



**PALM BEACH COUNTY COMMUNITY RATING SYSTEM  
FLOODPLAIN MANAGEMENT PLAN  
ACTIVITY 510 PROGRESS REPORT CY2020**

Palm Beach County, Florida  
NFIP Number - 120192

**Department of Public Safety  
Division of Emergency Management**

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1. Name of the CRS Floodplain Management Plan:

***Unified Local Mitigation Strategy***

The purpose of the Palm Beach County Unified Local Mitigation Strategy (LMS) is to develop and execute an ongoing unified strategy for reducing the community's vulnerability to identified natural, technological, and societal hazards. The strategy provides a rational, managed basis for considering and prioritizing hazard-specific mitigation options and for developing and executing sound, cost effective mitigation projects. The LMS also provides a basis for justifying the solicitation and use of local, state, federal, and other monies to support hazard mitigation projects and initiatives. The Palm Beach County Unified LMS believes broad community support, including ongoing public and private sector involvement, is very important to the success of the program.

Palm Beach County has had an increasing number of stakeholders preparing to incorporate the LMS as part of their Floodplain Management Plans in accordance with the CRS Coordinator's Manual Activity 500 – Flood Damage Reduction Activities, specifically, Activity 510 – Floodplain Management Planning. Several communities have worked with PBC Division of Emergency Management, the Building Division of the Planning, Zoning, and Building Department, and private contractors in efforts to identify the resources necessary to accomplish planning initiatives. Currently nearly all of our municipalities use the LMS for their floodplain management plan in addition to unincorporated Palm Beach County.

2. Date Adopted

- Original adoption: September 30, 1999
- Revised Plan approved by FEMA: November 2004
- Revised Plan approved by FEMA: January 2010
- Revised Plan approved by FEMA: February 2015
- Revised Plan approved by FEMA: October 16, 2019

3. Location where copies are available for review:

Palm Beach County Division of Emergency Management  
Emergency Operations Center  
20 South Military Trail  
West Palm Beach, FL 33415

Contact: Shane Ratliff, Planning Manager/Acting CRS-LMS Coordinator, Planning Section

Also posted on the internet at the following address:

<http://discover.pbcgov.org/publicsafety/dem/Publications/PBC%20Local%20Mitigation%20Strategy%202020.pdf>

4. Summarize any flooding that occurred during calendar year 2020:

The LMS ranks floods at the top of the list of identified hazards because of their projected impact potential across the entire spectrum of community exposure and services. Florida, and especially PBC, is highly susceptible to localized flooding. Inland and coastal flooding in particular are the likely types of floods to frequently affect communities across the County. The tropical rainfall pattern in the county coupled with the hurricane season (June 1 through November 30) makes PBC particularly vulnerable to flooding, especially later in the hurricane season when the water table is high and the ground is saturated from impacts of cyclones and rain events. PBC averages more than 64 inches of rain per year, and more than 130 rain days, with most of that occurring between the months of June and November. The following flooding advisory statistics were noted for CY 2020:

Flood Advisories: 70  
 Flash Flood Warnings: 11  
 Flash Flood Watches: 00  
 Coastal Flood Statements 34

