

Municipio Autónomo de San Juan

## CDBG- Disaster Recovery Autonomous Municipality of San Juan

Carmen Yulín Cruz Soto, Mayor



## Introduction

On September 20, 2017 the catastrophic and record-setting Hurricane María made landfall in Puerto Rico with overwhelming force, causing widespread havoc and destruction on the Island. San Juan, the capital of Puerto Rico and the economic, tourism and social center of the Island, bore the brunt of powerful wind gusts, storm surges, and intense rain that flooded many parts of the coastal communities, as well as inland communities alongside river banks and other waterways. Thus, Hurricane María destroyed thousands of homes in Puerto Rico and San Juan, leaving countless number of families in need of temporary housing and relief to cover personal costs. The electric power system experienced a complete power outage, leaving citizens throughout the Island in absolute darkness for months. Alongside the electric power system, other public utilities, including water and communications systems were severely impacted, altering the way of life of every single citizen, leaving families without access to basic, essential services.

Recovery efforts have been uneasily slow and tortuous. Currently, public utilities and infrastructure remain fragile, with constant failures leading to frequent blackouts. Likewise, housing needs have left many families and survivors having to endure without a steady and safe household where they can return to. With such delicate public infrastructure, dwindling economic opportunities, and even more challenges to the recovery efforts, many families fear the upcoming hurricane season might negate the sacrifices made so far.



On February 9, 2018 Congress approved a \$1.5 billion disaster aid package for the Government of Puerto Rico to supplement the FEMA, SBA, and

USACE funds previously disbursed. Accordingly, the Government of Puerto Rico will submit a plan to HUD for the use of the CDBG-Disaster Recovery Funds, and San Juan is eager to participate and be part of this action plan in order to bring about a speedy recovery and transformation to the citizens and the

rethinking our communities making them more resilient and resistant to disasters

communities alike, making them more resilient and resistant to the increasing effects of global warming, the rise of ocean tides and harsher, more severe, tropical storms and droughts. The proposals presented herein are design to provide better living conditions to the citizens and families of San Juan with particular emphasis on the communities living under the national poverty level and the working middle class.

According to the 2012-2016 American Community Survey 5 Year Estimates, the Population of the Municipality of San Juan is 363,744, divided as such: Average Household Size: 1 person household: 53,500 (36.20%); 2 person household: 44,485 (30.10%); 3 person household: 25,420 (17.20%); 4 or more person household: (16.50%); average number of rooms per Home: 4.7.

Per FEMA housing statistics from February 14, 2018:

• In the Municipality of San Juan, FEMA received requests for assistance by 57,623 owners of housing units.



- Out of the 57,623 housing units, FEMA has only inspected 34,943 housing units or (61%).
- The total housing units yet to be inspected remains at 22,680 housing units or (39%).
- Of the total housing units inspected (34,943), per FEMA data, only 17,915 or (51%) of applicants have received some form of federal aid.
- A comprehensive analysis of said data shows that 17,028 housing
  units and families assessed for damages sustained by hurricane
  María have not received assistance or relief from FEMA, leaving
  them unable to recover and offset the loss of property and
  belongings. These families currently have extensive housing unmet
  needs.
- As of February 14, 2018, the total amount of housing assistance approved by FEMA to owners of housing units damaged by Hurricane María amounts approximately to \$27,000,000.00.
- Of this amount, only 40% accounts for repairs, improvements or replacements of housing units damaged or affected by the havoc caused by Hurricane María.



- The remaining difference was committed to cover rental expenses (20%) and other needs (40%) such as: personal property expenses, costs of transportation, medical or dental costs, and funeral expenses for families who lost loved ones.
- Additionally, per data gathered by FEMA, 62,950 requests for assistance from rental units were registered in the Municipality of San Juan.
- Out of the 62,950 rental units registered, only 36,901 units or (59%) had been inspected by FEMA.
- 26,049 registered housing units are yet to be inspected.



## Community Impact Assessment

## Destroyed and affected households:

- o Number of people displaced/living outside of home: 1540
- o Number of households without electricity: 100%
- Number of households without potable water: 51.25%
- Number of households destroyed: 426

#### Education

o Number of schools closed after hurricane María: 102

#### Healthcare

o Number of people with health needs: N/D

#### Infrastructure/Government

- Number of obstructed roads: 90%
- o Communication services: 10%

#### **Economic Sector**

- o Number of people who lost their jobs after the hurricane: 500
- o Increase in the unemployment rate after hurricane: 0.6 %
- Number of small businesses affected: 43.6 %

#### Recovery work done by local committees, civil groups, non-profits:

 Churches, such as, Iglesia Adventista, Iglesia de Dios Pentecostal Mission Board (Church of God), Iglesia de Dios Pentecostal M.I., Iglesia Bautista de Rio Piedras, Iglesia Lucero,



Centro de Bendición Parcelas Falú, Iglesia Rey Jesus, Centro de Ayuda Social de Puerto Nuevo): food preparation and distribution.

- Local Committees, such as Torre de Francia, Barriada Figueroa, Comunidad El Retiro, Condominio Las Americas, Los Velazquez, Jardines de la Nueva Puerta de San Juan, Torres de Sabana: food preparation and distribution.
- Non-profits such as, La Perla del Gran Precio, Hogar Niñas de Cupey, Hogar Buen Pastor, Casa Julia de Burgos, Fondita de Jesus: food preparation and distribution.
- "Centro de Acción Urbana, Comunitaria y Empresarial de Río
   Piedras" (CAUCE) and G-8: Community Outreach
- o Jorge Posada Foundation food donation
- o Ricky Martin Foundation food donation
- o Olga Tañon food donation

## **Populations with Special Concerns**

Most vulnerable groups in the Municipality of San Juan: senior citizens living alone or unattended, and citizens that have health needs that require special care. Additionally, singleparent households with one or more children with disabilities or special care needs are in more disadvantage and their path to recovery is a steeper one.



# Municipality of San Juan past performances of CDBG funds

The Municipality of San Juan is the only municipal jurisdiction in Puerto Rico that has the same level of experience as the Government of Puerto Rico in the administration and managing of the housing programs sponsored by the United States Department of Housing and Urban Development (HUD). This is based upon the fact that San Juan administers four (4) programs of the initiatives of Planning and Development of HUD, including the following programs: Community Development Block Grant Program; HOME Investment Partnerships Program; Housing Opportunities for Persons with AIDS (HOPWA); and the Emergency Solutions Grants Program. With respects to the HOPWA, our municipal administration is the only administrator of funds renowned and recognized by HUD.

This has allowed the City officials and administrators to gather vast amount of practical experience in the managing and disbursement of funds and, more importantly, in the development of projects and activities designed to carry out and meet the affordable housing needs of the citizens at-risk and with low and moderate-income sources. At this point, we proceed to detail the experience level that the Municipality of San Juan carries in the managing of HUD's CPD funds.

 Restoration and rehabilitation of housing units: this activity is intended to provide economic resources to restore and rehabilitate physical upgrades to housing units of low and moderate-income



families. The Municipality provides funds for materials and labor for the restoration of households. The improvements intend to guarantee safer living conditions in order to meet with the requirements of adequate households for low and medium-income families. The Municipality carries vast experience enacting this activities in wooden and cement housing units. The restoration and rehabilitation activities are carried out throughout the year and it is sponsored with funds from CDBG, HOME and NSP. In average, the Municipality of San Juan restores over 75 housing units annually.

- Financial Aid for Rent-Subsidy Program: under this initiative, the Municipality of San Juan provides financial aid for rent-subsidy programs for families of low and moderate-income families. This activity allows working-class families to occupy and reside permanently in stable housing units in order to foster better living conditions and granting families the opportunity to grow economically. Annually, the Municipality provides this services to over 5,000 families through the funds provides by Section 8 Program, HOPWA, ESG and funds from the strategic initiatives of continuous care for homeless families under HUD. In terms of volume, the Municipality of San Juan cares for the most amount of families through Section 8 Program besides the Government of Puerto Rico' Housing Department.
- Program for the Design and Construction of New Homes for Sale: this
  program is enacted under initiatives sponsored through the HOME



Program. The Municipality of San Juan provides funds to private developers for the development of affordable housing units for low and moderate-income households. Besides promoting the development of new housing units for sale, this program fosters the creation of relations between the private housing sector and the Municipality and facilitates the investment of private resources in projects, maximizing the output of funds disbursed to the City. The accrued experience of the City on this activity is displayed in the investment of over \$86,000,000 in tunds and construction of approximately 2,500 housing units during the time that the City has been a grantee and participant of the HOME Program.

- Program for the Development and Construction of Housing Units for Rent: similar to the program for the design, development and construction of new homes for sale, this program is specially intended for the rent-housing market. This activity is enabled through investment from HOME Program and matching private investment through tax credits for low income families. The private investment allows the funds to have a maximum performance and helps clear housing inventory. Under this initiative, our City Administration has enacted four (4) projects for a total of 408 housing units with an investment of \$60,000,000 during the previous three (3) years.
- Homeownership Program: Under this program the City promotes the acquisition of existing housing for families of low and moderateincome through financial aid. Repossessed housing units in the



banking market are given first priority allowing better living conditions and preventing the abandonment and worsening of existing housing units. This initiative is carried out with HOME Program and NSP Program funds which have made possible the acquisition of properties for over 600 families of low and moderate-income through an approximate investment of \$130,000,000.

