



Puerto Rico Aqueduct and Sewer Authority  
GOVERNMENT OF PUERTO RICO

# DRAFT SUBMISSION - SUBJECT TO MATERIAL CHANGE

## Revised Fiscal Plan

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

WORKING DRAFT AS OF

January 24, 2018

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# Important Considerations

- The purpose of this submission is to comply with Oversight Board mandated deadline of January 10, 2018 for submission of a draft amended and restated fiscal plan. As set forth below, certain challenges make submission of a fully developed fiscal plan at this stage difficult if not impossible. This submission is 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 and AAFAF **best estimates** considering the limited information available, as well as the limited timeframe provided to prepare this amendment to the Certified Fiscal Plan.
- The assumptions presented for projected billings reduction, including macroeconomic forecast impact, the deficient service credit, the collections rate and other variables will be updated as more information becomes available. However, a minor change on any of these variables may significantly affect the revenue projections included herein.
- At this time PRASA neither AAFAF can provide certainty on the total impact that Hurricanes Irma and Maria had on the financial projections, specifically on revenues, expenses and on the capital improvement program; nor of the funding amounts to be recovered from the insurance coverages and from FEMA. PRASA and AAFAF continues to assess and estimate the damages suffered, and is 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, neither from potential drought, new hurricanes or other natural disasters.
- 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.**



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Introduction

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Hurricanes Impact

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Baseline Projections – Initial Financial Need

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Initiatives - Reducing the GAP

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Debt Service Sustainability

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Governance and Fiscal Plan Implementation

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Risks and Mitigation Strategies

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Viable Fiscal Plan



# 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, even while the Government's economic situation worsens.

- On the one hand, PRASA has managed **to sustain its revenues and control its expenses**. On the other, PRASA's rate structure was designed to provide sufficient funds to cover all of its operating expenses and current and projected debt service, but 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 in FY 2018**



- **Hurricane Irma (August 2017)**
- **Hurricane Maria (September 2017)**



# 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 recommendations from 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 financial consultants has prepared this **Revised Fiscal Plan**, which supersedes the ones presented in the past, to include updates and reflect the projected impact of Hurricanes Irma and Maria on the projected revenues, expenses and Capital Improvement Plan
- This Revised Fiscal Plan will cover a **5-year period**, starting on FY 2018, instead of 10-years as included in the prior certified Fiscal Plan
  - The timeframe reduction for the Plan was adopted to comply with the Oversight Board requirements
  - The 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 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/assignments**



# Hurricanes Impact Summary



## REVENUES

Billings and collections are expected to be materially reduced to reflect not only a credit for the period PRASA was not able to provide services, but also for the reduction in customer accounts and consumption due to the 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 has 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 (timing and structure for these proceeds are currently under development/negotiation)



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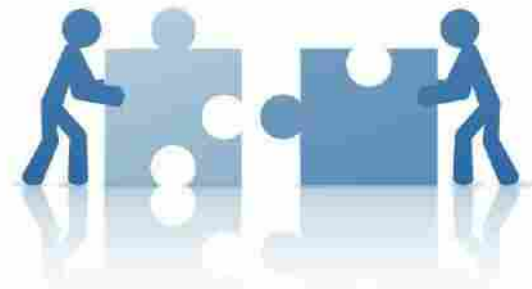




# Top Challenges after the Hurricanes

## 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

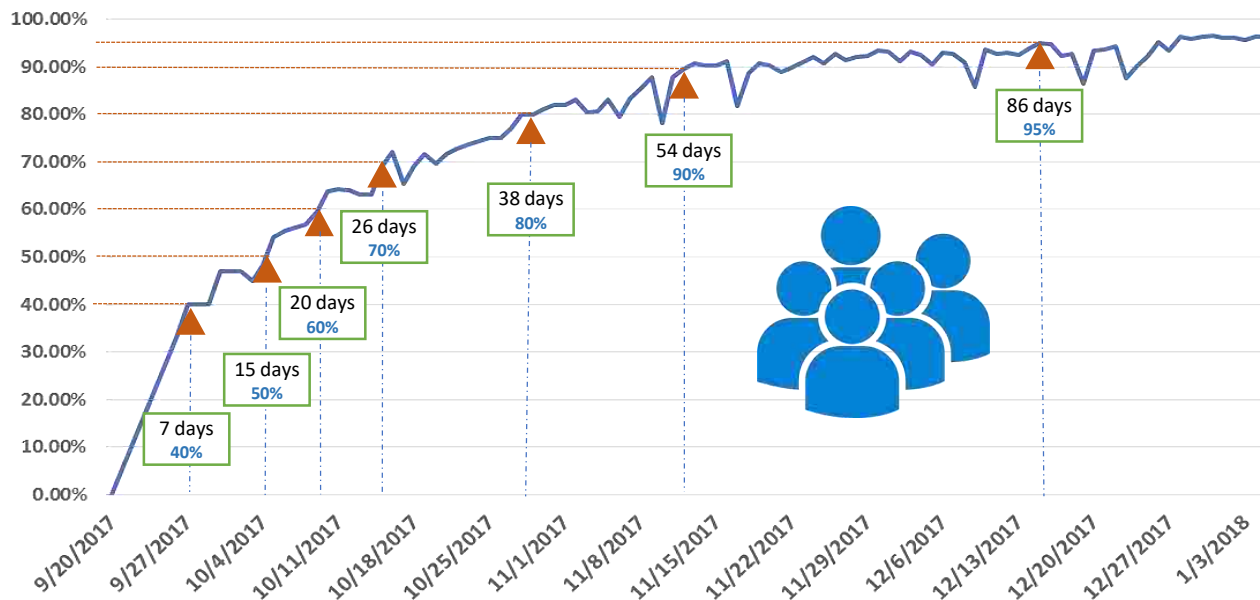


# Recovery Status



# Clients with service

## Evolution of Clients with Service



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

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)

1,229,365

total PRASA clients

1,184,824

clients with service



96%

Hurricanes  
Impact

# PRASA System complexity

PRASA's system complexity, including the large amount of facilities and its distribution throughout the island, make the recovery efforts a major challenge, which required great efforts to achieve high levels of service promptly, even more when currently around 60% of the facilities do not have electric service

8 DAMS



1,562 WATER TANKS



114 WATER TREATMENT PLANTS



254 WATER WELLS



143 WATER INTAKES  
14,753 MILES OF WATER PIPELINE  
5,994 MILES OF WASTEWATER PIPELINE



51 WASTEWATER TREATMENT PLANTS

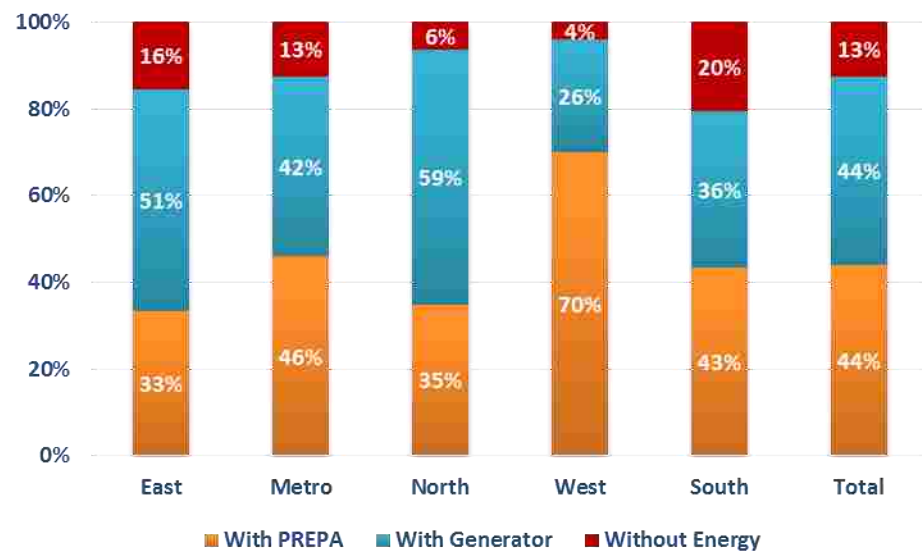


883 WATER PUMP STATIONS  
714 WASTEWATER PUMP STATIONS



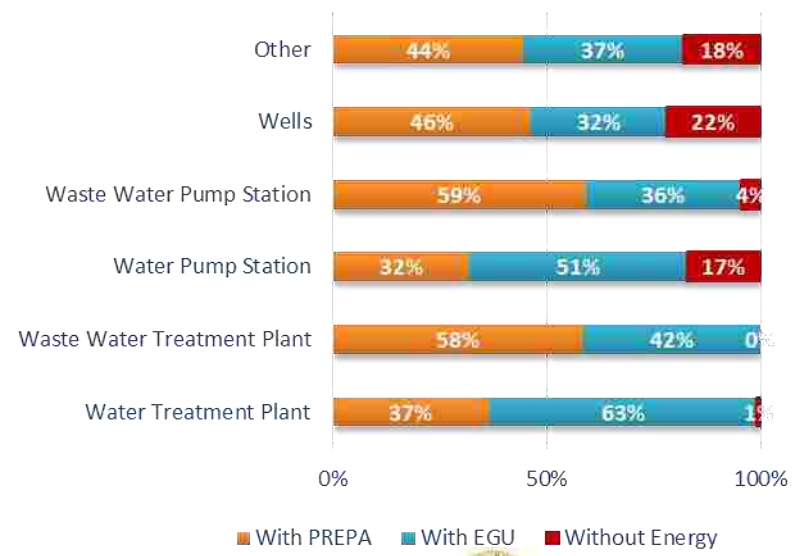
# Energy Status by Facility

Facilities with and without Energy by Region



Without PREPA: **57%**  
Without Energy: **13%**

Energy Status per Facility Type



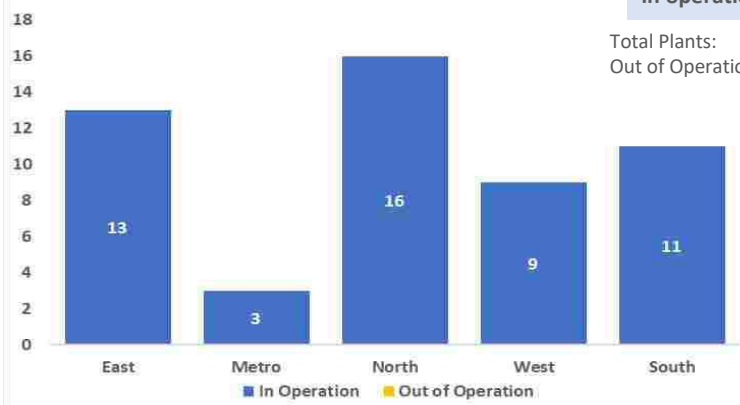
# Current Situation

Restoration of the potable water system, the operation of the treatment plants and wells.

