PRASA’s Infrastructure and its Capital Improvement Program

Puerto Rico Growth Summit

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PRASA’S - CAPITAL IMPROVEMENT PROGRAM

• The Authority is responsible for identifying the system’s present and future needs to perform all the necessary works to be carried out in the short, medium and long term.

• To this end, a Capital Improvement Program (CIP) was created to manage and execute the construction projects according to the priorities established by the Executive President and Board of Directors.
The investment in capital improvements between fiscal years 2011 to 2014 was more than $1,300 M. The economic model of the CIP relied primarily by issuing bonds.

PRASA halts the Capital Improvement Program and had to terminate the construction of 18 projects due to lack of funding. PRASA was unable to access the bond market. Puerto Rico suffered one of the most severe droughts in the last 60 years.

PRASA only had funds for emergencies, pipe repairs, and a few small projects.
2017  •  Hurricane María affected PRASA's infrastructure

2018  •  PRASA spent most of the year temporarily repairing facilities affected by Hurricane María.
  •  PRASA, COR3 and FEMA agreed on a work plan.

2019  •  PRASA restructured the debt and regained access to federal funds
  •  The CIP reactivation was announced.

2020  •  Earthquakes affected facilities in the southern area of Puerto Rico.
  •  PRASA, COR3, and FEMA inspected PRASA facilities to document all damages.
  •  PRASA obtained access to the bond market
2021 - FEMA announced the approval of $3.7 Billion under the FEMA’s Accelerated Award Strategy (FAASt).

April 2021 - PRASA submitted the initial FAASt Workplan to COR3 and FEMA, based on the CIP projects. The workplan is required to be updated every 90 days. PRASA’s FAASt Workplan outlined:

- Proposed infrastructure investments for the next ten (10) years.
- For the 10% cost-share allocation, PRASA will seek funds from the HUD Community Development Block Grant (CDBG) program.
- PRASA contracted Four (4) Consulting firms to provide project management for the CIP projects (Planning, Design, Bid and Construction).

October 2021 - PRASA received the First FAASt’s Project Approval under Cat F (Morovis Sur RWI), along with other 3 projects including the A&E.
• PRASA received FEMA’s approval for the FAASt Project - Water Meters project - $330M.
• PRASA completed the construction of the Buena Vista Tank (FEMA’s first Cat F project completed in PR).
• PRASA received FEMA’s approval for 15 FAASt projects - $841M (including the A&E).
October 30, 2017 - After Hurricane María, the Government of Puerto Rico chose to participate under FEMA’s alternative procedures to subsidize large projects for Categories C-G of the Public Assistance (PA) Program, in accordance with the provisions of Section 428 of the “Stafford Law” for Permanent Works.
PRASA’S RECONSTRUCTION PROCESS
TRADITIONAL PA VS SECTION 428

**PA Program:**
- FEMA’s PA Program focuses on restoring damaged infrastructure to pre-disaster conditions. The PA Program provides grant funding to return the damaged facility to pre-disaster function and capacity.

**Section 428:**
- FEMA includes funding for restoring the infrastructure to:
  - Codes, specifications, and/or industry standards;
  - Any applicable consensus-based codes, specification, and/or standard that the Applicant identifies for the facility; and/or
  - Any approved industry standard as applicable under the Bipartisan Budget Act (BBA).
PRASA’S RECONSTRUCTION PROCESS

BIPARTISAN BUDGET ACT (BBA)

• Section 20601 of the Bipartisan Budget Act of 2018 (BBA) authorizes FEMA to provide assistance, pursuant to Section 428 of the “Stafford Act” for critical services as defined in Section 406.

• BBA allows FEMA to provide assistance to restore facilities or disaster-damaged infrastructure, specifically identified for critical services to industry standards without regard to the pre-disaster condition.

• Historical opportunity, to make all the necessary improvements to bring PRASA’s Infrastructure to industry standards.
  • Money available and obligated for projects of great magnitude and complexity to be executed for a period of 10 years.
PRASA’S RECONSTRUCTION PROCESS
RISK MITIGATION PROGRAM (FEMA-404)

• What is the Hazard Mitigation Grant Program (HMGP)?
  • Grant program to help communities implement hazard mitigation measures following a Presidential Declaration of Major Disaster.
  • Key purpose is to **enact mitigation measures to** reduce the risk of loss of life and property from future disasters.
  • Puerto Rico has a total of **$3,000 million**
    • **$600 Million for the water sector (water/sewerage)**

