= **20%**

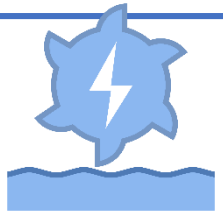
of PRASA's current energy consumption

New Initiatives

8 Hydroelectric Power Generation

Current Status

- PRASA is evaluating different legal structures to allow for the implementation of this initiative given the sui generis nature of the relationship that would be established between PRASA and PREPA
- Currently there is no information available regarding the condition of the hydroelectric assets:
  - Prior to the Hurricanes Impact, the required investment to increase capacity of the assets was estimated at $100M
  - As of the date of the submission of this Revised Fiscal Plan, the investment requirement is expected to be materially higher than the one included in the prior Fiscal Plan and can not be estimated at this time.
- PRASA is still pursuing this initiative, as it is considered critical not only to reduce the second largest cost but also to better control and manage water resources as well as to improve resiliency. At this time there is no assurance an agreement may be reached with PREPA and/or a private partner
- Therefore, at this moment no financial impact was included in this Revised Fiscal Plan



9 Other Expenses Reduction

- The reduction in the Other Expenses line is expected to be achieved by the implementation of the **Voluntary Pre-Retirement Program**, as created by Act 211-2015 (the "Early Retirement Program")
- Based on the approval by the Office of Management and Budget for the Early Retirement Program, net savings was calculated considering around 350 employees who qualified for it
- The impact of the Early Retirement Program is presented net from certain payments for the benefit of the employees until they comply with the age for retirement, as required by Act 211-2015
- The Other Expenses reduction through the Early Retirement Program is projected at an average of **$7M** per year or **$41M** during the 6-year projected period
- The expense reductions specifically associated with the other initiatives proposed above are presented and considered under each of the initiatives impact to simplify the presentation

As shown previously PRASA is already operating under the level of headcount recommended by V2A which may affect the level of service and the water quality. Also further reductions on Maintenance and Repairs as well as on Chemicals expense may affect the level as well as the quality of service, which is one of PRASA's main priorities

10 Forbearance Agreements

- Historically, PRASA has received federal funds for its CIP through:

  State Revolving Fund (SRF) Loans: Granted by the Clean Water State Revolving Fund Programs (CWSRF) and the Drinking Water State Revolving Fund Programs (DWSRF), administered by the Government's Environmental Quality Board and PRDOH, respectively.

  Rural Development (RD) Bonds: Bond proceeds from the USDA Rural Development Program by issuing revenue bonds as authorized under the PRASA's Resolution No. 1224, adopted by PRASA on August 12, 1986, as amended.

- The SRF Loans and the RD Bonds are secured by a guaranty from the Government under Act No. 45 of the Legislative Assembly of Puerto Rico, approved on July 28, 1994, as amended.
- The current balance outstanding is around $580 million for SRF loans and $390 million for RD Bonds, with an annual debt service of around $60 million.

10 Forbearance Agreements

- On June 30, 2016, PRASA entered into forbearance agreements related to both programs, which were later extended in various occasions and are currently due and will terminate on:
  - SRF Loans: June 30, 2018
  - RD Bonds: April 30, 2018
- The agreements grant PRASA a forbearance of principal and interest on both programs of approximately $60 million per year, which was reduced from the FY2018 debt service requirements
- PRASA continues to have ongoing discussions with both USEPA and USDA
- The payment of the balances owed since June 30, 2016 up to July 1, 2018 is expected to be included as part of a potential debt restructuring and were not included as incremental debt service for financial projections purposes.

11 Superaqueduct Debt

- PRASA's debt balance includes a portion of the 2011 Series B Bonds issued by the Public Finance Corporation ("PFC") on December 2011 to refinance certain outstanding debt related to the construction cost of the North Coast Superaqueduct.
- In the past, PRASA agreed with the Government to pay the debt service on the portion of this debt related to the Superaqueduct ($162.7 million) if sufficient funds were available for such purpose.
- However, this is not a general obligation of PRASA and is otherwise payable solely from appropriations received from the Government.
- PRASA has been unable to make such payments in recent years. As provided in the MAT, if PRASA is unable to make these payments, the obligation is not cumulative, and therefore does not carry forward to future periods.
- Since PRASA is not legally required to make this payment, the debt service related to the Superaqueduct is eliminated from the financial projections resulting in savings of $9 million per year.

The Superaqueduct is one of the main assets owned and operated by PRASA, producing around 100 MGD, or 20% of PRASA's water production.

12 New Federal Funds

State Revolving Funds

- State Revolving Funds (SRFs) are received through annual grants assigned to the EPA by the US Congress, in an amount of around $27 million for DWSRF and CWSRF Programs, requiring a state match of 20% of the annual grant, which is included as PRASA's costs and netted from the new funds.
- PRASA projected **$346M or 18%** of the 6-year CIP may qualify for SRF funding
  - Annual Appropriation: Based on the Oversight Board recommendation the portion of the annual appropriation ($27M) was reduced by **50% or $13.5M** expected for each year
  - Repayment Funds: A total of **$188M** on SRF repayment funds is expected to be received from the Central Government during the projected period
  - The funds for FY2018 are expected to be received starting on FY2019
- The SRF funding impact is presented on the Initiatives Impact table net from the cost of debt service (calculated as 30-year 1% loans, as recently proposed by EPA) and assumes a 20% state match (expected to be provided by PRASA) for the annual appropriation portion

12 New Federal Funds

Rural Development Bonds

- PRASA expect to incur in **$24M** on projects qualifying for RD funding starting on FY2019
  - Following the Oversight Board recommendation, the adjusted financial projections assumes sources from RD funds each year for the minimum of:
    - 50% of the annual funds appropriated in the past ($5M)
    - Total cost of projects qualifying for RD funds
  - The new funds are presented in the adjusted financial projections net from the expected debt service calculated as 40-year / 4% bonds, which are terms similar to the current outstanding bonds.

Proposed Initiatives Total Impact

The total impact of the proposed initiatives reduced the Initial Financial Need by **$1,133M**

In $' Millions	FY2018	FY2019	FY2020	FY2021	FY2022	FY 2023	Revised FP (4/5/18)	Certified FP (8/25/17)	6-year Change	% Var
Rate Increase (Net Impact	4.0	39.7	67.5	98.3	132.4	169.9	511.8	494.4	17.4	4%
P3 for Commercial Service	-	-	(15.9)	11.4	36.2	61.1	92.8	166.5	(73.8)	-44%
Government Collections	25.0	9.3	9.6	9.9	10.1	-	63.9	-	63.9	N/A
Revise adjustment policy	2.0	2.0	2.0	2.0	2.0	2.0	12.0	12.0	-	0%
Add dis-connection Fee	-	2.3	1.5	1.2	1.2	0.9	7.1	8.0	(0.9)	-11%
Revenue Enhancing	31.0	53.3	64.8	122.7	181.8	233.9	687.5	680.9	6.7	1%
Physical Water Losses	2.2	6.5	8.5	11.0	9.8	10.3	48.4	76.0	(27.6)	-36%
Hydroelectric Energy	-	-	-	-	-	-	-	23.1	(23.1)	-100%
Other Expenses (Act 211-1	0.9	3.8	7.1	8.3	9.9	11.4	41.4	11.5	29.9	260%
Expense Savings	3.1	10.3	15.7	19.3	19.7	21.7	89.8	110.6	(20.8)	-19%
Forbearance Agreements	58.1	-	-	-	-	-	58.1	-	58.1	N/A
Superaqueduct debt (PFC	9.0	9.0	9.0	9.0	9.0	9.0	54.0	54.0	-	0%
Debt Service Reduction	67.1	9.0	9.0	9.0	9.0	9.0	112.1	54.0	58.1	108%
Federal Funds	-	31.4	52.4	85.9	66.5	7.6	243.7	150.1	93.5	62%
TSA Loan	-	-	-	-	-	-	-	-	-	N/A
New Financing	-	31.4	52.4	85.9	66.5	7.6	243.7	150.1	93.5	62%
Initiatives Net Impact	**101.1**	**104.0**	**141.8**	**236.9**	**277.1**	**272.2**	**1,133.0**	**995.5**	**137.5**	**14%**

New Initiatives

Adjusted Financial GAP

After the proposed initiatives are implemented a gradual reduction in the annual financial need is expected showing a positive path to financial self sustainability in the long term, even after the Hurricanes negatively impacted the financial projections