As previously stated, the Municipality of San Juan has a proven record of managing, disbursing and developing affordable housing units for the working class sector of San Juan and families of low and medium-income. The accrued experience through the years have

San Juan is the most experienced municipality in the management of federal programs

make the Municipality of San Juan the standard in the management of federal funds with distinctively emphasis on the communities urgent and unmet needs while taking into account the active participation of public and private interests and the highest efficiency and transparency in the use of federal funds.

The Municipality of San Juan has a general budget for fiscal year 2017-2018 of \$638.9 million, out of which \$447.8 million originates from ordinary funds and \$107.7 million are federal funds.



# Unmet housing and public infrastructure needs in the Municipality of San Juan

#### Housing:

The total number of private households in the Municipality of San Juan is 199,915. In the immediate aftermath of Hurricane Maria, a total of 120,573 home owners submitted claims to FEMA for individual assistance under FEMA's Individuals and Households Program (IHP). According to FEMA reports, a total of 71,844 were inspected, leaving unattended a total of 48,729 households which have yet to be inspected. The citizens of San Juan need the necessary resources to cover the unmet housing needs for the residences.

The communities most heavily impacted by the path of hurricane María were the coastal communities of the Peninsula de Cantera, Barrio Obrero, Playita, the communities alongside the Caño Martín Peña, and the southern communities of Caimito and Cupey. Additionally, the distinctively working-class, urban communities in the "mid-belt" part of the City sustained heavy flood damage that caused copious property loss.

#### **Electricity and Water Services:**

In the immediate aftermath of Hurricane Maria, 100% of all households in the City were left without electricity. Additionally, 51.25% of homes were



left without potable, drinking water. The loss of public utility services caused devastating consequences to the economic sectors of the City that are the main contributors to the economy at-large and sustain the primary drivers in areas such as education, health, housing, infrastructure, tourism, manufacture and commerce.

As a mitigation effort to build, create and transform the City to be more resilient and resistant to the ever changing effects of the rising temperatures, sea levels, and extreme weather that cause record-setting tropical storms, droughts and heat waves, San Juan is requesting disaster relief funds to cover the unmet needs in order to develop private housing that meets the present-day weather challenges with renewable energy and water efficiency.

#### Road Damage:

The impact of Hurricane Maria damaged around 25 kilometers of municipal roads. This situation affected hundreds of families who could not leave their homes. The most affected roads were in Quebrada Arena, Condado, Venus Gardens, Cupey and Caimito.

The most substantial damage was caused by landslide of roads, asphalt detachment, damage to sidewalks, and the scouring of roads, among others.



## Proposed Projects for Municipality of San Juan CDBG-Recovery Funds

## Project 1

- 1. Name: Elderly Resilient houses for our third age population
- 2. Description: Hurricane María destroyed the electrical grid in the Municipality San Juan and Puerto Rico as a whole, and left without access to safe, reliable drinking water 100% of the population of the entire Island for days, weeks, and even months on end. This extreme lack of access to electricity or potable water caused a significant deterioration of the health of our elderly population who needed those services in order to manage their existing health conditions.

We therefore propose to develop activities focused on mitigating the adverse living conditions of our elderly population and directing the development of a sustainable and resilient environment for those who are limited in their mobility or bed-ridden due to medical conditions. We propose:

#### Electric Power

 The distribution of backup photovoltaic systems to 350 homes in which an elderly, bed-ridden citizen of lower income resides.



Preference will be given to the homes which are harder to reach due to obstructed or difficult access.

 The distribution of a backup photovoltaic system to each of the of the 35 nursing homes located in the Municipality, with due corroboration of their eligibility for CDBG funds;

#### Water

- Distributing and installing 275-gallon water cisterns at each of the 14,779 homes located in the rural mountainous area of the Municipality (10% total of the homes in San Juan);
- Distributing and installing two 400-gallon water cisterns at each of the 35 nursing homes located in the Municipality.

#### Health

- The distribution of 3,920 respiratory therapy devices to deal with the needs of the elderly population who suffer from pulmonary and respiratory system ailments and require such life-saving machines to breathe.
- 3. Needs and Problem: We propose to deal with the most urgent needs of the elderly population of the Municipality of San Juan first. This is a particularly vulnerable population with the Municipality since their health can often be already compromised from chronic ailments, they also depend on fixed pension payments, and their mobility can also be limited. A part of this population has severe health conditions which can lead to them being bed-ridden, resulting in a population that needs even more assistance when dealing with a natural disaster like Hurricane



María, whether they live in individual homes or are a part of an assisted care facility or nursing home. There are 35 nursing homes in the Municipality of San Juan according to the Elderly Affairs Office in Puerto Rico and some 59,980 homes (40.6% of the total of homes in the Municipality of San Juan) whose head of household is 60 years old or older, according to the 2012-2016 American Community Survey 5 Year Estimates conducted by the United States Census Bureau.

4. Population to impact: The elderly population (defined as those people 60 year old or older, according to Law 121 from July 12, 1986 known as the Bill of Rights of Elderly People, as amended), within the Municipality of San Juan, is of 91,699 people, representing a 23.7% of the residents of the Municipality of San Juan for that year (Community Survey from 2015, utilizing data from 2013). Likewise, there are 59,980 homes in which the head of household is 60 years or older in the Municipality of San Juan, which represents 40.6% of all of the homes in San Juan. On average, 1.5 people of that age group live within each of those homes. For the purposes of this project, we estimate that in 1% of the homes in which the head of household is at least 60 years or older, there is a low income, bedridden elderly person living in that household.

The solar power distribution we are proposing would impact some 350 individual homes, which, if we average 1.5 people per home would result in us impacting 525 people, and the 35 nursing homes we wish to impact have approximately 3,716 elderly people in them. In total, this aspect would directly impact some 4,241 people.



The water cisterns we are proposing would impact 14,779 homes located in the mountainous area of San Juan. If on average 1.5 people live in these homes, we estimate that we will impact 22,169 people, and 35 nursing homes in which an average of 3,716 elderly folks live. In total, the water cistern project would impact 25,885 people.

The health project we are proposing would directly impact 3,920 people who suffer from respiratory ailments.

Thus, these three initiatives would directly impact 34,046 elderly folks, of which 350, at least, are considered bed-ridden or of limited mobility. This represents 37% of the population of people 60 years old or older who reside in the Municipality of San Juan.

## 5. Compliance with National Objectives:

- a. Our proposed project benefits those of lower and moderate means, and helps meet the urgent needs of this population, including their power, water, and health necessities.
- b. Our goal in responding to these needs is to frame the help provided in a sustainable and resilient fashion.
- c. This project would also indirectly promote economic development in the communities being impacted within the Municipality of San Juan.
- **6. Physical Address:** Attached please find a map indicating the locations of the 35 nursing homes within the Municipality of San Juan.

The individual residences are located throughout the entire Municipality. When doing a detailed inventory, we will utilize GIS data to localize the



homes we wish to impact based on the Census Bureau information provided from those homes in which the head of household is 60 years old or older.

## 7. Phases of the Project:

PHASES		DESCRIPTION	INVESTMENT
Phase IA	Power	Solar panels (photovoltaic system): the system costs \$3 per watt. We wish to install back-up energy systems, thus assuming that a 5,000watt system is enough for each home. Each unit costs \$15,000. The objective is to serve 350 homes in which elderly people of low income reside, focusing on homes with bed-ridden patients and homes that are not easily accessible.	\$5,250,000
Phase IB	Power	On average, each nursing home in San Juan has about 106 people residing there. If we wish to impact all 35 homes, that would mean we would be benefiting some 3,716 elderly people. Shared appliances such as refrigerators, fans, and medical devices will be powered up with the solar panels, but by sharing larger appliances, energy consumption can be lowered. We estimate the need to acquire 1,208 photovoltaic	\$6,038,500



PHASES		DESCRIPTION	INVESTMENT	
		systems, and at \$5,000 for each system, the total cost would be \$6,038,500.		
Phase IIA	Water	Cisterns for individual homes: each 275-gallon water cistern costs \$380. If we impact 50% of the 29,558 housing units in the mountainous area of San Juan, we would be impacting 14,779 homes south of PR-199.	\$5,616,020	
Phase IIB	Water	Cisterns for nursing homes and assisted living facilities: the 400-gallon cisterns de cost approximately \$580 each. If we distribute two cisterns to each of the 35 nursing homes in San Juan, the cost would be \$40,600.	\$40,600	
Phase III	Medical equipment	Respiratory therapy devices: Assuming that 75% of people who suffer from respiratory conditions treat their diseases using respiratory therapy devices, and that 57 out of every 1,000 pulmonary patient requires respiratory treatment (as reported by the P.R. Health Department in their 2015 report); and that each device costs \$150.00, we estimate that we need to acquire 3,920 respiratory therapy devices, for a total of \$588,000.	\$588,000	

