GOVERNMENT OF PUERTO RICO

Puerto Rico Aqueduct and Sewer Authority

FAASt WORKPLAN

Puerto Rico Aqueduct and Sewer Authority (PRASA)

Post-Fixed Cost Estimate Obligation Workplan

FEMA-4339-DR-PR

FEMA Accelerated Award Strategy (FAASt)

Third Revision-January 2022

NOMENCLATURE

AMWA	Association of Metropolitan Water Agencies
ASTM	American Society of Testing and Materials
AWIA	America's Water Infrastructure Act of 2018
AWWA	American Water Works Association
AAA	Puerto Rico Aqueduct and Sewer Authority
B	PRASA Building (s)
BBA	2018 Bipartisan Budget Act
CIP	Capital Improvement Program
COR3	Central Office of Recovery, Reconstruction, and Resiliency
CWA	Clean Water Act
CDBG-DR	Community Development Block Grant Disaster Recovery
D	Dam (s)
DOH	Department of Health
D & T -WL	Distribution and Transmission Water Line (s)
EQB	Environmental Quality Board
FAASt	FEMA Accelerated Award Strategy
FEMA	Federal Emergency Management Agency
FY	Fiscal Year (PR Fiscal Year from July to June)
GIS	Geographical Information System
Government	Government of Puerto Rico
Governor	Governor of Puerto Rico
HUD	Department of Housing and Urban Development
ICC	International Building Code
KPIs	Key Performance Indicators
kWh	Kilowatt-Hours
MGD	Million Gallons per Day
NFPA	National Fire Protection Association
NPS	National Primary Standards
NSF	National Standards Foundation

OMB	Puerto Rico Office of Management and Budget
O&M	Operations and Maintenance
OO	Ocean Outfalls
PPTD	Projects Pending to be Determined
PR	Puerto Rico
PRASA	Puerto Rico Aqueduct and Sewer Authority
PRDH	Puerto Rico Department of Health
PREPA	Puerto Rico Electric Power Authority
PRIFA	Puerto Rico Infrastructure Finance Authority
PROMESA	Puerto Rico Oversight, Management, and Economic Stability Act
PSI	Pounds per Square Inch
PWSID	Potable Water System Identification
Regions	Operational Regions
R	Reservoirs
RD	Reservoirs Dredging
RFQ	Request for Qualification
RFP	Request for Proposal
RWI	Raw Water Intake
RWW	Raw Water Well (s)
SDWA	Safe Drinking Water Act
System	Authority's Public Water Supply and Wastewater System
SOP	Standard Operating Procedure
SOW	Scope of Work
STS	Sludge Treatment System
T	PRASA Telemetry System
TSL	Trunk Sewer Line (s)
US	United States of America
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency

WM	Water Meter (s)
WST	Water Storage Tank (s)
WTP	Water Treatment Plant (s)
WPS	Water Pump Station (s)
WWTP	Wastewater Treatment Plant (s)
WWPS	Wastewater Pump Station (s)

SYMBOLS

$	Dollar
%	Percent
Q	Quarter

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Chapter 1 Executive Summary

The 2017 hurricane season caused unparalleled devastation in Puerto Rico. During September of that year, Puerto Rico experienced a Category five (5) and Category four (4) hurricane (Irma and María, respectively). Hurricane María was the most devastating natural disaster to hit the island since Hurricane San Felipe made landfall nine decades ago in 1928. Since that time, the population has expanded, from 1.5 Million residents to a current population of 3.4 Million.

Category five (5) Hurricane Irma, one of the strongest recorded storms in the Atlantic, affected Puerto Rico on September 6, 2017. Due to its passing through the northern part of the island, the Puerto Rico Aqueduct and Sewer Authority (PRASA) suffered damages to water treatment facilities and other structures. Over one million customers lost electric power, and over one-third of PRASA's customers lost drinking water service.

Just a few days later, on September 20, Puerto Rico felt the ruthless force of Category four (4) Hurricane Maria, the most massive disaster that the Island has endured, impacting all PRASA's infrastructure severely across the island. The flooding and loss of the electrical power system resulted in a shutdown on most of the island's water supply and wastewater treatment plants, and pumping stations. Sewage waters contaminated the streets, rivers, and sea, posing an immediate threat to the environment, public health, and safety. PRASA acted diligently to promptly restore the water and wastewater service using both internal and external resources.

For projects necessary to build back PRASA's System to pre-hurricane conditions and improve resiliency to potential future events, on January 5, 2021, the Federal Emergency Management Agency (FEMA) announced the obligated grant for PRASA for **$4.2 Billion**. FEMA reserved the obligated funds to repair, improve or replace PRASA's infrastructure as per FEMA's Public Assistance Alternative Procedures, according to Section 428 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act and in compliance with the US Congress 2018 Bipartisan Budget Act (BBA). PRASA requires to provide safe water and wastewater service and supply to the 1.2 million active clients through the following infrastructure:

- Fifty-one (51) Wastewater Treatment Plants (WWTP)

- One hundred and fourteen (114) Water Treatment Plants (WTP)
- PRASA buildings
- Eight (8) Dams
- Around three thousand eight hundred (3,800) ancillary facilities (1,560 Tanks; 1,977 Pump Stations; 249 Water Wells)
- Over 20,000 miles of potable water and wastewater collection pipes

As a requirement associated with this funding obligation, FEMA and the Central Office of Recovery, Reconstruction, and Resiliency (COR3) required PRASA to submit a work plan, called PRASA's FAASt Workplan, within 90 days of the funding obligation date. This plan would outline PRASA's proposed investments in Puerto Rico's water systems over the next ten years. Also, PRASA is required to update and resubmit this work plan to COR3 and FEMA every 90 days after the initial submission.

This FAASt Workplan provides an overview of PRASA's infrastructure investment strategy; the context for the selection of projects included in the plan; a prioritized list of these proposed infrastructure projects; the expected benefits, projected costs, key project milestones, the estimated time horizon for each project; and a brief overview of PRASA's approach to managing the execution of this program and the group of projects described herein.

This document addresses COR3 and FEMA's requirement to plan a list of projects for the obligated funds. Projects in this plan will include funding from the FEMA Accelerated Award Strategy (FAASt) and 404 hazard mitigation programs and HUD Community Development Block Grant Disaster Recovery (CDBG-DR) program.

1.1 The Investment Strategy Overview

Several investment focus areas based on work previously completed by PRASA and developed by PRASA's team and other stakeholders such as FEMA and COR3 guided PRASA's investment strategy for this FAASt Workplan.

PRASA leveraged the information in each area and performed an additional evaluation to guide the project's selection in this FAASt Workplan.

PRASA selected these five (5) focus areas to define the intent of the projects in this plan. Table 1-1 summarized the five (5) investment focus areas and a brief description of each one.

Table 1-1: List of Investment Focus Areas

Focus Areas	Brief Description
Public Health & Environmental Protection	Ensure to provide a safe and reliable supply of drinking water and treatment of wastewater, complying with federal environmental regulations to safeguard the population's health and the island's environment while guaranteeing an affordable service for all customers.
Codes and Industry Standards	Rehabilitate, improve, or restore the water system following Codes and Industry Standards, including the applicable PRASA design standards, contained in the *Reglamento de Normas de Diseño de la AAA*.
Reliability and System Resiliency	Ensure the required investment in necessary technology and infrastructure to restore the system, enhance resiliency, and establish an efficient and safe water system that provides customer reliability.
Hazard Mitigation	Ensure to provide long-term solutions that reduce the PRASA's infrastructure impact of future events and minimize disaster losses and system vulnerability.
Modernization and Maintenance	Modernize and maintain PRASA's infrastructure to optimize its operational efficiency, protect public health, safeguard the environment, and promote continued economic development.

1.2 Asset Categories and Prioritization Approach

To develop this plan, PRASA's team examined more than 1,400 possible projects. Focused on the five (5) investment focus areas mentioned above to set the safe, reliable, and efficient water and wastewater treatment services, PRASA included as part of the initial FAASt Workplan submittal a list of 136 projects, for the second revision PRASA updated the list of projects and increased the list to 141 projects. For this revision, the third, PRASA updated the list of projects to 180.

The 180 projects in the plan are still organized into sixteen distinct asset categories. PRASA based the plan's asset categories on the categorization approach used to reach the FAASt funding obligation. Table 1-2 summarized the asset categories list.

Table 1-2: Asset Categories List

Asset Category	Brief Description
Water Treatment Plants (WTP)	114 WTP Islandwide, including the Raw Water Intakes (RWI). One (1) WTP was closed after Hurricane María.
Wastewater Treatment Plants (WWTP)	51 WWTP Islandwide
Wastewater Pump Stations (WWPS)	799 WWPS Islandwide
Water Pump Stations (WPS)	468 WPS Islandwide
Water Storage Tanks & Water Pump Stations (WST & WPS)	808 WPS Islandwide
Water Storage Tanks (WST)	997 WST Islandwide
Ocean Outfalls (OO)	12 Ocean Outfalls Island wide
Dams (D)	8 Dams Islandwide operated by PRASA
Reservoirs (R)	8 Reservoir Islandwide
Raw Water Wells (RWW)	269 Raw Water Wells Islandwide
Buildings (B)	91 PRASA Buildings Islandwide
Distribution and Transmission Water Lines (D & T -WL)	Estimated amount of 15,148 Miles of Water Lines Islandwide in diameters ranging from 1" to 84" and in a wide variety of materials.
Water Meters (WM)	872,596 each of Water Meters Islandwide part of the Distribution and Transmission Water Lines System.

Asset Category	Brief Description
Trunk Sewer Lines Islandwide (TSL)	Estimated amount of 5,994 Miles of Sewer Pipes Islandwide in diameters ranging from 4" to 90" and a wide variety of materials.
Telemetry (T)	Telemetry System along with PRASA Islandwide facilities: WTP, WWTP, WWPS, WPS, and Wells.
Projects Pending to be Determine (PPTD)	PRASA will evaluate other projects covered under the FAASt funding obligation. The projects are going to be determined in the near future.

PRASA's team identified the projects for inclusion in the FAASt Workplan, prioritized the projects, and developed the estimated sequencing for FEMA submission, approval, and subsequent execution. Each project in the FAASt Workplan includes a brief project description and cost estimate. PRASA's team also listed each project into one of the three-time horizons: near-term (i.e., 2021-2023), mid-term (i.e., 2024-2027), and long-term (i.e., 2028 and beyond).

Four (4) major standard milestones were defined and standardized across all projects in the FAASt Workplan. PRASA's team estimated the timing for each major milestone for each project.

The four (4) standardized major milestones are:

- Project expected to commence 30% architecture and engineering work
- Project expected submission to COR3 and FEMA for review and approval
- Project expected to commence construction/implementation
- Project expected to commence FEMA and COR3 closeout activities

PRASA assigned projects to a time horizon based on when the project's first major milestone starts. The prioritization methodology used the following criteria:

- Currently out of service or inoperative infrastructure
- Safety, environmental, and water quality standards requirements
- System operation needs and constraints
- Impacts to reliability performance, such as extreme droughts
- Severe storm hazard mitigation

1.3 Plan Overview

PRASA's FAASt Workplan includes approximately **$4.2 Billion** in investment needed to rehabilitate and improve Puerto Rico's water and wastewater system, most of which qualifies for FEMA funding under its 428 and 404 hazard mitigation programs. Currently, FEMA has under evaluation several projects submitted by PRASA under the 404 funds. Projects will be incorporated as part of the plan as soon as FEMA approves them.

The estimate includes only the cost associated with FEMA 428 funds and FEMA 404 funds, therefore excludes infrastructure hardening work that is eligible for funding through FEMA's 406 Public Assistance Mitigation (406) program.

PRASA will submit proposals for 406 funding with its applicable 428 proposals. This approach will ensure the integrity of the process given the differing requirements of each funding source.

FEMA's 406 programs are designed to provide funding to rebuild infrastructure exceeding industry standards to prevent damage from future disaster events, referred to as the "hardening" of assets.

As described above, and in alignment with COR3 and FEMA's process, PRASA will submit proposals for 406 funding with each of its applicable 428 project submittals. These hardening proposals will add costs not included in this plan. However, the additional cost is expected to be offset by funding through FEMA's 406 programs. **Table 1-3** summarized the plan by asset categories and funding source, deducting the amount of **$133.7 Million** corresponding to insurances, as described in the approved FAASt Project Number 144184, MAAA200 PRASA Islandwide.

Table 1-3: Plan Summary by Asset Categories and Funding Source List

Asset Category	FEMA 428($M)	FEMA 404 ($M)	FEMA 406($M)	Estimated Total Cost
WTP	$983.6	$0.0	TBD	$983.6
WWTP	$612.7	$0.0	TBD	$612.7
WWPS	$94.1	$0.0	TBD	$94.1
WPS	$44.4	$0.0	TBD	$44.4
WST & WPS	$46.3	$0.0	TBD	$46.3
WST	$60.5	$0.0	TBD	$60.5
RWW	$8.5	$0.0	TBD	$8.5
B	$56.8	$0.0	TBD	$56.8
OO	$180.0	$0.0	TBD	$180.0
D	$28.6	$0.0	TBD	$28.6
R	$262.2	$0.0	TBD	$262.2
D&T-WL	$409.2	$0.0	TBD	$409.2
WM	$300.0	$0.0	TBD	$300.0
TSL	$734.4	$0.0	TBD	$734.4
T	$5.0	$0.0	TBD	$5.0
PPTD	$243.3	$0.0	TBD	$243.3
Total	**$4,069**	**$0.0**	**TBD**	**$4,069**

It is important to note that all cost estimates in this document are "class 5" estimates. A class 5 cost estimate is defined as an estimate with an accuracy range from 50% below to 100%

above the actual final project cost and is prepared at an early stage in the project development process. Leading industry practice is to revise estimates to become more accurate as engineering design progresses and project requirements are solidified.

In addition to the funding sources discussed above, PRASA will seek to leverage funds from Community Development Block Grant Disaster Recovery (CDBG-DR) for the 10% cost-share allocation.

Forecast spend projections for each project are scoped to include all project activities from the point at which the project commences initial architectural and engineering work through the completion of project closeout activities. Several projects within the FAASt Workplan extend throughout the entire 10-year period.

Figure 1-1 illustrates the projected cash flow for the next ten years and the cost-share allocation needs by the Fiscal Year (FY), which starts in July of each year and ends in June of the next year.

Figure 1-1: Projected Cash Flow and Cost-Share Allocation Needs by FY ($ Million)

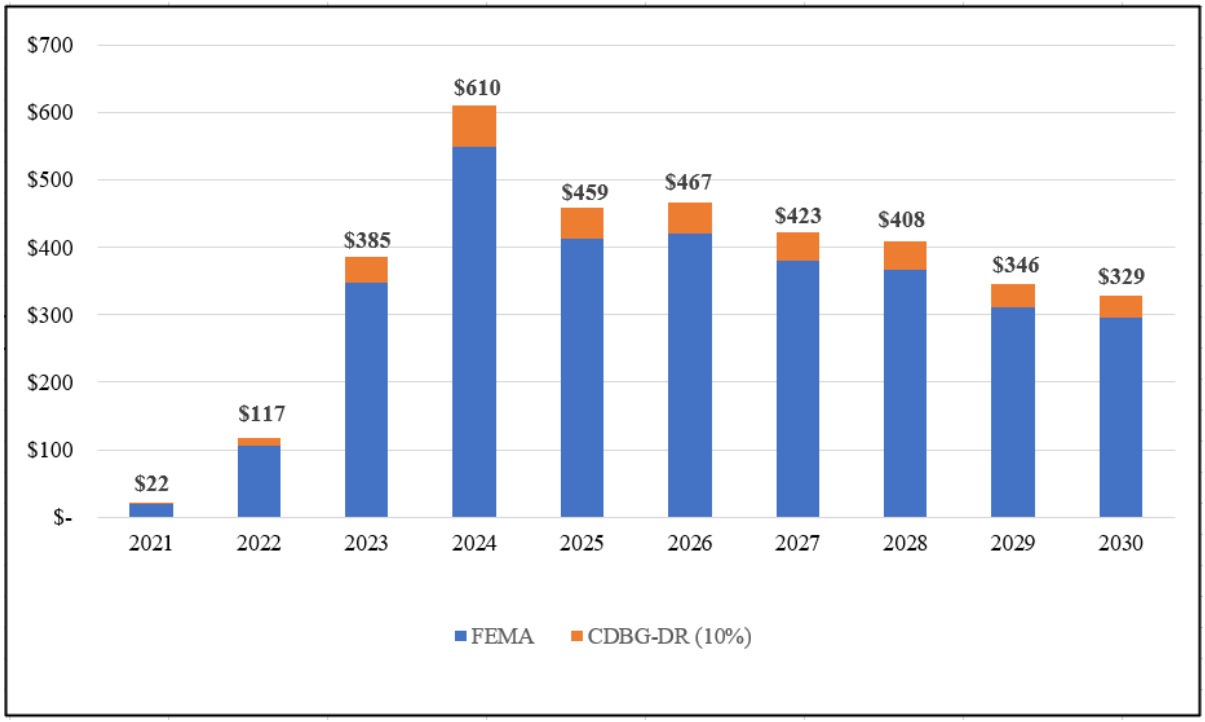
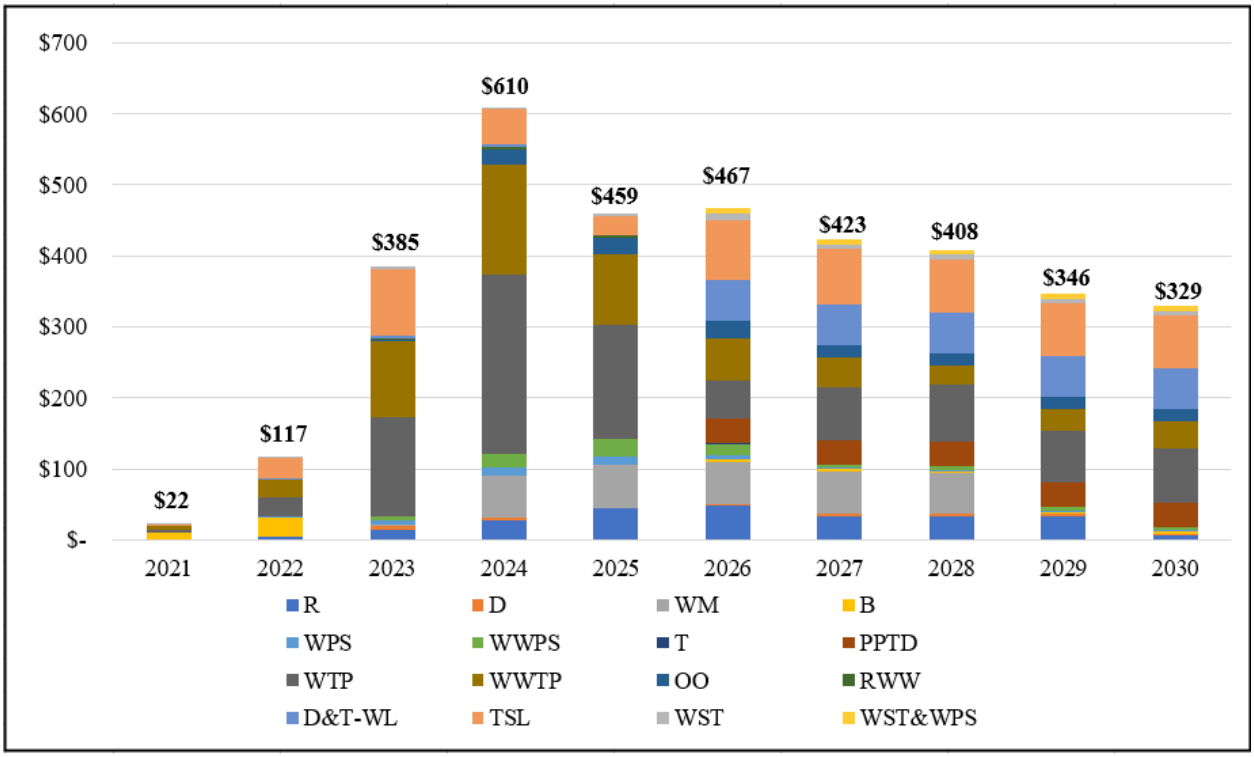


Figure 1-1 illustrates the projected cash flow by assets for the next ten years.

Figure 1-2: Projected Cash Flow By Asset Category by Fiscal Year ($ Million)



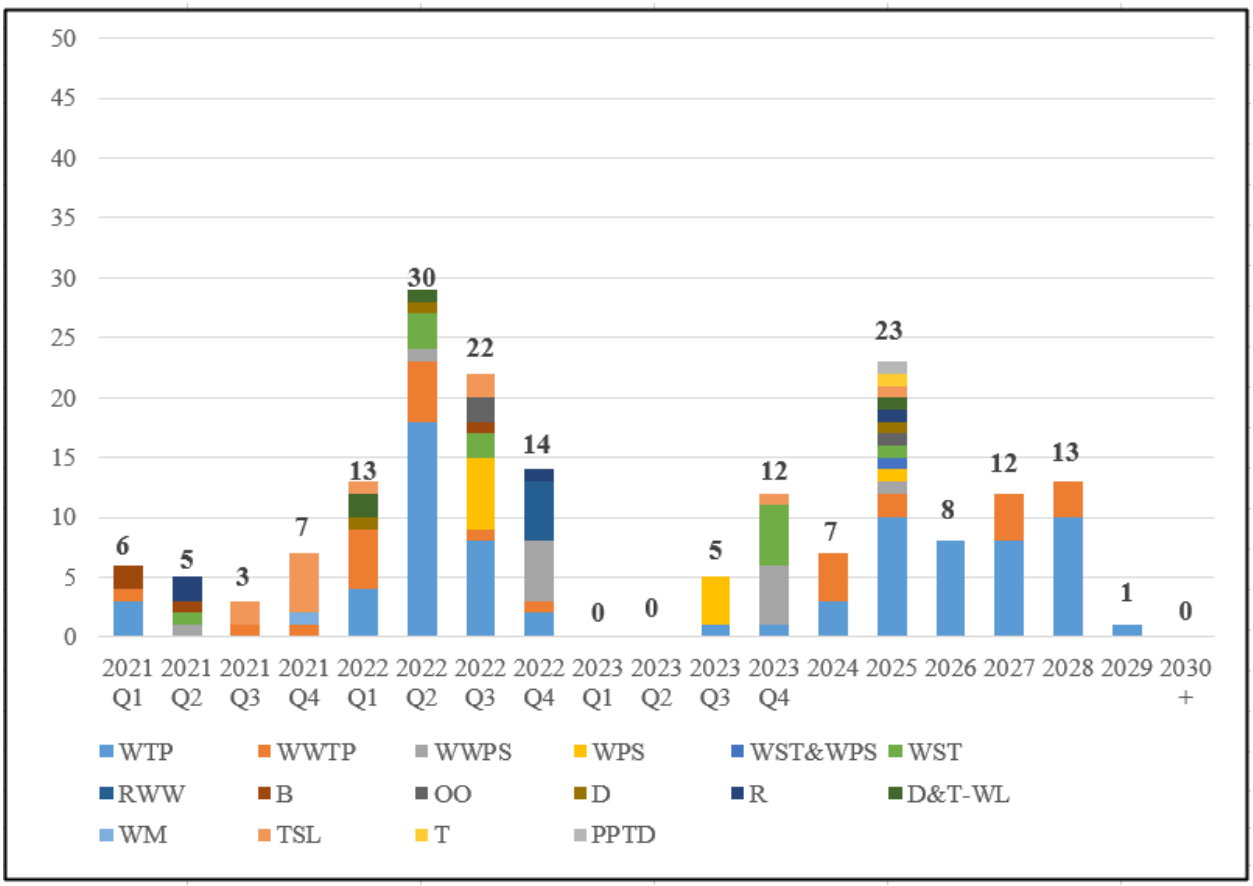
As discussed above, 180 projects were identified (Third Revision), prioritized, and included in the FAASt Workplan (Third Revision- January 2022). Table 1-4 illustrates the distribution of these projects by asset category and when the projects are planning to begin the architectural and engineering (A & E) design phase on the horizon.

