

# RÍO PUERTO NUEVO

## Flood Risk Management Project



### BACKGROUND

**SPONSOR**  
Puerto Rico Department of Natural and Environmental Resources (DNER)

**LOCATION (PROJECT FOOTPRINT)**  
Metropolitan San Juan, Puerto Rico (Río Puerto Nuevo Drainage Basin, including the Río Piedras Basin and its tributaries)

**AUTHORIZATION**  
Section 202 of the Water Resources Development Act (WRDA) of 1986 (Public Law 99-662)

**REMAINING PROJECT COST**  
\$1.585 Billion

**FUNDING**  
100% funded under the Bipartisan Budget Act of 2018 addressing damages from Hurricanes Harvey, Irma, and Maria

**HISTORY**  
The Río Puerto Nuevo Basin drains 26 square miles, 80% of which is highly developed with a population of 250,000. Rapid upstream runoff, inadequate channel capacity, constriction of bridges, and elimination of the floodplain due to urbanization results in severe flooding impacting 7,000 residential structures and 800 commercial and public structures valued at over \$3 billion (such as 1.5 square miles of port facilities, government offices, and major water, sewer, transportation, and communication infrastructure).

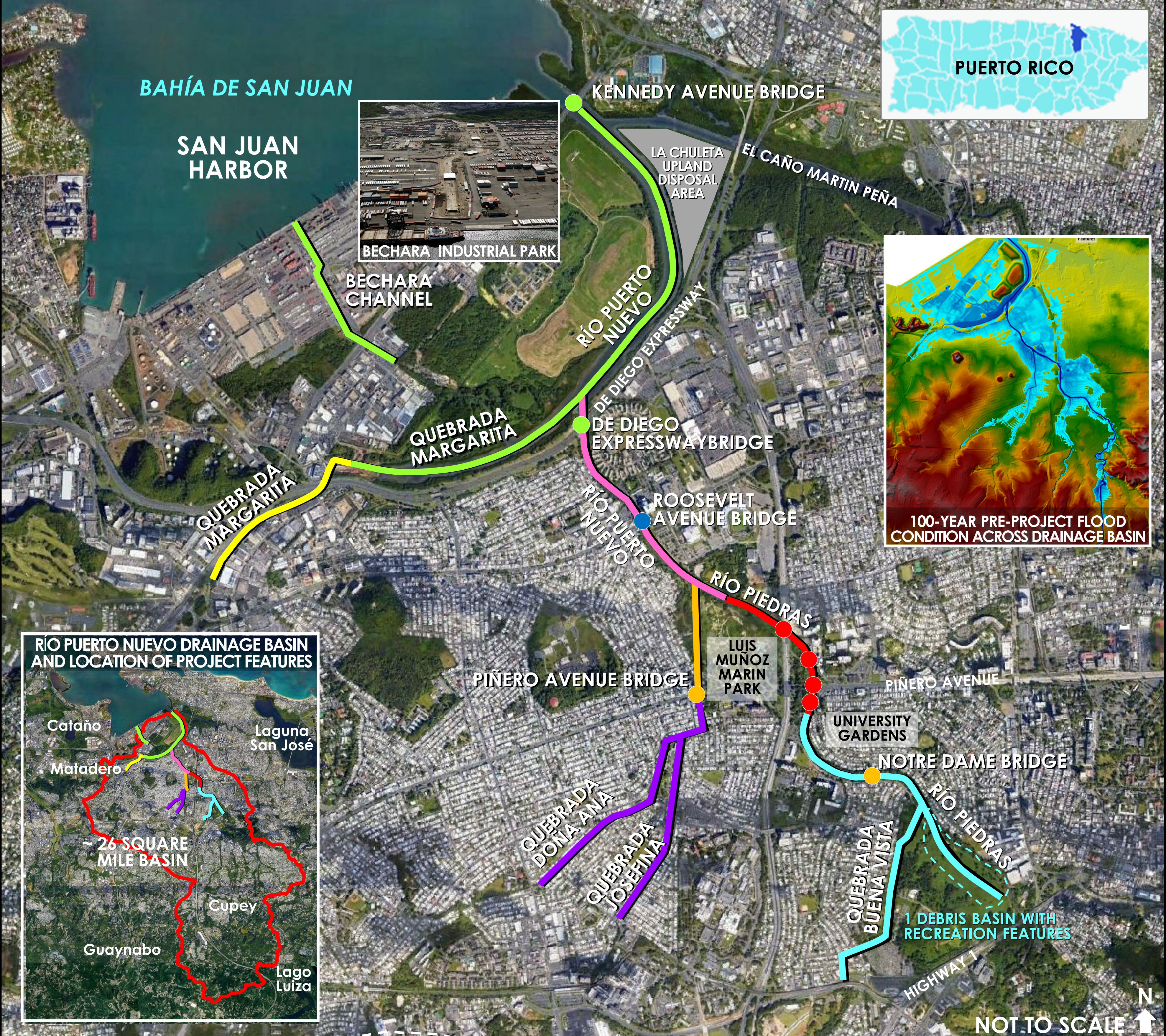
**FLOODING DURING A 2 TO 5-YEAR STORM EVENT**

**DESCRIPTION OF PROJECT FEATURES**

- 1.7 miles of earth-lined channels
- 9.5 miles of concrete-lined channels
- 1 debris basin
- 2 stilling basins
- 23 new, replaced or modified bridges
- Recreation facilities, such as a bike path, linear path, and pedestrian bridge(s)
- Sewer line modifications and replacements
- Mitigation for loss of habitat

### CONTRACT IMPLEMENTATION, FEATURES, AND PROJECT MAP (ALL LOCATIONS ARE APPROXIMATE)

<b>COMPLETED</b>
CONTRACTS 1, 1A, 2A/AR, 2AA, 2C1
STATUS: 2C1, last completed, was August 2020
AMOUNT: \$450M
CONSTRUCTION:
▪ First 1.3 miles of channel improvements
▪ Kennedy Bridge seismic retrofit; 36-inch water line
▪ Quebrada Margarita channel excavation and confluence wall; lower Puerto Nuevo channel dredging
▪ Bechara Channel secant pile wall box culvert; 90-inch sewer line modification; open channel work
▪ De Diego Expressway Bridge abutments; east and west pier drill shaft reinforcement
<b>ONGOING</b>
CONTRACT 2D: RÍO PUERTO NUEVO CHANNEL WALLS
STATUS: March 2022 anticipated completion