## Water Treatment Plants

**96%**  
in operation

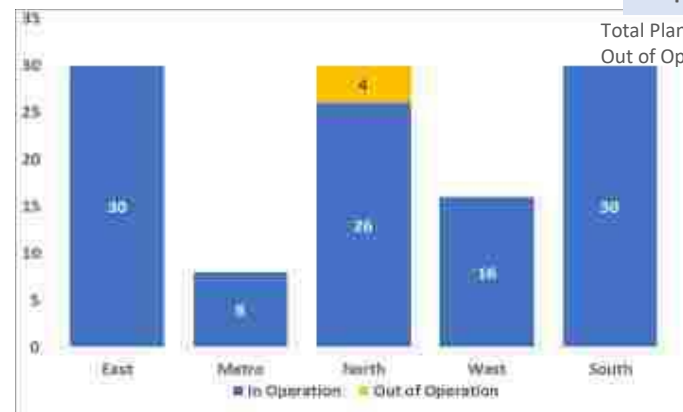
Total Plants: 114  
Out of Operation: 4



## Wastewater Treatment Plants

**100%**  
in operation

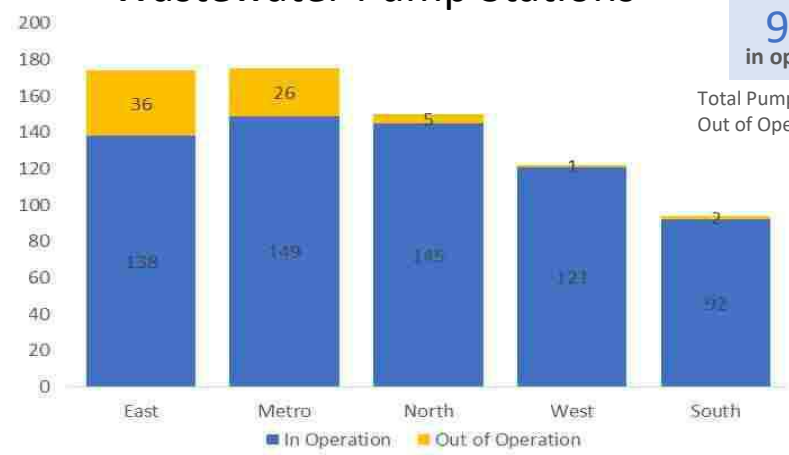
Total Plants: 51  
Out of Operation: 0



## Wastewater Pump Stations

**90%**  
in operation

Total Pumps: 715  
Out of Operation: 70



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

Hurricanes Impact

# Commercial Services

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

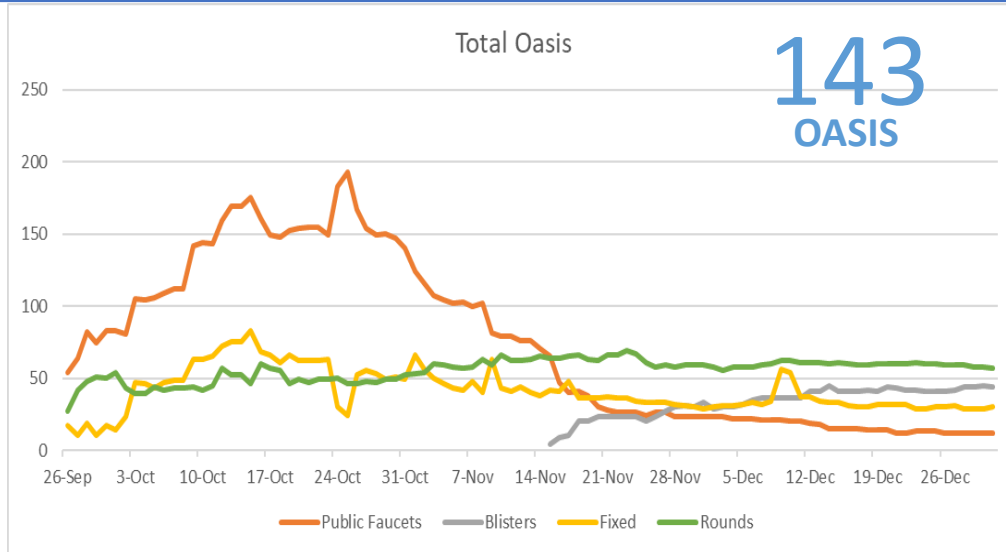


2 Still Closed Commercial Offices

10 Open Commercial Offices

# Oasis - Water Distribution to Customers in need

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**  
**500K**  
customers served  
during the  
emergency



Hurricanes Impact



# Next Steps



Continue Recovery phase to sustain and resume operations



Complete damage assessment



Continue efforts to obtain all information needed for FEMA and insurance claims



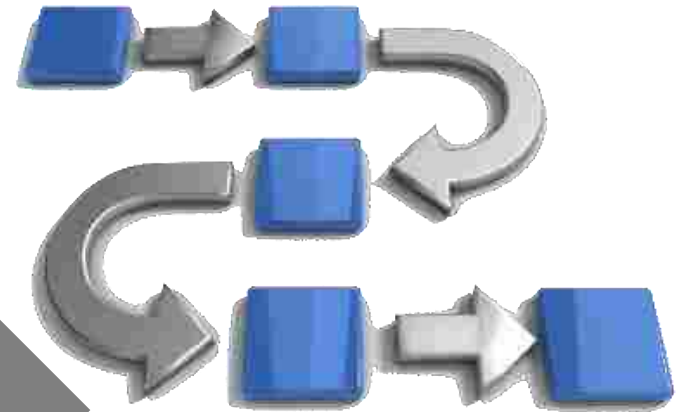
Continue EGU logistics



Continue efforts to repair all damaged infrastructure



Establish a timeframe to normalize operations



# 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 compliances 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

221,214 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 - Summary



## 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



## Reporting and Process Control

All activities related to daily based compliance procedures are expected to be normalized starting on January 2018

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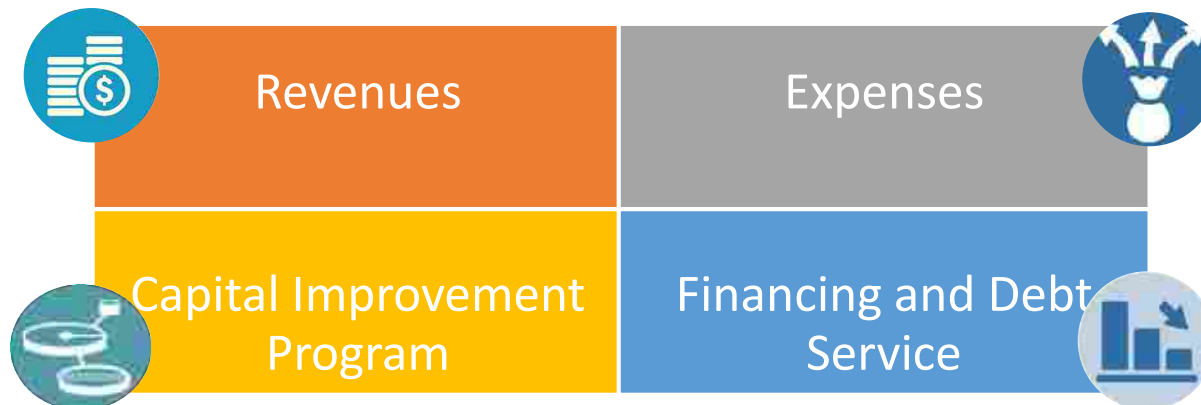
8

Viable Fiscal Plan



# Projections Components

- The Baseline Projections include the expected impact of all the ongoing initiatives, 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 Pre and Post Hurricanes.



# Revenues

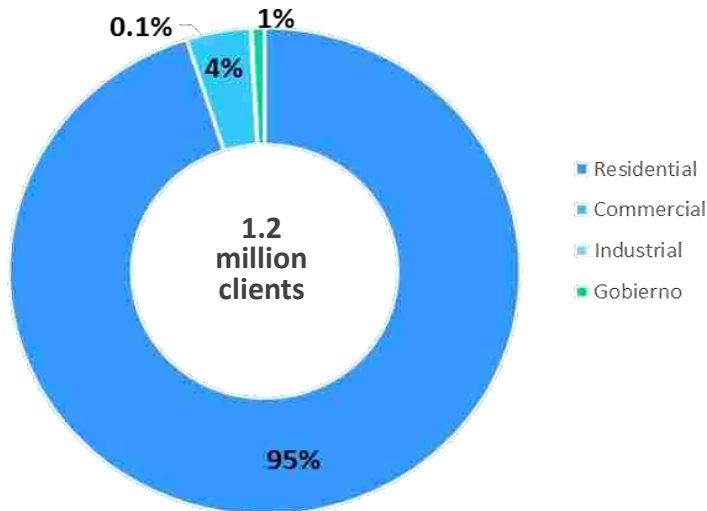
- Baseline
- Projections
- 
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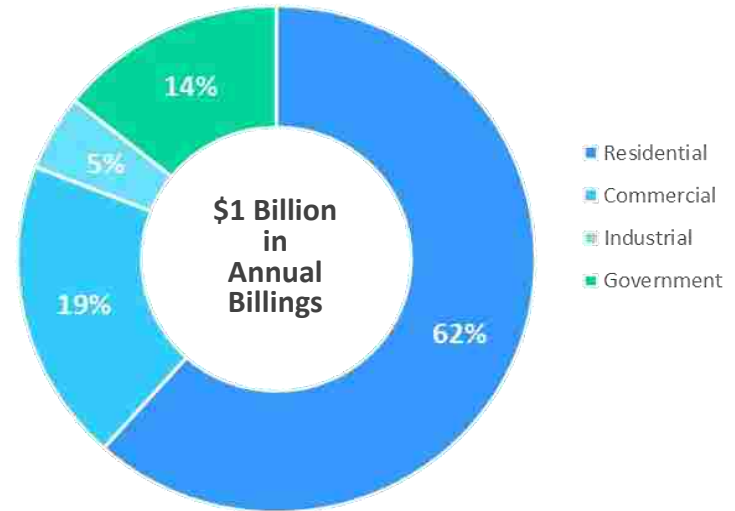
# Revenue and Customer Base FY 2017

Revenues	Expenses
Capital Improvement	Financing and Debt Service

**FY2017 Customers Breakdown**



**FY2017 Revenue Breakdown**



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

Baseline  
Projections





# General Assumptions

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- Revenues for the months of July to November reflect actual collections
- To project future revenues, actual data of billings as of December 31, 2017 was used
  - Covering around 70% of PRASA’s customers
- Projected revenues for January 2018 to June 2018 were estimated applying the following factors:
  - 1 **Delayed billing** process (meter readings are performed manually and it takes PRASA 60 days and 40 bi-monthly plus 18 monthly cycles to close a full billing period – See prior slide)
  - 2 Actual **consumption reduction** as a result of: (a) the period with service interruptions and (b) the expected decrease in population and 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 meters may be inaccessible, damaged, etc.)
    - 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



1

# Delayed Billings

Revenues	Expenses
Capital Improvement	Financing and Debt Service

## 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**



## 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 will be billed covering a 120-day consumption period.
- As usual, the billing is divided into two bills, for example:
  - Clients with meters last read on July 20, 2017 were not read on September 20, 2017 and will be read again on November 20, 2017, covering a period from July 21 to November 20.
- The full reading cycle will be finished around January 15, 2017: each labor-day a different cycle is read, and PRASA needs 60 days to read all its meters
- Payment term for customers was extended from 21 to 45 days



Revenues	Expenses
Capital Improvement	Financing and Debt Service

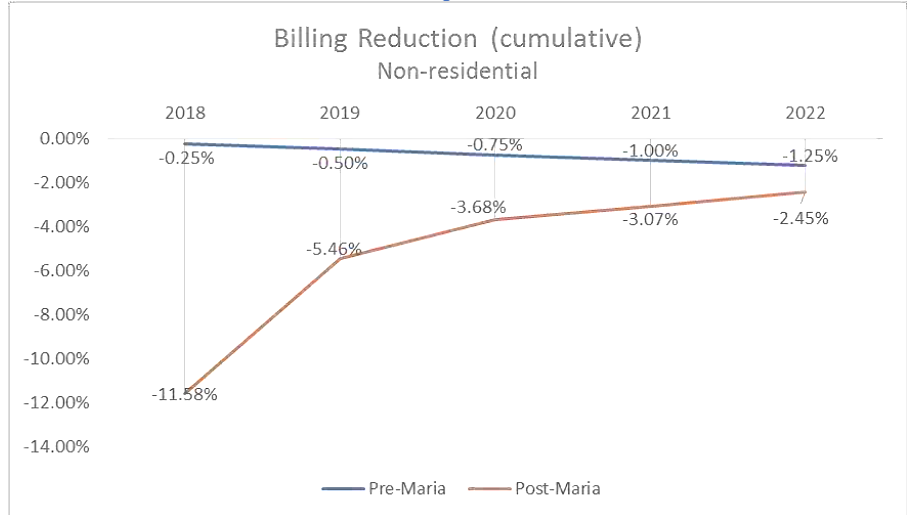
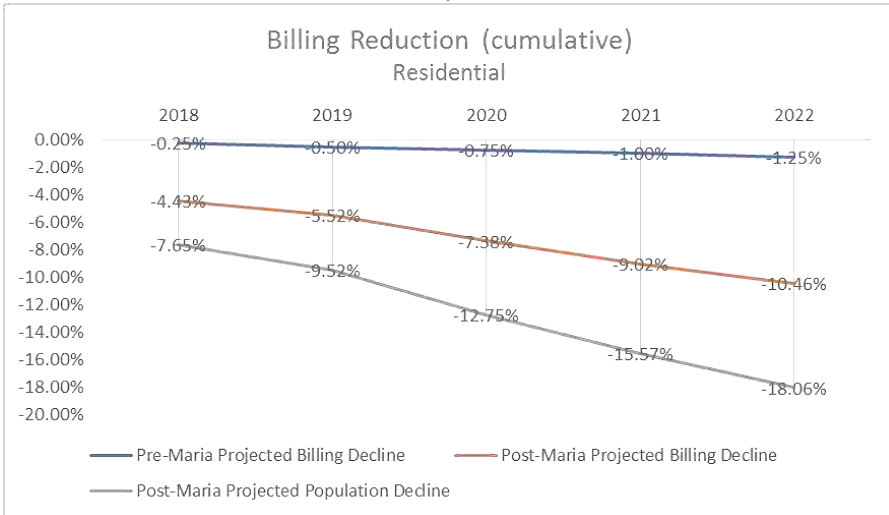
# 2 Macroeconomic Trends

