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# Tres puentes sobre el Caño 1948





Photo: Ernesto Robles



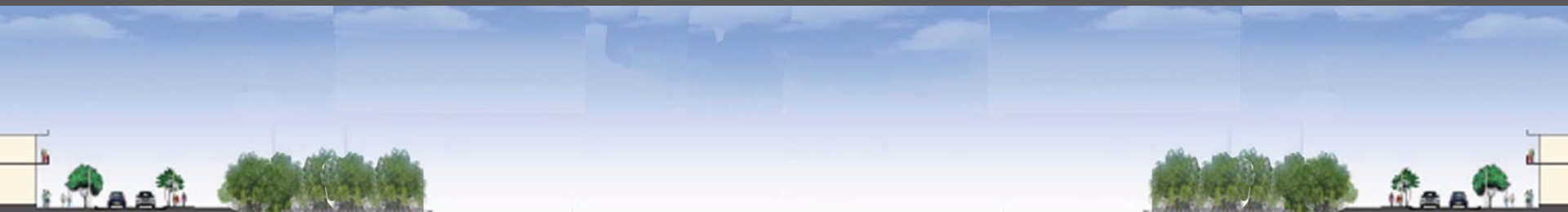
Caño Martín Peña, 1936



Caño Martín Peña, 2002



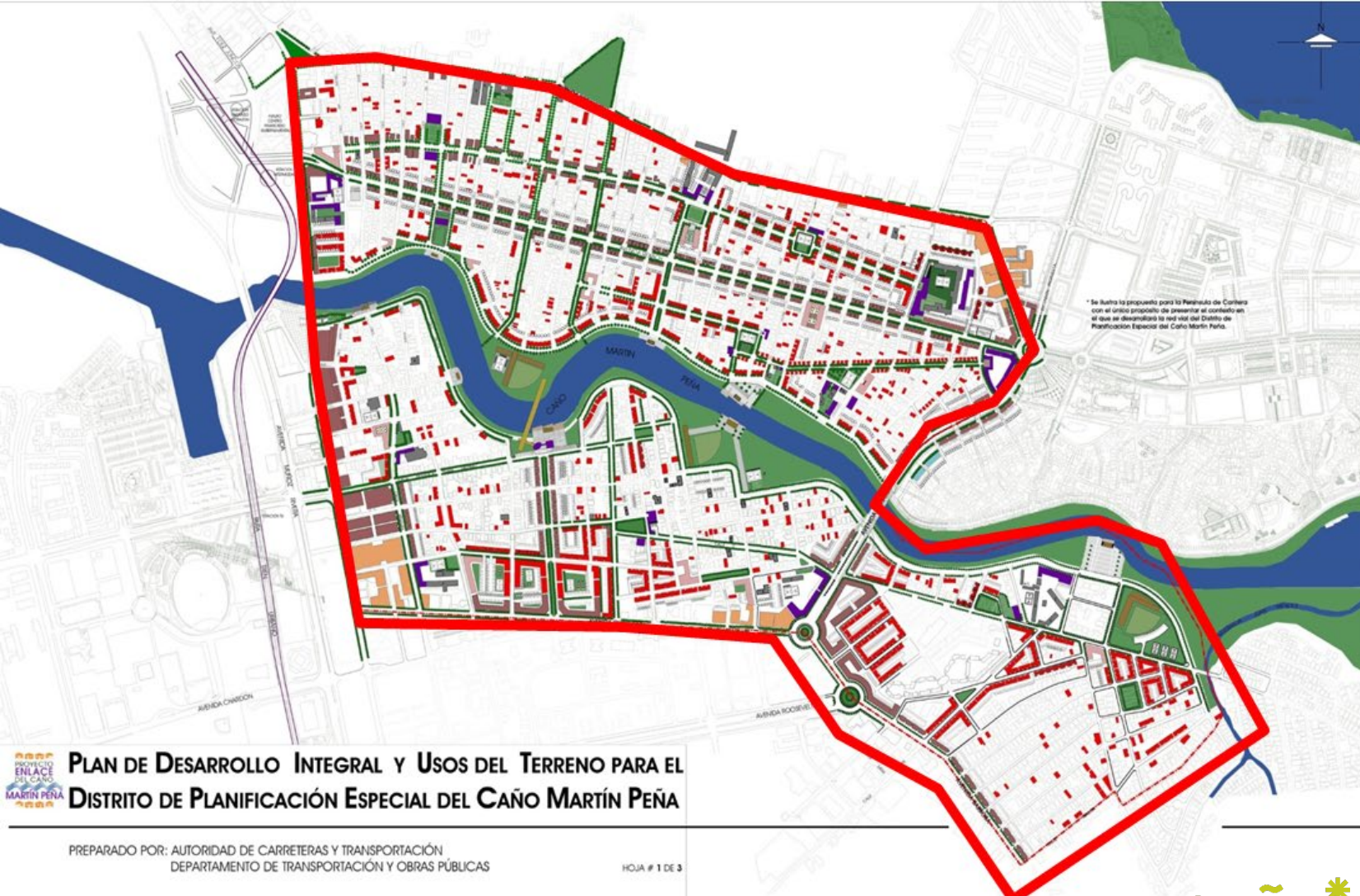




100 PIES DE ANCHO



# Comprehensive Development and Land Use Plan for the Caño Martín Peña Special Planning District



ESTADO LIBRE ASOCIADO DE PUERTO RICO  
OFICINA DEL GOBERNADOR  
JUNTA DE PLANIFICACION

PLAN DE DESARROLLO INTEGRAL Y USOS DEL TERRENO  
PARA EL DISTRITO DE PLANIFICACION ESPECIAL DEL CAÑO MARTÍN PEÑA

**ADOCIÓN**

A TENDR CON LAS DISPOSICIONES DE LA LEY 75 DEL 24 DE JUNIO DE 1975, SEGUN ENMIENDADA, ESTA JUNTA DE PLANIFICACION ADOPTA EN SU SESION DEL DE DE EL PLAN DE DESARROLLO INTEGRAL Y USOS DEL TERRENO PARA EL DISTRITO DE PLANIFICACION ESPECIAL DEL CAÑO MARTÍN PEÑA.

ANIL S. RODRIGUEZ  
PRESIDENTE

WANDA A. CAYO VIGIA  
MIEMBRO ASOCIADO

FREDERICK MALACH  
MIEMBRO ASOCIADO

WANDA MARRERO VELAZQUEZ  
MIEMBRO ASOCIADO

RIC C. GUARDADO GÓMEZ  
MIEMBRO ASOCIADO

CERTIFICADO POR: CAMÍN TORRES MUÑOZ  
SECRETARIA

**APROBACIÓN**

LA FORTALEZA, PUERTO RICO

A TENDR CON LAS DISPOSICIONES DE LA LEY 75 DEL 24 DE JUNIO DE 1975, SEGUN ENMIENDADA, POR LA PRESENTE, YO ANBAL ACEVEDO VILA, GOBERNADOR DEL ESTADO LIBRE ASOCIADO DE PUERTO RICO, APRUEBO HOY DE DE EL PLAN DE DESARROLLO INTEGRAL Y USOS DEL TERRENO PARA EL DISTRITO DE PLANIFICACION ESPECIAL DEL CAÑO MARTÍN PEÑA.

ANBAL ACEVEDO VILA  
GOBERNADOR

CERTIFICADO POR: SECRETARIO DE ESTADO

