

Broward County

Community Development Block Grant- Disaster Recovery (CDBG–DR) Action Plan 2023 and 2024 Storms



CONTENTS

1. Executive Summary.....	2
1.1 Disaster-Specific Overview.....	2
1.2 Most Impacted and Distressed Areas	4
1.3 Impacts of the Qualifying Disaster Overview	5
2. Unmet Needs and Mitigation Needs Summary	10
2.1 Unmet Needs and Mitigation Needs Summary	10
3. Unmet Needs Assessment	12
3.1 Housing.....	13
3.2 Emergency Shelters and Interim and Permanent Housing	14
3.2.1 Emergency Shelters.....	15
3.2.2 Interim Housing.....	15
3.3 Rental and Owner-Occupied Single Family and Multifamily Housing	15
3.3.1 Current Housing Market Analysis	15
3.3.2 Housing Data	17
3.3.3 Damage Assessment	17
3.3.4 Manufactured Housing Units	24
3.3.5 National Flood Insurance	25
3.4 Public Housing (Including HUD-assisted Housing) and Other Affordable Housing.....	26
3.5 Insurance	27
3.6 Infrastructure.....	27
3.6.1 Broward County Disaster Impact Survey to Community and Municipal Leadership.....	31
3.7 Economic Revitalization.....	31
3.8 Public Service	32
4. Mitigation Needs Assessment	36
4.1 Overview	36
4.2 Presidential Declarations	36
4.3 Greatest Risk Hazards	39
4.4 Hazard Probabilities	41
4.5 Hazard Profiles	41

4.5.1 Tropical Cyclone	41
4.5.2 High Wind.....	43
4.5.3 Storm Surge.....	44
4.5.4 Flooding.....	44
4.5.5 Flash Flooding	44
4.5.6 Coastal Flooding.....	45
4.5.7 Tidal Flooding.....	45
4.5.8 Riverine Flooding	46
4.5.9 Riverine Reach.....	46
4.5.10 Severe Summer Storm/Thunderstorm	46
4.5.11 Hail	47
4.5.12 Lightning.....	47
4.5.13 Tornado.....	48
4.5.14 Drought	48
4.5.15 Extreme Heat	50
4.5.16 Severe Winter Storm/Extreme Cold	54
4.5.17 Frozen Precipitation	55
4.5.18 Extreme Cold/Freeze.....	55
4.5.19 Wildfire.....	55
4.5.20 Indispensable Services	57
4.6 Vulnerability of Critical Facilities by Hazard	60
4.6.1 Tropical Cyclone	60
4.6.2 Flooding.....	60
4.6.3 Drought/Extreme Heat	60
4.6.4 Severe Winter Storm/Extreme Cold	60
4.6.5 Wildfire.....	60
5. Connection of proposed programs and projects to unmet needs and mitigation needs	63
5.1 Allocation and Award Caps	64
5.1.1 General Exception Criteria	64
5.1.2 Administration	64
5.1.3 Planning.....	64

5.1.4 Housing 65

5.1.5 Rental Housing Recovery Program 65

5.2 Voluntary Buyout and Acquisition Program.....67

5.3 Residential Recovery and Repair Program68

5.4 CDBG-DR Mitigation Set-Aside69

5.4.1 Compliance with Applicable Statutes 69

5.4.2 Minimizing Displacement and Ensuring Accessibility 69

5.5 Infrastructure.....70

5.6 Connection of proposed programs and projects to unmet needs and mitigation needs.67

5.6.1 Overview 67

5.7 CDBG-DR Requirements.....67

5.7.1 National Objectives 67

5.7.2 Low to Moderate- Income 67

5.7.3 Urgent Need..... 68

5.7.4 Slum and Blight 68

6. Allocation, Award Caps, and Program Description 70

6.1 General Exception Criteria70

6.2 Planning.....70

6.3 Housing.....70

6.4 CDBG-DR Mitigation Set-Aside70

6.4.1 Compliance with Applicable Statutes 71

6.4.2 Minimizing Displacement and Ensuring Accessibility 71

6.5 Infrastructure.....71

7. General Information 73

7.1 Overview73

7.2 Citizen Participation73

7.3 Consultation on Developing the Action Plan.....73

7.3.1 Stakeholder Meetings 74

7.3.2 Access to Public Hearing 75

7.3.3 People living with a disability..... 75

7.3.4 People with Limited English Proficiency (LEP) 76

7.3.5 Public Comment 76

7.3.6 Public Hearing 76

7.3.7 Citizen Complaints 77

7.3.8 Modifications to the Action Plan 77

7.3.9 Substantial Amendment 78

7.3.10 Non-substantial Amendment..... 78

7.3.11 Performance Reports 78

7.3.12 Program Income..... 79

7.3.13 Environmental Review 79

8. Appendix 81

8.1 Introduction81

8.2. Survey Results82

8.3 Certifications.....105

8.4 Public Comment Summary and Response.....106

Change Control

To ensure transparency and accountability, the Housing and Finance Division (HFD) will maintain a revision/change log to record modifications made to the Broward County CDBG-DR Action Plan. This log will facilitate effective dissemination of information and changes and offer a clear, straightforward method for tracking changes.

All adjustments to the Action Plan are processed through substantial or non-substantial amendments and will be tracked using a version numbering system. The change control log will document the amendment version number, and its effective date. For further information regarding Action Plan modifications, please consult the Citizen Participation Plan and General Information, Modifications section.

Change Control Log

Version Number	Effective Date	Change: Update, Addition, and/or Deletion
Version 1	XX/XX/2025	Original Draft
	XX/XX/2025	Action Plan Approved by HUD

1

Executive Summary

1. Executive Summary

Under the major disaster declaration [FEMA-4709-DR-FL](#), signed by the President on April 27, 2023, The U.S. Department of Housing and Urban Development (HUD) allocated \$29,222,000 in Community Development Block Grant-Disaster Recovery (CDBG-DR) funds to Broward County, Florida. Funds were allocated through the Allocation Announcement Notice published in Volume 90, Number 10, January 16, 2025 (90 FR 4759). This allocation was made available through the [Disaster Relief Supplemental Appropriations Act, 2025 \(Pub. L. 118-158\)](#). CDBG-DR funds will be utilized to support long-term recovery efforts following the Florida Severe Storms, Tornadoes and Flooding that occurred between April 12 and 14, 2023.

To support disaster recovery, the appropriations act(s) making CDBG-DR funds available have imposed additional requirements and authorized HUD to modify the rules that apply to the annual CDBG program to enhance flexibility and facilitate a quick recovery. program to enhance flexibility and facilitate a quick recovery.

The CDBG-DR funding, administered by the Broward County Housing Finance Division (HFD), is designed to address unmet housing, infrastructure, economic revitalization, and public service needs. Broward County's allocation includes \$25,410,000 for unmet disaster recovery needs that remain after all other assistance has been exhausted, and \$3,812,000 set aside for mitigation activities that boost resilience, lower long-term risks of loss, and reduce impact of future disaster. This plan details how funds will be used to address remaining unmet and mitigation needs in Broward County, Florida.

1.1 Disaster-Specific Overview

Between April 12 and April 14, 2023, Broward County experienced significant impacts from a series of severe storms that brought heavy rainfall, flooding, damaging winds, hail, and several brief tornadoes. Fort Lauderdale recorded a historic rainfall total of 24 and 25.87 inches according to the National Weather Service and the Ft. Lauderdale International Airport's Florida Severe Weather MesoSTEM Network, respectively. Other areas reported up to 16-21 inches of flooding, respectively. Floodwater led to the temporary closure of the Fort Lauderdale-Hollywood International Airport for nearly two days, resulting in the cancellation of more than 650 flights. Flash flooding disrupted transportation, stranded residents and motorists, and caused widespread property damage, necessitating a substantial recovery effort across the region.

The National Weather Service confirmed two EF-0 tornadoes: one just southwest of Fort Lauderdale-Hollywood International Airport and another west of I-95, north of Sheridan Street. The Dania Beach Tornado (EF-0) peak winds reached 85 mph and its path measured over a half mile. Damage to trees and rooftops was reported before the tornado continued into a mobile home community located east of I-95. The Sheridan Street Tornado (EF-0) reached an estimated peak wind of 65 mph.¹

An Executive Order 23-65 was issued by Governor DeSantis for Broward County on April 25th, 2023 due to the historic flooding that occurred in southeastern Broward County. A State of Emergency was issued

¹ Broward County Flooding April 13, 2023, Office of the Governor Ron DeSantis, [Liveandworkwell.com](https://www.liveandworkwell.com/content/dam/laww/documents/special-alerts/DR_FL_041323.pdf), Special Alerts, https://www.liveandworkwell.com/content/dam/laww/documents/special-alerts/DR_FL_041323.pdf

by Governor DeSantis for Broward County on April 25th, 2023 due to the historic flooding that occurred in southeastern Broward County.² President Biden approved the Major Disaster Declaration for Broward County on April 27th, 2023 enabling the county to access disaster recovery resources and support.³

Figure 1: Sailboat Bend neighborhood of Fort Lauderdale, Fla., April 13, 2023



Rebecca Blackwell, Associated Press, 2023, <https://www.wlrn.org/news/2023-04-14/in-photos-historic-downpour-floods-broward>

Figure 2: Floodwater the FT Lauderdale Edgewood neighborhood

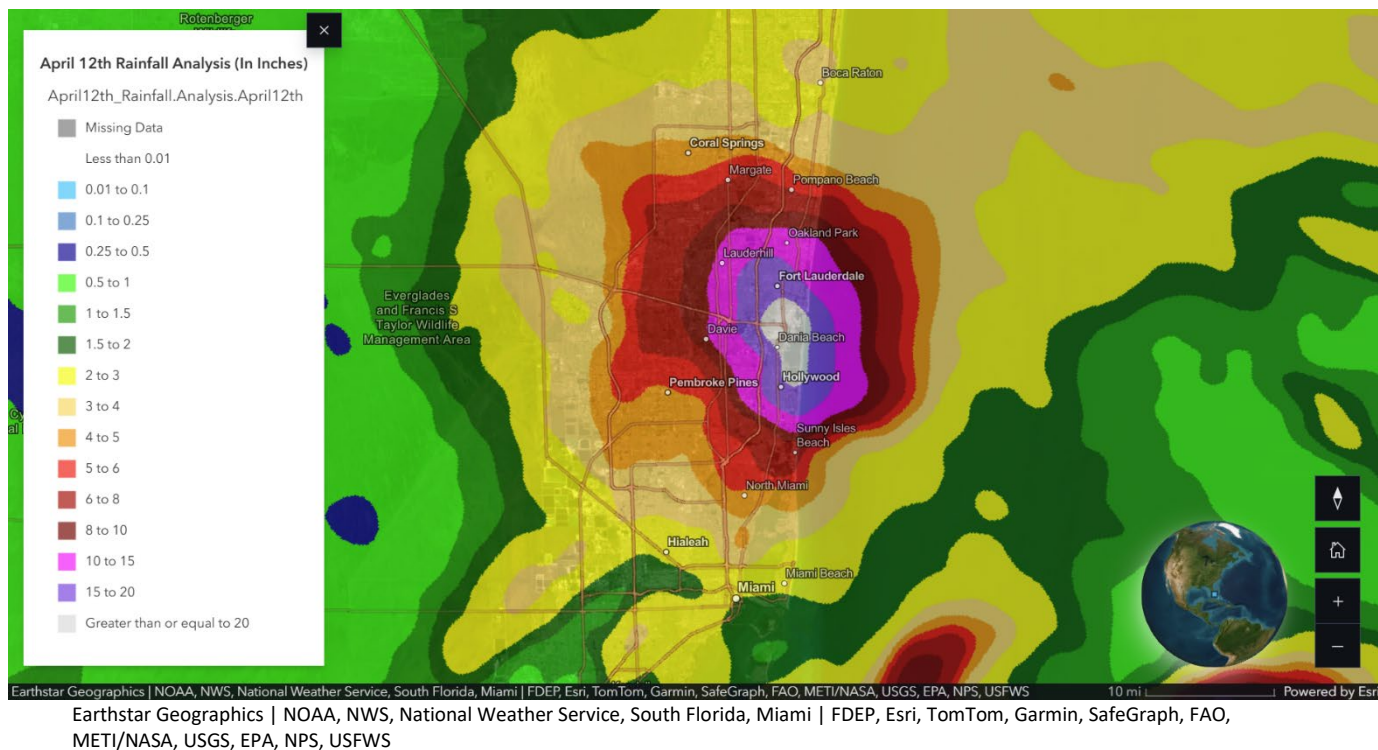


Joe Cavaretta, South Florida Sun Sentinel, 2023, <https://www.wlrn.org/news/2023-04-14/in-photos-historic-downpour-floods-broward>

² State of Florida (2023, April 13). *OFFICE OF THE GOVERNOR EXECUTIVE ORDER NUMBER 23-65*. Executive Offices of the Governor Newsroom. Retrieved June 27, 2025, from <https://www.flgov.com/eog/sites/default/files/executive-orders/2024/EO-23-65-1.pdf>

³ United States (2023, April 27). *Presidential Declaration of a Major Disaster for the State of Florida*. Federal Register, 88 (86), 28651 - 28652. Retrieved June 27, 2025, from <https://www.federalregister.gov/documents/2023/05/04/2023-09482/presidential-declaration-of-a-major-disaster-for-the-state-of-florida>

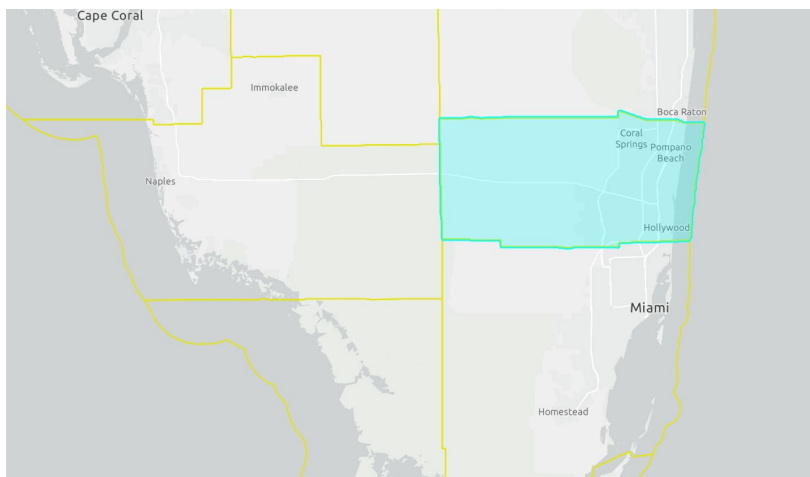
Figure 3: South Florida Rainfall Map



1.2 Most Impacted and Distressed Areas

In accordance with HUD requirements, CDBG-DR funds must be directed toward addressing unmet needs within the Most Impacted and Distressed (MID) areas as a result of the qualifying disaster (FEMA-4709-DR-FL). As specified in the AAN, HUD has designated the entirety of Broward County as the MID area. The following map illustrates Broward County, highlighting the regions most affected by the recent severe storms and flooding event.

Figure 4: Broward County MID Area



1.3 Impacts of the Qualifying Disaster Overview

Between April 12 and April 14, 2023, Broward County was significantly affected by severe storms, tornadoes, and widespread flooding. More than two dozen schools sustained damage throughout the county, with initial estimates from local officials placing repair costs at approximately \$2 million. Flood insurance participation remains relatively low in Broward County. Since 2017, only about 10% of residents have maintained National Flood Insurance Program (NFIP) coverage, leaving uncertainty regarding the extent of insured losses in the aftermath of the event.⁴

In addition to flooding, numerous residences sustained roof and window damage. Critical infrastructure including roads, bridges, and public utilities, was also impacted, resulting in substantial disruptions to transportation and essential services. The event led to widespread inundation of both residential and commercial properties, posing structural challenges. The greatest remaining recovery needs that have not been addressed by other sources of funds will be determined once SBA and FEMA data is available.

Table 1: Disaster Overview

Disaster Summary	
Qualifying Disaster:	Florida Severe Storms, Tornadoes, and Flooding DR-4709-FL
HUD-identified MID Areas:	Broward County
Grantee-Identified MID Areas:	N/A

Table 2: CDBG-DR Allocation Overview

CDBG-DR Allocation Summary

⁴ <https://alert.air-worldwide.com/flood/2023/broward-county-flash-flooding/event-summary/>

CDBG-DR Allocation:	\$25,410,000
CDBG-DR Mitigation Set Aside:	\$3,812,000
Total Allocation:	\$29,222,000

A comprehensive table detailing unmet needs calculations and proposed allocations will be incorporated into the Action Plan upon receipt of relevant data from SBA and FEMA. The following table template will be used to display the planned distribution of CDBG-DR resources, outlining eligible cost categories, corresponding allocation amounts, and estimated percentages dedicated to key priorities.

Table 3: Unmet Needs and Proposed Allocations

Eligible Cost Category	CDBG-DR Allocation Amount	% of CDBG-DR Allocation	Estimated % to CDBG-DR Mitigation Set-aside	Estimated % to HUD identified MID Areas	Estimated % to LMI
Administration	Enter value in terms of \$ here.	This percentage cannot exceed 5% of the total allocation, plus 5% of program income.			
Planning	Enter value in terms of \$ here.	This percentage cannot exceed 15% of the total allocation.	Enter value in terms of % here.		
Housing	Enter value in terms of \$ here.	Enter value in terms of % here.	Enter value in terms of % here.	Enter value in terms of % here.	Enter value in terms of % here.
CDBG-DR Mitigation Set-Aside	Enter value in terms of \$ here.	Enter value in terms of % here. ⁵	Enter value in terms of % here.	Enter value in terms of % here.	Enter value in terms of % here.
Total	This value should be the same as the total grantee allocation, if not the grantee should identify the value of funds not allocated below.	This percentage should be the same as the total grantee allocation, if not the grantee should identify the value of funds not allocated below.	Enter value in terms of % here.	Enter value in terms of % here.	Enter value in terms of % here.

2

Unmet Needs and Mitigation Needs

2. Unmet Needs and Mitigation Needs Summary

2.1 Unmet Needs and Mitigation Needs Summary

The following table will provide a detailed summary of unmet and mitigation needs. This information will be finalized upon receipt and analysis of data from the SBA and FEMA.

Table 4: Unmet Needs and Proposed Allocations

Eligible Cost Category	CDBG-DR Allocation Amount	% of CDBG-DR Allocation	Estimated % to Expend in MID Areas	Estimated to LMI	(\$) Allocation to LMI
Administration	\$1,461,100	This percentage cannot exceed 5% of the total allocation, plus 5% of program income.	-	-	-
Planning	\$4,383,300	This percentage cannot exceed 15% of the total allocation.	100%	100%	\$4,383,300
Housing	\$19,565,600	65.4%	100%	100%	\$19,565,600
Economic Revitalization	-	-		-	-
Public Service	-	-		-	-
CDBG-DR Mitigation Set Aside	\$3,812,000	15%		100%	\$3,812,000
Total	\$29,222,000	100%		100%	\$29,222,000
% of Total	100%	100%		100%	100

3

Unmet Needs Assessment

3. Unmet Needs Assessment

Broward County is a coastal county with low elevations, with some of the largest cities, such as Hollywood and Dania Beach. Many of the locations lie at less than 10 feet above sea level, particularly Dania Beach with areas at sea level, which makes these areas prone to flooding even during regular storms. This storm only exacerbated an already existing need. This unmet needs assessment will address current and future needs and identify mitigation and resiliency efforts to support the community as climate changes and sea levels rise.

The information collected through the unmet recovery and mitigation needs assessment process serves as the foundation for the County's Community Development Block Grant – Disaster Recovery (CDBG-DR) program funding and prioritization decisions. Data in this assessment reflects the best available data as of the Draft Action Plan posting to capture the unmet needs at that point in time.

To develop the unmet needs assessment, Broward County referenced and incorporated data from a range of authoritative sources. At the time of publishing the Draft Action Plan, FEMA and SBA data were not yet available and, as a result, have not been included in this assessment. The unmet needs analysis will be updated to reflect these datasets upon receipt, and the Action Plan will be amended accordingly to ensure accuracy and comprehensiveness.

The following are source descriptions:

- Federal Emergency Management Agency Individual and Public Assistance Program(s):** The FEMA IA program is the primary source of data on all impacted households and information collected is used to calculate unmet housing recovery needs for CDBG-DR recipients. Shortly following a disaster, homeowners and renters can voluntarily register for FEMA Individual Assistance. FEMA Verified Loss awards aid in repair or replacement of homes to get them to habitable conditions. FEMA IA data reflects the cost to repair a home to habitable conditions and often underestimates the true need. The data available at the household level, includes a range of income and estimates of real property damage which allows the County to conduct an analysis utilizing the formula outlined in the Universal Notice. In addition, the FEMA Public Assistance Program provides funding to cover costs for various categories of assistance. There are two components of PA Eligible Work: Emergency Work and Permanent Work under FEMA guidelines. Emergency Work includes immediate actions taken to protect lives, public health, and safety, or to eliminate immediate threats of significant damage. This typically involves debris removal and emergency protective measures. Permanent Work involves restoring damaged public infrastructure to its pre-disaster condition, such as repairing roads, bridges, public buildings, and utilities. Both components are essential for supporting communities in disaster recovery and resilience.
- Small Business Administration (SBA):** The Small Business Administration disaster loan program is a necessary recovery resource for impacted households. This loan program provides funds for housing repairs and business needs. For homes, there is a critical difference between FEMA Individual Assistance and SBA estimates, SBA estimates are based on inspections and often include the full home restoration cost, whereas FEMA restores to a habitable condition.
- Insurance Claims:** Broward County reviewed National Flood Insurance Program (NFIP) claim data at the county level to estimate insurance assistance per household. The County analyzed Florida Office of Insurance Regulation (FOIR) data to assist with the unmet needs analysis.
- U.S. Census Bureau/American Community Survey:** The American Community Survey (ACS) is updated annually based on a sample survey and this data is utilized to capture economic, housing,

and demographic data.

- **HUD Homeless Point in Time Count:** The annual point in time count is conducted every year in January. The Broward Continuum of Care (CoC) conducts this count annually which accounts for the number and makeup of individuals housed in emergency shelters, transitional housing, and unsheltered housing. This helps guide the housing component of the unmet needs assessment.
- **HUD Low-and Moderate-Income (LMI) Data:** This data, published annually calculates the number of households at or below 80% of area median income.
- **Broward County Local Mitigation Strategy:** This comprehensive mitigation plan was consulted to inform the mitigation needs assessment. In development of this Draft Action Plan, Broward County reviewed the 15 significant hazards that can potentially impact Broward County.
- **Broward County Enhanced Local Mitigation Survey:** This document describes enhanced hazard identification and vulnerability assessment components. The Enhanced Local Mitigation Survey conforms to the scope of work items in the FEMA mitigation grant. This plan was reviewed for additional information for the mitigation needs assessment.

The County identified and prioritized critical unmet needs for long-term recovery based on available data. The quality of the assessment is directly correlated with the quality and completeness of the data that is available, and responses received from community surveys. The assessment attempts to take into consideration work already completed for the recovery, community goals, and Broward County's capacity to manage and implement the CDBG-DR program. The assessment allows Broward County to design recovery programs that are responsive to the actual needs in the community. As more information is made available to the County, the plan will be updated accordingly.

Broward County in its long-term response understands that disaster recovery needs will change and evolve as conditions change. The County will update the Unmet Needs Assessment accordingly, identify when substantial amendments are needed, and if program funding allocations need to be updated.

The following assessment will focus on the core aspects of recovery: housing, infrastructure, public services, and economic revitalization. This assessment will analyze the needs which have not been addressed by other funding sources and the overall impact on the County's population, particularly focusing on vulnerable populations such as low/moderate income individuals and households.

3.1 Housing

The unprecedented rainstorm, which occurred on April 12, 2023, brought over 25 inches of rain in 12 hours, and the storm system also produced two tornados which dramatically exacerbated the impact of the storm. Most of the impacts from the disaster which affected housing are from flooding, which not only dramatically impacts the state of the current housing market, particularly around affordable housing but also highlights the fundamental interdependence between housing and infrastructure.

The Housing Unmet Needs Assessment evaluates the scale and distribution of housing-related damages caused by the disaster, the extent of the assistance provided, and the remaining unmet need. This section analyzed data from FEMA's IA Program, the Small Business Administration (SBA) Disaster Home Loan Program, and National Flood Insurance Program data to quantify the unmet needs of both owner-occupied and renter-occupied households. The analysis considers real and personal property damage, occupancy type, assistance received, and financial need due to underinsurance or ineligibility for assistance.

This assessment also includes data describing housing market conditions to better understand the needs of the community for safe and affordable housing, which is a significant need in Broward County. This has factored into Broward County’s programmatic decisions. Data from the Broward County Affordable Housing Needs Assessment, American Community Survey, and Broward survey data were all taken into consideration in this analysis.

Not all households that requested or were eligible for assistance from FEMA IA or received insurance payments from the national flood insurance program, which leaves a gap between the impact recorded and the true impact of the disaster. While many affected households received timely and adequate support according to FEMA, some gaps remain. These gaps will be reflected in the unmet needs assessment. The housing unmet needs assessment represents the impact on housing in Broward County, which needs to be rehabilitated, reconstructed, or newly built. Broward County, in response to this disaster, intends to initiate programs which will result in the reconstruction or new construction of rental properties, which will serve the unmet housing needs of the public.

3.2 Emergency Shelters and Interim and Permanent Housing

It has been widely recognized that disasters have significant impacts on housing options for people experiencing homelessness. Ft. Lauderdale/Broward County’s Continuum of Care is Broward County’s local planning group working to end homelessness. The Continuum of Care is a collaborative network of organizations, advocates, community residents and businesses which plan programs with the main goal of alleviating homelessness in all areas of Broward County. The Broward County Point in Time Count was conducted over a three-day period in January 2025. As the counts from 2025 have not been published by HUD, the 2024 Point in Time Data has been included below:

Table 5: Point in Time Count for Broward County

Summary by household type reported	Emergency Shelter	Transitional Housing	Unsheltered	Total
Households without children	449	36	1,565	2,050
Households with at least one adult and one child	213	145	57	415
Households with only children	2	0	2	4
Total Homeless Households	664	181	1,624	2,469

[CoC PopSub CoC FL-601-2024 FL 2024.pdf](#)

At the time of development of this Draft Action Plan, there was no data which indicated the direct impact of the disaster on the homeless population, however it is presumed that due to the flooding, the homeless

population did suffer adversely due to the disaster(s). The County through its continuum of care works along service providers and other stakeholders to help strategize collaborative solutions to homelessness, and to expand capacity to meet the needs of those experiencing homelessness. According to the count, many people were in emergency shelters (664) or transitional housing programs, but 1,624 were unsheltered, meaning they were camping, sleeping in cars, or otherwise on the street. The scarcity of affordable housing options, and the increasing rents place a significant burden on individuals and households with very low and extremely low incomes, which further contributes to the increased likelihood of homelessness. According to the 2017 – 2021 Comprehensive Housing Affordability Data provided by HUD, 415,965 households are cost burdened in Broward County. Of this total amount, 306,345 are owner-occupied households, and 109,620 are renters. Cost burdened households are those that spend more than 30% of their gross monthly income on housing, while severely burdened households are those that spend over 50% of their gross monthly income on housing. The total amount of households that are severely burdened is 150,755. Of this total number, 69,320 are owner-occupied, and 81,435 are renters ([Consolidated Planning/CHAS Data | HUD USER](#)). This highlights the overall imbalance of housing affordability, and the significant challenge placed on households who are cost burdened.

3.2.1 Emergency Shelters

In the immediate aftermath of the storm, many Broward County residents relied on emergency shelters. Many of these shelters were held in school facilities, which needed to return to school operations, so the temporary shelter was short-lived. The City of Fort Lauderdale did have an emergency shelter which opened in collaboration with the Red Cross, which sheltered over 600 people.

3.2.2 Interim Housing

Many homes were deemed uninhabitable immediately following the storm, which made it so that families could not return until major repairs were complete to make the unit habitable again. As a result, many survivors of the storm were required to live in hotels, with relatives, or in other temporary arrangements. FEMA provided temporary assistance to those requiring short-term stay, however this program was limited and not all households qualified.

3.3 Rental and Owner-Occupied Single Family and Multifamily Housing

3.3.1 Current Housing Market Analysis

In March 2024, Broward County published 'Housing Broward: 10-year Affordable Housing Master Plan' which provides a critical policy framework for addressing Broward County's housing affordability crisis. The scope and scale of Broward County's housing affordability crisis is unprecedented. Like many counties in the nation, housing prices and rents have increased much faster than wages in an economy which has slow high-wage job creation coupled with a housing market where rapid appreciation permanently removes more units each year and produces far too little units to fill the gap. The County's housing market is characterized by increasing home prices, competition particularly against investors, extended selling periods, and a limited inventory.

According to the Affordable Housing Master Plan, Broward County has a significantly high percentage of units (86% or 710,309 units) which were constructed prior to the Florida Building Code, unless these

structures were adequately constructed prior to the Florida Building Code, or have undergone substantial improvements since then, they would be particularly structurally vulnerable in a major storm event. An additional challenge facing Broward County is unprecedented housing price increases, particularly since the COVID pandemic.

All South Florida experienced double-digit appreciation in the years following the pandemic, this unprecedented level of housing market activity was largely driven by a surge in investor buying. This investor real estate activity accompanied by rapid appreciation in the housing market exacerbated an existing housing affordability crisis which was fueled by increasing renter housing, a lack of affordable owner and rental housing production, and increasingly depressed household incomes. The vast majority (95 percent) of Broward County residents are unable to afford the current median sale price of a single-family home. Broward County's median single-family home price-to-median household income ratio soared to 9.8:1 (*Broward County 10 Year Affordable Housing Plan*).