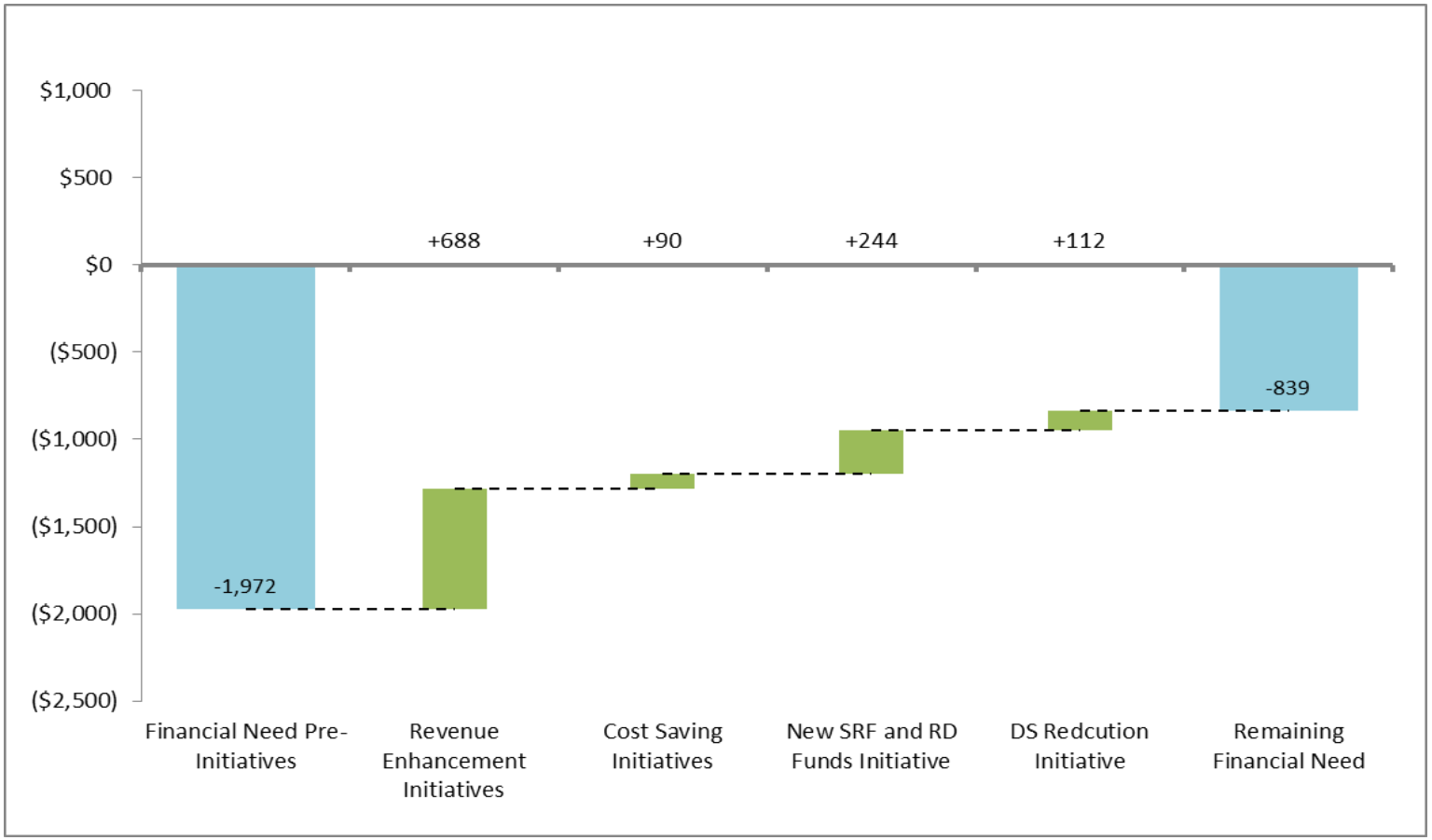
In $' Millions	FY2018	FY2019	FY2020	FY2021	FY2022	FY 2023	Revised FP (4/5/18)	Certified FP (8/25/17)	6-year Change	% Var
Initial Financial Need	**(332.1)**	**(323.0)**	**(332.2)**	**(330.6)**	**(337.4)**	**(316.3)**	**$ (1,971.6)**	**$ (1,893.8)**	**$ (77.8)**	**4%**
Revenue Enhancing	31.0	53.3	64.8	122.7	181.8	233.9	687.5	680.9	6.7	1%
Expense Savings	3.1	10.3	15.7	19.3	19.7	21.7	89.8	110.6	(20.8)	-19%
Debt Service Reduction	67.1	9.0	9.0	9.0	9.0	9.0	112.1	54.0	58.1	108%
New Financing	-	31.4	52.4	85.9	66.5	7.6	243.7	150.1	93.5	62%
Initiatives Net Impact	**101.1**	**104.0**	**141.8**	**236.9**	**277.1**	**272.2**	**1,133.0**	**995.5**	**137.5**	**14%**
Adjusted Financial Need	**$ (230.9)**	**$(219.1)**	**$(190.4)**	**$ (93.6)**	**$ (60.3)**	**$ (44.1)**	**$ (838.6)**	**$ (898.3)**	**$ (59.7)**	**7%**

Still, after the implementation of all the proposed initiatives, a **$839M** remaining Financial Need is projected which is expected to be covered by:

- **New Financing**
- **Debt Restructuring**

Adjusted Financial Need

The proposed initiatives **reduced the initial financial need by 57%,** still a financial needs of **$839M** remains



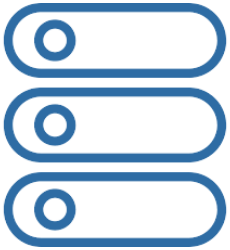
New Initiatives

Other Potential Opportunities

- The following potential sources of funds and relief may be explored to improve the financial projections presented herein:

In $' Millions	Estimated Potential Benefit	
Operating Reseve Fund Requirement Waived	$ 178.2	Requires amendments to the MAT and bondholders consent
Debt Service Reserve Fund Release	90.6	
Loan from TSA	80.0	A Government loan to PRASA was approved by the Legislature and is being currently evaluated
Total Potential Benefit	**$ 348.8**	

- The potential benefit of the above presented initiatives is estimated at **$349M** during the projected period, 42% of the projected adjusted financial need.



Other Potential Sources of Funds

- Also PRASA may access additional funds for its CIP if some requirements for specific Programs are modified or waived as for example:
  - EPA
    - Water Infrastructure Finance and Innovation Act (WIFIA)
    - State Revolving Funds
  - U.S. Department of Agriculture (USDA)
    - Emergency Community Water Assistance Grants (ECWA)
    - Water & Waste Disposal Loan & Grant Program
- Examples of necessary waivers:
  - Matching Requirements
  - Eligibility requirements based on credit worthiness
  - American Iron & Steel Requirements
- Additional subsidization in the form of principal forgiveness, negative interest rate loans, or grants will also be beneficial
- The availability, form, amount and timing for these funds is currently unclear, therefore no impact is included in the financial projections presented herein

Supplemental Post-Disaster Funding Programs

Community Development Block Grant – Disaster Recovery Program (CDBG-DR)

- Funding for CDBG-DR may be available from the Department of Housing and Urban Development (HUD) following a qualifying Major Disaster Declaration.
- Funds are appropriated by Congress when there are significant unmet needs for long term recovery. Intended to fund disaster relief, long term recovery, restoration of infrastructure and housing, and economic revitalization.
- A CDBG-DR Action Plan must be developed by the Government of Puerto Rico, describing the proposed use of funding and the method of allocation.
- CDBG-DR provides funding to address unmet recovery needs after federal, state / territory, and local resources are exhausted. Intended to supplement post-disaster programs and may be used as a match for FEMA programs.
- The availability, form, amount and timing for these funds is currently unclear, therefore no impact is included in the financial projections presented herein

Contents

Cash Flow Available for Debt Service

The table below summarizes the annual cash flow available for debt service:

Cash flow available for debt service

	2018	2019	2020	2021	2022	2023	Total
Operating revenues	$833.0	$919.2	$945.3	$970.3	$989.7	$1,006.6	$5,664.1
Total net operating expenses	(685.9)	(702.5)	(703.7)	(708.8)	(705.3)	(708.4)	(4,214.6)
Operating reserve fund	(33.7)	(36.8)	(35.4)	(36.5)	0.9	(0.8)	(142.2)
Capital improvement fund	(123.9)	(181.4)	(218.1)	(227.9)	(294.8)	(285.9)	(1,332.0)
Initial financial need (pre-DS)	**($10.5)**	**($1.6)**	**($11.8)**	**($2.8)**	**($9.5)**	**$11.5**	**($24.7)**
Initiatives net impact (excl. DS&FF)	34.0	63.6	80.4	142.0	201.6	255.6	777.3
Cash flow available for DS	**$23.5**	**$62.0**	**$68.6**	**$139.2**	**$192.0**	**$267.1**	**$752.6**
	*Average annual cash flow available for debt service: **$125M***						
Memo: net impact of federal funds	–	*31.4*	*52.4*	*85.9*	*66.5*	*7.6*	243.7
Cash flow available post federal funds	**$23.5**	**$93.4**	**$121.0**	**$225.1**	**$258.5**	**$274.7**	**$996.3**
	*Average annual cash flow available for DS Incl. Federal Funds: **$166M***						