8. Budget of the Project: \$19,286,432



## 9. Estimate Cost by Phases:

Phase I: solar panels \$11,288,500

Phase II: potable water \$5,656,620

Phase III: medical equipment \$588,000

SUMMARY OF COSTS					
Project	Estimated Cost	Total			
Power					
Individual Homes	\$5,250,000				
Nursing Homes	\$6,038,500				
Sub-Total	\$10,500,000	\$11,288,500			
Water					
Individual Homes	\$5,616,020				
Nursing Homes	\$ 40,600				
Sub-Total	\$5,656,620	\$5,656,620			
Health					
Devices	\$588,000	\$ 588,000			
Sub-Total		\$17,533,120			
Administration (10%)	\$1,753,312	\$1,753,312			
TOTAL		\$19,286,432			

10. Identify additional funds: \$1,753,312 in-kind

11. Date of the beginning and end of the Project: August 2018 -

September 2019



## **Project 2**

- 1. Name: <u>Nuevo Horizontes Shelter Gender Violence</u>
- 2. Description: Temporary housing services for victims of domestic abuse lacking steady and stable homes. Additional outreach services are provided by social workers to the families.
- 3. Needs and Problem: As a result of hurricane María, the building housing up to 25 families, victims of domestic abuse, sustained significant structural damage, forcing the relocation of the families.
- **4. Population to be impacted:** Annually, the number of impacted people is approximately 73 women, victims of domestic abuse, with their children.
- 5. Compliance with national objectives: The proposed project will impact citizens with low and medium-income, and will eliminate places in ruin or heavily deteriorated and insecure housing units. Hogar Nuevo Horizontes will be built in compliance with the standards set by the laws and codes of green buildings and will be a self-sustaining structure. Additionally, the reconstruction of Hogar Nuevo Horizontes will aid in the battle against homelessness in Puerto Rico.
- 6. Physical Address: Avenida Constitución #360, San Juan, PR.



## 7. Phases of the Project:

PHASES		SCHEDULE	PROGRAM	INVESTMENT
Phase I:	Study, design and permits	Aug 2018 – Oct 2018	City Insurance CDBG- DR funds	\$370,108 \$171,767
Phase II:	Bid and hiring process	Nov 2018 – Jan 2019		
Phase	Construction	Feb 2019 – Sept 2019	CDBG- DR funds	\$5,633,125
Phase IV:	Project delivery and final permits	Oct - Nov 2019	CDBG- DR funds	\$1,000
Phase V:	Operation	Nov 2019	Fondos CoC PR- 502	\$320,572
			Matching of 25% with ordinary funds	\$94,095
			Total	\$6,590,667

**8. Budget of the Project:** \$6,590,667

## 9. Estimate Cost by phases:

Phase I: \$541,875

Phase II: \$0

Phase III: \$5,633,125

Phase IV: \$1,000

Phase V: \$414,667

## 10. Identify additional funds: \$414,667

11. Date of the beginning and end of the Project: The project is scheduled to begin in August 2018, with an anticipated completion date expected in November 2019.



## Project 3-A

## 1. Name: Río Piedras - Housing Development

Development of affordable housing and economic development opportunities for low-income people living in vulnerable areas affected by Hurricane María.

2. Description: This proposal encompasses two (2) main activities:

Develop new low-cost housing by acquiring and developing abandoned structures in areas with no risk of flooding in the districts of Rio Piedras. Although the rehabilitation of structures will serve mainly residential purposes, the project will promote community economic development opportunities by rehabilitating structures for commercial or mixed use (residential-commercial). These areas will house capacity building and technical assistance initiatives, common workshops and startup-projects. The main purpose of these activities is to offer and guarantee affordable housing in safe, urban contexts for residents of San Juan and other municipalities of the Island, with emphasis on those most affected by Hurricane María.

We also propose the demolition of unsafe residential units in areas that are prone to flooding and promoting the use of these areas as green infrastructure for public and recreational use.

3. Needs and Problem: Individual residential units throughout San Juan were visited and physically inspected by the New York City Housing Preservation and Development Department. Over 1,000 properties suffered substantial damage, including substantial structural damages.



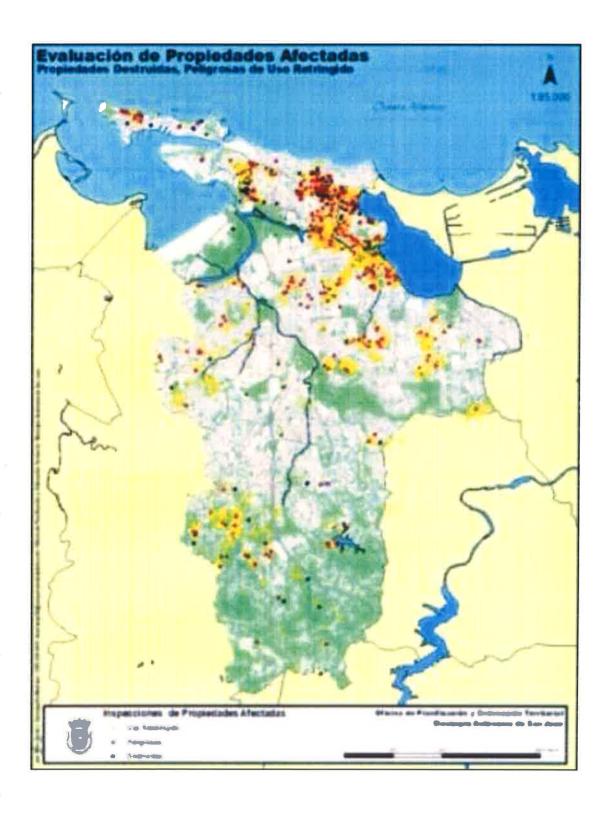
According to this inspection, over 300 properties were totally destroyed. This data is complementary to the executive summary provided by FEMA, according to which 200 residential units were visited and certified as destroyed in San Juan by January 12, 2018. Both sources identify clear clusters of destroyed residential units: a) Santurce (Barrio Obrero, Península de Cantera, Villa Palmera, Playita, Shangai, El Checo, Seboruco, Villa Kennedy and Figueroa, among others) and b) the southern area of the municipality (Caimito, Cupey, Monacillo, El Cinco, Buen Consejo, Venezuela and Jurutungo, among others).

Most destroyed residential units are in low-income communities with high levels of poverty according to the American Community Survey of the U.S. Census Bureau. Also, most of these structures are located in vulnerable areas susceptible to natural disasters, such as flooding and landslides.

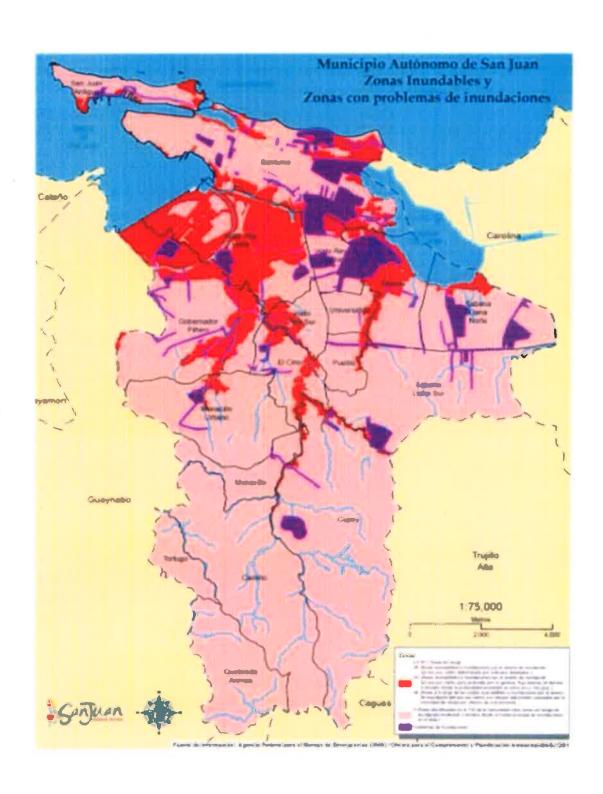
Urban areas within San Juan currently have the necessary capacity, basic infrastructure and regulatory framework to serve as receptors of the populations more severely affected by the hurricane. Individuals and families currently living in sub-standard housing conditions in high-risk areas will be relocated in rehabilitated housing projects within urban centers.