Table 6: Monthly Housing Costs as a Percentage of Household Income in the past 12 months

	Occupied housing units	Percent occupied housing units	Owner-occupied housing units	Percent owner-occupied housing units	Renter-occupied housing units	Percent renter-occupied housing units
Less than \$20,000	76,731	10.2%	40,989	8.6%	35,742	13.0%
30% or more	72,731	9.7%	38,492	8.1%	34,289	12.5%
\$20,000 to \$34,999	78,469	10.5%	41,787	8.8%	36,682	13.3%
30% or more	65,620	8.8%	30,058	6.3%	35,562	12.9%
\$35,000 to \$49,999	82,806	11.1%	42,558	9.0%	40,248	14.6%
30% or more	61,467	8.2%	23,858	5.0%	37,609	13.7%
\$50,000 to \$74,999	120,970	16.1%	68,294	14.4%	52,676	19.1%
30% or more	70,025	9.3%	30,073	6.3%	39,952	14.5%
\$75,000 or more	371,007	49.5%	273,798	57.8%	97,209	35.3%
30% or more	61,993	8.3%	40,949	8.6%	21,044	7.6%
Zero or negative income	11,537	1.5%	6,626	1.4%	4,911	1.8%
No cash rent	7,852	1.0%	-	-	7,852	2.9%

S2503: Financial Characteristics - Census Bureau Table

The table above shows the monthly housing costs as a percentage of household income for both renters and homeowners in the last 12 months. HUD defines a cost burdened household as one who pays over 30% of their household income towards housing costs. While overall percentages paying over 30% or more of their household income towards housing costs maintain relatively low percentages, they are higher for renters and particularly renters with lower incomes. Overall percentages for renters paying over 30% of their household income for housing costs are higher for the lower income thresholds for renters than homeowners.

3.3.2 Housing Data

The following section presents an overview of key housing indicators, highlighting both affordability challenges faced by renters and homeowners and the broader impacts of recent events on local households. These data points provide essential context for understanding current housing needs and informing decisions related to housing stability, vulnerability, and disaster response. Note: FEMA data for FEMA tables within this section were retrieved from [OpenFEMA](#), which is FEMA's public data platform designed to promote transparency, collaboration, and informed decision-making by making a wide range of emergency management data freely accessible to the public. OpenFEMA does not provide the PII necessary for a comprehensive analysis, however it does provide certain information that is valuable to the housing needs assessment.

3.3.3 Damage Assessment

Below is a summary of the damage assessment information used in determining whether to declare a major disaster. Preliminary estimates have the total number of residences impacted at 1,353. The preliminary damage assessment process is a mechanism used to determine the impact and magnitude of damage and resulting needs of individuals, businesses, public sector, and community as a whole. Information collected is used by the State as a basis for the Governor's request for a major disaster or emergency declaration, and by the President in determining a response to the Governor's request (44 CFR 206.33).

Table 7: Damage Assessment Information

Population	Impact
Poverty households	12.4%
Ownership households	62.7%
Population receiving SNAP	13.4%
Population receiving SSI	4.1%
Pre-disaster unemployment	6.0%
Age 65 and older	16.7%
Age 18 and under	21.2%
Disability	10.8%
Individuals and Household Program (IHP) Cost to Capacity Ratio	12
Total Individual Assistance cost estimate	\$18,192,013

Source: [FEMA-4709-DR-FL](#)

The current supply of housing units does not adequately meet the needs of the County, particularly where affordability is concerned. Especially after the April flood. There is a deficit in both affordable for-sale and

rental properties that are available low and moderate income households. This limited stock reduces the ability of low-income households to find safe, suitable housing that is affordable at the same time rents are anticipated to increase, with wages not rising simultaneously. This increases furthermore the strain on low-income households.

Table 8: FEMA IA Owner Occupied

Disaster	County	# of Applicants	# of Inspections	# Inspected with Damage	# Received Assistance	Total FEMA Verified Loss	Average FEMA Verified Loss	Unmet Need
4709	Broward	3,952	2,960	1,450	1,227	\$5,330,714	\$3,676	\$2,323,466

Source: OpenFEMA

The table above depicts the number of applicants and the number of households who received FEMA assistance. Please note that data from the City of Fort Lauderdale is not included in this table, since the city received its own CDBG-DR allocation. Out of the number of applicants, 40.9% received assistance with an average FEMA verified loss of \$3,676.

As of the publication date of the draft Action Plan, SBA data and FEMA IA data has not yet been received. Once SBA data can be cross-referenced with FEMA IA records containing personally identifiable information (PII), unmet needs will be accurately verified. Upon receipt of this information, a comprehensive analysis of housing requirements for both renter-occupied and owner-occupied units will be conducted. The CDBG-DR Action Plan will be amended to incorporate the results of the needs assessment and, if necessary, detail targeted programs designed to address identified gaps.

Broward County has formally submitted the required Memorandum of Understanding (MOU) with the SBA, as well as the HUD Data Sharing Agreement, for full execution to request the relevant data from both SBA and FEMA.

Table 9: FEMA IA Renter-Occupied

Disaster	County	# of Applicants	# of Inspections	# Inspected with Damage	# Received assistance	Total FEMA Verified Loss	Average FEMA Verified Loss	Unmet Need
4709	Broward	5,453	3,164	1,089	1,034	\$1,057,570	\$971	\$100-\$200 Million

Source: OpenFEMA

Out of the number of applicants, 18.9% received assistance with an average FEMA verified loss of \$971. To assess unmet rental needs, the County determined the total number of applicants for FEMA Individual Assistance rental support and estimated that approximately 30% of these applicants did not receive assistance.

The county calculated the average cost of constructing new multifamily developments and determined the number of units that could be built based on 70% of applicants for FEMA Individual Assistance rental support. The total estimated unmet rental need is between \$100 and \$200 million. Moving forward, the

county intends to prioritize projects that can leverage additional funding sources, such as Low-Income Housing Tax Credits (LIHTC), to help address this need.

The degree of damage is defined as the following:

- **Destroyed:** total loss of structure, structure is not economically feasible to repair, or complete failure to major structural components (e.g., collapse of basement walls/foundation, walls or roof);
- **Major Damage:** substantial failure to structural elements of residence (e.g. walls, floors, foundation), or damage that will take more than 30 days to repair;
- **Minor Damage:** home is damaged and uninhabitable, but may be made habitable in short period of time with repairs; and
- **Affected:** some damage to the structure and contents, but still habitable.

The following table illustrates that the majority of storm-related damages are classified in the major-low to minor-low categories, signifying that while homes have sustained damage, they may be rendered habitable within a relatively short period through appropriate repairs.

Table 10: FEMA Real Property Damage-Owner-Occupied Units

County	Major-High	Major-Low	Minor-High	Minor-Low	Severe	Grand Total
Broward (County)	21	247	171	1,007	4	1,450

Source: OpenFEMA

The following table presents a summary of FEMA Individual Assistance allocations for owner-occupied real property by city, highlighting both the distribution and totals among various jurisdictions.

Table 11: FEMA Individual Assistance-Owner Occupied Real Property by City (*in dollars*)

City	Sum of RPFVL	Sum of PPFVL	Total
City of Sunrise	-	300	300
Coconut Creek	10,644	3,302	13,946
Cooper City	5,418	-	5,418
Coral Springs	57,556	6,530	64,086
Dania	480,356	117,776	598,131
Dania Beach	370,446	71,840	442,286
Davie	212,630	31,048	243,677
Deerfield	-	-	-
Deerfield Beach	34,853	6,365	41,219
Hallandale	179,155	22,173	201,328
Hallandale Beach	165,330	29,774	195,104
Hollywood	1,664,574	315,467	1,980,038
Laud Lakes	-	495	495
Lauderhill	398,842	90,842-	489,684-
Lauderdale Lakes	101,303	28,372	129,675

Lighthouse Point	17,189	8,072	25,261
Margate	67,296	24,476	88,772
Miramar	89,806	7,597	97,402
North Lauderdale	77,802	10,806	88,608
Oakland Park	83,848	9,250	93,099
Parkland	-	-	-
Pembroke Park	-	-	-
Pembroke Pines	38,245	3,642	41,887
Plantation	74,696	19,155	93,851
Pompano Beach	137,860	18,823	156,683
Sea Ranch Lakes	-	300	300
Southwest Ranches	-	-	-
Sunrise	57,976	15,373	73,349
SW Ranches	-	-	-
Tamarac	52,720	7,038	59,758
West Park	36,166	4,881	41,047
Weston	2,418	900	3,318
Wilton Manors	55,252	6,740	61,992
Grand Total	\$4,472,379	\$858,335	\$5,330,714

*Indicates jurisdiction which received its own CDBG-DR allocation

Source: OpenFEMA

Broward County received a total IHP amount of \$6,156,932. This leaves a total unmet need of \$2,323,466 for owner-occupied housing. This analysis is based solely on Open-FEMA data. The findings are subject to revision once SBA and FEMA local level is received and can be analyzed with appropriate multipliers.

Due to the significant extent of damages sustained, Fort Lauderdale was allocated a separate distribution of CDBG-DR funds. Among the remaining jurisdictions within Broward County, Hollywood experienced the next highest level of FEMA Individual Assistance disbursements, followed by Dania Beach. Table 12 provides a detailed breakdown of FEMA application statistics categorized by housing type.

Table 12: FEMA Applications by Housing Type

Housing Type	# Of Applicants	% Owner Occupied	% Tenants	% Unknown	% Type
Apartment	6,074	0.13%	49.91%	6.50%	29.37%
Assisted Living Facility	40	0.00%	0.33%	0.00%	0.19%
Boat	8	0.06%	0.02%	0.00%	0.04%
College Dorm	1	0.00%	0.01%	0.00%	0.00%
Condo	715	5.00%	2.40%	2.44%	3.46%
Correctional Facility	1	0.00%	0.01%	0.00%	0.00%
House/Duplex	10,418	74.77%	33.40%	54.47%	50.38%
Military Housing	8	0.00%	0.07%	0.00%	0.04%

Mobile Home	461	4.40%	0.73%	1.63%	2.23%
Other	1,526	4.53%	9.10%	32.52%	7.38%
Townhouse	1,377	10.81%	3.82%	1.63%	6.66%
Travel Trailer	50	0.30%	0.20%	0.81%	0.24%

Source:

OpenFEMA

A majority of the FEMA IA applicants were owner-occupied households living in homes/duplexes, with tenants residing in apartments representing the next largest group.

Damage severity classifications are divided into five damage levels based on FEMA data to assess and characterize the extent of impact among affected units. The table below outlines the specific criteria for each damage severity category. To clarify the following definitions, RPFVL refers to Real Property FEMA Verified Loss Amount, while PPFVL indicates Personal Property FEMA Verified Loss Amount.

Table 13: Damage severity category definitions

FEMA Category	Owner-Occupied RPFVL	Owner-Occupied PPFVL	Rental PPFVL
Minor-Low	Less than \$3,000 of FEMA-inspected real property damage	Less than \$2,500 of FEMA-inspected personal property damage	Less than \$1,000 of FEMA-inspected personal property damage
Minor-High	\$3,000 to \$7,999 of FEMA-inspected real property damage	\$2,500 to \$3,499 of FEMA-inspected personal property damage	\$1,000 to \$1,999 of FEMA-inspected personal property damage or determination of "moderate" damage by the FEMA inspector
Major-Low	\$8,000 to \$14,999 of FEMA-inspected real property damage and/or 1 to 3.9 feet of flooding on the first floor	\$3,500 to \$4,999 of FEMA-inspected personal property damage or 1 to 3.9 feet of flooding on the first floor	\$2,000 to \$3,499 of FEMA-inspected personal property damage or 1 to 3.9 feet of flooding on the first floor or determination of "major" damage by the FEMA inspector
Major-High	\$15,000 to \$28,800 of FEMA-inspected real property damage and/or 4 to 5.9 feet of flooding on the first floor	\$5,000 to \$9,000 of FEMA-inspected personal property damage or 4 to 5.9 feet of flooding on the first floor	\$3,500 to \$7,500 of FEMA-inspected personal property damage or 4 to 5.9 feet of flooding on the first floor
Severe	Greater than \$28,800 of FEMA-inspected real property damage or determined destroyed and/or 6 or more feet of flooding on the first floor	Greater than \$9,000 of FEMA-inspected personal property damage or determined destroyed and/or more feet of flooding on the first floor	Greater than \$7,500 of FEMA-inspected personal property damage or determined destroyed and/or 6 or more feet of flooding on the first floor or determination of 'destroyed' by the FEMA inspector.

Source: OpenFEMA

To meet the statutory requirements of “most impacted” for rental properties, homes are determined to have a high level of damage if they have damage of “major low” or higher. They should have a FEMA personal property damage assessment of \$2,000 or greater or flooding one foot or above on the first floor. It is also presumed by HUD that landlords have adequate insurance coverage unless the unit is occupied by a renter with income less than the greater of the Federal poverty level or 50 percent of the area median income. Units occupied by a tenant with income less than the greater of the poverty level or 50 percent of the area median income are used to calculate likely unmet needs for affordable rental housing.

The average cost to fully repair a home for the disaster to code within each of the damage categories noted above is calculated using the median real property damage repair costs determined by the SBA for its disaster loan program based on a match comparing FEMA and SBA inspections by each of the FEMA damage categories described above. FEMA and SBA data do not typically align and it is anticipated that FEMA assessments may not fully account for all outstanding needs of affected residents, and the variability in FEMA claims submitted and paid, data alignment will be verified once FEMA and SBA data is received. It is anticipated that Broward County will implement the methodology outlined in FR-2020-00943.

Presented in tables 14, 15, and 16 is detailed breakdowns of housing impacts affecting both homeowners and rental units within Broward County showing distribution of impacts to homeowners and rental units. In order to calculate Housing Unmet Needs, HUD applies a disaster specific multiplier based on the incident type that each FEMA IA applicant falls into.

Table 14: FEMA Housing Impacts (by Damage Level and Residence Type)

Damage Level/Residence Type	Number of Damaged Structures	Total FEMA Estimated Property loss	Real Property Verified Loss	Estimated Total Loss (HUD Multiplier)
All residences	20,679	\$31,083,912.3	\$20,910,676.66	
Minor-Low				
Homes	7872	\$2,498,996.27	\$1,497,025.04	
Mobile Homes	258	\$82,494.74	\$47,544.70	
Condo/Apartment/Townhouse	7145	\$789,372.54	\$172,562.70	
Other	1485	\$8,776.37	-	
Minor-High				
Homes	535	\$1,369,243.38	\$753,857.87	
Mobile Homes	116	\$693,048.56	\$632,851.14	
Condo/Apartment/Townhouse	515	\$1,072,386.30	\$338,898.60	
Other	-	-	-	
Major-High				
Homes	410	\$5,374,776.84	\$3,323,308.46	
Mobile Homes	18	\$393,924.45	\$307,197.57	
Condo/Apartment/Townhouse	167	\$788,734.27	\$30,941.80	

Other	-	-	-	
Major-Low				
Homes	1482	\$14,952,593.64	\$12,302,503.86	
Mobile Homes	67	\$945,857.98	\$806,732.14	
Condo/Apartment/Townhouse	320	\$1,091,888.81	\$285,909.50	
Other	-	\$2,191.58	-	
Severe				
Homes	52	\$883,539.27	\$383,216.92	
Mobile Homes	-		-	
Condo/Apartment/Townhouse	6	\$51,531.72	-	
Other	-	-	-	

Table 15: FEMA Real Property Damage-Rental Occupied Property

County	Major-High	Major-Low	Minor-High	Minor-Low	Severe	Grand Total
Broward (County)	39	113	189	748	-	1,089

Table 16: FEMA Individual Assistance-Renter Occupied Real Property by City (*in dollars*)

City	Sum of RPFVL	Sum of PPFVL	Total
City of Sunrise	-	1,079	1,079
Coconut Creek		930	930
Cooper City	-	-	-
Coral Springs		26,453	26,453
Dania	-	-	-
Dania Beach	7,348	77,676	85,024
Davie		23,224	23,224
Deerfield	-	-	-
Deerfield Beach		6,886	6,886
Hallandale		53,264	53,264
Hallandale Beach		48,117	
Hollywood		245,585	245,585
Laud Lakes	-	3,429	3,429
Lauderhill		125,219	125,219
Lauderdale Lakes		54,614	54,614
Lighthouse Point			
Margate		6,702	6,702
Miramar		12,927	12,927
North Lauderdale		38,433	38,433

Oakland Park		24,130	24,130
Parkland	-	-	-
Pembroke Park	-	2,607	2,607
Pembroke Pines		10,396	10,396
Plantation		24,130	24,130
Pompano Beach		56,988	56,988
Sea Ranch Lakes	-		
Southwest Ranches	-	479	-
Sunrise	-	21,563	21,563
SW Ranches	-	-	-
Tamarac	-	12,763	12,763
West Park		2,199	2,199
Weston	-	1,079	1,079
Wilton Manors	-	300	300
Grand Total	\$7,348	\$1,057,570	\$1,064,918

FEMA IHP does not inspect rental units for real property damage so personal property damage is used as a proxy for unit damage. The total IHP amount is \$3,823,667 with the total unmet need rental housing at \$100-200 Million. A comprehensive analysis is pending and will be completed upon receipt of the SBA data.

3.3.4 Manufactured Housing Units

Of the total mobile housing units in Broward County, 100 applicants registered for FEMA Individual Assistance (IA), representing approximately 0.54% of all units within the county. These applicants, whose mobile homes were affected by the storm, underwent FEMA inspections to verify damages and determine eligibility for assistance. The following table provides a detailed breakdown of manufactured housing units in Broward County that applied for FEMA Individual Assistance.

Table 17: Total Manufactured Units applying for FEMA IA in Broward County

County	No. Of Units	% of Total Units in County
Broward (County)	100	0.54%%

These applicants reported a verified loss of \$397,022, received Individual and Households Program (IHP) assistance totaling \$557,287, and have an outstanding unmet need of \$160,264.

A separate multiplier is applied to mobile homes for all disaster types. The mobile home multipliers provided by HUD are \$77,058 for major-low, \$98,463 for major-high, and \$134,834 for severe.

The following table summarizes key figures related to FEMA assistance for manufactured housing units in Broward County, including applicant counts, verified losses, grant amounts, and outstanding needs.

Table 18: FEMA Manufactured Housing Units

County	Sum of Applicant Count	Sum of Total FEMA Verified Loss	Sum of IHP Amount	Total	Unmet Need
Broward	100	397,022	557,287	18,608	(160,264)

3.3.5 National Flood Insurance

The County evaluated claims and awards provided by the National Flood Insurance Program (NFIP). The NFIP provides essential financial protection to property owners, renters, and businesses by insuring both buildings and their contents against flood-related losses. The following table provides data of National Flood Insurance payouts distributed across localities, highlighting the number of homeowners assisted and the scope of financial relief provided for both building and contents damages.

Table 19: National Flood Insurance Payments by City

Location	# of Home-owners	Payment (for Building)	Payment (for Contents)	Total Payment
Broward County(includes City of Fort Lauderdale)	44	3,088,827	411,215	3,500,042
City of Dania Beach	278	10,211,886	1,464,845	11,676,731
Town of Davie	74	290,296	219,063	509,359
City of Deerfield Beach	1	-	-	-
City of Hallandale Beach	1,842	4,095,541	149,867	4,245,407
City of Hollywood	988	10,686,906	1,381,594	12,068,500
City of Lauderdale Lakes	3	57,827	3,982	61,809
City of Lauderhill	17	442,085	53,340	495,425
City of Margate	1	-	-	-
City of Miramar	3	31,662	-	31,662
City of North Lauderdale	2	10,139	-	10,139
City of Oakland Park	12	162,308	50,553	212,861
Pembroke Pines	2	34,511	1,305	35,815

City of Plantation	20	439,214	76,374	515,588
City of Sunrise	2	11,761	-	11,761
City of Tamarac	5	87,003	4,603	91,606
City of Wilton Manors	23	407,043	74,620	481,664
Grand Total	4,737	\$86,902,932	\$13,939,052	\$100,841,984

3.4 Public Housing (Including HUD-assisted Housing) and Other Affordable Housing

HUD's Multifamily Housing property portfolio consists primarily of rental housing properties with five or more dwelling units such as apartments or town houses, but can also include nursing homes, hospitals, elderly housing, mobile home parks, retirement service centers, and occasionally vacant land. HUD provides subsidies and grants to property owners and developers in an effort to promote the development and preservation of affordable rental units for low-income populations, and those with special needs such as the elderly, and disabled.

The portfolio can be broken down into two basic categories: insured and assisted. The three largest assistance programs for Multifamily Housing are Section 8 Project Based Assistance, Section 202 Supportive Housing for the Elderly, and Section 811 Supportive Housing for Persons with Disabilities. Below is a summary of HUD-assisted properties across Broward County cities, detailing the number of properties, total units, units receiving assistance, and those awaiting support.

Table 20: HUD assisted Units by City in Broward County

Municipalities	No. Of Properties	No. Of Units	No. Of Units Assisted	No. Of Units Waiting Assistance
Coral Springs	2	438	324	114
Dania Beach	2	175	112	63
Davie	3	110	109	1
Deerfield Beach	7	602	603	1
Franklin Park CDP	1	50	50	0
Hallandale	2	128	126	2
Hollywood City	2	174	173	1
Lauderdale Lakes	3	550	532	18
Lauderhill City	1	176	174	2
Pembroke Pines	5	418	416	2
Plantation City	1	6	6	0
Pompano Beach	3	233	178	55
Sunrise City	2	200	200	0

[Assisted Housing: National and Local | HUD USER](#)

There are six Housing Authorities serving Broward County: Dania Beach Housing Authority, Housing Authority of the City of Deerfield Beach, Hollywood Housing Authority, and Broward County Housing

Authority. Additionally, the City of Fort Lauderdale maintains its own Housing Authority, which is not included in the above list due to the City of Fort Lauderdale receiving a separate allocation. Each authority administers a combination of Section 8 project-based units and Housing Choice Vouchers. At the time this draft Action Plan was published, Broward County had not received any reports regarding public housing units impacted by the disaster.

3.5 Insurance

Broward County residents filed over 4,700 insurance claims to cover roughly \$100,841,984 million in flood damage. According to FEMA the percentage of insured residences with flood insurance is 29.0%. Driven by the increasing frequency of storms, homeowners insurance providers in Florida have responded to disaster-related losses, inflation, and rising reinsurance costs by raising premiums, limiting coverage, and adjusting underwriting strategies.

Analysis of FEMA IA data reveals a significant proportion of disaster applicants lack flood insurance, particularly among lower income groups. Housing assessments further indicate that, although the majority of residents maintain homeowners or property insurance, the same group does not possess flood insurance coverage. The following table outlines the distribution of owner-occupied homes with and without flood insurance across different income categories.

Table 21: Owner-Occupied Units with and without Homeowner's Insurance by Income

Income Category	Homeowners without Flood Insurance	Percentage of Total without Flood Insurance	Homeowners with Flood Insurance	Percentage of total with flood insurance	Total Homeowners
\$120,001-\$175,000	75	1.90%	58	1.47%	133
\$15,000-\$30,000	447	11.31%	48	1.21%	495
\$30,001-\$60,000	891	20.49%	414	4.91%	2,140
\$60,001-\$120,000	1,355	16.08%	504	5.98%	1,859
<\$15,000	507	6.02%	79	0.94%	586
<\$175,000	138	1.64%	143	1.70%	281
0	1,533	18.20%	519	6.16%	2,052
Grand Total	6,433	76.36%	1,992	23.64%	8,425

The Office of Insurance Regulation evaluates catastrophe claims and compels all insurers to report data. This aggregate information is based on claims data submitted by insurers and has not undergone independent audit or verification. As of the publication of this Draft Action Plan, the County had not received OIR for the April 2023 floods.

3.6 Infrastructure

The severe storms and flooding which occurred in 2023 (FEMA-4709-DR) caused damage to buildings and equipment and public utilities. There are currently 64 approved FEMA PA projects (Categories A through G) totaling \$26,096,479.18. The following table summarizes the FEMA Public Assistance Program projects by applicant, detailing the scope and funding associated with each jurisdiction.

Table 22: FEMA Public Assistance Program Projects by Applicant

Applicant Name	# of Projects	Project Costs	Federal Share	Non-Federal Share	Sum of Mitigation Amount
Broward County	22	17,628,612.04	13,221,459.08	4,407,152.96	1,940,255.21
Broward County School Board	2	28,088.72	21,066.54	7,022.18	-
Broward Sheriff's Office	7	271,887.33	207,152.27	64,735.06	-
City of Dania Beach	2	173,986.74	130,490.06	43,496.68	-
Florida Division of Emergency Management	1	2,668,581.37	2,668,581.37	-	-
City of Fort Lauderdale*	15	5,258,293.05	3,943,719.85	1,314,573.20	83,391.68
City of Hallandale Beach	5	137,770.24	104,967.81	32,802.43	-
City of Hollywood	8	2,416,671.91	1,812,503.94	604,167.97	-
City of Lauderhill	1	59,302.86	44,477.15	14,825.71	-
City of Miramar	1	13,003.41	9,752.56	3,250.85	-
North Broward Hospital District	1	15,750.00	11,812.50	3,937.50	-
City of Plantation	1	106,393.18	79,794.89	26,598.29	-
South Florida Water Management District	1	492,203.56	369,152.67	123,050.89	-
Wilton Manor (Corporate Name Wilton Manors)	2	6,538.58	4,981.78	1,556.80	-
Grand Total	69	29,277,082.99	22,629,912.47	6,647,170.52	2,023,646.89

*Indicates jurisdiction which received its own CDBG-DR allocation

The following table provides a detailed breakdown of FEMA Public Assistance Program funding and applicant data by damage category.

Table 23: FEMA Public Assistance Program

FEMA Damage Category	Sum of Applicant Count	Sum of Project Amount	Sum of Federal Share	Sum of Local Match (Unmet need)	Sum of Mitigation Amount	Total Need (Match plus Resiliency)
A – Debris Removal	3	\$1,582,424.91	\$1,186,818.61	\$395,606.20	\$59,340.93	\$454,947.13
B – Protective Measures	22	\$2,564,612.04	\$1,923,459.10	\$641,152.94	\$96,172.95	\$737,325.96
C – Roads and Bridges	1	\$30,826.28	\$23,119.71	\$7,706.57	\$1,155.99	\$8,862.56
E – Buildings and Equipment	25	\$19,533,818.80	\$14,650,364.16	\$4,883,454.64	\$732,518.21	\$5,615,942.91
F – Public Utilities	4	\$2,172,807.68	\$1,629,605.77	\$543,201.91	\$81,480.29	\$624,682.21

G – Recreational or Other	9	\$211,989.57	\$158,992.20	\$52,997.37	\$7,949.61	\$60,947.00
Z – State Management	3	\$19,818.88	\$19,818.88	\$0.00	\$743.21	\$5,697.93
Grand Total	69	\$26,116,298.06	\$19,592,178.43	\$6,524,119.63	\$979,361.19	\$7,508,435.70

Source: OpenFEMA

Analysis of OpenFEMA data in the tables above indicates that Category E—Buildings and Equipment—represents the area of greatest need, with total project allocations amounting to \$19,533,818.80. This substantial unmet need highlights the importance of infrastructure improvements to support essential buildings and equipment. Category E typically encompasses both structural and non-structural elements of buildings, including mechanical, electrical, and plumbing systems, as well as contents, equipment, including vehicles and construction machinery. It is important to note that, for buildings and related systems, distinguishing between incident-related damages and pre-existing conditions can present significant challenges. Prior to determining eligibility, FEMA considers each of the following factors: age of the building and its systems, evidence of regular maintenance, any pre-existing issues such as water damage from a leaky roof, and the severity and impact of the incident.

The category with the second highest level of need is Category B—Protective Measures. This category reimburses state, tribal, and local governments, as well as certain private non-profit organizations, for eligible emergency protective actions undertaken to safeguard lives, protect public health and safety, or minimize damage to property during a federally declared disaster. Eligible activities include evacuation and sheltering, search and rescue operations, and temporary repairs. It is crucial that these activities are thoroughly documented, including clear justifications for the actions taken and detailed records of all associated expenses, to ensure eligibility for reimbursement.

Examples of eligible activities under this category include, costs associated with moving people out of harm's way and providing temporary housing in shelters, efforts to locate and evacuate people who may be trapped or injured, removing debris, medical care, structural shoring to prevent building collapse, traffic control and road closures, and medical care and transport for sheltering populations. Costs associated must be necessary, reasonable, and directly related to the emergency protective measures taken.

The total need comprises both the local match and resiliency considerations. Category E—Buildings and Equipment—representing the highest level of unmet need. The total unmet need for infrastructure is \$7,508,435.70. The County has allocated other funding sources to address this gap and does not anticipate using any CDBG-DR funds for this purpose.