Restructuring

The Fiscal Plan (post measures and initiatives) indicate that the current debt structure is not sustainable:

Excluding federal funds	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Total**
Cash flow available for debt service	$23.5	$62.0	$68.6	$139.2	$192.0	$267.1	$752.6
Current DS (net from DS Initiatives)	(254.5)	(312.5)	(311.4)	(318.8)	(318.9)	(318.8)	(1,834.8)
Surplus / (Shortfall)	**($230.9)**	**($250.4)**	**($242.8)**	**($179.6)**	**($126.8)**	**($51.7)**	**($1,082.2)**

Including federal funds	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Total**
Cash flow available for debt service	$23.5	$93.4	$121.0	$225.1	$258.5	$274.7	$996.3
Current DS (net from DS Initiatives)	(254.5)	(312.5)	(311.4)	(318.8)	(318.9)	(318.8)	(1,834.8)
Surplus / (Shortfall)	**($230.9)**	**($219.1)**	**($190.4)**	**($93.6)**	**($60.3)**	**($44.1)**	**($838.6)**

Remaining gap

In order to address the remaining shortfall, PRASA intends to engage with its creditors to bridge the remaining gap through a consensual restructuring, if possible

Illustrative Debt Capacity

- The tables below provide an illustrative debt capacity based on a range of interest rates and assuming net zero amortization
- These sensitivities assess the debt capacity assuming a certain percentage of cash flow available is reserved for contingencies and not available for debt service

Illustrative sustainable debt capacity sizing

Illustrative Cash Flow Available		Sensitivity Analysis: Implied Debt Capacity at 10% Contingency						
		$150	$175	$200	$225	$250	$275	$300
Sensitivity Analysis: PV Rate %	4.0%	$2,334	$2,723	$3,113	$3,502	$3,891	$4,280	$4,669
	5.0%	2,075	2,421	2,767	3,113	3,459	3,805	4,151
	6.0%	1,858	2,168	2,478	2,787	3,097	3,407	3,717
	7.0%	1,675	1,954	2,234	2,513	2,792	3,071	3,350
	8.0%	1,520	1,773	2,026	2,280	2,533	2,786	3,040

Illustrative Cash Flow Available		Sensitivity Analysis: Implied Debt Capacity at 5% PV Rate						
		$150	$175	$200	$225	$250	$275	$300
Sensitivity Analysis: % Contingency	5.0%	$2,191	$2,556	$2,921	$3,286	$3,651	$4,016	$4,381
	7.5%	2,133	2,488	2,844	3,199	3,555	3,910	4,266
	10.0%	2,075	2,421	2,767	3,113	3,459	3,805	4,151
	12.5%	2,018	2,354	2,690	3,026	3,363	3,699	4,035
	15.0%	1,960	2,287	2,613	2,940	3,267	3,593	3,920

Current weighted average coupon: ***5.5%***

Long-Term Forecast

PRASA has estimated a 30-year forecast based on the Central Government's long-term macroeconomic assumptions and highly illustrative assumptions for long-term planning and debt service sustainability analysis

- Billings are driven by expected population changes and GNP growth
- For the long-term projections, after FY2023, expenses are driven by inflation except for:
  - Payroll and Related Costs, assuming:
    - 4,900 throughout the projected period, then netted from the initiatives effect on headcount
    - No changes in legislation and the maintenance of Act 26-2017 reduction in benefits
    - Pay-Go cost as per February 19, 2018 actuarial valuation
    - No salary increases until FY2024
  - Electricity, based on rates submitted by PREPA until FY2023 and a 3% increase yearly thereafter
- Collection rates are expected to increase through FY2023 and remain flat thereafter
- Includes illustrative expected long-term impact of fiscal plan initiatives
- Assumes the rate increases as approved by PRASA's Governing Board until FY2022 will be also applied to FY2023 and an annual 0.50% increase is projected thereafter
- Includes CIP as projected on a project by project base for the next 10-year period and an average estimate of $250 million per year thereafter

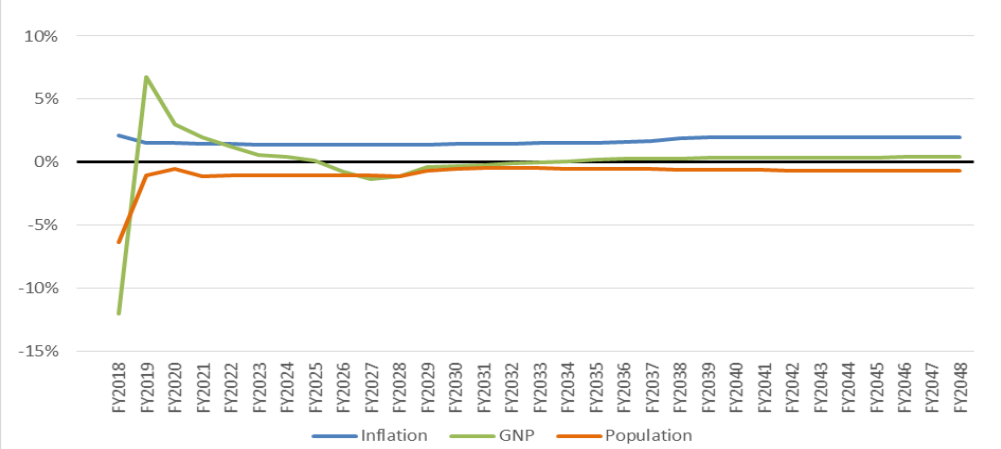
A minimum change in the assumptions for any of the variables applied will materially affect the Debt Service Sustainability analysis presented herein

Macroeconomic Drivers
Inflation, GNP and Population

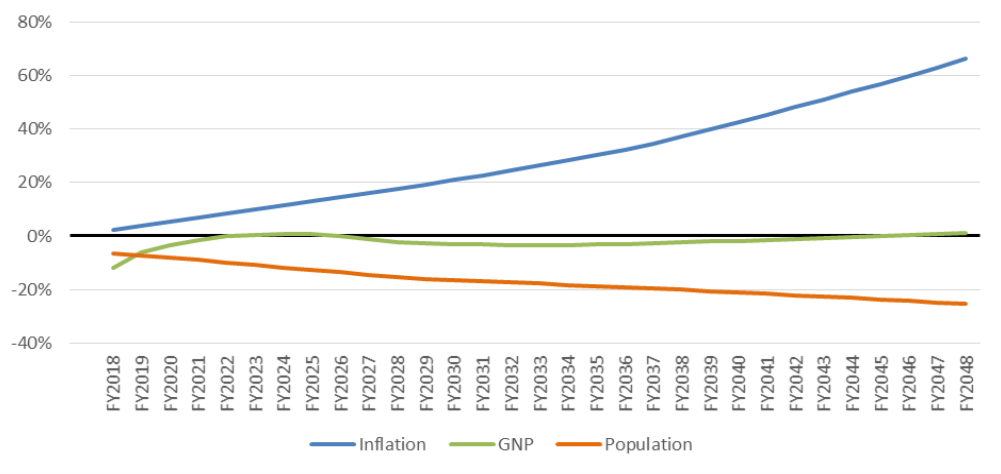
PRASA projections are mainly driven by the following macroeconomic indicators:

1) Inflation for expenses
2) Population growth for Residential clients billings
3) GNP for Non-Residential clients billings

Annual Change on Macroeconomic Indicators



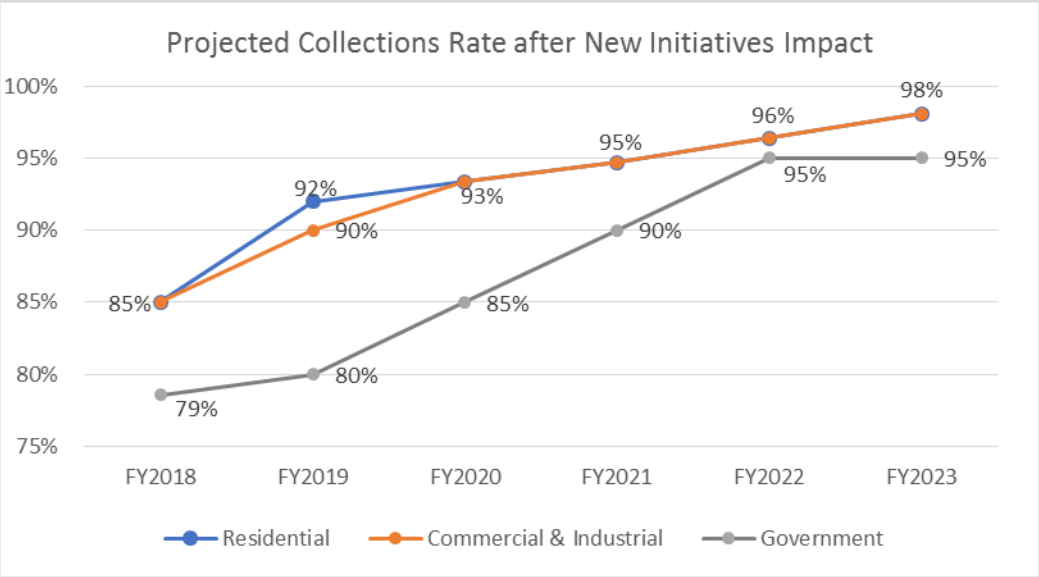
Accumulated Change on Macroeconomic Indicators