Table 1-4: Number of Projects to Start A & E Design Phase by Asset Category in the Time Horizon (Natural Years and Cumulative Total)

Asset Category	Near- Term (2021-2023)		Mid - Term (2024-2027)		Long - Term (2028-2030)		Total	
	Projects	$ (M)	Projects	$ (M)	Projects	$ (M)	Projects	$ (M)
WTP	38	$600.5	29	$288.8	10	$94.3	77	$882.3
WWTP	16	$422.1	9	$159.8	3	$30.8	28	$503.2
WWPS	12	$63.1	1	$31.0	0	$0.0	13	$64.0
WPS	10	$32.8	1	$11.6	0	$0.0	11	$15.0
WST & WPS	0	$0.0	1	$46.3	0	$0.0	1	$46.3
WST	11	$15.5	1	$45.0	0	$0.0	12	$13.9
RWW	5	$8.5	0	$0.0	0	$0.0	5	$8.0
B	3	$36.8	1	$20.0	0	$0.0	4	$67.8
OO	2	$54.0	1	$126.0	0	$0.0	3	$180.0
D	2	$8.6	1	$20.0	0	$0.0	3	$30.5
R	3	$221.2	1	$41.0	0	$0.0	4	$258.0
D&T-WL	3	$9.2	1	$400.0	0	$0.0	4	$484.9
WM	1	$300.0	0	$0.0	0	$0.0	1	$300.0
TSL	11	$214.4	1	$520.0	0	$0.0	12	$761.0
T	0	$0.0	1	$5.0	0	$0.0	1	$5.0
PPTD	0	$0.0	1	$243.3	0	$0.0	1	$450.0
TOTAL	**117**	**$1,986.7**	**50**	**$1,957.9**	**15**	**$140.7**	**180**	**$4,069.9**

Figure 1-3 provides the estimated timeframe for project submission to FEMA for review and approval. The number of projects will likely change over time as PRASA collaborates with FEMA and COR3 to evaluate each project and optimize its project submission and evaluation strategy.

Figure 1-3: FEMA SOW Estimated Initial Submittal Timeline (Natural Years)



The following sections provide additional information about each of the priority categories, near-term, mid-term, and long term.

1.4 Near-Term Projects Profile (2021-2023)

There are 117 projects in the near-term priority category. These projects either have already begun 30% architectural and engineering (A & E) design or are expected to do so in 2021, 2022, and 2023 (natural years).

The cumulative investment on the projects expected to begin A & E within this time horizon is **$1.9 Billion.** Figure 1-4 illustrates the breakdown of cumulative investment by asset category for projects commencing during this period.

Figure 1-4: Total Estimated Cost by Asset Category for Near-Term Projects($M)

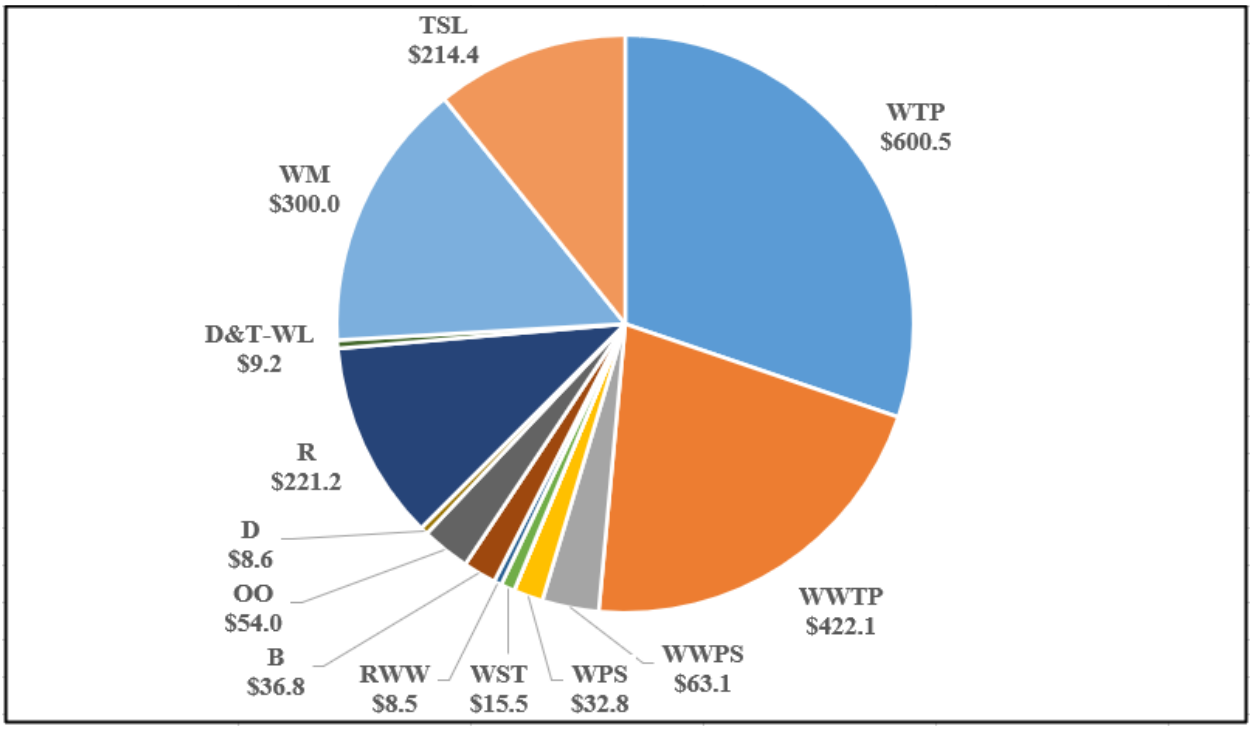


Table 1-5 provides a representative sample of notable projects slated to start during this period.

A high proportion of the FAASt Workplan projects have been sequenced in the near-term time horizon for several reasons:

- It is PRASA's objective to deliver results as quickly as possible.
- Some projects already have completed preliminary engineering and are ready to proceed into the 30% design phase.
- Some projects have a complex design, and the availability of designers with the necessary expertise is limited in Puerto Rico and these must be started in the near-term and completed within the later years of the plan.
- In many cases, environmental remediation, rights-of-way, permits, and approvals must be carried out before the actual project begins.

Table 1-5: Near-Term (2021-2023) Notable Projects

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Total Cost Estimate ($M)
B	CIP.3130001	PRASA Central Laboratory in Caguas (FAAST)	2019 - Q1	2021 - Q1	$28.09
WWTP	CIP.3135079	Rehabilitation of Blowers in Caguas WWTP (FAAST)	2019 - Q4	2021 - Q4	$4.79
WST	CIP.3360002	Design and Construction Buena Vista Tank (FAAST)	2020 - Q1	2021 - Q2	$1.48
D&T-WL	CIP.2475022	Installation of Permanent WL Rio Utuado Bridge (FAAST)	2020 - Q2	2022 - Q1	$0.66
WTP	CIP.2479001	Rehabilitation and Improvements to the Morovis Sur RWI (FAAST)	2020 - Q4	2021 - Q1	$1.59
WWPS	CIP.3445009	Design and Build - Rehabilitation of La Sabana Las Piedras WWPS	2020 - Q4	2021 - Q2	$0.66
WTP	CIP.2096007	Rehabilitation of Enrique Ortega WTP Toa Alta (FAAST-25)	2021 - Q1	2021 - Q1	$78.99
WWTP	CIP.3305001	Improvements to Guayama WWTP (FAAST)	2021 - Q1	2021 - Q1	$73.53
TSL	CIP.4089000	Rehabilitation of Arroyo-Guayama Trunk Sewer Lines (FAAST)	2021 - Q1	2021 - Q4	$24.69
WTP	CIP.2017005	Rehabilitation of Culebrinas WTP Aguadilla FEMA (FAAST-25)	2021 - Q2	2021 - Q1	$47.26
D	CIP.7776071	Rehabilitation of Toa Vaca Dam (FAAST)	2021 - Q2	2022 - Q1	$5.01
WWTP	CIP.3365083	Rehabilitation of Humacao Waste Water Treatment Plant (WWTP) Sludge Treatment System (STS)	2021 - Q2	2021 - Q3	$11.11
B	CIP.1660002	Rehabilitation of PRASA Main Building in Hato Rey	2021 - Q2	2021 - Q4	$0.68
R	CIP.5376001	Repair of Geosynthetic Membranes in Lago Regulador in Isabela	2021 - Q3	2021 - Q2	$12.20

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Total Cost Estimate ($M)
TSL	CIP.1169001	Rehabilitation of Los Angeles and Loíza Pueblo Trunk Sewers (FAAST)	2021 - Q3	2021 - Q3	$14.59
TSL	CIP.2149001	Rehabilitation of Camuy Trunk Sewer Lines (FAAST)	2021 - Q3	2021 - Q3	$36.99
B	CIP.3139000	Equipment for New PRASA Central Laboratory in Caguas (FAAST)	2021 - Q3	2021 - Q1	$8.00
WST	CIP.1009001	Rehabilitation of Water Storage Tanks -Metro Region Phase 1 (FAAST)	2021 - Q4	2022 - Q1	$0.35
WTP	CIP.2736007	Rehabilitation of Santa Isabel Utuado WTP and WI (FAAST-25)	2021 - Q4	2022 - Q1	$11.56
WST	CIP.3009001	Rehabilitation of Water Storage Tanks(WST) -East Region Phase 1 (FAAST)	2021 - Q4	2022 - Q1	$2.43
D&T-WL	CIP.3189002	Rehabilitation of Water Potable System at La Piedra and Pasto Viejo in Cayey (FAAST) . .	2021 - Q4	2022 - Q1	$2.63
WST	CIP.4009001	Rehabilitation of Water Storage Tanks -South Region Phase 1 (FAAST)	2021 - Q4	2022 - Q1	$2.47
WTP	CIP.5506044	Rehabilitation of Miradero Mayaguez WTP and RWI (FAAST-25)	2021 - Q4	2022 - Q1	$56.79
WTP	CIP.5506047	Rehabilitation of Miradero Mayaguez WTP and WI (FAAST-25)	2021 - Q4	2022 - Q1	$21.61
WTP	CIP.5596001	Rehabilitation of Guajataca Quebradillas WTP and WI (FAAST)	2021 - Q4	2022 - Q1	$21.89
WWTP	CIP.1165044	Rehabilitation of Carolina WWTP FEMA (FAAST-25) .	2021 - Q4	2022 - Q1	$24.47
TSL	CIP.2095052	Rehabilitation of 42 IN Trunk Sewer Line from PR-684 to the South part of Barceloneta WWTP	2021 - Q4	2022 - Q1	$5.34
TSL	CIP.2755055	Rehabilitation of Vega Baja Trunk Sewer Lines (TSL) .	2021 - Q4	2021 - Q4	$4.97

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Total Cost Estimate ($M)
TSL	CIP.3139002	Rehabilitation of Caguas Trunk Sewer Lines (FAAST)	2021 - Q4	2021 - Q4	$22.41
WWTP	CIP.4315010	Rehabilitation to Guayanilla WWTP (FAASt)	2021 - Q4	2022 - Q1	$42.10
TSL	CIP.4589003	Rehabilitation of Ponce Trunk Sewer System (FAAST)	2021 - Q4	2021 - Q4	$21.80
WWTP	CIP.5035001	Rehabilitation of Aguada WWTP (FAAST-25)	2021 - Q4	2022 - Q1	$23.60
WWTP	CIP.5415031	Rehabilitation of Lajas WWTP (FAAST)	2021 - Q4	2022 - Q1	$13.86
WWTP	CIP.5505028	Rehabilitation of Mayaguez WWTP (FAAST-25)	2021 - Q4	2022 - Q1	$51.51
TSL	CIP.5509001	Rehabilitation of Hormigueros and Mayaguez Trunk Sewer Lines (FAAST)	2021 - Q4	2021 - Q4	$19.10
WTP	CIP.1016095	Rehabilitation of Guaynabo WTP and WI Santa Rosa (FAAST-25)	2022 - Q1	2022 - Q2	$35.74
R	CIP.1019000	Dragado Lago Loíza (Carraízo) FAAST	2022 - Q1	2021 - Q2	$59.02
WPS	CIP.1669002	Rehabilitation of Puerto Nuevo WPS and Water Potable Line of 48"(FAAST) .	2022 - Q1	2022 - Q2	$9.73
WTP	CIP.1726043	Rehabilitation of Sergio Cuevas WTP Trujillo Alto (FAAST-25)	2022 - Q1	2022 - Q2	$22.01
WTP	CIP.2076042	Rehabilitation of Esperanza WTP and WI , Arecibo(FAAST)	2022 - Q1	2022 - Q2	$8.11
WTP	CIP.2206107	Rehabilitation of Frontón WTP and WI, Ciales (FAAST)	2022 - Q1	2022 - Q2	$10.48
WTP	CIP.2246106	Rehabilitation of Negros WTP and WI, Corozal (FAAST-25)	2022 - Q1	2022 - Q2	$9.82
WTP	CIP.2346015	Rehabilitation of Hatillo-Camuy WTP(FAAST)	2022 - Q1	2022 - Q2	$9.46

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Total Cost Estimate ($M)
WTP	CIP.2386049	Rehabilitation of Canalizo WTP and WI , Jayuya (FAAST)	2022 - Q1	2022 - Q2	$7.44
WTP	CIP.2426100	Rehabilitation of Lares Nueva Espino WTP and WI, Lares(FAAST)	2022 - Q1	2022 - Q2	$10.14
WTP	CIP.2526006	Rehabilitation of Morovis Sur WTP (FAAST-25)	2022 - Q1	2022 - Q2	$9.83
WTP	CIP.2526007	Rehabilitation of Morovis Urbano WTP (FAAST)	2022 - Q1	2022 - Q2	$11.49
D&T-WL	CIP.2549000	Rehabilitation of Transmission and Distribution System at Naranjito (FAAST)	2022 - Q1	2022 - Q2	$5.92
WTP	CIP.2596004	Rehabilitation of Quebradillas WTP and WI (FAAST-25)	2022 - Q1	2022 - Q2	$8.79
WTP	CIP.2736006	Rehabilitation of Mameyes Utuado WTP and WI (FAAST)	2022 - Q1	2022 - Q2	$10.14
WTP	CIP.3156093	Rehabilitation of El Yunque WTP and WI, Rio Grande (FAAST-25)	2022 - Q1	2022 - Q2	$13.21
WTP	CIP.3366005	Rehabilitation of Humacao WTP (FAAST-25)	2022 - Q1	2022 - Q2	$10.15
WTP	CIP.4316007	Rehabilitation of Jaguas Pasto WTP, Guayanilla (FAAST-25)	2022 - Q1	2022 - Q2	$7.44
WTP	CIP.4646004	WTP Salinas (Wells Closure) (FAAST-25)	2022 - Q1	2022 - Q2	$24.19
WTP	CIP.5379002	Design and Build Guajataca WTP Floating Raw Water Pumping Station Project	2022 - Q1	2022 - Q2	$2.44
WWPS	CIP.2039000	Rehabilitation of Guerrero 2 WWPS, Aguadilla (FAAST)	2022 - Q1	2022 - Q2	$0.45
WWTP	CIP.2075073	Rehabilitation of Islote WWTP, Arecibo (FAAST)	2022 - Q1	2022 - Q2	$14.90
WWTP	CIP.3139001	Improvements to Caguas WWTP (FAAST-25)	2022 - Q1	2022 - Q2	$25.99

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Total Cost Estimate ($M)
WWTP	CIP.4495001	Rehabilitation of Maunabo WWTP (FAAST-25)	2022 - Q1	2022 - Q2	$12.83
WWTP	CIP.4555022	Rehabilitation of Orocovis WWTP (FAAST-25)	2022 - Q1	2022 - Q2	$12.16
WWTP	CIP.4585096	Rehabilitation of Ponce WWTP (FAAST-25)	2022 - Q1	2022 - Q2	$24.29
D	CIP.1666090	Improvements to La Plata Dam -Installation of Anchorage System	2022 - Q1	2022 - Q2	$3.63
WTP	CIP.2426099	Rehabilitation of Indiera Alta WTP and WI , Lares(FAAST)	2022 - Q2	2022 - Q3	$7.48
WTP	CIP.2916002	Rehabilitation of Superacueductos WTP, Arecibo (FAAST-25)	2022 - Q2	2022 - Q3	$13.74
WTP	CIP.3186003	Rehabilitation of Farallon WTP, Cayey (FAAST)	2022 - Q2	2022 - Q2	$0.45
WTP	CIP.4796004	Rehabilitation of Río Prieto WTP (FAAST)	2022 - Q2	2022 - Q3	$13.86
WST	CIP.5009001	Rehabilitation of Water Storage Tanks -West Region Phase 1 (FAAST)	2022 - Q2	2022 - Q3	$0.35
WTP	CIP.5036006	Rehabilitation of Aguadilla Montaña WTP (FAAST)	2022 - Q2	2022 - Q3	$26.00
WTP	CIP.5486006	Rehabilitation of Monte del Estado Maricao WTP and WI (FAAST)	2022 - Q2	2022 - Q3	$6.77
WTP	CIP.5486007	Rehabilitation of Maricao WTP(FAAST)	2022 - Q2	2022 - Q3	$8.00
WTP	CIP.5489001	Rehabilitation of Monte del Estado Maricao WTP and WI (FAAST)	2022 - Q2	2022 - Q3	$5.00
OO	CIP.2149105	Rehabilitation of Ocean Outfalls- Camuy (FAAST) .	2022 - Q2	2022 - Q3	$27.00
WWTP	CIP.3765002	Rehabilitation Vieques WWTP (FAAST) . .	2022 - Q2	2022 - Q3	$31.90

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Total Cost Estimate ($M)
OO	CIP.5509105	Rehabilitation of Ocean Outfalls- Mayaguez (FAAST) .	2022 - Q2	2022 - Q3	$27.00
WM	CIP.6009002	Water Meters Islandwide LS Project (FAAST)	2022 - Q2	2021 - Q4	$300.00
WPS	CIP.1009103	Rehabilitation of Water Pump Stations (WPS) Metro Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	$2.58
RWW	CIP.1009106	Rehabilitation of RWW -Metro Region Phase 1(FAAST)	2022 - Q3	2022 - Q4	$1.70
WST	CIP.2009001	Rehabilitation of Water Storage Tanks -North Region Phase 1 (FAAST)	2022 - Q3	2022 - Q3	$0.35
WPS	CIP.2009103	Rehabilitation of Water Pump Stations (WPS) North Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	$2.58
RWW	CIP.2009106	Rehabilitation of RWW -North Region Phase 1(FAAST)	2022 - Q3	2022 - Q4	$1.70
WPS	CIP.3009103	Rehabilitation of Water Pump Stations (WPS) East Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	$2.58
RWW	CIP.3009106	Rehabilitation of RWW -East Region Phase 1(FAAST)	2022 - Q3	2022 - Q4	$1.70
WTP	CIP.3536006	Rehabilitation of Río Blanco WTP, Naguabo (FAAST-25)	2022 - Q3	2022 - Q3	$19.93
WPS	CIP.4009103	Rehabilitation of Water Pump Stations (WPS) South Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	$2.58
RWW	CIP.4009106	Rehabilitation of RWW -South Region Phase 1(FAAST)	2022 - Q3	2022 - Q4	$1.70
WTP	CIP.4576002	Rehabilitation of Peñuelas WTP (FAAST)	2022 - Q3	2022 - Q4	$12.16
WTP	CIP.4776078	Rehabilitation of Jagueyes-Villalba WTP (FAAST)	2022 - Q3	2022 - Q4	$10.14
WPS	CIP.5009103	Rehabilitation of Water Pump Stations (WPS) West Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	$2.58

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Total Cost Estimate ($M)
RWW	CIP.5009106	Rehabilitation of RWW -West Region Phase 1(FAAST)	2022 - Q3	2022 - Q4	$1.70
WWPS	CIP.1009104	Rehabilitation of WWPS Metro Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	$6.20
WWPS	CIP.2009104	Rehabilitation of WWPS North Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	$6.20
TSL	CIP.2375002	Trunk Sewer Lines (TSL) Isabela - Aguada (FAAST)	2022 - Q3	2022 - Q3	$36.94
WWTP	CIP.2475021	Rehabilitation of Barceloneta WWTP (FAAST-25)	2022 - Q3	2022 - Q4	$31.72
TSL	CIP.2709010	Rehabilitation of Arecibo Trunk Sewer Lines (TSL) (FAAST) .	2022 - Q3	2022 - Q3	$0.90
WWPS	CIP.3009104	Rehabilitation of WWPS East Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	$6.20
WWPS	CIP.4009104	Rehabilitation of WWPS South Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	$6.20
WWPS	CIP.5009104	Rehabilitation of WWPS West Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	$6.20
R	CIP.4009000	Bauta Tunnel (FAAST)	2022 - Q4	2022 - Q4	$150.00
WTP	CIP.4776077	Rehabilitation of Apeadero Villalba WTP (FAAST-25)	2023 - Q2	2023 - Q3	$11.49
WST	CIP.1009101	Rehabilitation of Water Storage Tanks -Metro Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	$1.48
WPS	CIP.1009203	Rehabilitation of Water Pump Stations (WPS) Metro Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	$2.58
WST	CIP.2009101	Rehabilitation of Water Storage Tanks -North Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	$1.48
WPS	CIP.2009203	Rehabilitation of Water Pump Stations (WPS) North Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	$2.58

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Total Cost Estimate ($M)
WST	CIP.3009101	Rehabilitation of Water Storage Tanks (WST) -East Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	$1.48
WST	CIP.4009101	Rehabilitation of Water Storage Tanks -South Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	$2.20
WPS	CIP.4009203	Rehabilitation of Water Pump Stations (WPS) South Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	$2.58
WST	CIP.5009101	Rehabilitation of Water Storage Tanks -West Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	$1.48
WPS	CIP.5009203	Rehabilitation of Water Pump Stations (WPS) West Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	$2.40
WTP	CIP.5506046	Rehabilitation of Ponce de León Mayaguez WTP (FAAST-25)	2023 - Q3	2023 - Q4	$6.76
WWPS	CIP.1009204	Rehabilitation of WWPS Metro Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	$6.20
WWPS	CIP.2009204	Rehabilitation of WWPS North Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	$6.20
WWPS	CIP.3009204	Rehabilitation of WWPS East Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	$6.20
WWPS	CIP.4009204	Rehabilitation of WWPS South Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	$6.20
WWPS	CIP.5009204	Rehabilitation of WWPS West Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	$6.20
TSL	CIP.5685000	Replacement of Trunk Sewer Lines (TSL) in San Sebastián (FAAST) .	2023 - Q3	2023 - Q4	$26.68
WWTP	CIP.3185033	Rehabilitation of Orocovis WWTP (FAAST-25)	2023 - Q4	2024 - Q1	$23.30

1.5 Mid- Term Projects Profile (2024-2027)

The mid-term priority category comprises 50 projects that should begin 30% A & E design in 2024, 2025, 2026, and 2027 (natural years). The cumulative investment on the projects expected to begin A & E within this time horizon is **$1.9 Billion**. Figure 1-5 illustrates the breakdown of cumulative investment by asset category for projects commencing during this period.

Figure 1-5: Total Estimated Cost by Asset Category for Mid-Term Projects($M)

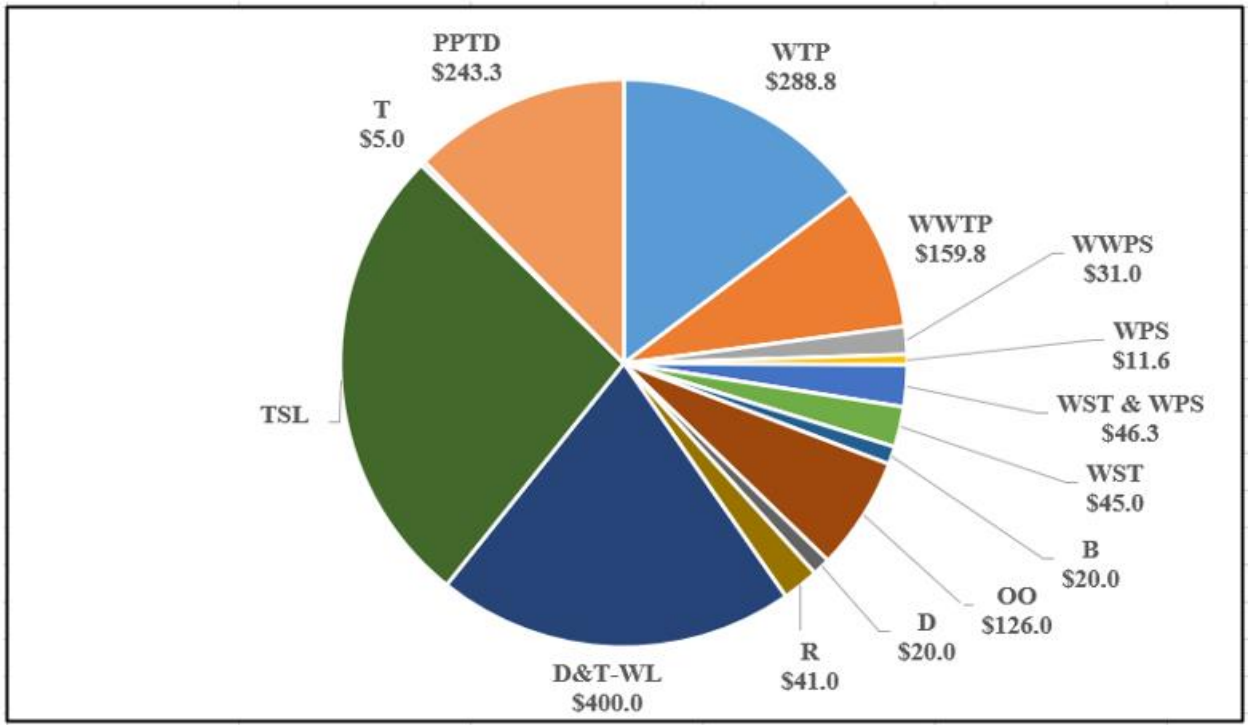


Table 1-6 provides a representative sample of notable projects slated to commence during this period.