The following table summarizes key projects and funding allocations for FEMA's Hazard Mitigation Grant Program:

Table 24: FEMA Hazard Mitigation Grant Program Project Summary

Subrecipient Name	Project Amount	Federal-Cost Share	Unmet Need (Local Match)
Coral Springs Improvement District	4,314,449.00		4,314,449.00
Fort Lauderdale	9,882,859.00	1,155,477.75	8,667,111.25

Lighthouse Point	170,937.00	-	170,937.00
Miramar	857,462.00	643,096.50	214,365.50
North Broward Hospital District	9,293,743.00	789,939.97	8,503,803.03
Plantation	1,789,935.00		1,789,935.00
Pompano Beach	9,992,327.00		9,992,327.00
Southwest Ranches	529,924.00		529,924.00
Statewide	81,191.21	81,191.21	-
Weston	797,410.00	25,267.50	772,142.50
Wilton Manor (corporate name Wilton Manors)	252,081.00	118,031.00	134.50.00
Grand Total	38,596,861.21	2,813,003.93	35,783,857.28

The FEMA Hazard Mitigation Grant Program (HMGP) will be a critical part of the long-term recovery process in both rebuilding and protecting housing stock and vital infrastructure. The States allocate HMGP funds to local jurisdictions for infrastructure and public facilities projects that aim to reduce risks from future disasters. Recipients of the grants are required to provide a non-federal cost share as matching funds for the grant. CDBG-DR funds may be used as the non-Federal match portion and satisfy this requirement.

The County was determined to have \$38,596,861.21 million in potential HMGP eligible costs, which requires a non-federal cost share of approximately \$35,783,857.28. The figures above include the City of Fort Lauderdale, which has received a separate CDBG-DR allocation; excluding this amount adjusts the total HMGP costs to \$28,714,002.21, with a corresponding non-federal cost share of \$27,116,746.03.

Among local jurisdictions, the North Broward Hospital District accounts for the highest value of potential HMGP projects, followed by the Coral Springs Improvement District. Significant damage and water inundation were reported at hospitals and health facilities across the northern two-thirds of the county during the storm event.

The HMGP program also tracks the project type and according to the chart below, the project type which has the highest amount of HMGP funding is Stormwater Management-Diversions, followed by Feasibility, Engineering, and Design Studies, and Utility Protective Measures. The following table outlines the distribution of HMGP funding across various project types, highlighting the financial commitments and local match requirements for each category.

Table 25: HMGP Project Type

Project Type	Sum of Project Amount	Sum of Federal Share Obligated	Sum of Local Match
103.1 Feasibility, Engineering and Design Studies	5,254,664.00	25,267.50	5,229,396.50
103.2 Feasibility, Engineering and Design Studies	9,822,589.00	1,155,477.75	8,667,111.25

202.2 Elevation of Private Structures-Coastal	235,714.00		235,714.00
207.2 Mitigation Reconstruction	459,099.00		459,099.00
400.1 Utility Protective Measures (Electric, Gas, etc.)	9,293,743.00	789,939.97	8,503,803.03
403.2 Stormwater Management-Diversions	9,992,327.00		9,992,327.00
601.2 Generators-Regular	3,457,534.00	761,127.50	2,696,406.20
700.1 Management Costs-Salaries, 700.2 Management Costs-Equipment, 700.3-Management Costs-Office Space Rental, 700.4 Management Costs-Supplies	81,191.21	81,191.21	-
Grand Total	38,596,861.21	2,813,003.93	35,783,857.28

3.6.1 Broward County Disaster Impact Survey to Community and Municipal Leadership

The County undertook outreach to engage and learn from affected communities. This included hosting a public meeting and distributing an electronic survey to municipalities, non-profit organizations, and community leaders and representatives, inviting them to share feedback on unmet disaster recovery needs. These efforts were designed to ensure that community perspectives are reflected in the draft Action Plan and that CDBG-DR funds are allocated based on the highest priorities and areas of greatest need.

Among the 32 survey respondents, 15 represented cities and towns within Broward County. Of those respondents, 12 identified infrastructure activities as their highest priority need. Specific projects highlighted in the survey comments included flood prevention activities, infrastructure upgrades to mitigate flooding, improvements to aging drainage systems, and other essential infrastructure enhancements aimed at increasing resiliency and addressing critical community needs.

The other significant group of respondents are private businesses and non-profit organizations. The overall theme was resilient housing, emphasizing the urgent need for housing recovery. Comments consistently highlighted the importance of developing more resilient housing solutions and noted that the loss of basic shelter creates crises for affected populations. Support for the development of affordable housing was identified as a key priority. Further details and a comprehensive summary of survey responses are available in the Appendix.

3.7 Economic Revitalization

The April 12, 2023 flooding event impacted Broward County's businesses in a significant way. Business interruptions, property damage and loss, and damage to infrastructure impacted people's ability to work. The Fort Lauderdale-Hollywood International Airport is a major public airport, averaging over 700 flights a day to over 135 domestic and international gateways. The storm caused significant disruptions to airport

operations and the surrounding area, including a two-day closure that led to millions in revenue losses. This interruption had a notable impact on Broward County residents who rely on the airport’s operations.

The State of Florida conducted a Business Damage Assessment Survey which found that out of the 326 businesses that responded, 227 businesses reported damage from the flooding and 226 reported lost revenue. That resulted in 57 businesses reporting layoffs, with 197 temporary and 50 permanent layoffs. The average reported business damage was \$79,332.51 (Governor Ron DeSantis, “Request for Major Disaster Declaration Broward County Flooding,” April 25, 2023, <https://www.floridadisaster.org/contentassets/241a13fe015142f2998c308d5a3c3aa8/major-disaster-dec-request-broward-county-flooding-executed.pdf>).⁶

An additional impact to the economic factors which affect Broward County individuals and families is the increasing consumer prices. The average consumer prices in the United States have risen 8.3% over the past year. This increase has not only affected the cost of household goods, but also rent and construction materials, particularly in Broward County which has increased dramatically above the Consumer Price Index, especially due to strains on the construction sector due to Hurricanes Ian and Nicole. As a response to this disaster the Florida Department of Commerce (FloridaCommerce) activated the Emergency Bridge Loan Program to provide working capital to impacted businesses. FloridaCommerce provided assistance via small business loans to over 429 small businesses in the Broward County area, resulting in the disbursement of more than \$16 million in funding.

The following table provides a summary of unemployment insurance claims related to the disaster event in Broward County. The County will update its data set to incorporate information related to SBA loans as soon as those details become available.

Table 26: Unemployment Insurance Claims

FEMA Declaration Number	Total Claims	Average Weeks of Unemployment Compensated	Total Compensation
4709	2271	193 weeks	\$5,240,719

Source: Department of Labor Employment and Training Administration Report

3.8 Public Service

The County does not anticipate allocating CDBG-DR funding toward public services. Funding for these services is provided through alternative County resources.

⁶ DeSantis, R. (2023, April 25). *Memorandum Request for Major Disaster Declaration Broward County Flooding*. Florida Disaster. Retrieved June 27, 2025, from <https://www.floridadisaster.org/contentassets/241a13fe015142f2998c308d5a3c3aa8/major-disaster-dec-request-broward-county-flooding-executed.pdf>

4

Mitigation Needs Assessment

4. Mitigation Needs Assessment

4.1 Overview

In accordance with HUD guidance, Broward County has completed the following Mitigation Needs Assessment. The County reviewed existing hazard plans, and past state and regional action plans, to develop a multi-hazard risk-based Mitigation Needs Assessment. This assessment informs and provides a substantive basis for mitigation activities proposed in this draft Action Plan, with a focus on addressing and analyzing all significant current and future hazard risks. This mitigation needs assessment analyzes countywide and statewide risks with specific sections detailing hazards in the most impacted areas.

This assessment establishes a foundational framework for recommending programs and projects within this plan aimed at mitigating hazards. Furthermore, it ensures that all initiatives funded through CDBG-DR, at a minimum, do not exacerbate or intensify natural hazard threats and instead utilize limited recovery and mitigation resources effectively.

4.2 Presidential Declarations

Major disasters are declared by the President of the United States when the magnitude of a disaster event is of such severity and magnitude that effective response is beyond the capabilities of the State and Local governments. When this occurs, eligible applicants may apply for a wide range of federal disaster assistance that includes funds for public assistance, individual assistance, and hazard mitigation assistance.

Since 1965, Broward County has received 21 presidential disaster declarations for hurricane, flood, wildfire, tornado, and freeze events ⁷. Please note that this list does not include all federal, state, or local emergency declarations issued for smaller, less damaging disaster events that did not warrant a presidential declaration. The following table provides a comprehensive overview of presidential disaster declarations affecting Broward County from 1965 through 2022, highlighting the frequency and scale of major events that have shaped local emergency response and recovery efforts.

Table 27: Presidential Disaster Declarations for Broward County (1965-2022)⁸

⁷ [Broward Action Plan Development and Implementation - BC-Local-Mitigation-Strategy.pdf - All Documents](#)

⁸ [Broward Action Plan Development and Implementation - BC-Local-Mitigation-Strategy.pdf - All Documents](#)

Event	Declaration Date	Declaration Number
Hurricane Betsy	09/14/1965	FEMA-209-DR
Freeze	03/15/1971	FEMA-304-DR
Hurricane Andrew	08/24/1992	FEMA-955-DR
Tornadoes, Flooding, High Winds & Tides, Freezing	03/22/1993	FEMA-982-DR
Severe Storms, High Winds, Tornadoes, and Flooding	02/20/1998	FEMA-1204-DR
Severe Storms, High Winds, Tornadoes, and Flooding	03/09/1998	FEMA-1195-DR
Extreme Fire Hazard	06/18/1998	FEMA-1223-DR
Hurricane Irene	10/20/1999	FEMA-1306-DR
Heavy Rains and Flooding	10/04/2000	FEMA-1345-DR
Severe Freeze	02/06/2001	FEMA-1359-DR
Hurricane Charley and Tropical Storm Bonnie	08/13/2004	FEMA-1539-DR
Hurricane Frances	09/04/2004	FEMA-1545-DR
Hurricane Jeanne	09/26/2004	FEMA-1561-DR
Hurricane Katrina	08/28/2005	FEMA-1602-DR
Hurricane Wilma	10/24/2005	FEMA-1609-DR
Tropical Storm Fay	8/21/2008	FEMA-3288-DR
Hurricane Matthew	11/04/2016	FEMA-4283-DR
Hurricane Dorian	10/21/2019	FEMA-4468-EM

Covid-19-Pandemic	03/25/2020	FEMA-4486-DR
Hurricane Isaias	08/01/2020	FEMA-3533-EM
Hurricane Ian	11/10/2022	FEMA-4673-DR
Hurricane Nicole	12/13/2022	FEMA-4680-DR

Source: [Disaster Declarations Summaries - v2 | FEMA.gov](#)

There have been 55 presidentially declared disasters in the State of Florida since 1995.⁹ Hurricane-related disasters represent the most frequent natural events resulting in federal disaster declarations for the region. Since 1995, there have been 3 declared tropical storm-related disasters, 30 hurricane-related disasters, 20 severe storm-related disasters (excluding severe winter storms), 4 flooding disasters and 10 tornado-related disasters. This historical pattern of extreme weather is expected to continue and become more severe due to increasing hazards. Based on this, mitigation measures to reduce impacts caused by these types of hazards are critical.

Consequently, Broward County's 31 municipalities and unincorporated areas each face varying degrees of vulnerability to multiple hazards, which will be further detailed in the forthcoming hazard mitigation assessment. Encompassing 1,225 square miles—including 24 miles of coastline and 300 miles of inland waterways — the County's coastal communities are particularly susceptible to the impacts of coastal erosion and sea level rise, in contrast to the risks faced by central and western regions. The central and

⁹ Disasters and Other Declarations, 2025 FEMA.gov,

https://www.fema.gov/disaster/declarations?field_dv2_declaration_date_value%5Bmin%5D=1995&field_dv2_declaration_date_value%5Bmax%5D=2025&field_dv2_declaration_type_value=DR&field_dv2_incident_type_target_id_selective=All&field_dv2_state_territory_tribal_value%5B0%5D=SD&page=4

western communities are more vulnerable to wildfire, and continuously more so as development expands westward.

Every municipality in the County has been impacted by one or more of these events and has resulted in the devastating loss of life and hardship of Broward County residents, forcing many to relocate, exhaust their financial assets and undermine the security of living in their homes or investing in their properties or businesses. Flood loss insurance claims are particularly costly with 14,922 claims paid, totaling over \$ 443,338,109.75 in Broward County since 1995.¹⁰

As part of this assessment, the County sought to identify and address risks to indispensable services. Broward County undertook an evaluation of risks impacting essential services — those functions necessary to sustain critical business and governmental operations, are critical to public health and safety and support economic stability.

To inform and enhance the mitigation needs assessment, the County utilized a diverse array of authoritative resources.

- Broward County Resilience Plan 2025
- The Broward County Emergency Management Division Local Mitigation Strategy July 2023 plan's data sources include:
 - 2000 version of the Broward County Local Mitigation Strategy
 - The Broward County Economic & Socioeconomic Vulnerability Study
 - Port Everglades Vulnerability & Economic Study
 - The Broward County profile from Florida Department of Community Affairs report entitled *Integrating Hazard Mitigation Planning into Comprehensive Planning*,
 - The State of Florida Hazard Mitigation Plan and the CSX Transportation Hazardous Materials Density Study for Broward County, Florida (2006).
- The 2023 Florida State Enhanced Hazard Mitigation Plan's data sources include:
 - HAZUS-MH
 - HelpFL Tool
 - SOLARIS-FITS
 - FEMA Declared Events
 - NOAA/NWS/NHC
 - NOAA National Centers for Environmental Information (NCEI)
 - NOAA National Integrated Drought Information System (NIDIS), Drought.gov
 - Southern Wildfire Risk Assessment (SWRA)
 - U.S. Geological Survey (USGS)
 - Statewide Critical Facility Data
 - Florida State Agency Information
 - Internet Research

¹⁰ Historical NFIP Claims and Trends, FEMA & NFIP, 2024, <https://www.floodsmart.gov/historical-nfip-claims-information-and-trends?map=countries/us/us-sd-all®ion=us-sd&miny=1995&maxy=2024&county=>ype=state>

4.3 Greatest Risk Hazards

Analysts identified the ‘greatest risk hazards’ as hazards with the highest damage costs and the highest frequencies of occurrence as designated by the NOAA National Centers for Environmental Information (NCEI) 2025 data.

Broward County has identified the hazards of most significant concern for Broward County. Each of these hazards were studied by the County for their potential impact as well as in terms of availability of hazard mitigation strategies to reduce that impact. To provide a clearer understanding of Broward County’s vulnerability to natural hazards, the following table highlights those identified as presenting the greatest risks to the community.

Figure 5: Most Significant Hazards of Concern for Broward County¹¹

Natural Hazards	Human Caused Hazards
Atmospheric <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Extreme Heat <input type="checkbox"/> Freeze <input type="checkbox"/> Lightning <input checked="" type="checkbox"/> Severe Thunderstorm <input checked="" type="checkbox"/> Tornado <input checked="" type="checkbox"/> Tropical Cyclone (Storms and Hurricanes) <input type="checkbox"/> Winter Storm Hydrologic <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Coastal Erosion <input checked="" type="checkbox"/> Drought <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Rip Current <input checked="" type="checkbox"/> Sea Level Rise/Climate Change Geologic <ul style="list-style-type: none"> <input type="checkbox"/> Earthquake <input type="checkbox"/> Expansive Soils <input type="checkbox"/> Sinkhole / Land Subsidence <input type="checkbox"/> Tsunami <input type="checkbox"/> Volcano Other <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Wildfire 	Biological <ul style="list-style-type: none"> <input type="checkbox"/> Agricultural Disease <input checked="" type="checkbox"/> Pandemic/Infectious Disease Societal <ul style="list-style-type: none"> <input type="checkbox"/> Civil Disturbance <input checked="" type="checkbox"/> Mass Migration <input checked="" type="checkbox"/> Terrorism <input checked="" type="checkbox"/> Active Shooter Technological <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Cyber <input type="checkbox"/> Dam / Levee Failure <input checked="" type="checkbox"/> Hazardous Material Incident <input type="checkbox"/> Nuclear Power Plant Accident <input type="checkbox"/> Structural Fire

Source: Broward County Resilience Plan 2025

Broward County has experienced multiple natural hazards among its 31 municipalities and unincorporated areas. These hazards primarily include tropical cyclones and tornadoes, and more recently, extreme heat. While a tropical cyclone is expected and provides the opportunity for advance preparedness, and if necessary, evacuation planning and execution, however other natural disasters such as a tornado do not. In September 2022, a tornado was spawned by Hurricane Ian when it made landfall in the Fort Meyers area on the West Coast, struck the suburb of Pembroke Pines and caused minor to moderate damage to

¹¹ Broward County Emergency Management Division. (July 2023). *Local Mitigation Strategy for Broward County and Its Municipalities*. <https://www.broward.org/Emergency/Responders/Documents/BC-Local-Mitigation-Strategy.pdf>

businesses and the general aviation North Perry airport. In recent years, the increased severity of extreme heat has impacted the urban areas of Broward County, specifically Fort Lauderdale.

The following table summarizes the frequency, financial impact, and prevalence of major disaster events that have affected Florida over the past four decades.

Table 28: Billion-Dollar Events to affect Florida from 1980 to 2025* (CPI-Adjusted)

Disaster Type	Events	Events/Year	Percent Frequency	Total Costs	Percent of Total Costs
Tropical Cyclone	36	0.8	38.3%	\$300.0B-\$420.0B	93.5%
Severe Storm	33	0.7	35.1%	\$5.0B-\$10.0B	1.5%
Winter Storm & Freeze	10	0.2	10.6%	\$12.0B-\$25.0B	4%
Drought	7	0.2	7.4%	\$1.0B-\$2.0B	0.3%
Wildfire	4	0.1	4.3%	\$250M-\$500M	0.1%
Flooding	4	0.1	4.3%	\$2.0B-\$5.0B	0.7%
All Disasters	94	2.1	100.0%	\$300.0B-\$450.0B	100.0%

Source: National Centers for Environmental Information (NCEI), NOAA, 2025

To align the NCEI data above with the Broward County Local Mitigation Strategy July 2023 and the 2023 Florida Enhanced Mitigation Plan, this Draft Action Plan will include:

- **Tropical Cyclones:** Will have a separate hazard profile from the severe storm profile, due to its historical significance when considering the risk and impact of DR.
- **Freeze/Extreme Cold Hazards:** Will be included within the winter storm hazard profile
- **Tornadoes:** While tornadoes may be associated with severe summer storms and tropical cyclones this hazard sub profile will be analyzed within the tropical cyclone profile to align with existing hazard mitigation plans.
- **Sinkholes:** Although not referenced in the NCEI data, have historical significance in the disaster-impacted area, and is highlighted in local Hazard Mitigation Plans. Accordingly, a dedicated hazard profile for sinkholes will be included

The greatest risk hazards identified are:

1. Tropical Cyclone
2. Flooding
3. Severe Summer Storm
4. Drought
5. Extreme Heat
6. Severe Winter Storm/Extreme Cold
7. Wildfire
8. Sinkhole

4.4 Hazard Probabilities

For many of the natural hazards, the best available data with which to estimate probability is often based on past events. Though certainly not the only source of past event data, a key source for this information comes from the Storm Events Database of the National Centers for Environmental Information. As NCEI information is used for so many hazards, it is important to note the following about the information in the NCEI Storm Events Database ¹²:

- From 1950 through 1954, only tornado events were recorded.
- From 1955 through 1992, only tornado, thunderstorm, wind, and hail events were keyed from the paper publications into digital data.
- From 1993 to 1995, only tornado, thunderstorm, wind, and hail events have been extracted from the unformatted text files.
- From 1996 to present, 48 event types were recorded as defined in NWS Directive 10-1605.

4.5 Hazard Profiles

4.5.1 Tropical Cyclone

A tropical cyclone is a rotating, organized system of clouds and thunderstorms that originates over tropical or subtropical waters and has a closed low-level circulation. Tropical cyclones rotate counterclockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere and have an average diameter of 200 to 400 miles across. These storms form when a developing center of low pressure moves over warm water, and the pressure drops (measured in millibars or inches of Mercury) in the center of the storm. As the pressure drops, the system becomes better organized and the wind begins to rotate around the low pressure, pulling in the warm and moist ocean air. This is what causes the wind and rain associated with a tropical cyclone. If all the conditions are favorable (warm ocean water and favorable high-altitude winds), the system could build to a point where it has winds more than 155 miles per hour, bringing catastrophic impacts if it makes landfall in populated areas.

Tropical cyclones are classified from tropical depression to major hurricane, using the following metrics:

- Tropical depression: The formative stages of a tropical cyclone in which the maximum sustained (using the U.S. 1-minute average) surface wind is < 38 mph.
- Tropical storm: A warm core tropical cyclone in which the maximum sustained surface wind (using the U.S. 1-minute average) ranges from 39–73 mph.
- Hurricane: A warm core tropical cyclone in which the maximum sustained surface wind (using the U.S. 1-minute average) is at least 74 mph.
- Major Hurricane: A warm core tropical cyclone in which the maximum sustained surface wind (using the U.S. 1-minute average) is at least 111 mph.

¹² NOAA National Centers for Environmental Information, 2024, <https://www.ncdc.noaa.gov/stormevents/>

Fatalities from tropical storms or hurricanes can be through direct or indirect causes. Direct deaths are caused by one of the tropical cyclone hazards while the storm is occurring. Examples include drowning from storm surge flooding or flash flooding, deadly flying debris, and collapsing buildings. Indirect deaths occur after the storm has passed. Examples of indirect deaths include deaths due to power loss, driving through flood waters, overexertion during cleanup, generator accidents, electrocution from downed power lines, and water-borne diseases spread by flood waters. Indirect deaths can be hard to count, and can happen days, weeks, or even months after a storm passes.

Located immediately offshore and running parallel to Broward County's 24 miles of shoreline, Florida's coral reef consisting of a ridge complex, inner, middle, and outer reefs provide storm protection and flood reduction benefits to the County. Due to its close proximity to the highly urbanized shoreline of Broward County, the exposure of coral reefs to human-induced impacts coupled with the effects of climate change on ocean chemistry and temperature, and the recent widespread outbreak of stony coral tissue loss disease, resulted in both biological and physical degradation of the coral reef ecosystem. The degradation reduces the capability of coral reefs to act as natural infrastructure to provide shore protection.

All areas of Broward County are highly susceptible to hurricanes and tropical storm-force winds. Further, the immediate coastal zone and areas along the canals of Broward County are extremely susceptible to potential storm surge inundation resulting from hurricanes and tropical storms, as well as inundation from King Tide events, which will continue to be exacerbated as sea levels rise. The map below illustrates storm surge inundation zones for Broward County.

Figure 6: Storm Surge Inundation Zones



National Hurricane Center, NOAA Broward County GIS

The probability of future tropical storm/hurricane events in Broward County is considered highly likely. According to statistical data provided by the National Hurricane Center, the annual probability of a hurricane and tropical storm affecting the area is between 48 and 54% per year.

4.5.2 High Wind

Tropical Cyclones can produce very strong and destructive winds that can persist for great distance in area and duration even after landfall. Wind speed of tropical cyclones is categorized by the Saffir-Simpson scale. Damaging or destructive winds may reach speeds of more than 300 km/h in the most intense systems. Hurricane force winds are extremely dangerous and can cause severe damage and debris. This debris, including signs, pieces of structures not properly secured, and shallow rooted trees, is often then carried by the high winds and can cause further damage. The more vulnerable the area is to high winds, the more likely damage may be widespread, while also lengthening recovery.

Tornadoes are a significant threat during tropical cyclones and have been present in most events that have affected Florida. Tornadoes tend to develop on the leading northwest edge relative to the forward motion (or on the right-front quadrant) of hurricanes, within thunderstorms and rain bands away from the center. Many tornadoes that occur with hurricanes are relatively weak and short-lived. In recent years, much of the wind damage in hurricanes attributed to tornadoes has been the result of down bursts, which are strong downdrafts causing damaging winds on or near the ground. For more information regarding tornadoes, please see the *Severe Summer Storm* profile in the next section.

4.5.3 Storm Surge

Storm surge is an extremely dangerous hazard associated with hurricanes and tropical storms and is defined as an abnormal rise of water generated by a storm, over and above the predicted astronomical tides. It is a phenomenon that can raise the water level several feet or more, causing flooding in normally dry areas many miles from the shore, especially in low-lying coastal areas. Just one foot of moving water can carry a small car, but during storm surge, many feet of water can move onshore. The force of this water carries cars and can completely sweep houses and buildings from their foundations. As a result, damage from storm surge can be catastrophic. Historically, about half of the direct deaths in landfalling tropical cyclones in the United States are from storm surge. Storm surge heights are dependent upon the configuration of the continental shelf (narrow or wide) and the depth of the ocean bottom (bathymetry). The National Hurricane Center separated storm surge from the Saffir-Simpson Hurricane Wind Scale because it did not accurately describe storm surge; a Category 1 hurricane could have a devastating storm surge, while a Category 5 hurricane could have minimal storm surge.

Along most of the Atlantic coast of Florida, a narrow shelf (drops steeply from the shoreline) tends to produce a lower surge but higher and more powerful storm waves. The Gulf Coast has a long, gently sloping shelf and shallow water depths, leading to higher surge but smaller waves. South Miami-Dade County is somewhat of an exception to these general rules due to Biscayne Bay, which has a wide shelf and shallow depth. In this instance, a hurricane has a larger area to “pile up” water in advance of its landfall. The threat of storm surge is very prevalent in the Apalachee Bay Region, where storm surge can reach several feet above ground. The impacts of climate change and the associated sea level rise will have considerable impact on future storm surge levels. The main impact to Broward County will be:

- Inundation of coastal properties by higher sea level and reduced effectiveness of existing storm surge barriers in Broward County
- Higher storm surge levels

The impacts of climate change and sea level rise will likely exacerbate the severity of future storm events. This hazard is considered highly likely to occur.

4.5.4 Flooding

A flood or flooding refers to the general or temporary conditions of partial or complete inundation of normally dry land areas from the overflow of inland or tidal water and of surface water runoff from any source. If local conditions cannot accommodate intense precipitation through a combination of infiltration and surface runoff, water may accumulate and cause flooding. Floodplains are defined as any land areas susceptible to being inundated by water from any flooding source. While many people underestimate the severity of floods, it is one of the most prevalent and damaging hazards in Florida.

In Florida, several variations of flooding occur because of severe thunderstorms, tropical cyclones, seasonal rain, and other weather-related conditions. This hazard profile will focus on two broad categories of flooding: inland and coastal flooding.

4.5.5 Flash Flooding

Flash floods present more significant safety risks than other riverine floods because of the rapid onset, the high-water velocity, the debris load, and the potential for channel scour. In addition, more than one flood crest is possible and may result from a series of fast-moving storms. The extent of potential flood

damage is proportional to the volume and the velocity of the water. High volumes of water can move heavy objects and undermine roads and bridges. Sudden destruction of structures and the washout of access routes may result in the loss of life. Although rural flooding is dangerous to fewer people and may be less costly than urban flooding, it can cause great damage to agricultural operations.

As Florida's population rapidly increased over the last 50 years, major changes were made to the profile of its landscape. Rapid urbanization has led to increased impervious surface areas, including asphalt roads, concrete areas, sidewalks, and structures. The result of this increase has been a much higher level of flash flooding during heavy rainstorms and flooding events. While urban drainage systems have been designed to dispose of stormwater as rapidly and efficiently as possible in a concentrated area, it is often collected and transported elsewhere without a comprehensive strategy for the whole drainage system. As a result, drainage in many of Florida's urbanized areas is often "piecemeal" and lacking a comprehensive design, which only further exacerbates flash flooding.

The most common type of flood that happens during a thunderstorm is a flash flood. The National Weather Service defines a flash flood as flooding caused by heavy rainfall or another event, generally less than six hours. These floods can develop quickly depending on the intensity and duration of the storm, the topography of the area, soil conditions, and ground cover. The rapid urbanization within the State of Florida has increased impervious surface areas, leading to less natural drainage and more flash flooding.

Flash flood watches and warnings are issued by NWS. Sudden destruction of structures and the washout of access routes may result in the loss of life. Nearly half of all fatalities are auto related, resulting the "Turn Around, Don't Drown" campaign.¹³ If suddenly caught in a flash flood, seek higher ground if possible and abandon the vehicle before it is swept away.

4.5.6 Coastal Flooding

Coastal flooding is usually the result of a severe weather system such as a severe thunderstorm, hurricane, or tropical storm with high winds. Water driven ashore by the wind, known as a storm surge, is the main cause of coastal flooding.

Damage to structures located along the coast can be caused by storm surge, high winds, waves, heavy rains, coastal erosion, and battering by debris. Additionally, coastal flooding can damage sea walls, jetties, and the profile of the beach through erosion, which becomes costly over time. Loss of life and property damage are often more severe along the coast because a storm surge involves rising waters, wave action and accompanying winds. An example of this is Hurricane Nicole in 2022, which caused severe coastal erosion and damage to structures and homes along the coastlines of Volusia, Flagler, and St. Johns counties. Storm surge is discussed in depth in the *Tropical Cyclone Profile* above.

4.5.7 Tidal Flooding

Tides are one of the most reliable phenomena in the world. According to NOAA, tides are very long-period waves that move through the ocean in response to the forces exerted by the moon and sun. Tides originate in the ocean and progress toward the coastlines where they appear as the regular rise and fall

¹³ National Weather Service, Turn Around, Don't Drown, n.d., <https://www.weather.gov/safety/flood-turn-around-dont-drown>

of the sea surface. Tides are very predictable, and most coastal areas experience two high tides and two low tides every day.

A king tide is a non-scientific term people often use to describe exceptionally high tides, which usually occur during a new or full moon when the moon is at its perigee.¹⁴ In Florida, king tides generally occur in the fall. These tides can be more than a foot above the average high tide of that area. King tides are a normal occurrence once or twice every year in coastal areas and can cause flooding of streets and even structures. It is also important to note that weather conditions, seasonal changes, and concurrent rainfall can exacerbate the effects of king tides.