## 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 over 10% by FY2022 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 11.6% on FY2018 and gradually recover thereafter



Baseline Projections

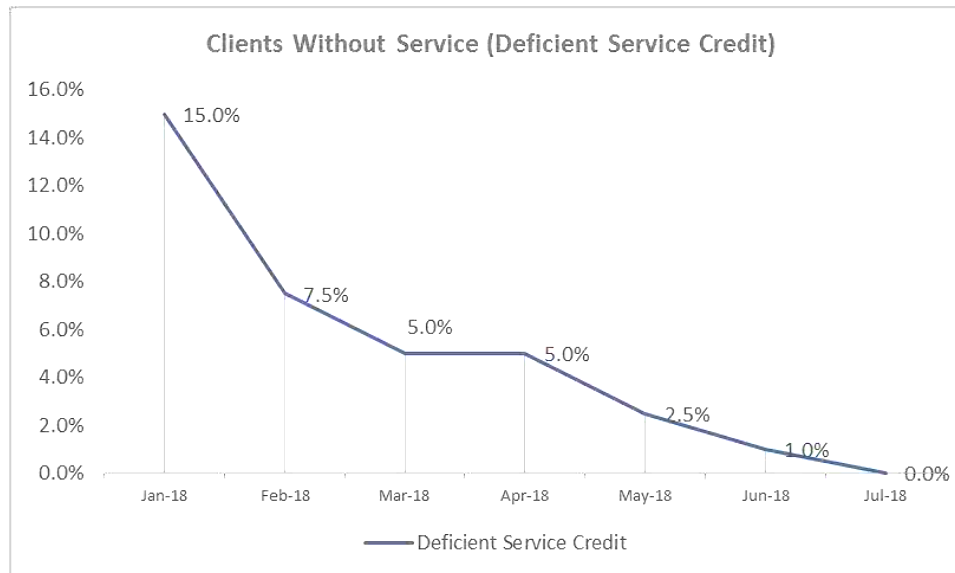
\* Commercial, Government and Industrial Accounts

## 3

# Deficient Service Credit

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- As required by PRASA's regulations, a deficient service credit it is being applied to clients without service
- The credit is projected based on the quantity of days without water service
- PRASA assumed the following billing reductions based on the expected credit to be applied to customers.
  - The gradual reduction reflects PRASA's expectancy of level of service
  - The deficient service credit for November and December billings was around 20%

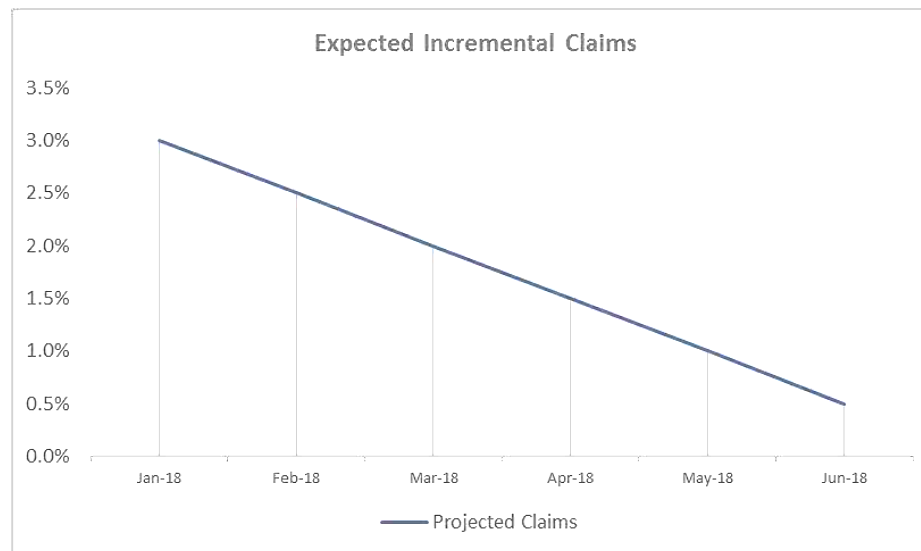


## 4

# Expected Claims

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- A higher amount of claims is projected during FY2018 as a result of **potential**:
  - a) Higher percentage of estimated water consumption (as meters may be inaccessible, damaged, etc.)
    - 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) Incorrect 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



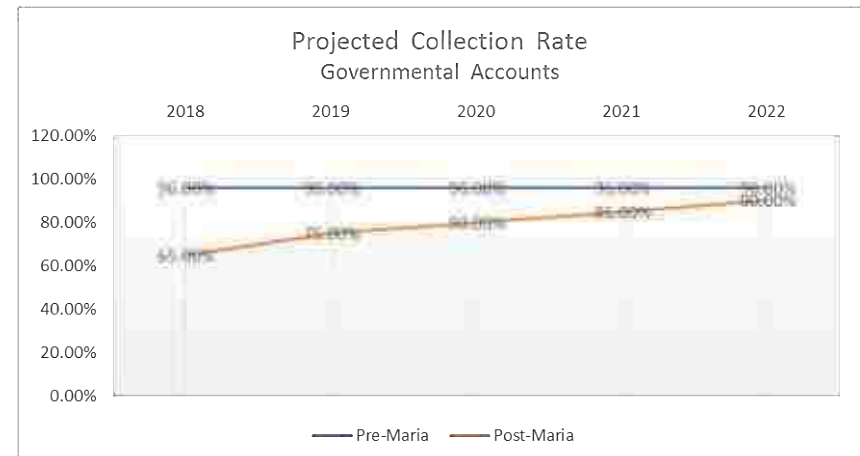
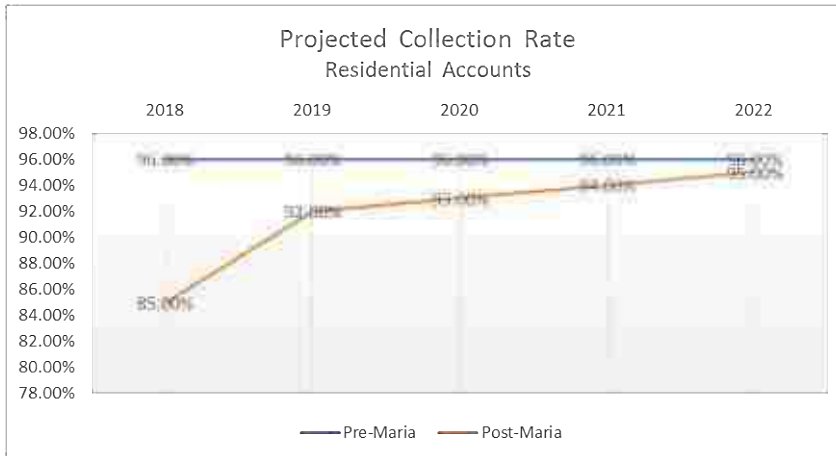
Expected impact of claims resolution benefitting the clients



# Projected Collections

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- 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 Governmental accounts, as follows:

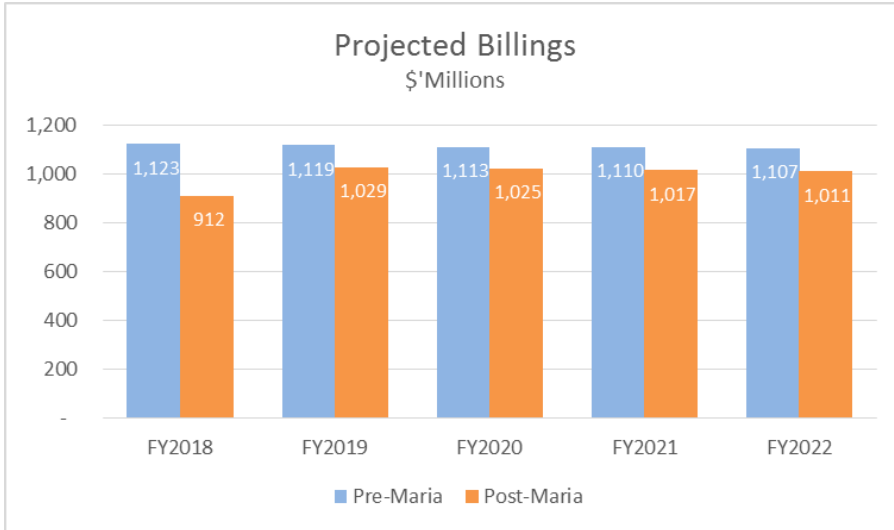


- The collections rate was applied based on a collection curve considering the extension of the payment terms mentioned previously
  - PRASA anticipates full recovery of the projected collections rate in a 3-month period for the remaining of FY 2018 and 2-months thereafter

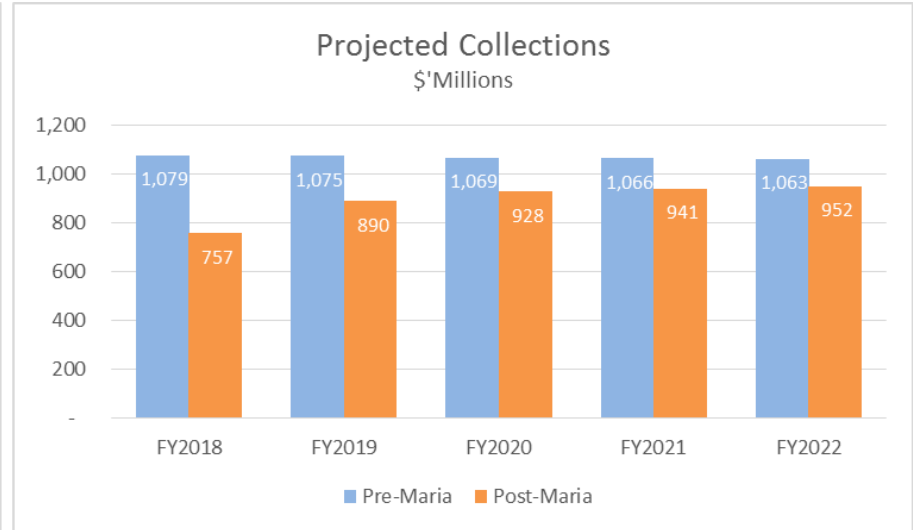
# Projected Operating Revenues Billing & Collections