FY	Inflation	GNP	Population
FY2018	2.1%	-12.0%	-6.4%
FY2019	1.5%	6.7%	-1.1%
FY2020	1.5%	3.0%	-0.5%
FY2021	1.4%	2.0%	-1.2%
FY2022	1.4%	1.2%	-1.1%
FY2023	1.4%	0.6%	-1.0%
FY2024	1.4%	0.4%	-1.0%
FY2025	1.4%	0.1%	-1.0%
FY2026	1.4%	-0.8%	-1.0%
FY2027	1.4%	-1.3%	-1.1%
FY2028	1.4%	-1.2%	-1.1%
FY2029	1.4%	-0.4%	-0.7%
FY2030	1.5%	-0.3%	-0.5%
FY2031	1.5%	-0.2%	-0.5%
FY2032	1.5%	-0.1%	-0.5%
FY2033	1.5%	0.0%	-0.5%
FY2034	1.5%	0.1%	-0.5%
FY2035	1.5%	0.2%	-0.5%
FY2036	1.6%	0.2%	-0.6%
FY2037	1.7%	0.3%	-0.6%
FY2038	1.9%	0.3%	-0.6%
FY2039	1.9%	0.3%	-0.6%
FY2040	1.9%	0.3%	-0.6%
FY2041	1.9%	0.3%	-0.6%
FY2042	1.9%	0.3%	-0.7%
FY2043	1.9%	0.3%	-0.7%
FY2044	1.9%	0.4%	-0.7%
FY2045	1.9%	0.4%	-0.7%
FY2046	1.9%	0.4%	-0.7%
FY2047	1.9%	0.4%	-0.7%
FY2048	1.9%	0.4%	-0.7%

Collection Rates

Collection rates are projected to gradually increase and then remain at FY2023 level (98% for Non-Government accounts and 95% for Government Accounts)

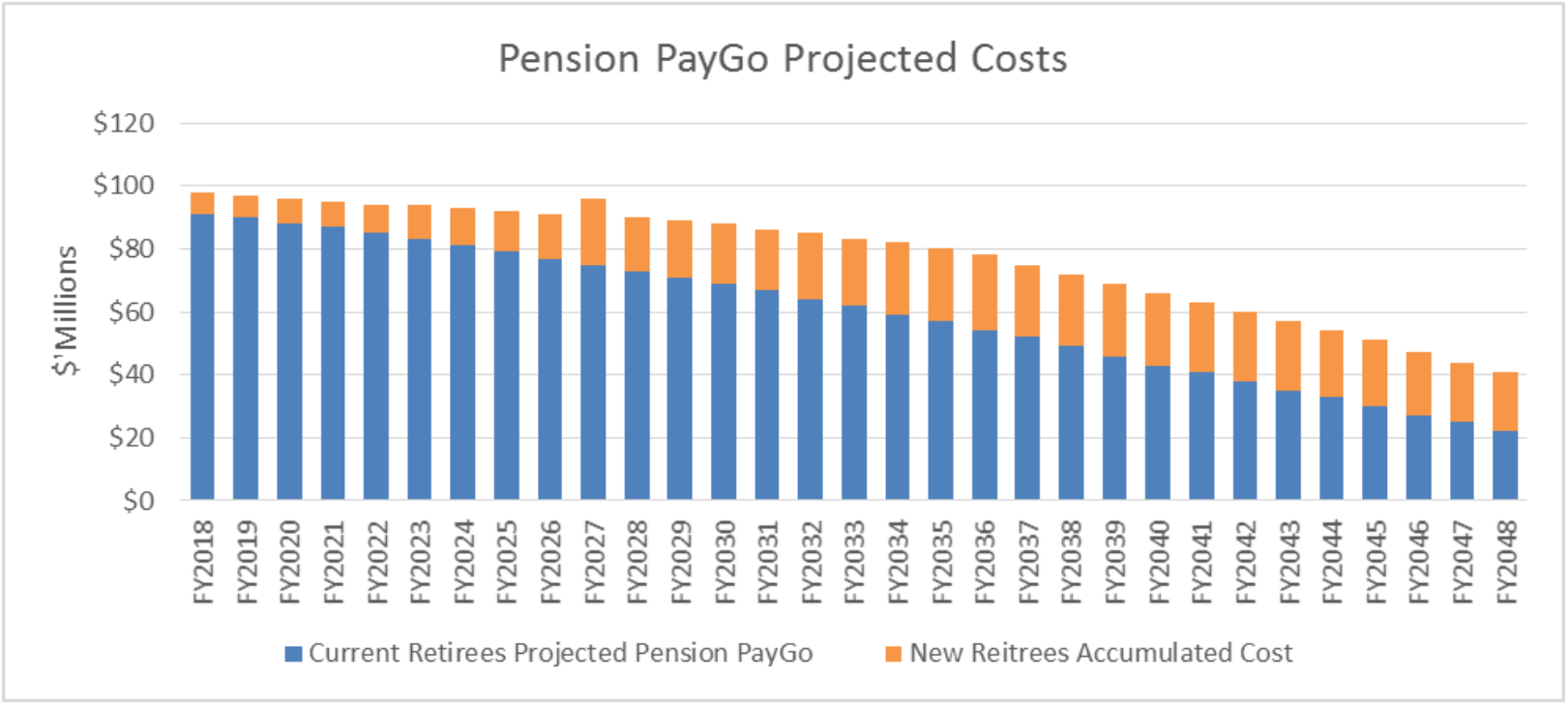


Collections rates reflect the favorable impact of the proposed initiatives presented under the "New Initiatives" Section:

1. **P3 for Commercial Services** activities, increasing Non-Government accounts collections by 2%
2. **Improve of Government accounts collection** from 65% to 79% in FY2018 and 5% improvement annual thereafter up to FY2022 when a 95% collection rate is achieved

Pension Pay-Go Cost

Pension Pay-Go Cost assumes the actuarial valuation for current retirees as well as for current employees with benefits accrued as of June 30, 2016 without assuming future pension costs increases

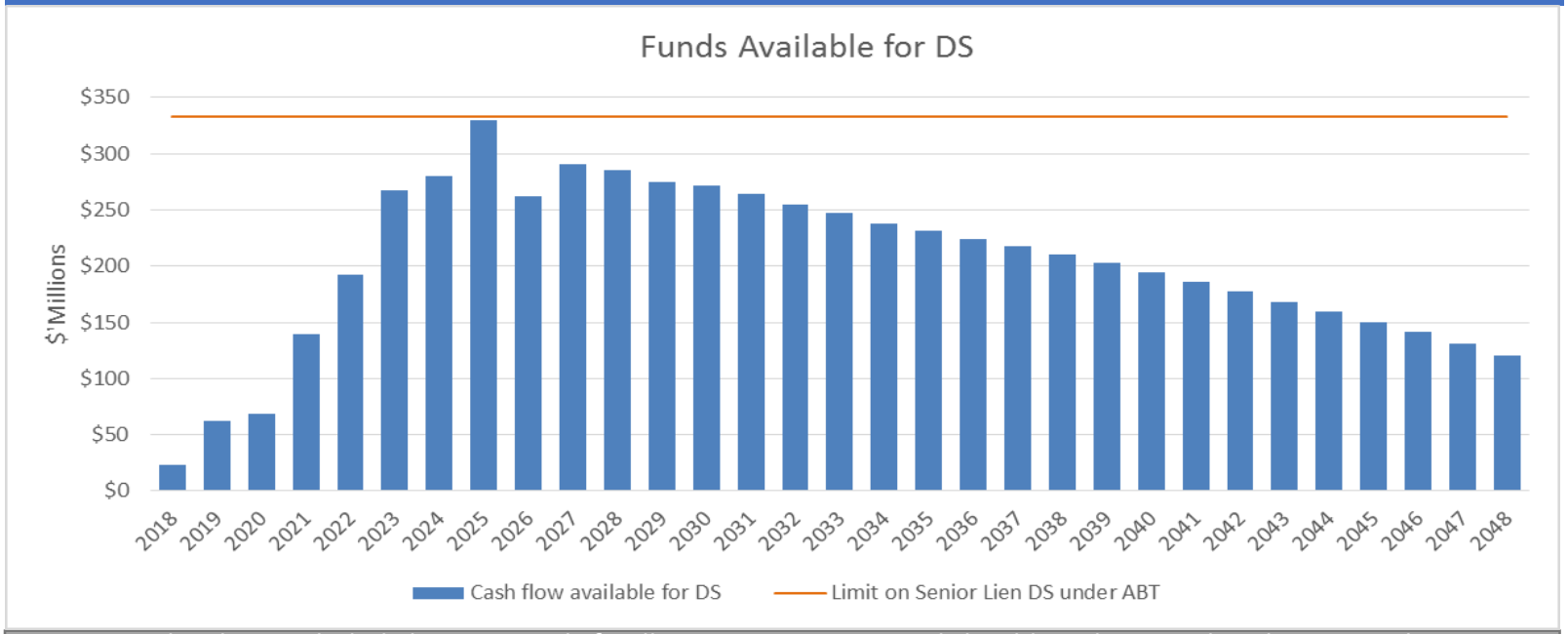


Source: Milliman memo "PRGERS Estimated Projected Benefit Payments reflecting Act 106-2016 – Agency 201 = PRASA – CONFIDENTIAL" addressed to AAFAF dated on February 19, 2018