4.5.8 Riverine Flooding

Riverine flooding occurs when natural drainage systems do not have the capacity to handle the flow of runoff. Florida's low-lying topography, combined with its subtropical climate, makes it highly vulnerable to inland or riverine flooding. Inland flooding can occur without precipitation near the flooded areas due to rainfall occurring upstream. That is why inland communities can be blindsided with flooding days after a tropical storm or hurricane makes landfall.

4.5.9 Riverine Reach

A reach is a section of a stream or river along which similar hydrologic conditions exist, such as discharge, depth, area, and slope. It can also be the length of a stream or river (with varying conditions) between two stream gages, or a length of river for which the characteristics are well described by readings at a single stream gage. In practical use, a reach is any length of a stream or river. The term is often used by hydrologists when they're referring to a small section of a stream or river rather than its entire length.

Proximity to the Gulf or Atlantic Ocean, tides, and storm surge will all influence the amount of flooding within the river's reach. The influence of riverine flooding on river stage (water level) gradually decreases the further the location from the coast. Further, the influence of tides and storm surges on river stage gradually increases the flood levels in bodies of water.

4.5.10 Severe Summer Storm/Thunderstorm

According to the National Oceanic and Atmospheric Administration (NOAA), a thunderstorm is classified as severe when it contains one or more of the following: hail one inch or greater, winds gusting in excess of 50 knots (57.5 mph), or a tornado. Further, severe storms can have lightning, damaging winds, hail, tornadoes, and flooding. For a thunderstorm to form, there needs to be moisture, unstable air, and lift. Hail and/or damaging wind gusts can produce severe thunderstorms, which in turn can produce some of nature's most destructive and deadly weather. All aspects of severe thunderstorms are life-threatening. NOAA tracks weather related fatalities and lightning alone contributes to the most thunderstorm related deaths in Florida. According to the National Weather Service (NWS), Florida is the lightning capital of the United States. Florida has severe thunderstorms and non-severe thunderstorms. Below are four types of thunderstorms that develop in Florida:

¹⁴ National Oceanic and Atmospheric Administration, What is a perigean spring tide?, n.d., <https://oceanservice.noaa.gov/facts/perigean-spring-tide.html> <https://oceanservice.noaa.gov/facts/perigean-spring-tide.html> <https://oceanservice.noaa.gov/facts/perigean-spring-tide.html>

- Single-cell: Small, brief, weak storms that grow and die within an hour or so. Single-cell storms may produce brief heavy rain and lightning.
- Multi-cell: Clusters of individual cells. Individual cells usually last 30 to 60 minutes, while the system may last for many hours. Multi-cell storms may produce hail, strong winds, brief tornadoes, and/or flooding.
- Squall Line: A group of storms in a line, which can extend laterally for hundreds of miles. Squall lines include heavy precipitation, hail and strong winds. They can also produce tornadoes and waterspouts. Long-lived squall lines are known as “derechos” and can travel hundreds of miles, causing considerable damage along their path.
- Supercell Thunderstorms: A long-lived (greater than one hour) and highly organized storm feeding off an updraft (a rising current of air) that is tilted and rotating. Potentially the most dangerous form of all thunderstorm types and have produced numerous long-lived strong and violent (EF2-EF5) tornadoes, along with damaging wind, hail, and flash floods.

Florida leads the nation with the highest incidence per year (80 to 100 plus annual thunderstorm days). The impacts to residents and businesses can be severe because of Florida’s vulnerability to this hazard, specifically Broward County. Long term power outages, which can occur during a severe storm, impact the health and safety of segments of the vulnerable population. Similarly, straight-line wind and hail can cause injury and property damage.

4.5.11 Hail

Hail is precipitation in the form of irregular pellets or balls of ice more than 5mm in diameter. It is formed when updrafts carry raindrops up into the highest parts of the cloud and the supercooled liquid droplets collide. This process continues until the size of the hailstone becomes too large and falls to the ground. Hail is measured by the diameter of the stone. For reference, a hailstone one inch in diameter is roughly the size of a quarter. The State of Florida is not particularly likely to experience hail events based on historical occurrences. The Florida Hail Events Map shows the average number of hail events per year, with the highest average number of events being less than 0.5.

4.5.12 Lightning

Lightning develops during the violent circulation of air within the cumulonimbus cloud. The friction causes positive and negative charges within the storm to separate. Positive charged particles will rise while negative charged particles descend from bottom of the storm cloud to the ground. Positive charges on the ground connect with the negative charge from the cloud, resulting in an electrical transfer or lightning.

Lightning is the most lethal component of a thunderstorm. Vaisala’s Total Lightning Statistics 2022 Report shows that even though Texas had the most lightning events, Four Corners, Florida is the “lightning capital of the United States” and Florida ranks number one in lightning density (lightning events per square kilometer) at 109.84 events per km² in 2022.¹⁵ This is mostly due to Florida’s geography, and the combination of warm temperatures, humidity, and sea breezes. Additionally, Florida’s dense population

¹⁵ Vaisala X Weather, The Annual Lightning Report, 2024, <https://www.xweather.com/annual-lightning-report> Vaisala X Weather, The Annual Lightning Report, 2024, <https://www.xweather.com/annual-lightning-report> ¹⁵ Vaisala X Weather, The Annual Lightning Report, 2024, <https://www.xweather.com/annual-lightning-report>

and popularity of outdoor activities make it dangerous, and even deadly. More people are struck and killed by lightning in Florida than any other state.

4.5.13 Tornado

The NWS defines a tornado as a violently rotating column of air touching the ground, usually spawned from a thunderstorm. Wind speeds of a tornado can reach up to 300 mph and be in excess of one mile wide. In Florida, tornadoes typically form along a squall line ahead of an advancing spring cold front from the North, along the squall lines in areas where masses of warm air converge, from isolated local summer thunderstorms, and/or within a hurricane.

When survey teams from the National Weather Service examine structural damage of a tornado event, the tornado is given a value from the Fujita Scale. The Fujita Scale was developed by Dr. T. Theodore Fujita and categorizes tornadoes based on their intensity and area. The scale relates a tornado's damage to the fastest quarter-mile wind speed at the height of the damaged structure to determine its intensity. The scale ranges from EF0, with minor damages from winds ranging 65–85 mph, to EF5, with severe damages from winds more than 200 mph.

The following table provides a clear overview of key data and characteristics related to the topic discussed above.

Figure 7: The Enhanced Fujita Scale (EF Scale)

EF SCALE	
EF Rating	3 Second Gust (mph)
0	65-85
1	86-110
2	111-135
3	136-165
4	166-200
5	Over 200

Source: NOAA National Weather Service, n.d.

With the expected increase in the number of severe storms (i.e. thunderstorms) each year due to climatological factors related to climate change, it is anticipated that Broward County will experience increased tornado activity. Two unclassified tornados spawned by Hurricane Ian before it made landfall on Florida's west coast struck the neighborhood of Pasadena Lakes in east Pembroke Pines and in Davie, causing major damage. The probability of future tornado occurrences affecting Broward County is considered highly likely. According to FEMA's National Risk Index as of 2022, the Expected Annual loss for tornadoes in Broward County is \$8.8 M, with a total exposure of \$13T. While FEMA designates Broward's Historic Loss Ratio from tornadoes as Very Low, the county's expected annual loss score is relatively high at 39.69. The risk index score for tornadoes is 28.91.

4.5.14 Drought

A drought is a deficiency in precipitation over an extended period. Although droughts are a normal and recurring feature of our climate, sometimes they can endanger vegetation, animals, and even people. The

duration of droughts varies widely. They can develop quickly and last a few weeks or can persist for months or years if exacerbated by extreme heat, wind, and other climate factors. Dry conditions and droughts can often lead to cascading hazards, like brush fires or wildfires.

According to the Florida Climate Center, there are several types of droughts when focusing on climate:

- **Meteorological:** Based on the dryness (when compared to a normal or average amount) and the duration of the dry period. Region specific because climate can vary depending on geographic location, topography, etc.
- **Hydrological:** Associated with the effects of periods of below normal precipitation (snow and rainfall) on surface and ground water supplies. Can be seen in low levels in lakes and reservoirs, stream flow, and ground water wells. It takes longer periods of drought for these impacts to manifest, and extended periods of above normal precipitation to recover, depending on the severity of this type of drought.
- **Agricultural:** Links the characteristics of meteorological and hydrological drought to agricultural impacts. Focuses on precipitation and water supply shortages and how drought affects soil water deficits and evapotranspiration, as well as how susceptible crops are to drought during different stages of crop development, from planting to harvest.
- **Socioeconomic:** Associated with the supply and demand of some economic good (water, food, hydroelectric power) with elements of meteorological, hydrological, and agricultural drought. Occurs when the demand for economic good far exceeds supply because of a weather-related shortfall in water supply.

Many factors of precipitation determine whether rain will relieve a drought. For example, the timing and effectiveness of the rain. There is also a balance between precipitation and evapotranspiration that must be maintained to avoid drought. Evapotranspiration is the sum of evaporation and transpiration, which is the release of water from plant leaves. High temperatures, high winds, and low relative humidity are factors that can intensify a drought. The agricultural industry is particularly vulnerable to the impacts of drought because the crops depend on stored soil water and surface water. The State of Florida experiences cyclical drought on a regular basis. Analyzing past events, as well as the current drought conditions, has proven that the conditions have been variable over the years, affecting all regions of Florida randomly and somewhat equally. Florida experienced a destructive drought from 1998 to 2001 where farm crops were ruined, forest fires burned, and lake levels reached an all-time low. In 2006 to 2007, rainfall deficits were the largest observed since the mid-1950s, which led to severe wildfires in 2007.

While drought is a common occurrence in Florida, there has never been a Presidential Major Disaster Declaration for drought in the State of Florida. However, the Secretary of Agriculture (USDA) is authorized to designate counties as disaster designations to make emergency loans available to producers experiencing losses. Agriculture-related disasters are quite common and most counties in the U.S. have been designated as disaster areas at some time since 2012. As of 2012, a county can be designated as a disaster area when there is a severe drought. Based on the previous occurrences of drought conditions in the state, the probability of future drought events occurring over the long term with some frequency remains relatively high. As the state continues to develop, population growth increases the demand for irrigation and potable water.

Additionally, climate change increases the probability of experiencing drought-like conditions and may prolong the duration of occurrence. Drought conditions may begin to have a profound impact on the state and its residents. This hazard was determined to occur about every 5 to 10 years, giving it a Probability ranking of Likely. Drought conditions typically do not cause significant damage to the built environment, but rather drought effects are most directly felt by agricultural sectors. There are a few agricultural areas in the county that have greater exposure to drought. According to the Broward County Property Appraiser data, the areas with the most agricultural land use were the municipalities of Parkland, Coconut Creek, and Southwest Ranches, as well as south of Weston and west of Cooper City. The probability of future drought events in Broward County and South Florida is considered likely although not classified as severe in comparison to other regions.

4.5.15 Extreme Heat

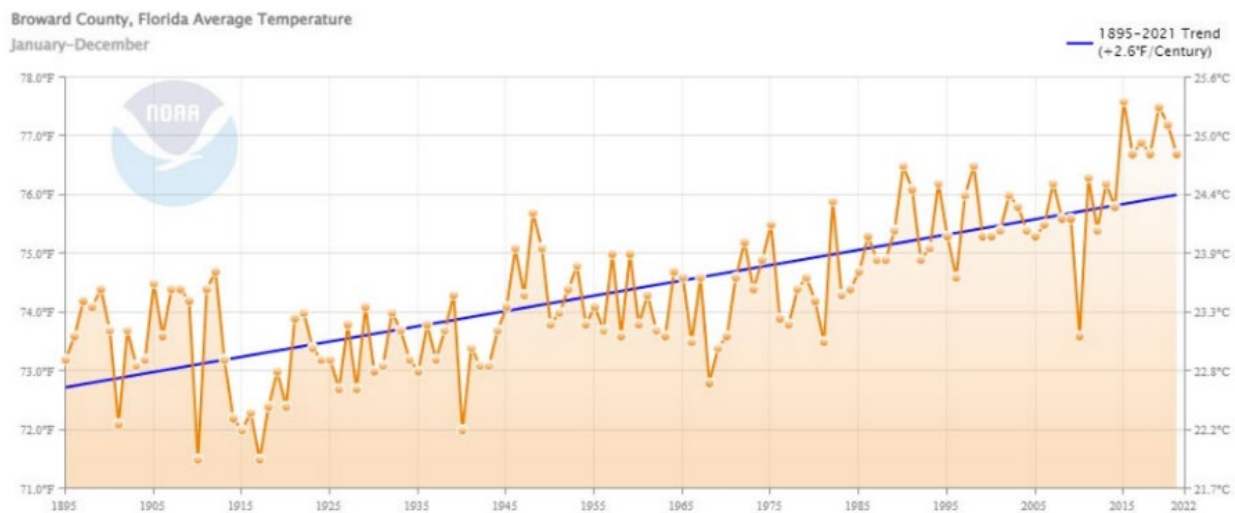
Extreme heat is defined as a period of high heat and humidity with temperatures above 90 degrees for at least two to three days. Extreme heat events occur across the state each year. This hazard is focused on the effects on the human population, while drought focuses more on environmental interests. According to the National Weather Service, heat stress is a leading cause of weather-related deaths in the United States each year. Different tools are used to measure heat and the potential for heat stress, usually measuring a combination of temperature and humidity. One of the more common techniques is the heat index, and a newer technique is the wet-bulb temperature.

Due to the subtropical climate of Florida, the entire state has historically been vulnerable to extreme heat events. Because of the proximity of large bodies of water, Florida typically experiences fewer days when the temperature reaches 100 degrees Fahrenheit or greater than many other states. However, the proximity to large bodies of water also increases the humidity, which decreases the body's ability to dissipate the heat. The hottest daytime temperatures tend to occur in the northern and interior areas of the state, away from the moderating influence of the Gulf of Mexico and the Atlantic Ocean. Urban areas, including small cities, are usually warmer than their rural surroundings because of the "urban heat island" effect. As cities develop the amount of green space tends to be replaced by increasing amounts of impervious surfaces. Also, these locations usually experience higher maximum daytime temperatures and less nighttime cooling.

In the last decade, Broward County has experienced increased vulnerability to extreme heat. Expanded development in terms of residential and commercial construction is a contributing factor, with the greatest concentration of extreme heat in the eastern section of the county. The climate of Broward County has been historically vulnerable to extreme heat events.

The below graph is a summary of the annual average temperature trends in Broward County spanning from 1865 to 2022.

Figure 8: Annual Average Temperature in Broward County from 1865 to 2022

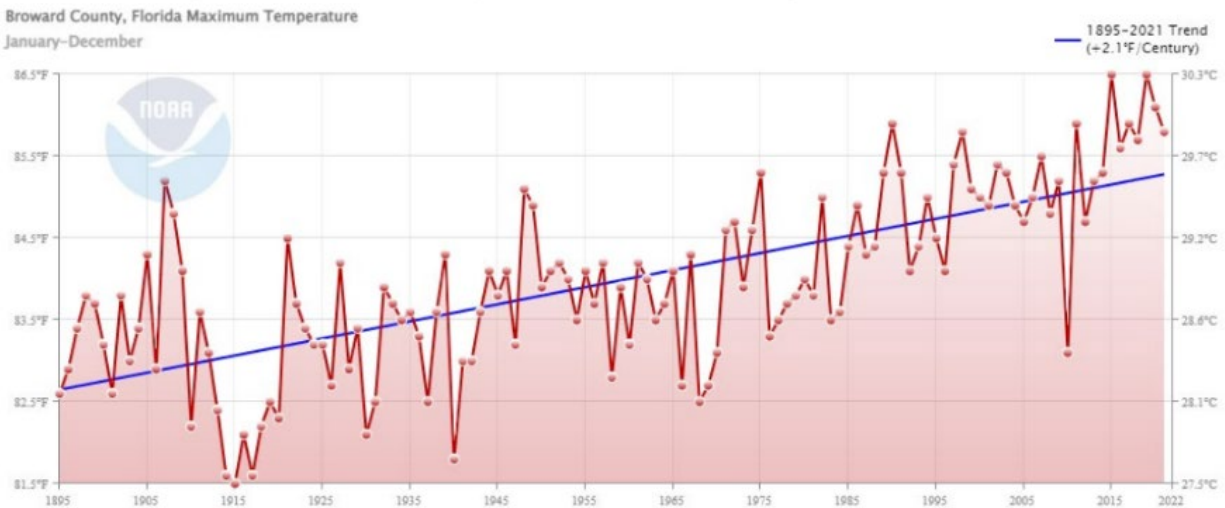


Source: NOAA National Centers for Environmental Information, Climate at a Glance: County Time Series, Average Temperature, published August 2022. <https://www.ncdc.noaa.gov/cag>

The graph above shows an increase of 3.5 degrees since 1895 of +2.6 degrees Fahrenheit per century. While temperature variability appears to be greater than the change in average temperature, the upward trend (shown by the blue line) indicates increasing temperatures over time.

To further illustrate local temperature trends, the following graph presents the maximum temperatures recorded in Broward County from 1895 to 2022.

Figure 9: Maximum Temperature in Broward County from 1895 to 2022



The graph above shows an increase of 3.2 degrees since 1895 at a rate of +2.1percent per century. While temperature variability appears to be greater than the change in temperature, the upward trend (shown by the blue line) indicates increase in maximum temperatures over time.

To provide a more detailed understanding of how temperature varies across the county, the following table highlights the average temperatures by Census Block Groups in Broward County.

Figure 10: Historical and Projected Heat Index

BROWARD COUNTY				
Heat Index above	Historical (1971-2000)	By midcentury (2036-2065)	By late century (2070-2099)	By late century, if we limit warming to 2°C (2070-2099)
90°F -----	152 days	184 days	198 days	180 days
100°F -----	34 days	128 days	162 days	109 days
105°F -----	5 days	80 days	132 days	52 days
Off the Charts	0 days	1 days	14 days	0 days

Source: Killer Heat in the United States: Climate Choices and the Future of Dangerously Hot Days

Source: Killer Heat in the United States: Climate Choices and the Future of Dangerously Hot Days

The chart above shows the probability of heat hazards occurring in the near future is highly likely.

The figure below demonstrates the average temperature by Census Block Groups in Broward County. As you can see the communities with the highest risk lie in the City of Deerfield Beach, Pompano Beach, Oakland Park, Lauderdale Lakes, Lauderhill, Fort Lauderdale, Hollywood, and Hallandale Beach.

To visualize the patterns and distribution of temperature across Broward County, the following map offers a detailed view by Census Block Group.


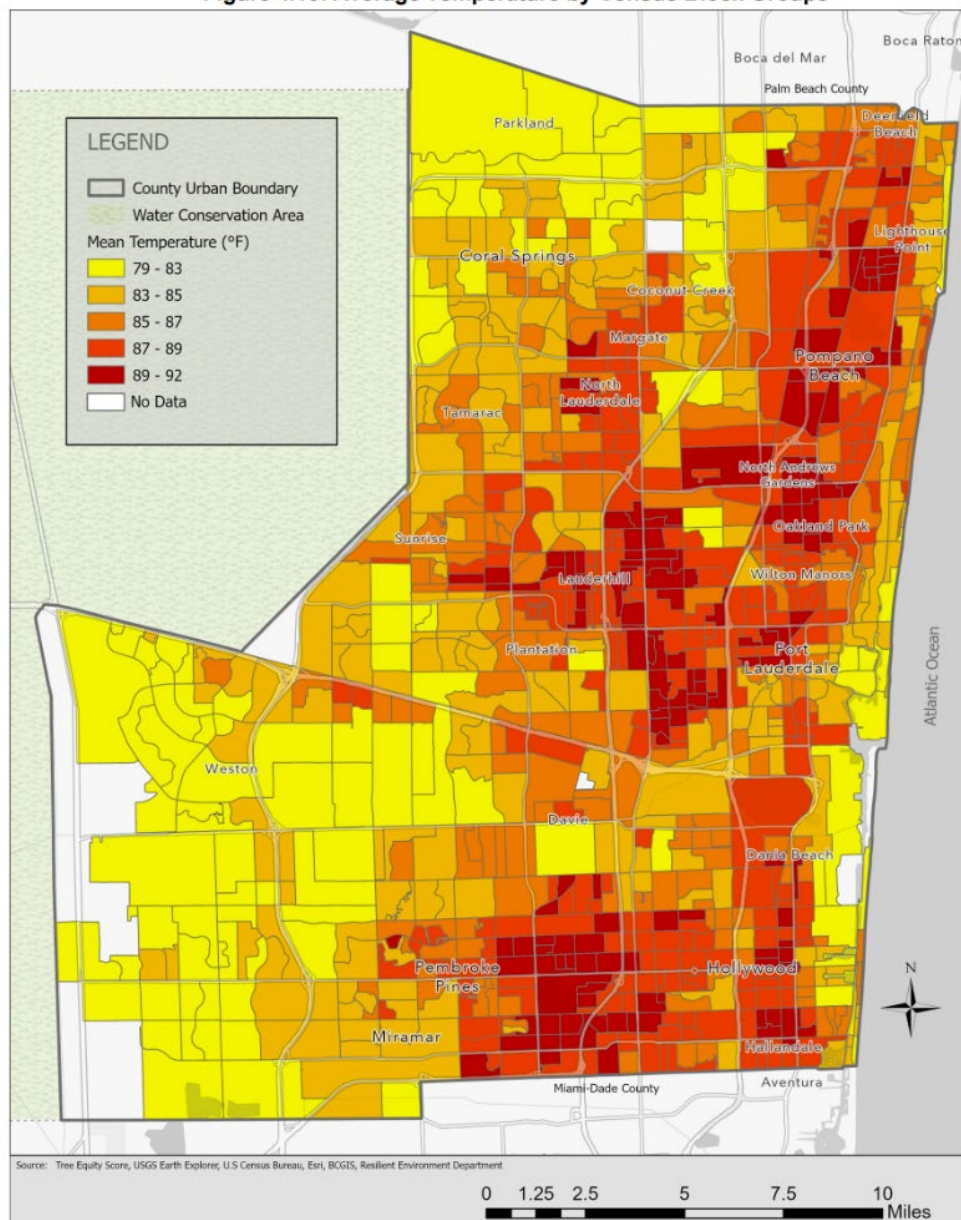
 Figure 11: Average Temperature by Census Block Groups

Figure 4.13: Average Temperature by Census Block Groups



Source: [Broward County LMS/Project Prioritization Matrix](#)

4.5.16 Severe Winter Storm/Extreme Cold

The National Weather Service defines a winter weather event as a winter weather phenomenon that impacts public safety, transportation, and/or commerce. Winter weather includes extreme cold, snowfall, ice storms, winter storms, and/or strong winds, and affects every state in the continental United States. Winter storm formation requires below-freezing temperatures, moisture, and lift to raise the moist air to form the clouds and cause precipitation. These storms move easterly or northeasterly and use both the southward plunge of cold air from Canada and the northward flow of moisture from the Gulf of Mexico to produce ice, snow, and sometimes blizzard conditions. These fronts may push deep into the interior regions of the U.S. and sometimes as far south as Florida.

4.5.17 Frozen Precipitation

Winter weather events may produce an accumulation of frozen precipitation, such as snow, sleet, and freezing rain. NWS explains the difference between the various types of [frozen precipitation](#):

- **Snowfall:** Steady fall of snow for several hours or more. Heavy snow is defined as either a snowfall accumulating to four inches in depth in 12 hours or less, or snowfall accumulation to six inches or more in depth in 24 hours or less.
- **Sleet:** Pellets of ice composed of frozen or mostly frozen raindrops or refrozen partially melted snowflakes. Heavy sleet is a relatively rare event defined as the accumulation of ice pellets covering the ground to a depth of half an inch or more.
- **Freezing Rain:** Freezing rain occurs when the layer of freezing air is so thin that the raindrops do not have enough time to freeze before reaching the ground. Instead, the water freezes on contact with the surface, creating a coating of ice on whatever the raindrops contact.

In states such as Florida, where even the smallest accumulations can cause impacts, lower thresholds are typically used to define significant winter storms and when issuing warnings or advisories. This is because of a lower capacity to respond to winter storm events. Florida homes are usually ill-equipped to handle the impacts of winter weather, often lacking adequate heating and insulation.

In South Florida, freezing temperatures can cause widespread damage to sensitive plants and crops and have been known to cause lizards and iguana to become temporarily immobilized. The NWS in Miami has issued unofficial "falling iguana" advisories during past occurrences. Fortunately, overnight temperatures rarely drop below freezing in South Florida, especially along the coasts. Inland areas are more susceptible to below freezing temperatures, primarily during the middle part of January.

4.5.18 Extreme Cold/Freeze

Frost is water vapor that becomes solid, usually forming on objects like cars, windows, and plants. It can occur when air temperatures fall below 36 degrees Fahrenheit, the wind is light, and there is sufficient moisture in the air. If a frost persists for long enough, it can lead to crop damage or loss. Frost is not a threat to the public but is a concern for the agricultural industry, particularly during Florida's citrus growing season. A freeze occurs when overnight temperatures reach at least 32 degrees Fahrenheit. A hard freeze occurs when the temperature falls below 28 degrees Fahrenheit for four hours or more. While most vegetation can survive frost, very little vegetation can survive a hard freeze. Most damage to crops occurs during a hard freeze. Additionally, homes and buildings in Florida are not typically built to withstand the impacts of hard freezes, including damage to pipes.

The NWS will issue a hard freeze watch or warning whenever this type of weather is expected. While cold fronts rarely bring snow or sleet to Florida, long lasting cold temperatures occur more often and can last for several days. Nighttime temperatures can drop below freezing for periods longer than eight hours, especially in the Panhandle.

4.5.19 Wildfire

Wildfire, or wildland fire, is an unplanned and uncontrolled fire in a natural area, such as a forest, grassland, or prairie. These fires can be caused by natural sources, such as lightning, or by human activity,

both intentional and accidental. Wildfires occur in Florida every year and at all times of the year and are part of the natural cycle of Florida's fire-adapted ecosystems. Wildfires can cause major environmental, social, and economic damages because of the possible loss of life, property, wildlife habitats, and timber. Fortunately, many of these fires are quickly suppressed before they can damage or destroy property, homes, and lives.

There are three main types of wildfires:

- Ground fires: Occurs when plant roots and other organic matter below the soil surface ignite.
- Surface fires: Occurs when dead or dry vegetation above the ground ignites. Ground fires can lead to surface fires.
- Crown fires: Occurs when fire burns through the tree canopy. This type of fire can spread quickly if wind is present.

Environmental short-term loss caused by wildland fire can include the destruction of wildlife habitat and watersheds. Long-term effects include reduced access to affected recreational areas, destruction of cultural and economic resources and community infrastructure, and vulnerability to flooding and landslides following a fire. Wildfires can be caused by humans or occur naturally. Weather conditions often determine how much a wildfire grows; dry conditions, high temperatures, and wind can cause a wildfire to become out of control very fast. Additionally, topography is important because it affects the movement of air over the ground surface and the slope and shape of terrain can change the rate of speed at which fire travels. Add in development within wildland areas and forests, and you get a perfect storm for risk to people and property.

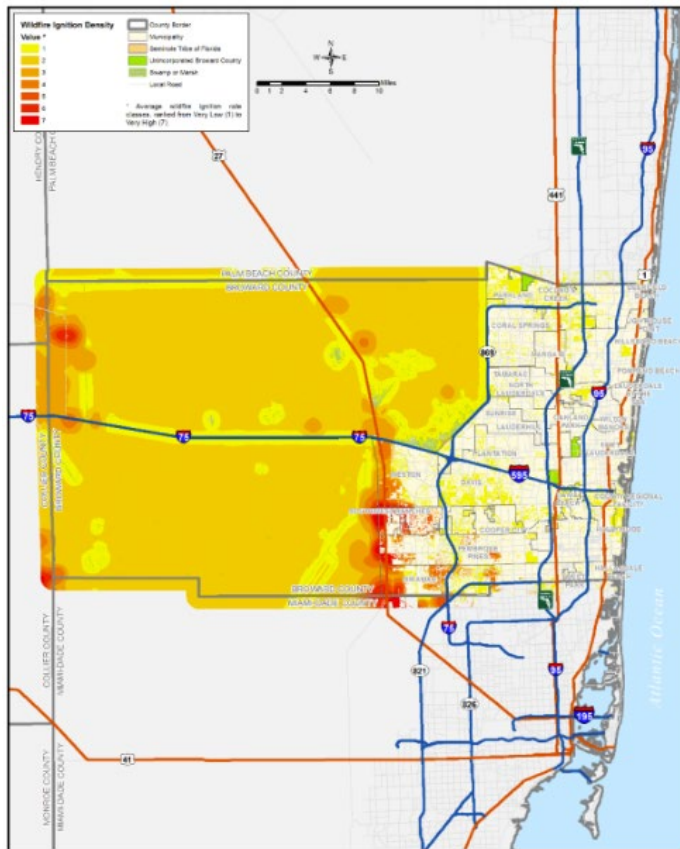
Florida has a year-round fire season, with the peak months being April and May. The dry months, combined with low humidity and high wind, tend to have the highest number of fires reported. Alternatively, the largest number of lightning-caused fires occur in July. According to the Florida Forest Service Reporting System, the annual average number of wildfires from 2018-2022 was 1,436.¹⁶ In comparison, the annual average from 2013 to 2017 was 2,414. While the trend between those two time periods show a decrease in annual occurrences, it is expected that wildfires will continue to occur annually.