Table 1-6: Mid-Term (2024-2027) Notable Projects

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Total Cost Estimate ($M)
WWTP	CIP.3236247	Rehabilitation of Comerío WWTP (FAAST)	2024 - Q1	2024 - Q2	$14.87
WWTP	CIP.1665115	Rehabilitation of Puerto Nuevo WWTP, San Juan (FAAST)	2024 - Q2	2024 - Q3	$35.76
WTP	CIP.6009016	Rehabilitation to PRASA WTP Islandwide LS Project (FAST)	2024 - Q3	2024 - Q3	$30.00
WWTP	CIP.6009017	Rehabilitation to PRASA WWTP Islandwide LS Project (FAST)	2024 - Q3	2024 - Q3	$30.00
WTP	CIP.3786003	Rehabilitation of Guayabota WTP and WI, Yabucoa (FAAST)	2024 - Q3	2024 - Q4	$7.44
WTP	CIP.4576004	Rehabilitation of Malpaso Peñuelas WTP (FAAST)	2024 - Q3	2024 - Q4	$10.13
WTP	CIP.3106106	Rehabilitation of Barrancas WTP and WI, Barranquitas (FAAST)	2024 - Q4	2025 - Q1	$9.46
WTP	CIP.1156004	Rehabilitation of Cubuy WTP and WI, Canóvanas (FAAST)	2024 - Q4	2025 - Q1	$11.16
WST	CIP.6009001	Water Storage Tanks Islandwide (FAAST)	2025 - Q1	2025 - Q2	$45.00
WPS	CIP.6009003	Rehabilitation of WPS Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	$11.61
WWPS	CIP.6009004	Rehabilitation of WWPS Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	$31.00
OO	CIP.6009005	Rehabilitation of Ocean Outfalls Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	$126.00
B	CIP.6009007	Buildings Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	$20.00
PPTD	CIP.6009008	Projects Pending to Defined LS Project (FAAST)	2025 - Q1	2025 - Q2	$243.32
WST & WPS	CIP.6009013	WST & WPS Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	$46.30
R	CIP.6009010	Reservoir Dredging Islandwide LS Project	2025 - Q1	2025 - Q2	$41.00
D	CIP.6009011	Dams Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	$20.00

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Total Cost Estimate ($M)
T	CIP.6009012	Telemetry Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	$5.00
TSL	CIP.6009014	Trunk Sewer Lines (TSL) Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	$520.00
D&T-WL	CIP.6009015	T & D -WL Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	$400.00
WTP	CIP.2736005	Rehabilitation of Mameyes Limón, Utuado (Arriba) WTP and WI (FAAST)	2025 - Q1	2025 - Q2	$7.44
WTP	CIP.4556009	Rehabilitation of Sanamuertos Orocovis WTP(FAAST)	2025 - Q1	2025 - Q2	$10.14
WTP	CIP.3106105	Rehabilitation of La Boca WTP and WI, Barranquitas (FAAST)	2025 - Q1	2025 - Q2	$8.12
WTP	CIP.2736008	Rehabilitation of Roncador WTP and WI, Utuado (FAAST)	2025 - Q1	2025 - Q2	$7.29
WTP	CIP.4016012	Rehabilitation of Guilarte WTP, Adjuntas (FAAST)	2025 - Q2	2025 - Q3	$7.44
WWTP	CIP.3785018	Rehabilitation of Yabucoa WWTP (FAAST)	2025 - Q2	2025 - Q3	$14.88
WWTP	CIP.3045036	Rehabilitation of Aguas Buenas WWTP (FAAST)	2025 - Q2	2025 - Q3	$13.86
WTP	CIP.3106104	Rehabilitation of Barranquitas WTP and WI (FAAST)	2025 - Q3	2025 - Q4	$8.12
WTP	CIP.3186002	Rehabilitation of Cayey Urbana WTP (FAAST)	2025 - Q3	2025 - Q4	$12.16
WTP	CIP.3136012	Rehabilitation of Caguas Norte WTP (FAAST)	2025 - Q3	2025 - Q4	$17.56
WTP	CIP.3336045	Rehabilitation of Gurabo WTP (FAAST)	2026 - Q1	2026 - Q2	$10.14
WTP	CIP.3136013	Rehabilitation of Caguas Sur WTP(FAAST)	2026 - Q1	2026 - Q2	$10.14
WTP	CIP.2076043	Rehabilitation of Río Arriba WTP Arecibo (FAAST)	2026 - Q2	2026 - Q3	$5.42
WTP	CIP.4016008	Rehabilitation of Olimpia - Adjuntas WTP(FAAST)	2026 - Q2	2026 - Q3	$9.46

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Total Cost Estimate ($M)
WTP	CIP.4586084	Rehabilitation of Guaraguao Ponce WTP (FAAST)	2026 - Q2	2026 - Q3	$10.13
WTP	CIP.4796005	Rehabilitation of Rancheras Yauco WTP (FAAST)	2026 - Q2	2026 - Q3	$7.44
WTP	CIP.5686045	Rehabilitation of San Sebastián WTP and WI (FAAST)	2026 - Q3	2026 - Q4	$9.47
WTP	CIP.3536007	Rehabilitation of El Duque WTP, Naguabo (FAAST)	2026 - Q3	2026 - Q4	$7.44
WTP	CIP.3186004	Rehabilitation of Culebras Alto WTP, Cayey (FAAST)	2027 - Q1	2027 - Q2	$7.44
WWTP	CIP.3056002	Rehabilitation of Aibonito WWTP (FAAST)	2027 - Q1	2027 - Q2	$12.89
WTP	CIP.2386048	Rehabilitation of La Pica WTP and WI , Jayuya (FAAST)	2027 - Q2	2027 - Q3	$7.44
WTP	CIP.1156005	Rehabilitation of Canóvanas Nueva WTP and WI (FAAST)	2027 - Q2	2027 - Q3	$14.19
WTP	CIP.3466005	Rehabilitation of Luquillo-Sabana WTP (FAAST)	2027 - Q2	2027 - Q3	$12.16
WTP	CIP.2206106	Rehabilitation of Jaguas Pesas WTP and WI, Ciales (FAAST)	2027 - Q2	2027 - Q3	$7.44
WTP	CIP.5636006	Rehabilitation of Sabana Grande WTP and WI (FAAST)	2027 - Q2	2027 - Q3	$7.44
WTP	CIP.5656001	Rehabilitation of Caín Alto San German WTP and WI (FAAST)	2027 - Q2	2027 - Q3	$7.45
WWTP	CIP.3105032	Rehabilitation of Barranquitas WWTP (FAAST)	2027 - Q3	2027 - Q4	$10.14
WWTP	CIP.2545006	Rehabilitation of Naranjito WWTP (FAAST)	2027 - Q3	2027 - Q4	$12.52
WTP	CIP.5376006	Rehabilitation of Isabela Urbana WTP and WI (FAAST)	2027 - Q3	2027 - Q4	$9.14
WWTP	CIP.5685004	Rehabilitation of San Sebastián WWTP (FAAST)	2027 - Q3	2027 - Q4	$14.91

1.6 Long-Term Projects Profile (2028 and beyond)

The long-term priority category comprises 15 projects that are expected to begin 30% A & E design in years 2028 and beyond.

The cumulative investment on the projects expected to begin A & E within this time horizon is **$125.1 Million**.

Figure 1-6 illustrates the breakdown of cumulative investment by asset category for projects commencing during this period.

Figure 1-6: Total Estimated Cost by Asset Category for Long-Term Projects($M)

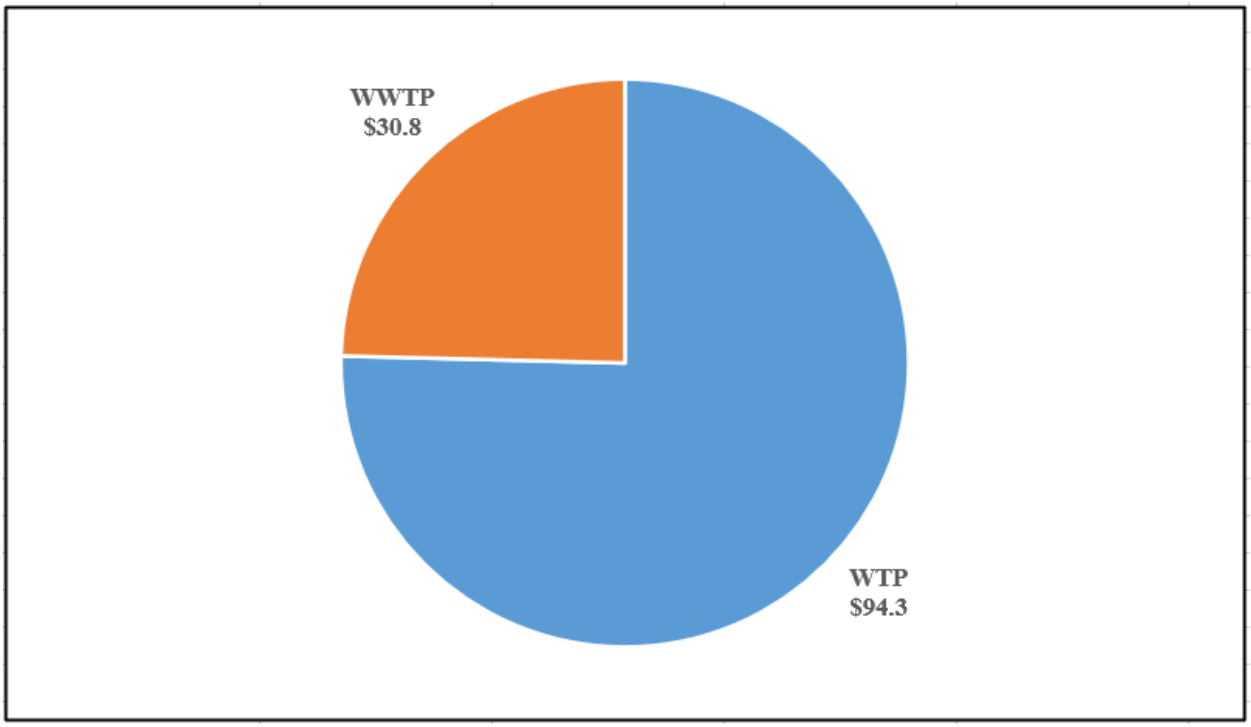


Table 1-7 provides a representative sample of notable projects slated to commence during this period.

Table 1 7: Long-Term (2028 and beyond) Notable Projects

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Total Cost Estimate ($M)
WTP	CIP.3046005	Rehabilitation of Aguas Buenas WTP (FAAST)	2028 - Q1	2028 - Q2	$8.12
WTP	CIP.3216066	Rehabilitation of Cidra Urbano WTP (FAAST)	2028 - Q1	2028 - Q2	$10.14
WTP	CIP.3786004	Rehabilitation of Yabucoa WTP (FAAST)	2028 - Q1	2028 - Q2	$7.45
WTP	CIP.2246107	Rehabilitation of Corozal Urbana WTP (FAAST)	2028 - Q2	2028 - Q3	$7.44
WTP	CIP.2386047	Rehabilitation of Jayuya Urbano WTP and WI (FAAST)	2028 - Q2	2028 - Q3	$10.49
WTP	CIP.2426101	Rehabilitation of Lares WTP and WI (FAAST)	2028 - Q2	2028 - Q3	$10.14
WWTP	CIP.2745019	Rehabilitation of Vega Alta WWTP (FAAST)	2028 - Q2	2028 - Q3	$10.14
WTP	CIP.2076041	Rehabilitation of Arecibo Urbano WTP (FAAST)	2028 - Q2	2028 - Q3	$10.14
WWTP	CIP.3136014	Rehabilitation of Parcelas Borinquen Caguas WWTP (FAAST)	2028 - Q3	2028 - Q4	$6.77
WTP	CIP.1116011	Improvements to LT2 WTP Barrio Nuevo or Elimination , Bayamon (FAAST)	2028 - Q3	2028 - Q4	$7.79
WWTP	CIP.4795022	Rehabilitation of Yauco WWTP (FAAST)	2028 - Q3	2028 - Q4	$13.86
WTP	CIP.3536002	Improvements to LT2 WTP Cubuy Este - Maizales, Naguabo (FAAST)	2028 - Q3	2028 - Q4	$10.13
WTP	CIP.3276053	Rehabilitation of Fajardo WTP(FAAST)	2028 - Q4	2029 - Q1	$12.51

1.7 Program Management

PRASA has implemented project management standards and controls in accord with leading practices. In 2020 PRASA issued an RFQ/RFP to secure engineering firms to serve as the Project Management Consortiums for efficient and timely execution of the CIP, including the projects under this plan. Currently, PRASA has onboarded all the Consortiums.

PRASA's Infrastructure Office, with the assistance of the Consortiums, will implement leading practices following these components: solid centralized governance of the group of projects; a standard, rigorous process from project initiation to closeout for all projects in the plan; a centralized system to provide a single source of truth for all projects (with particular focus on scope, schedule, and budget); and standardized project controls across PRASA.

Chapter 2 Introduction

The purpose of this document is to describe further the PRASA investment plan for the next ten years using the **$4.2 Billion** funding obligated by FEMA under the Stafford Act, Section 428 Public Assistance (428) program, and BBA. The plan starts in 2021 and is projected to end in 2030.

This plan is being submitted to COR3 and FEMA to satisfy the requirement to present a plan within 90 days of the single fixed-cost grant obligation. This plan is considered a "living document." It requires updates and resubmissions to COR3 and FEMA every 90 days after the initial submission. Consequently, we have discussed with FEMA and COR3 during plan development to gain the best possible understanding of their requirements for this plan and to meet those requirements.

PRASA's FAASt Workplan is not subject to approval by COR3 or FEMA, nor does it secure the release of any obligated 428 funds. Instead, the plan serves as a working document to provide context for and support collaboration among PRASA, COR3, and FEMA in the process of developing and submitting individual projects for review, approval, and funds disbursement. Submission of this plan is an essential first step, followed by PRASA submitting individual project funding requests and beginning 30% design for 2021 projects. Now that the initial version of this plan has been completed and submitted, PRASA will begin requesting funding as soon as practicable. PRASA has already submitted a request for reimbursement of around $20.0 Million under the FAASt.

This plan will include project funding from the FEMA 428 and 404 mitigation programs and HUD Community Development Block Grant Disaster Recovery (CDBG-DR) program.

This document will provide the requirements under their 428 work plan to COR3 and FEMA, such as:

- An overview of PRASA's infrastructure investment strategy to provide context for the selection of projects in the plan

- A prioritized list of the infrastructure projects that contain the plan with brief descriptions and class 5 cost estimates
- A section that shows the estimated timing of crucial project milestones by quarter for 2021-2023 and by year for 2024-2030
- An overview of PRASA's instrumental management of the infrastructure controls.

The projects identified in this plan and their associated schedule provide a framework for sketching the work and an expected sequence for its execution. However, ten years is a long-term planning horizon, and adjustments to this FAASt Workplan are expected as long as justified with results from studies, natural events, implementation or scheduling restrictions, or other influences.

This plan is based on the most current information available to PRASA and will be updated quarterly. With this submittal, PRASA intends to execute a set of defined, effective, multi-faceted projects to improve water and wastewater infrastructure in Puerto Rico.

Chapter 3 PRASA's Infrastructure Investment Strategy

3.1 Context

The 2017 hurricane season caused unparalleled devastation in Puerto Rico. As a result, PRASA suffered damages to water treatment facilities and other structures across the Island. After facing the damages of the 2017 events, PRASA needs to continue working to permanently repair their infrastructure with the ongoing challenges of droughts, hurricanes, earthquakes, and the current COVID-19 pandemic. PRASA has one of the most complex systems when is compared to other U.S. jurisdictions. PRASA serves more than one million customers, which is an added challenge to any decisions regarding infrastructure design and development to provide or deliver resilient and less vulnerable water and wastewater system for Puerto Rico.

Indeed, resiliency for water projects comes with the challenge of how to measure their performance. Resiliency is a topic discussed for quite some time in the water industry, but there is no official consensus measuring resiliency. Meanwhile, PRASA is committed to continuing with the recovery efforts and ensuring that future infrastructure developments consider resiliency for the significant challenges that the Island faces.

After the events of 2017, several steps set the path to transforming Puerto Rico's water system. Some of these steps include the development of PRASA's Strategic Plan 2020-2025 and PRASA's Certified Fiscal Plan(s).

These steps provide the foundation for this plan. Table 3-1 illustrates the six (6) foundational components of PRASA's FAASt Workplan.

Table 3-1 Foundational Components of FAASt Workplan

Components	Description
PRASA's Vision and Mission	Since its creation in 1945, PRASA is committed to providing excellence in all aspects of the operations, including drinking water production and distribution, wastewater collection and treatment, as well as system maintenance and customer satisfaction. The goal of providing

Components	Description
	quality and reliable services has not diminished over time and will continue for years to come. As stated on its mission statement, PRASA has the mindset "to provide high-quality, safe, reliable, and affordable water and wastewater services to the people of Puerto Rico, protecting their health and the environment."
America Water Infrastructure Act of 2018	Establishes parameters to improve drinking water and water quality, infrastructure investments, enhance public health and quality of life, increase jobs, and bolster the economy, including assessing the PRASA's system vulnerability to several threats, including climate change and natural disasters.
Codes and Industry Standards	Rehabilitate, improve, and restore the water system following Codes and Industry Standards, including the applicable PRASA design standards, contained in the *Reglamento de Normas de Diseño de la AAA.*
PRASA's Strategic Plan 2021-2025	Provides a roadmap to meet expected water demand over a planning horizon through the future development with specific plans to improve the reliability of the water & water waste system, beginning with the core values responsible for supporting the mission and vision as well as shaping the organization's culture.
PRASA Certified Fiscal Plan(s)	Lays out the path for operational and financial sustainability of PRASA in order to enable the transformation of Puerto Rico's water and wastewater system.
FEMA's Damages Assessment Reports	Provides a description of the damages, related causes, location, and dimensions of the equipment and facilities damaged during the 2017 hurricanes and other catastrophic events.

3.2 Overview of Investment Strategy

PRASA leveraged the foundational components outlined in Table 3.1 and performed additional analysis to guide the project's selection in this FAASt Workplan.

To align and guide our work, we designated five (5) investment focus areas that summarize the intent of what our projects will collectively achieve. The investment focus areas are as follows in Table 3-2.

Table 3-2: Investment Focus Areas

Focus Area	Description
Public Health & Environmental Protection	Ensure to provide a high-quality water service while promoting water conservation and protecting the environment and health of Puerto Rico, following: • Safe Drinking Water Act (SDWA) • Environmental Protection Agency (USEPA) requirements • Puerto Rico Department of Health (PRDH) • Clean Water Act (CWA)
Codes and Industry Standards	Ensure compliance with applicable laws and regulations and alignment with consensus-based codes and standards. Examples include: • American Water Works Association (AWWA) • National Fire Protection Association (NFPA) • American Society of Testing and Materials (ASTM) • National Standards Foundation (NSF) • International Code Council (ICC) • *Reglamento de Normas de Diseño de la AAA*
Reliability and System Resiliency	Ensure the required investment in necessary technology and infrastructure to restore the system, enhance resiliency, and establish an efficient and safe water system that provides reliability for customers.
Hazard Mitigation	Ensure to provide long-term solutions that reduce the PRASA's infrastructure impact of future events and minimize disaster losses and the water system vulnerability.
Modernization and Maintenance	Modernize and maintain PRASA's infrastructure to optimize its operational efficiency, protect public health, safeguard the environment and promote continued economic development.

Chapter 4 PRASA's Prioritized Infrastructure Projects

4.1 Overview

This section of PRASA's FAASt Workplan categorizes each project in the plan as to priority. The three priority categories are near-term (2021-23 start), mid-term (2024-27 start), and long-term (2028 or later start).

We established several criteria and considerations to assign projects to categories. Project start, for this prioritization, was defined as when 30% of design work should begin. A & E work is PRASA's first standard milestone for projects in its infrastructure plan.

In this section, each priority category has a description of the type of infrastructure projects contained within it, a summary overview of the number and estimated costs of projects in the priority category broken down by asset type, and an overview of the estimated timing for submission of projects to COR3 and FEMA. Following these overviews are a series of tables containing the name, brief description, estimated COR3 and FEMA submission timing, and class 5 cost estimate for each project in the priority category.

Under direction from COR3 and FEMA, PRASA will update this plan every 90 days after the initial submission and will update project details and prioritization based on coordination with COR3 and FEMA, its internal findings, and feedback from other stakeholders.