ПП









## Zonas Inundables (2009-FEMA) - Playita Población Afectada (Censo 2010): 1,073

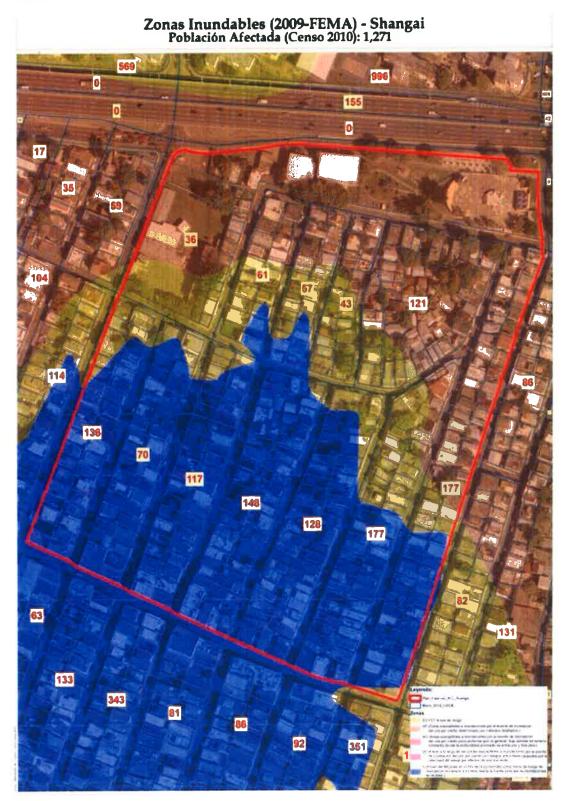




## Zonas Inundables (2009-FEMA) - Figueroa Población Afectada (Censo 2010): 1,070

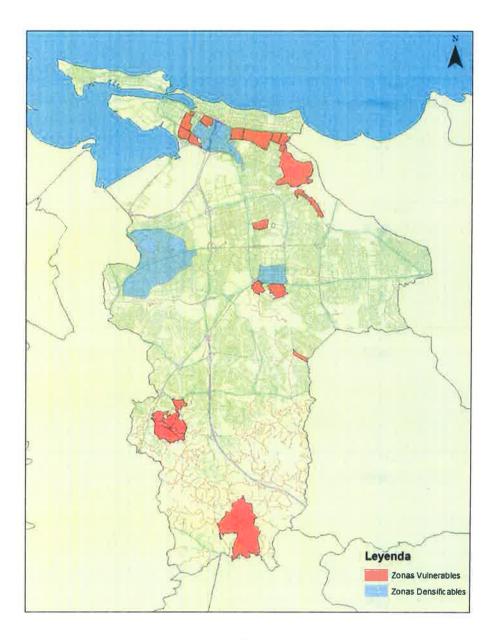








**4. Population to impact:** This project will benefit residents of high-risk, vulnerable areas within the Municipality of San Juan and the rest of Puerto Rico, with emphasis of individuals and families living in the communities most affected by Hurricane María. These communities are shown in the following map:





## 5. Compliance with National Objectives:

- a. Benefits low- and moderate- income persons. Access to affordable housing is a core element of social justice and access and the Right to the City. In general, underserved communities in San Juan live in vulnerable areas susceptible to natural and anthropological risks. This project seeks to identify low-and-moderate income individuals and families living in sub-standard housing conditions in high-risk areas, and relocate them to affordable housing units in safe, risk-free areas with adequate infrastructure. This is a key element for the attainment of social justice for these communities and is consistent with the Municipality of San Juan land-use plans and regulations.
- b. Aids in the prevention or elimination of slums or blight. In addition to developing new housing projects, this proposal seeks to demolish and remove unsafe settlements in high-risk areas. This measure would prevent the informal occupation of vacant housing units in the future. New vacant lots will be used to develop recreational and risk-mitigation areas, such as green infrastructure with the purpose of mitigating future flooding, sea-level raise and tsunamis, among other environmental risks.
- c. Meets a need having a particular urgency. This project addresses the urgent need of housing for those displaced by Hurricane María.



In addition, it serves the need of offering vitality to urban centers in the process of depopulation and deterioration.

6. Physical Address: The project seeks to relocate low-income individuals and families currently living in high-risk, vulnerable zones identified in the map with the color red to the green zones, which represent areas to be densified.

## 7. Phases of the Project:

Phase I: Acquisition and rehabilitation of properties \$9,375,000

Phase II: Rehabilitation of common spaces \$9,750,000

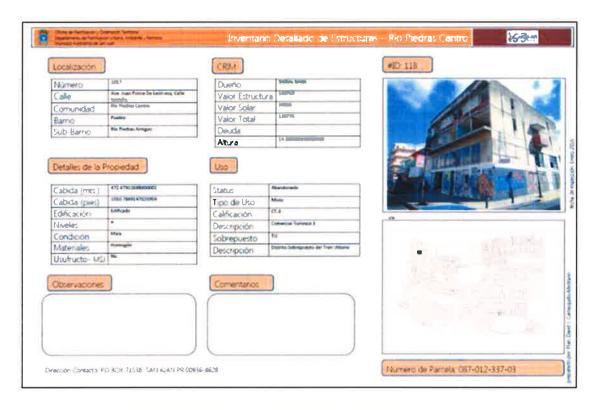
Phase III: Demolition \$1,000,000

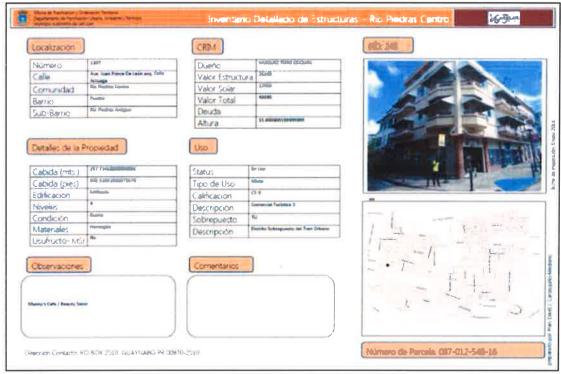
8. Budget of the Project: \$20,250,000

## 9. Estimate Cost by phases:

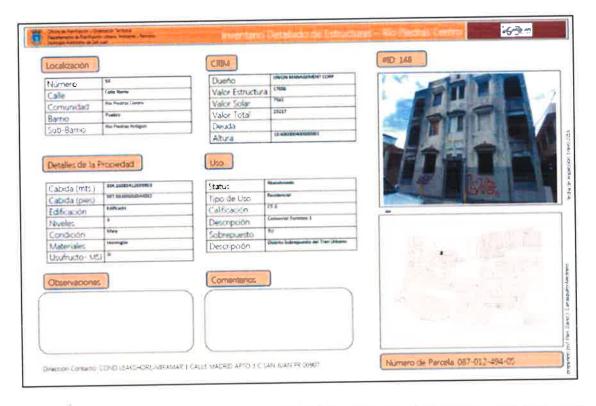
- Acquisition and rehabilitation of buildings and other suitable structures in Río Piedras, Santuce, and Puerto Nuevo.
  - Initially, and as a part of a pilot project in Río Piedras, the Municipality will acquire buildings and structures already identified that meet the following criteria: non-vacant, adequate structural state and mixed-use capability. Some examples of suitable structures already identified are shown below:

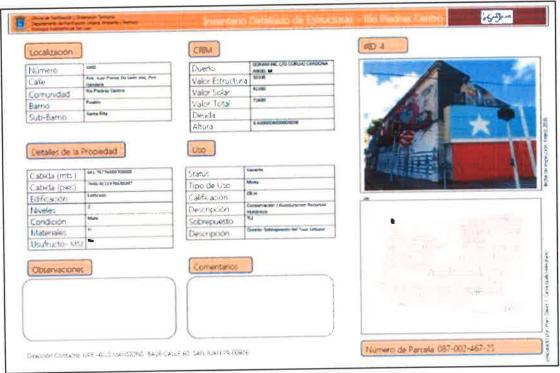


















## Autonomous Municipality of San Juan



CDBG- Disaster Recovery







### Acquisition costs estimates are as follows:

- Parcel 087-012-337-03 \$350,000
- Parcel 087-012-494-20 \$300,000
- Parcel 087-012-548-16 \$450,000
- Parcel 087-012-528-22 \$350,000
- Parcel 087-012-494-05 \$300,000
- Parcel 087-012-529-04 \$300,000
- Parcel 087-002-467-25 \$450,000
- Parcel 087-012-529-10 \$350,000

Once rehabilitated, the shown structures (8) could provide between 79 and 90 housing units.

Following the goal of developing 250 housing units, we recommend the assignment of \$9.375 million for acquisition of real estate property. The estimate cost of rehabilitation is \$30,000 per housing unit and the rehabilitation of common areas is \$45,000 per unit. As a result, we estimate the total rehabilitation costs for the project to be \$9,750,000.