The municipalities in western Broward County are at greatest risk to wildfire. They are Coral Springs, Miramar, Parkland, Pembroke Pines, Southwest Ranches, Sunrise, Tamarac, and Weston. While most of Broward County is not likely to be heavily affected directly by wildfire, the secondary effects of smoke and ash pose significant threats to air quality throughout the area. Presented below is a map of the areas within Broward County that are most at risk for wildfires.

Figure 12: Wildfire risk areas in Broward County¹⁷

¹⁶ Florida Department of Agriculture and Consumer Services, Florida Forest Service Reporting System, Fires by Causes, 2022, <https://fireinfo.fdacs.gov/fmis.publicreports/FiresByCause.aspx>
<https://fireinfo.fdacs.gov/fmis.publicreports/FiresByCause.aspx>
<https://fireinfo.fdacs.gov/fmis.publicreports/FiresByCause.aspx>

¹⁷ Southern Wildfire Risk Assessment



Source: Southern Wildfire Risk Assessment

The probability of future large wildfire events in western portions of Broward County is considered ‘likely’ particularly during drought cycles and dry conditions in the Everglades.

4.5.20 Indispensable Services

Indispensable services are those that enable the continuous operation of critical business and government functions and/or are critical to human health and safety and economic security. These services are largely operated out of critical facilities. A critical facility provides services and functions essential to a community, especially during and after a disaster.

Examples of indispensable service-providing facilities requiring special consideration include:

- Police stations, fire stations, critical vehicle and equipment storage facilities, and emergency operations centers needed for disaster response activities before, during, and after a disaster
- Medical facilities, including hospitals, nursing homes, blood banks, and health care facilities (including those storing vital medical records) likely to have occupants who may not be sufficiently mobile to avoid injury or death during a disaster
- Schools and day care centers, especially if designated as shelters or evacuation centers

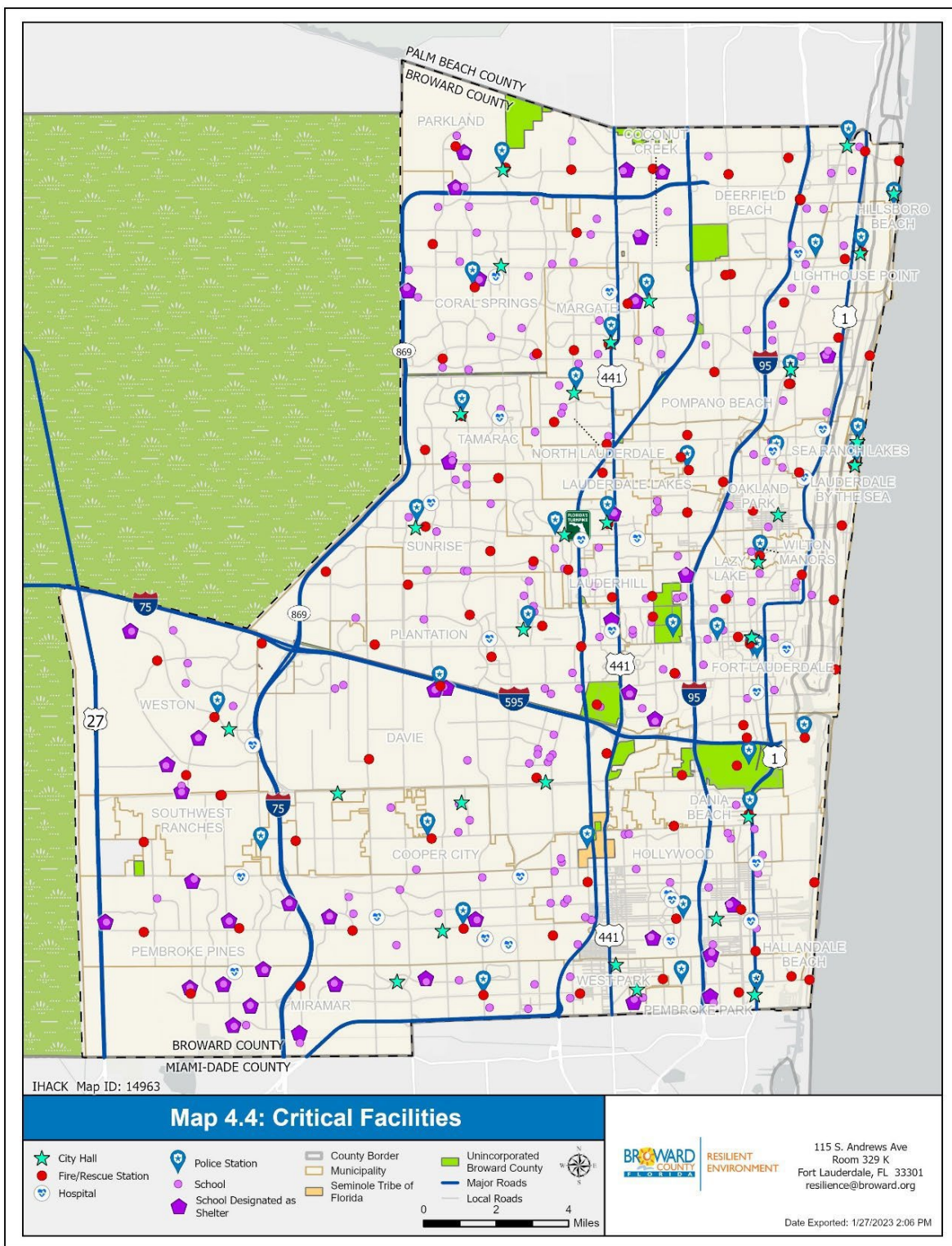
- Power generating stations and other public and private utility facilities vital to maintaining or restoring normal services to flooded areas before, during, and after a flood
- Drinking water and wastewater treatment plants
- Structures or facilities that produce, use, or store highly volatile, flammable, explosive, toxic, and/or water-reactive materials ¹⁸

State facilities are the facilities that are owned (or leased/operated) by the State of Florida. Some facilities are critical or valuable in ways that cannot necessarily be expressed in dollars. Utilities and medical facilities are such facilities. State-owned utility and medical facilities have been identified in hazard areas of the state and will be presented in this section.

Determining what is “critical” or not is sometimes a matter of opinion. While utilities and medical facilities are generally agreed upon as critical, some other facilities are key to operations, necessary to maintaining emergency services, and essential for providing necessary basics. A facility that helps keep roads open and clear throughout the year, whether the sun is shining or blizzards abound, is an example of key facilities. Though often overlooked, but certainly essential for keeping roads open, is the facility where salt or brine is stored so that it can be used to treat roads in severe winter weather and keep them open. To provide clear insight into the distribution of essential infrastructure across Broward County, the following map highlights the locations of critical facilities vital for disaster response and community resilience.

¹⁸ Critical Facility, FEMA.gov, 2020, <https://www.fema.gov/about/glossary/critical-facility>

Figure 13: Map of Broward County Critical Facilities



Source: Broward County GIS 2022

4.6 Vulnerability of Critical Facilities by Hazard

Providing an overview of key infrastructure assets, the following table lists critical facilities essential to Broward County's disaster preparedness and response.

The GIS-based analysis for critical facilities identified 78 critical facilities throughout Broward County as being potentially at-risk to flood events. These include 24 city halls, 80 fire stations, 28 police stations, 14 hospitals, and 201 schools (26 of which are designated as either county or local shelters).

4.6.1 Tropical Cyclone

Within Broward County, there are 14,665 acres of land within the coastal hazard zone (CHZ) and an additional 237 acres in the hurricane vulnerability zone (HVZ). These zones are primarily located on the barrier islands and inland up to a couple of miles. Incorporated coastal communities occupy most of these zones.

4.6.2 Flooding

Much of Broward County is in a flood zone. Currently, 193,965 acres are at risk from flooding, but this does not include the Everglades Conservation Area which naturally floods. Of the 193,965 acres, 64.8%, or 125,750 acres are in residential use. Also, 33,981 flood-prone acres, or 17.5%, of the floodplain is currently undeveloped. An additional 9,934 acres besides those in the Everglades Conservation Area are designated as parks, conservation areas, and golf courses.

Using flood-prone areas for parks and conservation purposes is a strong flood mitigation strategy since development can be limited in these areas and the natural hydrology left in place. The Broward County Mitigation Plan works to ensure the protection of critical facilities by restricting or prohibiting constructing critical facilities in high-hazard areas (which includes 100-year and 500-year floodplains).

4.6.3 Drought/Extreme Heat

Water shortages during times of drought (and the degree of regulatory use restrictions) can have a potentially significant impact through Broward County and possibly higher economic costs for water supply. As a secondary effect, drought events increase the threat of wildfire in South Florida (and particularly the Everglades).

4.6.4 Severe Winter Storm/Extreme Cold

It is not anticipated that severe winter storm/extreme cold will significantly impact critical facilities in the County.

4.6.5 Wildfire

Due to climate change, wildfire poses an increased risk to Broward County, particularly in the less developed areas to the west. Small wildfire-prone areas are found throughout the County, although there is a concentration along Route 27. Single-family homes are found in 46.9% of the wildfire susceptible acres, generally scattered in isolated areas south of Highway 75 and east of Route 27. These homes are most likely vulnerable to wildfires since single-family residential neighborhoods outside of urban areas generally have a lot of vegetation that can allow a fire to spread between homes.

5

Connection of proposed
programs and projects
to unmet needs and mitigation
needs

5. Connection of proposed programs and projects to unmet needs and mitigation needs

Broward County's unmet needs assessment has identified housing and infrastructure as areas of highest priority, with estimated housing recovery needs ranging from \$100 million to \$200 million and infrastructure needs totaling \$7,508,435.70. In response to these significant impacts, the County is focusing on rehabilitating and developing new affordable multi-family housing, supporting residential recovery, implementing mitigation measures, and advancing resilient infrastructure projects. The overarching goal is to create safe, resilient, and accessible housing solutions that specifically serve low- and moderate-income residents, as well as other vulnerable populations, while ensuring that housing and infrastructure improvements are designed to withstand future storm events.

The following table outlines the CDBG-DR program's allocation amounts and corresponding funding thresholds by eligible cost category.

Table 29: CDBG-DR Program Allocation and Funding Thresholds

Eligible Cost Category	CDBG-DR Allocation Amount	% of CDBG-DR Allocation	% of Unmet Need
Administration (5% cap)	\$1,461,100	5%	
Planning (15% cap)	\$4,383,300	15%	
Multifamily Affordable Housing New Construction	\$2,967,000	44%	100%
Multi-Family Rental Reconstruction and Rehabilitation	\$4,566,200	16%	
Voluntary Home Buyout for single-family (TBD on Needs Assessment)	0%	0%	
Single Family Rehabilitation (Mitigation Set-Aside)	\$2,922,200	10%	
Infrastructure (Mitigation Set-Aside)	\$2,922,200	10%	
Total	\$29,222,000	100%	

5.1 Allocation and Award Caps

5.1.1 General Exception Criteria

In the implementation of these programs, Broward County is responsible for ensuring that the grant expenditures are allowable, reasonable, necessary, and cost effective. The County will develop program policies and procedures which will provide the framework for the implementation of each program. The policies will also establish award caps, if applicable and exception criteria to those caps. It is anticipated that exceptions could be made to comply with federal accessibility standards or to reasonably accommodate a person with disabilities.

At the time of submission, maximum award amounts for the rental rehabilitation program have not yet been set. When the County sets the award cap, the Action Plan will be amended in order to capture the amount. Should data and program circumstances require the need for a future change in the amount or exception criteria, the Action Plan will be amended accordingly.

5.1.2 Administration

Broward County will allocate five percent of the total grant award for administration which has been allowed through the Universal Notice. This funding is allocated for the creation and management of the CDBG-DR programs, including general grant administration, compliance monitoring, performance tracking, management of the Disaster Recovery Grant Reporting System (DRGR), quarterly reports, and subrecipient or contractual agreements as necessary. This is the total amount for administration throughout the six-year life cycle of the grant.

To provide greater clarity on administrative funding, the following table outlines the allocation for CDBG-DR program administration activities.

Table 30: Administration Activity Overview

Eligible Cost Category	CDBG-DR Allocation Amount	% of CDBG-DR Allocation
Administration Total:	\$1,461,100	5%
Total	\$1,461,100	5%

5.1.3 Planning

Broward County will allocate fifteen percent of the total grant award for planning activities, as allowed in the Universal Notice. This amount is representative of the total amount for the 6-year life cycle of the grant. The objectives of the planning activity are utilized for program development, capacity building, monitoring activities, required environmental studies and assessments. Planning also includes data gathering for the Draft Action Plan, consultation with stakeholders, and housing assessments (if needed). The Action Plan can be amended at a later date to reallocate planning funds directly into programs as program needs become clearer during the life of the grant.

The following table presents an overview of CDBG-DR planning allocation amounts and percentages.

Table 31: Planning Activity Overview

Eligible Cost Category	CDBG-DR Allocation Amount	% of CDBG-DR Allocation
24 CFR 570.205(a)		
Planning Total:	\$4,383,300	15%
Total:	\$4,383,300	15%

5.1.4 Housing

Broward County is facing a significant shortage of affordable rental housing even before the 2023 storms, however this challenge has been exacerbated by widespread storm-related damage and displacement. This need is documented in the County's Unmet Needs Assessment and underscores the importance of accelerating the delivery of new affordable housing units.

The following table provides a detailed overview of the allocation of CDBG-DR funds across housing activity categories.

Table 32: Housing Activity Overview

Eligible Cost Category	CDBG-DR Allocation Amount	% of CDBG-DR Allocation
Multi-Family Affordable Housing New Construction	\$12,967,000	44%
Multi-Family Rental Reconstruction and Rehabilitation	\$4,566,200	16%
Voluntary Home Buyout for Single-Family (TBD on Needs Assessment)	\$0	\$0
Single Family Rehabilitation (Mitigation Set-Aside)	\$2,922,200	10%
Total:	\$20,455,400	70%

5.1.5 Rental Housing Recovery Program

The Rental Housing Recovery Program is designed to increase the supply of safe, decent, and affordable rental housing for low-and moderate-income households. The eligible activities include clearance, demolition, removal, reconstruction, new construction, and rehabilitation of multi-family buildings and all applicable waivers identified in the Allocation Notice.

This program will support the construction of new multifamily rental housing units to expand the inventory of affordable rental housing and to incorporate sustainable and resiliency features. The County will promote equitable access to housing for vulnerable populations, including extremely and very low-income households and will encourage mixed-income and inclusive community development.

The County will implement this program throughout Broward County, excluding properties located within the city limits of Fort Lauderdale. Eligible applicants include for-profit developers, non-profit developers, Community Housing Development Organizations, and public housing authorities acting in a development

capacity. Comprehensive outreach efforts will be conducted to ensure that all potential applicants are informed of the program and its requirements.

Priority for rental units will be afforded to households affected by recent storms and have unmet needs. The anticipated maximum allowable rent for units will be established as the lower amount between fair market rent and 30% of 80% of the area median income (AMI). Priority consideration, Rent limits, eligibility, and other program requirements will be detailed in program policies and procedures.

Broward County will serve as the lead agency for all environmental reviews per 24 CFR 58.4(b)(2).

Eligibility criteria for this program include:

- Must be a for-profit developers, non-profit developers, Community-Housing Development Organizations, and public housing authorities (acting as a developer)
- Must be registered in the System for Award Management (SAM)
- Must provide evidence of site control
- Must provide evidence of proper zoning or zoning change in progress
- Must submit a completed application within the application period and with all required documents submitted
- Applicant must not have active litigation
- A minimum of 51% of the units must set-aside for LMI households
- Projects must be located within flood-impacted Broward County jurisdictions, however not in the City of Fort Lauderdale
- Priority for tenancy will be given to households directly impacted by the disaster. A tenant selection plan will be developed as part of the program design process and communicated to the public in the policy guidelines.

Scoring Criteria:

- Organizational capacity and experience
- Serves % of very and extremely low-income households
- Shovel-readiness
- % of leveraged funding (based on approval status, not LOIs)
- Cost effectiveness (demonstrated by underwriting)

Mitigation Measures: All new construction will be required to integrate mitigation measures into project scope. Mitigation activities funded for replacement housing will increase resilience to disasters or eliminate the long-term risk of loss of life, injury, damage to and loss of property, and suffering and hardship by lessening the impact of future disasters. This will increase the supply of disaster-resistant housing for all income groups, including individuals with disabilities and seniors.

Reducing Impediments for Assistance: The County is committed to ensuring access to disaster recovery assistance for all disaster-impacted individuals. The County will establish requirements for the number of accessible units and deeply affordable units based on project size. To the greatest extent possible, application processes will be streamlined to reduce complexity. Targeted outreach campaigns will be conducted in coordination with trusted local organizations in disaster-impacted communities to ensure special needs populations, populations with disabilities, seniors and others receive information and

updates on the program. The County will utilize the full mitigation set aside to ensure mitigating measures are incorporated into the housing construction.

5.2 Voluntary Buyout and Acquisition Program

Broward County will offer voluntary buyouts or acquisition of residential properties damaged by the April 2023 storms. The County will emphasize properties located in areas of elevated flood risk or in situations where the location supports broad-scale resilience or mitigation to future disasters. All properties that are acquired through buyouts or acquisitions will be subject to the requirements of the CDBG-DR program. These requirements require that the land be maintained as open space, used for recreational purposes, or be utilized for flood mitigation. Properties which are through other eligible acquisition may also be subject to the same land use restrictions. Broward County also anticipates providing relocation or safe housing incentives in order to facilitate voluntary transitions to lower-risk areas. The County will develop policies and procedures for this program to describe the required end land use of the property as well as the specific criteria and implementation approach.

National Objective: LMH – 24 CFR 570.208(a)(3); LMI Area Benefit (LMA)- 24 CFR 570.208(a)(1)

Connection to Unmet Needs: Broward County will acquire residential properties which sustained damage from the April 2023 storms. These properties must be located within floodways, floodplains, or other areas identified as having a high risk of future storm damage (disaster risk reduction areas). The primary objective of the program is to relocate Broward County residents out of harms way and to convert the acquired properties into open space (parks), recreational use (such as a soccer field), or flood mitigation purposes in order to reduce the impact of future disasters on the Community.

Lead Agency: Broward County will be responsible for administering the program. The County will also serve the environmental responsible entity to ensure the project meets environmental requirements provided under 24 CFR 58.

Eligible Geographic Areas: Broward County excluding the City of Fort Lauderdale

Other Eligibility Criteria: All properties which are eligible for voluntary buyout or acquisition under this program include:

- Properties located in a disaster risk reduction area designated by the County for strategic risk reduction, resilience enhancement, or increased resiliency. The County will define these locations in their program policies and procedures.

Mitigation Measures: All properties acquired through the voluntary buyout and acquisition program will be utilized following the requirements provided in the Federal Notice. The properties acquired will be dedicated for uses which support long-term risk reduction, eligible uses include: open space, flood mitigation, or recreational purposes. If any alternative uses are proposed the County will define it in their program policies and procedures.

Reducing Impediments for Assistance: This program will be made available to all residents and owners of properties in Broward County who meet the requirements of the program. These program policies will be published on their website, and communication assistance will be provided as necessary. All interested property owners in the County will be able to apply for the program. The County intends to support broad

outreach in order to support effective program participation.

5.3 Residential Recovery and Repair Program

This program will carry out housing repair, reconstruction and elevation as a response to the April 2023 flood. All newly constructed, replaced, or repaired housing units will incorporate mitigation measures to reduce damage in future storm events. Activities funded under this program include:

- Repairing existing structures, to bring the property up to current code.
- Making energy efficiency improvements through insulation, updated windows and doors and other measures.
- Incorporating accessibility features as necessary.
- Repairing or replacing damaged components of the home including damaged roofs, windows, flooring, water systems, air conditioning, electrical, plumbing systems, and septic tanks.
- Demolishing and rebuilding a home as needed and in the substantially the same manner including elevating homes which are damaged in special flood hazard areas.
- Demolishing unsafe and blighted housing units.
- Reimbursing eligible costs for repairing, reconstruction or demolished homes which were damaged by the April 2023 storms.

The County will develop program policies and procedures which will explain how in the implementation of this program the County will meet all applicable HUD, state, and local building codes and requirements. In the event that a home is designated as ‘not suitable for repair’ the County will explain in the program policies and procedures. The County will also explain eligibility for reconstruction or replacement assistance as needed. The County is committed to meet the eligibility requirements of the CDBG-DR program, such as verification of storm damage, income qualification ownership etc. and will be subject to the availability of funds. Only properties damaged by the April flood will be considered for eligibility unless activities are mitigation in nature and funded under mitigation.

National Objective: Low and Moderate Income Housing (LMH-24 CFR 570.208(a)(3), Elimination of Slum or Blight (24 CFR 570.208(b)(2), and Urgent Need (24 CFR 570.208(c)),

Lead Agency and Distribution Model: Broward County is the lead entity who is responsible for administering this program. The City will also serve as the environmental entity for this program and meet all the environmental review requirements at 24 CFR Part 58.

Mitigation Measures: This program will rehabilitate, replace, and reconstruct homes in a manner which supports resiliency measures and decreases damage to future disasters. The County will incorporate mitigation measures in construction activities when it is determined to be necessary and cost reasonable and will be in accordance with Broward County and Florida Building Codes. The County will explain which activities they will incorporate into this program that will meet the requirements of the mitigation set aside. This will be described in the programmatic policies and procedures.

Maximum amounts per Beneficiary: The County will describe the maximum amount per beneficiary and how they will address exceptions to this maximum amount in the programmatic policies and procedures.

Reducing Impediments to Assistance: This program is available to all Broward County homeowners who were impacted by the April 2023 floods and meet the program eligibility requirements. The County will make the application process accessible to all potential applicants and will facilitate communication assistance as needed.

5.4 CDBG-DR Mitigation Set-Aside

Table 36: CDBG-DR Mitigation Set-Aside Programs Overview

Eligible Cost Category	CDBG-DR Mitigation Set Aside Allocation Amount	% of CDBG-DR Allocation for LMI Benefit	Does this Program have tie back to the disaster?
CDBG-DR Mitigation Set-Aside Standalone Program Number One	\$3,812,000	15% set-aside	Yes
Total:	\$3,812,000	15% set-aside	

5.4.1 Compliance with Applicable Statutes

Broward County will allocated CDBG-DR funds in accordance with all relevant statutes. Guidance for compliance with these laws and regulations is outlined in Section 109 of the Housing and Community Development Act (42 U.S.C. 5309), Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et. Seq.), Title VII of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.), Title VIII of the Civil Rights Act of 1968 (The Fair Housing Act, 42 U.S.C.3601-19), Sections 504 and 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794), the Americans with Disabilities Act of 1990 (ADA) (42 U.S.C. 12131 et. Seq.), and the Personal Responsibility and Work Opportunity Reconciliation Act of 1996.

The County will meet or exceed the HUD requirement to expend at least 70% of funding towards activities that benefit low-and moderate-income households or areas. The program(s) will be designed to provide necessary ADA accommodations to support the recovery needs of individuals with disabilities. As mentioned, these programs will ensure access for all residents, including vulnerable populations.

5.4.2 Minimizing Displacement and Ensuring Accessibility

Broward County will make efforts to ensure that all activities undertaken with CDBG-DR funds will not displace or disrupt residents or businesses as much as possible. The County's recovery program(s) will be structured in a way to minimize direct and indirect displacement of persons or businesses identifying solutions that allow businesses and persons to stay in their homes or neighborhoods. If displacement occurs, the County will assist displaced persons and businesses through the relocation process following the Uniform Relocation Act and will draft Optional Relocation Act policies as needed.

5.5 Infrastructure

Table 37: Infrastructure Program Overview

Eligible Cost Category	CDBG-DR Allocation Amount	% of CDBG-DR Allocation for LMI Benefit	Does this Program have tie back to the disaster?
CDBG-DR Mitigation Set-Aside Standalone Program Number One	\$3,812,000	100%	No
Total:	\$3,812,000	100%	

Broward County will fund an infrastructure program which will fund the restoration and strengthening of key infrastructure systems that were damaged during the April 2023 storm. The program will also provide funding for infrastructure projects that support disaster recovery and long-term community resilience. Eligible activities may include both recovery improvements and mitigation components. Projects that are able to leverage funding will also be included. The program's intent is to address infrastructure needs in Broward County, with the exception of Fort Lauderdale.

Eligible Activities:

- Acquisition of real property, 24 CFR 570.201(a)
- Public facilities and improvements, 24 CFR 570.201(c)
- Clearance, demolition, rehabilitation and reconstruction of buildings. 24 CFR 570.201(d)
- Payment of non-federal share 24 CFR 570.201(g)

National Objective(s): LMA 24 CFR 570.208(a)(1), LMC 24 CFR 570.208(a)(2)

Lead Agency and Distribution Model: Broward County will directly administer the program. Broward County will also serve as the responsible entity for environmental review following 24 CFR Part 58.

Eligible Geographic Area: Broward County excluding the City of Fort Lauderdale

Other Eligibility Criteria: Eligible projects must be:

- Public Infrastructure designed to address a clearly defined unmet or mitigation need
- Supported by documentation of unmet need and is not duplicative of other funding sources
- Able to meet a HUD National Objective and be an eligible activity
- Meet the criteria established in the Broward County infrastructure guidelines.

If Broward County determines that program priorities are needed those will be addressed via an amendment to the action plan, notification to the public, and an update to program policies and procedures.

Mitigation Measures: The program will implement measures to incorporate mitigation measures which will address the unique hazards facing Broward County. The County will promote resilience through integration of mitigation measures, implementing activities and strategies which reduce future disaster risk.

Reducing Impediments for Assistance: Broward County will support residents who may face barriers to accessing CDBG-DR programs, including awareness of programs, accessibility challenges, language assistance when needed and public outreach of the program(s).

5.6 Connection of proposed programs and projects to unmet needs and mitigation needs.

5.6.1 Overview

CDBG-DR applicable notices, 90 FR 4759 and 90 FR174 (Universal Notice including sections I through V and appendices A through C) require a grantee to allocate at least 80% of the funds to address unmet needs in the most impacted and distressed (MID) areas identified by HUD. Broward County was identified as MID and received a direct allocation of \$29,222,000. Fifteen percent of these funds, or \$3,812,000, are required to be used for mitigation measures to reduce the risk and damage from future storms.

In considering the unmet, mitigation, and local needs, and the limited amount of CDBG-DR funds, the Draft Action Plan proposes to use the funds to address the needs of rental housing. Mitigation activities will be incorporated into the rental housing repair program and specific guidelines for measuring resiliency will be developed and incorporated into the programmatic policies and procedures.

5.7 CDBG-DR Requirements

5.7.1 National Objectives

All Broward County programs will align with one of the CDBG's three primary national objectives: benefiting low- and moderate-income (LMI) persons, aiding in the prevention or elimination of slums or blight, and addressing urgent needs that pose a serious and immediate threat to the health or welfare of the community. These objectives ensure that the funds are used effectively to support equitable recovery and long-term community resilience.

5.7.2 Low to Moderate- Income

The Universal Notice requires that at least 70% of the program funds will benefit LMI persons or households. Activities under this objective can include:

- **Area Benefit (LMA))** (24 CFR 570.208(a)(1): Activities that benefit all residents of a particular area, where at least 51 percent of the residents are LMI persons.
- **Limited Clientele (LMC):** Activities that benefit a specific group of people, at least 51 percent of whom are LMI persons.
- **Housing (LMH)** (24 CFR 570.208 (a) (3): Activities that provide or improve permanent residential structures, which will be occupied by LMI households.
- **Housing Incentive (LMHI):** Activities tied to voluntary buy out of housing owned by LMI households.
- **Jobs (LMJ):** Activities that create or retain jobs, at least 51 percent of which will be made available to or held by LMI persons

5.7.3 Urgent Need

This objective is for activities that address serious and immediate threats to the health or welfare of the community that are of recent origin or recently became urgent. This includes:

- **Urgent Need (UN):** Activities that address immediate needs that pose a serious threat to the health or welfare of the community. The conditions must have arisen or become urgent within the last 18 months.
- **Urgent Need Mitigation (UNM):** Activities that mitigate urgent needs and are focused on reducing the risk of life and property from future disasters. Activities must be measurable and verifiable and benefit the community.

5.7.4 Slum and Blight

Activities under this objective must address conditions causing slums or blight in a designated area, on a spot basis, or as part of an urban renewal strategy

- **Slum and Blight Area (SBA):** The area must be officially designated as slum or blighted under state or local law and be in a general state of deterioration.
- **Slum and Blight Spot Basis (SBS):** This category targets specific conditions of blight or physical decay on a spot basis, not necessarily within a designated slum or blighted area
- **Slum and Blight Urban Renewal (SBR):** If using this criteria, Broward County must create an Urban Renewal Plan and maintain it in their project files. The project description must also provide documentation that the activity meeting this national objective was required in order to meet the goals outlined in the renewal plan. It is not anticipated that Broward County will use this national objective.

The specific national objective for each program will be included in the programmatic policies and procedures for each program.