Revenues	Expenses
Capital Improvement	Financing and Debt Service

## Net Billings



## Collections



**Reduction in Billings for the 5-year period**

\$579M



10%

**Reduction in Collections for the 5-year period**

\$883M



17%

Baseline Projections

# Adjusted Operating Revenues

Revenues	Expenses
Capital Improvement	Financing and Debt Service

in \$'Millions	FY2018	FY2019	FY2020	FY2021	FY2022	5-year total
<b>Pre-Maria</b>	<b>\$ 1,079</b>	<b>\$ 1,075</b>	<b>\$ 1,069</b>	<b>\$ 1,066</b>	<b>\$ 1,063</b>	<b>\$ 5,352</b>
Post-Maria	757	890	928	941	952	4,469
Insurance Proceeds (BI)	25	25	-	-	-	50
<b>Post-Maria Op. Revenues</b>	<b>\$ 782</b>	<b>\$ 915</b>	<b>\$ 928</b>	<b>\$ 941</b>	<b>\$ 952</b>	<b>\$ 4,519</b>
Change \$	\$ (296)	\$ (160)	\$ (141)	\$ (125)	\$ (112)	\$ (833)
Change %	-27%	-15%	-13%	-12%	-11%	-16%

After applying the assumptions explained throughout this section, revenues are projected to be **\$833M less** than expected for the 5-year period, even after netting the business interruption insurance proceeds



- Major drivers for revenue reduction:
- 1) Population and consumption projected decline
  - 2) Adjustment for deficient service
  - 3) Increase in uncollectible accounts



# Expenses

Baseline  
Projections

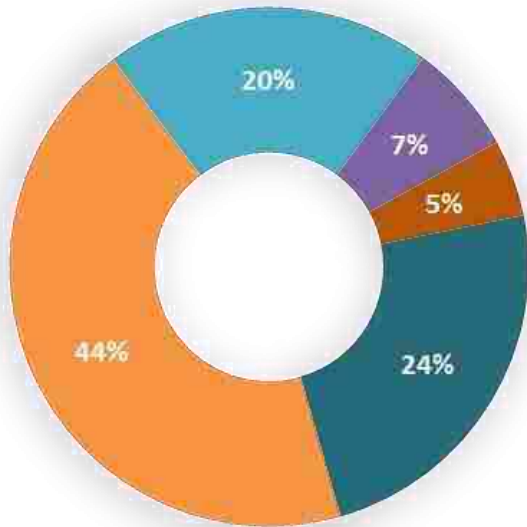


# Expense Assumptions Components

Revenues	Expenses
Capital Improvement	Financing and Debt Service

## Expenses Distribution

Based on FY2019 Projections

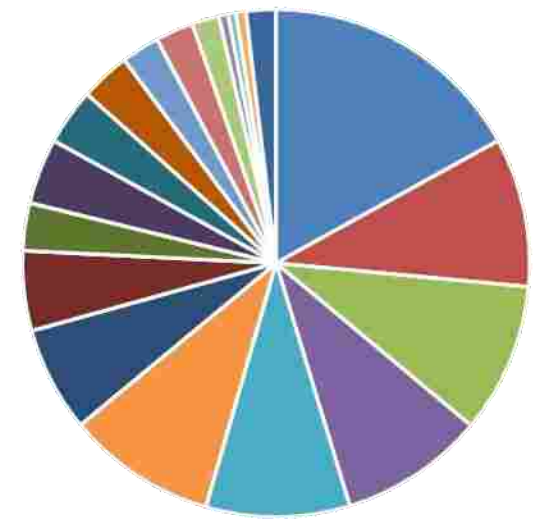


**2/3 of the budget is for Payroll and Electricity Costs**  
 When adding Maintenance and Chemicals, the four categories represent 76% of the total budget

- Payroll and Related, Net
- Electricity
- Maintenance & Repair
- Chemicals
- Other Expenses

- Professional Services
- Materials & Supplies
- Insurance
- Billings & Collections
- IT Services / Licenses
- Technical Assistance
- Water Purchase
- Security
- Asphalt materials and services\*
- Fuels and Oils
- Rentals

## Other Expenses Breakdown

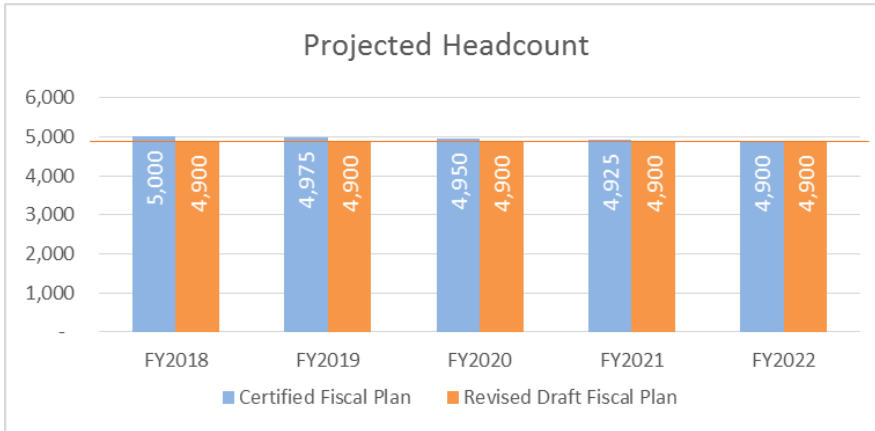


Baseline Projections

# Expense Assumptions Payroll

Revenues	Expenses
Capital Improvement	Financing and Debt Service

## Headcount

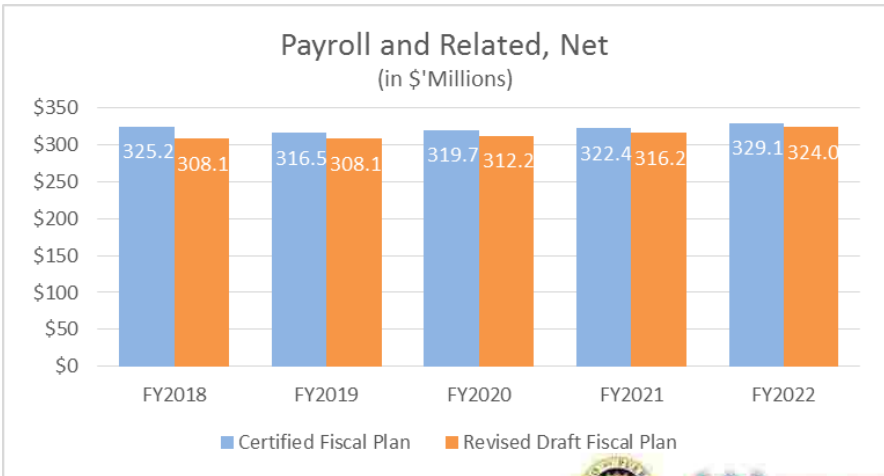


Employees were reduced to **4,900** starting in FY2018 for the revised Fiscal Plan based on current headcount levels and projections

## Payroll Cost

**\$44M<sup>1</sup>** in savings during the 5-year projected period as a result of:

- 1) Headcount reduction: \$11M
- 2) Pension cost PayGo revision based on FY2018 invoice from ERS<sup>2</sup>: \$35M reduction



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

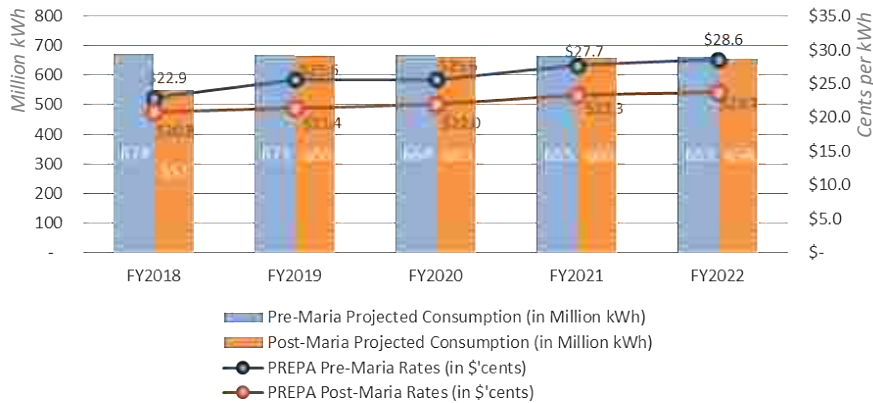
<sup>1</sup> Presented net of expense capitalization  
<sup>2</sup> Government Employee's Retirement System

# Expense Assumptions Electricity

Revenues	Expenses
Capital Improvement	Financing and Debt Service

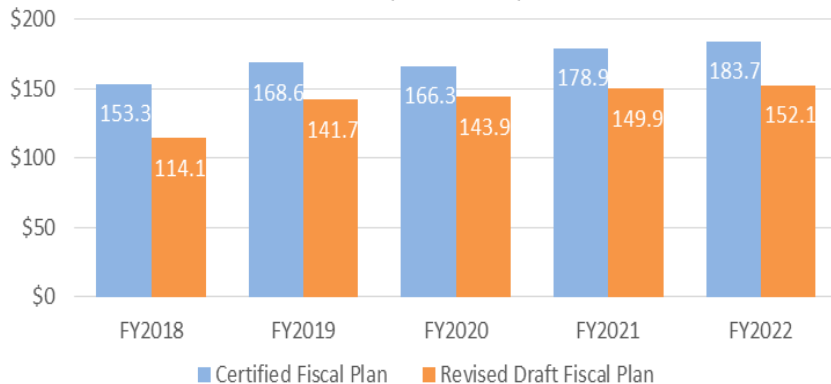
## Assumptions

Projected Electricity Consumption and Rates



## Projected Total Cost

Electricity Cost  
(in \$Millions)



## Key Assumptions:

- ✓ **PREPA Projected Rate:** Based on PREPA’s projections of the blend of rates applicable to PRASA starting on FY2019 (FY2018 rate was estimated at the average of FY2017 rate and projected FY2019 rate)
- ✓ **Consumption:** Adjusted to reflect the reduction in electricity usage on FY2018 as a result of electric service interruption and 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 FY2022

**\$149M or 18% in savings** for the 5 years 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 = \$7M per year on PRASA’s expenses



# Expense Assumptions

## Maintenance

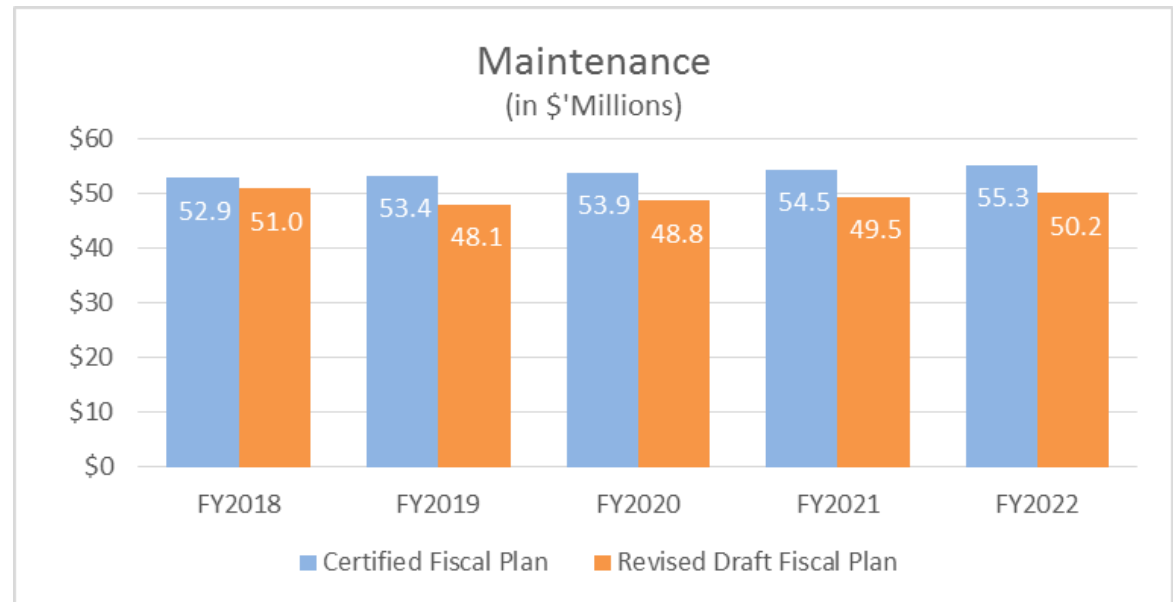
Revenues	Expenses
Capital Improvement	Financing and Debt Service