PHASES		DESCRIPTION	INVESTMENT
Phase I	Acquisition	Estimate acquisition cost for 40 units: \$3,000,000.00 40 units x 6.25 = 250 housing units \$3,000,000 x 6.25 = \$9,375,000 for acquisition	\$9,375,000
Phase II	Rehabilitation /Construction	Rehabilitation costs estimate for housing: \$30,000 Rehabilitation costs estimate for common areas: \$45,000	\$9,750,000



PHASES		DESCRIPTION	INVESTMENT
		250 units x \$30,000 = \$7,500,000 50 Areas for economic development initiatives x \$45,000 = \$2,250,000 \$7,500,000 (housing rehabilitation) + \$2,250,000 = \$9,750,000 for rehabilitation	
Phase	Demolition	Demolition of destroyed or severely damaged structures in flood risk zones and use new vacant lots for the development of green infrastructure and recreation areas.  It is estimated that 100-200 properties were destroyed by Hurricane María in San Juan. Among those, approximately 100 are located in areas where it would be unsafe to re-occupy the area.  The average cost for a demolition is estimated in \$100 per square foot.  The average footprint area of houses located in affected zones is 800 square meters. In total, the 50 properties to be demolished represent 4,000 square meters, with a cost of \$400,000.Accounting for applicable permits and certifications, these activities have an estimated cost of \$1,000,000.	\$1,000,000

10. Identify additional funds: N/A

11. Date of the beginning and end of the Project: August 2018-August 2020(2 years)



## Project 3-B

- 1. Name: <u>Housing Development, Business Incubator, Community Urban</u>

  Gardens on the former <u>La Milagrosa College in Rio Piedras</u>
- 2. Description: This project aims to rehabilitate the spaces of the former La Milagrosa School for Housing Development, focusing on people with low and moderate income, whose homes were totally or partially destroyed by Hurricane María. The proposal also includes an economic development component to promote the economic recovery of the Río Piedras area through the establishment of a business incubator, including funds for seed money. This component will promote the establishment of new businesses on available spaces in the Plaza del Mercado, Paseo de Diego and Río Piedras Urban Center. In addition, the proposal includes the creation of a community center to provide services to residents, focusing on the social and psychological conditions provoked by the disaster.
- 3. Needs and Problem: The communities of Río Piedras and adjacent areas were adversely affected by Hurricane María, in particular, its housing capabilities and sustained economic development were greatly hampered by the damaged wreaked by the storm.
  The Centro de Acción Urbana, Comunitaria y Empresarial (CAUCE),

documents that Hurricane María destroyed partially or entirely 243 homes within the communities in the Río Piedras area.



Hurricane María had a devastating effect on the Island's economy, causing the closure of businesses and the loss of thousands of jobs. Three months of the disaster, 40% of the business were still closed. This situation worsened the conditions of people living in underserved communities.

According to the local press, 1,500 students abandoned the University of Puerto Rico Río Piedras Campus after the disaster. Those numbers represent a hard blow to the existing public policy focused on increasing the population in the urban center and affecting the possibilities of economic recovery in Río Piedras.

4. Population to impact: Río Piedras Urban Center, Capetillo, García Ubarri, Buen Consejo, Venezuela, Blondet, Cabrera, Mora, Lopez Sicardo, San Felipe, Victoria and others. The poverty level in these communities reaches 56%.

## 5. Compliance with National Objectives:

- a. Impacts and benefits persons and families with low and moderate incomes.
- b. Meets urgent needs,



**6. Physical Address:** Former La Milagrosa College, De Diego Street, Río Piedras Urban Center.



## 7. Phases of the Project:

Phase I	Construction documents, cost estimate and permitting	\$731,000
Phase II	Cleaning and demolition	\$1,250,000
Phase III	Rehabilitation and construction	\$7,310,000

## Other stages:

- Identification and qualification of families.

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- Transformation and rehabilitation of rooms and spaces in the former La Milagrosa College into affordable housing units.
   CDBG Funds.
- Design and implementation of capacity building programs for residents focusing on accompaniment, technical assistance and access to resources for future business. CDBG funds.
- Promote and provide support to community, cultural, economic and educational activities. No CDBG funds required.

#### 8. Budget of the Project: \$9,291,000

#### A. Breakdown:

- Phase 1 (Construction documents, cost estimate and permitting) - \$731,000
- Phase 2 (Cleaning and demolition) \$1,250,000
- Phase 3 (Rehabilitation and construction) \$7,310,000

COMPONENTS	ESTIMATED COSTS
a. Housing Development	
✓ Individual. Houses -	\$6,000,000
\$75,000 x 80	\$360,000
✓ Common Areas - \$60,000	
x 6	
	Sub-total housing: \$6,360,000
b. Business Incubator and Specialize	
Workshops	
✓ Industrial Kitchen	\$200,000
√ Gardens	\$35,000
✓ Multipurpose Workshops	\$150,000
✓ Rooms (3)	\$90,000



COMPONENTS	ESTIMATED COSTS
	Sub-total incubator: \$475,000
c. Community Services Center	\$475,000
	Sub-total service center:
	\$475,000
SUB-TOTAL Phase 3	\$7,310,000

B. Operational Budget IncreaseUtilities costs (\$2,000/monthly) - \$24,000 annual

#### 9. Estimate Cost by phases:

Phase I: \$731,000

Phase II: \$1,250,000

Phase III: \$7,310,000

10. Identify additional funds: N/A

11. Date of the beginning and end of the Project: August 13, 2018 – February 14, 2020

The Río Piedras Housing Project will develop **330 affordable housing units** and economic development opportunities for low-income people living in vulnerable areas affected by Hurricane María. The budget for both projects is of **\$29,541,000**.



## Project 4

1. Name: Puerto Nuevo – Housing Development

2. Description: This proposal encompasses two (2) main activities:

Develop new low-cost housing by acquiring and developing abandoned structures in areas with no risk of flooding in the districts of Puerto Nuevo. Although the rehabilitation of structures will serve mainly residential purposes, the project will promote community economic development opportunities by rehabilitating structures for commercial or mixed use (residential-commercial). These areas will house capacity building and technical assistance initiatives, common workshops and startup-projects. The main purpose of these activities is to offer and guarantee affordable housing in safe, urban contexts for residents of San Juan and other counties of the island, with emphasis of on those most affected by Hurricane María.

Demolish unsafe residential units in flooding areas and promote the use of this areas as green infrastructure for public and recreational use.

3. Needs and Problem: Individual residential units though San Juan were visited and physically inspected by the New York City Housing Preservation and Development Department. Over 1,000 properties suffered substantial damages, including substantial structural damages. According to this inspection, over 300 properties were totally destroyed. This data is complementary to the executive summary provided by

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FEMA, according to which 200 residential units were visited and certified as destroyed in San Juan by January 12, 2018. Both sources identify clear clusters of destroyed residential units: a) Santurce (Barrio Obrero, Península de Cantera, Villa Palmera, Playita, Shangai, El Checo, Seboruco, Villa Kennedy and Figueroa, among others) and b) the southern area of the municipality (Caimito, Cupey, Monacillo, El Cinco, Buen Consejo, Venezuela and Jurutungo, among others).

Most destroyed residential units are in low-income communities with high levels of poverty according to the American Community Survey of the U.S. Census Bureau. Also, most of these structures are located in vulnerable areas susceptible to natural disasters, such as flooding and landslides.

Urban areas within San Juan currently have the necessary capacity, basic infrastructure and regulatory framework to serve as receptors of the populations more severely affected by the hurricane. Individuals and families currently living in sub-standard housing conditions in high-risk areas will be relocated in rehabilitated housing projects within urban centers.

**4. Population to impact:** This project will benefit residents of high-risk, vulnerable areas within the Municipality of San Juan and the rest of Puerto Rico, with emphasis of individuals and families living in the communities most affected by Hurricane María.



#### 5. Compliance with National Objectives:

- a. Benefits low- and moderate- income persons. Access to affordable housing is a core element of social justice and access and the Right to the City. In general, underserved communities of San Juan live in vulnerable areas susceptible to natural and anthropological risks. This project seeks to identify low-and-moderate income individuals and families living in sub-standard housing condition in high-risk areas and relocate them to affordable housing units in safe, risk-free areas with adequate infrastructure. This is a key element for the attainment of social justice for these communities and is consistent with the Municipality of San Juan land-use plans and regulations.
- b. Aids in the prevention or elimination of slums or blight. In addition to developing new housing projects, this proposal seeks to demolish and remove unsafe settlements in high-risk areas. This measure would prevent the informal occupation of vacant housing units in the future. New vacant lots will be used to develop recreational and risk-mitigation areas, such as green infrastructure with the purpose of mitigating future flooding, sea-level raise and tsunamis, among other environmental risks.
- c. Meets a need having a particular urgency. This project addresses the urgent need of housing for those displaced by Hurricane María. In addition, it serves the need of offering vitality to urban centers in process of depopulation and deterioration.
- **6. Physical Address:** The project seeks to relocate low-income individuals and families currently living in high-risk, vulnerable zones identified in the

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map with the color red to the green zones, which represent areas to be densified.

#### 7. Phases of the Project:

Phase I: Acquisition and rehabilitation of properties \$9,375,000

Phase II: Rehabilitation of common spaces \$9,750,000

Phase III: Demolition \$1,000,000

#### 8. Budget of the Project: \$20,250,000

#### 9. Estimate Cost by phases:

 Acquisition and rehabilitation of buildings and other suitable structures in Puerto Nuevo.

Following the goal of developing 250 housing units, we recommend the assignment of \$9.375 million for acquisition of real property. The estimate cost of rehabilitation is \$30,000 per housing unit and the rehabilitation of common areas is \$45,000 per unit. As a result, we estimate the total rehabilitation costs for the project to be \$9,750,000.