6

Allocation, Award Caps, and Program Description

6. Allocation, Award Caps, and Program Description

6.1 General Exception Criteria

Table 33: Grantee Administration Activity(ies) Overview

Eligible Cost Category	CDBG-DR Allocation Amount	% of CDBG-DR Allocation
Administration Total:	\$1,461,100	This percentage cannot exceed 5% of the total allocation, plus 5% of program income.
Total	\$1,461,100	5%

6.2 Planning

Table 34: Grantee Planning Activity(ies) Overview

Eligible Cost Category	CDBG-DR Allocation Amount	% of CDBG-DR Allocation
Planning Total:	\$4,383,300	This percentage cannot exceed 15% of the total allocation.
Total	\$4,383,300	15%

6.3 Housing

Table 35: Housing Programs Overview

Eligible Cost Category	CDBG-DR Allocation Amount	% of CDBG-DR Allocation for LMI Benefit
Housing Program Total:	\$19,565,600	100%
Total	\$19,565,600	66.95%

6.4 CDBG-DR Mitigation Set-Aside

Table 36: CDBG-DR Mitigation Set-Aside Programs Overview

Eligible Cost Category	CDBG-DR Mitigation Set Aside Allocation Amount	% of CDBG-DR Allocation for LMI Benefit	Does this Program have tie back to the disaster?
CDBG-DR Mitigation Set-Aside Standalone Program Number One	\$3,812,000	15% set-aside	Yes
Total:	\$3,812,000	15% set-aside	

6.4.1 Compliance with Applicable Statutes

Broward County will allocated CDBG-DR funds in accordance with all relevant statutes. Guidance for compliance with these laws and regulations is outlined in Section 109 of the Housing and Community Development Act (42 U.S.C. 5309), Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et. Seq.), Title VII of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.), Title VIII of the Civil Rights Act of 1968 (The Fair Housing Act, 42 U.S.C.3601-19), Sections 504 and 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794), the Americans with Disabilities Act of 1990 (ADA) (42 U.S.C. 12131 et. Seq.), and the Personal Responsibility and Work Opportunity Reconciliation Act of 1996.

The County will meet or exceed the HUD requirement to expend at least 70% of funding towards activities that benefit low-and moderate-income households or areas. The program(s) will be designed to provide necessary ADA accommodations to support the recovery needs of individuals with disabilities. As mentioned, these programs will ensure access for all residents, including vulnerable populations.

6.4.2 Minimizing Displacement and Ensuring Accessibility

Broward County will make efforts to ensure that all activities undertaken with CDBG-DR funds will not displace or disrupt residents or businesses as much as possible. As possible, the County's recovery program(s) will be structured in a way to minimize direct and indirect displacement of persons or businesses favoring solutions which allow businesses and persons to stay in their homes or neighborhoods. If displacement occurs, the County will assist displaced persons and businesses through the relocation process following the Uniform Relocation Act and will draft Optional Relocation Act policies as needed.

6.5 Infrastructure

Table 37: Infrastructure Program Overview

Eligible Cost Category	CDBG-DR Allocation Amount	% of CDBG-DR Allocation for LMI Benefit	Does this Program have tie back to the disaster?
Infrastructure Program	Enter value in terms of \$ here.	Enter value in terms of % here.	Yes
Total:	Enter value in terms of \$ here.	Enter value in terms of % here.	

Broward County will fund an infrastructure program which will fund the restoration and strengthening of key infrastructure systems that were damaged during the April 2023 storm. The program will also provide funding for infrastructure projects that support disaster recovery and long-term community resilience. Eligible activities may include both recovery improvements and mitigation components. Projects that are able to leverage funding will also be included. The program's intent is to address infrastructure needs in Broward County, with the exception of Fort Lauderdale.

Eligible Activities:

- Acquisition of real property, 24 CFR 570.201(a)
- Public facilities and improvements, 24 CFR 570.201(c)
- Clearance, demolition, rehabilitation and reconstruction of buildings. 24 CFR 570.201(d)
- Payment of non-federal share 24 CFR 570.201(g)

National Objective(s): LMA 24 CFR 570.208(a)(1), LMC 24 CFR 570.208(a)(2)

Lead Agency and Distribution Model: Broward County will directly administer the program. Broward County will also serve as the responsible entity for environmental review following 24 CFR Part 58.

Eligible Geographic Area: Broward County excluding the City of Fort Lauderdale

Other Eligibility Criteria: Eligible projects must be:

- Public Infrastructure designed to address a clearly defined unmet or mitigation need
- Supported by documentation of unmet need and is not duplicative of other funding sources
- Able to meet a HUD National Objective and be an eligible activity
- Meet the criteria established in the Broward County infrastructure guidelines.

If Broward County determines that program priorities are needed those will be addressed via an amendment to the action plan, notification to the public, and an update to program policies and procedures.

Mitigation Measures: The program will implement measures to incorporate mitigation measures which will address the unique hazards facing Broward County. The County will promote resilience through integration of mitigation measures, implementing activities and strategies which reduce future disaster risk.

Reducing Impediments for Assistance: Broward County will support residents who may face barriers to accessing CDBG-DR programs, including awareness of programs, accessibility challenges, language assistance when needed and public outreach of the program(s).

7

General Information

7. General Information

7.1 Overview

In addition to administering CDBG-DR funds, the Housing Finance Division (HFD) of Broward County is responsible for scheduling, advertising, and conducting community and stakeholder outreach, public meetings and hearings relative to the CDBG-DR 2023/2024 Storms allocation. Broward County is committed to providing extensive community outreach to effectively engage, empower and inform stakeholders and residents throughout the disaster recovery process.

All information gathered for the Draft Action Plan will be compliant with the procedures outlined in the Broward County Citizen Participation Plan (CPP). The CPP outlines all the processes for: public notice and advertisements, meetings, publications of plan, amendments to plans, and reports, citizen comments and feedback, accessibility of meetings, documents, and the disaster recovery website, consultation with area agencies, public access to data sources, environmental review; and complaints. The CPP, which aligns requirements established in [24 Code of Federal Regulations \(CFR\) Part 91.105](#), is available on the Broward County website.

Broward County allows citizens, stakeholders, local governments, and Public Housing Agencies (PHA) to participate in a minimum 30-day public comment period regarding the use of CDBG-DR funds.

7.2 Citizen Participation

The county uses various outreach methods and the CPP to encourage public involvement, mainly through scheduled meetings, hearings, and contact with civic associations. Broward County holds widely publicized community meetings to review CDBG-DR Action Plans, evaluate performance, and discuss any amendments, ensuring transparency and resident involvement. All meetings and public hearings are advertised in compliance with HUD, state, and local regulations. Public notices for environmental and project-related matters are also included in this process.

Broward County HFD employs a dual strategy to foster meaningful citizen participation in program planning and decision-making. First, it encourages the formation of civic associations within impacted communities, which serve as advisory groups that gather annually to review programs, offer input, and make policy recommendations to ensure community needs are met. Public meetings hosted by these associations provide opportunities for community feedback. Second, HFD collaborates directly with residents during needs assessments and project selection phases, making proposed initiatives available for public review and comment. Additionally, public housing residents are invited to participate through their local municipalities or nearby civic associations, ensuring inclusive input in the planning process.

7.3 Consultation on Developing the Action Plan

Community outreach and consultations occurred prior to the publication of the Draft Action Plan. Broward County organized a series of comprehensive consultations to collect meaningful feedback from disaster-impacted communities. These outreach efforts included public meetings and a targeted survey designed to engage residents and local organizations directly affected by the storm events of 2023 and 2024. Through these interactions, staff sought to capture a clear and nuanced understanding of the ongoing

unmet needs faced by disaster survivors, including housing, infrastructure, and economic revitalization. The insights gathered during these consultations played a critical role in shaping the Draft Action Plan, ensuring it was responsive to the community’s experiences and priorities. Ultimately, this approach aimed to foster transparent decision-making and provide a foundation for effective recovery strategies tailored to the unique challenges within each affected community.

7.3.1 Stakeholder Meetings

The goal of stakeholder meetings is to get feedback from stakeholders who represent those who were adversely impacted by the 2023/2024 Storms. Broward County HFD held two public meetings to provide citizens, non-profits, businesses, and local governments within Broward County an opportunity to give feedback regarding the programs outlined in the Draft Action Plan. HFD reached out by phone and email to invite stakeholders to give feedback on infrastructure, economic revitalization, housing, and planning needs for the CDBG-DR programs. Broward also advertised the public meeting in the Sun Sentinel, a local newspaper with wide distribution. Public meetings were held to engage the public that were directly impacted by the 2023/2024 Storms.

Public meeting details are listed below:

Location: Broward County Housing Finance Division
110 Northeast 3rd Street, Suite 300
Fort Lauderdale, FL 33301

Dates and times: June 27, 2025 at 10:00 AM
June 30, 2025 at 4:00 PM

In addition to the outreach efforts detailed above, Broward County consulted with the following groups and organizations:

Table 37: Action Plan Consultations

Partners Consulted	Consultation Description
Federal Partners (FEMA, SBA)	Data Request
Local/State Government	Telephone Calls and Survey, and local data from the Urban Planning Division.
Indian Tribes:	Survey
Nongovernmental Organizations	Survey
Private Sector	Survey
State and local emergency management agencies that have primary responsibility for the	

administration of FEMA funds	
Agencies that manage local Continuum of Care	Telephone Calls and Survey
Public Housing Agencies	Telephone Call and Survey
HUD-approved housing counseling agencies	Survey
State Housing Finance Agencies	
Other Stakeholders	Survey

7.3.2 Access to Public Hearing

Broward County is committed to ensuring that all programs and activities are accessible to all individuals, including those with disabilities. The public hearing was also hosted virtually via Webex to enhance accessibility and broaden the engagement of the public hearing. To support transparency and increase public access, questions, comments, and responses, if received, are available on the [disaster recovery website](#) and at the HFD office in person, by phone, and via email.

7.3.3 People living with a disability

We adhere to a strict non-discrimination policy in compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA). In compliance with Title II of the Americans with Disabilities Act (ADA) of 1990, Broward County ensures non-discrimination based on disability in the admission, access, operations of its programs, services, activities, and facilities. Broward County government programs, services, activities, and facilities are, when considered in their entirety, readily accessible to and usable by qualified individuals with disabilities.

The County will, upon request, provide appropriate aid and services to facilitate effective communication for qualified individuals with disabilities, ensuring their equal participation in the Action Plan development process. This includes the provision of qualified sign language interpreters, documents in Braille, and other methods to make information and communications accessible to individuals with speech, hearing, or vision impairments. The Disaster Recovery web page is equipped with the latest automated website accessibility platform/application.

All visual aids will be displayed on large screens to enhance visibility for all individuals. Public meetings will be held in accessible buildings to accommodate individuals with disabilities. Citizens can contact the HFD Office at (954) 357-4900 at least 48 hours in advance to request such services. More information on accessibility requests can be found at [https://www.broward.org/Intergovernmental/Documents/AccommodationRequestForm\(AuxiliaryAid-Modification\).pdf](https://www.broward.org/Intergovernmental/Documents/AccommodationRequestForm(AuxiliaryAid-Modification).pdf).

7.3.4 People with Limited English Proficiency (LEP)

Broward County ensures all citizens have access to information about the disaster recovery programs. The County has developed a four-factor analysis and Language Action Plan (LAP) to be in compliance with HUD guidelines for accessibility to information for Limited English Proficiency (LEP) persons living in the county. The full LAP is available for review at [Four Factor Analysis and LAP](#). A summary of the four-factors include:

- Size of LEP Population
- Frequency of Contact
- Nature and Importance of the Program
- Available Resources

7.3.5 Public Comment

Public comments play a crucial role in decision-making regarding activities and programs and help establish priorities and outcomes. Feedback from residents, businesses, and stakeholders is vital to the Action Plan process to ensure the plan adequately addresses unmet needs, mitigation requirements and provides an opportunity for input on activities and programs to ensure they effectively address community needs. Prior to submission of the Action Plan to HUD, a 30-day public comment period is required.

The 30-day public comment period commenced on September 20, 2025, subsequent to publication of the proposed Action Plan. Citizens were notified of the 30-day comment period through various channels including newspaper advertisements, the Housing Finance Division Website, email distribution to local municipalities, and other stakeholders. Public comments were carefully reviewed, considered, and integrated into the final decisions regarding unmet needs, mitigation needs, activity and program design, and budget allocations. Broward County will ensure that all citizens have equal access to information in adherence with the Americans with Disabilities Act (ADA).

Response to public comments were provided within 15 days of receipt. A summary of public comments, along with responses and consideration for inclusion in the Action Plan, will be included in the Appendix. The public comment period for this Draft Action Plan is from September 20, 2025 to October 20, 2025. Comments regarding the Draft Action Plan were accepted in-person at Housing Finance Division office located at 110 Northeast 3rd Street, Suite 300, Fort Lauderdale, Florida 33301, via phone at (954) 357-4900 and through email to Ylopez@broward.org or Phaggerty@broward.org. Additionally, comments will be accepted in person or virtually during public hearings held throughout the public comment period.

To support transparency and increase public access, questions, comments, and responses are available, if received on the disaster recovery website, at the HFD offices, and via email requests.

7.3.6 Public Hearing

Following the publication of the Proposed Action Plan on the HFD's Disaster Recovery website and prior to submission to HUD, Broward County is mandated by the CDBG-DR Universal Notice to convene a public hearing to solicit public comments on the proposed Action Plan. This publication of the proposed Action Plan provides citizens with the opportunity to review the proposed plans and to offer an opportunity for written and oral feedback.

HFD published the Draft Action Plan on September 20, 2025, initiating the 30-day public comment period, which concluded on October 20, 2025. A hybrid public hearing was conducted to increase community participation. This hearing will take place on October 3 at 6:00 p.m. at the Housing Finance Division office located at 110 Northeast 3rd Street, Suite 300, Fort Lauderdale, Florida 33301. Virtual public hearing attendees could ask questions live through Webex our representatives responded in real time.

Notification of the public hearing was disseminated through various channels including the Broward County [Housing Finance Division Community Development Block Grant Disaster Recovery CDBG-DR](#) (disaster recovery) webpage, in the Sun Sentinel newspaper, social media platforms, and email distributions to local stakeholders such as municipalities, non-profit organizations, Continuums of Care, and housing agencies. A recording of the public hearing, along with a copy of the presentation, is available on the Disaster Recovery website. The public hearing and notifications adhered to the requirements of the Americans with Disabilities Act (ADA).

7.3.7 Citizen Complaints

Broward County or its subrecipients will provide a written response to each formal complaint within 15 working days of receiving the complaint or will document why additional time for a response is needed.

- Formal complaints are written statements of grievance, including emails, comments posted on the Broward County website, and handwritten complaints. Broward County shall detail the process and contact information (through the website and email address) for submitting complaints within program guidelines, application documents, and on the Broward County website. Broward County shall maintain a tracker for collecting and categorizing complaints through resolution.
- Informal complaints are verbal complaints. Broward County and its subrecipients will attempt to resolve informal complaints however, they are not subject to the written response process.
- Complaints alleging violation of fair housing laws will be directed to HUD for immediate review. Complaints regarding fraud, waste, or abuse of funds will be forwarded to the HUD Office of the Inspector General Fraud Hotline (phone: 1-800-347-3735 or email: hotline@hudoig.gov).

Broward County will make available to HUD detailed Fraud, Waste, and Abuse Policies and Procedures on the disaster recovery [Housing Finance Division Community Development Block Grant Disaster Recovery CDBG-DR](#) to demonstrate that adequate procedures are in place to prevent fraud, waste, and abuse.

7.3.8 Modifications to the Action Plan

The County understands that recovery needs, programs, and projects may evolve, and modifications to the Broward County CDBG-DR Action Plan for 2023 and 2024 Storms may be necessary. These changes will be classified as either substantial or non-substantial amendments based on impact on program scope, funding allocation, and eligibility criteria.

Broward County will ensure that all amendments comply with HUD's Universal Notice requirements, maintaining transparency and public engagement as required. In simple terms, large changes will be considered "substantial" and involve public notice and input, while minor changes will be considered "non-substantial" and will not require a full public comment period. Both amendments will be documented and submitted to HUD. All amendments, both substantial and non-substantial, will be noted

in the Amendment chart at the beginning of this document. The amendments will be numbered sequentially and posted on the Broward County website.

7.3.9 Substantial Amendment

The following criteria determine what changes in Broward’s Action plan for Disaster Recovery constitute a substantial amendment and require public notification and a comment period of at least 30 days. Broward County considers an amendment to be “substantial” if it meets the following criteria:

- Change in program benefit or eligibility criteria;
- Addition or deletion of an activity;
- Reduction in the overall benefit requirement;
- Allocation or reallocation of 30% of the total allocation.

If a change meets one of these criteria, Broward County will follow a formal process to amend the Action Plan. This process will include publishing the proposed substantial amendment for public review and comment for at least 30 days (similar to the original CDBG-DR Action Plan comment period). The County will advertise the amendment’s availability and will hold at least one public hearing to gather feedback on the proposed changes. After the comment period, the County will consider all comments and then submit the substantial amendment to HUD for approval. The County will implement the change only after HUD approves the amendment.

Whenever program funds are reallocated from one program to another through a substantial amendment, the County will review and update the mitigation needs assessment.

7.3.10 Non-substantial Amendment

A non-substantial amendment is a small change that doesn't meet the criteria for a substantial amendment. These are usually minor adjustments or corrections that don't change the core of the CDBG-DR Action Plan. Examples of non-substantial amendments include fixing typos, updating factual details, clarifying wording, or making small budget changes that are below the threshold for substantial amendments. For instance, moving a small amount of funds from one activity to another to better meet demand, as long as it’s less than the threshold percentage of the total grant.

Non-substantial amendments do not require a formal public comment period or public hearing. This means the County can make these minor changes administratively. Broward County will notify HUD at least five business days before any non-substantial amendment takes effect. This notification ensures HUD is aware of all changes.

7.3.11 Performance Reports

Performance reports will be completed every quarter using HUD’s Disaster Recovery Grant Reporting (DRGR) system. Data will be gathered for performance reports from subrecipients as well as internally at Broward County. The data will be compiled and entered per activity in DRGR. Financial and progress-based data will be collected. Broward County will make all performance reports available for public review and comment.

7.3.12 Program Income

The County does not anticipate generating program income from any CDBG-DR funded activities. If program income is anticipated to be received, the County will comply with all applicable requirements regarding the use and management of program income.

7.3.13 Environmental Review

The County will be the responsible entity for all environmental responsibilities per 24 CFR 58.4(b)(2).

8

Appendix

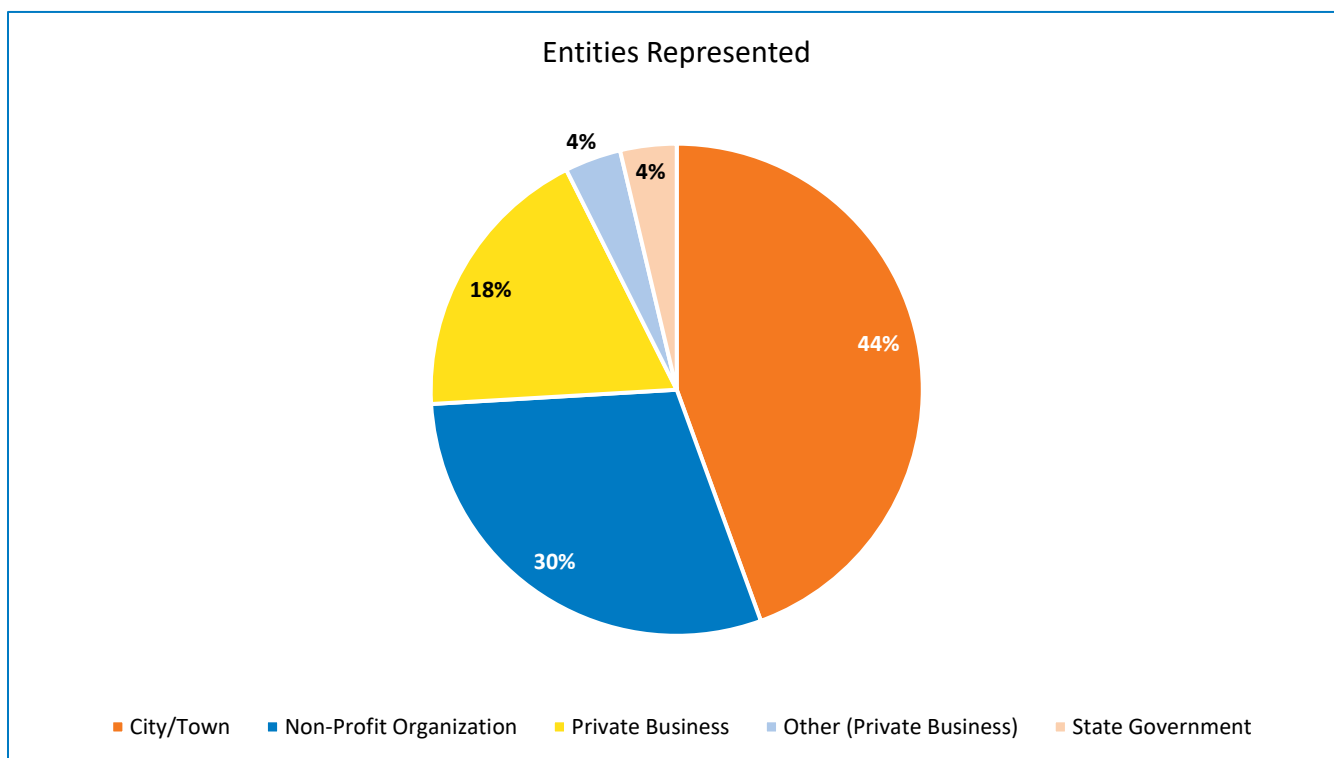
8. Appendix

8.1 Introduction

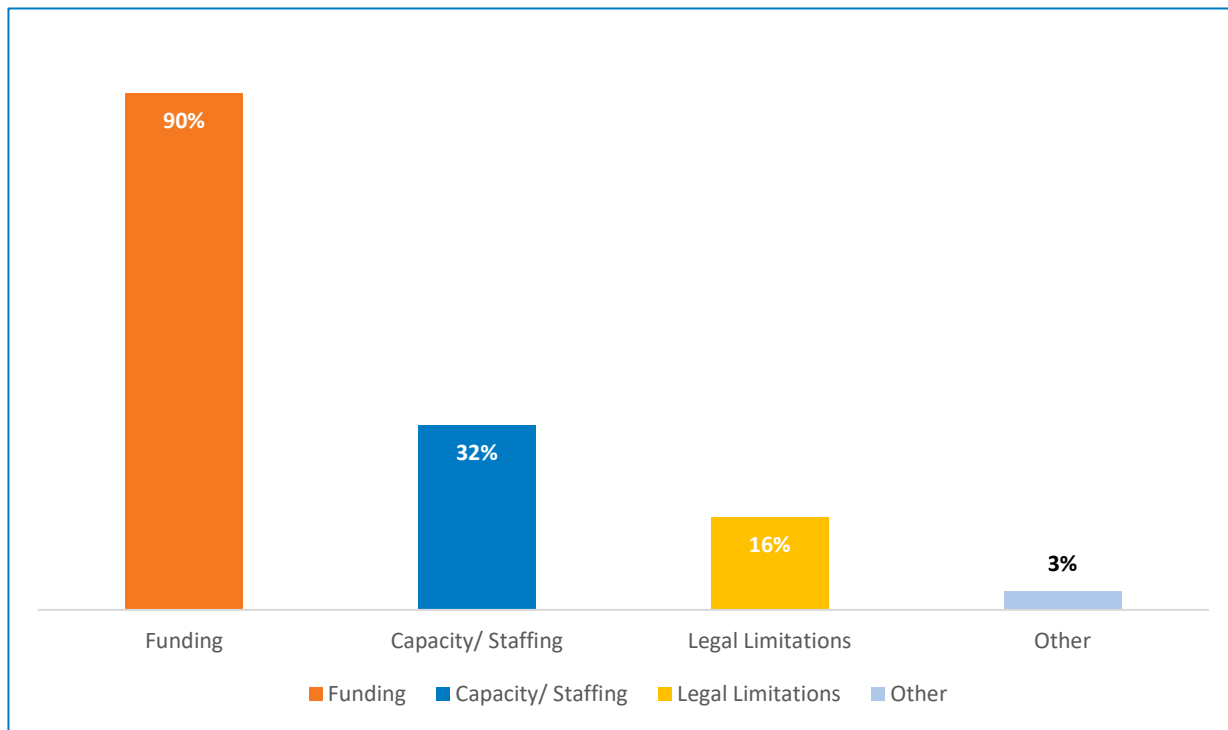
In anticipation of the release of the CDBG-DR Action Plan, Broward County conducted public outreach to gather feedback from the community on impacts of the 2023 and 2024 storms.

The survey consisted of 21 questions. Overall, 31 participants responded to the survey with a mix of City/Towns, Non-profit organizations and private businesses responding. The survey consisted of 21 questions.

8.2. Survey Results



Question 3: What is your entity's biggest barrier to implementing disaster recovery projects, including hazard mitigation activities?

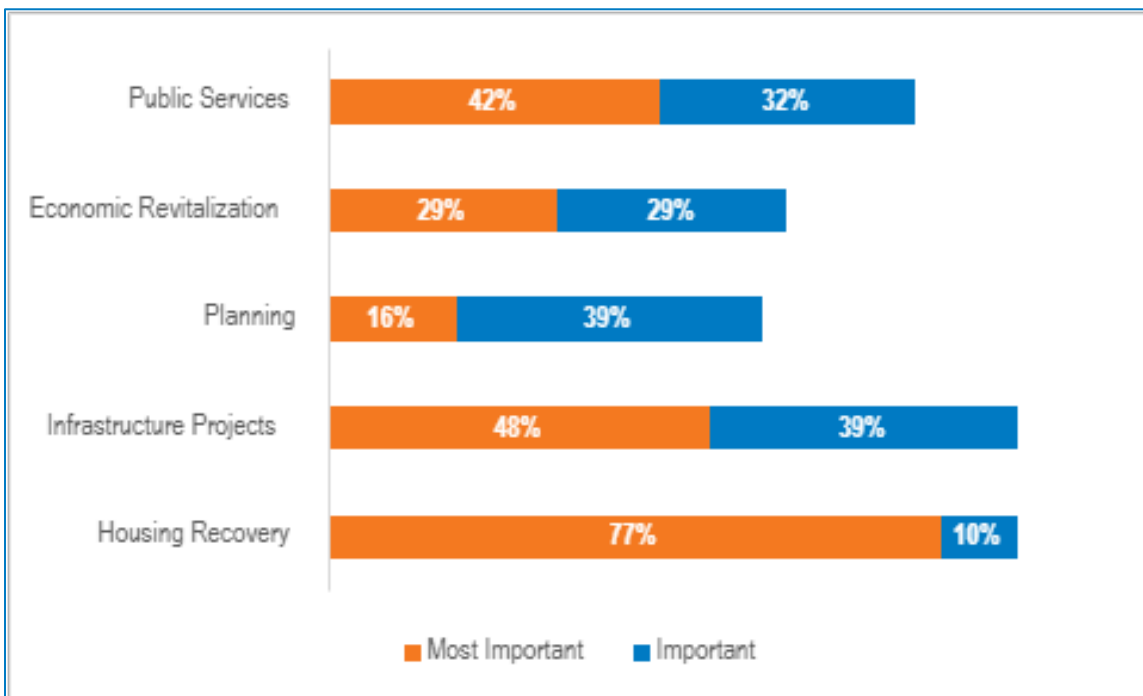


Note: Multiple responses were permitted for this question.