4.2 Asset Category Descriptions

Table 4-1 outlines each asset category contained in this plan and characterizes the types of projects found within each category:

Table 4-1: List of Assets Descriptions

Asset Category	Description
WTP	114 WTP, with capacity ranges from 0.14 to 100 million gallons per day (MGD) with a median and average treatment capacity of 1.2 and 5.1 MGD. After Hurricane María one (1) WTP was closed. The WTP are classified by the type of treatment, with 1% using direct filtration, 92% dual filtration, and 7% membranes. These WTP and the RWI suffered widespread damages caused by flooding, wind, flood transported debris, wind-driven rain, wind-driven debris, falling trees, sediment accumulation, power interruption, and other damages caused by the hurricane. The damaged process components and equipment are necessary for these WTP's operation so the treated water may be distributed as potable water. Damaged process equipment includes (but is not limited to) pumps, screens, clarifiers, package plants, media filters, membrane systems, chlorination systems, UV disinfection, sludge thickeners, sludge filters, and sludge drying beds. Additionally, support (ancillary) items required to operate the WTP were damaged, including (but not limited to) instrumentation, telemetry, process control (SCADA), power (and backup power), piping, channels, valves, buildings, covers, roofs. Sitewide items that are part of the WTP but not associated with the process components or necessary to treat the water also suffered widespread damages. Damaged non-process items include (but are not limited to) fencing, lighting (interior and exterior), paint, HVAC system, furnishings, materials, various non-process equipment (e.g., for landscaping and housekeeping), and buildings not used for the protection of process equipment.
WWTP	51 facilities, with capacity ranges from 0.09 to 144 million gallons per day (MGD) with a median and average treatment capacity of 1.3 and 10.6 MGD. They are classified by the degree of treatment (primary, secondary, or tertiary) and the specific type of biological treatment used. For all 51 WWTP, 12% carry out only primary treatment, 70.5% carry out secondary treatment, and

Asset Category	Description
	17.5% tertiary treatment. For the 51 WWTP, 12% do not carry out biological treatment (primary treatment only), 59% use activated sludge, 14% use trickling filters, and 14% use biological nutrient removal. One WWTP uses rotating biological discs for biological treatment. These WWTPs suffered widespread damages caused by flooding, wind, flood transported debris, wind-driven rain, wind-driven debris, falling trees, sediment accumulation, power interruption, and other damages caused by the hurricane. The damaged process components and equipment are necessary for these WWTPs, so the treated wastewater may be discharged to surface waters. Damaged process equipment includes (but is not limited to) pumps, influent structures, screens, grit removal, primary clarifiers, activated sludge systems, oxidation ditches, package plants, trickling filters, secondary clarifiers, coarse media filters, chlorination/dichlorination systems, UV disinfection, sludge thickeners, anaerobic and aerobic digesters, sludge filters, and sludge drying beds. Additionally, support (ancillary) items required to operate the WWTP were damaged, including (but not limited to) instrumentation, telemetry, process control (SCADA), power (and backup power), piping, channels, valves, buildings, covers, and roofs. Sitewide items that are part of the WWTP but not associated with the process components or necessary to treat the wastewater also suffered widespread damages. Damaged non-process items include (but are not limited to) fencing, lighting, paint, HVAC system, furnishings, materials, various non-process equipment (e.g., for landscaping and housekeeping), and buildings not used for the protection of process equipment.
WWPS	799 WWPS, also called wastewater lift stations, a**re** used to deliver wastewater collected in the trunk sewers from a lower to a higher elevation through a force main. The force main allows the wastewater to flow by gravity

Asset Category	Description
	to the WWTP or another WWPS. The wastewater is usually stored in and pumped from an underground storage pit called a wet well. These WWPS suffered widespread damages caused by flooding, wind, flood transported debris, wind-driven rain, wind-driven debris, falling trees, sediment accumulation, power interruption, and other damages caused by the hurricane. The damaged components and equipment are necessary for the operation of these WWPS that deliver wastewater to the WWTP. Damaged process equipment includes (but is not limited to) pumps, instrumentation, telemetry, process control, power (and backup power), piping, valves, buildings, covers, and roofs. Items that are part of the WWPSs but not associated with the process components or necessary to deliver the wastewater also suffered widespread damages include (but are not limited to) fencing, lighting, paint, HVAC system, various non-process equipment (e.g., for landscaping and housekeeping), and buildings not used specifically for the protection of process equipment.
WPS	468 WPS, used to deliver water to WST, WTP, and the drinking water distribution system. WPS is required when there is insufficient pressure to deliver the water by gravity alone. WPS can deliver raw untreated water to a WTP or treated potable water to the distribution system, including WST. These WPS suffered widespread damages caused by flooding, wind, flood transported debris, wind-driven rain, wind-driven debris, falling trees, sediment accumulation, power interruption, and other damages caused by the hurricane. The damaged components and equipment are necessary for the operation of these WPS used to deliver water. Damaged equipment includes (but is not limited to) pumps, motors, valves, piping, instrumentation, telemetry, process control, and power. Items that are part of the WPS facilities but not directly associated with the process components or necessary to deliver

Asset Category	Description
	the water also suffered widespread damages including, (but not limited to) fencing, lighting, paint, HVAC system, various non-process equipment (e.g., for landscaping and housekeeping), and parts of the building not used specifically for the protection of process equipment.
WST & WPS	808 WST & WPS, used when both the water storage tank and the water pumping station are located together in a single site. These contain pumps and motors, valves, piping (both buried and above ground), instrumentation, telemetry, controls, power, and a protective building or enclosure. The water storage tank also requires a check valve to keeps water from flowing back into the treatment plant and overflow piping to protect the storage tank from being overfilled. These WST & WPS suffered widespread damages caused by flooding, wind, flood transported debris, wind-driven rain, wind-driven debris, falling trees, sediment accumulation, power interruption, and other damages caused by the hurricane. The damaged components and equipment are necessary for the operation of the WST & WPS that store and deliver treated potable water. Damaged equipment includes (but is not limited to) pumps, motors, valves, check-valves, piping, instrumentation, telemetry, process control, power, tank roofing membrane, roof tank access hatches, roof access ladders, and safety cages. Items that are part of the WST & WPS facilities but not directly associated with the process components or necessary to store and deliver the water also suffered widespread damages including, (but not limited to) fencing, lighting (interior and exterior), paint, HVAC system, various non-process equipment (e.g., for landscaping and housekeeping), and buildings or parts of the building not used for the protection of process equipment.
WST	997 WST is used to store treated potable water to use on-demand. The storage also provides extra capacity in case of a failure of the water treatment plant. The WST is usually elevated above the drinking water distribution

Asset Category	Description
	system to provide sufficient pressure for distribution. The WST also requires a check valve to keep water from flowing back into the source and overflow piping to protect the WST from being overfilled. These WST suffered widespread damages caused by flooding, wind, flood transported debris, wind-driven rain, wind-driven debris, falling trees, sediment accumulation, power interruption, and other damages caused by the hurricane. The damaged components and equipment are necessary for the operation of these WSTs used to store raw water. Damaged equipment includes (but is not limited to) check-valves, piping, instrumentation, telemetry, process control, power (and backup power), tank roofing membrane, roof tank access hatches, roof access ladders, and safety cages. Items that are part of the WST facilities but not directly associated with the process components or necessary to deliver the water also suffered widespread damages including, (but not limited to) fencing, lighting, paint, HVAC system, various non-process equipment (e.g., for landscaping and housekeeping), and buildings not used specifically for the protection of process equipment.
Ocean Outfalls (OO)	PRASA owns and operates twelve (12) Ocean Outfall Diffuser Systems. The up-stream treatment plants discharge treated effluent through a piping system terminating in a high-rate diffuser (herein system). The systems typically extend from ¼ mile to ¾ miles offshore and terminate with rate diffusers. The piping system is buried and has a rock protection layer. The diffusers vary from a straight line to a branched configuration (Tor V) with risers and ported outlets that are exposed. Ported outlets disperse the effluent at an average depth between 75 to 150 feet below low water sea level. Wave action and underwater currents developed from Hurricane-force winds (María) caused erosion and displacement of the facility (s).

Asset Category	Description
Dams (D)	PRASA operates and maintains eight (8) major Dams throughout Puerto Rico. La Plata in the North Region, Carraízo and Las Curías in the Metro Region, Toa Vaca in the South Region, Cidra, Rio Blanco and Fajardo in the East Region and *Lago Regulador de Isabela* in the West Region. La Plata and Carraízo are concrete dams with gated controlled spillways. Cidra is a concrete dam with an ungated overflow-type spillway. Toa Vaca is an earth/rock embankment dam with a gated controlled spillway. Las Curías, Rio Blanco and Fajardo are earth/rock embankment dams with ungated overflow-type spillway. For these facilities, the water source is a tributary. In the case of La Plata, Carraízo, Las Curías, Toa Vaca, and Cidra, rivers flow directly into the reservoirs. In the case of Rio Blanco and Fajardo there is an Intake Structure at the rivers that collects and supplies raw water to the reservoirs through a pipe. The primary purpose of all these reservoirs, formed by dams, is storing, and collecting raw water for its supply to Water Treatment Plants (except for Las Curías). Some of the damages on the Island Wide Dams were as follow: damages on Actuators, Antennas, Dam Alarms, Cameras, Controls, Doors, A/C Units, Electrical Components, Fencing, Floodgate Components, Floors, Geotextile for Embankment, Intake Components (Slide Gates), Lighting, Motors, Machine Elements, Pavement, Pumps, Reservoir Air Injection System, RipRap Armoring for Embankment, Roofs, Slope Failure (Erosion/Scouring), Valves, Walls, and Windows.
Reservoirs (R)	PRASA has eight main reservoirs across Puerto Rico and multiple other surface water storage facilities (lakes and basins). The reservoirs are created by impounding (capturing) surface water runoff with concrete or embankment dams. The current purpose of these facilities is to store water for its raw water supply to water treatment plants, providing potable water to the public. Due to the disaster event, heavy sedimentation impacted these four reservoirs: Toa

Asset Category	Description
	Vaca, Cidra, Carraízo, and La Plata. Additionally, one (1) surface water storage facility (lake), *Lago Regulador de Isabela* has some scour damages due to María Hurricane. As part of PRASA's FAASt Workplan, the target is to remove sediments deposited in the assets and repair the facility lake -*Lago Regulador de Isabela.*
Buildings (B)	PRASA manages 91 building facilities grouped by the function: Commercial, Operational, Laboratory, Administrative, Warehouse, and Maintenance. The facilities suffered widespread damages caused by wind-driven rain, wind-driven debris, flooding, flood transported debris, the impact from fallen trees, ground erosion, and other hurricane-related impacts. Damages include roof cover breakage, delamination, and in some instances, total loss of roofing systems which allowed continuous water infiltration. Hurricane conditions also caused the forceful removal of windows and doors, which further contributed to water infiltration and caused violent internal wind pressure, resulting in further structural damage. Water infiltration, structural failure, and invasive wind caused secondary damage to interior building components, such as lighting, furnishings, finish materials, equipment, heating, ventilation, air conditioning (HVAC) systems, electrical systems, fire alarm systems, suspended ceiling systems, and floor coverings. Sustained power loss, caused by island-wide electrical utilities' total failure, resulted in a lack of humidity control inside the buildings, which allowed mold to grow in gypsum board walls, ductwork, throughout building insulation, and other components**.** High winds, wind-driven rain, and windblown debris damaged paint, exterior wall fixtures, antennas, and other exterior elements. The extreme conditions also damaged exterior site components such as lighting poles, fences, gates, and the groundwork.

Asset Category	Description
Raw Water Wells (RWW)	PRASA owns 269 Raw Water Wells, used to extract groundwater by submersible pumps that deliver the raw water to the surface through a pipe casing. The concrete sealing, which surrounds the metal pipe, and a concrete wellhead at the surface protect the well. The extracted raw water may require treatment before being used as drinking (potable) water. The completion of treatment requires either using on-site disinfection or at a WTP. The raw or disinfected water can be delivered to a Water Storage Tank (WST) or delivered directly to a WTP. If the WTP is at a higher elevation, a Water Pumping Station (WPS) will deliver the raw water to the WTP. These Wells suffered widespread damages caused by flooding, wind, flood transported debris, wind-driven rain, wind-driven debris, falling trees, sediment accumulation, power interruption, and other damages caused by the hurricane. The damaged components and equipment are necessary for these Wells' operations that deliver raw water to the WTP or WST. Damaged process equipment includes (but is not limited to) pumps, instrumentation, chlorinators, telemetry, process control, power (and backup power), piping, valves, buildings, covers, and roofs. Items that are part of the Well facilities but not directly associated with the process components or necessary to deliver the water also suffered widespread damages including, (but not limited to) fencing, lighting, paint, HVAC system, various non-process equipment (e.g., for landscaping and housekeeping), and buildings not used specifically for the protection of process equipment.
Transmission and Distribution Water Lines (T&D-WL)	It consists of an estimated 15,148 miles of potable water lines and water distribution lines in diameters ranging from 1" to 84" and in a wide variety of materials. The water transmission lines are pipes, valves, air relief valves, and meters that deliver the raw, untreated water to the WTP. The Water Distribution Lines are a series of pipes, valves, air relief valves, fire hydrants,

Asset Category	Description
	and water meters that deliver the treated potable water from the WTP to the consumers. These water lines suffered widespread damages caused by erosion, flooding, flood transported debris, wind-driven rain, wind-driven debris, falling and uprooted trees, sediment accumulation, power interruption, and other damages caused by the hurricane.
Water Meters (WM)	872,596 each of the WM are part of the Potable Water Lines Distribution. A water meter or hydrometer is a device that allows for counting the volume of water passing through it. It is often used in water supply conductions of residential and industrial installations to make charges to users. These Water Meters suffered widespread damages to the strainers (filters), metering pistons, and non-return (backflow prevention) valves. The hurricane caused blockage and accumulation of debris and sediment by interruption of service, significant fluctuations in pressure, water hammer, backflow, and other damages. The damaged components and equipment are necessary for these Water Meters to accurately measure the flow of and allow passage of potable water delivered to the consumer.
Trunk Sewer Lines (TSL)	TSL's consist of an estimated 5,994 miles of sewer pipes in diameters ranging from 4'to 90" and in a wide variety of materials. The sewer system collects sewage and wastewater from households, commercial businesses, and industries and delivers the wastewater to a wastewater treatment plant (WWTP) through a series of pipes. Maintenance holes connect this series of pipes. These concrete sewer pipes suffered widespread damages caused by flooding, wind, flood transported debris, wind-driven rain, wind-driven debris, falling trees, sediment accumulation, power interruption, and other damages caused by the hurricane. The damaged components and equipment are necessary for the sewer system's operation that delivers wastewater to the WWTP. Damaged equipment includes (but is not limited to) pipes (gravity

Asset Category	Description
	and pressure), maintenance holes, risers, covers, siphons, pipe supports, and eroded topsoil and roadways.
Telemetry (T)	Telemetry System along with PRASA facilities, WTP, WWTP, WWPS, WPS, WST, WST & WPS, and RWW Islandwide. The telemetry system, usually done by wireless communication, can also be done through other means such as telephone, computer networks, fiber optic link, among others. Ranging from motorsport, aviation, astrology, agriculture, the oil industry, medicine, and even biology, telemetry has various utilities. Telemetry aims to allow the mediation of physical or chemical magnitudes, know the state of processes and systems, and remotely control the operation, correct errors, and send the information collected towards an information system for use and benefit. Telemetry helped identify widespread damages caused by hurricanes along the island.
Projects Pending to determine (PPTD)	PRASA is evaluating other projects covered under the FEMA 428-funding obligation to mitigate risks along with several facilities on the system. PRASA will determine the projects in the near future.

4.3 Project Prioritization Approach

After identifying projects, PRASA prioritized them in groups based on safety, impact to the community, the relative complexity of the work, and regulatory requirements.

4.4 Near-Term Category Overview

The near-term priority category is composed of projects that have either already begun design (A &E) or are expected to do so in 2021-2023.

PRASA intends to pursue a significant proportion of its projects in the near-term for several reasons:

1. It is PRASA's objective to deliver results as quickly as possible,
2. Some projects already have preliminary engineering and are ready to proceed into the 30% design phase
3. Some projects are substantial in scope and must be initiated in the near term years.

In the following section, we provide this information on near-term priority projects; Table 4-2 explains this information.

Table 4-2: Provided Project Information

Section	Plan Information Provided
1. Description of projects	An overview of the projects in the priority category and the approach used to designate them, organized by asset type
2. Summary of projects	Number of projects by asset category and start year, along with total dollars by asset category
3. COR3 and FEMA submission timeline	Estimated timeline for SOW submittal to indicate the number of projects for each year and asset category
4. List of projects	Project name, a brief description, estimated submittal timing, estimated cost, and CIP # for each project included in the plan

4.4.1 Description of Near-Term Priority Projects

Near-term projects mainly consist of the rehabilitation of damages to PRASA assets incurred during the 2017 hurricanes. It includes all projects in the application submitted under the FEMA 428 program. PRASA's target is to rehabilitate and improve all these assets following industry standards without regard to pre-disaster conditions and restore components not

damaged by the disaster when necessary to restore the facility function. The projects included in the near-term priority are as follow:

WTP & WWTP

Near-term WTP & WWTP projects mainly consist of the rehabilitation of damages incurred during the 2017 hurricanes at numerous facilities. Due to these facilities' size and complexity, each facility will constitute one (1) project for this plan.

PRASA's WTP consist of 113 assets located islandwide, including the RWI (after Hurricane Maria, one (1) WTP was closed). PRASA reported that each of the 114 WTP suffered some form of disaster damage, classified as follows: minor (6% of all 114 WTP), moderate (59%), or severe (35%). As part of this plan, PRASA includes seventy-seven (77) WTP to be rehabilitated. As part of the near-term period (Third Revision), PRASA proposes to start thirty-eight (38) WTP projects.

PRASA WWTP consists of 51 assets along the island. PRASA reported that each one of the facilities suffered some disaster damage: minor (23%), moderate (53%), or severe (24%). As part of this plan, PRASA includes twenty-eight (28) WWTP to be rehabilitated. As part of the near-term period, PRASA is proposing to start sixteen (16) WWTP projects

WWPS, WPS, WST&WPS, WST and RWW

PRASA's WWPS consists of 799 facilities throughout the island. Part of this plan is considering that at least 40% of the facilities suffered moderate or severe damages, which results in at least 320 WWPS needing rehabilitation and improvement. As part of this workplan revision, PRASA has identified thirteen (13) projects in this category. One (1) project is identified as Rehabilitation to PRASA WWPS Islandwide LS Project (FAASt). This project may be divided in the future into several projects by PRASA's regions, in which each project may contain several WWPS facilities. For this plan, PRASA is scheduling to start twelve (12) projects identified in this category (WWPS) as part of a near-term period between the years 2021 to 2023.

PRASA's WPS consists of 468 facilities. Part of this plan considers that at least 20% of the facilities suffered moderate or severe damages, which will result in at least 94 WPS needing rehabilitation and improvement. As part of this workplan revision, PRASA has identified eleven (11) projects in this category; one of these projects is named Rehabilitation to PRASA WPS Islandwide LS Project (FAAST). This project may be divided soon into several projects by PRASA's regions, and each project may contain several WPS facilities. For this plan, PRASA is scheduling to start ten (10) WWPS projects in the near-term period.

PRASA's WST consists of 997 storage tanks located islandwide. Part of this plan considers that at least 30% of the facilities suffered moderate or severe damages that will result in at least 300 WST needing rehabilitation or improvement. As part of this workplan revision, PRASA has identified twelve (12) projects in this category. One (1) of the projects is identified as the Rehabilitation to PRASA WST Islandwide LS Project (FAAST), which may be divided soon into several projects. As part of this plan, PRASA is scheduling to start eleven (11) projects under this category(WST) as part of the near-term period.

PRASA's WST & WPS consists of 808 assets located throughout the island. Part of this plan considers that at least 20% of the facilities suffered moderate or severe damages, which will result in at least 162 WST & WPS needing rehabilitation or improvement. Preliminary, PRASA has identified one (1) project in this category, named Rehabilitation to PRASA WST & WPS Islandwide LS Project (FAAST). This project may be divided soon into several projects by PRASA's regions, and each project may contain several WST & WPS. For this plan, PRASA is not scheduling these assets to start between the years 2021 to 2023. PRASA is planning to start those projects after 2024.

PRASA's RWW consists of 269 Wells located throughout PRASA's five regionals. . As part of this workplan revision, PRASA has identified five (5) projects in this category. For this plan, PRASA is scheduling to start the RWW projects in the near-term period.

Ocean Outfalls (OO)

PRASA's Ocean Outfalls consists of 12 assets, and part of this plan PRASA's target is to rehabilitate and improve all these assets following industry standards without regard to pre-disaster conditions and to restore components not damaged by the disaster, when necessary to restore the facility function. As part of this workplan revision, PRASA has identified three (3) projects in this category. One (1) of the projects in this category is named Rehabilitation to PRASA OO Islandwide LS Project (FAAST), which may be divided in the future into several projects. Due to the size and complexity of these facilities, each facility may constitute one project. PRASA plans to start two(2) of the three (3) projects in this category as part of the near-term period.

Dams(D)

PRASA operates and maintains eight (8) major Dams throughout Puerto Rico. Part of this plan is to rehabilitate and improve all these assets following industry standards without regard to pre-disaster condition, to restore components not damaged by the disaster, and when necessary to restore the facility function. Preliminary, PRASA has identified three (3) projects under this asset. One (1) of the projects is identified as Rehabilitation to Dams Islandwide LS Project (FAASt), which may be divided soon into several projects. Due to the size and complexity of these facilities, each facility may constitute one project. PRASA plans to start two(2) of the three (3) projects under this category as part of the near-term period.

Reservoirs (R)

PRASA has eight (8) main reservoirs throughout Puerto Rico. As part of this plan, PRASA's target is to remove sediments deposited in the assets to extend the useful life of the facilities following industry standards without regard to pre-disaster conditions. Preliminary, PRASA has four (4) projects under this asset. One (1) of the projects is identified as Reservoir Dredging Islandwide LS Project, which may be divided soon into several projects. Carraízo Reservoir Dredging was originally included as part of this LS Project; however, currently is

included as a separate project. As part of the near-term period, PRASA schedules to start the three (3) projects, including Carraízo Reservoir Dredging

Buildings (B)

PRASA manages a total of 91 building facilities throughout five (5) regional sectors on the island. Building facilities are grouped by the function of the building: Commercial, Operational, Laboratory, Administrative, Warehouse, and Maintenance. PRASA has claimed 41 building facilities, while 56 sites are not included in the asset group of the damage inventory. PRASA leases eight (8) of the 41 claimed building facilities, and of such leased facilities, PRASA will only claim building contents. Preliminary, PRASA has identified four (4) projects under this asset. One (1) of the projects is identified as PRASA Buildings Islandwide LS Project (FAAST), which may be divided in the near future into several projects per PRASA's regions, and each project may contain several building facilities. PRASA plans to start three (3) of the four (4) projects under this category as part of the near-term period.

Distribution and Transmission Water Lines (D&T-WL)

PRASA has Distribution and Transmission water lines along all the island. PRASA intends to rehabilitate and improve these assets damaged by the hurricanes following industry standards. Also, to rehabilitate or improve components not damaged, when necessary, to restore the facility function. Preliminary, PRASA has identified four (4) projects under this asset. One (1) of the projects is identified as PRASA T & D -WL Islandwide LS Project (FAAST), which may be divided soon into several projects. As part of the near-term period, PRASA plans to start three (3) projects under this category.

Water Meters (WM)

PRASA has Distribution and Transmission water lines along all the island, and as part of this system are included the WM. PRASA's target is rehabilitation and improvement of all these assets following industry standards without regard to pre-disaster conditions, to restore

components not damaged by the disaster, and when necessary to restore the facility function. Preliminary, PRASA has identified under this category one (1) project named PRASA WM Islandwide LS Project (FAAST). As part of the near-term period, PRASA plans to start the project under this category.

Trunk Sewer Lines (TSL)

PRASA has sewer lines along all the island. PRASA intends to rehabilitate and improve these assets damaged by the hurricanes following industry standards. Also, to rehabilitate or improve components not damaged, and when necessary, to restore the facility function. Preliminary, PRASA has identified twelve (12) projects under this category. One (1) of the projects is identified as PRASA TSL Islandwide LS Project (FAAST), which may be divided soon into several projects. As part of the near-term period, PRASA plans to start eleven (11) projects under this category.

Telemetry (T)

Telemetry System is along with PRASA facilities, WTP, WWTP, WWPS, WPS, WST, WST & WPS, and RWW Islandwide. PRASA intends to rehabilitate and improve these assets. Preliminary, PRASA has identified one (1) project under this asset. This project is named PRASA Telemetry Islandwide LS Project (FAAST), which may be divided soon into several projects. For this plan, PRASA is scheduling to start the Telemetry (T) projects between the years 2024 and 2027.

Projects Pending to be Defined (PPTD)

PRASA evaluates other projects under the MAAA200 PRASA Island Wide FAASt Project. In the near future, PRASA will identify those projects. Preliminary, PRASA plans to start those projects after 2025.