JOSE ENRIQUE MARTINEZ NIEM  
PROFESORADO ES

- Legenda:**
- Comercial
  - Instalaciones Recreativas
  - Industrial/Residencial
  - Institucional existente
  - Institucional propuesto
  - Pisos de Agua
  - Pisos y Parques Públicos
  - Puente/Piso Peatonal
  - Residencial
  - Residencial/Comercial
  - Vivienda Asistida para Envejecidos
  - Límite del Distrito

**PLAN DE DESARROLLO INTEGRAL Y USOS DEL TERRENO PARA EL DISTRITO DE PLANIFICACION ESPECIAL DEL CAÑO MARTÍN PEÑA**

PREPARADO POR: AUTORIDAD DE CARRETERAS Y TRANSPORTACION  
DEPARTAMENTO DE TRANSPORTACION Y OBRAS PUBLICAS

HOJA # 1 DE 3



# Section 5127 of the Water Resources Development Act of 2007

Authorizes the CMP-ERP as a multi-purpose Ecosystem Restoration and Flood Risk Management Project:

“The Secretary shall review a report prepared by the non-Federal interest concerning *flood protection and environmental restoration* for Caño Martín Peña, San Juan, Puerto Rico, and, if the Secretary determines that the report meets the evaluation and design standards of the Corps of Engineers and that the project is feasible, the Secretary may carry out the project at a total cost of 150,000,000.”



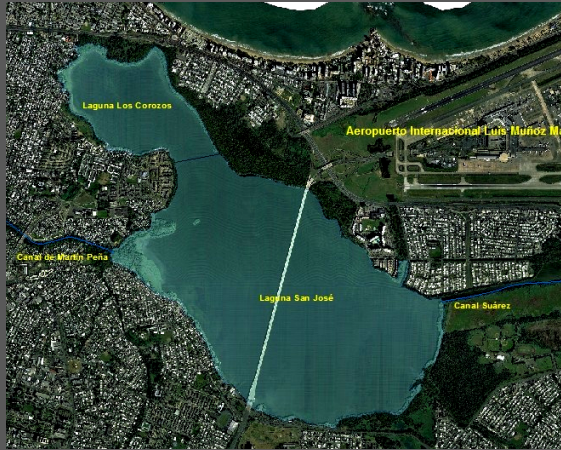


seagrass
  non-connected to San Juan Bay: magroves
  emergent wetlands
  seasonally flooded wetlands
  Magrove
  reef
  open water

Improves connectivity within the Estuary by 61%  
 Ecological uplift: 6,678 habitat units

Increased biodiversity, Caribbean fisheries hotspot.