### Key Assumptions:

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

**\$22M or 8% in savings** for the 5 years 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)



# Expense Assumptions Chemicals

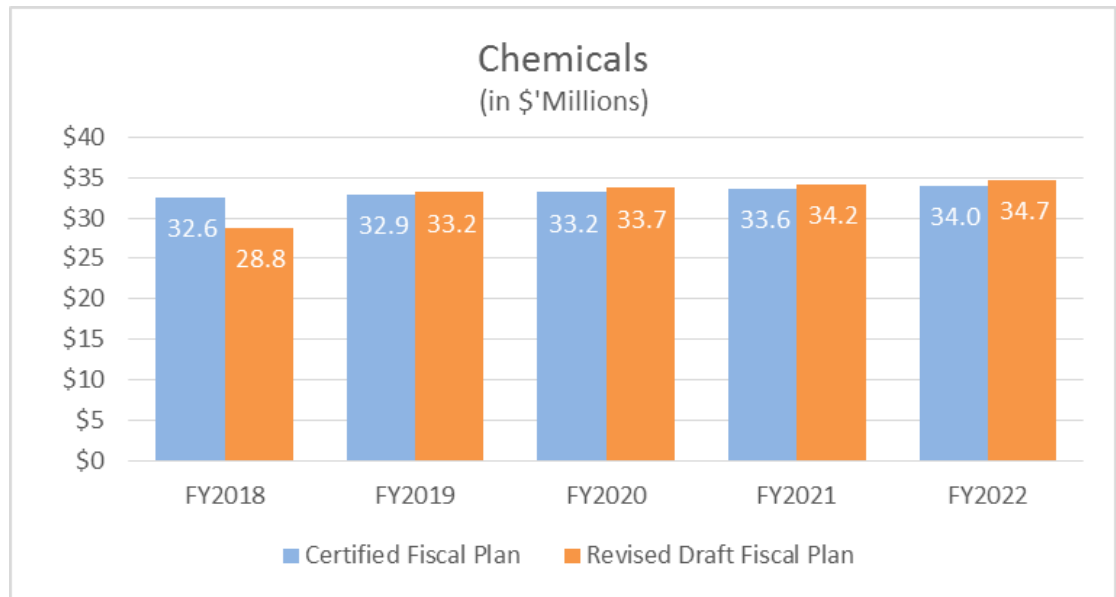
Revenues	Expenses
Capital Improvement	Financing and Debt Service

## 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

**\$2M** or 1% increase for the 5-year projected period, basically reflecting the inflation impact and a stable level of chemicals consumption

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



Baseline  
Projections



# Expense Assumptions

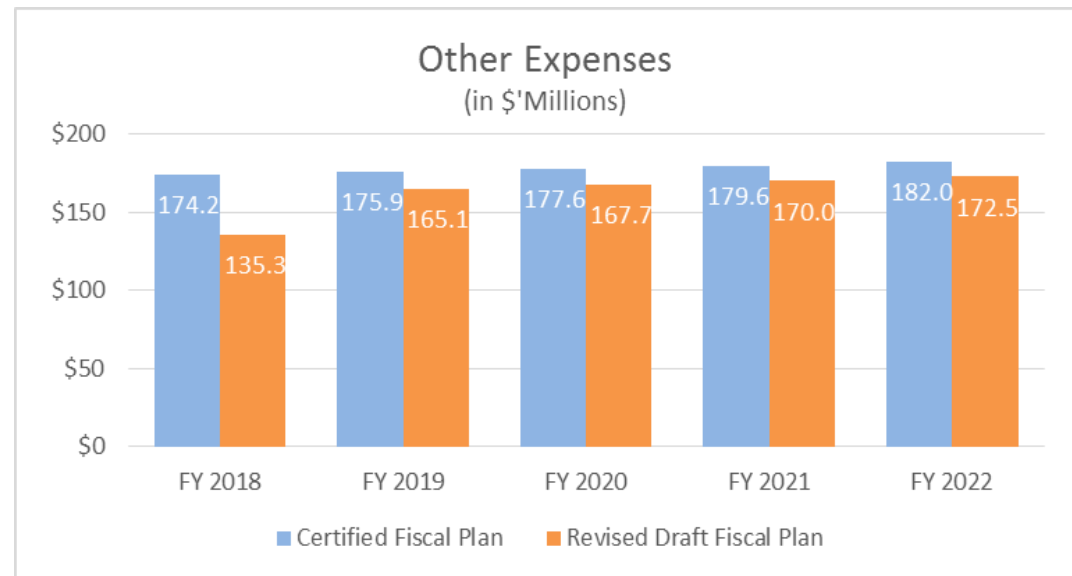
## Other Expenses

Revenues	Expenses
Capital Improvement	Financing and Debt Service

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

Reduction of **\$79M or 9%** during the five year period as a result of:

- Reduction by \$39 million on FY2018 as a result of the Hurricanes impact (services delayed or refocused to the emergency and included in the Hurricanes Impact on OPEX line)
- Reduction on FY2019/22 by an average of \$10M 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

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- Operating expenses were materially impacted by the hurricane, as explained previously, some expense categories has been reduced but 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 December 31, 2017 based on information submitted or to be submitted to FEMA
  - Many uncertainites 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



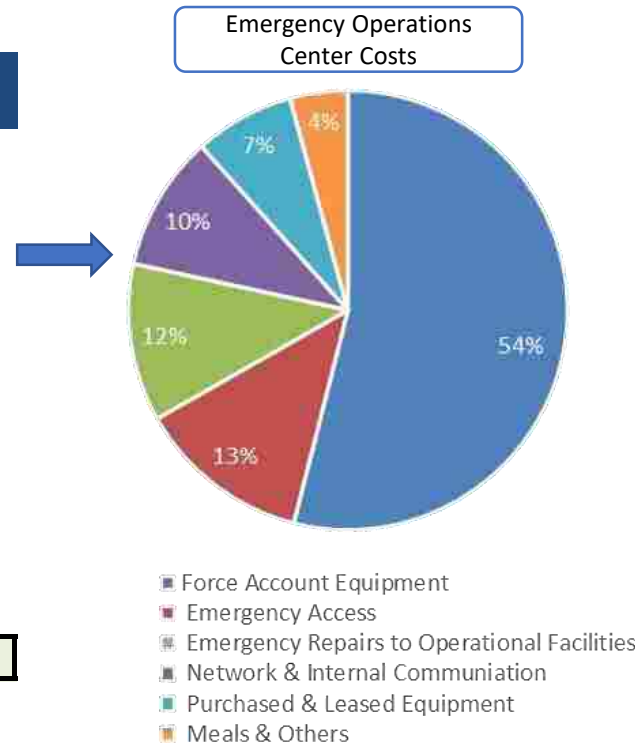


# Hurricanes Impact on Expenses

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- 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 Payroll and Benefits (Overtime)	38,009
Emergency Operations Center	33,258
Insurance Deductible	26,266
Security Measures	25,000
Water Transport - Oasis	18,701
Supplies and Commodities	17,489
Emergency Repairs	8,119
Environmental Preservation and Public Safety	8,035
Vacuum Trucks	5,174
Temporary Facilities & Communications	5,000
Debris Removal	5,178
	2,075
	<b>\$ 395,550</b>



- 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

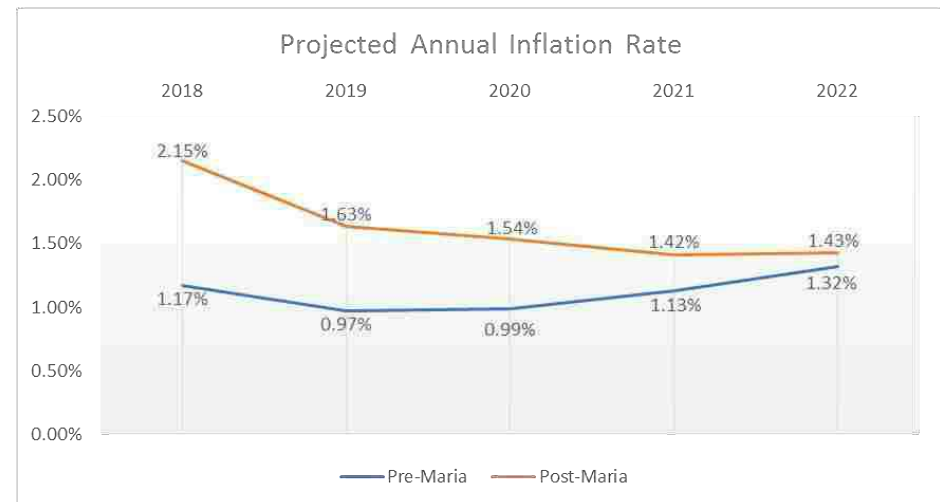


Baseline Projections

# Inflation Rate

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- Except for Payroll and Electricity cost, all other expenses for FY2019 thru FY2022 were projected applying the inflation rate, as provided by the Government and the Oversight Board economists
- 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 in the assets, mostly for underground pipelines for which a higher amount of breakages is expected
  - Professional, technical, IT and consulting services required to comply with the increased information and reporting requirements



# Baseline Projections

## Expenses

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- The baseline expenses are projected as follows:

in \$ Millions	Projected					Revised	Certif FP		
	FY2018	FY2019	FY2020	FY2021	FY2022	5-year Total	5-year Total	5-year Change	%
Payroll and Related, Net	\$ 308.1	\$ 308.1	\$ 312.2	\$ 316.2	\$ 324.1	\$ 1,568.7	\$ 1,612.9	\$ (44.2)	-3%
Electricity	114.1	141.7	143.9	149.9	152.1	701.7	\$ 850.8	\$ (149.1)	-18%
Maintenance & Repair	51.0	48.1	48.8	49.5	50.2	247.6	\$ 270.0	\$ (22.4)	-8%
Chemicals	28.8	33.2	33.7	34.2	34.7	164.6	\$ 166.3	\$ (1.7)	-1%
Other Expenses	135.3	165.1	167.7	170.0	172.5	810.6	\$ 889.3	\$ (78.7)	-9%
Hurricane Impact on OPEX	395.6	-	-	-	-	395.6	\$ -	\$ 395.6	N/A
FEMA/Insurance Reimbursement	(356.0)	-	-	-	-	(356.0)	\$ -	\$ (356.0)	N/A
<b>Operating Expenses</b>	<b>\$ 676.9</b>	<b>\$ 696.2</b>	<b>\$ 706.3</b>	<b>\$ 719.8</b>	<b>\$ 733.6</b>	<b>\$ 3,532.8</b>	<b>\$ 3,789.3</b>	<b>\$ (256.5)</b>	<b>-7%</b>

Total Operating Expenses projections reflect a reduction of **\$256M** or **7%**, mainly as a result of:

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



# Capital Improvement Program



# Capital Improvement Program

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- **The CIP is expected to be funded in its entirety with Operating Revenues for the Baseline Projections**, and as PRASA’s current rate structure has mostly not been designed to finance the CIP, a financial gap or need is presented for each year covered by this Fiscal Plan.
- 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 \$720M for the projected period
  - Includes the payment of \$60M owed to contractors during FY2018