4.4.2 Summary of Near-Term Priority Projects

The following table (Table 4-3) summarizes the volume of the near-term projects that PRASA plans to initiate (A & E Phase) and the estimated cost by asset category:

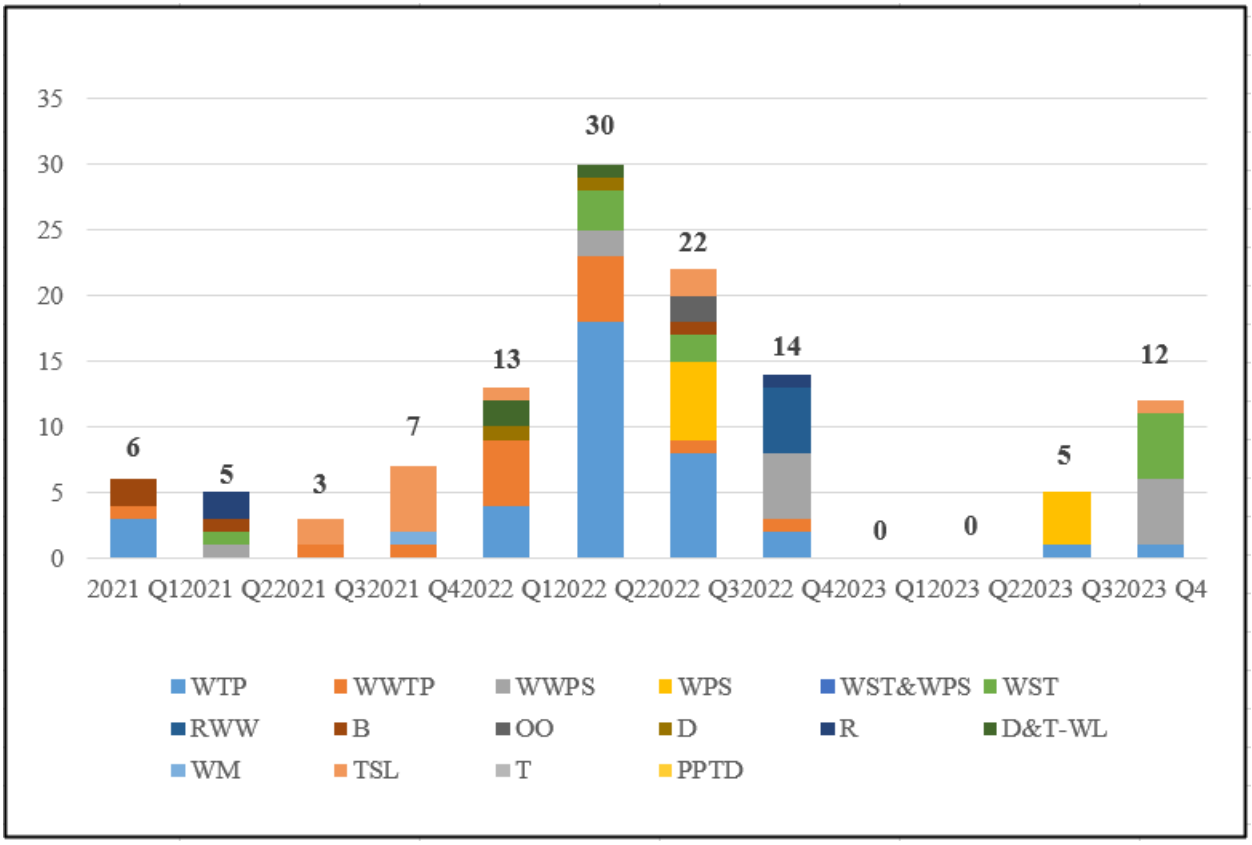
Table 4-3: Summary of Near-Term Priority Projects (Natural Years and Cumulative Total)

Asset Category	A & E Start 2021	A & E Start 2022	A & E Start 2023	Total Projects	Total Cost Estimates (Million)
WTP	7	28	3	38	$600.5
WWTP	8	7	1	16	$422.1
WWPS	1	6	5	12	$63.1
WPS	0	6	4	10	$32.8
WST & WPS	0	0	0	0	$0.0
WST	1	5	5	11	$15.5
RWW	0	5	0	5	$8.5
B	2	1	0	3	$36.8
OO	0	2	0	2	$54.0
D	0	2	0	2	$8.6
R	2	1	0	3	$221.2
D&T-WL	0	3	0	3	$9.2
WM	1	0	0	1	$300.0
TSL	7	3	1	11	$214.4
T	0	0	0	0	$0.0
PPTD	0	0	0	0	$0.0
Total	**29**	**69**	**19**	**117**	**$1,986.7**

4.4.3 COR3 and FEMA Submissions Timeline

The following chart figure shows the estimated timeline for the submittal of individual projects to COR3 and FEMA for review and approval.

Figure 4-1: COR3 and FEMA Near-Term SOW Project Submissions by Quarter (Natural Years)



4.4.4 List of Near-Term Priority Projects

Table A-1 of Appendix A includes the complete list of projects in the near-term priority category. In addition, the Appendix identifies projects by asset category, brief description,

estimated timing for submission to COR3 and FEMA for review and approval, a class 5 cost estimate, and PRASA's Construction Improvement Program number.

It is important to note that the cost estimate provided does not include potential hazard mitigation funding that may be available through FEMA's 406 Hazard Mitigation Program. PRASA intends to submit applications for 406 funding with its 428 projects, where applicable. These additional funds will be critical to reinforcing the new infrastructure to protect against damage from future disaster events.

All projects in the tables below are funded through FEMA's 428 programs unless otherwise noted. Also, HUD's CDBG-DR funds will support some of the infrastructure projects contained in this plan, but the allocation of the HUD funds are yet to be tied to specific projects, which will occur in a future update of this plan.

4.5 Mid-Term Category Overview

The mid-term priority category is composed of projects that have either already begun design (A & E) or are expected to do so in 2024-2027.

In the sections that follow, we provide this information on near-term priority projects. Table 4-4 enumerates this information.

Table 4-4: Project Information to be provided

Section	Plan Information Provided
1.Description of projects	An overview of the projects in the priority category and the approach used to designate them, organized by asset type
2. Summary of projects	Number of projects by asset category and start year, along with total dollars by asset category
3. COR3 and FEMA submission timeline	Estimated timeline for SOW submittal to indicate the number of projects for each year and asset category

Section	Plan Information Provided
4. List of projects	Project name, a brief description, estimated submittal timing, estimated cost, and CIP # for each project included in the plan

4.5.1 Description of Mid-Term Category Overview

Mid-term projects mainly consist of the rehabilitation of damages to PRASA assets incurred during the 2017 hurricanes. The application submitted under the FEMA 428 program, includes all projects. PRASA's target is to rehabilitate and improve all these assets following industry standards without regard to pre-disaster conditions, to restore components not damaged by the disaster, and when necessary to restore the facility function.

The projects included in the mid-term priority are as follow:

WTP & WWTP

As the summary of the mid-term period, PRASA is planning to start A & E for the following projects for WTP and WWTP:

- WTP- 29 Projects.
- WWTP- 9 Projects.

WWPS, WPS, WST&WPS, WST and RWW

As the summary of the mid-term period, PRASA is planning to start A & E for the following projects for WWPS, WPS, WST&WPS, WST and RWW:

- WWPS- One (1) Project.
- WPS- One(1) Project.
- WST&WPS- One (1) Project.
- WST- One(1) Project

- RWW- For this workplan revision, PRASA is scheduling to start the RWW projects in the near-term period.

Mid-term WWPS, WPS, WST&WPS, WST, and RWW mainly consist of the rehabilitation of damages incurred during the 2017 hurricanes at numerous facilities.

Ocean Outfalls (OO)

As part of this plan, PRASA is programming to start one (1) project as part of the mid-term period.

Dams (D)

As part of the mid-term projects period, PRASA plans to start one (1) project under this category, named PRASA Dams Islandwide LS Project (FAAST), which may be divided in the future into several projects.

Reservoirs (R)

As part of the mid-term projects period, PRASA is programming to start one (1) project under this category.

Buildings (B)

As part of the mid-term projects period, PRASA is programming to start one (1) project under this category.

Distribution and Transmission Water Lines (D&T-WL)

As part of the mid-term projects period, PRASA is programming to start one (1) project under this category, named PRASA D&T-WL Islandwide LS Project (FAAST), which may be divided in the future into several projects.

Water Meters (WM)

PRASA is programming to start projects under these assets as part of the near-term period.

Trunk Sewer Lines (TSL)

As part of the mid-term projects period, PRASA is programming to start one (1) project under this category, named PRASA TSL Islandwide LS Project (FAAST), which may be divided in the future into several projects.

Telemetry (T)

Telemetry System is along with PRASA facilities, WTP, WWTP, WWPS, WPS, WST, WST & WPS, and RWW Islandwide. PRASA intends to rehabilitate and improve these assets. Preliminary, PRASA has identified one (1) project under this category, named PRASA Telemetry Islandwide LS Project (FAAST), which may divide this LS project into several projects. For this plan, PRASA is planning to start the telemetry projects in the mid-term period.

Projects Pending to be Defined (PPTD)

PRASA is evaluating other projects under FAASt Project # 144184, MAAA200 Island Wide. In the near future, PRASA will identify those projects. Preliminary, PRASA is planning to start these projects under the mid-term period.

4.5.2 Summary of Mid-Term Priority Projects

The following table (Table 4-5) summarizes the mid-term project volume and the cost estimate by asset category:

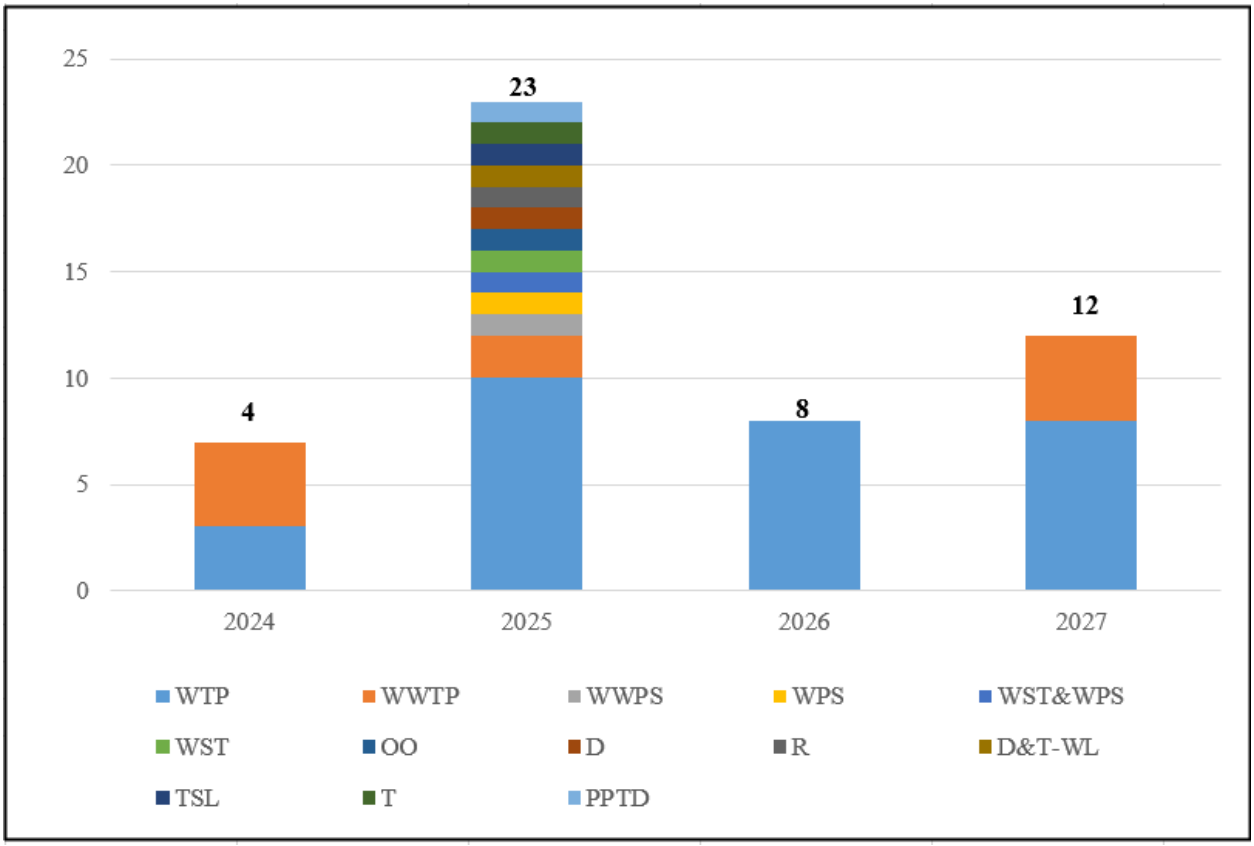
Table 4-5: Summary of Mid-Term Priority Projects (Natural Years and Cumulative Total)

Asset Category	A & E Start 2024	A & E Start 2025	A & E Start 2026	A & E Start 2027	Total of Projects	Total Cost Estimates
WTP	5	8	8	8	29	$288.8
WWTP	3	2	0	4	9	$159.8
WWPS	0	1	0	0	1	$31.0
WPS	0	1	0	0	1	$11.6
WST & WPS	0	1	0	0	1	$46.3
WST	0	1	0	0	1	$45.0
RWW	0	0	0	0	0	$0.0
B	0	1	0	0	1	$20.0
OO	0	1	0	0	1	$126.0
D	0	1	0	0	1	$20.0
R	0	1	0	0	1	$41.0
D&T-WL	0	1	0	0	1	$400.0
WM	0	0	0	0	0	$0.0
TSL	0	1	0	0	1	$520.0
T	0	1	0	0	1	$5.0
PPTD	0	1	0	0	1	$243.3
Total	**8**	**22**	**8**	**12**	**50**	**$1,957.9**

4.5.3 Mid-Term COR3 and FEMA Submission Timeline

The following bar chart (Figure 4-2) shows the estimated timeline for submittal of individual projects to COR3 and FEMA for review and approval:

Figure 4-2:-COR3 and FEMA Near-Term SOW Submissions by Quarter (Natural Years)



4.5.4 List of Mid-Term Priority Projects

Table A-2 of Appendix A of this document includes the complete list of projects in the mid-term priority category. In addition, the Appendix identifies projects by asset category, brief description, estimated timing for submission to COR3 and FEMA for review and approval, a class 5 cost estimate, and PRASA's Construction Improvement Program number.

It is important to note that the cost estimate provided does not include potential hazard mitigation funding that may be available through FEMA's 406 Hazard Mitigation Program. PRASA intends to submit applications for 406 funding with each of its 428 projects, where applicable. These additional funds will be critical to reinforcing the new infrastructure to protect against damage from future disaster events.

All projects in the tables below are funded through FEMA's 428 programs unless otherwise noted. Also, HUD's CDBG-DR funds will support some of the infrastructure projects in this plan. However, the allocation of the HUD funds has not yet been tied to specific projects, resulting in a future update of this plan.

4.6 Long- Term Category Overview

The long-term priority category comprises projects that have already begun design (A & E) or will begin in 2028-2030.

In the sections that follow, we provide this information on near-term priority projects. Table 4-6 enumerates the information presented.

Table 4-6: Provided Project Information

Section	Plan Information Provided
1. Description of projects	An overview of the projects in the priority category and the approach used to designate them, organized by asset type.
2. Summary of projects	Number of projects by asset category and start year, along with total dollars by asset category.
3. COR3 and FEMA submission timeline	Estimated timeline for submittal to indicate the number of projects for each year and asset category.
4. List of projects	Project name, a brief description, estimated submittal timing, estimated cost, and IRP reference section for each project included in the plan.

4.6.1 Description of Long-Term Category Overview

Long-term projects mainly consist of the rehabilitation of damages to PRASA assets incurred during the 2017 hurricanes. All projects are in the application submitted under the FEMA 428 program. PRASA's target is to rehabilitate and improve all these assets following industry standards without regard to pre-disaster conditions and restore components not damaged by the disaster when necessary to restore the facility function.

The projects included in the long-term period are as follow:

WTP & WWTP

As the summary of the long-term period, PRASA is planning to start A & E for the following projects for WTP and WWTP:

- WTP- 10 Projects.
- WWTP-3 Projects.

WWPS, WPS, WST&WPS, WST and RWW

As part of this plan, PRASA is planning to start all the projects related to WWPS, WPS, WST, WST&WPS, and RWW as part of the near-term and mid-term periods.

Ocean Outfalls (OO)

As part of this plan, PRASA plans to start all the projects related to Ocean Outfall as part of the near-term and mid-term periods.

Dams(D)

As part of this plan, PRASA plans to start all the projects related to Dams as part of the near-term and mid-term periods.

Reservoirs (R)

As part of this plan, PRASA plans to start all the projects related to Dams as part of the near-term and mid-term periods.

Buildings(B)

As part of this plan, PRASA plans to start the projects related to this asset as part of the near-term and mid-term periods.

Distribution and Transmission Water Lines (D&T-WL)

PRASA is planning to start the projects related to this asset as part of the near-term and mid-term periods.

Water Meters (WM)

PRASA is planning to start the projects related to this asset as part of the near-term period.

Trunk Sewer Lines (TSL)

PRASA plans to start the projects related to this asset as part of the near-term and mid-term periods.

Telemetry (T)

PRASA plans to start the projects related to this asset as part of the mid-term period.

Projects Pending to be Defined (PPTD)

The PRASA plan is to define all the projects by the mid-term period and start the A & E before 2028.

4.6.2 Summary of Long-Term Priority Projects

The following table (Table 4-7) summarizes the volume of the long-term projects planned to be initiate (A & E Phase) and the estimated cost per asset category:

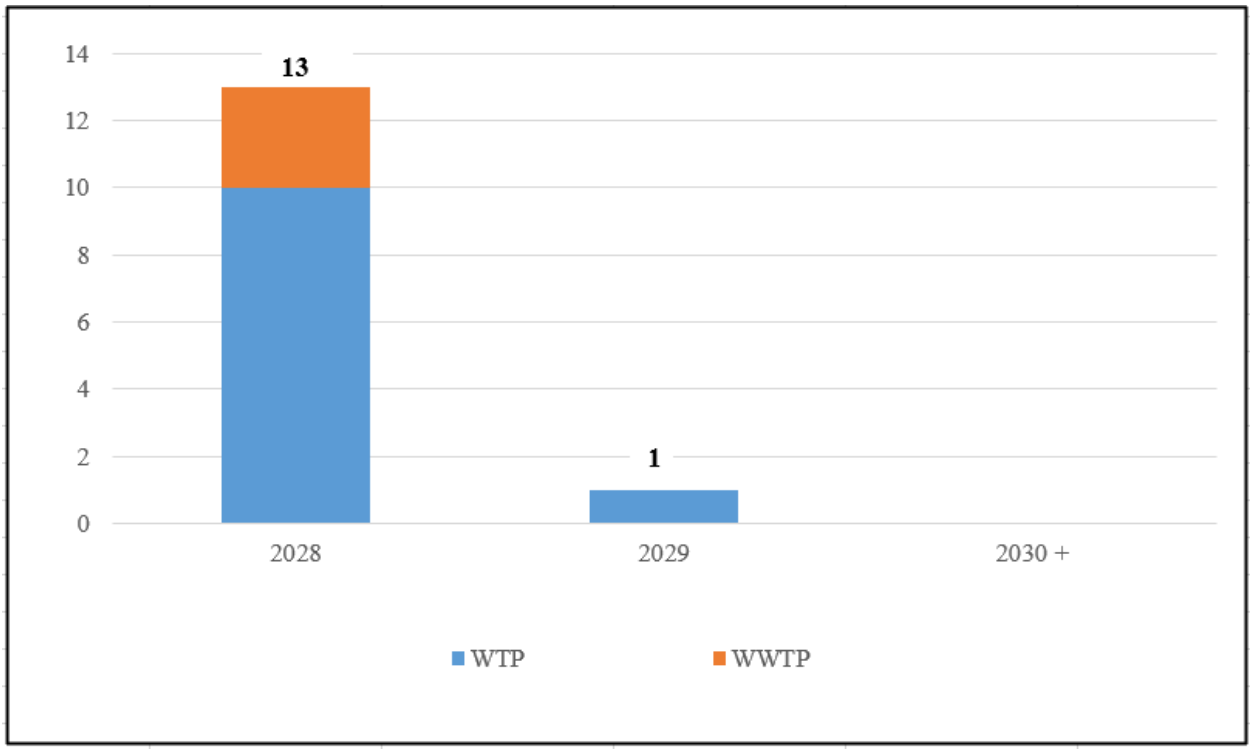
Table 4-7: Summary of Long-Term Priority Projects (Natural Years and Cumulative Total)

Asset Category	A & E Start 2028	A & E Start 2029	A & E Start 2030	Total of Projects	Total Cost Estimates
WTP	10	0	0	10	$94.3
WWTP	3	0	0	3	$30.8
WWPS	0	0	0	0	$0
WPS	0	0	0	0	$0
WST & WPS	0	0	0	0	$0
WST	0	0	0	0	$0
RWW	0	0	0	0	$0
B	0	0	0	0	$0
OO	0	0	0	0	$0
D	0	0	0	0	$0
R	0	0	0	0	$0
D&T-WL	0	0	0	0	$0
WM	0	0	0	0	$0
TSL	0	0	0	0	$0
T	0	0	0	0	$0
PPTD	0	0	0	0	$0
Total	13	0	0	13	$125.1

4.6.3 Long- Term COR3 and FEMA Submission Timeline

The following bar chart (Figure 4-3) shows the estimated timeline for submittal of individual projects to COR3 and FEMA for review and approval:

Figure 4-3: COR3 and FEMA Long-Term SOW Submissions by Quarter (Natural Years)



4.6.4 List of Long-Term Priority Projects

Table A-3 of Appendix A of this document included the complete list of projects in the long-term priority category. PRASA identifies projects by asset category, brief description, estimated timing for submission to COR3 and FEMA for review and approval, a class 5 cost estimate, and PRASA's Construction Improvement Program number.

It is important to note that the cost estimate provided does not include potential hazard mitigation funding that may be available through FEMA's 406 Hazard Mitigation Program. PRASA intends to submit applications for 406 funding with each of its 428 projects, where applicable. These additional funds will be critical to reinforcing the new infrastructure to protect against damage from future disaster events.

All projects in the tables below are funded through FEMA's 428 programs unless otherwise noted. Also, HUD's CDBG-DR funds will support some of the infrastructure projects in this plan. However, the allocation of the HUD funds has not tied to specific projects, resulting in a future update of this plan.

Chapter 5 PRASA's Plan Schedule

5.1 Timing Assumptions

The estimation of project time regarding the identification and prioritization of projects relies on the best information available to PRASA at the time of plan development, primarily that project formulation, based on the FEMA Five Phase National Workflow, will occur expeditiously.

Recognizing that PRASA does not yet have all the necessary details to develop detailed plans for its infrastructure projects and have precision on timing, COR3 and FEMA have identified this plan as a "living document," one that requires an update and resubmission every 90 days after initial submittal.

The estimated timing of projects in PRASA's FAASt Workplan will be impacted by many different factors including, but not limited to, regulatory requirements and stakeholder input, improved clarity on project requirements and approach, project review and permitting processes, the availability of both labor and material resources to execute on project design and construction tasks, and potential future disaster events impacting the island. It is expected that PRASA's FAASt Workplan, including estimated project timing, will require revision as part of these regular plan updates.

It is expected that increased clarity on project requirements and approach provided from current and future engineering studies and the completion of 30% design work will result in updates to project approach and milestone timing estimates. Also, collecting as-built/record drawings, asset management planning, and document control requirements will impact the design work and the project approach.

Another set of milestone timing assumptions and potential drivers of milestone timing changes are around approval and permitting processes. These include uncertainty about the amount of time required from project submission to completion of review and receipt of approval from

COR3 and FEMA. Specifically, the timing for environmental and remediation permits for each project will depend on the type of project, location, and potential impacts on environmental/social receptors, including air, water, wetlands, natural resources, and cultural and historical resources.

Lastly, milestone timing estimates assume the required labor and materials needed to support the infrastructure plan will be available; however, shortages of either, even temporarily, may cause delays and necessitate adjustments to project milestone timing estimates.

5.2 Estimated Project Timing Assumptions

Each project has four major standardized milestones regarding timing:

- Begin 30% Architecture and Engineering Design (A & E)
- Submit Project to COR3 and FEMA for Review
- Begin Construction/Implementation
- Begin COR3 and FEMA Project Closeout

Appendix B shows the schedule, year by year, the work plan for major milestone initiation for the projects in the near-term, mid, and long-term periods.

Chapter 6 PRASA's Management Approach

The work needed to complete projects from their planning phase to completion requires both PRASA's internal personnel and external resources. To support PRASA in managing this plan and achieve a cost-effective way to carry out this plan, PRASA has onboard a Project Management Consortium (C). The Consortiums responsibility will be the efficient and timely execution of the CIP. All the projects included in this plan were added to PRASA's CIP.

PRASA, in coordination with the Consortiums, must establish metrics by project and monitor compliance and execution through a CIP tracking tool. Typically, the construction phase includes the highest potential for deviations in cost and time. To maintain control of these, PRASA keeps monthly track of two industry-standard KPIs:

- Cost Performance Index (CPI): Measures the cost efficiency of resources committed to the project, evaluating whether the project will be completed on budget.
- Schedule Performance Index (SPI): Measures the relationship between the executed work versus the planned work, assessing whether the project will be completed on time.

The established metrics will allow for high-level monitoring of the project's execution.