# ECOSYSTEM RESTORATION BENEFITS



Restore the benthic habitat in the San José Lagoon.



Improve the fish habitat in the SJBE system.



Increase biodiversity of species in the mangrove forests.



# BENEFITS TO THE SAN JOSÉ LAGOON

→ Increase benthic communities.

→ Decrease salinity stratification.

→ Restoration of approx. 630 acres of the lagoon's bottom.

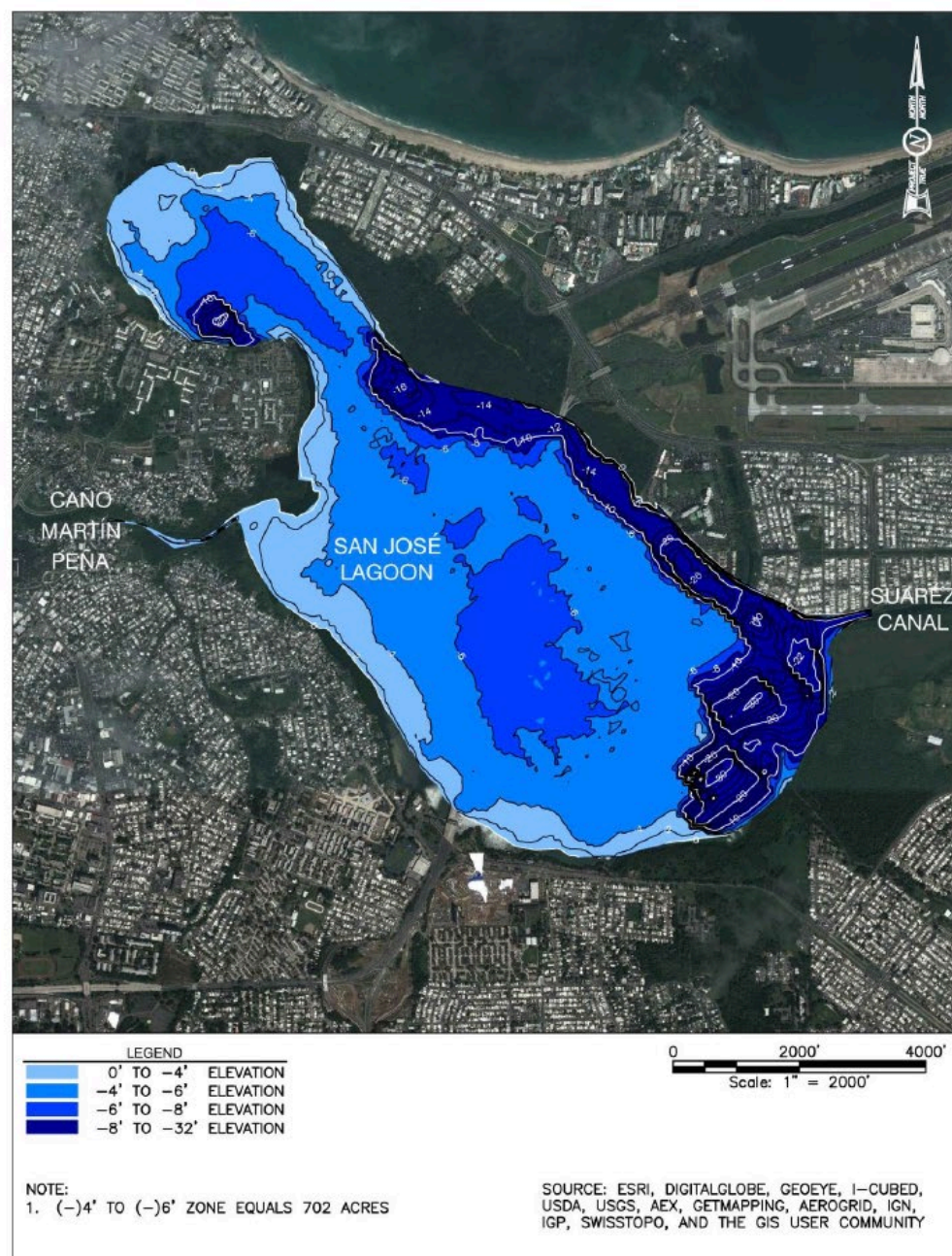


Figure 8. Spatial extent of water depth areas within San José Lagoon. Those depths with expectation of improvement in hypoxia/anoxia are the 702 acres located within the 4- to 6-foot elevation.