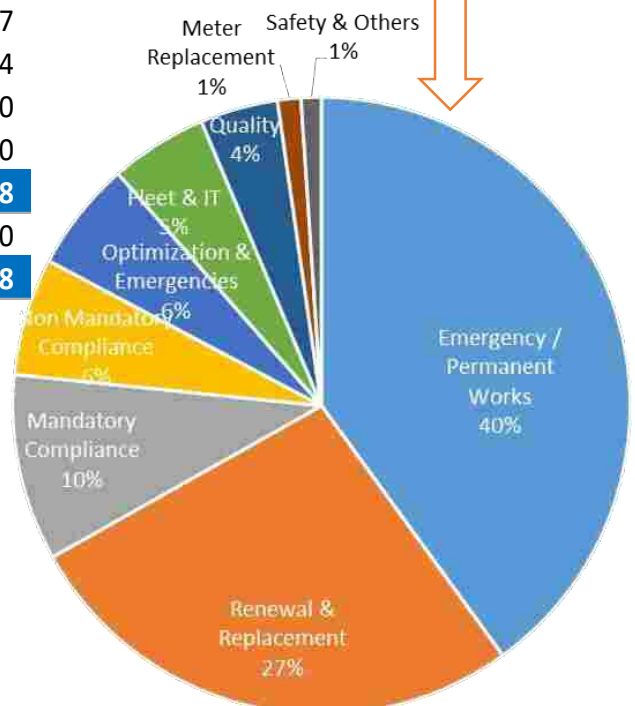


# Revised CIP

Baseline  
Projections

<i>In \$'Millions</i>	FY2018	FY2019	FY2020	FY2021	FY2022	5-year Total
Emergency / Permanent Works	\$ 65.2	\$ 254.4	\$ 142.6	\$ 166.2	\$ 91.7	\$ 720.1
Renewal & Replacement	86.4	76.1	89.7	91.7	139.0	483.0
Mandatory Compliance	16.6	24.7	65.6	47.3	21.7	175.9
Non Mandatory Compliance	2.8	3.9	10.0	37.2	57.1	110.9
Optimization & Emergencies	21.5	22.2	20.8	18.9	20.5	103.9
Fleet & IT	21.2	18.0	19.0	17.3	16.2	91.7
Quality	1.2	5.9	11.7	22.7	31.9	73.4
Meter Replacement	4.0	4.5	4.5	4.5	4.5	22.0
Safety & Others	0.7	3.0	2.7	5.1	7.4	19.0
<b>Subtotal</b>	<b>\$ 219.7</b>	<b>\$ 412.7</b>	<b>\$ 366.6</b>	<b>\$ 410.9</b>	<b>\$ 389.9</b>	<b>\$ 1,799.8</b>
Outstanding Debt Payment	60.0	-	-	-	-	60.0
<b>Total</b>	<b>\$ 279.7</b>	<b>\$ 412.7</b>	<b>\$ 366.6</b>	<b>\$ 410.9</b>	<b>\$ 389.9</b>	<b>\$ 1,859.8</b>

Direct impact of the Hurricanes



# 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 lines
  - 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	Total for 5-year	%
FEMA/Insurance	58.7	229.0	128.3	149.5	82.5	\$ 648.1	35%
SRF	-	-	-	-	-	-	0%
RD	-	-	-	-	-	-	0%
Operating Revenues	221.0	183.7	238.3	261.4	307.4	1,211.8	65%
<b>Total</b>	<b>\$279.7</b>	<b>\$412.7</b>	<b>\$366.6</b>	<b>\$410.9</b>	<b>\$389.9</b>	<b>\$ 1,859.8</b>	<b>100%</b>



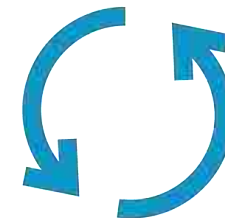
# Major CIP Changes

In \$'Millions	# Projects with Cash Flow	FY2018 thru 2022
CIP - Certified Fiscal Plan	279	\$ 1,261.2
Additions to restore the system	179	720.1
Other additions	5	9.3
Eliminated Projects	-5	(7.8)
Postponed/ Delayed Projects	-64	(69.8)
Increase in budget		29.9
Reduction due to project delay		(142.9)
<b>Revised Fiscal Plan</b>	<b>394</b>	<b>\$ 1,799.8</b>

*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.*

*The lack of financing had a domino effect on the CIP and 64 projects (14 which are mandatory ones) were postponed after fiscal year 2022.*

PRASA will seek to negotiate with EPA new due dates base on the hurricane effects on the previous timeline established and considering current emergencies priorities.





# Build Back Better Projects



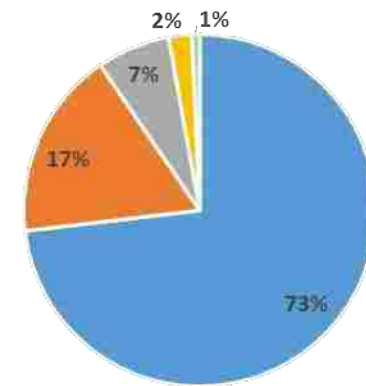
Baseline  
Projections

Project Objective <i>In \$' Millions</i>	Water & Water		Total Resiliency Projects (\$M)
	Control	Wastewater	
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
<b>Total Resiliency Projects</b>	<b>\$ 1,803.9</b>	<b>\$ 396.2</b>	<b>\$ 2,200.0</b>

From the total, **\$73M are included in the 5-year CIP**, mainly for:

- Valenciano WTP: \$20M
- Dorado Sewer Trunk: \$15M
- Enrique Ortega WTP Improvement: \$14M

Resiliency Projects by Objective



- Water service reliability
- Wastewater treatment reliability
- Intake relocation
- Increase dams safety
- Overflows elimination

**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 \$212M (not included in the financial projections included herein)*

# Financing and Debt Service



# Financing

Revenues	Expenses
Capital Improvement	Financing and Debt Service

- 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)
- As previously discussed, in the past, the Authority received \$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 debts with both programs are subject to Forbearance Agreements



# Debt Service

Revenues	Expenses
Capital Improvement	Financing and 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%		
		<b>3,299.3</b>	<b>69.9%</b>	<b>232.2</b>	<b>72%</b>		
Commonwealth Guaranteed Indebtedness	Rural Development Bonds <sup>(1)</sup>	392.6	8.2%	25.3	8%		
	State Revolving Fund <sup>(2)</sup>	581.3	12.2%	37.9	12%		
	2008 Ref Bonds - Series A&B	284.8	6.0%	17.2	5%		
		<b>1,258.7</b>	<b>26.7%</b>	<b>80.4</b>	<b>25%</b>		
CSO	Superaqueduct Debt <sup>(3)</sup>	<b>162.7</b>	<b>3.4%</b>	<b>9.0</b>	<b>3%</b>		
<b>Total prior PFC &amp; GDB</b>		<b>4,720.7</b>	<b>100%</b>	<b>\$ 321.6</b>	<b>100%</b>		
Debt not covered by MAT	GDB Term Loan <sup>(4)</sup>	65.5					
	PFC Debt <sup>(5)</sup>	248.5					
<b>Total Debt</b>		<b>\$ 5,034.8</b>					

<sup>(1)</sup> Debt held by US Department of Agriculture

<sup>(2)</sup> Debt held by the Environmental Protection Agency

<sup>(3)</sup> 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

<sup>(4)</sup> 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

<sup>(5)</sup> 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



# Baseline Projections Summary



# Financial Projections

The initial Financial Need for the projected period, including all PRASA outstanding obligations, amounts to **\$2 billion**, an increase of **\$450M** or **29%** when compared with the prior Fiscal Plan

in \$'Millions	FY2018	FY2019	FY2020	FY2021	FY2022	Revised FP (1/10/18)	Certified FP (8/25/17)	5-year Change	% Var
Operating Revenues	782.3	915.5	927.9	941.1	951.7	4,518.5	5,352.0	(833.5)	-16%
Senior and Senior Sub Debt <sup>1</sup>	(232.2)	(230.8)	(230.8)	(230.8)	(230.8)	(1,155.3)	(1,155.3)	-	0%
Total Net Operating Expenses	(676.9)	(696.3)	(706.3)	(719.9)	(733.5)	(3,532.9)	(3,789.4)	256.5	-7%
Operating Reserve Fund <sup>2</sup>	(34.7)	(34.8)	(36.8)	(38.7)	(3.4)	(148.5)	(161.1)	12.6	-8%
Capital Improvement Fund <sup>3</sup>	(221.0)	(183.7)	(238.3)	(261.4)	(307.4)	(1,211.8)	(1,326.2)	114.4	-9%
Commonwealth Payment Fund <sup>1</sup>	(89.4)	(90.7)	(89.6)	(97.0)	(97.1)	(463.8)	(463.8)	-	0%
<b>Initial Financial Need</b>	<b>(471.8)</b>	<b>(320.8)</b>	<b>(374.0)</b>	<b>(406.6)</b>	<b>(420.5)</b>	<b>(1,993.7)</b>	<b>(1,543.7)</b>	<b>(449.9)</b>	<b>29%</b>

## NOTES:

<sup>1</sup> Debt service for debt currently outstanding, assuming full payment of all obligations

<sup>2</sup> 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)

<sup>3</sup> 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%.



# Agenda

1

Introduction

2

Hurricanes Impact

3

Baseline Projections – Initial Financial Need

4

Initiatives - Reducing the GAP

5

Debt Service Sustainability

6

Governance and Fiscal Plan Implementation

7

Risks and Mitigation Strategies

8

Viable Fiscal Plan



# Implemented Initiatives





# 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

### Revenue Optimization Program

- \$100M impact on Operating Revenues

### Non-Revenue Water Reduction Program

- Reduced over 100 MGD in water production since FY2012 (507MGD on FY2017)

### Improving Customer Service

- Reduced number of customer's complaints and service waiting time

### Measuring and Reporting KPIs

- Developed a Strategic Plan and standardized KPI system and metrics

### Headcount Optimization

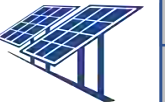
- \$30M in saving through over 1,000 headcount reduction since FY2008

### 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 approx. 13 WTPs and 9 WWTPs since FY 2010
- Closing of 13 commercial offices



# Reducing Dependency on PREPA

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%

- Under normal operating conditions these facilities are partially or completely powered with solar energy and the excess is net metered into PREPA's grid; however, the Hurricane impacted PRASA's capability to generate and use solar power
- To address this situation, PRASA entered into an agreement with Solar City Corporation DBA 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 so that the solar system could become operational without the need for the PREPA grid.
- In the case of the Vieques facilities, which generate less energy than the energy consumed, additional temporary and ground mounted photovoltaic panels were installed by Tesla.