PRASA Infrastructure Office, with the assistance of the Consortiums, will manage the FEMA funded projects under a governance structure that includes:

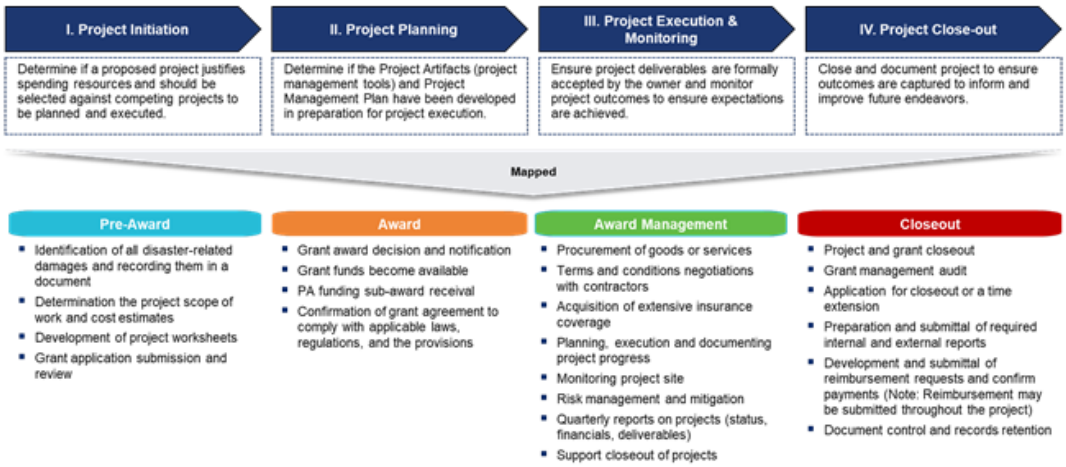
- Strong governance and oversight, by senior executives, of all projects
- Project justification is rigorous, documented, data-driven, standardized, and includes assessing costs, benefits, and alternative courses of action.
- Project authorization is grounded in a well-defined process with clear roles and responsibilities.
- Centralized approvals and oversight so that projects work together as a cohesive group of projects.

As defined by COR3, the federal grant lifecycle process (See Figure 6-1) is an end-to-end framework outlining the progression of phases and key requirements that PRASA must complete, obtain, manage, and close of Public Assistance funding sub-awards and projects.

Figure 6-1: COR3's Federal Grant Lifecycle

PRASA ensures a rigorous project management process that governs all projects with clear accountabilities, consistent standards based on leading practices for managing and governing all PRASA projects. The management process has four phases for a project (See Figure 6-2), each of which has defined deliverables and documentation required to enter the next phase. To ensure compliance with local and federal guidelines and regulations, PRASA has incorporated the key requirements and associated controls to manage FEMA funds within the project management process.

Figure 6-2: PRASA's Management Process to Federal Grant Lifecycle



PRASA has a Management Information System with functional architecture that provides various project management features to enable management to maintain visibility around projects in each stage of the project lifecycle from project initiation to project closeout.

PRASA has incorporated the following controls to ensure FEMA fund management guidelines are met:

- A set of quality management controls based on PRASA's quality management system.
- Plus, effective project management controls and execution procedures, including risk management, based on leading practices.
- The FEMA grant and fund management control process to ensure compliance.
- The preparation of dashboards, project reports, and monthly operating sequences.

Chapter 7 Appendix A

7.1 Appendix A: Table A.1- List of PRASA Projects FAASt Near-Term

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate ($M)	Total Cost Estimate ($)
B	CIP.3130001	PRASA Central Laboratory in Caguas (FAAST)	2019 - Q1	2021 - Q1	2020 - Q3	2022 - Q1	$28.09	28,094,198.53
WWTP	CIP.3135079	Rehabilitation of Blowers in Caguas WWTP (FAAST)	2019 - Q4	2021 - Q4	2019 - Q4	2021 - Q2	$4.79	4,786,904.55
WST	CIP.3360002	Design and Construction Buena Vista Tank (FAAST)	2020 - Q1	2021 - Q2	2020 - Q4	2021 - Q4	$1.48	1,481,842.76
D&T-WL	CIP.2475022	Installation of Permanent WL Rio Utuado Bridge (FAAST)	2020 - Q2	2022 - Q1	2022 - Q1	2022 - Q4	$0.66	662,695.00
WTP	CIP.2479001	Rehabilitation and Improvements to the Morovis Sur RWI (FAAST)	2020 - Q4	2021 - Q1	2021 - Q4	2022 - Q2	$1.59	1,586,954.10
WWPS	CIP.3445009	Design and Build - Rehabilitation of La Sabana Las Piedras WWPS	2020 - Q4	2021 - Q2	2021 - Q4	2022 - Q3	$0.66	663,452.12

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate ($M)	Total Cost Estimate ($)
WTP	CIP.2096007	Rehabilitation of Enrique Ortega WTP Toa Alta (FAAST-25)	2021 - Q1	2021 - Q1	2022 - Q2	2024 - Q4	$78.99	78,985,046.09
WWTP	CIP.3305001	Improvements to Guayama WWTP (FAAST)	2021 - Q1	2021 - Q1	2022 - Q2	2024 - Q4	$73.53	73,530,435.89
TSL	CIP.4089000	Rehabilitation of Arroyo-Guayama Trunk Sewer Lines (FAAST)	2021 - Q1	2021 - Q4	2022 - Q2	2024 - Q4	$24.69	24,689,563.91
WTP	CIP.2017005	Rehabilitation of Culebrinas WTP Aguadilla FEMA (FAAST-25)	2021 - Q2	2021 - Q1	2022 - Q2	2024 - Q3	$47.26	47,259,945.06
D	CIP.7776071	Rehabilitation of Toa Vaca Dam (FAAST)	2021 - Q2	2022 - Q1	2022 - Q3	2023 - Q4	$5.01	5,010,299.00
WWTP	CIP.3365083	Rehabilitation of Humacao Waste Water Treatment Plant (WWTP) Sludge Treatment System (STS)	2021 - Q2	2021 - Q3	2022 - Q2	2024 - Q1	$11.11	11,114,219.94
B	CIP.1660002	Rehabilitation of PRASA Main Building in Hato Rey	2021 - Q2	2021 - Q4	2022 - Q2	2023 - Q3	$0.68	680,000.00
R	CIP.5376001	Repair of Geosynthetic Membranes in Lago Regulador in Isabela	2021 - Q3	2021 - Q2	2022 - Q3	2023 - Q4	$12.20	12,203,321.20

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate ($M)	Total Cost Estimate ($)
TSL	CIP.1169001	Rehabilitation of Los Angeles and Loíza Pueblo Trunk Sewers (FAAST)	2021 - Q3	2021 - Q3	2022 - Q1	2023 - Q2	$14.59	14,590,599.26
TSL	CIP.2149001	Rehabilitation of Camuy Trunk Sewer Lines (FAAST)	2021 - Q3	2021 - Q3	2022 - Q1	2023 - Q3	$36.99	36,987,404.00
B	CIP.3139000	Equipment for New PRASA Central Laboratory in Caguas (FAAST)	2021 - Q3	2021 - Q1	2021 - Q3	2022 - Q2	$8.00	8,000,000.00
WST	CIP.1009001	Rehabilitation of Water Storage Tanks - Metro Region Phase 1 (FAAST)	2021 - Q4	2022 - Q1	2022 - Q3	2023 - Q2	$0.35	350,000.00
WTP	CIP.2736007	Rehabilitation of Santa Isabel Utuado WTP and WI (FAAST-25)	2021 - Q4	2022 - Q1	2022 - Q4	2024 - Q3	$11.56	11,555,489.20
WST	CIP.3009001	Rehabilitation of Water Storage Tanks(WST) -East Region Phase 1 (FAAST)	2021 - Q4	2022 - Q1	2022 - Q2	2023 - Q3	$2.43	2,428,573.00
D&T-WL	CIP.3189002	Rehabilitation of Water Potable System at La Piedra and Pasto Viejo in Cayey (FAAST) . .	2021 - Q4	2022 - Q1	2022 - Q3	2023 - Q2	$2.63	2,628,608.00

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate ($M)	Total Cost Estimate ($)
WST	CIP.4009001	Rehabilitation of Water Storage Tanks - South Region Phase 1 (FAAST)	2021 - Q4	2022 - Q1	2022 - Q2	2023 - Q3	$2.47	2,467,011.00
WTP	CIP.5506044	Rehabilitation of Miradero Mayaguez WTP and RWI (FAAST-25)	2021 - Q4	2022 - Q1	2023 - Q1	2025 - Q2	$56.79	56,790,194.00
WTP	CIP.5506047	Rehabilitation of Miradero Mayaguez WTP and WI (FAAST-25)	2021 - Q4	2022 - Q1	2023 - Q1	2024 - Q4	$21.61	21,607,168.40
WTP	CIP.5596001	Rehabilitation of Guajataca Quebradillas WTP and WI (FAAST)	2021 - Q4	2022 - Q1	2023 - Q1	2025 - Q1	$21.89	21,888,615.73
WWTP	CIP.1165044	Rehabilitation of Carolina WWTP FEMA (FAAST-25) .	2021 - Q4	2022 - Q1	2022 - Q4	2025 - Q2	$24.47	24,468,063.02
TSL	CIP.2095052	Rehabilitation of 42 IN Trunk Sewer Line from PR-684 to the South part of Barceloneta WWTP	2021 - Q4	2022 - Q1	2022 - Q2	2023 - Q1	$5.34	5,335,025.23
TSL	CIP.2755055	Rehabilitation of Vega Baja Trunk Sewer Lines (TSL) .	2021 - Q4	2021 - Q4	2022 - Q2	2023 - Q1	$4.97	4,970,251.88

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate ($M)	Total Cost Estimate ($)
TSL	CIP.3139002	Rehabilitation of Caguas Trunk Sewer Lines (FAAST)	2021 - Q4	2021 - Q4	2022 - Q2	2024 - Q2	$22.41	22,405,378.00
WWTP	CIP.4315010	Rehabilitation to Guayanilla WWTP (FAASt)	2021 - Q4	2022 - Q1	2022 - Q3	2024 - Q2	$42.10	42,100,000.00
TSL	CIP.4589003	Rehabilitation of Ponce Trunk Sewer System (FAAST)	2021 - Q4	2021 - Q4	2022 - Q2	2024 - Q4	$21.80	21,797,996.00
WWTP	CIP.5035001	Rehabilitation of Aguada WWTP (FAAST-25)	2021 - Q4	2022 - Q1	2023 - Q1	2025 - Q4	$23.60	23,603,634.56
WWTP	CIP.5415031	Rehabilitation of Lajas WWTP (FAAST)	2021 - Q4	2022 - Q1	2023 - Q1	2025 - Q2	$13.86	13,862,302.77
WWTP	CIP.5505028	Rehabilitation of Mayaguez WWTP (FAAST-25)	2021 - Q4	2022 - Q1	2022 - Q1	2024 - Q4	$51.51	51,509,093.30
TSL	CIP.5509001	Rehabilitation of Hormigueros and Mayaguez Trunk Sewer Lines (FAAST)	2021 - Q4	2021 - Q4	2022 - Q2	2023 - Q4	$19.10	19,096,801.00
WTP	CIP.1016095	Rehabilitation of Guaynabo WTP and WI Santa Rosa (FAAST-25)	2022 - Q1	2022 - Q2	2023 - Q1	2025 - Q3	$35.74	35,740,358.16
R	CIP.1019000	Dragado Lago Loíza (Carraízo) FAAST	2022 - Q1	2021 - Q2	2023 - Q1	2026 - Q2	$59.02	59,021,734.04

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate ($M)	Total Cost Estimate ($)
WPS	CIP.1669002	Rehabilitation of Puerto Nuevo WPS and Water Potable Line of 48"(FAAST) .	2022 - Q1	2022 - Q2	2022 - Q4	2025 - Q1	$9.73	9,730,296.00
WTP	CIP.1726043	Rehabilitation of Sergio Cuevas WTP Trujillo Alto (FAAST-25)	2022 - Q1	2022 - Q2	2022 - Q4	2025 - Q1	$22.01	22,012,589.73
WTP	CIP.2076042	Rehabilitation of Esperanza WTP and WI , Arecibo(FAAST)	2022 - Q1	2022 - Q2	2023 - Q1	2024 - Q4	$8.11	8,112,804.80
WTP	CIP.2206107	Rehabilitation of Frontón WTP and WI, Ciales (FAAST)	2022 - Q1	2022 - Q2	2023 - Q1	2025 - Q2	$10.48	10,483,347.37
WTP	CIP.2246106	Rehabilitation of Negros WTP and WI, Corozal (FAAST-25)	2022 - Q1	2022 - Q2	2022 - Q4	2025 - Q1	$9.82	9,821,827.29
WTP	CIP.2346015	Rehabilitation of Hatillo-Camuy WTP(FAAST)	2022 - Q1	2022 - Q2	2023 - Q1	2024 - Q4	$9.46	9,463,521.96
WTP	CIP.2386049	Rehabilitation of Canalizo WTP and WI , Jayuya (FAAST)	2022 - Q1	2022 - Q2	2023 - Q1	2024 - Q4	$7.44	7,438,785.72
WTP	CIP.2426100	Rehabilitation of Lares Nueva Espino WTP and WI, Lares(FAAST)	2022 - Q1	2022 - Q2	2023 - Q1	2024 - Q2	$10.14	10,144,802.04

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate ($M)	Total Cost Estimate ($)
WTP	CIP.2526006	Rehabilitation of Morovis Sur WTP (FAAST-25)	2022 - Q1	2022 - Q2	2023 - Q1	2025 - Q1	$9.83	9,827,954.29
WTP	CIP.2526007	Rehabilitation of Morovis Urbano WTP (FAAST)	2022 - Q1	2022 - Q2	2023 - Q1	2024 - Q4	$11.49	11,487,635.20
D&T-WL	CIP.2549000	Rehabilitation of Transmission and Distribution System at Naranjito (FAAST)	2022 - Q1	2022 - Q2	2022 - Q4	2024 - Q3	$5.92	5,920,000.00
WTP	CIP.2596004	Rehabilitation of Quebradillas WTP and WI (FAAST-25)	2022 - Q1	2022 - Q2	2023 - Q1	2024 - Q4	$8.79	8,788,066.88
WTP	CIP.2736006	Rehabilitation of Mameyes Utuado WTP and WI (FAAST)	2022 - Q1	2022 - Q2	2022 - Q4	2024 - Q3	$10.14	10,138,665.04
WTP	CIP.3156093	Rehabilitation of El Yunque WTP and WI, Rio Grande (FAAST-25)	2022 - Q1	2022 - Q2	2023 - Q2	2025 - Q3	$13.21	13,214,994.69
WTP	CIP.3366005	Rehabilitation of Humacao WTP (FAAST-25)	2022 - Q1	2022 - Q2	2023 - Q2	2024 - Q4	$10.15	10,147,205.04
WTP	CIP.4316007	Rehabilitation of Jaguas Pasto WTP, Guayanilla (FAAST-25)	2022 - Q1	2022 - Q2	2022 - Q4	2024 - Q3	$7.44	7,438,730.72

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate ($M)	Total Cost Estimate ($)
WTP	CIP.4646004	WTP Salinas (Wells Closure) (FAAST-25)	2022 - Q1	2022 - Q2	2023 - Q1	2025 - Q3	$24.19	24,190,167.75
WTP	CIP.5379002	Design and Build Guajataca WTP Floating Raw Water Pumping Station Project	2022 - Q1	2022 - Q2	2022 - Q2	2023 - Q3	$2.44	2,436,000.00
WWPS	CIP.2039000	Rehabilitation of Guerrero 2 WWPS, Aguadilla (FAAST)	2022 - Q1	2022 - Q2	2023 - Q1	2024 - Q2	$0.45	450,000.00
WWTP	CIP.2075073	Rehabilitation of Islote WWTP, Arecibo (FAAST)	2022 - Q1	2022 - Q2	2023 - Q1	2024 - Q4	$14.90	14,903,308.60
WWTP	CIP.3139001	Improvements to Caguas WWTP (FAAST-25)	2022 - Q1	2022 - Q2	2023 - Q1	2025 - Q2	$25.99	25,988,672.21
WWTP	CIP.4495001	Rehabilitation of Maunabo WWTP (FAAST-25)	2022 - Q1	2022 - Q2	2023 - Q1	2024 - Q3	$12.83	12,834,676.36
WWTP	CIP.4555022	Rehabilitation of Orocovis WWTP (FAAST-25)	2022 - Q1	2022 - Q2	2023 - Q1	2024 - Q3	$12.16	12,163,078.28
WWTP	CIP.4585096	Rehabilitation of Ponce WWTP (FAAST-25)	2022 - Q1	2022 - Q2	2023 - Q1	2025 - Q3	$24.29	24,293,314.64
D	CIP.1666090	Improvements to La Plata Dam -Installation of Anchorage System	2022 - Q1	2022 - Q2	2022 - Q4	2024 - Q1	$3.63	3,631,288.85

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate ($M)	Total Cost Estimate ($)
WTP	CIP.2426099	Rehabilitation of Indiera Alta WTP and WI , Lares(FAAST)	2022 - Q2	2022 - Q3	2023 - Q2	2024 - Q4	$7.48	7,481,714.72
WTP	CIP.2916002	Rehabilitation of Superacueductos WTP, Arecibo (FAAST-25)	2022 - Q2	2022 - Q3	2023 - Q2	2026 - Q1	$13.74	13,739,589.31
WTP	CIP.3186003	Rehabilitation of Farallon WTP, Cayey (FAAST)	2022 - Q2	2022 - Q2	2023 - Q1	2024 - Q2	$0.45	451,145.00
WTP	CIP.4796004	Rehabilitation of Río Prieto WTP (FAAST)	2022 - Q2	2022 - Q3	2023 - Q3	2025 - Q3	$13.86	13,857,551.77
WST	CIP.5009001	Rehabilitation of Water Storage Tanks - West Region Phase 1 (FAAST)	2022 - Q2	2022 - Q3	2022 - Q4	2023 - Q3	$0.35	350,000.00
WTP	CIP.5036006	Rehabilitation of Aguadilla Montaña WTP (FAAST)	2022 - Q2	2022 - Q3	2023 - Q3	2025 - Q3	$26.00	25,997,851.21
WTP	CIP.5486006	Rehabilitation of Monte del Estado Maricao WTP and WI (FAAST)	2022 - Q2	2022 - Q3	2023 - Q2	2025 - Q1	$6.77	6,771,211.64
WTP	CIP.5486007	Rehabilitation of Maricao WTP(FAAST)	2022 - Q2	2022 - Q3	2023 - Q2	2025 - Q2	$8.00	8,000,964.00
WTP	CIP.5489001	Rehabilitation of Monte del Estado	2022 - Q2	2022 - Q3	2023 - Q2	2025 - Q1	$5.00	5,000,000.00

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate ($M)	Total Cost Estimate ($)
		Maricao WTP and WI (FAAST)						
OO	CIP.2149105	Rehabilitation of Ocean Outfalls- Camuy (FAAST) .	2022 - Q2	2022 - Q3	2023 - Q3	2025 - Q4	$27.00	27,000,000.00
WWTP	CIP.3765002	Rehabilitation Vieques WWTP (FAAST) . .	2022 - Q2	2022 - Q3	2023 - Q2	2026 - Q3	$31.90	31,900,000.00
OO	CIP.5509105	Rehabilitation of Ocean Outfalls- Mayaguez (FAAST) .	2022 - Q2	2022 - Q3	2023 - Q3	2025 - Q4	$27.00	27,000,000.00
WM	CIP.6009002	Water Meters Islandwide LS Project (FAAST)	2022 - Q2	2021 - Q4	2023 - Q2	2028 - Q2	$300.00	300,000,000.00
WPS	CIP.1009103	Rehabilitation of Water Pump Stations (WPS) Metro Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	2023 - Q1	2025 - Q2	$2.58	2,580,000.00
RWW	CIP.1009106	Rehabilitation of RWW -Metro Region Phase 1(FAAST)	2022 - Q3	2022 - Q4	2023 - Q1	2025 - Q2	$1.70	1,700,000.00
WST	CIP.2009001	Rehabilitation of Water Storage Tanks - North Region Phase 1 (FAAST)	2022 - Q3	2022 - Q3	2022 - Q4	2023 - Q3	$0.35	350,000.00

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate ($M)	Total Cost Estimate ($)
WPS	CIP.2009103	Rehabilitation of Water Pump Stations (WPS) North Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	2023 - Q1	2025 - Q2	$2.58	2,580,000.00
RWW	CIP.2009106	Rehabilitation of RWW -North Region Phase 1(FAAST)	2022 - Q3	2022 - Q4	2023 - Q1	2025 - Q2	$1.70	1,700,000.00
WPS	CIP.3009103	Rehabilitation of Water Pump Stations (WPS) East Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	2023 - Q1	2025 - Q2	$2.58	2,580,000.00
RWW	CIP.3009106	Rehabilitation of RWW -East Region Phase 1(FAAST)	2022 - Q3	2022 - Q4	2023 - Q1	2025 - Q2	$1.70	1,700,000.00
WTP	CIP.3536006	Rehabilitation of Río Blanco WTP, Naguabo (FAAST-25)	2022 - Q3	2022 - Q3	2023 - Q3	2025 - Q3	$19.93	19,932,453.49
WPS	CIP.4009103	Rehabilitation of Water Pump Stations (WPS) South Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	2023 - Q1	2025 - Q2	$2.58	2,580,000.00
RWW	CIP.4009106	Rehabilitation of RWW -South Region Phase 1(FAAST)	2022 - Q3	2022 - Q4	2023 - Q1	2025 - Q2	$1.70	1,700,000.00
WTP	CIP.4576002	Rehabilitation of Peñuelas WTP (FAAST)	2022 - Q3	2022 - Q4	2023 - Q3	2025 - Q4	$12.16	12,158,711.28
WTP	CIP.4776078	Rehabilitation of Jagueyes-Villalba WTP (FAAST)	2022 - Q3	2022 - Q4	2023 - Q3	2025 - Q4	$10.14	10,135,893.04

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate ($M)	Total Cost Estimate ($)
WPS	CIP.5009103	Rehabilitation of Water Pump Stations (WPS) West Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	2023 - Q1	2025 - Q2	$2.58	2,580,000.00
RWW	CIP.5009106	Rehabilitation of RWW -West Region Phase 1(FAAST)	2022 - Q3	2022 - Q4	2023 - Q1	2025 - Q2	$1.70	1,700,000.00
WWPS	CIP.1009104	Rehabilitation of WWPS Metro Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	2023 - Q1	2025 - Q2	$6.20	6,200,000.00
WWPS	CIP.2009104	Rehabilitation of WWPS North Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	2023 - Q1	2025 - Q2	$6.20	6,200,000.00
TSL	CIP.2375002	Trunk Sewer Lines (TSL) Isabela - Aguada (FAAST)	2022 - Q3	2022 - Q3	2022 - Q4	2025 - Q1	$36.94	36,937,500.00
WWTP	CIP.2475021	Rehabilitation of Barceloneta WWTP (FAAST-25)	2022 - Q3	2022 - Q4	2023 - Q3	2026 - Q2	$31.72	31,722,560.52
TSL	CIP.2709010	Rehabilitation of Arecibo Trunk Sewer Lines (TSL) (FAAST) .	2022 - Q3	2022 - Q3	2023 - Q1	2023 - Q3	$0.90	902,940.00
WWPS	CIP.3009104	Rehabilitation of WWPS East Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	2023 - Q1	2025 - Q2	$6.20	6,200,000.00
WWPS	CIP.4009104	Rehabilitation of WWPS South Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	2023 - Q1	2025 - Q2	$6.20	6,200,000.00

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate ($M)	Total Cost Estimate ($)
WWPS	CIP.5009104	Rehabilitation of WWPS West Region Phase 1 (FAAST)	2022 - Q3	2022 - Q4	2023 - Q1	2025 - Q2	$6.20	6,200,000.00
R	CIP.4009000	Bauta Tunnel (FAAST)	2022 - Q4	2022 - Q4	2024 - Q1	2029 - Q3	$150.00	150,000,000.00
WTP	CIP.4776077	Rehabilitation of Apeadero Villalba WTP (FAAST-25)	2023 - Q2	2023 - Q3	2023 - Q1	2025 - Q4	$11.49	11,487,177.20
WST	CIP.1009101	Rehabilitation of Water Storage Tanks - Metro Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	2024 - Q1	2026 - Q2	$1.48	1,480,000.00
WPS	CIP.1009203	Rehabilitation of Water Pump Stations (WPS) Metro Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	2024 - Q1	2026 - Q2	$2.58	2,580,000.00
WST	CIP.2009101	Rehabilitation of Water Storage Tanks - North Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	2024 - Q1	2026 - Q2	$1.48	1,480,000.00
WPS	CIP.2009203	Rehabilitation of Water Pump Stations (WPS) North Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	2024 - Q1	2026 - Q2	$2.58	2,580,000.00
WST	CIP.3009101	Rehabilitation of Water Storage Tanks (WST) -East Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	2024 - Q1	2026 - Q2	$1.48	1,480,000.00