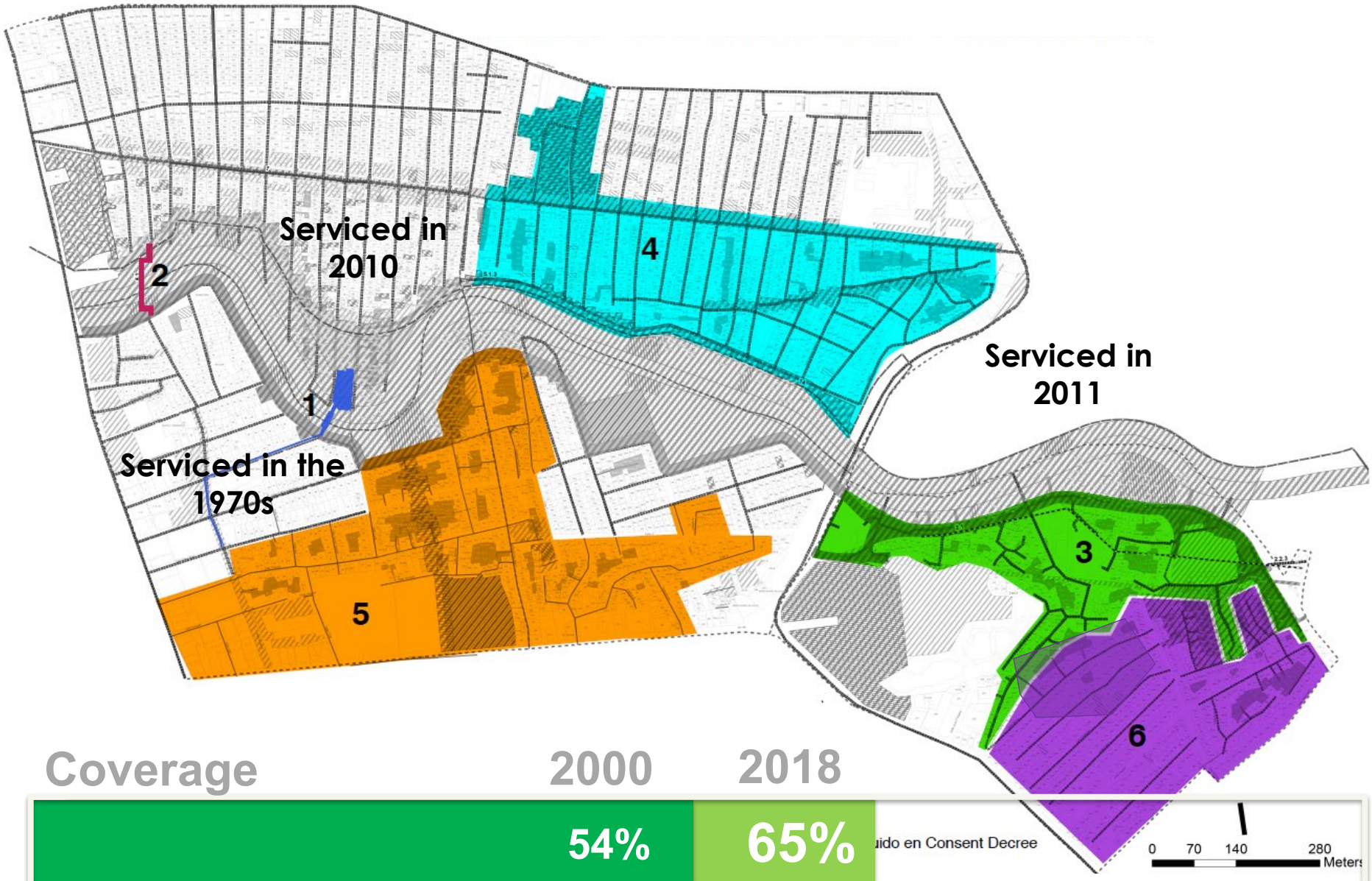
REDUCTOR  
VELOCIDAD

**Rain = Flood.** In 2012, 70% of residents reported their streets or homes had been flooded, a significant increase from the 39% flood reports from 2002.





# Areas without sanitary sewers



0

100%



# National Ecosystem Restoration Plan

## Contract 1 – **SHOVEL READY**



San Juan Bay

Luis Muñoz Rivera Bridge

Barbosa Avenue Bridge

Ponce De Leon Bridge

Urban Train Bridge

Teodoro Moscoso Bridge

San Jose Lagoon

Ciudad Deportiva Roberto Clemente (CDRC)

- Legend**
- Terrestrial Maritime Zone
  - CDRC Area
  - CDRC Road
  - CDRC Staging Area
  - Las Piedras Staging Area
  - Disposal Areas
  - Western Bridges
  - Canal
  - Mangrove Areas

- Contracts**
- Contract 1: Main Disposal Sites & Dredging of San Jose Lagoon up to Barbosa Bridge
  - Contract 2: Scour Protection Measures
  - Contract 3: Dredging and Bank Stabilization\*

Note: \*Bank Stabilization includes the entire Canal



## Estimated costs: MCX 2019

# Caño Martin Peña Ecosystem Restoration Project

**\$255.81 M**

### TOTAL PROJECT COSTS ESTIMATES

Fully funded, MCX Certified as of March 2019.  
WRDA 2007 authorized \$150 M (per inflation).

**\$164.81 M**

### FEDERAL SHARE OF THE PROJECT

Federal share estimate for PED and construction.