PHASES		DESCRIPTION	INVESTMENT
Phase I	Acquisition	Estimate acquisition cost for 40 units: \$3,000,000.00 40 units x 6.25 = 250 housing units	\$9,375,000
Phase II	Rehabilitation /Construction	Rehabilitation costs estimate for housing: \$30,000 Rehabilitation costs estimate for common areas: \$45,000	\$9,750,000



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	PHASES		DESCRIPTION	INVESTMENT
			Areas for economic development initiatives x \$45,000	
F	Phase III	Demolition	Demolition of destroyed or severely damaged structures in flood risk zones and use new vacant lots for the development of green infrastructure and recreation areas.	\$1,000,000
		P	It is estimated that 100-200 properties were destroyed by Hurricane María in San Juan. Among those, approximately 50 are located in areas where it woud be unsafe to re-occupy the area.  The average cost for a demolition is estimated in \$100 per square foot.  The average footprint area of houses located in affected zones is 800 square meters. In total, the 50 properties to be demolished represent 4,000 square meters, with a cost of \$400,000.Accounting for applicable permits and certifications, these activities have an estimated cost of \$1,000,000.	

- 10. Identify additional funds: N/A
- 11. Date of the beginning and end of the Project: August 2018-August 2020 (2 years)



## Project 5

#### 1. Name: Santurce - Housing Development

Construction and rehabilitation of impacted housing units ravaged by hurricane María in the communities of Santurce.

- 2. Description: The Municipality of San Juan Housing Department, in collaboration and with support of other City departments, will implement a restoration program of housing units impacted by the path of hurricane María, as identified in the damage inventory compiled by the Office of Emergency Management of the City of New York (NYC-OEM). The restoration project will do the following:
  - Identify and channel the necessary funds for restoration;
  - Provide technical assistance for the restoration of housing units and households guaranteeing the new housing units meet the standards of constructions and building regulations, making them resistant and resilient to weather risks and the increasing effects of global warming; and
  - Facilitate, coordinate and establish community initiatives in order to have an active participation of the communities in the restoration process.

The restoration project will be enacted in selected communities within the barrios of Santurce that sustained the most concentration of partially or totally destroyed housing units, per inventory and assessment conducted by the NYC-OEM. In these communities, 342 households were identified as functional but in need of restoration.



- 3. Needs and Problem: The path of hurricane María caused widespread damage to a vast amount of households in the Municipality of San Juan. Inspections conducted by the Office of Emergency Management of the City of New York for some of the most heavily affected sectors in San Juan found that a total of 2,888 housing units were partially or totally destroyed. Additionally, a 643 housing units were found to be empty before the hurricane made landfall. The communities assessed and hardest hit are within areas of San Juan were the poverty levels and lack of access to essential services are the highest. Citizens living under said households are at increasing risk or in unsafe living conditions.
- **4. Population to impact:** Citizens and families of the 730 households affected by path of hurricane María within the poor barrios of Santurce.

#### 5. Compliance with National Objectives:

- a. The project will benefit citizens of low and moderate-income and will meet the urgent housing needs of the families displaced or living under unstable housing units, making them more resilient and resistant to the ever increasing effects of global warming and harsher climate.
- 6. Physical Address: The project will emphasize the communities of the barrios of Santurce with the most concentration of damage per NYC-OEM housing inventory (see map). A total of 730 housing units have been identified and will be part of the restoration process.



**7. Phases of the Project**: Restoration and rehabilitation of housing units is expected to take up to 20 months from the beginning to completion.

Phase I	Field visit and data validation. 1.5 months.	
Phase II	Development of final itinerary and cost estimates. 1.5	
	months.	
Phase III	Materials, equipment and acquisition process. 2 months.	
Phase IV	Restoration and construction works of housing units. 13	
	months.	
Phase V	Project closing. 2 months.	

#### 8. Budget of the Project: \$3,610,000

#### 9. Estimate Cost by phases:

**Phase I-V**: Preliminary estimates put the average cost of restoration at \$10,000 per household affected by hurricane María. The final estimate of cost per household will be determined with a validation process. The estimated cost for the completion of the project is \$3,610,000 which includes administrative fees, hiring and cost of materials and equipment.

#### 10. Identify additional funds: N/A

11. Date of the beginning and end of the Project: Once funds have been approved and allocated, start of the project is scheduled to begin August 2018 and completion date is expected in May 2020.



## Project 6

- 1. Name: <u>Cantera Housing Development</u>
- 2. Description: Construction of 183 new housing units with two bedrooms, each equipped with solar panels and water collection systems for citizens affected by the widespread destruction of hurricane María. Development of the housing units will be located in the following lots:
  - Villa solar 8 housing units
  - Pepe Santana 45 housing units
  - Solar Fambres 10 housing units
  - Solar Rexach 60 housing units
  - Almacenes Kopel 60 housing units
- 3. Needs and Problem: Replacement of destroyed and beyond-repair housing units by hurricane María. Relocation of the families affected and displaced consistent with the integral development plan for the community.
- 4. Population to impact: Right in the heart of the metropolitan area of San Juan, right next to the financial and banking district of Hato Rey and the development of high value residential units in the coastal strip of Isla Verde, lies the community of Cantera with approximately 9,000 residents. Within the community of Cantera, 3,000 families live tightly packed in a high population density peninsula of land at risk of flooding, and vulnerable to the rise of the water levels of the adjacent lagoon. The community profile is distinctively poor and immigrant, with frail public



utility systems and infrastructure that limits the community's capacity to prosper and develop.

### 5. Compliance with National Objectives:

- a. Benefits residents of low and moderate-income.
- b. Meets the urgent housing needs of the community in the immediate aftermath of hurricane María with safe, steady and self-sustainable housing units.
- 6. Physical Address: Sector Las Casas, Barrio Santurce, San Juan, PR

#### 7. Phases of the Project:

PHASES		PROGRAM	INVESTMENT
Phase I	Acquisition and Demolition of Properties	CDBG Funds	\$1,800,000
Phase II	Design, Permitting, Inspection and Management	CDBG Funds	\$1,317,600
Phase III	Bidding and Contract Process	CDBG Funds	\$0
Phase IV	Construction	CDBG Funds	\$13,176,000

- 8. Budget of the Project: \$16,293,600.00
- 9. Estimate Cost by phases:



## **Project Villa Solar**

	PHASES		INVESTMENT
Phase I	Acquisition and Demolition of Properties	CDBG Funds	N/A
Phase II	Design, Permitting, Inspection and Management	CDBG Funds	\$57,600
Phase III	Bidding and Contract Process	CDBG Funds	\$0
Phase IV	Construction	CDBG Funds	\$576,000
		TOTAL	\$633,600

## Project Pepe Santana

PHASES		PROGRAM	INVESTMENT
Phase I	Acquisition and Demolition of Properties	CDBG Funds	N/A
Phase II	Design, Permitting, Inspection and Management	CDBG Funds	\$324,000
Phase III	Bidding and Contract Process	CDBG Funds	\$0
Phase IV Construction		CDBG Funds	\$3,240,000
		TOTAL	\$3,564,000



## **Project Solar Fabres**

	PHASES	PROGRAM	INVESTMENT
Phase I	Acquisition and Demolition of Properties	CDBG Funds	\$100,000
Phase II	Design, Permitting, Inspection and Management	CDBG Funds	\$72,000
Phase III	Bidding and Contract Process	CDBG Funds	\$0
Phase IV	Construction	CDBG Funds	\$720,000
		TOTAL	\$892,000

## **Project Solar Rexach**

PHASES		PROGRAM	INVESTMENT
Phase I	Acquisition and Demolition of Properties	CDBG Funds	\$800,000
Phase II	Design, Permitting, Inspection and Management	CDBG Funds	\$432,000
Phase III	Bidding and Contract Process	CDBG Funds	\$0
Phase IV	Construction	CDBG Funds	\$4,320,000
		TOTAL	\$5,552,000



## **Project Almacenes Kopel**

	PHASES		INVESTMENT
Phase I	Acquisition and Demolition of Properties	CDBG Funds	\$900,000
Phase II	Design, Permitting, Inspection and Management	CDBG Funds	\$432,000
Phase III	Bidding and Contract Process	CDBG Funds	\$0
Phase IV	Construction	CDBG Funds	\$4,320,000
		TOTAL	\$5,652,000

## 10. Identify additional funds: N/A

11. Date of the beginning and end of the Project: Start of the project is scheduled to begin in May 2018, with an expected completion date of May 2020.