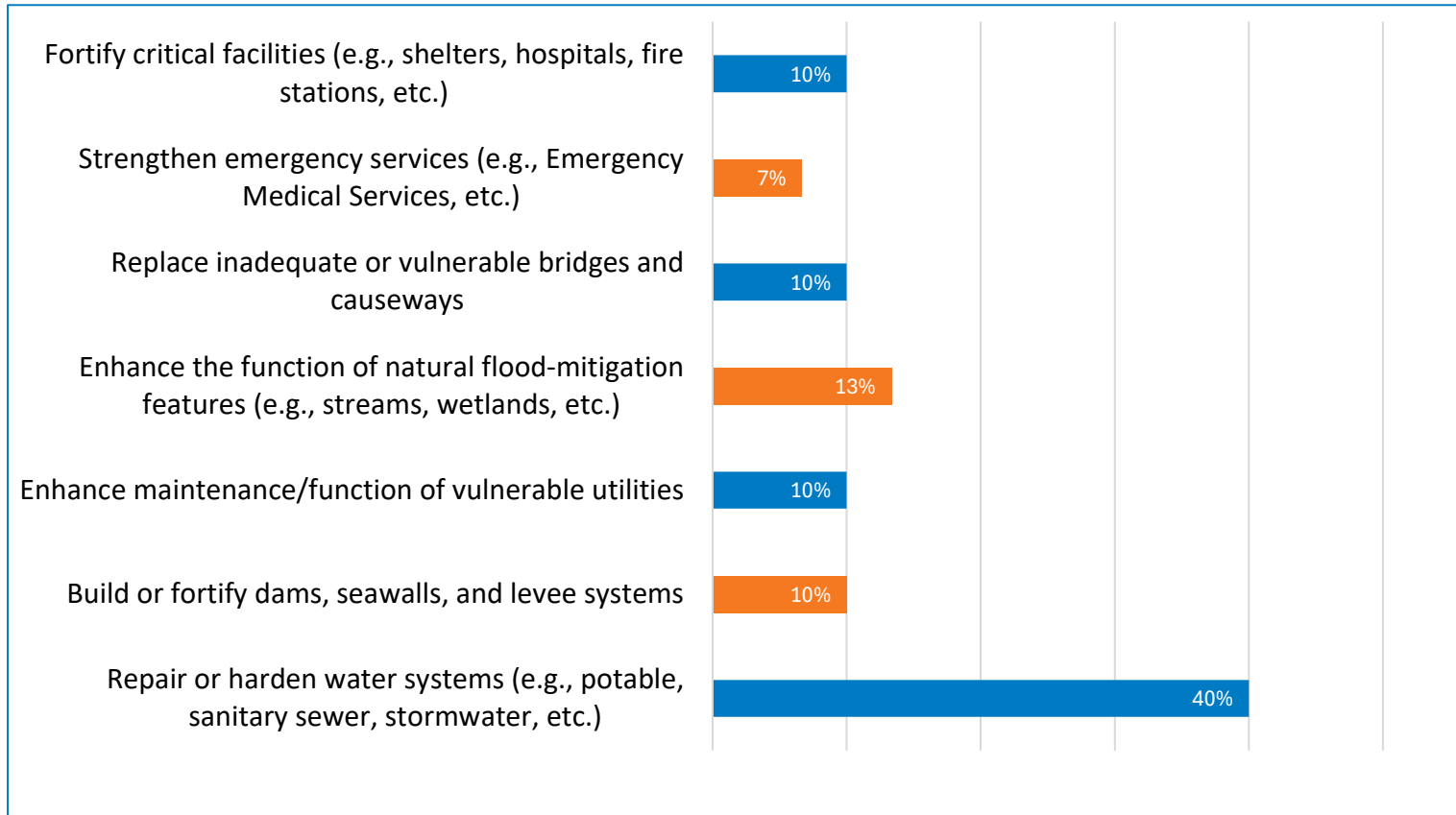
Answer Provided for "Other"

- Affordable Housing Developer and Operator

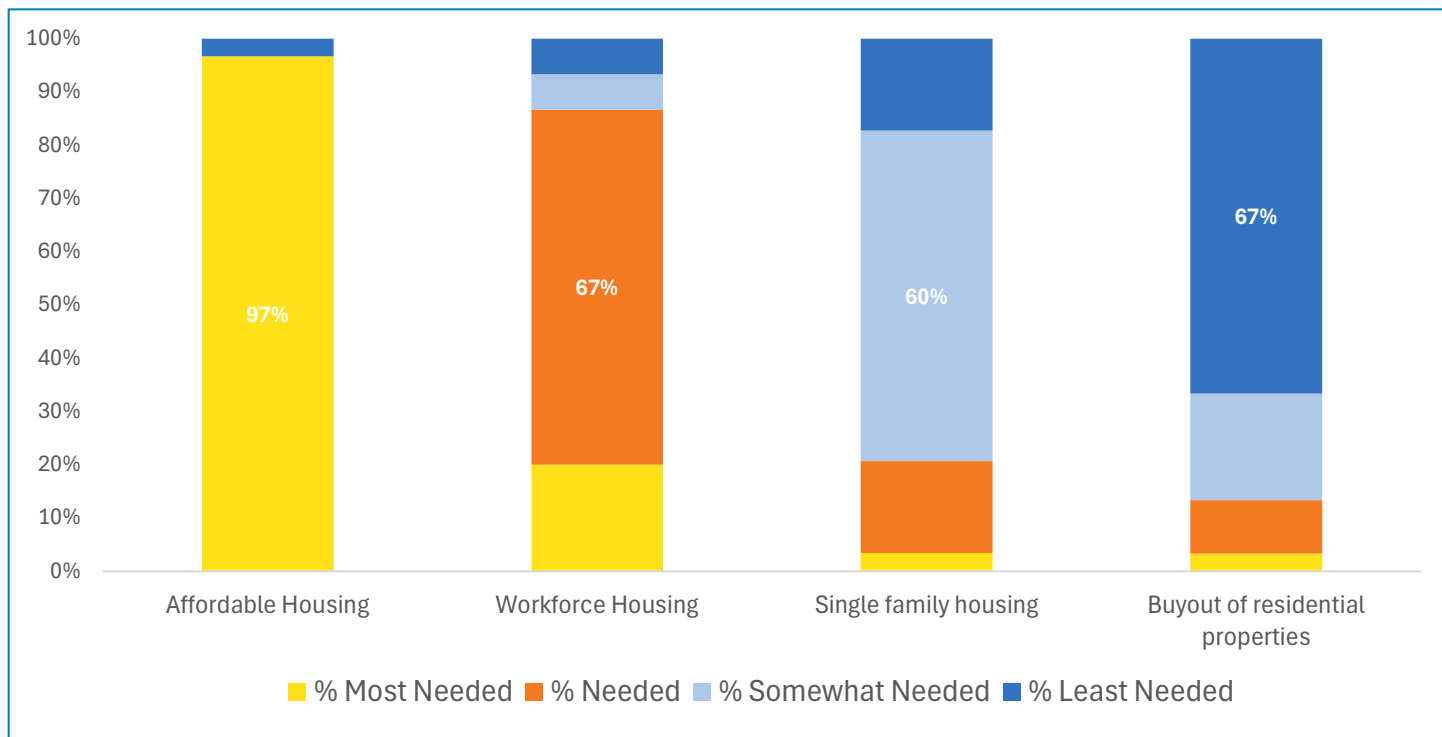
Question 4: Taking into consideration your community's past experiences with natural hazards, please rate, on a scale from 1 to 3, your entity's interest in pursuing the below disaster recovery activities.



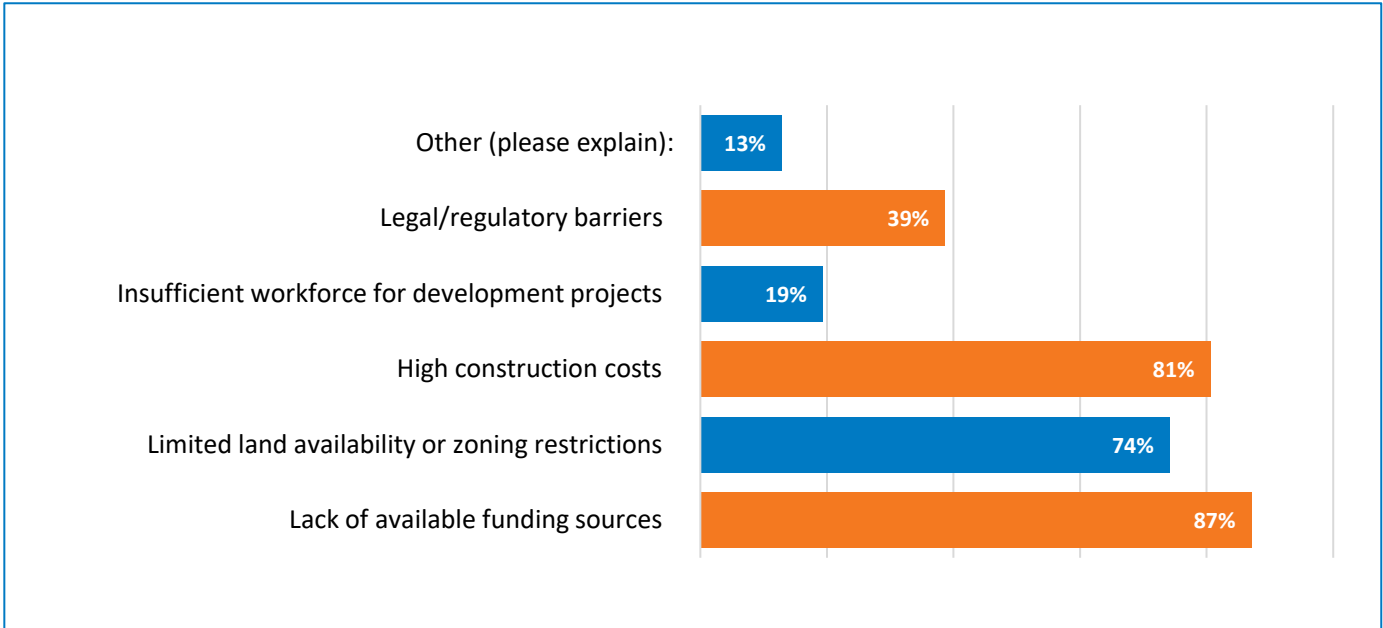
Question 5: Considering the listed activities, which do you feel would benefit most from new or revised policies (e.g., enhanced building codes, zoning regulations, or funding mechanisms)?



Question 6: Please rank the below unmet housing needs in your community from the most needed to the least needed to recover from the 2023 and 2024 Storms.



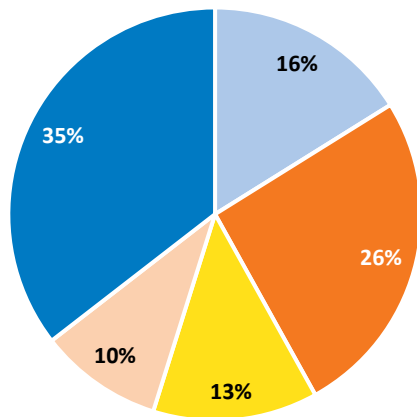
Question 7: What are the main obstacles preventing the development of new affordable housing in your community?



Answers Provided for “Other”

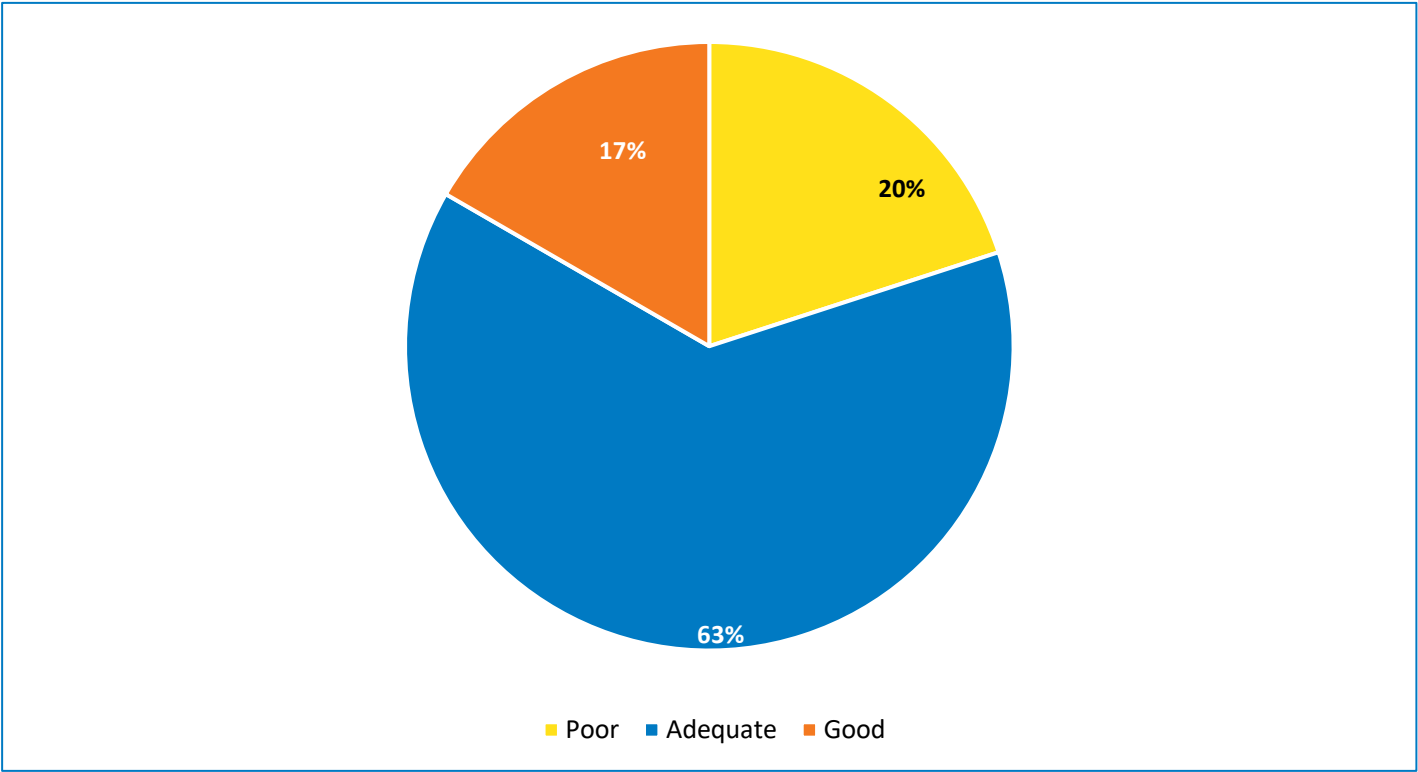
- We would work and apply for all applicable available funding sources to be in a position to best serve the community and have examples of service in many different ways from Habitat's across the country
- Other forms of subsidy and soft debt for affordable housing development.
- Municipal stormwater fees/assessments
- Local County funding.

Question 8: Does your community currently have a long-term housing plan in place to support disaster recovery?

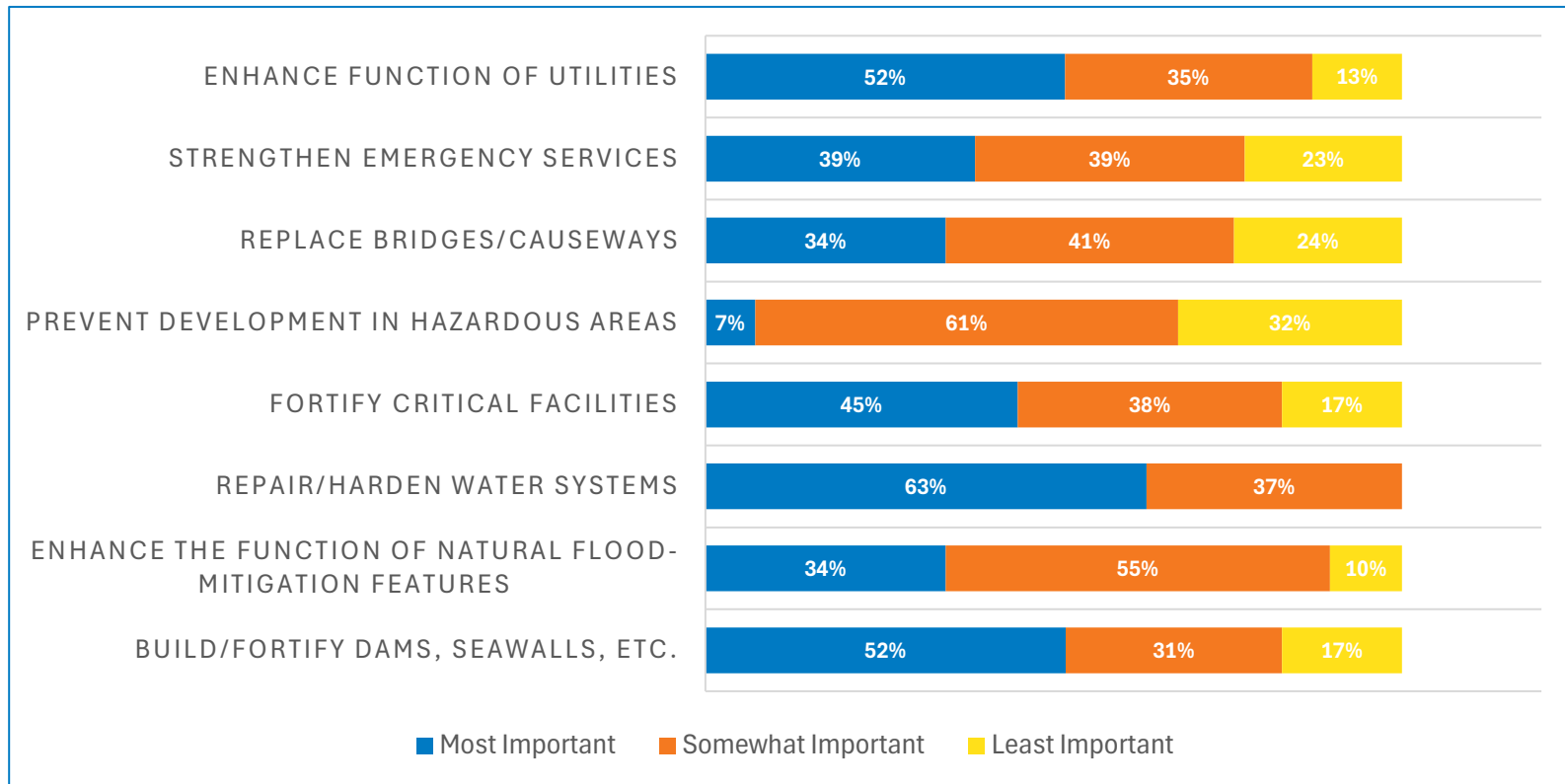


- Yes, and it is actively being implemented
- Yes, but it is outdated and needs revision
- No, but we are in the process of developing one
- No, and there are no immediate plans to create one
- Not sure

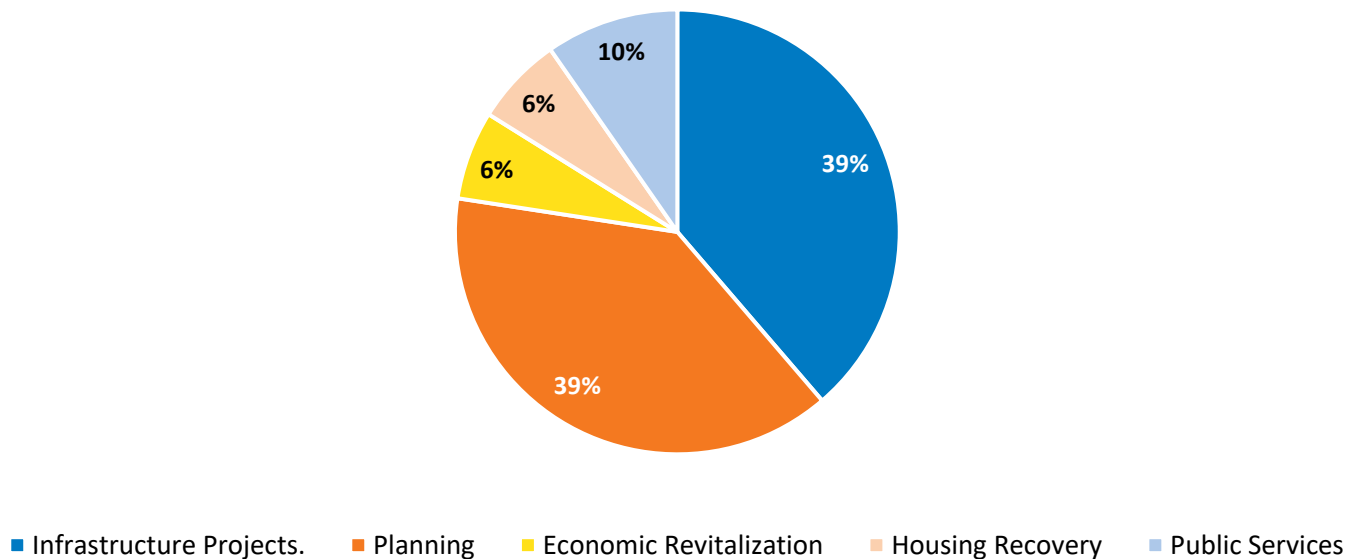
Question 9: On a scale from 1 to 3 how would you rate the current condition of your community's infrastructure?



Question 10: Please rate the below infrastructure or disaster recovery activities according to your entity's current priorities.



Question 11: Reflecting on past storm events, which of the below disaster recovery activities have been most effective in reducing losses, and what lessons (if any) can be applied to future recovery efforts?



Question 11 Answers

Infrastructure Projects:

- Advanced Metering Infrastructure (AMI) projects. The primary purpose is energy efficiency, smart grid modernization, or operational improvements for utilities. The AMI system is designed to enhance resilience or reduce risk to a hazard. AMI helps identify and isolate outages more quickly during hurricanes, thereby reducing risks to public health or safety.
- Most of the disasters in South Florida are related to flooding due to poor infrastructure that needs to be upgraded to modern systems and to accommodate the population growth. We are building structures, and people are moving at a rapid pace to South Florida, but the infrastructure is not meeting the demand. So we are overloading our systems and a big flood is always inevitable if this issue is not addressed. Every project, every new development needs to factor in the burden on the current infrastructure. And if it does not have the capacity to accommodate the new development, we need to upgrade the infrastructure prior to approving a new development.
- They are all important, but infrastructure projects are the foundation for other storm events for both residential and commercial entities and affects housing, work place and others.
- Installation of a pump would aid in the mitigation of future flooding.
- Heavy rains, tidal flooding, and rising sea levels have challenged the City of Hollywood's aging drainage system, putting neighborhoods, roadways and quality of life at risk. However, the city has recently adopted a bold, science-driven Stormwater Masterplan. Prior to its adoption, there was no comprehensive plan with regard to the city's infrastructure and water management needs. The plan includes 40+ improvement zones, 2 flood protection goals, prioritized capital projects, resiliency and sea level rise adaptation, and a 20 to 30-year, long-term, phased funding strategy which includes securing grants. Funding, such as the CDBG-DR grant, would allow the city to

address the critical stormwater related projects included in our plan and begin mitigating future stormwater related flooding.

- Creating adequate catchment basins and improve stormwater facilities can mitigate against major flooding. With many of Broward counties major cities laying along the coastlines, it is important that there is infrastructure in place to receive both storm and Sea-level rise flooding events.
- Better infrastructure is prevention
- Flood prevention

Planning:

- The City recently revised our City Code, with a strong emphasis placed on land development. We are in the process of developing a vulnerability assessment and adaptation plan, which will assist with future mitigation planning.

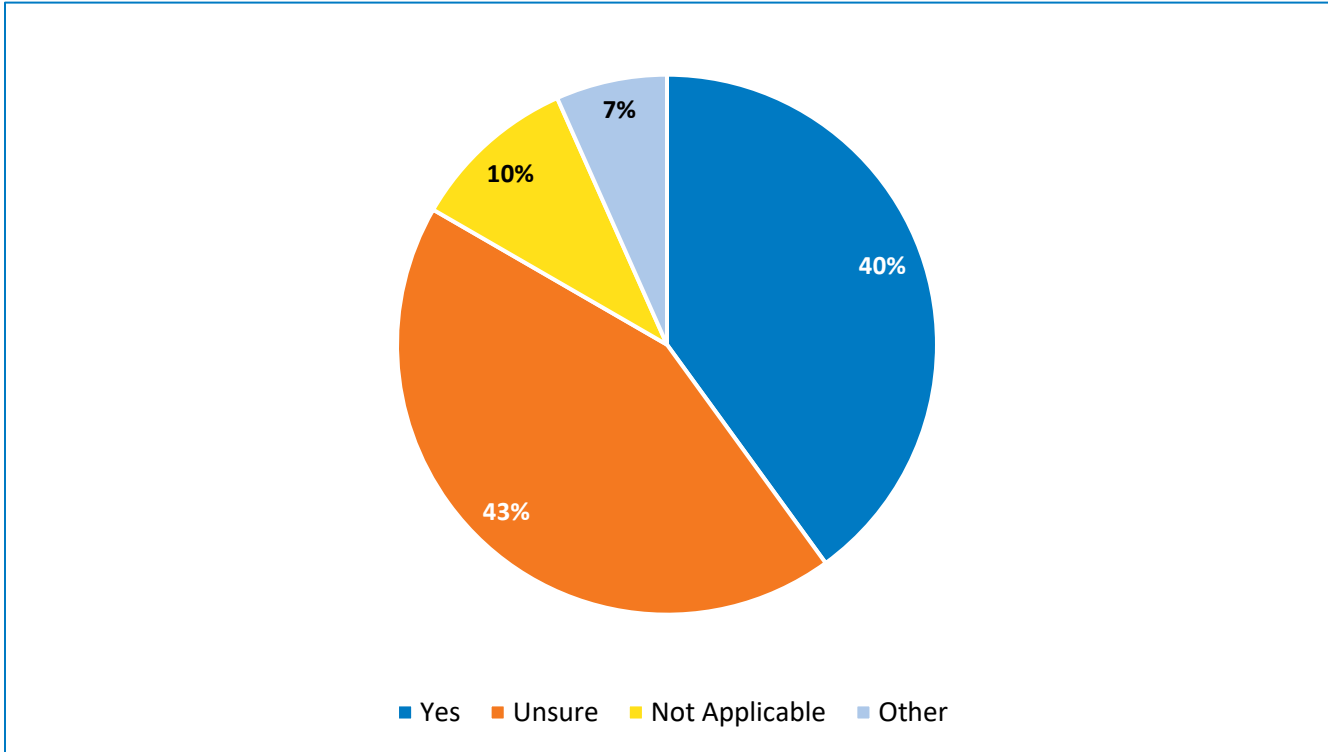
Housing Recovery:

- Building housing that is more resilient to the future natural disasters is critical to address the most basic needs of the community.
- Loss of basic shelter creates a crisis
- Keep residents housed by hardening homes which have been an ongoing effort of the city.
- The speed at which housing is rebuilt for victims and the capacity for municipalities to handle the influx of permit applications to replace this housing.
- "The top priority is assisting with one of our community's greatest needs: affordable housing. And, here are 5 strategies for incorporating CLTs in local disaster recovery plans. <https://southfloridactl.org/5-reasons-policymakers-should-integrate-community-land-trusts-into-floridas-disaster-plans/> At the SFCLT, our goal is to place vulnerable, low-income populations in less vulnerable areas, prioritizing building new housing on higher ground. We have also committed to acquiring and renovating aging rental buildings to current codes so that low-income residents, with less ability to evacuate and recover from a storm, are safe. The second priority is updating our stormwater systems, both using softscape and landscape solutions for improved drainage as well as installing larger pipes and storm water systems. The Public Service and Economic Revitalization needs are important, but were needed immediately following the storm more than now. Planning is helpful but we will not see any immediate results."
- The number one issue is housing affordability and that is due to supply.
- providing the basic need of housing allows the continuation of other work needed to lift people up and on a more secure path to sustainability and independence.
- Housing is a critical need and not having adequate, safe housing creates greater need for housing in an already overburdened market.
- We need to invest in new affordable housing.

Public Services:

- When the storms happen the most basic needs of the people are strained; food shelter and availability to access them. Additional food pantries, and shelter options are needed. Whenever someone can not attend work due to storm it also places financial strains on the household which increases the need for rental or mortgage assistance.

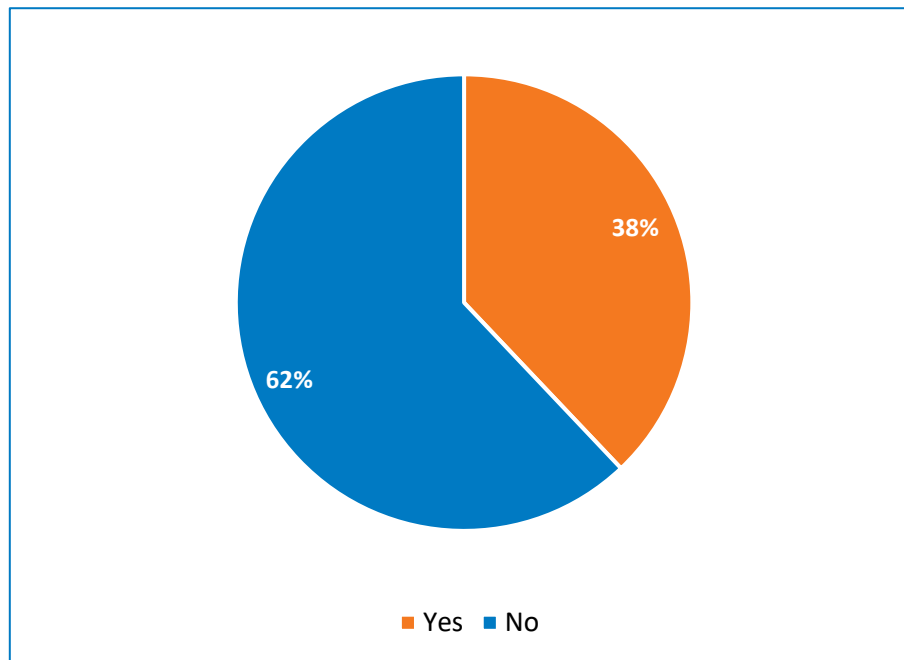
Question 12: If your entity's Local Hazard Mitigation Strategy was completed prior to your community experiencing storm impacts in 2023 and 2024, are the prioritized mitigation activities still aligned with your community's needs?



Answers Provided for "Other"

- We are revamping our strategies as we speak. Nationally Habitat for Humanity has prioritized 'Disaster Recovery' as such all of us across the country are reevaluating our disaster preparedness plans, examining where the gaps are in our communities, how to coordinate and collaborate with others and develop the right plan moving forward.
- Broward County LMS

Question 13: Are there any hazard or long-term recovery issues specific to your community or region, such as repetitive flooding, wind damage, etc. at specific location, that you would like to emphasize?