**\$91 M**

### LOCAL COST SHARE

Combination of cash contributions, *in kind*, and acquisitions & relocations (LERRDs).

By the end of FY2020, **ENLACE will have invested at least 41% of its cost share requirements in LERRDs.**



# Pre-construction, Engineering and Design

Fully Funded (\$3.85 M)

## COMPLETED BY FY2019:

- Water Quality Certificate (PREQB)
- Acquisition of hydrographic data in the San José Lagoon
- Acquisition of topographic data in the San José Lagoon, Caño, CDRC, and all bridge cross sections.
- Evaluation of biometric for San José Lagoon for Contained Aquatic Disposal (CAD)
- Geotech Investigations Ph I & II and Environmental Sampling Ph I
- SHPO Coordination

## PROJECTED BY FY2020:

- Geotechnical Investigations Ph III
- Environmental Sampling of Sediments (404) Ph II
- Bridge scanning and inspection
- Survey to update/complete P&S for Contract #1
- Completion of Plans & Specs for Contract #1

# LERRDs

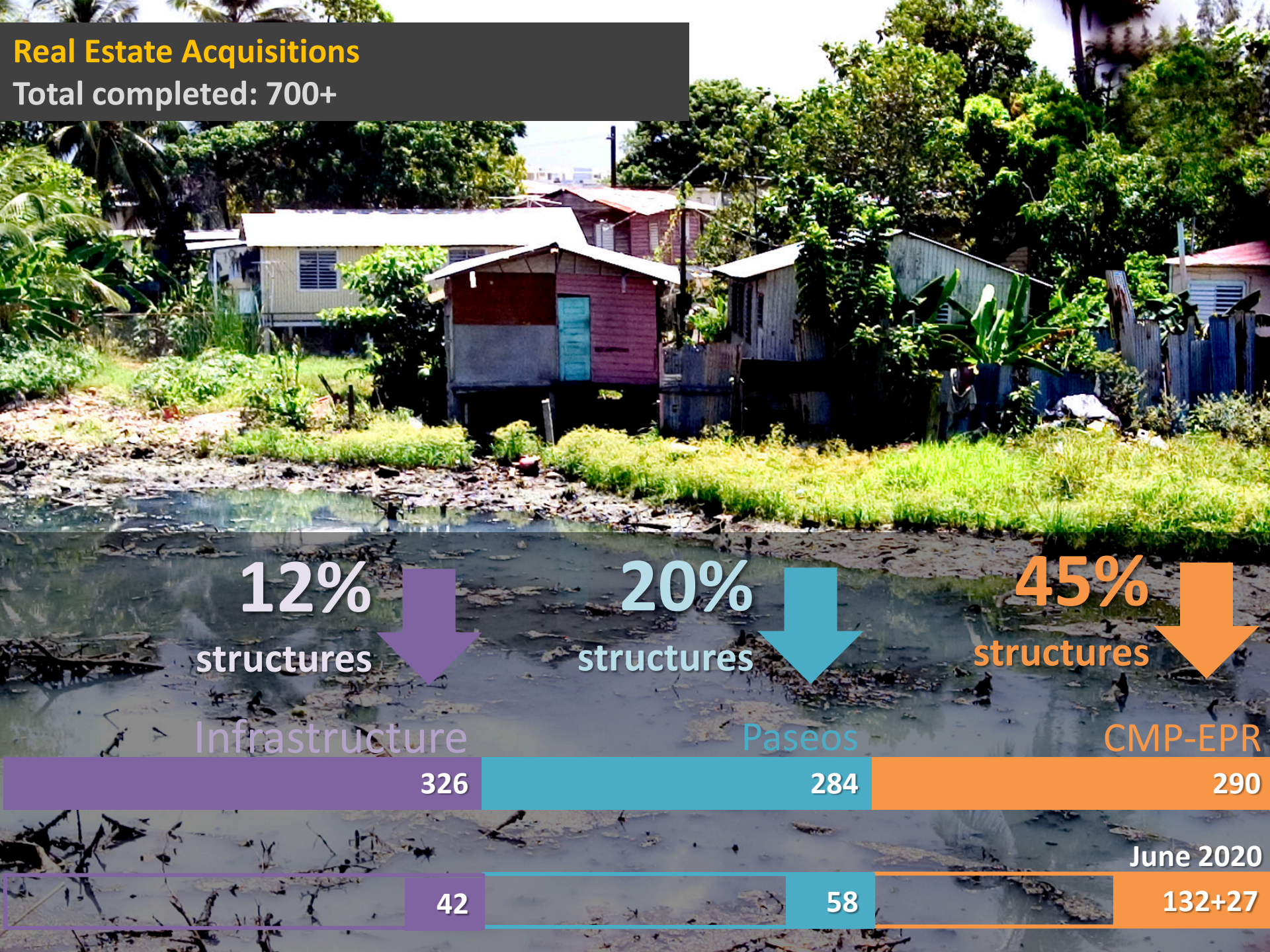
Phase	Estimated costs (millions)	Expenses and allocations		
		By FY19	FY20	Total
<b>LEERDs.</b>	<b>\$ 47.52</b>	<b>\$ 17.01</b>	<b>\$ 4.55</b>	<b>\$ 21.56</b>
Relocation of the 115kW Power Transmission Line 38900 of PREPA (Completed)		\$ 0.24		\$ 0.24
Relocation of Rexach Trunk Sewer of PRASA		\$ 0.62		\$ 0.62
Relocation of Borinquen Potable Water Line (Construction contract awarded with funds of ENLACE and PRASA), includes acquisitions & relocations		\$ 3.83		\$ 3.83
Acquisition of 297 structures and relocation of eligible occupants (ENLACE and Cantera).		\$ 12.32	\$ 4.55	\$ 16.87

