



## **Floodplain Management Plan Progress Report**

April 15, 2021

This is the "Floodplain Management Plan Progress Report" for the City Palm Bay. It was prepared by Jim Williams CFM, Floodplain Coordinator after consulting with the Palm Bay Public Works Department, Land Development Division, and the Economic Development Dept.

The City of Palm Bay uses our portion of the Brevard Prepares "Local Mitigation Strategy" (LMS) combined with the Capital Improvements Plan (CIP), the City Floodplain Ordinances, the Public Works Standard Operating Procedures for Stormwater and Flood Management (PWSOP 26), and the Community Rating System (CRS) activities for our "Comprehensive Floodplain Management Plan". This combination is used to provide the optimum flood protection for the citizens of Palm Bay.

The City adopted the Resolution 2020-54, the 2020 Brevard County Local Hazard Mitigation Strategy which is a Multi-Jurisdictional Five-Year Plan on November 5, 2020.

In December 2020, the City adopted two Flood Administration Ordinances: 2020-82, 2020-83 and with the help of the Florida Division of Emergency Management, Ordinance 2020-84. The first two ordinances moved the Floodplain Coordinator and Community Rating System (CRS) responsibilities to the Building Department from the Land Development Division. Ordinance 2020-83 made improvements to Chapter 174, Floodplain and Stormwater Management, subchapter 'Floodplain Management'. Mainly this ordinance reflects new Floodzones on the new coastal Flood Insurance Rate Map (FIRM), Effective Date: January 29, 2021. The five new FIRM Panels for Palm Bay include additional "Velocity" and "Coastal A" Floodzones along the Indian River Lagoon and the construction in these zones as referenced in the new Florida Building Codes, Effective Date December 31, 2020. This was done to remain compliant with FEMA and the National Flood Insurance Program.

For credit under the CRS for flood insurance, this report must be distributed to the media and be made available to the public. The Community Information Coordinator will do a press release and provided copies to the media. The report will be posted on the City website under Flood Protection Info; copies are also available at the Building Department at 190 Malabar Rd. SW Ste 105.

## 1.) Background

The Bylaws of Brevard Prepares - Mitigation 20/20 for Local Mitigation Strategy Development Brevard County Florida contains several Articles pertinent to Palm Bay. This City of Palm Bay Floodplain Management Plan Progress Report was prepared by City staff and is not a product of the *Brevard Prepares* Membership or Steering Committee.

**Purpose:** The LMS plan reviews a variety of measures that can decrease the vulnerability of the citizens to the future economic and environmental costs of natural disasters. It develops, monitors, and maintains a local strategy for hazard mitigation and post disaster redevelopment.

**Membership:** The membership and participation of local governments in *Brevard Prepares* is controlled by contractual agreement between the Florida Department of Community Affairs, Brevard County, and the participating municipalities.

## 2.) Public Works "Standard Operations Procedure"

In addition to the LMS, the Public Works Standard Operating Procedure (PWSOP: 26) has been developed to promote the public safety and general welfare and to minimize public and private safety losses due to flood conditions in specific areas. Procedures for proper storm water maintenance have been established. The objective is to protect the City's storm sewer system and the waters of the City, State, and Nation from the unwanted and unnecessary pollutants and to provide for an unobstructed storm and flood infrastructure.

Inspection of the infrastructure shall be conducted once every five (5) years. After storm events of 3 inches or greater roadways that cross major canals are checked for clogging or failures. The Maintenance Division removes debris buildup immediately from those canals and culverts. All drainage right-of-way (DROW) channels are mowed twice a year. Dredging of City maintained channels is done once every five (5) years on a rotational basis or as needed. It is the responsibility of the Public Works personnel to follow these procedures, recommend improvements or changes, and to be vigilant to the welfare of the citizens of the City of Palm Bay.

## 3.) Review of the New 2020-84 Floodzone Ordinance and Building code amendments that reflect changes of the new January 29, 2021 "Coastal" Flood Insurance Rate Panels

The original Floodplain ordinances intent was not changed. The Flood Insurance Study for Brevard County, Florida, and Incorporated Areas, dated January 29, 2021, and all subsequent amendments and revisions, and the accompanying Flood Insurance Rate Maps (FIRM), and all subsequent amendments and revisions to such maps, are adopted by

reference as a part of this ordinance and shall serve as the minimum basis for establishing flood hazard areas.

The major additions include:

- 1.) The addition of new Velocity Zones to the Indian River Lagoon here in Palm Bay. None of the Velocity Zones reach the shoreline here in the City of Palm Bay.
- 2.) The creation of a Limited Wave Action Line or LiMWA Line along the Indian River Shoreline, included on these five new FIRM panels. While this line is on many river-front parcels here in Palm Bay, it does not affect any existing residential structures. Two parcels at Castaway point are affected by the LiMWA line. One of these parcels is Castaway Point Park which is owned by the City. The line goes through a small picnic pavilion in the park, but no renovations are required. The other Parcel is to the north of Castaway Point Park and is minimally affected.
- 3.) With the creation of the LiMWA line, another new floodzone for Palm Bay has been created. The "Coastal A" floodzone is new and is the AE Zone area from the LiMWA Line eastward to the Velocity Zone.
- 4.) Coastal A zone construction standards must meet the conditions of Velocity Zone Construction.
- 5.) These five new Flood Insurance Rate Map (FIRM) panels have a new effective date of January 29, 2021 and the Suffix letter "H", while the remaining Panels for Palm Bay are still dated March 17, 2014 and have a Suffix letter G.