**Total Precipitation for CY 2020** (NWS – Miami taken from PBC PBI)

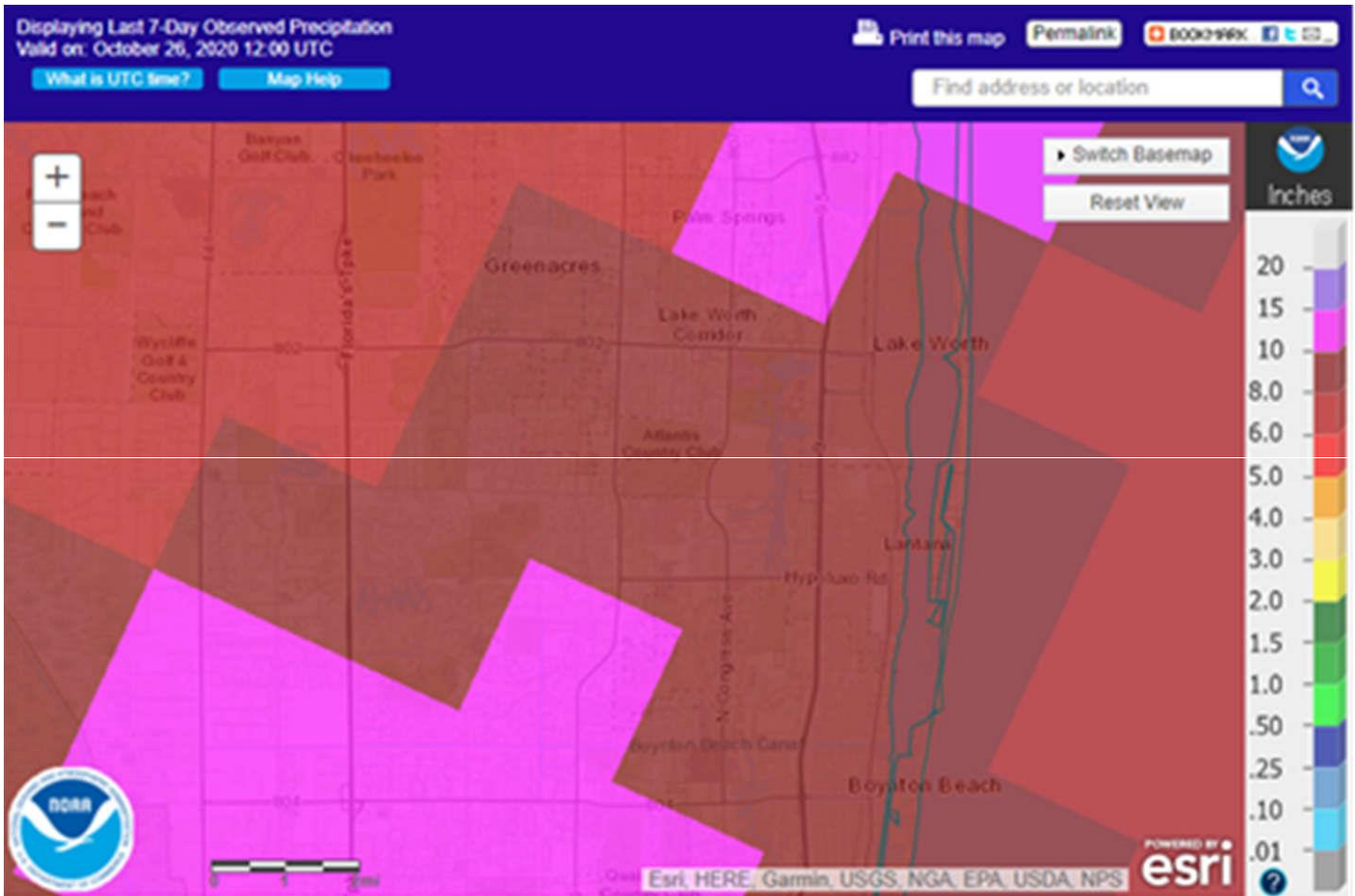
2020	Total Rain	Days >0.01"	Days >0.10"	Days >0.50"	Days 1.00">	Greatest Rain Day	Date
Jan	1.75	9	4	1	0	0.73	31-Jan
Feb	2.58	8	5	3	0	0.84	22-Feb
Mar	0.17	2	0	0	0	0.09	10-Mar
Apr	2.99	10	7	2	1	1.18	17-Apr
May	9.19	14	10	4	2	4.44	25-May
Jun	6.44	13	7	5	3	1.71	19-Jun
Jul	11.8	21	15	6	3	4.06	5-Jul
Aug	7.01	20	12	7	2	1.13	30-Aug
Sep	5.63	19	13	2	2	1.32	19-Sep
Oct	14.73	22	15	8	5	3.58	1-Oct
Nov	7.92	11	6	4	3	2.28	8-Nov
Dec	2.26	10	4	1	1	1.4	7-Dec