By the end of FY2020, ENLACE will have invested at least **45%** of its cost share requirements in LERRDs.



# Real Estate Acquisitions

Total completed: 700+



12%  
structures

20%  
structures

45%  
structures

Infrastructure  
326

Paseos  
284

CMP-EPR  
290

42

58

132+27

June 2020

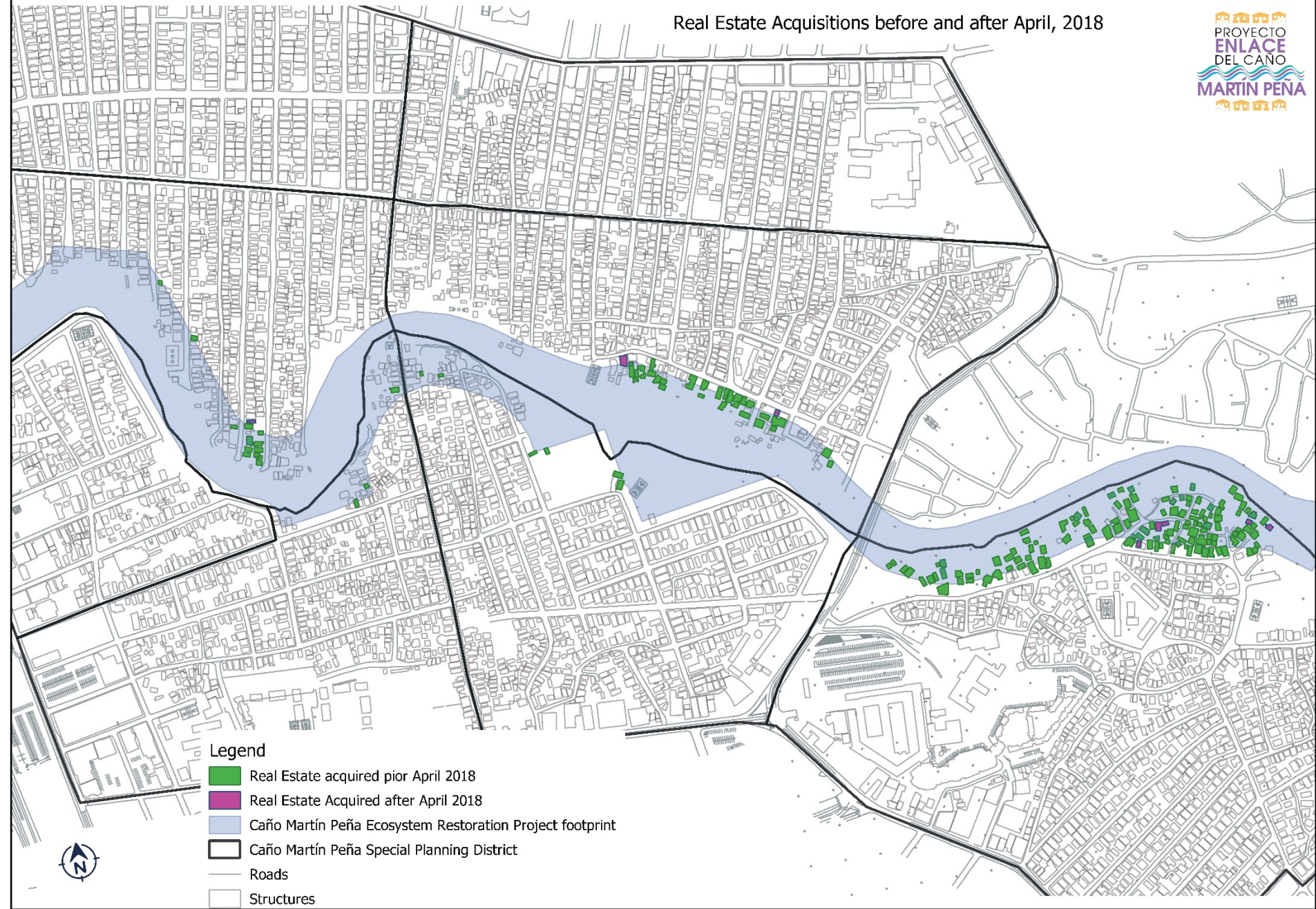




- Workshop to Eligible Occupants

Owner-Occupant Relocation





# Demolitions



**315**

Structures  
demolished to date



**75**

Structures scheduled  
for demolition during  
FY 2020

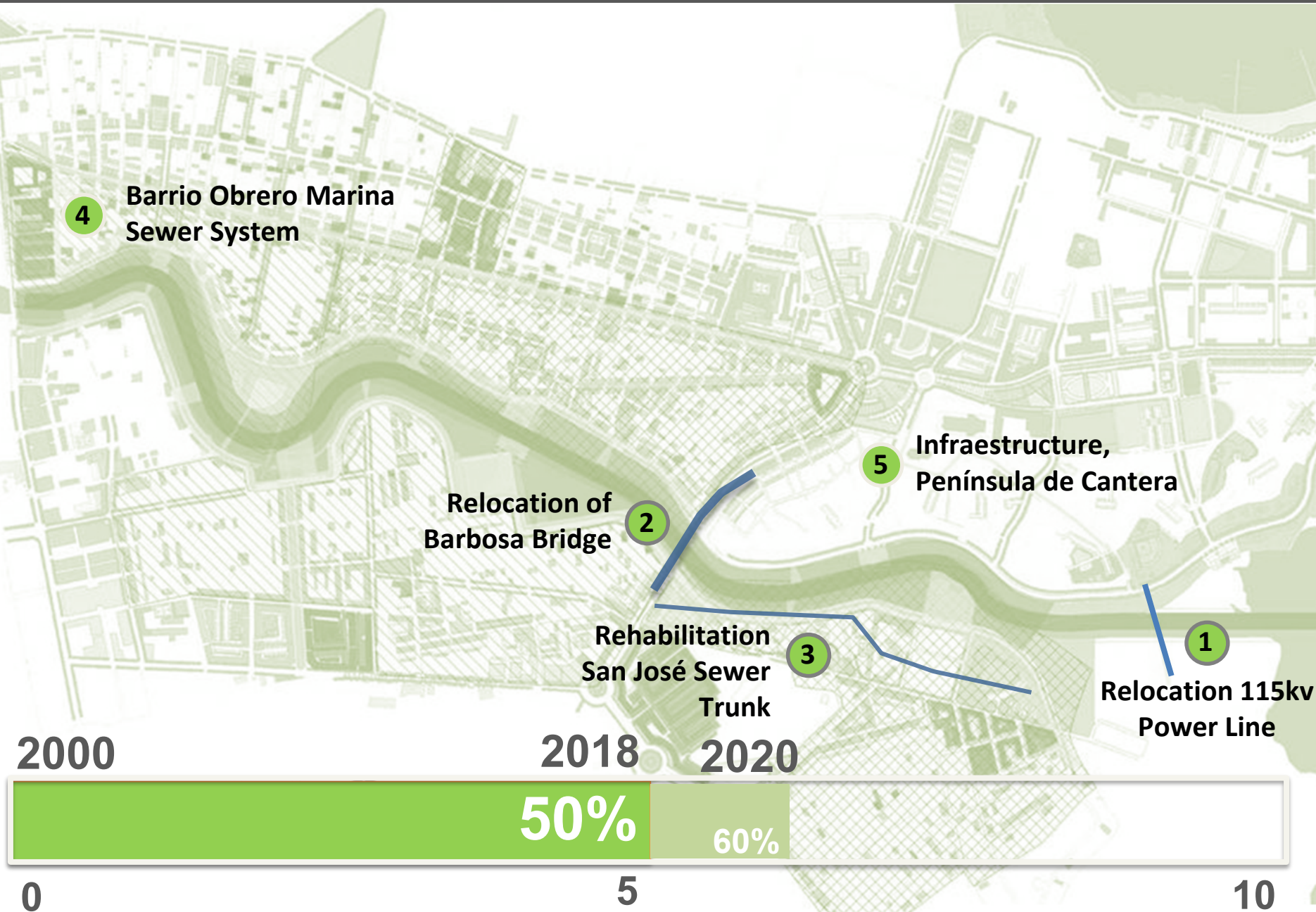






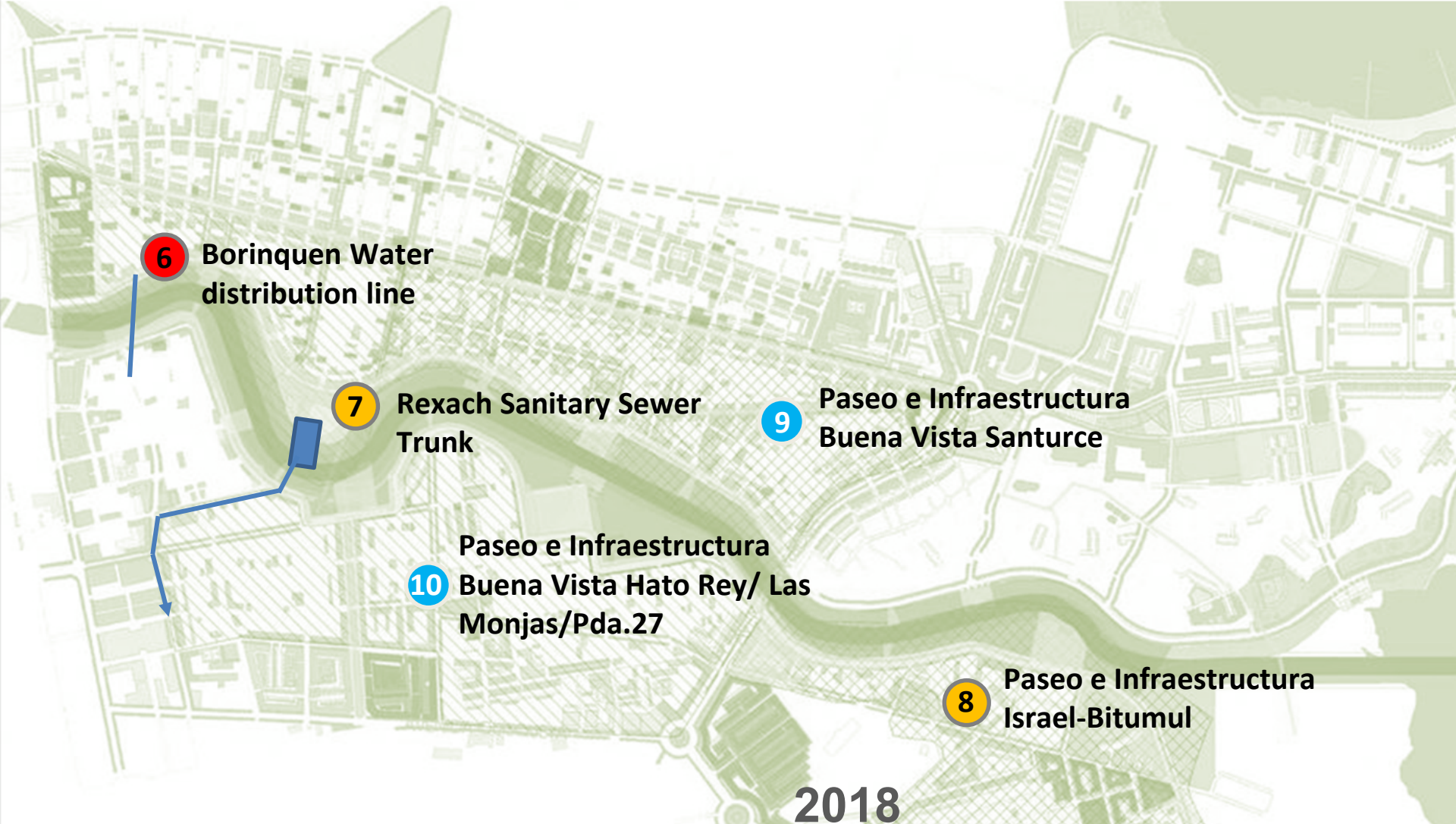


# Key projects— **COMPLETED**





# CRITICAL PROJECTS/ **DESIGNED**



2018



0

1

3

5

Puerto Rico has invested over **\$120 million** in local funds towards comprehensive development in Martín Peña.



# Caño Martín Peña Ecosystem Restoration Project – USACE

## USACE Work Plan FY 2020: *Construction New Start*

### House Energy and Water Development Act, 