The new FIRM Panel Index date for Brevard County is January 29,2021.

#### **4. CRS Outreach Projects and the Florida Floodplain Managers Association**

We continue our outreach notices with a special mailer including the new FIRM map that is sent to our Repetitive Loss areas every year before hurricane season. We also continue our one-third page outreach notice inserted into the Stormwater Utility Bill; this reaches every parcel owner in Palm Bay and has covers several areas of information.

The City Floodplain Coordinator is a Certified Floodplain Manager (CFM)) and is also the Community Rating System (CRS) coordinator. The CFM continues memberships in the Florida Floodplain Managers Association (FFMA) and the Association of State Floodplain Managers (ASFPM).

### **MAJOR PROJECTS IN PALM BAY**

#### **City of Palm Bay Awarded Over \$2 Million for Flood Mitigation Efforts in Northeast Palm Bay**

**Palm Bay, FL** - On August 24, 2020, the City of Palm Bay was notified of an award of \$2,052,539 through FEMA's Hazard Mitigation Grant Program (HMGP). In 2018, the City sought federal funding assistance to administer the Voluntary Home Buyout (VHB) Program to acquire and demolish 13 flood-prone homes in northeast Palm Bay. The VHB Program is a long-standing effort by the City and

homeowners to address repetitive flood damage following natural disasters.

In 2017, the City of Palm Bay was approached by homeowners regarding losses incurred because of Hurricane Irma and sought assistance to address perpetual flood damage to the homes, which were built within or near a high-risk floodway. Homes built within this area sustain recurrent flood damage, which is not covered under home insurance but is covered by FEMA flood Insurance.

Funding under FEMA's Hazard Mitigation Grant Program covers 75 percent of overall project costs and requires a 25 percent cost-share from other funding sources. In 2019, the City was notified of its award of \$684,179 in Community Development Block Grant - Disaster Recovery (CDBG-DR) funds to meet the cost-share requirement.

“The City is currently seeking applications and supporting documentation from homeowners participating in the City’s Voluntary Home Buyout Program, funded by FEMA’s Hazard Mitigation Grant and the Community Development Block Grant – Disaster Recovery, for losses due to repetitive flood damage.”

## **Public Works Stormwater Utility and Capital Improvement Projects**

The City of Palm Bay is committed to protecting the community and its waterways through sound planning, construction, maintenance, and improvement of the drainage control systems. The City’s improved Stormwater Utility Program makes this goal a reality, while providing a means for the City to meet State and Federally mandated regulations for discharging stormwater.

Currently the City’s main priority is paving roads and the associated drainage maintenance for these roads. This includes new crossover pipes under the roads and outfall pipes where needed along with the associated swale grading. To date the project has 102 road miles substantially complete and has replaced 334 drainage pipes.

### **C-75 Canal Projects**

In late November 2018, the City of Palm Bay Public Works Department launched a new, multi-stage project in the northeast area of the City as part of Palm Bay’s ongoing infrastructure repair and improvement program known as the Stormwater Utility Program. The new project was focused on culvert crossings associated with Melbourne Tillman Water Control District’s C-75 Canal. The project required temporary full road closures with detours at three canal crossings, which was staggered to minimize the impact on local traffic.

### **Pebble Avenue**

The first phase of the project addressed the culvert at the C-75 Canal crossing on Pebble Avenue. The Pebble Avenue portion of the project involved the removal of two failed 66” metal pipes and the replacement with a new box culvert which will provide enhanced stormwater drainage in the area.



## Pembroke Avenue

The City of Palm Bay Public Works Department completed the second stage of the C-75 Canal project that involved the crossing on Pembroke Avenue. This project included the removal of a 54" failed metal pipe and the replacement of a new, improved box culvert.



## Emerson Drive

The final phase of the C-75 Canal project took place at the crossing on Emerson Drive. This project location required the removal of two 60" failed metal pipes and the replacement of a single box culvert. Due to the relatively high traffic usage of Emerson Drive, construction at this location was completed on an accelerated timetable, with the road closure lasted less than 21 days.



## RECOMMENDATIONS

- 1.) Palm Bay will continue the job of implementing the LMS recommendations and ongoing Capital Improvement Projects and objectives.
- 2.) The City will continue to inform citizens on their status of the newly revised Flood Insurance Rate Map.
- 3.) The City will enforce our Floodplain Ordinance and continue to work with the State Floodplain Management Office to ensure we are in compliance with the new December 31, 2020 Florida Building Code, FEMA and the NFIP.
- 4.) The City will continue to attend Melbourne Tillman Water Control District meetings. The City is active in intergovernmental meetings held by the St. Johns Water Management District as well as attending Florida Stormwater Association meetings.

- 5.) The City will continue to work with Brevard County and other municipalities for water quality issues impacting the Indian River Lagoon.
- 6.) The City will continue to participate in the ASFPM, FFMA, and all our CRS Activities.
- 7.) The City will continue to update the Flood Protection Info on the City website including a new interactive FIRM map and this current Progress Report.