



Puerto Rico Aqueduct and Sewer Authority

**NATIONAL FEDERATION OF MUNICIPAL ANALYSTS
MUNICIPAL ANALYSTS GROUP OF NEW YORK**

September 22, 2006



Introduction

PRASA IS IN THE MIDST OF A MAJOR TURNAROUND

- **A strong, experienced management team is in place. Our objectives are:**
 - **Achieve financial self-sufficiency**
 - **Transform organizational culture**
 - **Improve customer satisfaction**

- **We have increased rates to:**
 - **Attain long-term revenue stability**
 - **Support a major capital plan**

- **The capital plan is focused on meeting the customers' needs by improving reliability, efficiency and regulatory compliance**



System Overview

PRASA serves a large area with diverse topography and population densities

KEY FACTS

- **Service area: approximately 3,500 square miles**
- **Elevation range: 0 to 4,400 feet**
- **Service population: 3.8 million residents plus 1 million tourists**
- **97% water service coverage**
- **55% sewer service coverage**
- **1.25 million water subscribers**
- **129 water treatment plants produce 541 MGD of potable water**
- **62 wastewater treatment plants receive and treat 307 MGD**
- **1,677 pump stations**
- **7,700 miles of water distribution pipelines**
- **3,900 miles of sewer pipe lines**

MUNICIPIOS DE PUERTO RICO



PRASA's Background

1970 TO 2004

- **Once a well-managed public corporation**
- **Deteriorated operationally and financially over last 25 years**
- **Privatized from 1994 to April 2004; well intended, but not successful.**

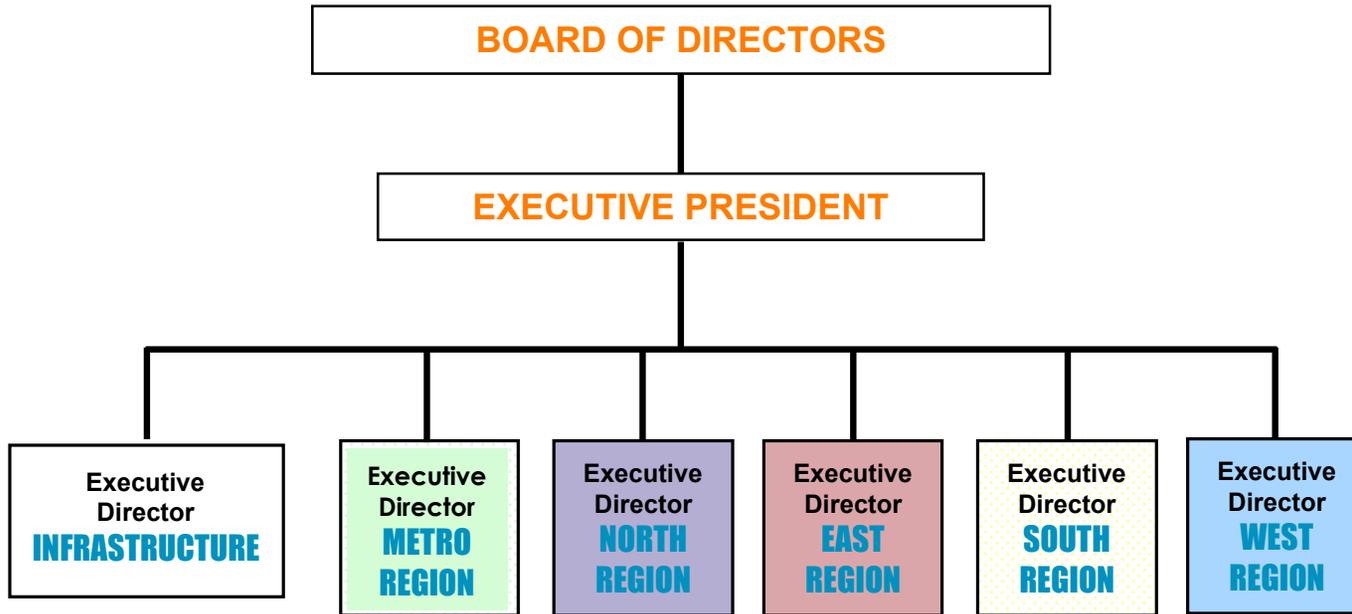


PRASA's Turnaround Begins

- **Act 92 (2004):**
 - **Transitioned PRASA back to public sector management**
 - **Decentralized system administration by creating five operating regions**
 - **Established seven new positions, each with a six-year appointment:**
 - **Executive President**
 - **Five Executive Directors to manage each operating region**
 - **Executive Director to manage infrastructure needs**