Source NWS: <https://w2.weather.gov/climate/index.php?wfo=mfl>

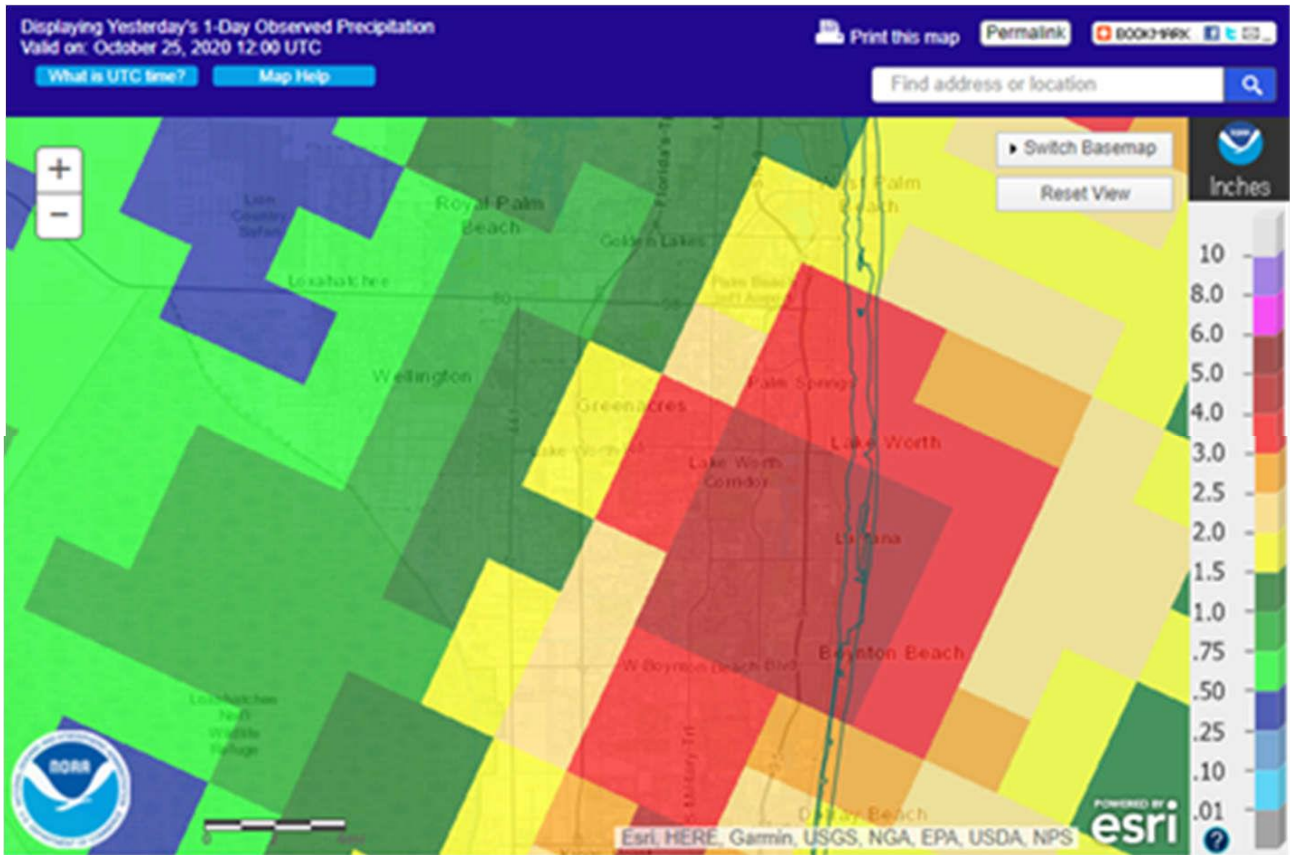
Significant weather activities during this past year:

**October 2020:**

October 23-25: Tropical Depression #28 (which was upgraded to Tropical Storm Zeta on the night of 10/24/2020) provided 7-day rainfall totals of 8-10” in the Lantana/Boynton Beach areas ending 10/26/2020 as shown by the graph below.



Much of that rain fell over a 24-hour period ending at 8AM on Sunday, 10/25/2020, with 4-5” in the Lantana/Boynton Beach area, most of this rain fell between about 8:30 PM and midnight on Saturday night, as shown in the map below.