## **Project 7**

- Name: <u>San Juan CDBG Rehabilitation</u>, <u>Reconstruction and New Construction</u>
- 2. Description: Provide CDBG-DR funds for the rehabilitation, reconstruction and new construction of housing with materials and resilient systems with emphasis on solar energy and sustainability. The properties has a period of acquisition for 20 years.
- 3. Needs and Problem: Approximately 17,000 houses were affected with substantial damages, including 6,854 families of low to moderate income. The FEMA funds are not enough to finish the rehabilitation of all the affected structures.
- 4. Impacted Population: 1,000 families of low to moderate income.
- 5. Compliance with National Objectives: To benefit citizens of San Juan with low to moderate income. Eliminates and prevents abandoned areas in flooding areas.
- 6. Physical Address: Various areas of San Juan
- 7. Phases of the Project: N/A
- 8. Budget of the Project:: \$15,000,000
- 9. Estimate Cost by Phases: N/A
- 10. Identify additional funds: N/A
- 11. Date of the beginning and end of the Project: August 2018 January 2020 (approximately 20 months)



## **Project 8**

- Name: Monte Carlo Flood Control and Mitigation (Alturas de Berwind, Berwind Estates, Colinas de Monte Carlo, Villa Prades, Parcelas Falu, Hill Brother Norte y Sur, Las Virtudes y Villa Olimpica)
- 2. Description: Flood control and mitigation of the Eastern parts of the City for protection and conservation of households, preventing future and progressive damage to private property and value depreciation. Included herein are improvements to infrastructure and the road network, transforming public places into resilient areas. Communities included in the eastern part of the City are Berwind Estates up to Villa Olímpica.
- 3. Needs and Problem: For more than four decades, communities within San Juan suffer the continuous burden of floods and water surges that spill into households and businesses alike, impairing their ability to grow and develop economically. Through the eastern part of the City runs the Sabana Llana creek, which ends in the San José Iagoon. Sabana Llana creek runs a distance of 20,120 feet from the neighborhood of Highland Park up to Plaza Escorial, next to the neighboring city of Carolina. Communities affected by the storm tide and overflow of the creek are the neighborhoods of Montecarlo, Alturas de Berwind, Berwind Estates, and Colinas de Monte Carlo. Hurricane María weakened the already frail public infrastructure surrounding the creek, causing substantial and frequent flooding. The adjacent communities of Hill Brothers, Villa Prades, Parcelas Falú, Las Virtudes, and Villa



Olímpica are under constant threat of flooding and overflowing of the nearby Sabana Llana creek.

#### 4. Population to be impacted:

#### Number of Residents:

Urb. Montecarlo :	3,036
Urb. Alturas de Berwind:	77
Urb. Berwind Estates:	1,023
Urb. Colinas de Monte Carlo:	3,036
Urb. Villa Prades:	3,331
Comunidad Parcelas Falú:	3,034
Comunidad Hill Brother Norte:	1,686
Comunidad Hill Brother Sur:	2,225
Comunidad Las Virtudes:	729
Comunidad Villa Olímpica:	520

Total: 18,695

#### 5. Compliance with National Objectives:

- a. Relieve and reduce the risks generated by the continuing impact of flooding which is considered by FEMA to be the most common natural disaster.
- b. Low and medium-income households are at the center of the upgrades proposed herein.
- c. The project will shield the adjoining households, businesses and communities alike from suffering failures or structural damage to their properties, making them more resistant to the effects of heavy weather and rain.
- d. Urgent need is based on the heavy damage caused by hurricane María, which further aggravated the stability of the



structures that hold and channel the creeks from spilling into the neighboring communities.

6. Physical Address: Sabana Llana Creek

#### 7. Phases of the Project:

	PHASES	SCHEDULE	PROGRAM	INVESTMENT
Phase I:	Schematic design	Jan 2014	GDB Loan	\$75,000
1a.	Final design and permits	Aug-Oct 2018	CDBG- DR funds	\$1,175,000
Phase II:	Bidding Process and hiring	Oct- Dec 2018		
Phase III	Construction	Jan- Feb 2020	CDBG- DR funds	\$25,000,000
	Total			

8. Budget of the Project: \$26,250,000

## 9. Estimate Cost by phases:

a. Fase I: \$1,250,000

b. Fase II: \$0

c. Fase III: \$25,000,000

**10. Identify additional funds:** \$75,000 GDB Loan

**11.Date of the beginning and end of the Project**: The project is scheduled to start in January 2019, with anticipated completion date expected in February 2020.



## **Project 9**

- Name: <u>Antigua Via Flood Control and Mitigation (San Felipe y Victoria, Caparra Terrace, Buen Consejo, College Park, Venezuela, Dos Pinos, Valle Universitario, La Riviera, Las Americas, Las Lomas, Puerto Nuevo Norte y Sur, Reparto Metropolitano, Venus Gardens, Villa Nevarez, Jardines Metropolitanos, University Gardens)</u>
- 2. Description: Improvements and enhancements of public infrastructure to the central and western-parts communities of San Juan, including renovations to public roads, lighting and sewage systems, thus allowing those communities to become more resilient and resistant to water surge and floods. Additional upgrades and efforts in different sections of the Río Piedras and Los Corozos' lagoon to further strengthen the communities' ability to withstand the rising tides in events of intense rainfall. The anticipated impact of the improvements will guarantee safer conditions for the communities of Venus Gardens, Las Lomas, Puerto Nuevo and Dos Pinos, and approximately 661 small and medium-sized businesses.
- 3. Needs and Problem: For decades, communities and businesses alike have borne the brunt of constant flooding that causes heavy property losses and impacts the quality of life, and economic capacity of the communities to grow and develop. Parts of the central and west belt of the City are surrounded by creeks and bodies of water such as: Guaracanal, Juan Méndez, Josefina, Doña Ana y Los Muertos, all of which flow into the Río Piedras or the lagoon Los Corozos. The path of hurricane María caused heavy damage to the retaining walls that



surround and channel these creeks within the City and typically prevent them from spilling into the neighboring communities. Furthermore, María caused heavy damage to the previously stricken and overwhelmed public sewage and transportation infrastructure. Presently, these retaining walls have detached or collapsed, allowing for the spilling and overflowing of the currents into the bordering communities, flooding countless households and impacting commerce and transportation within the primary roads and avenues in the City.

4. Impacted Population: The proposed renovations will benefit some 46,122 citizens of low and medium-income communities, as well as the economic sectors within the neighborhoods that generate the most revenue and create well-paying jobs:

Urb. Antigua Vía	803	Com. San Felipe y Victoria	1,160
Urb. Caparra Terrace	7,633	Com. Buen Consejo	957
Urb. College Park	1,417	Com. Venezuela	91
Urb. Dos Pinos	720	Com. Valle Universitario	1,086
Urb. La Riviera	3,785	Urb. Las Américas	2,810
Urb. Las Lomas	1,481	Urb. Puerto Nuevo Norte y Sur	12,585
Urb. Reparto Metropolitano	4,567	Urb. Venus Gardens	1,555
Urb. Villa Nevárez y Jardines Metropolitanos	2,753	Urb. University Gardens	2,719

Total Residents: 46,122

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Comercial Sectors:Number of BusinessesAve. Andalucía101Ave. Américo Miranda166Ave. Roosevelt225Ave. José de Diego169

Total businesses: 661

Health: Access to the primary center for medical services, intensive and critical care in Puerto Rico in Centro Médico and the medical offices.

#### 5. Compliance with National Objectives:

- a. Relieve and reduce the risks generated by the continuing impact of flooding which is considered by FEMA to be the most common natural disaster.
- b. Low and medium-income households are at the center of the upgrades proposed herein.
- c. The project will shield the adjoining households, businesses and communities alike from suffering failures or structural damage to the properties, making them more resistant to the effects of heavy weather and rain.
  - d. Urgent need is based on the heavy damage caused by hurricane María which further aggravated the stability of the structures that hold and channel the creeks from spilling into the neighboring communities.

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6. **Physical Address:** Streams: Guaracanal, Juan Méndez, Josefina, Doña Ana y Los Muertos.

## 7. Phases of the Project:

PHASES		SCHEDULE	PROGRAM	INVESTMENT
Phase I: Project design for upgrades to public infrastructure and flood control. Includes permit process and project management.	Completion of Design	Aug-Dec 2018	CDBG- DR funds	Total; \$5,700,000
Phase 1a: From Antigua Vía and Venus Gardens, creek length of Guaracanal	Preliminary Design Final Design	September 2014 Aug-Oct 2018	GDB Loan CDBG- DR funds	\$32,000 \$900,000
Phase 1b: Sector Buen Consejo to San José, length Quebrada Juan Mendez	Final Design	Aug-Dec 2018	CDBG- DR funds	\$1,500,000
Phase 1c. From Parada 18 to Urb. Villa Nevarez, length Quebrada Buena Vista	Final Design	Aug-Dec 2018	CDBG- DR funds	\$700,000
Phase 1D: From Urb College Park to Urb Las Américas, length	Final Design	Aug-Dec 2018	CDBG- DR funds	\$1,750,000. 00



PHASES		SCHEDULE	PROGRAM	INVESTMENT
Quebrada Josefina				
Phase IE: From Urb Las Lomas to Urb Las Américas, length Quebrada Dona Ana	Final Design	Aug-Dec 2018	CDBG- DR funds	\$850,000
Phase II:		Oct-Mar 2019		
Phase IIa	Acquisition and reallocation of residents	Nov-Mar 2019		
Phase IIb		Jan-Mar 2019	CDBG- DR funds	\$5,000,000
Phase IIc		Jan-Mar 2019		
Phase IId		Jan-Mar 2019		
Phase III				
Phase III a		Jan-Oct 2019		\$9,000,000
Phase III b	Construction completion	Jan 2019- Feb 2020		\$15,000,000
Phase III c		Mar-Nov 2019	CDBG- DR funds	\$7,200,000
Phase III d		Mar 2019- Feb 2020		\$17,000,000
Phase III e		Feb 2019- Jan 2020		\$8,500,000
			Sub-total	\$56,700,000

8. Budget of the Project: \$67,400,000.00

TOTAL PROJECT COST CDBG- DR funds

\$67,400,000



9. Estimate Cost by phases:

Phase I: \$5,700,000

Phase II: \$5,000,000

Phase III: \$56,700,000

10. Identify additional funds: N/A

11. Date of the beginning and end of the Project: The project is scheduled to start in August 2018, with anticipated completion expected in June 2020.