Organizational Chart





Management's Key Objectives

- **Re-establish customer confidence by providing the people of Puerto Rico with water and sewer service consistent with the highest standards of the industry**
- **Transform and modernize organizational structure and culture**
- **Achieve financial independence**



Strategies

- **Preventative maintenance program**
- **Reduction of unaccounted water**
- **Equip, train, re-train and educate personnel**
- **Replacement of pipelines, attention to leakages and overflows**
- **Technological modernization**
- **Consolidate and simplify the system**



Initiatives

ENHANCE INCOME AND REDUCE EXPENSES

- **New rate structure**
- **Reduce “estimated” billings**
- **Replace meters**
- **Install anti-theft accessories**
- **Service disconnections for non-payment**
- **Improve collection activity for bad debts**
- **Eliminate clandestine water connections**
- **Monitor electricity usage**



Achievements

MANAGEMENT

- **Adoption and implementation of a new rate structure**
- **Mega Consent Decree in place**
- **Implementation of monthly billings**
- **Aggressive meter readings, meter replacements and collections**
- **Upgrade technology to modernize the Systems and provide more efficient service**
- **Improved management reporting and measurement; utilization and weekly tracking of operational indicators**
- **Raised \$250 million from local bank consortium**



Achievements

OPERATIONS

- **28% reduction of customers without water service (not including deficient service clients)**
- **43% reduction in service time relating to water leaks**
- **Reduction of estimated meter readings from 21% to 17%**
- **Acceleration of meter replacement schedule**
- **23,000 service suspensions for clandestine connections during FY 2006**



Water and Sewer Rates

Flexible rate structure permits cost-based adjustments

RATE INCREASE

- **Composed of two elements:**
 - **A minimum base rate**
 - **A new consumption charge for customers whose consumption exceeds the basic level included within the monthly base rate**
- **The rate increase has been implemented in two phases**
- **Commencing in FY 2009, rates can be adjusted by up to 4.5% per year to cover revenue shortfalls affecting PRASA's ability to pay operating and maintenance costs, cover debt service, and maintain required reserves**
- **Cumulative adjustments cannot exceed 25% without re-engaging in the Act 21 review process**



Water and Sewer Rates

PROJECTED vs. ACTUAL COLLECTIONS, FY 2006 and 2007 YTD

FY 2006 and 2007 YTD collections have exceeded projections

\$ Millions

Period	Projected Collections	Actual Collections	Difference \$	Difference %
FY 2006	\$407.00	\$464.22	\$57.22	14.06%
FY 2007 YTD	\$98.00	\$99.66	\$1.66	1.69%
Total	\$505.00	\$563.88	\$58.88	11.66%

- **First full month of collections reflecting both Phases I and II will end on September 30, 2007**



Estimated Operating Results

SUMMARY OF OPERATING RESULTS

\$ Millions

	Fiscal Year Ending June 30		
	2005	2006 ¹	2007 ²
Operating Revenues³	\$328.7	\$484.7	\$760.9
Operating Expenses	(\$558.0)	(\$581.3)	(\$593.0)
Rural Aqueducts Subsidy	<u>\$34.6</u>	<u>\$0.0</u>	<u>\$0.0</u>
Operating Results Before Depreciation	<u>(\$194.7)</u>	<u>(\$96.6)</u>	<u>\$167.9</u>

- 1) Unaudited.
- 2) Budget forecast.
- 3) Net of allowances for uncollectibles and subsidies.



Capital Improvement Plan

WATER IS THE KEY TO PUERTO RICO'S...

- **Quality of life**
 - **Environment and public health protection**
 - **Home ownership opportunities**
- **Economic development**
 - **Job opportunities**
 - **Business development**
 - **Tourism**



Capital Improvement Plan

- **383 Capital Improvement Projects**
- **Capital Improvement Program total investment of \$2.4 billion within the next 5 years, with funding identified for \$1.3 billion**
- **Over 40 WTP and WWTP to be eliminated within the next 10 years**
- **Over 80 MGD increase in potable water production within the next 10 years**
- **Over 45 MGD increase in sewer treatment capacity within the next 10 years**





Capital Improvement Plan

KEY PRASA PROJECTS





Rio Blanco Reservoir

DEVELOPMENT OF RESERVOIRS TO ASSURE A RELIABLE SUPPLY FOR GROWTH AND TO COMPLY WITH SAFE DRINKING WATER REGULATIONS

- **MUNICIPALITY:** Naguabo
- **INVESTMENT:** \$ 152,027,365
- **OPERATION:** March 2008