The Sea Pines Neighborhood/Tradewinds Way in the Lantana area received significant street flooding that lasted several days due to continual bands of rain. It was pinpointed that the issue was a non-maintained drainage system from Interstate 95 that was not allowing water to drain properly. Palm Beach County staff assisted the Town of Lantana with pumping water from the neighborhood on multiple occasions over a two-week period. Luckily, there were very few homes with water intrusion due to the neighborhood and drainage design methods used in South Florida, which keeps water at the street level and homes are the last to get water. Unfortunately, several residents advised they could not leave their homes for 2-3 days.



In total, there were 11 reports of street flooding on October 24, eight on October 25, and eight on October 26 to our County Warning Point. The Emergency Manager and other County staff responded to and assessed multiple areas where flooding was reported, and was unable to locate any homeowner who wanted to file a flooding report of water intrusion inside their homes. The local governments are now working on possible mitigation projects, which may allow for more capacity to remove water from the streets.

### **November 8-10, 2020**

Tropical Storm Eta was originally thought to be heading for South Florida, however it made a turn west and instead, the “dirty” part of the storm (the northeastern part in most tropical/hurricane type storms) sent copious amounts of rain into South Florida. Some of the same areas we saw just two weeks prior during the October rains were expecting significant rainfall again.

Emergency Management staff activated the Flood Response Preparations plan from the CRS-Program for Public Information committee. Information from the FRP were used in the County Emergency Manager’s press conference to the public pre-storm, and the Palm Beach County Public Affairs Department utilized the FRP in their public messaging.

Fortunately, the storm did not intensify until after passing out of our area, therefore not as much rain occurred as expected, but we still had street flooding in those areas that had previously flooded due to high amounts of rainfall this year.

#### 5. What impact did the flooding have on repetitive loss areas?

This office still has not received any reports of flooding from repetitive loss property area owners, and the areas that reported street flooding were not in repetitive loss areas. Even with well above-normal rainfall in 2020 throughout unincorporated PBC, the county was limited to street flooding due to the rate of rainfall versus the rate of storm water runoff. No structures were reported flooded during any of 2020 rain events.

#### 6. List each element of the plan and note how much was accomplished during the previous year.

Major progress in the LMS program during this reporting period includes:

- LMS2020 was scored by Verisk/ISO as a FMP under Activity 510. LMS2020 received a final score of 320 points due to the hard work our communities and program did to ensure that the “10 steps” process was followed for revising the LMS from the 2015 to the 2020 version.
- The appearance/spread of COVID-19 hampered efforts to remain on a normal schedule for most government and private sector agencies within Palm Beach County in 2020. In-person meetings were all but impossible due to social distancing requirements, travel restrictions placed by municipalities on their staff, and emergency orders that prohibited in-person gatherings and shuttered businesses for months. However, our LMS team adapted by using virtual means of communication in order to keep moving the program forward, and almost all of our normal meetings were held.
- Quarterly Meetings were held for the LMS Working Group (4), LMS Steering Committee (3), and the CRS Users Group (4). There was one (1) meeting of the LMS PPL Evaluation Panel to evaluate, score, and rank new projects for the Prioritized Project List (PPL) prior to the BRIC/FMA deadlines.
- The LMS WebEOC portal was vitally successful in capturing community submission packages for the Prioritized Project List (PPL). A total of 85 projects were recorded in the November 2020 submission to the State.

- The LMS Newsletter was only published once in 2020 due to COVID response. The Fall 2020 edition went out in early December to all municipalities and LMS members to be displayed in their public spaces, and posted online at <https://discover.pbcgov.org/publicsafety/dem/Sections/Planning-Local-Mitigation-Strategy.aspx> .
- Completed the Flood Hazard Specific Plan, addressing storm surge, coastal flooding, inland flooding, Sea Level Rise, dike breach, Tsunamis, and rogue waves. Also completed the Severe Weather Hazard Specific Plan, which addresses hurricanes, tornadoes, extreme heat, and extreme cold.
- Palm Beach County along with Broward, Monroe, and Miami-Dade continued to enhance the Southeast Florida Regional Climate Change Compact to coordinate mitigation and adaptation activities across county lines. In February 2020, the Unified Sea Level Rise report was updated from the 2015 version. Since then, the four Compact counties have advanced local and regional responses to, and preparations for, the effects of climate change, including sea level rise, flooding, and economic and social disruptions.
- PPL Mitigation projects continued to be funded from previous disasters, including those of flood mitigation projects. See *Annex 1* for all current projects in progress or completed from FEMA disaster numbers 4283 and 4337.