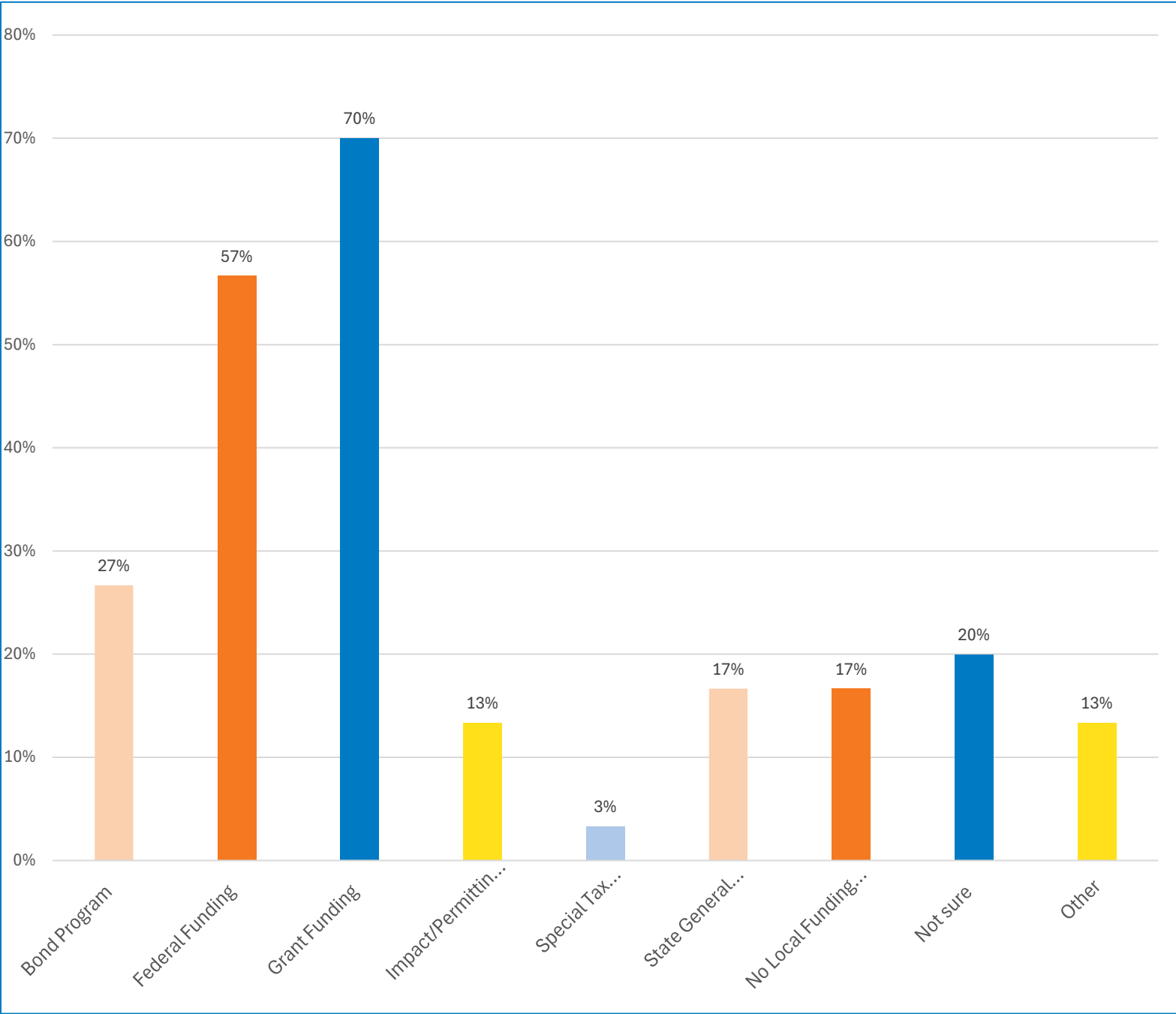


Answers Provided for “Yes”

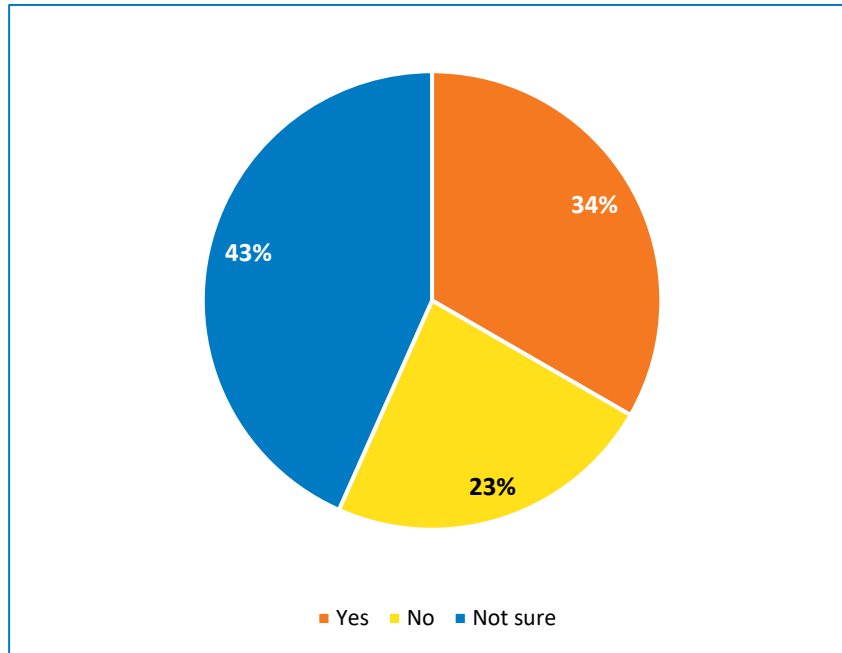
- "flash flooding was an issue, where this happened needs to be addressed"
- Fortifying aging housing stock of homeowners 80% or less AMI is critical given much of the stock does not meet newer fortication standards"
- The City has facilities that need hardening.
- There is repetitive flooding in certain areas in the city.
- flooding
- There is increased flooding due to rain in the summer months and the drainage system does not have capacity to handle it
- localize flood in some neighborhoods such as Silver Lakes. A new project has been budgeted and provide to update the drainage in this area.
- Flooding in the City of Fort Lauderdale and other areas of Broward County.
- Our existing stormwater infrastructure is not designed to meet today's population or climate. As a result, we have neighborhoods flood even on sunny days. We need to integrate softscape and landscape solutions for improved drainage as we work to install larger drainage pipes and maintain existing drainage systems free of debris.
- Yes, we are in a constant flooding stage of circumstances when we get a strong rain or tropical storm. our offices have constant roof damage, window leaks and parking lot flooding even in a non-emergency weather event.
- Flooding with just a rain storm on all surrounding streets making our facility not safely accessible during a weather emergency.
- Repetitive flooding is an ongoing issue for our community. Please see the emailed maps detailing hard hit areas related to the April 2023 storm. These areas continue to experience flooding.
- Melrose area is subject to repetitive flooding.

- flooding
- flooding
- South Florida is prone to flooding and Hurricanes annually
- repetitive flooding on Fort Lauderdale beach

Question 14: Which of the following describes your funding sources for disaster recovery/long-term resiliency activities?



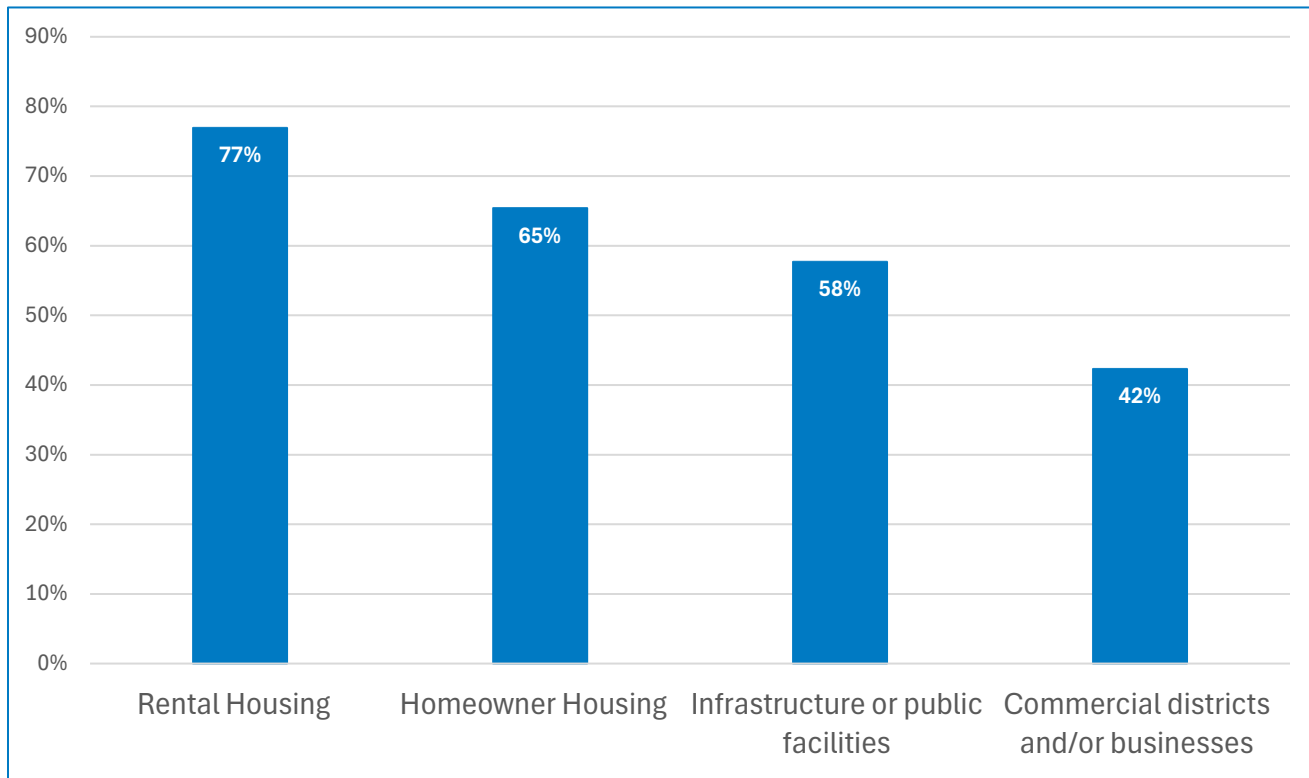
Question 15: Are you currently, or have you in the past, coordinated with regional partners, such as neighboring communities and regional organizations, to develop and implement disaster recovery and/or hazard mitigation activities?



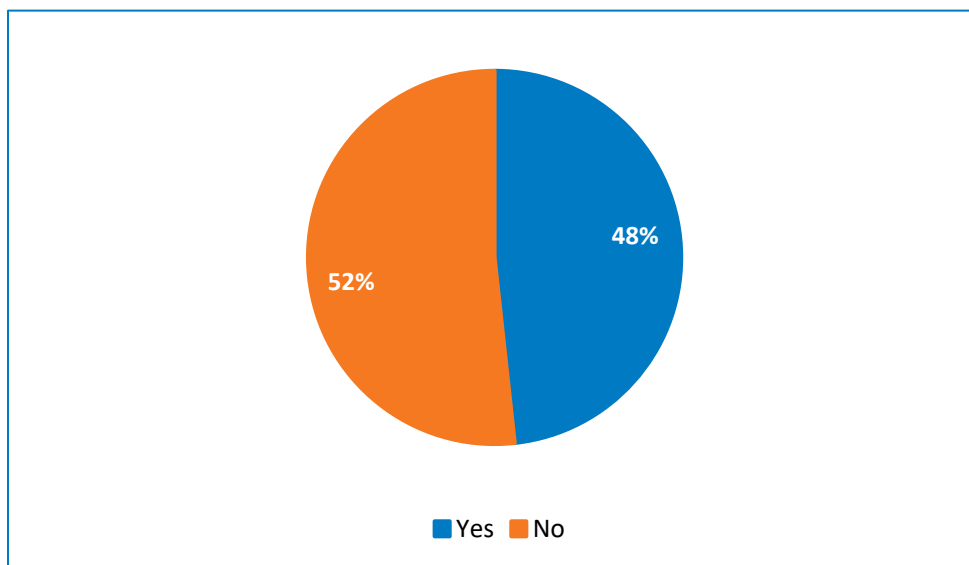
Answers Provided for “Yes”

- Habitat's do this everywhere all the time. We need to be more active in coordinating with the local players and VOAD
- We regularly work with Broward County
- We continue to partner with Broward County and neighboring cities in this regard.
- The City of Coral Springs emergency response unit covers Parkland and Coconut Creek.
- Green Mills has developed affordable housing with CDBG funds in the past.
- The city has a history of coordinating with regional partners to develop and implement disaster recovery and hazard mitigation activities. Examples of such coordination include partnering with the Florida Department of Transportation for the city's AIA pump stations, partnering with the county for general disaster recovery efforts and partnering with the cities of Dania Beach and Hallandale Beach for stormwater improvements.
- Broward County
- Partnered with local municipalities, the County and FEMA.

Question 16: Did your community experience any impact to the following?



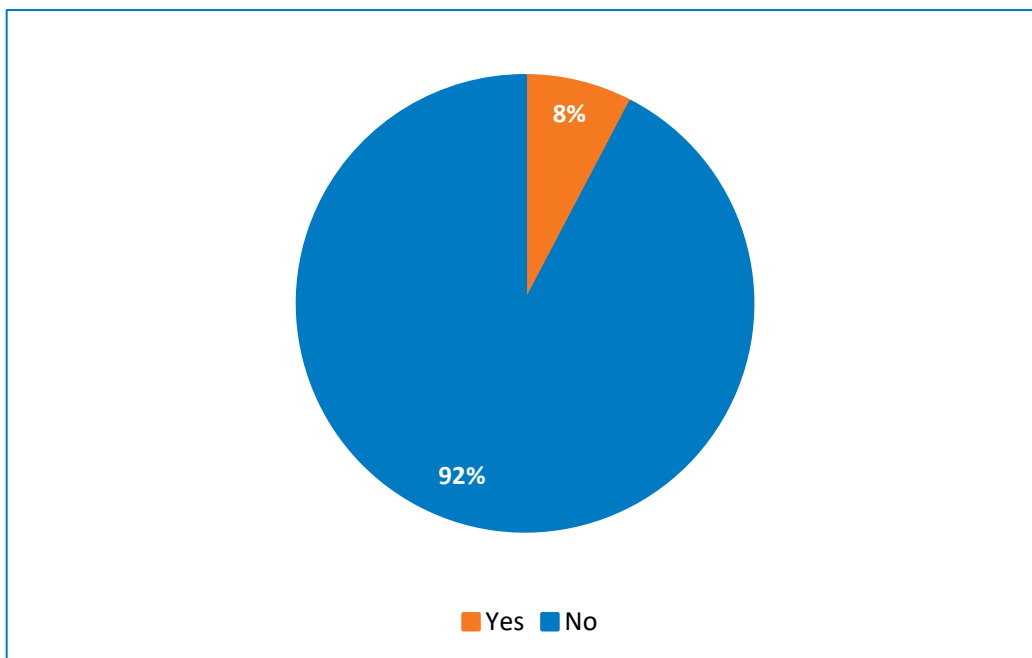
Question 17: Does your community still have unmet needs after insurance claims?



Answers provided for “Yes”

- Insurance companies dispute many Insurance claims. This leads to Litigation and leaving properties unrepaired.
- Many owners indicated insurance claim receipts were partial and did not provide the full support needed.
- The homes within the City are older and some of the folks here are outside of the 80% AMI range making it impossible for assistance although the need is there.
- Most insurance policies did not cover the losses and cost to restore many damaged homes and businesses
- Carriers do all they can to place the risk on others.
- Yes, we still see businesses and homes with tarps on their roofs and other damages caused.
- The City is still experiencing significant flooding in the areas that were most impacted during the April 2023 storm events.
- Many properties were under insured or uninsured for various reasons. Insurance payouts were either non-existent or inadequate.
- Affordable Housing and Housing Repair of older homes
- Insurance did not cover enough

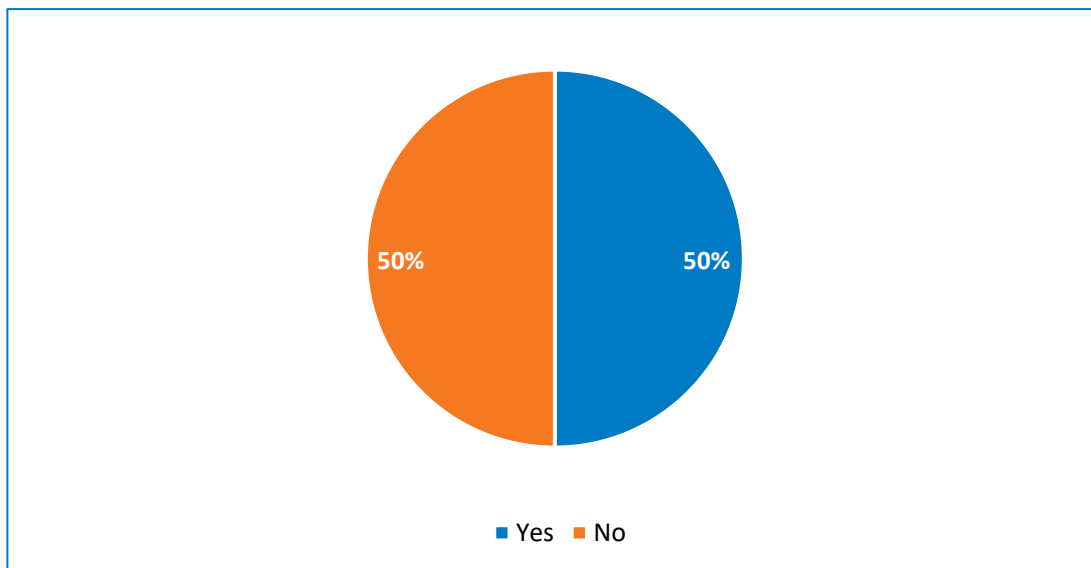
Question 18: Did your community collect any information/data about insurance claims and reported losses after the 2023 and 2024 disasters?



Answers provided for “Yes”

- Our Public Utilities team will send this data
- Our broker has this information if needed.

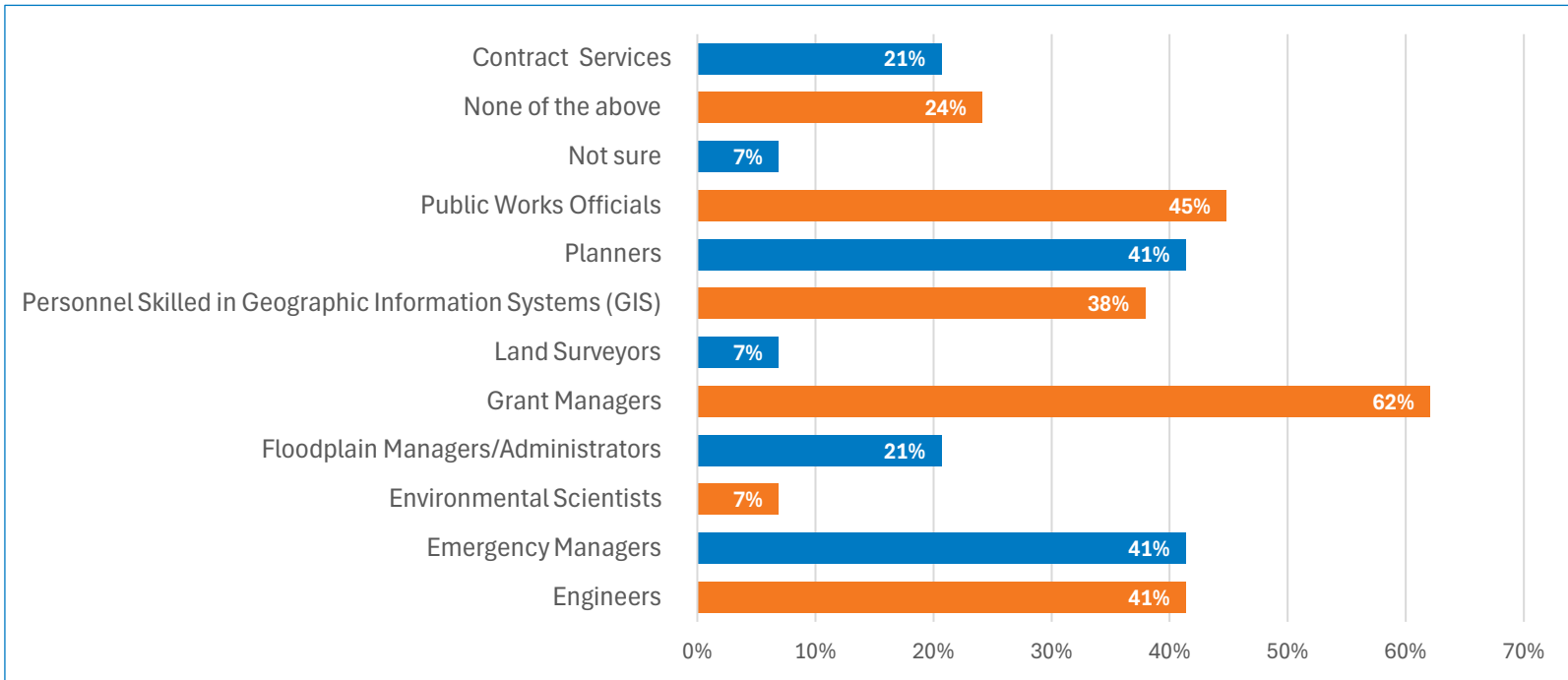
Question 19: Were there any impacts to persons experiencing homelessness at the time of the disasters or as a result of the 2023 and 2024 disasters?



Answers provided for “Yes”

- They loss their basic property and were further displaced.
- We experienced a higher need for rental assistance although we could not assist everyone prior to their relocation.
- Some homeless people who were living with relatives who experienced the flood went from homeless to unsheltered
- Services were disrupted
- Many of the unsheltered individuals had to be relocated to the Broward Outreach Centers, where they slept on cots and sleeping bags on the floor until the floodwaters subsided.
- Many of the unsheltered individuals had to be relocated to the Broward Outreach Centers, where they slept on cots and sleeping bags on the floor until the floodwaters subsided.
- Unhoused population suffered loss of personal items. The demand for shelter beds exceeded the county's shelter capacity.
- Yes they became unsheltered

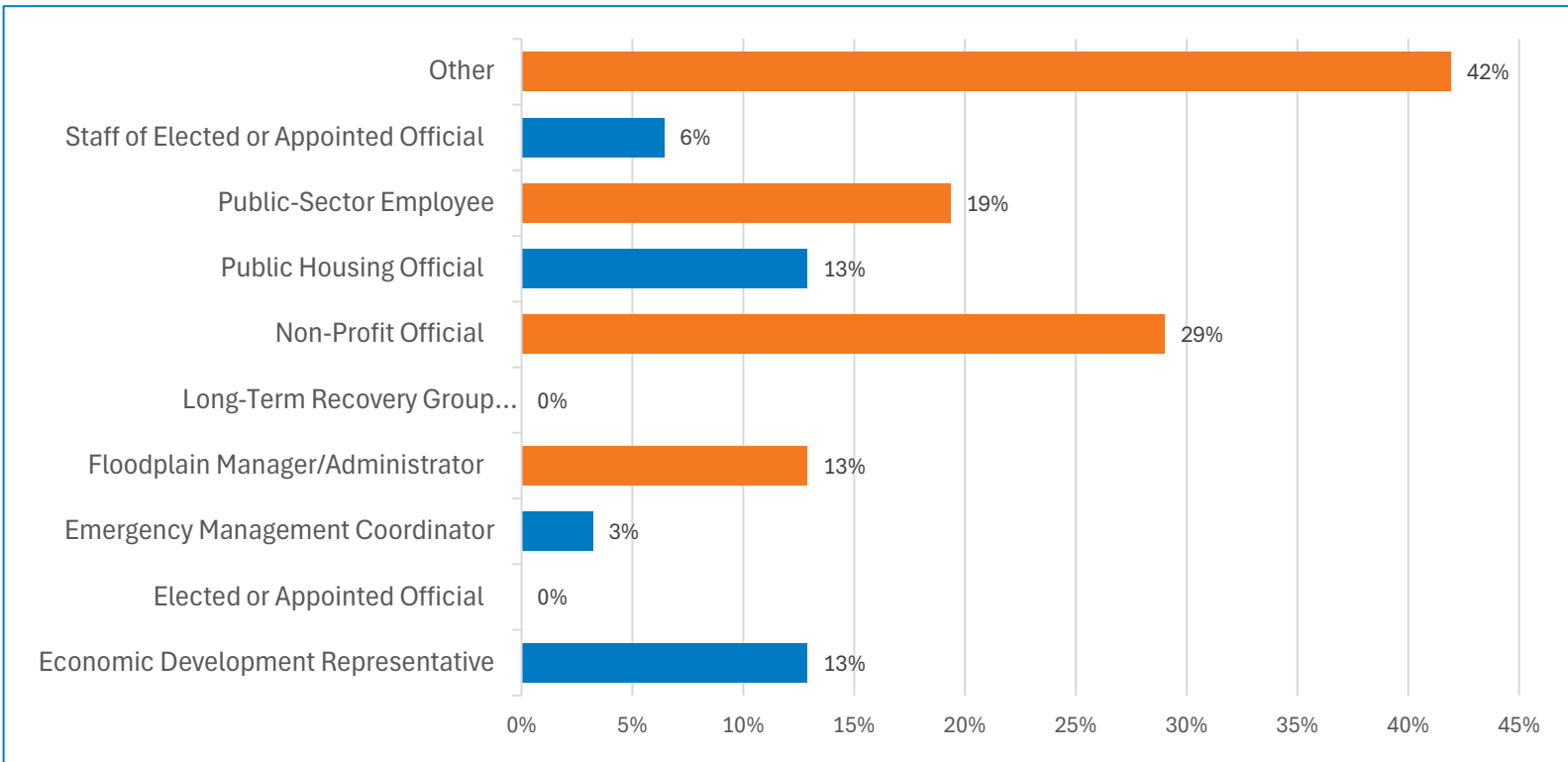
Question 20: Please indicate which staff positions your entity currently employs.



Answers provided for “We contract out the following services”

- Several Services- Refuse Collection, Information Technology, Street Sweeping, etc.
- We contract out for some engineering and design services.
- Engineer, Land Surveyor, Floodplain Administrator, Planner
- Landscape maintenance and debris management

Question 21: Which of the following describes you?



Answers provided for "Other"

- Housing providers
- Housing - Development Services
- Non-Profit Organization
- Affordable housing provider
- Affordable Housing Developer
- Housing Developer
- Grants, Intergovernmental Affairs, Emergency Manager, etc.
- Chief Housing Administrator
- Designated City FEMA Public Assistance (PA) point of contact.
- Real Estate Developer

8.3 Certifications

As required in the Universal Notice, as amended, grantees receiving an allocation under an AAN must make the following certifications with its action plan:

- a. **Uniform Relocation Act and Residential Anti-displacement and Relocation Plan** - The grantee certifies that it:
 - 1) Will comply with the acquisition and relocation requirements of the Uniform Act, and implementing regulations at 49 CFR part 24, as such requirements may be modified by waivers or alternative requirements;
 - 2) Has in effect and is following a RARAP in connection with any activity assisted with CDBG-DR grant funds that fulfills the requirements of Section 104(d), 24 CFR part 42, and 24 CFR part 570, as amended by waivers and alternative requirements.
- b. **Authority of Grantee** – The grantee certifies that the Action Plan for disaster recovery is authorized under state and local law (as applicable) and that the grantee, and any entity or entities designated by the grantee, and any contractor, subrecipient, or designated public agency carrying out an activity with CDBG-DR funds, possess(es) the legal authority to carry out the program for which it is seeking funding, in accordance with applicable HUD regulations as modified by waivers and alternative requirements.
- c. **Consistency with the Action Plan** – The grantee certifies that activities to be undertaken with CDBG-DR funds are consistent with its action plan.
- d. **Citizen Participation** – The grantee certifies that it is following a detailed citizen participation plan that satisfies the requirements of 24 CFR 91.115 or 91.105 (except as provided for in waivers and alternative requirements). Also, each local government receiving assistance from a state grantee must follow a detailed citizen participation plan that satisfies the requirements of 24 CFR 570.486 (except as provided for in waivers and alternative requirements).
- e. **Consultation with Local Governments (STATE ONLY)** – State grantee certifies that it has consulted with all disaster-affected local governments (including any CDBG entitlement grantees), Indian tribes, and any local public housing authorities in determining the use of funds, including the method of distribution of funding, or activities carried out directly by the state.
- f. **Use of Funds** – The grantee certifies that it is complying with each of the following criteria:
 - 1) Purpose of the funding. Funds will be used solely for necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure and housing, economic revitalization, and mitigation in the most impacted and distressed areas for which the President declared a major disaster pursuant to the Stafford Act (42 U.S.C. 5121 *et seq.*).
 - 2) Maximum Feasibility Priority. With respect to activities expected to be assisted with CDBG-DR funds, the Action Plan has been developed so as to give the maximum feasible priority to activities that will benefit low- and moderate-income families.

- 3) Overall benefit. The aggregate use of CDBG-DR funds shall principally benefit low- and moderate-income families in a manner that ensures that at least 70 percent (or another percentage permitted by HUD in a waiver) of the grant amount is expended for activities that benefit such persons.
 - 4) Special Assessment. The grantee will not attempt to recover any capital costs of public improvements assisted with CDBG-DR grant funds, by assessing any amount against properties owned and occupied by persons of low- and moderate-income, including any fee charged or assessment made as a condition of obtaining access to such public improvements, unless: (a) disaster recovery grant funds are used to pay the proportion of such fee or assessment that relates to the capital costs of such public improvements that are financed from revenue sources other than under this title; or (b) for purposes of assessing any amount against properties owned and occupied by persons of moderate income, the grantee certifies to the Secretary that it lacks sufficient CDBG funds (in any form) to comply with the requirements of clause (a).
- g. Grant Timeliness** – The grantee certifies that it (and any subrecipient or administering entity) currently has or will develop and maintain the capacity to carry out disaster recovery activities in a timely manner and that the grantee has reviewed the requirements applicable to the use of grant funds.
- h. Order of Assistance** – The grantee certifies that it will comply with the statutory order of assistance listed in Appendix C paragraph 9 and will verify if FEMA or USACE funds are available for an activity, or the costs are reimbursable by FEMA or USACE before awarding CDBG-DR assistance for the costs of carrying out the same activity.

8.4 Public Comment Summary and Response

Comment Received	Grantee’s Response

	...