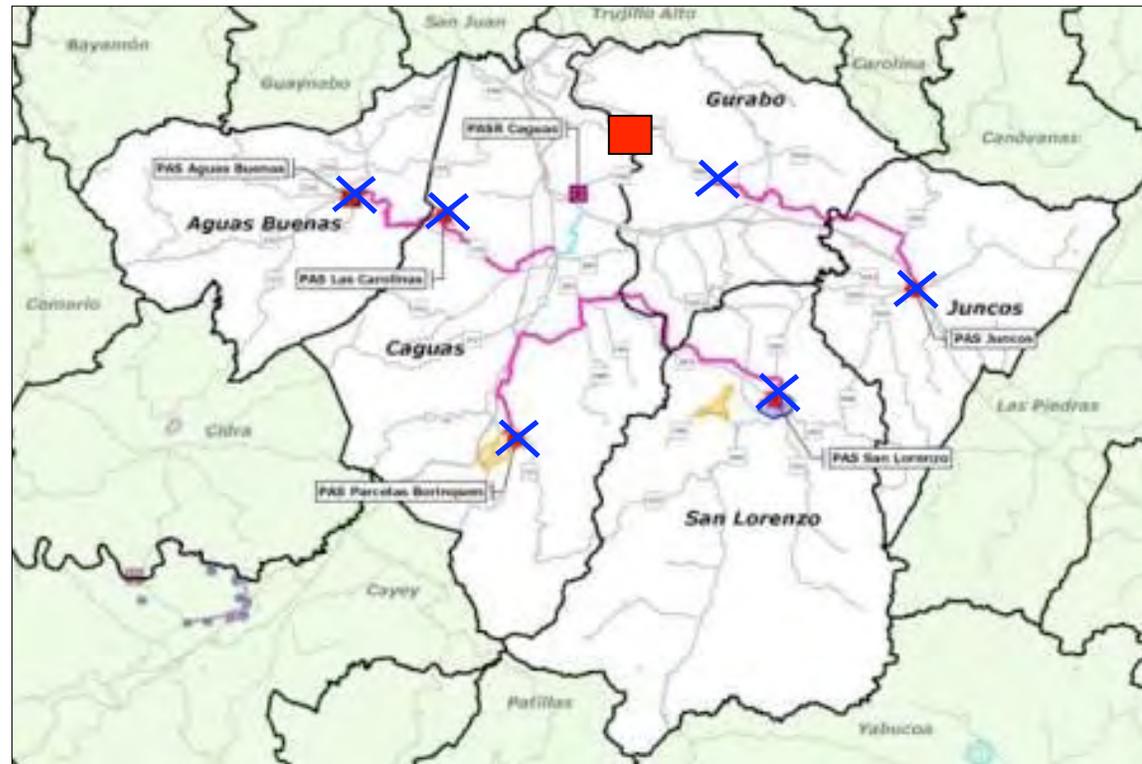




Caguas WWTP Expansion and Rehabilitation

ELIMINATION OF SIX WASTEWATER PLANTS AND REGIONALIZATION OF SERVICES

- **MUNICIPALITY:** Caguas
- **INVESTMENT:** \$ 108,000,000
- **OPERATION:** March 2009

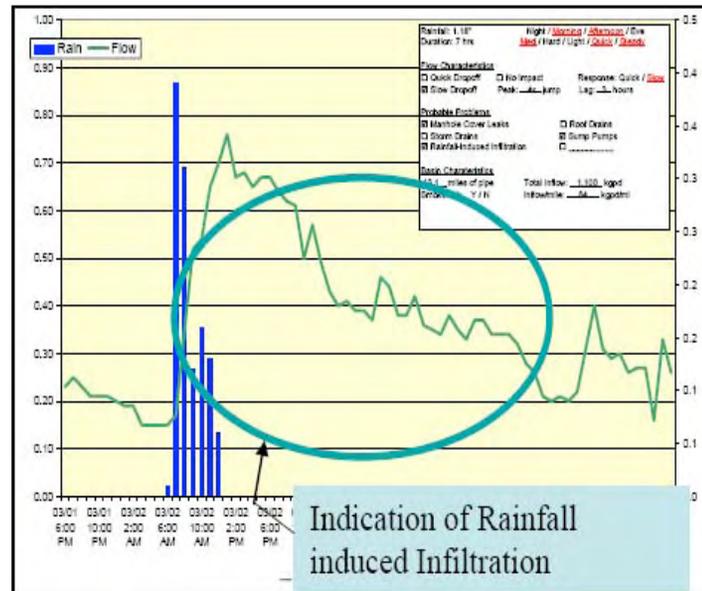




Sanitary Sewer Collection System Evaluations

PHASE I – Development of a “Sanitary Sewer Evaluation Plan” for the following systems:

- Bayamón
- La Parguera
- Aguadilla
- Isabela
- San Sebastián Nueva
- Unibón
- Juncos



- **Evaluations of the sanitary system will be conducted to determine if the system experiences problems of infiltration and/or inflow and to identify the possible sources of entrance to the system. Subsequently, a plan of improvements will be prepared to be presented to the EPA for its approval.**

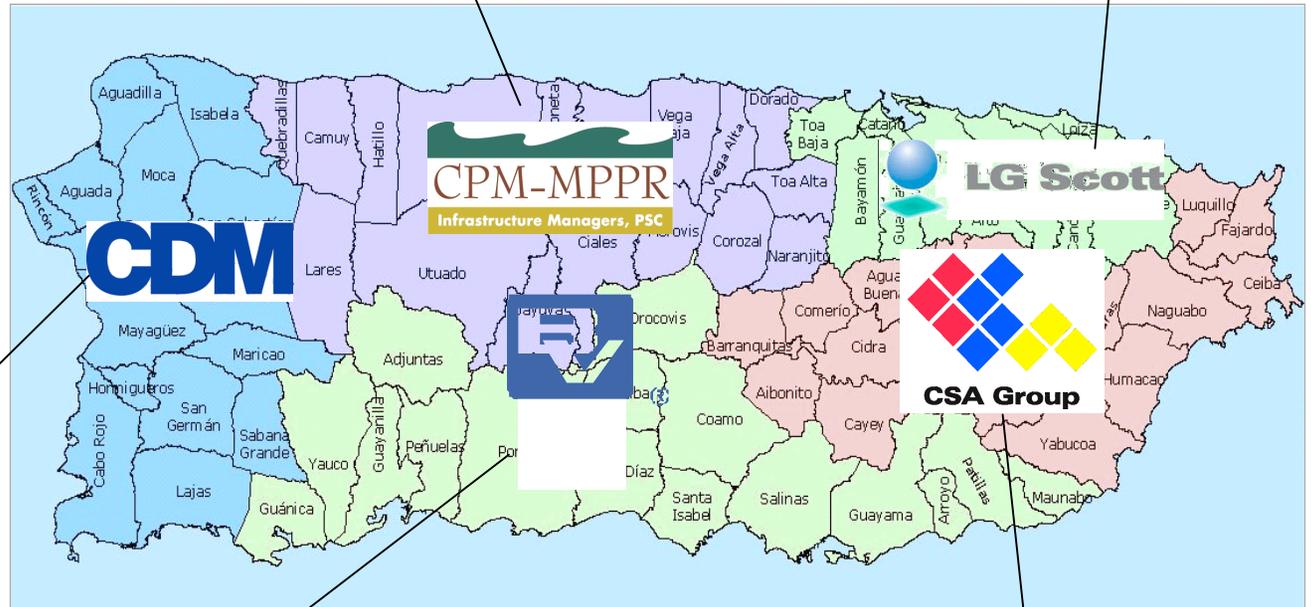


The Extended Team: Program Management Consortiums



**Malcolm Pirnie Inc. from White Plains, NY with Caribbean Project Management one of Puerto Rico's leading construction management firms:
#28 in Environmental Design
#39 in Overall Design**

**Parent company is CH2MHill from Denver, CO:
#1 in Program Management
#1 in Environmental Design
#6 in Overall Design**



**Camp, Dresser & Mckee from Boston, MA:
#23 in Overall Design
#15 in Environmental Design**

**Black & Veatch from Kansas City, MO with CMA Architects & Engineers one of Puerto Rico's largest Engineering firms:
#15 in Overall Design
#14 in Environmental Design
#5 in Design-Build Projects
#16 in Program Management**

CSA Group, Puerto Rico's largest Environmental Engineering firm, largest Hispanic Engineering firm in the USA, owner of Puerto Rico's largest privately owned GIS.



Conclusion

HIGHLIGHTS

- **New organizational structure**
- **New management team**
- **Managerial continuity**
- **New rate structure**
- **Mega Consent Decree**
- **Capital improvements**
- **Operational improvements**