7. Were any objectives not reached or are implementation behind schedule? If so, state why.

As a follow up to last year's report, all municipalities and LMS members (special districts and private utilities) adopted the LMS2020 as their mitigation strategy, and many are using it as their 510 Floodplain Management Plan as well.

As a result of the response to COVID-19, the Dike Failure Hazard Specific Plan was not completed as scheduled in August of 2020. However, it is now in final review with our stakeholders and should be approved by February of 2021.

8. Should new projects be started or should any of the recommendations or objectives be revised?

The LMS PPL was reviewed and updated in October/November 2020. All projects were dedicated to mitigate flooding issues within the respective communities. Projects on the list for than more than five (5) years at the time of bi-annual reviews were reviewed, and if necessary, either updated or purged. New projects were considered and scored/ranked only once this year after a vote of the LMS Working Group to forego the Spring submission period due to the emergence and response to COVID-19. However, we did complete a submission and scoring/ranking period in October/November of this year.

9. Progress Reports discussed and/or made available at a public meeting.

The status of all mitigation projects and success stories were reported and discussed at quarterly LMS Working Group and Steering Committee meetings (open to the public). An update to the website includes the number of new and existing projects. The PPL is posted on the DEM website at once approved by the Steering Committee, and is publicly available for review at [https://discover.pbcgov.org/publicsafety/dem/PDF/Fall%202020%20PPL%20\(Oct%202020\)%20FINAL.pdf](https://discover.pbcgov.org/publicsafety/dem/PDF/Fall%202020%20PPL%20(Oct%202020)%20FINAL.pdf) .

All general meetings are publicized through media releases, social media platforms, and posted announcements. The minutes for each LMS Working Group and Steering Committee meeting are posted on our LMS webpage for public consumption at <https://discover.pbcgov.org/publicsafety/dem/Sections/Planning-Local-Mitigation-Strategy.aspx> .

10. We have provided copies of this report to our governing board and local media.

The governing board for the CRS is the LMS Steering Committee. Copies of this progress report have been provided to members of the Steering Committee and have been posted to the homepage of the Palm Beach County Division of Emergency Management website for public review. A media release announcing the report and its posting has been executed.

## Annex 1: PPL Project Progress

As part of this annual progress report preparation process, the LMS Coordinator requested an update on the status of all active county flood mitigation projects from the state. Current projects submitted for Hazard Mitigation Grant Program (HMGP) funds for hurricanes Matthew and Irma that were awarded funds are listed below. A total of \$2,437,938 in total project costs were funded through Hurricane Matthew, and \$32,384,689 through Hurricane Irma HMGP funding, with most projects still in progress.

### Hurricane Matthew DR-4283

FEMA #4283	County	Project Title	POC	Project Cost	Total Federal Share	PM	FEMA Award Date	Contract Exec'd	POP Date	FEMA Closeout Date	09/30/20 %
014-R	Palm Beach	Town of Lantana Library Hurricane Shutter System, Retrofit	Deborah Manzo Linda Brien	\$69,286.00	\$51,965.00	Liliana Holly	03/04/18	06/08/18	03/31/20	11/18/20	99%
026-R	Palm Beach	Palm Beach County Natural Areas, Wildfire Mitigation	Harper Carroll	\$750,000.00	\$562,500.00	Holly	06/17/19	12/04/19	03/31/21		62%
028-R	Palm Beach	Village of Palm Springs, Miller Road Stormwater Improvement, Drainage	Kim Glas-Castro	\$111,152.00	\$83,364.00	Holly	02/13/18	06/15/18	12/31/20		74%
093-R	Palm Beach	Indian Trails Improvement District, Moss Property, Stormwater Pump, Drainage Improvement - Phased	Robert Robinson	\$7,500.00	\$1,875.00	Liliana Holly	05/03/18	07/27/18	05/31/19	10/15/20	100%
096-R	Palm Beach	Town of Lantana, Police Department (901 8th Street) Retrofit	Joel Cortes Commander Robert Haggerty	\$1,500,000.00	\$1,125,000.00	Holly	06/26/18	08/06/18	12/31/20		81%