Long-Term Debt Sustainability

- The chart below summarizes the annual cash flow available for debt service to support PRASA's long-term debt sustainability, and provides a $333M effective senior lien debt service limitation based on projected FY2018 gross revenues at a 2.5x revenue to debt ratio[1]
- Assumes rate increases as approved by PRASA's Governing Board until FY2022, which is also applied for FY2023 and an annual 0.50% increase thereafter

Cash flow available for debt service (excluding new SRF & RD funds)



The chart included above is purely for illustrative purposes and should not be considered a proposal

[1] Additional Bond Test (ABT) calculated using FY18 revenues as 2.5x Senior Lien coverage requirement for MADS

Contents

Cash Management
Short-Term Liquidity Challenges After the Hurricanes

Service Collections

Hurricane Effects

- Billings and collections materially reduced due to period of service outage
- Deficient service credit impact
- Effects heightened by population decline and GNP indicators

Delayed Billings

- Billing process has been suspended during two months
- Payment terms has been extended up to 45 days for bills issued up to January 2018

Operating Expenses

Delayed Payments

- Non-essential expenses that can be deferred without service interruptions were delayed in order to maximize liquidity

Cost Savings

- Payroll expense reductions through decreasing employees headcount
- Service interruption and internal energy savings initiatives leading to reduction in electricity consumption
- Lower chemicals cost from reduction in volume of water treatment
- Nevertheless certain expense categories materially increased due to the Hurricanes such as diesel costs for power generators used to operate facilities, employees overtime, security services, water distribution and others

Cash Management Program
12-month Period Ending on December 31, 2018

Levers considered to improve PRASA's short term liquidity

RECEIPTS:

Scenario 1:
- Business Interruption proceeds - $50M
- Reflect revenue enhancement initiatives inflow:
  - Rate Increase inflows - $23M
  - Increased Government Accounts Collections - $29M
    - $25M on FY2018 and 5% improvement from Jul to Dec
- Collections for FY 2018 updated with recent information

Scenario 2:
- Use of Operating Reserve Fund - $50M
- Emergency TSA Assistance Loan - $80M

DEBT SERVICE:

Base Scenario:
- Debt service payments as scheduled, except for the Superaqueduct related debt

Scenario 1:
- Current Forbearance Agreements extended through 12/18 - $56M

Potential for additional levers based on the senior and junior debt restructuring negotiations result

EXPENSES:

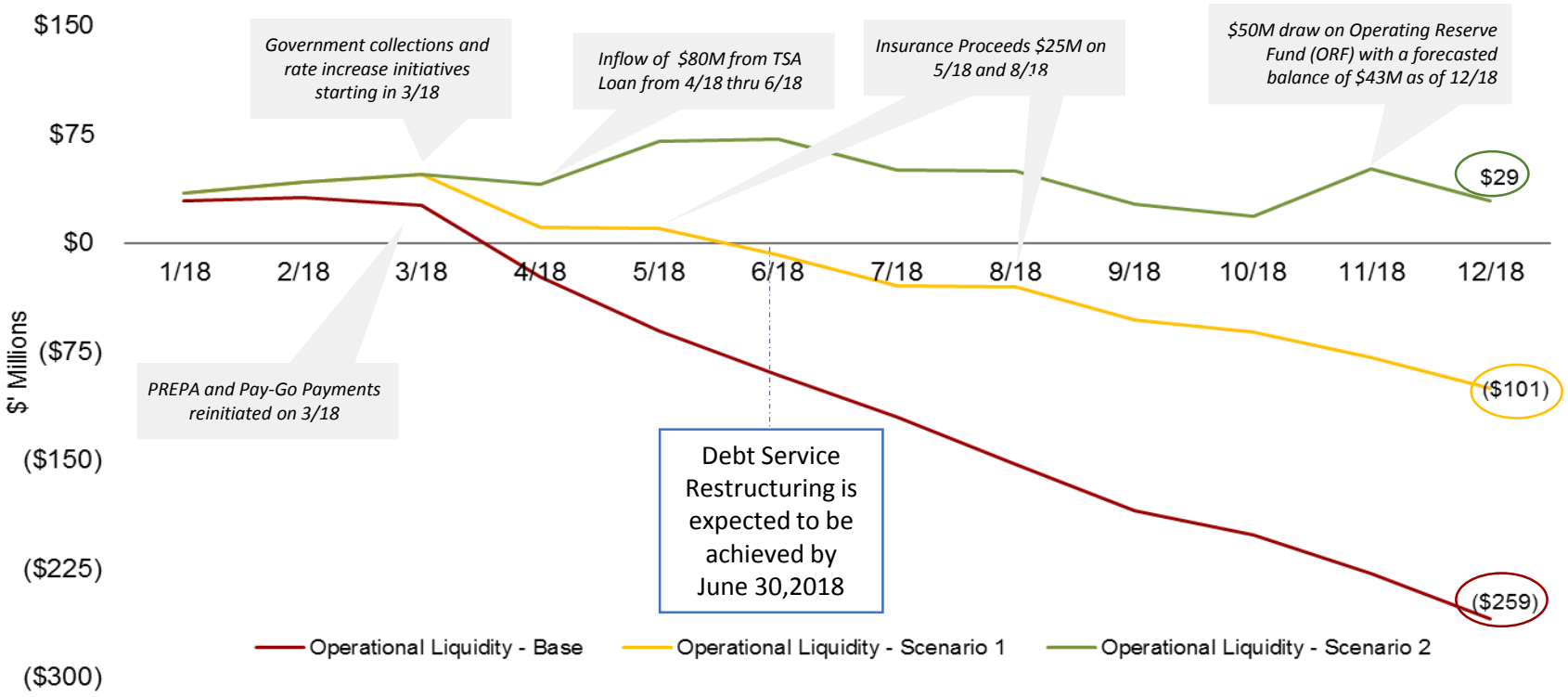
Base Scenario:
- PRASA used as baseline FY2018 Budget (pre-Maria) and normalized such to actuals including initiatives impact
- Emergency disbursements are based on the available balance of outstanding Purchase Order forecasted by examining historical trends on PO dates vs. payments
- Reimbursements reflects advanced amounts and identified unobligated Project Worksheets

CIP:

- Funding from Operations to the Capital Improvement Program amounts $122M
- Includes 10% on Emergency Works, assuming FEMA will provide for 90% of the costs

Projected Cash Position

Operational liquidity scenarios ($m)



Base Scenario:
$162M on PREPA & Pay-Go payments

Scenario 1: Base+ Initiatives + forbearance agreement during FY2018 and Insurance Proceeds

Based on Fiscal Plan scenario, including initiatives impact, prior to debt restructuring or new financing impact

Scenario 2:
Scenario 1 plus TSA loan funding and ORF utilization

In case no debt restructuring is achieved promptly, the only viable scenario is Scenario 2