AMOUNT: \$21.5M
CONTRACT AWARD: February 2017
CONSTRUCTION:
▪ 350-foot left channel wall
▪ 750-foot right channel wall
<b>REMAINING</b>
<b>SUPPLEMENTAL CONTRACT 1   CONSTRUCTION</b>
▪ Sewer line relocation
▪ Construction of .63 miles of channel improvements at Upper Quebrada Margarita
<b>SUPPLEMENTAL CONTRACT 2   CONSTRUCTION</b>
▪ Roosevelt Avenue Bridge replacement
<b>SUPPLEMENTAL CONTRACT 3   CONSTRUCTION</b>
▪ Channel walls
▪ 1.1 miles of Main Channel improvements
<b>SUPPLEMENTAL CONTRACT 4   CONSTRUCTION</b>
▪ Stilling Basin and Bridge Replacements
▪ 4A-1: Las Americas Expressway Bridge
▪ 4A-2: Piñero Avenue Bridge East
▪ 4A-3: Northeast Access Ramp Bridge
▪ 4A-4: Southeast Access Ramp Bridge
<b>SUPPLEMENTAL CONTRACT 5   CONSTRUCTION</b>
▪ 5A: Notre Dame Bridge replacement
▪ 5B: Piñero Avenue Bridge West replacement; Quebrada Josefina gap downstream to Río Piedras
<b>SUPPLEMENTAL CONTRACT 6   CONSTRUCTION</b>
▪ 1.75 miles of Río Piedras channel improvements
▪ 4 bridges (2 new; 2 replacements)
▪ .80 miles channel diversion at Quebrada Buena Vista
▪ Construction of 1 debris basin
<b>SUPPLEMENTAL CONTRACT 7   CONSTRUCTION</b>
▪ 10 bridge replacements
▪ 5000 linear feet of Quebrada Josefina Channel improvements
▪ 4400 linear feet of Quebrada Doña Channel improvements
<b>SUPPLEMENTAL CONTRACT LA CHULETA</b>
▪ Upland Disposal Area (future capacity of ~500,000 cubic yards of material)



### RESILIENCE | QUALITY OF LIFE

**FLOOD RISK MANAGEMENT**

- 100-year storm event
- More than 250,000 people residing in the highly urbanized and densely developed basin
- Over \$125 million average annual economic benefits

**UPDATED INFORMATION/DESIGN**

- Stakeholder engagement and updated data/analyses facilitating design modifications such as natural channel bottoms where possible, versus concrete).

**ENVIRONMENTAL SUCCESSES**

- 25+ acres of planted mangroves resulting in wildlife, such as the Antillean Manatee, returning to completed sections of the project.
- Improved sanitary sewer infrastructure reducing discharges into waterbody.

**PEDESTRIAN CORRIDORS**

- Planned linear parks, bike paths, and pedestrian bridges to increase connectivity across pedestrian corridors.

### SUPPLEMENTAL CONTRACT IMPLEMENTATION SCHEDULE