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate ($M)	Total Cost Estimate ($)
WST	CIP.4009101	Rehabilitation of Water Storage Tanks - South Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	2024 - Q1	2026 - Q2	$2.20	2,200,000.00
WPS	CIP.4009203	Rehabilitation of Water Pump Stations (WPS) South Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	2024 - Q1	2026 - Q2	$2.58	2,580,000.00
WST	CIP.5009101	Rehabilitation of Water Storage Tanks - West Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	2024 - Q1	2026 - Q2	$1.48	1,480,000.00
WPS	CIP.5009203	Rehabilitation of Water Pump Stations (WPS) West Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	2024 - Q1	2026 - Q2	$2.40	2,400,000.00
WTP	CIP.5506046	Rehabilitation of Ponce de León Mayaguez WTP (FAAST-25)	2023 - Q3	2023 - Q4	2024 - Q3	2026 - Q2	$6.76	6,764,216.64
WWPS	CIP.1009204	Rehabilitation of WWPS Metro Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	2024 - Q1	2026 - Q2	$6.20	6,200,000.00
WWPS	CIP.2009204	Rehabilitation of WWPS North Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	2024 - Q1	2026 - Q2	$6.20	6,200,000.00
WWPS	CIP.3009204	Rehabilitation of WWPS East Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	2024 - Q1	2026 - Q2	$6.20	6,200,000.00

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate ($M)	Total Cost Estimate ($)
WWPS	CIP.4009204	Rehabilitation of WWPS South Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	2024 - Q1	2026 - Q2	$6.20	6,200,000.00
WWPS	CIP.5009204	Rehabilitation of WWPS West Region Phase 2 (FAAST)	2023 - Q3	2023 - Q4	2024 - Q1	2026 - Q2	$6.20	6,200,000.00
TSL	CIP.5685000	Replacement of Trunk Sewer Lines (TSL) in San Sebastián (FAAST) .	2023 - Q3	2023 - Q4	2024 - Q3	2026 - Q4	$26.68	26,675,437.06
WWTP	CIP.3185033	Rehabilitation of Orocovis WWTP (FAAST-25)	2023 - Q4	2024 - Q1	2024 - Q4	2027 - Q1	$23.30	23,296,977.89

7.2 Appendix A: Table A.2- List of PRASA Projects FAASt Mid-Term

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate
WWTP	CIP.3236247	Rehabilitation of Comerío WWTP (FAAST)	2024 - Q1	2024 - Q2	2025 - Q1	2026 - Q4	14,874,904.60
WWTP	CIP.1665115	Rehabilitation of Puerto Nuevo WWTP, San Juan (FAAST)	2024 - Q2	2024 - Q3	2025 - Q2	2028 - Q1	35,758,817.00

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate
WTP	CIP.6009016	Rehabilitation to PRASA WTP Islandwide LS Project (FAST)	2024 - Q3	2024 - Q3	2025 - Q3	2032 - Q2	30,000,000.00
WWTP	CIP.6009017	Rehabilitation to PRASA WWTP Islandwide LS Project (FAST)	2024 - Q3	2024 - Q3	2025 - Q3	2032 - Q2	30,000,000.00
WTP	CIP.3786003	Rehabilitation of Guayabota WTP and WI, Yabucoa (FAAST)	2024 - Q3	2024 - Q4	2025 - Q3	2027 - Q2	7,440,705.72
WTP	CIP.4576004	Rehabilitation of Malpaso Peñuelas WTP (FAAST)	2024 - Q3	2024 - Q4	2025 - Q3	2027 - Q2	10,134,537.04
WTP	CIP.3106106	Rehabilitation of Barrancas WTP and WI, Barranquitas (FAAST)	2024 - Q4	2025 - Q1	2025 - Q4	2027 - Q2	9,464,022.96
WTP	CIP.1156004	Rehabilitation of Cubuy WTP and WI, Canovanas (FAAST)	2024 - Q4	2025 - Q1	2025 - Q4	2028 - Q1	11,159,798.45
WST	CIP.6009001	Water Storage Tanks Islandwide (FAAST)	2025 - Q1	2025 - Q2	2025 - Q3	2032 - Q2	45,000,000.00
WPS	CIP.6009003	Rehabilitation of WPS Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	2025 - Q3	2032 - Q2	11,610,000.00
WWPS	CIP.6009004	Rehabilitation of WWPS Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	2025 - Q3	2032 - Q2	31,000,000.00
OO	CIP.6009005	Rehabilitation of Ocean Outfalls Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	2025 - Q3	2032 - Q2	126,000,000.00

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate
B	CIP.6009007	Buildings Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	2025 - Q3	2032 - Q2	20,000,000.00
PPTD	CIP.6009008	Projects Pending to Defined LS Project (FAAST)	2025 - Q1	2025 - Q2	2025 - Q3	2032 - Q2	243,319,935.92
WST & WPS	CIP.6009013	WST & WPS Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	2025 - Q3	2032 - Q2	46,300,000.00
R	CIP.6009010	Reservoir Dredging Islandwide LS Project	2025 - Q1	2025 - Q2	2025 - Q3	2032 - Q3	41,000,000.00
D	CIP.6009011	Dams Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	2025 - Q3	2032 - Q2	20,000,000.00
T	CIP.6009012	Telemetry Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	2025 - Q3	2032 - Q2	5,000,000.00
TSL	CIP.6009014	Trunk Sewer Lines (TSL) Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	2025 - Q3	2032 - Q2	520,000,000.00
D&T-WL	CIP.6009015	T & D -WL Islandwide LS Project (FAAST)	2025 - Q1	2025 - Q2	2025 - Q3	2032 - Q2	400,000,000.00
WTP	CIP.2736005	Rehabilitation of Mameyes Limón, Utuado (Arriba) WTP and WI (FAAST)	2025 - Q1	2025 - Q2	2026 - Q1	2027 - Q4	7,440,698.72
WTP	CIP.4556009	Rehabilitation of Sanamuertos Orocovis WTP(FAAST)	2025 - Q1	2025 - Q2	2026 - Q1	2027 - Q3	10,136,064.04
WTP	CIP.3106105	Rehabilitation of La Boca WTP and WI, Barranquitas (FAAST)	2025 - Q1	2025 - Q2	2026 - Q1	2027 - Q4	8,119,765.80

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate
WTP	CIP.2736008	Rehabilitation of Roncador WTP and WI, Utuado (FAAST)	2025 - Q1	2025 - Q2	2026 - Q2	2027 - Q4	7,292,424.72
WTP	CIP.4016012	Rehabilitation of Guilarte WTP, Adjuntas (FAAST)	2025 - Q2	2025 - Q3	2026 - Q2	2027 - Q4	7,437,584.72
WWTP	CIP.3785018	Rehabilitation of Yabucoa WWTP (FAAST)	2025 - Q2	2025 - Q3	2026 - Q2	2028 - Q1	14,878,142.60
WWTP	CIP.3045036	Rehabilitation of Aguas Buenas WWTP (FAAST)	2025 - Q2	2025 - Q3	2026 - Q2	2028 - Q3	13,858,908.77
WTP	CIP.3106104	Rehabilitation of Barranquitas WTP and WI (FAAST)	2025 - Q3	2025 - Q4	2026 - Q3	2028 - Q1	8,116,455.80
WTP	CIP.3186002	Rehabilitation of Cayey Urbana WTP (FAAST)	2025 - Q3	2025 - Q4	2026 - Q3	2028 - Q2	12,159,943.28
WTP	CIP.3136012	Rehabilitation of Caguas Norte WTP (FAAST)	2025 - Q3	2025 - Q4	2026 - Q3	2028 - Q2	17,560,734.92
WTP	CIP.3336045	Rehabilitation of Gurabo WTP (FAAST)	2026 - Q1	2026 - Q2	2027 - Q1	2028 - Q4	10,142,105.04
WTP	CIP.3136013	Rehabilitation of Caguas Sur WTP(FAAST)	2026 - Q1	2026 - Q2	2027 - Q2	2028 - Q4	10,137,984.04
WTP	CIP.2076043	Rehabilitation of Río Arriba WTP Arecibo (FAAST)	2026 - Q2	2026 - Q3	2027 - Q2	2028 - Q4	5,415,861.48
WTP	CIP.4016008	Rehabilitation of Olimpia - Adjuntas WTP(FAAST)	2026 - Q2	2026 - Q3	2027 - Q2	2029 - Q1	9,460,112.96
WTP	CIP.4586084	Rehabilitation of Guaraguao Ponce WTP (FAAST)	2026 - Q2	2026 - Q3	2027 - Q2	2028 - Q4	10,134,867.04

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate
WTP	CIP.4796005	Rehabilitation of Rancheras Yauco WTP (FAAST)	2026 - Q2	2026 - Q3	2027 - Q2	2029 - Q1	7,440,644.72
WTP	CIP.5686045	Rehabilitation of San Sebastián WTP and WI (FAAST)	2026 - Q3	2026 - Q4	2027 - Q3	2029 - Q2	9,469,800.96
WTP	CIP.3536007	Rehabilitation of El Duque WTP, Naguabo (FAAST)	2026 - Q3	2026 - Q4	2027 - Q3	2029 - Q2	7,439,862.72
WTP	CIP.3186004	Rehabilitation of Culebras Alto WTP, Cayey (FAAST)	2027 - Q1	2027 - Q2	2028 - Q1	2029 - Q4	7,440,662.72
WWTP	CIP.3056002	Rehabilitation of Aibonito WWTP (FAAST)	2027 - Q1	2027 - Q2	2028 - Q1	2029 - Q4	12,890,942.36
WTP	CIP.2386048	Rehabilitation of La Pica WTP and WI , Jayuya (FAAST)	2027 - Q2	2027 - Q3	2028 - Q2	2029 - Q4	7,441,002.72
WTP	CIP.1156005	Rehabilitation of Canóvanas Nueva WTP and WI (FAAST)	2027 - Q2	2027 - Q3	2028 - Q2	2031 - Q1	14,190,742.44
WTP	CIP.3466005	Rehabilitation of Luquillo-Sabana WTP (FAAST)	2027 - Q2	2027 - Q3	2028 - Q2	2030 - Q1	12,159,532.28
WTP	CIP.2206106	Rehabilitation of Jaguas Pesas WTP and WI, Ciales (FAAST)	2027 - Q2	2027 - Q3	2028 - Q2	2030 - Q1	7,443,710.72
WTP	CIP.5636006	Rehabilitation of Sabana Grande WTP and WI (FAAST)	2027 - Q2	2027 - Q3	2028 - Q2	2030 - Q1	7,439,565.72
WTP	CIP.5656001	Rehabilitation of Caín Alto San German WTP and WI (FAAST)	2027 - Q2	2027 - Q3	2028 - Q2	2030 - Q1	7,448,117.72

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate
WWTP	CIP.3105032	Rehabilitation of Barranquitas WWTP (FAAST)	2027 - Q3	2027 - Q4	2028 - Q3	2030 - Q1	10,138,307.04
WWTP	CIP.2545006	Rehabilitation of Naranjito WWTP (FAAST)	2027 - Q3	2027 - Q4	2028 - Q3	2030 - Q4	12,520,779.61
WTP	CIP.5376006	Rehabilitation of Isabela Urbana WTP and WI (FAAST)	2027 - Q3	2027 - Q4	2028 - Q3	2030 - Q4	9,141,443.21
WWTP	CIP.5685004	Rehabilitation of San Sebastián WWTP (FAAST)	2027 - Q3	2027 - Q4	2028 - Q4	2030 - Q2	14,911,118.60

7.3 Appendix A: Table A.3- List of PRASA Projects FAASt Long-Term

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate
WTP	CIP.3046005	Rehabilitation of Aguas Buenas WTP (FAAST)	2028 - Q1	2028 - Q2	2029 - Q1	2030 - Q4	8,117,319.80
WTP	CIP.3216066	Rehabilitation of Cidra Urbano WTP (FAAST)	2028 - Q1	2028 - Q2	2029 - Q1	2030 - Q4	10,141,302.04
WTP	CIP.3786004	Rehabilitation of Yabucoa WTP (FAAST)	2028 - Q1	2028 - Q2	2029 - Q1	2030 - Q4	7,445,880.72
WTP	CIP.2246107	Rehabilitation of Corozal Urbana WTP (FAAST)	2028 - Q2	2028 - Q3	2029 - Q2	2030 - Q4	7,439,410.72
WTP	CIP.2386047	Rehabilitation of Jayuya Urbano WTP and WI (FAAST)	2028 - Q2	2028 - Q3	2029 - Q2	2031 - Q3	10,486,573.37
WTP	CIP.2426101	Rehabilitation of Lares WTP and WI (FAAST)	2028 - Q2	2028 - Q3	2029 - Q2	2031 - Q1	10,136,538.04
WWTP	CIP.2745019	Rehabilitation of Vega Alta WWTP (FAAST)	2028 - Q2	2028 - Q3	2029 - Q2	2031 - Q1	10,144,987.04
WTP	CIP.2076041	Rehabilitation of Arecibo Urbano WTP (FAAST)	2028 - Q2	2028 - Q3	2029 - Q2	2031 - Q1	10,141,042.04
WWTP	CIP.3136014	Rehabilitation of Parcelas Borinquen Caguas WWTP (FAAST)	2028 - Q3	2028 - Q4	2029 - Q3	2031 - Q1	6,773,408.64
WTP	CIP.1116011	Improvements to LT2 WTP Barrio Nuevo or Elimination , Bayamon (FAAST)	2028 - Q3	2028 - Q4	2029 - Q3	2030 - Q4	7,790,927.47

Asset Category	Project	Description	A &E Start Quarter	Initial SOW Submittal Quarter	Construction Start Quarter	SOW Close Out Submittal Quarter	Total Cost Estimate
WWTP	CIP.4795022	Rehabilitation of Yauco WWTP (FAAST)	2028 - Q3	2028 - Q4	2029 - Q3	2031 - Q3	13,861,380.77
WTP	CIP.3536002	Improvements to LT2 WTP Cubuy Este - Maizales, Naguabo (FAAST)	2028 - Q3	2028 - Q4	2029 - Q3	2031 - Q2	10,134,289.04
WTP	CIP.3276053	Rehabilitation of Fajardo WTP(FAAST)	2028 - Q4	2029 - Q1	2029 - Q4	2032 - Q1	12,505,150.61

Chapter 8 Appendix B

8.1 Appendix B: FAASt Plan Projects Schedule

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1		**PRASA FAASt Plan**	**3499 days**	**Sat 3/2/19**	**Thu 7/29/32**		
2		**2019**	**758 days**	**Sat 3/2/19**	**Wed 1/26/22**		
3		**WWTP**	**424 days**	**Fri 10/11/19**	**Wed 5/26/21**		
4		CIP.3135079 - Rehabilitation of Blowers in Caguas WWTP (FAAST)	424 days	Fri 10/11/19	Wed 5/26/21		
5		**B**	**758 days**	**Sat 3/2/19**	**Wed 1/26/22**		
6		CIP.3130001 - PRASA Central Laboratory in Caguas (FAAST)	759 days	Sat 3/2/19	Wed 1/26/22		
7		**2020**	**711 days**	**Thu 2/6/20**	**Thu 10/27/22**		
8		**WTP**	**378 days**	**Thu 12/17/20**	**Mon 5/30/22**		
9		CIP.2479001 - Rehabilitation and Improvements to the Morovis Sur RWI (FAAST)	378 days	Thu 12/17/20	Mon 5/30/22		
10		**WST**	**446 days**	**Thu 2/6/20**	**Thu 10/21/21**		
11		CIP.3360002 - Design and Construction Buena Vista Tank (FAAST)	446 days	Thu 2/6/20	Thu 10/21/21		
12		**WWPS**	**468 days**	**Thu 11/5/20**	**Mon 8/22/22**		
13		CIP.3445009 - Design and Build -Rehabilitation of La Sabana Las Piedras WWPS	468 days	Thu 11/5/20	Mon 8/22/22		
14		**D&T-WL**	**661 days**	**Thu 4/16/20**	**Thu 10/27/22**		
15		CIP.2475022 - Installation of Permanent WL Rio Utuado Bridge (FAAST)	661 days	Thu 4/16/20	Thu 10/27/22		
16		**2021**	**1218 days**	**Wed 2/3/21**	**Fri 10/3/25**		
17		**WTP**	**1080 days**	**Wed 3/3/21**	**Tue 4/22/25**		
18		CIP.2017005 - Rehabilitation of Culebrinas WTP Aguadilla FEMA (FAAST-25)	893 days	Thu 4/1/21	Mon 9/2/24		
19		CIP.2096007 - Rehabiltation of Enrique Ortega WTP Toa Alta (FAAST-25)	991 days	Wed 3/3/21	Wed 12/18/24		
20		CIP.2736007 - Rehabilitation of Santa Isabel Utuado WTP and WI (FAAST-25)	669 days	Fri 12/31/21	Wed 7/24/24		
21		CIP.5506044 - Rehabilitation of Miradero Mayaguez WTP and RWI (FAAST-25)	864 days	Thu 12/30/21	Tue 4/22/25		
22		CIP.5506047 - Rehabilitation of Miradero Mayaguez WTP and WI (FAAST-25)	746 days	Wed 12/1/21	Wed 10/9/24		
23		CIP.5596001 - Rehabilitation of Guajataca Quebradillas WTP and WI (FAAST)	860 days	Wed 12/1/21	Tue 3/18/25		
24		**WWTP**	**1218 days**	**Wed 2/3/21**	**Fri 10/3/25**		
25		CIP.1165044 - Rehabilitation of Carolina WWTP FEMA (FAAST-25) .	946 days	Mon 11/1/21	Mon 6/16/25		
26		CIP.3305001 - Improvements to Guayama WWTP (FAAST)	1009 days	Wed 2/3/21	Mon 12/16/24		
27		CIP.3365083 - Rehabilitation of Humacao Waste Water Treatment Plant (WWTP) Sludge Treatment System (STS)	719 days	Thu 5/20/21	Tue 2/20/24		
28		CIP.4315010 - Rehabilitation to Guayanilla WWTP (FAASt)	666 days	Mon 11/1/21	Mon 5/20/24		
29		CIP.5035001 - Rehabilitation of Aguada WWTP (FAAST-25)	1003 days	Wed 12/1/21	Fri 10/3/25		
30		CIP.5415031 - Rehabilitation of Lajas WWTP (FAAST)	882 days	Wed 12/1/21	Thu 4/17/25		
31		CIP.5505028 - Rehabilitation of Mayaguez WWTP (FAAST-25)	806 days	Thu 10/28/21	Thu 11/28/24		
32		**WST**	**516 days**	**Fri 10/1/21**	**Fri 9/22/23**		
33		CIP.1009001 - Rehabilitation of Water Storage Tanks -Metro Region Phase 1 (FAAST)	428 days	Fri 10/1/21	Tue 5/23/23		

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
34		CIP.3009001 - Rehabilitation of Water Storage Tanks(WST) -East Region Phase 1 (FAAST)	415 days	Sun 11/28/21	Thu 6/29/23		
35		CIP.4009001 - Rehabilitation of Water Storage Tanks -South Region Phase 1 (FAAST)	476 days	Sun 11/28/21	Fri 9/22/23		
36		**TSL**	**966 days**	**Fri 3/5/21**	**Fri 11/15/24**		
37		CIP.1169001 - Rehabilitation of Los Angeles and Loiza Pueblo Trunk Sewers (FAAST)	456 days	Thu 9/16/21	Thu 6/15/23		
38		CIP.2095052 - Rehabilitation of 42 IN Trunk Sewer Line from PR-684 to the South part of Barceloneta WWTP	304 days	Tue 11/30/21	Fri 1/27/23		
39		CIP.2149001 - Rehabilitation of Camuy Trunk Sewer Lines (FAAST)	470 days	Fri 9/17/21	Thu 7/6/23		
40		CIP.2755055 - Rehabilitation of Vega Baja Trunk Sewer Lines (TSL) .	324 days	Mon 11/1/21	Thu 1/26/23		
41		CIP.3139002 - Rehabilitation of Caguas Trunk Sewer Lines (FAAST)	697 days	Thu 10/28/21	Fri 6/28/24		
42		CIP.4089000 - Rehabilitation of Arroyo-Guayama Trunk Sewer Lines (FAAST)	955 days	Fri 3/5/21	Thu 10/31/24		
43		CIP.4589003 - Rehabilitation of Ponce Trunk Sewer System (FAAST)	797 days	Thu 10/28/21	Fri 11/15/24		
44		CIP.5509001 - Rehabilitation of Hormigueros and Mayaguez Trunk Sewer Lines (FAAST)	561 days	Thu 10/28/21	Thu 12/21/23		
45		**D**	**660 days**	**Mon 6/14/21**	**Fri 12/22/23**		
46		CIP.7776071 - Rehabilitation of Toa Vaca Dam (FAAST)	660 days	Mon 6/14/21	Fri 12/22/23		
47		**R**	**550 days**	**Tue 8/31/21**	**Mon 10/9/23**		
48		CIP.5376001 - Repair of Geosynthetic Membranes in Lago Regulador in Isabela	550 days	Tue 8/31/21	Mon 10/9/23		
49		**B**	**620 days**	**Sun 5/2/21**	**Fri 9/15/23**		
50		CIP.1660002 - Rehabilitation of PRASA Main Building in Hato Rey	621 days	Sun 5/2/21	Fri 9/15/23		
51		CIP.3139000 - Equipment for New PRASA Central Laboratory in Caguas (FAAST)	260 days	Thu 7/1/21	Wed 6/29/22		
52		**D&T-WL**	**364 days**	**Fri 11/19/21**	**Wed 4/12/23**		
53		CIP.3189002 - Rehabilitation of Water Potable System at La Piedra and Pasto Viejo in Cayey (FAAST) . .	364 days	Fri 11/19/21	Wed 4/12/23		
54		**2022**	**1958 days**	**Sat 1/1/22**	**Wed 7/4/29**		
55		**WTP**	**1067 days**	**Sat 1/1/22**	**Tue 2/3/26**		
56		CIP.1016095 - Rehabilitation of Guaynabo WTP and WI Santa Rosa (FAAST-25)	960 days	Sat 1/1/22	Thu 9/4/25		
57		CIP.1726043 - Rehabilitation of Sergio Cuevas WTP Trujillo Alto (FAAST-25)	804 days	Sat 1/1/22	Wed 1/29/25		
58		CIP.2076042 - Rehabilitation of Esperanza WTP and WI , Arecibo(FAAST)	733 days	Tue 2/1/22	Thu 11/21/24		
59		CIP.2206107 - Rehabilitation of Frontón WTP and WI, Ciales (FAAST)	839 days	Mon 1/31/22	Thu 4/17/25		
60		CIP.2246106 - Rehabilitation of Negros WTP and WI, Corozal (FAAST-25)	825 days	Sat 1/1/22	Thu 2/27/25		
61		CIP.2346015 - Rehabilitation of Hatillo-Camuy WTP(FAAST)	713 days	Tue 3/1/22	Thu 11/21/24		
62		CIP.2386049 - Rehabilitation of Canalizo WTP and WI , Jayuya (FAAST)	712 days	Tue 2/1/22	Wed 10/23/24		
63		CIP.2426099 - Rehabilitation of Indiera Alta WTP and WI , Lares(FAAST)	692 days	Sun 5/1/22	Mon 12/23/24		
64		CIP.2426100 - Rehabilitation of Lares Nueva Espino WTP and WI, Lares(FAAST)	608 days	Tue 2/1/22	Thu 5/30/24		