Cash Management

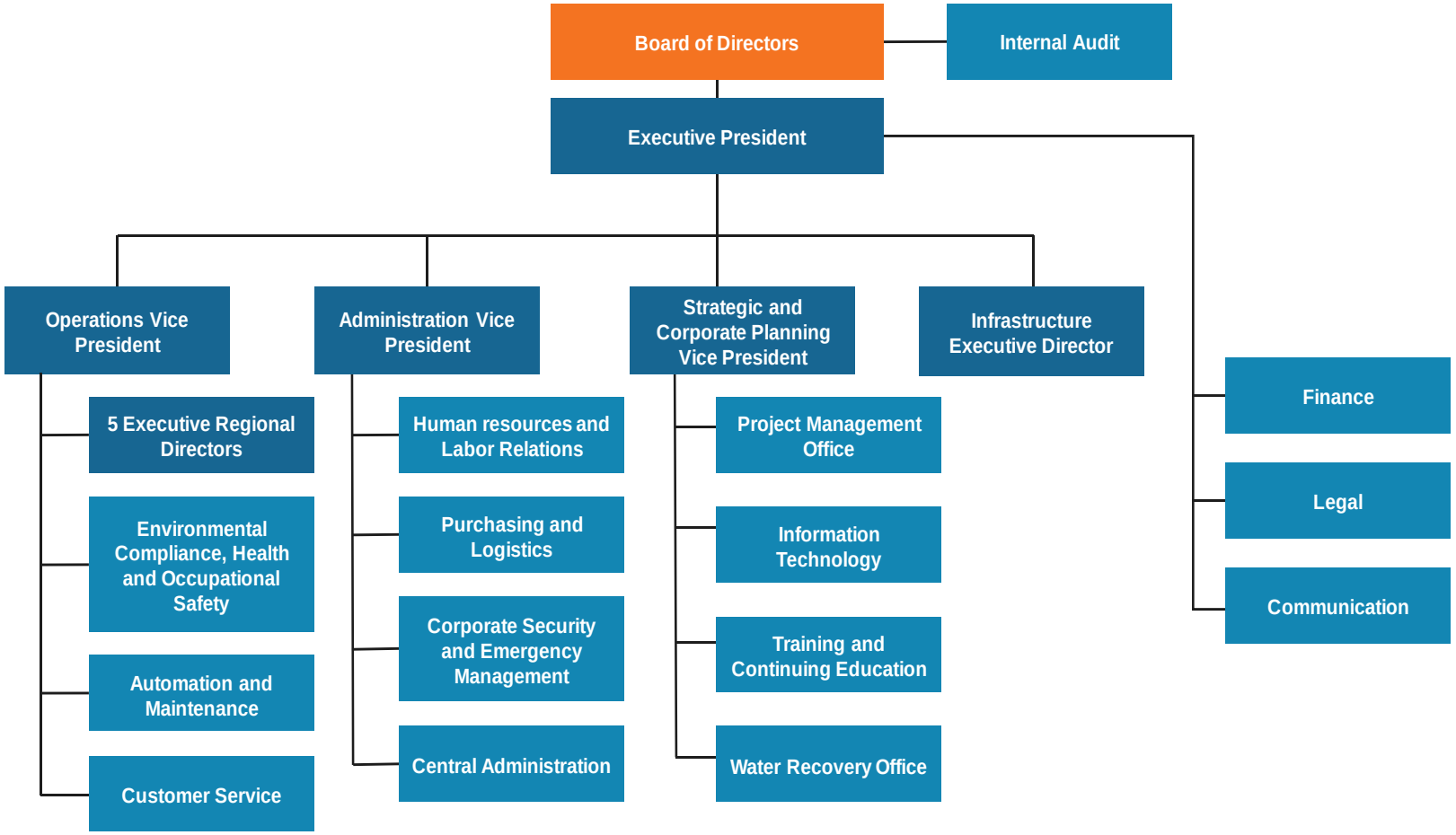
Cash Management
Closing Remarks

As presented, as part of PRASA's Cash Program, management has further measured potential levers and implemented several initiatives to seek to improve/sustain its near term liquidity through December 2018.

- To date, PRASA has preserved near-term operational liquidity by:
  - delaying inter-governmental disbursements, including PREPA and Pay-Go payments
  - executing forbearance agreements to defer $58M of annual debt service payments
  - Implementing the planned rate increase on January 1, 2018 resulting in a $4M positive impact on revenues in 2018 and $19M for the first two quarter of FY 2019
- For the **baseline cash flow scenario** PREPA and Pay-Go related payments are expected to be resumed on March with a final cash need of **$259M**
- **Scenario 1**: If PRASA successfully implement the revenue increase initiatives, receive $50M in insurance proceeds and maintain its current forbearance agreement until the end of calendar year 2018 (assuming no-prior debt restructuring agreement with USDA/USEPA), PRASA liquidity will be improved by over $158M but still a negative cash balance of **$101M** will remain by December 31, 2018.
- **Scenario 2**: If in addition to the measures included in Scenario 1, PRASA receives a loan from TSA by $80M and use $50M from the Operating Reserve Fund, the final cash balance by December 31, 2018 will be of **$29M**
- Potential sources of federal funds, except form FEMA funds, were excluded from all the scenarios
- **Cash flow projections may improve if a debt restructuring agreement is reached by June 30, 2018**

Contents

Organizational Structure



Each position at PRASA has specific requirements regarding education, qualification and experience which should be complied with to cover the position

Governing Board Composition

Act 68-2016 structured PRASA's Board of Directors with **7 members**

4 Independent directors appointed by the **Governor of Puerto Rico**

- 1 Authorized professional engineering (PR licensed) with 10 years of practice experience.
- 1 Attorney with 10 years of practice experience within PR.
- 1 Person with vast knowledge and experience in corporate finance.
- 1 Professional with expertise in any fields related functions delegated to PRASA

1 Customer representative selected by election supervised by Department of Consumer Affairs (DACO)*

1 Executive Director of the Mayors Association

1 Executive Director of the Mayors Federation

Act 2-2017

1 **Act No. 2-2017 provides that the Executive Director of the Puerto Rico Fiscal Agency & Financial Advisory Authority**, or his designee, shall be a member of any Board of the entities considered "covered territorial instrumentalities" under PROMESA.

Act 68-2016 provides for a **diversified & professionalized** Governing Board

***Act 68-2016** provides that the 2 current Board members representing customer interests shall remain in their office until their term expiration (June, 2020). Then, the costumer's representative shall serve for a 3 year term.

Governance

Governing Board Selection & Terms

Selection Process

- Independent directors shall be selected from a list of **at least 10 candidates** to be prepared and submitted to the Governor by a recognized executive search firm for board of director recruitment for institutions of similar size, complexity, and risks as PRASA.
- The identification of candidates by such firm shall be based on objective criteria such as educational and professional background, and at least 10 years of experience in their field.

Current legislation assures an **independent** selection process and determines **staggered terms** to isolate the Board from political cycles, granting **continuity** to PRASA's strategies implementation

Terms

- **Act 68-2016** establishes staggered terms for the independent directors to avoid political influence:
  - **2** members with **6-year term**
  - **2** members with **6-year term**
  - As the terms expire, the successors term will be for **5 years**
- The other members are ex-officio or selected by the consumers

Requirements

- A detailed set of prohibitions and requirements is included in Act 68-2016 applicable to PRASA's Governing Board members, as well as Executive Directors, all employees and contractors to ensure independence and elimination of political influence

Executive Officers

- PRASA's Executive Officers shall be those appointed by the Board and shall include:

  Executive President

  The **Chief Officer**, based solely on experience, ability, and other qualities that especially enable them to achieve the purposes of the Authority.

  Infrastructure Executive Director

  Professional Engineer's License of Puerto Rico with experience in activities related to the development and management of infrastructure projects.

  5 Regional Executive Directors

  From the Metro, North, South, East and West Regions

  3 Vice Presidents

  Operations, Administration and Strategic & Corporate Planning

- Main functions are established by PRASA's Enabling Act, in addition to those delegated by the Board

- The President and the 6 Executive Directors will have a 5-year term as established by Act 68-2016

An experienced **Management Team** has reflected in the past a successful internal career succession plan.

Strategic Plan

Current Strategic Plan is Under Revision to be Aligned with the Fiscal Plan

2014 PRASA developed its first **Strategic Plan**

which started with the establishment of the MISSION VISION

from which **5** STRATEGIC INITIATIVES were created

- Fiscal Health
- Operational Excellence
- Infrastructure Sustainability
- Technological Innovations
- Organizational Transformations

PMO

centralize all management, planning, and execution of its Strategic Plan and related initiatives and programs, data control, and KPI monitoring.

moving ahead 2018

PRASA is developing a revised version of the **Strategic Plan**, to be aligned with **"Plan para Puerto Rico"**

maintaining the main basic elements, but focusing in **3** MAIN AREAS OF INTEREST

1. Non Revenue Water Reduction
2. Water Quality and System Resiliency
3. Financial Sustainability

Governance

PMO Review

- PRASA's Project Management Office resides within the Strategic & Corporate Planning division.
- The PMO's framework setup is based on the integration of the Effective Utility Management 5 keys to management success and their ten attributes.
- Under its structure, the PMO will serve as a liaison between the departments and the Key Performance Indicators set up within the Strategic Plan, thus, providing transparency, control, and accountability throughout the organization.
- The economic results achieved will be reinvested within the corporation in route to fiscal sustainability.