Fully independent from PREPA grid



Culebra WWTP



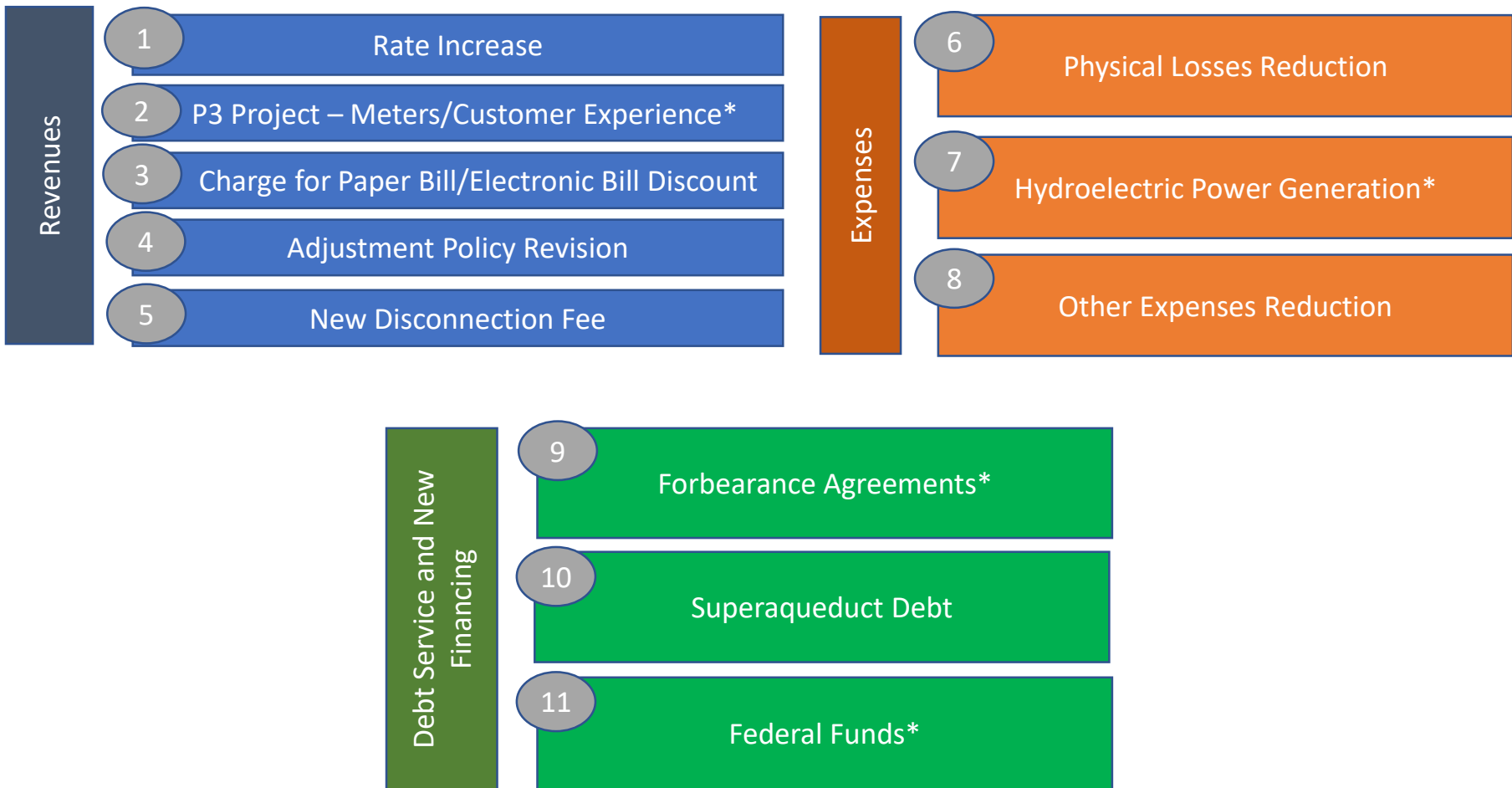
Vieques WWTP



# New Initiatives



# Proposed Initiatives



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

# Proposed Initiatives Total Impact

The total impact of the proposed initiatives reduced the Initial Financial Need by over **50%** or **\$1,022M**

In \$ Millions	FY2018	FY2019	FY2020	FY2021	FY2022	Revised FP (1/10/18)	Certified FP (8/25/17)	5-year Change	% Var
Rate Increase (Net Impact)	2.6	37.7	67.1	97.8	131.7	337.0	340.5	(3.5)	-1%
P3 for Commercial Services	-	-	(15.2)	12.5	37.9	35.1	102.5	(67.3)	-66%
Revise adjustment policy	2.0	2.0	2.0	2.0	2.0	10.0	10.0	-	0%
<b>Revenue Enhancing</b>	<b>4.6</b>	<b>42.0</b>	<b>55.4</b>	<b>113.6</b>	<b>172.8</b>	<b>388.3</b>	<b>460.0</b>	<b>(71.8)</b>	<b>-16%</b>
Physical Water Losses	1.6	5.1	7.3	8.8	9.4	32.1	62.5	(30.4)	-49%
Hydroelectric Energy	-	-	-	-	-	-	18.4	(18.4)	-100%
Other Expenses (Act 211-14)	1.1	1.2	2.7	2.6	2.5	10.1	9.5	0.6	7%
<b>Expense Savings</b>	<b>2.6</b>	<b>6.4</b>	<b>9.9</b>	<b>11.5</b>	<b>11.9</b>	<b>42.3</b>	<b>90.4</b>	<b>(48.1)</b>	<b>-53%</b>
Forbearance Agreements	59.3	-	-	-	-	59.3	-	59.3	N/A
Superaqueduct debt (PFC)	9.0	9.0	9.0	9.0	9.0	45.0	45.0	-	0%
<b>Debt Service Reduction</b>	<b>68.3</b>	<b>9.0</b>	<b>9.0</b>	<b>9.0</b>	<b>9.0</b>	<b>104.3</b>	<b>45.0</b>	<b>59.3</b>	<b>132%</b>
Federal Funds	-	46.9	72.3	87.2	80.9	287.4	127.3	160.1	126%
Community Disaster Loan	200.0	-	-	-	-	200.0	-	200.0	N/A
<b>New Financing</b>	<b>200.0</b>	<b>46.9</b>	<b>72.3</b>	<b>87.2</b>	<b>80.9</b>	<b>487.4</b>	<b>127.3</b>	<b>360.1</b>	<b>283%</b>
<b>Initiatives Net Impact</b>	<b>275.6</b>	<b>104.3</b>	<b>146.6</b>	<b>221.2</b>	<b>274.6</b>	<b>1,022.2</b>	<b>722.7</b>	<b>299.5</b>	<b>41%</b>



# Adjusted Financial GAP

In \$ <sup>1</sup> Millions	FY2018	FY2019	FY2020	FY2021	FY2022	Revised FP (1/10/18)	Certified FP (8/25/17)	5-year Change	% Var
<b>Initial Financial Need</b>	<b>(471.8)</b>	<b>(320.8)</b>	<b>(374.0)</b>	<b>(406.6)</b>	<b>(420.5)</b>	<b>\$ (1,993.7)</b>	<b>\$ (1,543.7)</b>	<b>\$ (449.9)</b>	<b>29%</b>
Revenue Enhancing	4.6	42.0	55.4	113.6	172.8	388.3	460.0	(71.8)	-16%
Expense Savings	2.6	6.4	9.9	11.5	11.9	42.3	90.4	(48.1)	-53%
Debt Service Reduction	68.3	9.0	9.0	9.0	9.0	104.3	45.0	59.3	132%
New Financing	200.0	46.9	72.3	87.2	80.9	487.4	127.3	360.1	283%
Initiatives Net Impact	275.6	104.3	146.6	221.2	274.6	1,022.2	722.7	299.5	41%
<b>Adjusted Financial Need</b>	<b>\$ (196.2)</b>	<b>\$ (216.6)</b>	<b>\$ (227.4)</b>	<b>\$ (185.4)</b>	<b>\$ (145.9)</b>	<b>\$ (971.4)</b>	<b>\$ (821.0)</b>	<b>\$ 150.4</b>	<b>-18%</b>
Current Expense Fund and Construction Fund <small>(Beginning Balance)</small>	117.2	(79.0)	(295.6)	(523.0)	(708.4)				
<b>Accumulated Financial Need</b>	<b>\$ (79.0)</b>	<b>\$ (295.6)</b>	<b>\$ (523.0)</b>	<b>\$ (708.4)</b>	<b>\$ (854.2)</b>				

Still, after the implementation of all the proposed initiatives and the consideration of the beginning current expense and construction fund balances , a **\$854 million** remaining Financial Need is projected which is expected to be covered by:

- New Financing
- Debt Restructuring

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# Restructuring

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

	2018	2019	2020	2021	2022	Total	Remaining gap
<b><u>Excluding federal funds</u></b>							
Cash flow available for debt service	\$42.6	\$58.0	\$20.8	\$55.2	\$101.1	\$277.5	
Current debt service	(321.6)	(321.5)	(320.4)	(327.8)	(327.9)	(1,619.1)	
<b>Surplus / (Shortfall)</b>	<b>(\$279.0)</b>	<b>(\$263.5)</b>	<b>(\$299.7)</b>	<b>(\$272.6)</b>	<b>(\$226.8)</b>	<b>(\$1,341.6)</b>	<b>\$1.3B</b>
% shortfall / debt service	115%	122%	94%	83%	69%	83%	
<b><u>Including federal funds</u></b>							
Cash flow available for debt service	\$242.6	\$104.9	\$93.1	\$142.4	\$182.0	\$764.9	
Current debt service	(321.6)	(321.5)	(320.4)	(327.8)	(327.9)	(1,619.1)	
<b>Surplus / (Shortfall)</b>	<b>(\$79.0)</b>	<b>(\$216.6)</b>	<b>(\$227.4)</b>	<b>(\$185.4)</b>	<b>(\$145.9)</b>	<b>(\$854.2)</b>	<b>\$854M</b>
% shortfall / debt service	25%	67%	71%	57%	44%	53%	

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 table below summarizes the annual cash flow available for debt service, and provides an illustrative debt capacity based on a range of interest rates and assuming net zero amortization

## Cash flow available for debt service

	2018	2019	2020	2021	2022	Total
Operating revenues	\$782.3	\$915.5	\$927.9	\$941.1	\$951.7	\$4,518.5
Total net operating expenses	(676.9)	(696.3)	(706.3)	(719.9)	(733.5)	(3,532.9)
Operating reserve fund	(34.7)	(34.8)	(36.8)	(38.7)	(3.4)	(148.5)
Capital improvement fund	(221.0)	(183.7)	(238.3)	(261.4)	(307.4)	(1,211.8)
<b>Initial financial need (pre-debt service)</b>	<b>(\$150.2)</b>	<b>\$0.6</b>	<b>(\$53.5)</b>	<b>(\$78.9)</b>	<b>(\$92.6)</b>	<b>(\$374.6)</b>
Beginning cash balance	117.2	-	-	-	-	117.2
Initiatives net impact (excl. FF)	75.6	57.3	74.3	134.0	193.6	534.9
<b>Cash flow available for debt service</b>	<b>\$42.6</b>	<b>\$58.0</b>	<b>\$20.8</b>	<b>\$55.2</b>	<b>\$101.1</b>	<b>\$277.5</b>
<i>Memo: net impact of federal funds</i>	<i>200.0</i>	<i>46.9</i>	<i>72.3</i>	<i>87.2</i>	<i>80.9</i>	<i>487.4</i>
<b>Cash flow available post federal funds</b>	<b>\$242.6</b>	<b>\$104.9</b>	<b>\$93.1</b>	<b>\$142.4</b>	<b>\$182.0</b>	<b>\$764.9</b>

Average annual cash flow available for debt service:  
**\$55M**

Including Federal Funds:  
**\$153M**

## Illustrative sustainable debt capacity sizing

### Sensitivity analysis: implied debt capacity

Current weighted average coupon:  
**5.5%**

Illustrative cash flow available	\$75	\$100	\$125	\$150	\$175	\$200
4.00%	\$1,875	\$2,500	\$3,125	\$3,750	\$4,375	\$5,000
5.00%	1,500	2,000	2,500	3,000	3,500	4,000
6.00%	1,250	1,667	2,083	2,500	2,917	3,333
7.00%	1,071	1,429	1,786	2,143	2,500	2,857
8.00%	938	1,250	1,563	1,875	2,188	2,500

