Rio Guayanilla Flood Risk Management **Supplemental Study**





Guayanilla, Puerto Rico





Residual Risk

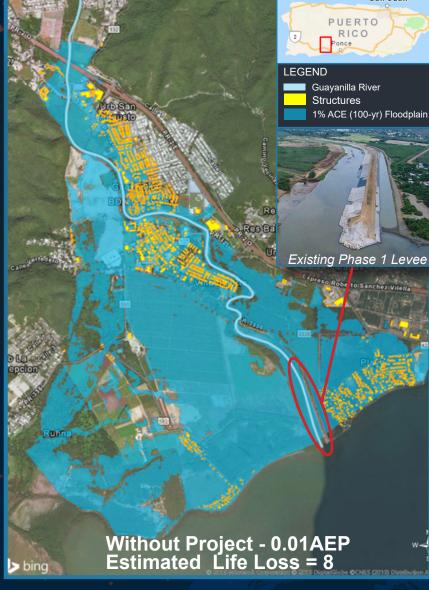
Ì	4	

	* * * * * *	
Expected Average Annual Damages	Future With- out Project (\$000)	Residual Damages- Recommended Plan (\$000)
Total Damages	\$ 19,844	\$ 579
0.1 AEP (10 year)	\$ 36,161	\$ 39
0.02 AEP (50 year)	\$121,167	\$ 383
0.01 AEP (100 year)	\$174,135	\$ 833
0.002 AEP (500 year)	\$277,834	\$76,641
Expected Life Loss 0.01 AEP (100 year)	8	0
Expected Life Loss 0.002 AEP (500 year)	29	1

FY2020 Price Levels; 50 year period of analysis; 2035 base year. 2.75% FDR



Flood damaged grocery store from Hurricane Maria





Flooding along PR-127 Hurricane Maria

Public Input & Our Team



- Over 200 people attended both the scoping and draft report public meetings.
- · Overwhelming support for the proposed plan.



Rio Guayanilla Flood Risk Management









Guayanilla, Puerto Rico

Recommended Plan





Project Costs & Benefits

Total First Cost	\$154,341,000
Federal Contribution	\$100,806,000
Non-Federal Contribution	\$53,535,000
Average Cost	\$6,071,000
Average Annual Benefits	\$20,022,000
Net Benefits	\$13,951,000
BCR @ 2.75%	3.3
BCR @ 7%	1.6

Conservation for T&E Species





Puerto Rican Boa

Puerto Rican Nightjar

Recommended Plan Features

3,900 LF of Conveyance Improvements

15,545 LF of Levee/Floodwall

9,000 LF of Diversion Channel

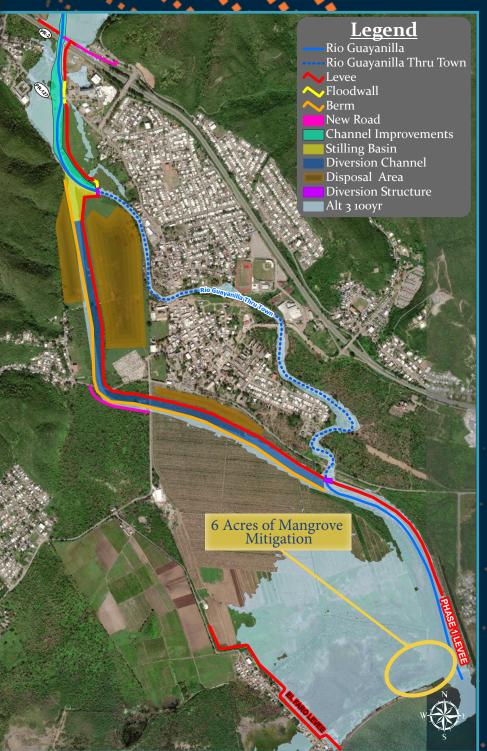
8,555 LF of Berm

2 Diversion Structures

3 Roads relocated (2,522 LF)

6 Acres of Mitigation

Flood Warning & Response Plan



With Project - 0.01 AEP Estimated Life Loss = 0