GROUNDWORK → PLANNING → BUSINESS CASE → EXECUTION → MEASURING SYSTEM → LESSONS LEARNED

Key Performance Indicators

Current KPIs Under Revision to be Aligned with the Revised Strategic Plan

Top Revenue Increase KPI's

1 Collection vs. Net Billing

Looks to improve or increase the amount of actual collections in relationship with PRASA's Billing Budget.

2 Billing Adjustments

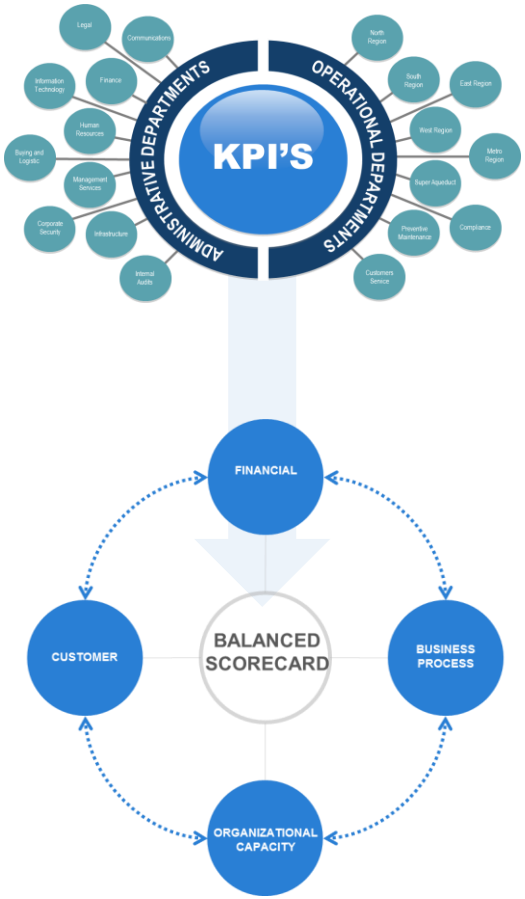
Looks for ways to diminish the amount of gross billing adjustments carried out every month.

3 Service Interruptions

Looks for ways to reduce the amount of service interruptions and to achieve a better excellence in service.

The KPI Manual details the 25 performance indicators that PRASA has been using for the past years. It specifies for each KPI:

- Name
- Strategic Initiative
- Description
- Variables
- Mathematical Expression
- Delivery Deadlines



Top Cost Reduction KPI's

1 Employees per Connection

Measures the efficiency of the employee's usage per every connection within the Island.

2 Overtime

Compares the amount paid in overtime with the amount paid in payroll

3 Customer Service Complaints

Looks to reduce the amount of customer service complaints.

4 System Water Volume Input (MGD)

Looks to report and reduce the average amount of water produced in millions of daily gallons during the period studied

5 Electrical Consumption

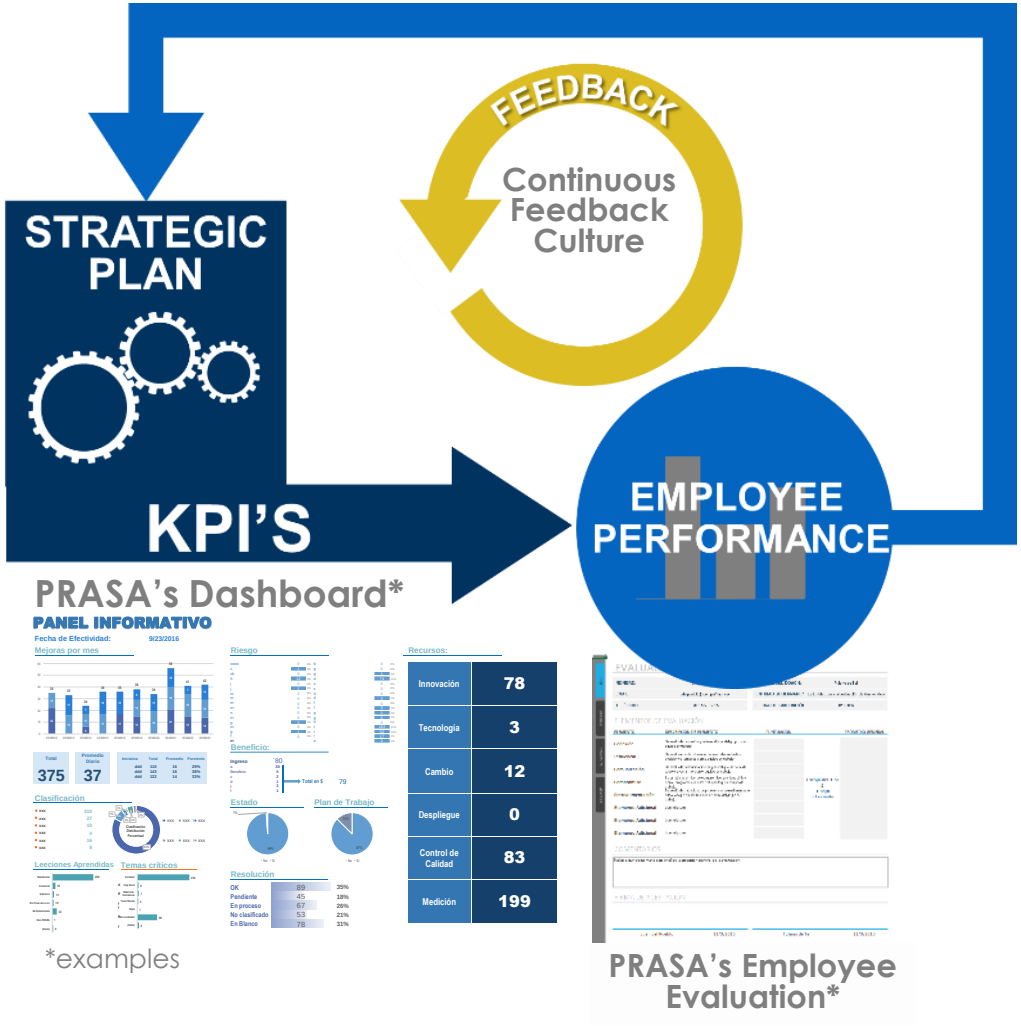
Looks for ways to reduce the electrical consumption within PRASA's facilities.

Accountability

The quantity and complexity of PRASA strategic initiatives to be implemented represents a Project and Change Management major challenge for any utility in the world. PRASA has develop a Governance Program in order to succeed in this goal

Creating an organizational culture of measuring results and sustainable responsibility spread throughout the organization

Employee's responsibilities will be directly related to the Strategic Plan and PRASA's KPI's and closely monitored to assure accountability