**Note:**  
Above current outstanding debt excluding PFC and other (\$4.6bn)



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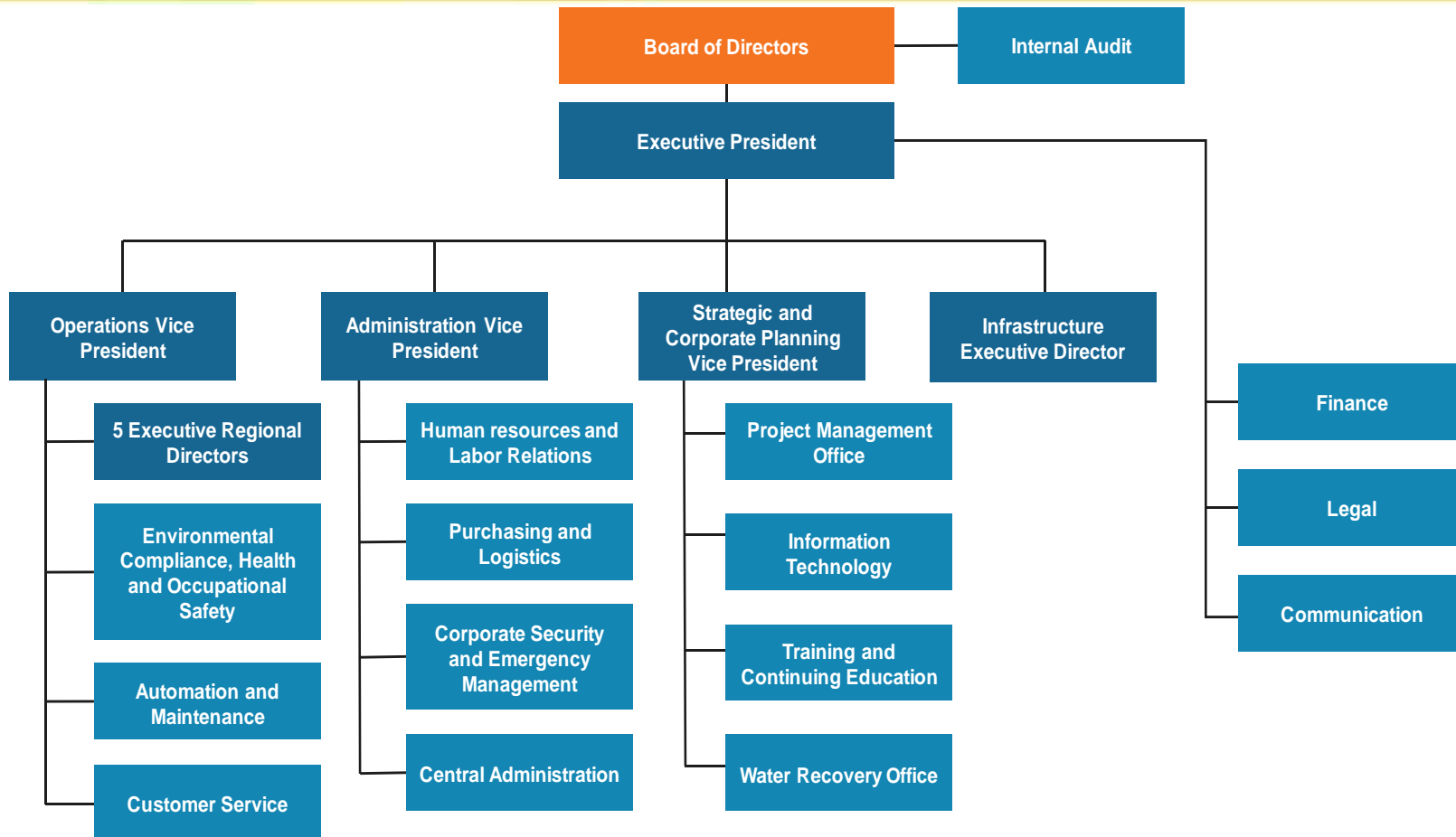
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# Organizational Structure

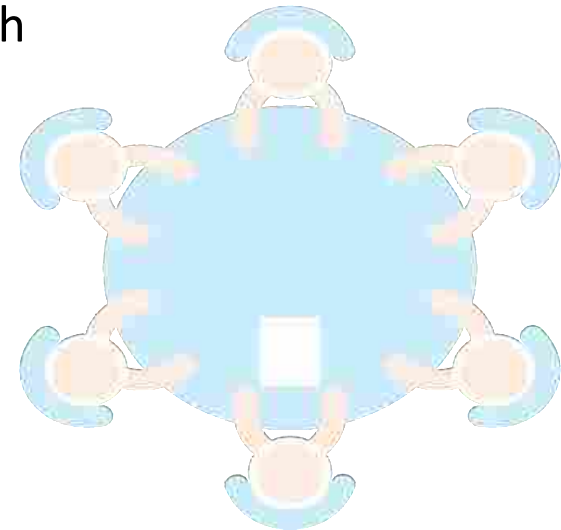


Each position at PRASA has specific requirements regarding education, qualification and experience which should be complied with to cover the position.

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

**Act 68-2016** provides that the two (2) Board members representing customer interests shall remain in their office until the terms for which they were elected expire (June, 2020). Then, the member elected shall represent the interests of all customer types shall serve for a three (3)-year term.

**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.

# 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.

## Terms

- **Act 68-2016** establishes staggered terms for the independent directors to avoid political influence:
  - **2 members with 5-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

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

# 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.
- All Executive Directors, except the Vice Presidents will have a 5-year terms.

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



# Strategic 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. Revenue Increase
2. Cost Reduction
3. Debt Service Reduction



# PMO Overview

- 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.





# Key Performance Indicators

## 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

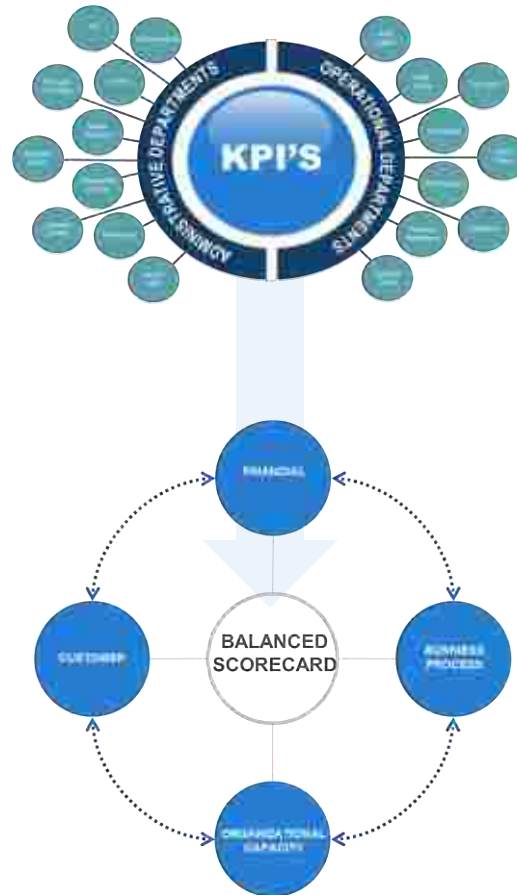
Looks for ways to diminish the amount of gross billing adjustments carried out every month.

### 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

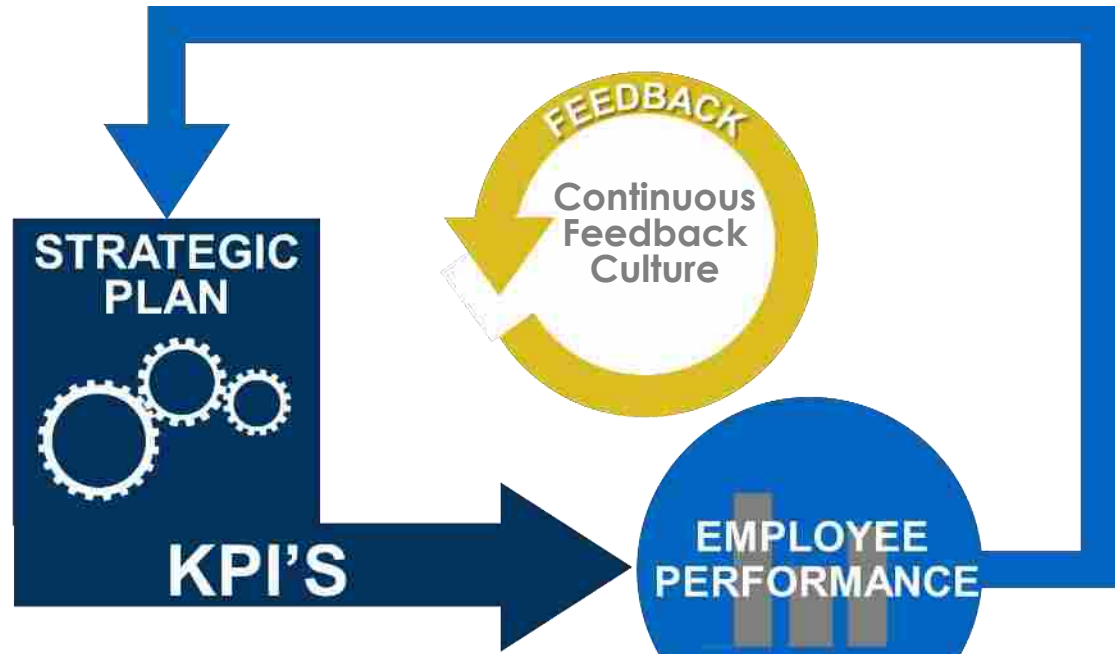
### 5 Electrical Consumption

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

# Accountability

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

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



PRASA's Dashboard\*



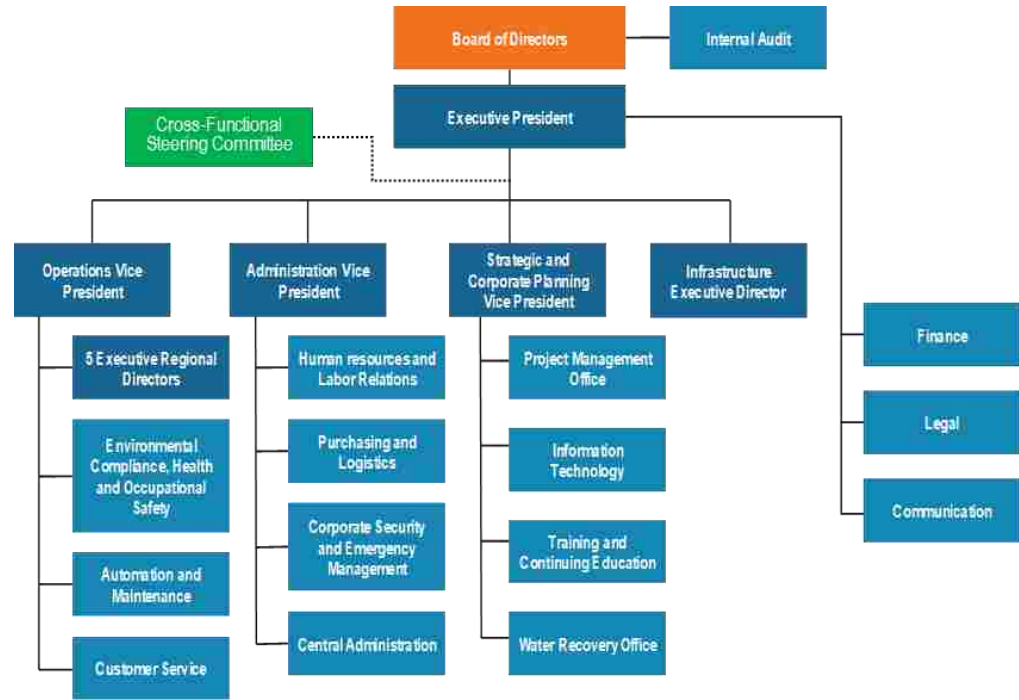
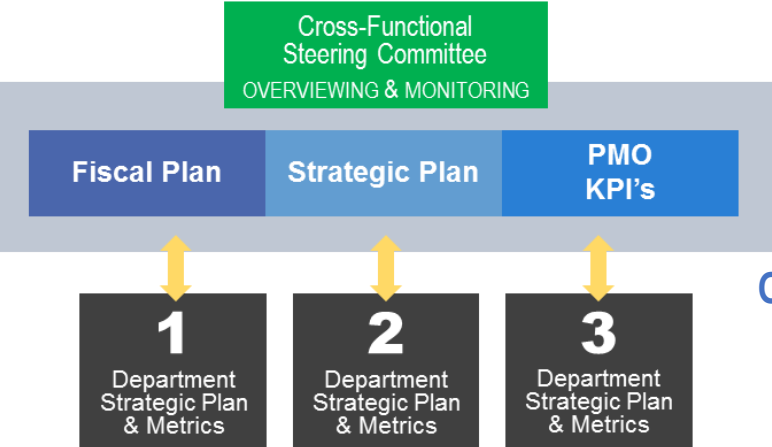
PRASA's Employee Evaluation\*

\*examples

# 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

# 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

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# 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

Risks and Mitigation

# 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	

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# Viabie 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/reneegotiate 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.**