2020 (H.R. 2960)

*House Report Language:* “The Committee *remains interested in the timely advancement of this project and recognizes the ancillary benefits this project would bring for flood protection, improved water quality, and economic revitalization* in a disadvantaged corridor of San Juan. The Committee encourages the Corps to work with the non-federal sponsor and to include funding for this project in future budget requests. The Corps is directed to brief the Committee not later than 90 days after enactment of this Act on the status of this project”

### Senate Energy and Water Development Act, 2020 (S.2470)

*Senate Report Language:* “The Committee *recognizes the importance of the Caño Martin Peña Ecosystem Restoration Project to residents’ health and well-being, the local economy and environment, and the reduction of coastal flood and storm damage risk.* The Committee understands that the PED phase of the project is on track to conclude by the end of fiscal year 2019. The Committee encourages the Corps to include appropriate funding in future budget requests and to coordinate closely with non-Federal interests in Puerto Rico to establish a project partnership agreement to continue to advance this critical project for environmental restoration, economic revitalization, and flood protection in a timely manner.”

# Strategies for New Start FY2020

## USACE Work Plan FY 2020: *Construction New Start*

### #1 Work Plan FY 2020

- *Support H.R. 2960 & S.2470*, which includes \$2.337 billion & \$7.75 billion, respectively, and six new construction starts (each bill) under USACE's Work Plan budget for FY 2020. This will allow the CMP-ERP to compete for funding as a construction new start.

### #2 USACE/OMB

- *Encourage the ASA-CW and OMB to select the CMP-ERP as an ecosystem restoration new construction start* under USACE's Work Plan budget for FY 2020, upon approval of the





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