### Hurricane Irma DR-4337

Disaster Number	Project Number	Project Title	Project Counties	Total Project Cost Estimate	Federal Share Proposed	Status	Date Approved
4337	0110	City of South Bay, Retrofit City Hall	PALM BEACH	\$ 165,888.00	\$ 124,416.00	Approved	04/12/19
4337	0121	City of Boynton Beach, Lakeside Gardens Improvements, Drainage	PALM BEACH	\$ 1,133,400.00	\$ 850,050.00	Approved	06/14/19
4337	0149	Town of Lake Park, Lake Shore Drive, Drainage	PALM BEACH	\$ 5,647,789.00	\$ 3,497,789.00	Approved	03/13/20
4337	0157	Town of Jupiter, Municipal Complex/Police Department, Code Plus	PALM BEACH	\$ 1,246,868.00	\$ 935,151.00	Approved	07/19/19
4337	0253	City of Greenacres, Public Works Facility, Generator	PALM BEACH	\$ 240,000.00	\$ 180,000.00	Approved	01/06/20
4337	0261	Village of Golf, Residential Under-grounding Powerlines, Utility Mitigation	PALM BEACH	\$ 2,241,957.00	\$ 1,681,467.75	Approved	03/06/20
4337	0267	Indian Trail Improvement District, East-West Conveyance Improvements, Drainage	PALM BEACH	\$ 4,035,431.60	\$ 2,986,219.38	Approved	09/06/19
4337	0269	Village of Wellington, Lift Station, Generators	PALM BEACH	\$ 250,000.00	\$ 187,500.00	Approved	09/27/19
4337	0278	Town of Palm Beach, Town Utility Undergrounding Project, Utility Protective Measures	PALM BEACH	\$ 14,851,500.01	\$ 8,465,355.01	Approved	09/27/19
4337	0288	Indian Trail Improvement District, Canal Reinforcement, Drainage	PALM BEACH	\$ 383,856.00	\$ 287,892.00	Approved	09/20/19
4337	0293	City of West Palm Beach, WTP Administrative and East High Service Buildings, Wind Retrofit	PALM BEACH	\$ 951,000.00	\$ 713,250.00	Approved	09/20/19
4337	0491	Village of Wellington, Public Works, Code Plus and Generator, Phase 1	PALM BEACH	\$ 1,237,000.00	\$ 716,250.00	Approved	07/08/20



This report will be released to the media via the county's Public Affairs Department, and posted on the Division of Emergency Management's website.

## Annex 2: Media Release example for LMS Meetings



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Verdenia C. Baker

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# Media Advisory

For release  
Contact

September 3, 2020  
Joe Mercurio (561) 712-6481

## Local Mitigation Strategy (LMS) Working Group General Meeting

On Wednesday, September 9, 2020, at 9:00 a.m., the Palm Beach County Local Mitigation Strategy (LMS) Working Group will hold a virtual general meeting of its public and private-sector membership. This meeting is open to the public via teleconference due to COVID-19 precautions.

The LMS Working Group is coordinated by the Palm Beach County Department of Public Safety's Division of Emergency Management, and is comprised of county, municipal, and community partners. Their purpose is to prepare and promote local strategies and projects that will reduce long-term risks to life and property from natural, technological, and human-caused hazards. The resulting pre- and post-disaster mitigation strategies and projects are supported by a variety of state and federal programs and funding sources, in accordance with the Disaster Mitigation Act of 2000.

Topics will include updates on the LMS2020 document.

**Who:** All interested persons

**What:** Local Mitigation Strategy (LMS) Working Group Meeting

**Where:** Palm Beach County Emergency Operation Center via Teleconference call-in: 561-776-2160 PIN: 763200#

**When:** September 9, 2020; 9:00 a.m. - 10:00 a.m.

**Contact:** Joe Mercurio at (561) 712-6481

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