• Important Data
  • Funds are limited/competition.
  • Requires application preparation.
  • Unaffected facilities are eligible, but a 25% match is required
    • PRASA projects will be subsidized by CDBG funds.
  • Projects with completed work are not eligible.
PRASA’S HAZARD MITIGATION PROJECTS (FEMA-404)

Enrique Ortega Emergency Generators

- To provide resiliency to the WTP.
  - Population served- 369,000.
  - Estimated Investment– $25 Million
- Status - Phase I – Approved by FEMA:
  - Design
  - Geotechnical studies
  - Endorsements
PRASA'S HAZARD MITIGATION PROJECTS (FEMA-404)

Bauta Tunnel

✓ Transfer water from the Bauta River to the Toa Vaca reservoir through the construction of a Tunnel.

✓ Objective - Increase the safe yield of the Toa Vaca Reservoir from 16 MGD up to 29.9 MGD, assuring the supply of water for the south region of Puerto Rico.
  - Includes increasing capacity of Toa Vaca WTP.
  - Estimated Investment - $257 Million.
  - Status –Phase 1 for Engineering and Design Approved
PRASA’S HAZARD MITIGATION PROJECTS (FEMA-404)

Salinas Water Treatment Plant (WTP)

- Purpose - Construction of a new WTP at Salinas with a capacity of 4 MGD.
- Will permanently substitute the water wells use.
- Water recharge to the South Aquifer System.
  - Estimated Investment – $32 Million
  - Status – Phase 1 approved for Engineering and Design
PRASA’S HAZARD MITIGATION PROJECTS (FEMA-404)

Valenciano Reservoir – Improvement to the Central Region Reservoir System as Water Treatment Plants (WTP)

- Construction of a reservoir of 13 Million M³ capacity.
  - Includes increasing the Valenciano WTP capacity to 15 MGD.
  - Includes increasing the water distribution system.
- Improves and connects Las Piedras, Humacao, Juncos, Gurabo, San Lorenzo, and Caguas water systems, providing redundancy and an appropriate storage capacity.
  - Estimated Investment - $300 Million.
  - Status - Under evaluation by COR3 and FEMA.
CAPITAL IMPROVEMENT PROJECTS
OVERVIEW

Types of Projects:
- Building and structures
- Aqueduct System
- Water Treatment Plants
- Sewer Systems
- Wastewater Treatment Plants

Total Program > 500 Projects  > $6,500 M
Active Projects      225 Projects  > $2,852 M
As of May 2022, there are 225 projects in various phases of the TOTAL CAPITAL IMPROVEMENT process.
## CAPITAL IMPROVEMENT PROJECTS
### NUMBER OF ACTIVE PROJECTS AND INVESTMENT COSTS

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<th>Project Stage</th>
<th>Number of projects</th>
<th>Inversion costs</th>
<th>Percentage</th>
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<tr>
<td>Planning</td>
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<td>Design</td>
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<td>$535M</td>
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<tr>
<td>Bid</td>
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<tr>
<td>Construction</td>
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<td><strong>Total</strong></td>
<td><strong>225</strong></td>
<td><strong>$2,890</strong></td>
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<th>Inversion costs</th>
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<td><strong>Total</strong></td>
<td><strong>225</strong></td>
<td><strong>$2,890</strong></td>
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As of May 2022
95 Bid Announcements scheduled up to December 22
OVERALL PMC – ALL PRASA’S REGIONS
PERFORMANCE METRIC – BID ANNOUNCEMENTS
UP TO JUNE 22
PRASA’S INFRASTRUCTURE RECONSTRUCTION
CHALLENGES AND OPPORTUNITIES

**Resources**
- Available market for competent professional individuals to meet CIP demand in a highly competitive environment.
- Available opportunities for Contractors with technical and financial capacity for large projects.
- Available market for design firms (complying with CIAPR).

**Execution**
- Streamline interagency coordination to facilitate permitting processes.
- Balance escalating costs against budget constraints.
- Implement strategies to recover lost trust with the Contractors’ community.
- Recognize markets’ supply chain limitations and incorporate them into CIP schedules.
- Prioritize CIP’s urgent needs within a pandemic environment.
- Effectively integrate CIP execution with PRASA Operations.

**Goals**
- Achieve program cashflow expenditures goals.
- Optimize CIP bidding and project closeout durations.
- Achieve management efficiency for small construction projects.
- Uphold a robust safety culture across all CIP participants and communities.