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
65		CIP.2526006 - Rehabilitation of Morovis Sur WTP (FAAST-25)	814 days	Tue 2/1/22	Fri 3/14/25		
66		CIP.2526007 - Rehabilitation of Morovis Urbano WTP (FAAST)	713 days	Sun 1/30/22	Tue 10/22/24		
67		CIP.2596004 - Rehabilitation of Quebradillas WTP and WI (FAAST-25)	703 days	Sat 2/5/22	Tue 10/15/24		
68		CIP.2736006 - Rehabilitation of Mameyes Utuado WTP and WI (FAAST)	668 days	Sat 1/1/22	Tue 7/23/24		
69		CIP.2916002 - Rehabilitation of Superacueductos WTP, Arecibo (FAAST-25)	960 days	Wed 6/1/22	Tue 2/3/26		
70		CIP.3156093 - Rehabilitation of El Yunque WTP and WI, Rio Grande (FAAST-25)	872 days	Mon 2/28/22	Tue 7/1/25		
71		CIP.3186003 - Rehabilitation of Farallon WTP, Cayey (FAAST)	535 days	Fri 4/1/22	Thu 4/18/24		
72		CIP.3366005 - Rehabilitation of Humacao WTP (FAAST-25)	746 days	Tue 2/1/22	Tue 12/10/24		
73		CIP.3536006 - Rehabilitation of Río Blanco WTP, Naguabo (FAAST-25)	839 days	Fri 7/1/22	Wed 9/17/25		
74		CIP.4316007 - Rehabilitation of Jaguas Pasto WTP, Guayanilla (FAAST-25)	668 days	Tue 2/1/22	Thu 8/22/24		
75		CIP.4576002 - Rehabilitation of Peñuelas WTP (FAAST)	839 days	Sat 7/30/22	Wed 10/15/25		
76		CIP.4646004 - WTP Salinas (Wells Closure) (FAAST-25)	960 days	Sat 1/1/22	Thu 9/4/25		
77		CIP.4776078 - Rehabilitation of Jagueyes-Villalba WTP (FAAST)	839 days	Sat 7/30/22	Wed 10/15/25		
78		CIP.4796004 - Rehabilitation of Río Prieto WTP (FAAST)	839 days	Wed 6/29/22	Mon 9/15/25		
79		CIP.5036006 - Rehabilitation of Aguadilla Montaña WTP (FAAST)	839 days	Wed 6/29/22	Mon 9/15/25		
80		CIP.5379002 - Design and Build Guajataca WTP Floating Raw Water Pumping Station Project	415 days	Sun 1/9/22	Thu 8/10/23		
81		CIP.5486006 - Rehabilitation of Monte del Estado Maricao WTP and WI (FAAST)	703 days	Tue 5/17/22	Thu 1/23/25		
82		CIP.5486007 - Rehabilitation of Maricao WTP(FAAST)	839 days	Sat 4/2/22	Wed 6/18/25		
83		CIP.5489001 - Rehabilitation of Monte del Estado Maricao WTP and WI (FAAST)	693 days	Thu 5/26/22	Mon 1/20/25		
84		**WWTP**	**1207 days**	**Sat 1/1/22**	**Tue 8/18/26**		
85		CIP.2075073 - Rehabilitation of Islote WWTP, Arecibo (FAAST)	733 days	Tue 2/1/22	Thu 11/21/24		
86		CIP.2475021 - Rehabilitation of Barceloneta WWTP (FAAST-25)	960 days	Mon 9/5/22	Fri 5/8/26		
87		CIP.3139001 - Improvements to Caguas WWTP (FAAST-25)	870 days	Sat 1/1/22	Thu 5/1/25		
88		CIP.3765002 - Rehabilitation Vieques WWTP (FAAST) . .	1100 days	Wed 6/1/22	Tue 8/18/26		
89		CIP.4495001 - Rehabilitation of Maunabo WWTP (FAAST-25)	670 days	Tue 3/1/22	Mon 9/23/24		
90		CIP.4555022 - Rehabilitation of Orocovis WWTP (FAAST-25)	670 days	Tue 3/1/22	Mon 9/23/24		
91		CIP.4585096 - Rehabilitation of Ponce WWTP (FAAST-25)	946 days	Tue 2/1/22	Tue 9/16/25		
92		**WPS**	**831 days**	**Fri 3/4/22**	**Fri 5/9/25**		
93		CIP.1009103 - Rehabilitation of Water Pump Stations (WPS) Metro Region Phase 1 (FAAST)	683 days	Wed 9/28/22	Fri 5/9/25		
94		CIP.1669002 - Rehabilitaton of Puerto Nuevo WPS and Water Potable Line of 48"(FAAST) .	771 days	Fri 3/4/22	Fri 2/14/25		
95		CIP.2009103 - Rehabilitation of Water Pump Stations (WPS) North Region Phase 1 (FAAST)	683 days	Wed 9/28/22	Fri 5/9/25		
96		CIP.3009103 - Rehabilitation of Water Pump Stations (WPS) East Region Phase 1 (FAAST)	683 days	Wed 9/28/22	Fri 5/9/25		
97		CIP.4009103 - Rehabilitation of Water Pump Stations (WPS) South Region Phase 1 (FAAST)	683 days	Wed 9/28/22	Fri 5/9/25		

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
98		CIP.5009103 - Rehabilitation of Water Pump Stations (WPS) West Region Phase 1 (FAAST)	683 days	Wed 9/28/22	Fri 5/9/25		
99		**WWPS**	**834 days**	**Tue 3/1/22**	**Fri 5/9/25**		
100		CIP.1009104 - Rehabilitation of WWPS Metro Region Phase 1 (FAAST)	683 days	Wed 9/28/22	Fri 5/9/25		
101		CIP.2009104 - Rehabilitation of WWPS North Region Phase 1 (FAAST)	683 days	Wed 9/28/22	Fri 5/9/25		
102		CIP.2039000 - Rehabilitation of Guerrero 2 WWPS, Aguadilla (FAAST)	575 days	Tue 3/1/22	Mon 5/13/24		
103		CIP.3009104 - Rehabilitation of WWPS East Region Phase 1 (FAAST)	683 days	Wed 9/28/22	Fri 5/9/25		
104		CIP.4009104 - Rehabilitation of WWPS South Region Phase 1 (FAAST)	655 days	Wed 9/28/22	Tue 4/1/25		
105		CIP.5009104 - Rehabilitation of WWPS West Region Phase 1 (FAAST)	683 days	Wed 9/28/22	Fri 5/9/25		
106		**WST**	**369 days**	**Sun 5/1/22**	**Thu 9/28/23**		
107		CIP.2009001 - Rehabilitation of Water Storage Tanks -North Region Phase 1 (FAAST)	325 days	Fri 7/1/22	Thu 9/28/23		
108		CIP.5009001 - Rehabilitation of Water Storage Tanks -West Region Phase 1 (FAAST)	325 days	Sun 5/1/22	Thu 7/27/23		
109		**D**	**559 days**	**Sat 1/1/22**	**Thu 2/22/24**		
110		CIP.1666090 - Improvements to La Plata Dam -Installation of Anchorage System	560 days	Sat 1/1/22	Thu 2/22/24		
111		**D&T-WL**	**639 days**	**Tue 3/1/22**	**Fri 8/9/24**		
112		CIP.2549000 - Rehabilitation of Transmission and Distribution System at Naranjito (FAAST)	639 days	Tue 3/1/22	Fri 8/9/24		
113		**WM**	**1565 days**	**Wed 6/15/22**	**Tue 6/13/28**		
114		CIP.6009002 - Water Meters Islandwide LS Project (FAAST)	1565 days	Wed 6/15/22	Tue 6/13/28		
115		**OO**	**853 days**	**Wed 6/29/22**	**Fri 10/3/25**		
116		CIP.2149105 - Rehabilitation of Ocean Outfalls- Camuy (FAAST) .	853 days	Wed 6/29/22	Fri 10/3/25		
117		CIP.5509105 - Rehabilitation of Ocean Outfalls- Mayaguez (FAAST) .	853 days	Wed 6/29/22	Fri 10/3/25		
118		**R**	**1937 days**	**Tue 2/1/22**	**Wed 7/4/29**		
119		CIP.1019000 - Dragado Lago Loíza (Carraizo) FAAST	1097 days	Tue 2/1/22	Wed 4/15/26		
120		CIP.4009000 - Bauta Tunnel (FAAST)	1764 days	Sat 10/1/22	Wed 7/4/29		
121		**RWW**	**683 days**	**Wed 9/28/22**	**Fri 5/9/25**		
122		CIP.1009106 - Rehabilitation of RWW -Metro Region Phase 1(FAAST)	683 days	Wed 9/28/22	Fri 5/9/25		
123		CIP.2009106 - Rehabilitation of RWW -North Region Phase 1(FAAST)	683 days	Wed 9/28/22	Fri 5/9/25		
124		CIP.3009106 - Rehabilitation of RWW -East Region Phase 1(FAAST)	683 days	Wed 9/28/22	Fri 5/9/25		
125		CIP.4009106 - Rehabilitation of RWW -South Region Phase 1(FAAST)	683 days	Wed 9/28/22	Fri 5/9/25		
126		CIP.5009106 - Rehabilitation of RWW -West Region Phase 1(FAAST)	683 days	Wed 9/28/22	Fri 5/9/25		
127		**TSL**	**697 days**	**Fri 7/1/22**	**Mon 3/3/25**		
128		CIP.2375002 - Trunk Sewer Lines (TSL) Isabela - Aguada (FAAST)	697 days	Fri 7/1/22	Mon 3/3/25		
129		CIP.2709010 - Rehabilitation of Arecibo Trunk Sewer Lines (TSL) (FAAST) .	318 days	Fri 7/1/22	Tue 9/19/23		
130		**2023**	**984 days**	**Sat 4/8/23**	**Thu 1/14/27**		
131		**WTP**	**797 days**	**Sat 4/8/23**	**Tue 4/28/26**		
132		CIP.4776077 - Rehabilitation of Apeadero Villalba WTP (FAAST-25)	660 days	Sat 4/8/23	Thu 10/16/25		
133		CIP.5506046 - Rehabilitation of Ponce de León Mayaguez WTP (FAAST-25)	703 days	Sat 8/19/23	Tue 4/28/26		
134		**WWTP**	**839 days**	**Mon 10/30/23**	**Thu 1/14/27**		

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
135		CIP.3185033 - Rehabilitation of Orocovis WWTP (FAAST-25)	839 days	Mon 10/30/23	Thu 1/14/27		
136		**WPS**	**683 days**	**Thu 9/28/23**	**Mon 5/11/26**		
137		CIP.1009203 - Rehabilitation of Water Pump Stations (WPS) Metro Region Phase 2 (FAAST)	683 days	Thu 9/28/23	Mon 5/11/26		
138		CIP.2009203 - Rehabilitation of Water Pump Stations (WPS) North Region Phase 2 (FAAST)	683 days	Thu 9/28/23	Mon 5/11/26		
139		CIP.4009203 - Rehabilitation of Water Pump Stations (WPS) South Region Phase 2 (FAAST)	683 days	Thu 9/28/23	Mon 5/11/26		
140		CIP.5009203 - Rehabilitation of Water Pump Stations (WPS) West Region Phase 2 (FAAST)	683 days	Thu 9/28/23	Mon 5/11/26		
141		**WWPS**	**683 days**	**Thu 9/28/23**	**Mon 5/11/26**		
142		CIP.1009204 - Rehabilitation of WWPS Metro Region Phase 2 (FAAST)	683 days	Thu 9/28/23	Mon 5/11/26		
143		CIP.2009204 - Rehabilitation of WWPS North Region Phase 2 (FAAST)	683 days	Thu 9/28/23	Mon 5/11/26		
144		CIP.3009204 - Rehabilitation of WWPS East Region Phase 2 (FAAST)	683 days	Thu 9/28/23	Mon 5/11/26		
145		CIP.4009204 - Rehabilitation of WWPS South Region Phase 2 (FAAST)	683 days	Thu 9/28/23	Mon 5/11/26		
146		CIP.5009204 - Rehabilitation of WWPS West Region Phase 2 (FAAST)	683 days	Thu 9/28/23	Mon 5/11/26		
147		**WST**	**683 days**	**Thu 9/28/23**	**Mon 5/11/26**		
148		CIP.1009101 - Rehabilitation of Water Storage Tanks -Metro Region Phase 2 (FAAST)	683 days	Thu 9/28/23	Mon 5/11/26		
149		CIP.2009101 - Rehabilitation of Water Storage Tanks -North Region Phase 2 (FAAST)	683 days	Thu 9/28/23	Mon 5/11/26		
150		CIP.3009101 - Rehabilitation of Water Storage Tanks (WST) -East Region Phase 2 (FAAST)	683 days	Thu 9/28/23	Mon 5/11/26		
151		CIP.4009101 - Rehabilitation of Water Storage Tanks -South Region Phase 2 (FAAST)	683 days	Thu 9/28/23	Mon 5/11/26		
152		CIP.5009101 - Rehabilitation of Water Storage Tanks -West Region Phase 2 (FAAST)	683 days	Thu 9/28/23	Mon 5/11/26		
153		**TSL**	**821 days**	**Wed 8/30/23**	**Wed 10/21/26**		
154		CIP.5685000 - Replacement of Trunk Sewer Lines (TSL) in San Sebastián (FAAST) .	821 days	Wed 8/30/23	Wed 10/21/26		
155		**2024**	**2176 days**	**Tue 2/27/24**	**Tue 6/29/32**		
156		**WTP**	**2087 days**	**Mon 7/1/24**	**Tue 6/29/32**		
157		CIP.1156004 - Rehabilitation of Cubuy WTP and WI, Canovanas (FAAST)	839 days	Fri 12/6/24	Wed 2/23/28		
158		CIP.3106106 - Rehabilitation of Barrancas WTP and WI, Barranquitas (FAAST)	703 days	Tue 10/8/24	Thu 6/17/27		
159		CIP.3786003 - Rehabilitation of Guayabota WTP and WI, Yabucoa (FAAST)	703 days	Mon 8/19/24	Wed 4/28/27		
160		CIP.4576004 - Rehabilitation of Malpaso Peñuelas WTP (FAAST)	678 days	Fri 9/13/24	Tue 4/20/27		
161		CIP.6009016 - Rehabilitation to PRASA WTP Islandwide LS Project (FAST)	2087 days	Mon 7/1/24	Tue 6/29/32		
162		**WWTP**	**2176 days**	**Tue 2/27/24**	**Tue 6/29/32**		
163		CIP.1665115 - Rehabilitation of Puerto Nuevo WWTP, San Juan (FAAST)	960 days	Sat 4/27/24	Thu 12/30/27		
164		CIP.3236247 - Rehabilitation of Comerío WWTP (FAAST)	703 days	Tue 2/27/24	Thu 11/5/26		

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
165		CIP.6009017 - Rehabilitation to PRASA WWTP Islandwide LS Project (FAST)	2087 days	Mon 7/1/24	Tue 6/29/32		
166		**2025**	**1976 days**	**Thu 1/2/25**	**Thu 7/29/32**		
167		**WTP**	**848 days**	**Sat 1/25/25**	**Wed 4/26/28**		
168		CIP.2736005 - Rehabilitation of Mameyes Limón, Utuado (Arriba) WTP and WI (FAAST)	703 days	Sat 1/25/25	Tue 10/5/27		
169		CIP.2736008 - Rehabilitation of Roncador WTP and WI, Utuado (FAAST)	703 days	Mon 3/31/25	Wed 12/8/27		
170		CIP.3106104 - Rehabilitation of Barranquitas WTP and WI (FAAST)	703 days	Wed 7/9/25	Fri 3/17/28		
171		CIP.3106105 - Rehabilitation of La Boca WTP and WI, Barranquitas (FAAST)	703 days	Tue 3/11/25	Thu 11/18/27		
172		CIP.3136012 - Rehabilitation of Caguas Norte WTP (FAAST)	703 days	Mon 8/18/25	Wed 4/26/28		
173		CIP.3186002 - Rehabilitation of Cayey Urbana WTP (FAAST)	703 days	Tue 7/29/25	Thu 4/6/28		
174		CIP.4016012 - Rehabilitation of Guilarte WTP, Adjuntas (FAAST)	678 days	Sat 5/10/25	Tue 12/14/27		
175		CIP.4556009 - Rehabilitation of Sanamuertos Orocovis WTP(FAAST)	678 days	Wed 2/19/25	Fri 9/24/27		
176		**WWTP**	**853 days**	**Fri 5/30/25**	**Tue 9/5/28**		
177		CIP.3045036 - Rehabilitation of Aguas Buenas WWTP (FAAST)	839 days	Thu 6/19/25	Tue 9/5/28		
178		CIP.3785018 - Rehabilitation of Yabucoa WWTP (FAAST)	703 days	Fri 5/30/25	Tue 2/8/28		
179		**WPS**	**1955 days**	**Thu 1/2/25**	**Wed 6/30/32**		
180		CIP.6009003 - Rehabilitation of WPS Islandwide LS Project (FAAST)	1955 days	Thu 1/2/25	Wed 6/30/32		
181		**WWPS**	**1955 days**	**Thu 1/2/25**	**Wed 6/30/32**		
182		CIP.6009004 - Rehabilitation of WWPS Islandwide LS Project (FAAST)	1955 days	Thu 1/2/25	Wed 6/30/32		
183		**WST**	**1955 days**	**Thu 1/2/25**	**Wed 6/30/32**		
184		CIP.6009001 - Water Storage Tanks Islandwide (FAAST)	1955 days	Thu 1/2/25	Wed 6/30/32		
185		**WST&WPS**	**1955 days**	**Thu 1/2/25**	**Wed 6/30/32**		
186		CIP.6009013 - WST & WPS Islandwide LS Project (FAAST)	1955 days	Thu 1/2/25	Wed 6/30/32		
187		**B**	**1955 days**	**Thu 1/2/25**	**Wed 6/30/32**		
188		CIP.6009007 - Buildings Islandwide LS Project (FAAST)	1955 days	Thu 1/2/25	Wed 6/30/32		
189		**D**	**1955 days**	**Thu 1/2/25**	**Wed 6/30/32**		
190		CIP.6009011 - Dams Islandwide LS Project (FAAST)	1955 days	Thu 1/2/25	Wed 6/30/32		
191		**D&T-WL**	**1955 days**	**Thu 1/2/25**	**Wed 6/30/32**		
192		CIP.6009015 - T & D -WL Islandwide LS Project (FAAST)	1955 days	Thu 1/2/25	Wed 6/30/32		
193		**OO**	**1955 days**	**Thu 1/2/25**	**Wed 6/30/32**		
194		CIP.6009005 - Rehabilitation of Ocean Outfalls Islandwide LS Project (FAAST)	1955 days	Thu 1/2/25	Wed 6/30/32		
195		**R**	**1976 days**	**Thu 1/2/25**	**Thu 7/29/32**		
196		CIP.6009010 - Reservoir Dredging Islandwide LS Project	1976 days	Thu 1/2/25	Thu 7/29/32		
197		**T**	**1955 days**	**Thu 1/2/25**	**Wed 6/30/32**		
198		CIP.6009012 - Telemetry Islandwide LS Project (FAAST)	1955 days	Thu 1/2/25	Wed 6/30/32		
199		**TSL**	**1955 days**	**Thu 1/2/25**	**Wed 6/30/32**		
200		CIP.6009014 - Trunk Sewer Lines (TSL) Islandwide LS Project (FAAST)	1955 days	Thu 1/2/25	Wed 6/30/32		
201		**PPTD**	**1955 days**	**Thu 1/2/25**	**Wed 6/30/32**		
202		CIP.6009008 - Projects Pending to Defined LS Project (FAAST)	1955 days	Thu 1/2/25	Wed 6/30/32		
203		**2026**	**817 days**	**Sat 3/7/26**	**Tue 4/24/29**		

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
204		**WTP**	**817 days**	**Sat 3/7/26**	**Tue 4/24/29**		
205		CIP.2076043 - Rehabilitation of Río Arriba WTP Arecibo (FAAST)	703 days	Thu 4/16/26	Mon 12/25/28		
206		CIP.3136013 - Rehabilitation of Caguas Sur WTP(FAAST)	703 days	Fri 3/27/26	Tue 12/5/28		
207		CIP.3336045 - Rehabilitation of Gurabo WTP (FAAST)	703 days	Sat 3/7/26	Tue 11/14/28		
208		CIP.3536007 - Rehabilitation of El Duque WTP, Naguabo (FAAST)	703 days	Fri 8/14/26	Tue 4/24/29		
209		CIP.4016008 - Rehabilitation of Olimpia - Adjuntas WTP(FAAST)	703 days	Sun 4/26/26	Tue 1/2/29		
210		CIP.4586084 - Rehabilitation of Guaraguao Ponce WTP (FAAST)	678 days	Sat 5/16/26	Tue 12/19/28		
211		CIP.4796005 - Rehabilitation of Rancheras Yauco WTP (FAAST)	703 days	Tue 5/26/26	Thu 2/1/29		
212		CIP.5686045 - Rehabilitation of San Sebastián WTP and WI (FAAST)	703 days	Sat 7/25/26	Tue 4/3/29		
213		**2027**	**1013 days**	**Wed 2/24/27**	**Fri 1/10/31**		
214		**WTP**	**1013 days**	**Wed 2/24/27**	**Fri 1/10/31**		
215		CIP.1156005 - Rehabilitation of Canóvanas Nueva WTP and WI (FAAST)	960 days	Mon 5/10/27	Fri 1/10/31		
216		CIP.2206106 - Rehabilitation of Jaguas Pesas WTP and WI, Ciales (FAAST)	703 days	Wed 6/9/27	Fri 2/15/30		
217		CIP.2386048 - Rehabilitation of La Pica WTP and WI , Jayuya (FAAST)	703 days	Thu 4/15/27	Mon 12/24/29		
218		CIP.3186004 - Rehabilitation of Culebras Alto WTP, Cayey (FAAST)	703 days	Wed 2/24/27	Fri 11/2/29		
219		CIP.3466005 - Rehabilitation of Luquillo-Sabana WTP (FAAST)	703 days	Fri 6/4/27	Tue 2/12/30		
220		CIP.5376006 - Rehabilitation of Isabela Urbana WTP and WI (FAAST)	839 days	Thu 9/2/27	Tue 11/19/30		
221		CIP.5636006 - Rehabilitation of Sabana Grande WTP and WI (FAAST)	703 days	Mon 6/14/27	Wed 2/20/30		
222		CIP.5656001 - Rehabilitation of Caín Alto San German WTP and WI (FAAST)	703 days	Sat 6/19/27	Tue 2/26/30		
223		**WWTP**	**939 days**	**Sun 3/21/27**	**Thu 10/24/30**		
224		CIP.2545006 - Rehabilitation of Naranjito WWTP (FAAST)	839 days	Mon 8/9/27	Thu 10/24/30		
225		CIP.3056002 - Rehabilitation of Aibonito WWTP (FAAST)	703 days	Sun 3/21/27	Tue 11/27/29		
226		CIP.3105032 - Rehabilitation of Barranquitas WWTP (FAAST)	703 days	Wed 7/14/27	Fri 3/22/30		
227		CIP.5685004 - Rehabilitation of San Sebastián WWTP (FAAST)	703 days	Mon 9/27/27	Wed 6/5/30		
228		**2028**	**1017 days**	**Tue 2/15/28**	**Wed 1/7/32**		
229		**WTP**	**1017 days**	**Tue 2/15/28**	**Wed 1/7/32**		
230		CIP.1116011 - Improvements to LT2 WTP Barrio Nuevo or Elimination , Bayamon (FAAST)	578 days	Wed 7/26/28	Fri 10/11/30		
231		CIP.1616001 - Rehabilitation of Guzmán Arriba WTP and WI, Rio Grande (FAAST)	822 days	Thu 3/30/28	Fri 5/23/31		
232		CIP.2076041 - Rehabilitation of Arecibo Urbano WTP (FAAST)	703 days	Sat 6/24/28	Tue 3/4/31		
233		CIP.2246107 - Rehabilitation of Corozal Urbana WTP (FAAST)	703 days	Wed 4/5/28	Fri 12/13/30		
234		CIP.2386047 - Rehabilitation of Jayuya Urbano WTP and WI (FAAST)	839 days	Tue 4/25/28	Fri 7/11/31		
235		CIP.2426101 - Rehabilitation of Lares WTP and WI (FAAST)	703 days	Mon 5/15/28	Wed 1/22/31		
236		CIP.3046005 - Rehabilitation of Aguas Buenas WTP (FAAST)	703 days	Tue 2/15/28	Thu 10/24/30		
237		CIP.3216066 - Rehabilitation of Cidra Urbano WTP (FAAST)	703 days	Fri 2/25/28	Tue 11/5/30		
238		CIP.3276053 - Rehabilitation of Fajardo WTP(FAAST)	839 days	Sun 10/22/28	Wed 1/7/32		
239		CIP.3536002 - Improvements to LT2 WTP Cubuy Este - Maizales, Naguabo (FAAST)	703 days	Wed 8/23/28	Fri 5/2/31		
240		CIP.3786004 - Rehabilitation of Yabucoa WTP (FAAST)	703 days	Thu 3/16/28	Mon 11/25/30		
241		**WWTP**	**857 days**	**Sun 6/4/28**	**Tue 9/16/31**		

ID		Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
242			CIP.2745019 - Rehabilitation of Vega Alta WWTP (FAAST)	703 days	Sun 6/4/28	Tue 2/11/31		
243			CIP.3136014 - Rehabilitation of Parcelas Borinquen Caguas WWTP (FAAST)	703 days	Fri 7/14/28	Tue 3/25/31		
244			CIP.4795022 - Rehabilitation of Yauco WWTP (FAAST)	814 days	Thu 8/3/28	Tue 9/16/31		