## **Project 10**

# Name: <u>San Juan - Community restoration and transformation for resilience</u>

2. Description: This project seeks to strengthen and rebuild the electrical

grid of residential areas, based on solar energy systems. The goal is to empower communities into managing their own resources in the fields of: distribution generation, and consumption of electric power. These "solar communities" will provide stability to local electrical systems, and ensure



community economic development endeavors related to selling and distributing energy resources. The installation and maintenance of the grid will enhance capacity building and job creation opportunities already in progress, with emphasis on communities with the most needs. Public community centers damaged by Hurricane Maria will be rebuild and refurnished to strengthen networks among service providers and vulnerable populations. These hubs will deal with problems related to electric power, drinking water, solid waste management and the deterioration of green areas provoked by Hurricane Maria. Furthermore,

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these hubs will support the generation of renewable energy for the community households.

- 3. Needs and Problem: In the aftermath of Hurricane María, the poor communities of San Juan, already exposed to multiple hazards and served by a fragile public infrastructure, confronted further vulnerability, and faced adverse conditions. Thousands of residents lack a sustainable supply of electric power and water, public building facilities equipped with indispensable resources to guarantee resilience building.
- **4. Population to impact**: This project will benefit low-income households in the following communities:

Community	Households under the federal poverty level
Playita	59%
Shangai	55%
Checo	61%
Cupey	51%
Quebrada Arenas	67%
Morcelo	34%
Figueroa/La Colectora	45%
Canejas	51%
Jurutungo	59%
Cantera	61%
Valencia	45%
Villa Nevarez	30%
University Gardens	18%
Villa Prades	31%
Las Lomas	47%



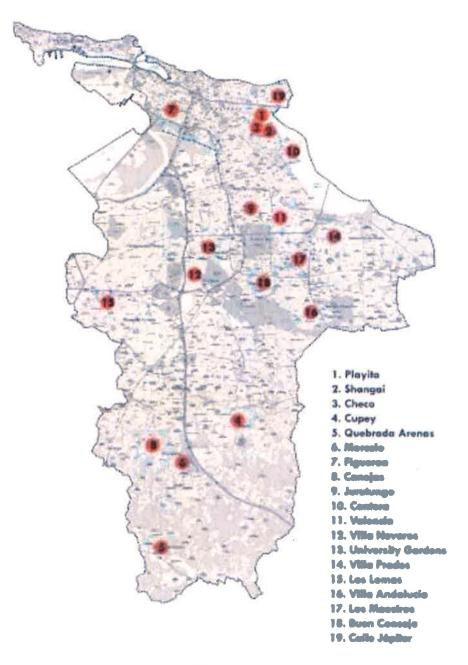
Villa Andalucía	29%
Buen Consejo	43%
Los Maestros	17%

- **5. Compliance with National Objectives:** This project responds to the three national objectives to:
  - a. benefit low and moderate-income individuals,
  - b. aid in the prevention or elimination of slums and blight,
  - c. meet a need that has particular urgency through projects in the areas of sustainability and renewable energy that are replicable in diverse community contexts. At the same time, it provides a space that satisfies the basic needs of the residents, homeless population, individuals with medical conditions, individuals with functional diversity, and the advanced age population and children.



**6. Physical Address:** Residences and community centers on the following map:

## Comunidades Impactadas





## 7. Phases of the Project:

PHASE	DESCRIPTION	INVESTMENT
Phase I	Viability assessment that includes geospatial analysis, sociodemographic profile, identification of resources and a needs assessment.	Funds are not provided by CDBG
Phase II	Identification of housing, analysis and design of the projects by community	\$1,903,230
Phase III	Presentation of the new sustainable transformation plan to the community.	Funds are not provided by CDBG
Phase IV	Equipment, materials, construction and installation.	\$19,032,300
Phase V	Design of community training program on renewable energy and solar microgrids systems; implementation of hands on community training: residents would obtain their practical education through the projects implementation process; technical and professional training, certification and employment of individuals in the community.	\$192,000
Phase VI	Grid maintenance	\$216,000 yearly. Funds are not provided by CBDG
Phase VII	Monitoring/Evaluation. Funds are not provided by CBDG funds.	Funds are not provided by CDBG

## 8. Budget of the Project: \$21,127,530



## 9. Estimate Cost by phases:

- Phase I-III Analysis, design and assessment (10% of total cost)
  - a. Per community = \$190,323
  - b. Total (18 communities) = \$1,903,230

COMPONENTS BY COMMUNITY	ESTIMATED COST
Solar energy	
a. New roof for each residence	
✓ Demolition	\$2,000
✓ Design and construction	\$13,000
Sub-total roof construction	\$15,000
Sub-total construction (per 10	\$150,000
residences):	
b. Residential photovoltaic system (5kw) <sup>1</sup>	
√ 15 Q-cell solar panels (335w)	\$5,025
✓ Mounting & others (\$0.5 x w)	\$2,500
✓ Inversor (Schneider XW5548)	\$6,000
✓ Charge controller	\$1,000
✓ Lithium battery	\$9,500
✓ Electrical system repair	\$3,000
✓ Installation	\$6,000
Sub-total photovoltaic system per residence	\$33,025
Sub-total photovoltaic system (per 10 residences):	\$330,250
c. Photovoltaic system for community center (20kw) <sup>2</sup>	
✓ 60 Q-cell solar panels (335w)	\$20,100
✓ Mounting and others (\$0.5 x w)	\$10,000
✓ Inversor	\$24,000
✓ Charge controller	\$4,000
✓ Lithium battery	\$38,000
✓ Electrical system repair	\$12,000

<sup>&</sup>lt;sup>1</sup> Quotation by HG-Energy Solutions

<sup>&</sup>lt;sup>2</sup> Quotation by HG-Energy Solutions



COMPONENTS BY COMMUNITY	ESTIMATED COST
✓ Installation	\$24,000
Sub-total photovoltaic system	
community center	\$132,100
d. Solar heater system	\$30,000
e. 20 light posts Lumen 16 feet (\$4,000/unit) <sup>3</sup>	\$80,000
	SUB-TOTAL SOLAR SYSTEM PER COMMUNITY: \$722,350
Water	
<ul><li>a. Water capture and tank</li><li>b. Water filter</li></ul>	\$60,000 \$35,000
c. Showers	\$25,000 SUB-TOTAL WATER SYSTEM PER COMMUNITY: \$120,000
Solid Waste	
a. Composter     b. Recycle center (5 containers)	\$30,000 \$10,000
	SUB-TOTAL WASTE MANAGEMENT SYSTEM PER COMMUNITY: \$40,000
Reforestation	
a. Plant trees	\$95,000
	SUB-TOTAL SUB-TOTAL REFORESTATION PER COMMUNITY: \$95,000
Soil	, , , , ,
a. Community garden	\$80,000
<u> </u>	SUB-TOTAL SOIL PER COMMUNITY:
	\$80,000
	SUB-TOTAL PHASE 2 PER COMMUNITY: \$1,057,350
	GRAND TOTAL PHASE 2 ALL COMMUNITIES:

<sup>&</sup>lt;sup>3</sup> Quotation by San Juan Lighting



COMPONENTS BY COMMUNITY	ESTIMATED COST
	(SUB-TOTAL PHASE 2 X 18
	COMMUNITIES) =
	\$19,032,300

- Phase IV (Construction, equipment and installation) \$19,032,300
- Phase V Capacity building and technical assistance
  - a.  $2 \text{ Instructors} 2 \times \$4,000 \text{ monthly} \times 24 \text{ months} = \$192,000$
- B. Phase VI Operational budget increase <u>Does not require CDBG</u> <u>funds.</u>
- 1. Grid maintenance (people from the community will be employed)
  - a. Per community = \$12,000/year
  - b. Total (18 communities) = \$216,000/year
- 10. Identify additional funds: N/A
- **11. Date of the beginning and end of the Project**: August 1, 2018 February 14, 2020



## Closure

We are grateful for the opportunity gives to us to participate in these hearings. We would also like to acknowledge the honorable Governor have shown great interest in the municipalities and the Government of Puerto Rico Housing Department work together in coordination in order to rebuild, transform and restore the best Puerto Rico possible.

The Municipality of San Juan has been a CDBG grantee since 1994, fact that have given us vast amount of experience in dealing with housing funds. Therefore, we are more than willing to share our acquired knowledge and capacity with the Government of Puerto Rico to maximize the resources recently assigned to the island.

Section 6 of the notice published in the Federal Register requires that our comments be considered and included in the plan presented by the State. It also requires the Government to submit a written response to the City with the final decision.

As elected officials, we have sensibly and responsibly managed our Community Development Block Grant Programs and have distribute and disbursed the funds with fairness in the neighborhoods and communities in need and citizens with low and medium-income. We recognize the Central Government commitment with these values. We appreciate this opportunity and enthusiastically anticipate your response to our comments.