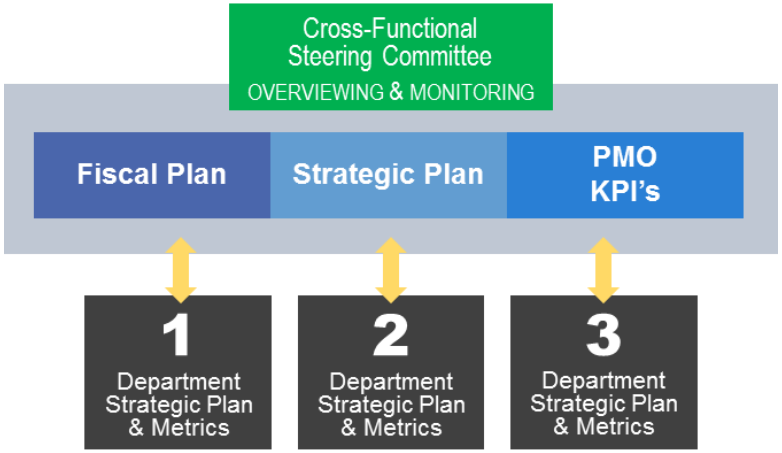


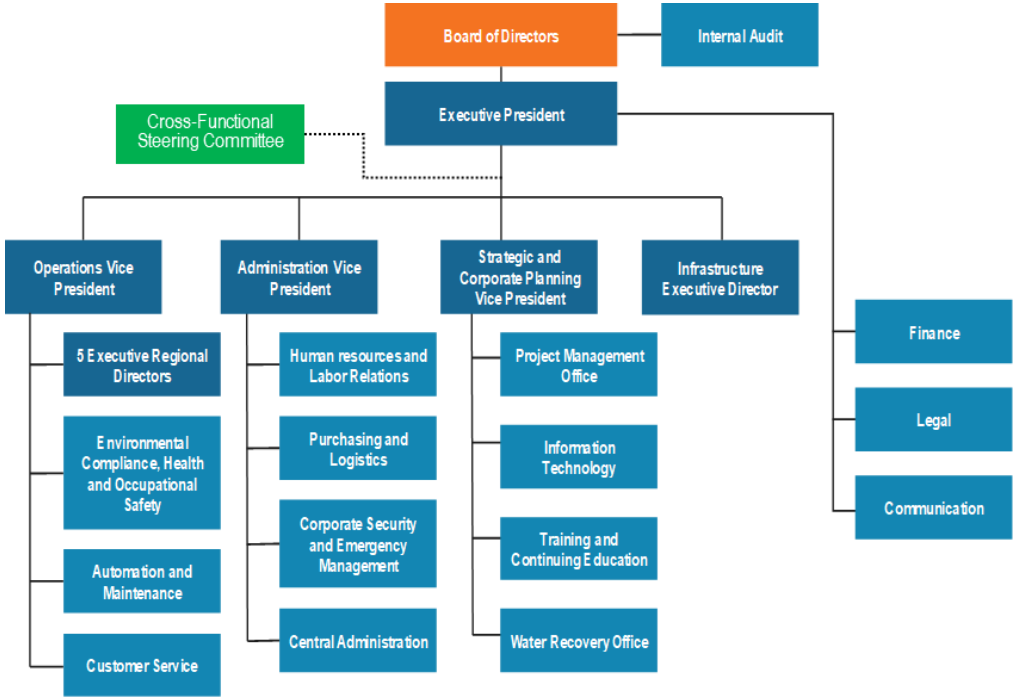
Governance

Cross-Functional Steering Committee

The Cross-Functional Steering Committee (CFSC) will consist of upper management professionals from different functional areas tasked with overseeing the implementation, and monitoring any deviation of the Fiscal Plan and Strategic Plan

By analyzing current risk factors, the CFSC will recommend actions to meet the goals established





Ownership & Accountability throughout the organization

Governance

Post-certification reporting
Financial Reporting

Post-certification reporting requirements

Report type	Detail	FOMB reporting cadence	Public reporting
Budget to actuals	• Tracking of budgeted to actual cash flow per budget certification agreements with FOMB package, including: – Explanation for material variances (>10% and >$1 million or >$10 million) – Accounts receivable by type of client (residential, commercial, industrial and government) – Schedule with amounts owed by each government client – Income Statement	• Monthly after budget is certified	Monthly reporting of headline I/S numbers and including summary A/R and A/P; B/S reported once per year. Begin upon budget certification
Liquidity	• 13-week cash flow report including: – Accounts payable and accounts receivable roll-forwards – 12 common weeks analysis to track material changes	• Weekly until restructuring, monthly after	Cash flow actuals reported bi-weekly upon FP certification and monthly thereafter
initiatives	• Development of FP initiatives timeline and actual impact tracking	• Implementation schedule development to occur 2-month post certification; subsequent quarterly reporting	

Post-certification reporting
CIP, Resiliency and Water Quality

Post-certification reporting requirements

Report type	Detail	FOMB reporting cadence	Public reporting
CIP: Revisions + implementation plan tracking	• 5-year CIP revisions after damage assessment are finalized and post-restructure revisions to fiscal projections; concurrent revisions/tracking of CIP implementation plan per agreed-upon template	• *Program revisions:* Annually + once post-restructure, once post damage-assessment • *Implementation plan:* Revisions submitted with above program revisions; subsequent quarterly updates	CIP implementation pipeline + milestones summary: upon completion of damage assessment and quarterly thereafter
Resiliency and reliability goals and KPIs	• Overall: Development of long term resiliency and reliability goals and KPIs to meet. subsequent reporting of progress. • Step 1: Develop contracted consultant scope of work + time and cost estimate for help to develop resiliency goals and KPIs, prioritization, cost benefit analysis	• Submit "Step 1" to FOMB by 1 month post-certification • Goals/KPIs developed over 12-18 months with interim reporting milestones *(TBD after consultant scope of work submitted)* • Subsequent quarterly reporting	
Water Quality KPIs and environmental compliance	• Report of SDWA and CWA water quality violations KPIs + breakout of monitoring vs. quality violations; Highly detailed compliance reports available upon FOMB request	• Monthly: Summary of KPI dashboard including monitoring/quality violation breakout	Annual Consumer Confidence Report

Fiscal Plan Implementation

- PRASA has in place an independent and professional Governing Board and Management, capable to implement the proposed Fiscal Plan.
- In the past, PRASA has demonstrated it is capable of complying with its goals and has already in place a KPI system to evaluate the results of the key strategies and take opportune actions when needed.
- The PMO office, which is under the Vice President of Strategic & Corporate Planning, is a key component for the implementation and monitoring of the Fiscal Plan Initiatives.
- The KPIs to be defined to monitor and ensure the Fiscal Plan objectives are achieved will be periodically updated and published to assure accountability and transparency of PRASA's actions and execution.
- Also, a successful succession plan has proven to be possible at PRASA, which will grant the continuity regarding the execution of its goals and initiatives as defined in both, its Fiscal Plan and its Strategic Plan.

PRASA will set a team, coordinated by the PMO, to assure the timely and successful implementation of each of the Fiscal Plan initiatives, creating a specific set of KPIs to monitor the compliance with the plan and defining the adjustments to make to ensure the projected results are attained if deviations to the objectives arise

Contents

Key risks and mitigation strategies

Potential risks in implementing the Fiscal Plan	Mitigation Strategies
Lack of political will to increase rates as needed and recover planned and approved costs	Specific requirements to increase rates by the Master Agreement of Trust (rate covenant) and environmental regulation imposing criminal charges on the ones who impede compliance with the Consent Decree. Also moderate rate increases are less likely to face strong opposition.
Limited ability to access the capital markets to finance the Capital Improvement Program (CIP)	Limitation of the CIP to the minimum possible to maintain the system operating. Increase rates to self-finance the CIP
Under-delivery of CIP to address infrastructure needs and comply with EPA requirements	Environmental Agreements (Consent Decree and Agreement with the PR Department of Health) amendments
Under-delivery of projected initiatives	CIP reduction, debt restructuring and or changes in the rate structure
Changes in payroll legislation which would impact projected expenses	Payroll cost was calculated applying Act 26-2017 protecting PRASA from incremental labor costs
Lack of capable resources on the mid-management sector to execute the Plan	Effective Project Management Office will drive the implementation of the Fiscal Plan

Key risks and mitigation strategies

Potential risks in implementing the Fiscal Plan	Mitigation Strategies
Consumption and collection rates lower than projected	Aggressive collection strategy and performance incentives or penalties will be included in the private operators compensation structure (under P3 Project) based on performance and metrics
Natural events like drought or hurricane	Revaluation of the Fiscal Plan, including potential CIP reductions and changes in the rate structure
Delayed or no interest in the main two initiatives of the Plan: P3 Project – Metering/Customer Experience and Hydros	
Potential changes in legislation affecting PRASA's financial projections	
Lack of willingness from investors to restructure debt	
Electricity cost increase over projected prices	

Fiscal Plan Risks
Closing Remarks

- PRASA is presenting a **12-item risk** list of implementing the Fiscal Plan with the respective **mitigation strategies**.
- Special considerations should be given to following risks:
  - Lack of willingness from investors to restructure debt
  - Limited ability to access the capital markets to finance the Capital Improvement Program (CIP)
  - Consumption and collection rates lower than projected
  - Electricity cost increase over projected prices
  - Impact of natural disasters and system resiliency
  - Successful and timely implementation of all proposed initiatives
  - Potential changes in labor costs
- Additional mitigation strategies could arise as well during the implementation of the Fiscal Plan based on risks specifics

Additional risks may arise during the implementation of the Fiscal Plan which may need to be addressed timely to avoid any impact on the financial projections included herein

Contents

Fiscal Plan Drivers

A Viable Fiscal Plan was presented, reflecting the Authority's Fiscal Goals, ensuring system and debt service sustainability

Our fiscal path for the next years

- Increase in Revenues
- Cost Savings
- Improving customer satisfaction and experience
- Increasing water availability and reducing service rationing potential
- New Financing through partnerships with the private sector and others
- Capital Improvement Program focused on water quality reoriented to system recovery and resiliency as well as to NRW reduction

Viable Plan

Viable Fiscal Plan

- PRASA must maintain its system to assure the provision of an essential service and comply with federal environmental regulations, safeguarding the health of the population and the environment of the island
- PRASA has identified several measures to develop a viable fiscal plan, which have been materially affected by the Hurricanes impact and changed management priorities
- Even after suffering the impact of one of the major hurricanes in Puerto Rico history, PRASA adjusted its projections to present a viable solution to the current financial situation
- A certified Fiscal Plan will create confidence in PRASA's financial projections allowing for the much needed market access and investors' interest to:
    - Partner with PRASA to implement operational initiatives as for example the P3 for Commercial Services activities
    - Obtain funds to finance the CIP
    - Restructure/renegotiate PRASA's outstanding debt
- **Provided that PRASA can access the market and restructure its debt, PRASA may be able to implement a viable Fiscal Plan based on rates affordable to its customers.**