



Community Development Department
Planning Division

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City of Palm Coast Floodplain Management Annual Progress Report August 2019

Executive Summary

The purpose of this document is to provide an annual account of activities associated with the City of Palm Coast ("City") Floodplain Management Program. This document facilitates information that can benefit public officials, businesses, and the Citizens of Palm Coast.

The Flagler County Local Mitigation Strategy (LMS) serves as the City's Floodplain Management Plan under the Community Rating System (CRS) of the National Flood Insurance Program (NFIP).

Under CRS Activity 510, the City is required to complete a Floodplain Management Plan annual progress report. This document serves as that report.

Annual Progress Report Development and Staff Roles

This document was prepared by one (1) of the City Certified Floodplain Managers (CFM), Denise Bevan, and subsequently reviewed by the four (4) remaining City CFM staff, Kendra Iannotti, Jordan Myers, Michael Brennan and Mike Peel; Ms. Myers serves as the Environmental Planning Technician and achieved her certification in June 2018. The referenced staff and the associated Floodplain, Outreach, Awareness & Management (FOAM) Team members, routinely conduct meetings to ensure that CRS program activities are managed and processed throughout the year. Additional discussion of the Team's role and responsibilities are discussed in the following sections.

Ms. Denise Bevan serves as the primary CFM / CRS Coordinator for the City of Palm Coast since April 2016. She manages the City's CRS program and facilitates updates throughout all City Departments. Ms. Bevan currently serves as the Team Leader of the FOAM (Floodplain Outreach, Awareness & Management) Team comprised of staff from various divisions. Further, Ms. Bevan serves as the primary City Liaison for the Flagler County Local Mitigation Strategy (LMS) Working Group.

Mr. Mike Peel serves as the City's Engineer and achieved CFM certification in June 2017. He has also held a professional license in civil engineering since July 1985. He is responsible for the overall management of the City's stormwater system and the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permitting program. Mr. Peel also consults on application requests for FEMA map revisions.

Ms. Jordan Myers is the primary reviewer of elevation certificates during the building permit stage of development. Her core responsibility revolves around the development process and reviews land use changes, development agreements, plats, and site development applications.

Mrs. Kendra Iannotti actively participates in all CRS program activities and CFM meetings. Mrs. Iannotti's primary responsibility is within the City Manager's Office. She provides support for public information that includes website updates, brochures and library resources.

Mr. Michael Brennan secured the CFM designation in March 2013 and has dually served as a City Liaison to the LMS Working Group. Mr. Brennan is the Stormwater Manager and oversees a multitude of flood hazard mitigation projects. His role and knowledge will continue to serve the CRS program and has proved to be a tremendous asset.

FOAM (Floodplain Outreach, Awareness & Management) Team Mission Statement:

To support and educate our citizens about flood hazards and the National Flood Insurance Program, while ensuring a safe community through steadfast stewardship of floodplain management, hazard mitigation, open space protection, and comprehensive stormwater management.

The Team's priority is to ensure the City's esteemed reputation in the floodplain community is maintained while providing a safe environment for our citizens.

Members, Titles and CRS Activity Focus:

- Denise Bevan, CFM
City Administration Coordinator; Role: CRS Coordinator & City Floodplain Manager (All Activities)
- Mike Peel, CFM
Engineer; Role: Activities 360, 450, 540
- Carmelo Morales
Stormwater Design and Construction Engineer; Role: Activities 360, 450, 540
- Jordan Myers, CFM
Environmental Planning Technician; Role: All Activities
- Kendra Iannotti, CFM
Executive Assistant to the City Manager; Role: Activities 330, 350, 360
- Mike Brennan, CFM
Stormwater Manager; Role: Activities 360, 450, 540
- Damaris Ramirez
Planner; Role: All Activities
- Conrad Troha
Stormwater Specialist Coordinator; Role: Activities 360, 450, 540
- Cathy Almberg
GIS Specialist; Role: Activities 420, 440, 501

Adoption of the LMS / Updates

The Flagler County LMS was adopted by *Resolution No. 2016-49* by the City Council on May 17, 2016. The LMS is required to be updated every five years and is due for an update by May 2021. This report respects the effective LMS that gives Flagler County and its municipalities the opportunity to determine what all-hazards mitigation actions need to be taken to minimize damage before the next disaster strikes.

City staff continues to work with County staff and other LMS stakeholders quarterly to enhance floodplain management activities across the entire County.

As part of this annual report, the City of Palm Coast reviews the LMS project list. Concurrently, the 5-year Capital Improvement Plan (CIP) has been evaluated for qualifying projects; fiscal year 2019 projects have been approved via adoption of the budget. City staff merged the documents into the "Prioritized Project List" in preparation of Hazard Mitigation Grant Program (HMGP) Notice of Funding Availability

resulting from Hurricane Irma Disaster Declaration (FEMA 4337-DR-FL). Please see Attachment A for the City mitigation projects submitted to the Florida Division of Emergency Management for consideration.

As part of the 2018 Floodplain Management Annual Report, the following projects were highlighted as part of the HMGP Hurricane Matthew Disaster Declaration (FEMA-4283-DR). All of the following projects were successfully awarded FEMA grant contracts.

- City Hall Generator
- 15 Wastewater Collection System Lift Station Generators
- 15 PEP Area Pump Station Generators

Purpose and Objectives of the LMS

The purpose of the LMS is to develop a unified approach among County and municipal governments for dealing with identified hazard and hazard management problems, including flooding, in the Flagler County area. It established an ongoing process that makes hazard mitigation part of the daily routine for the entire community. The LMS also helps establish funding priorities for current proposed mitigation projects and develop priority mitigation projects to be completed with such disaster assistance funds as may be available after a disaster. Implementation of planned, pre-identified, and cost-effective mitigation measures not only helps reduce loss of life, destruction of property, and damage to the environment, but also aids in the decision making process during the recovery and reconstruction following a disaster.

The primary hazard mitigation goals, objectives, and guiding principles of the LMS are to:

Goal 1.0 Minimize impacts from hazards to infrastructure, critical facilities, and property.

Goal 2.0 Minimize the impact to natural resources (including water resources, wetlands, and coastal habitats).

Goal 3.0 Promote community awareness of vulnerability and mitigation options.

Goal 4.0 Reduce potential hazard related economic losses to businesses.

Goal 5.0 Strengthen regional relationships in regards to mitigation among municipalities, agencies, and other organizations.

Goal 6.0 Promote methods of funding mitigation projects, including innovative methods.

Flagler County Local Mitigation Strategy Working Group

As noted in the LMS, “the Working Group acts as a local coordination committee to support and recommend projects for various grant programs; recommends to other regulating agencies or organizations ideas on how to better mitigate the community against natural disasters; and provides educational outreach to the general public about ways to prepare for disaster and mitigation opportunities for their homes and businesses.” The Group’s core consists of representatives of local municipalities, local organizations and County departments, and is coordinated by staff of the County Emergency Management Division. The LMS Working Group meetings are scheduled quarterly scheduling with supplemental topic-based meetings (i.e. floodplain managers, infrastructure, wildfire mitigation, etc.). The Working Group will continue to regularly review and revise its Prioritized Project List that are eligible for federal and state funding, i.e. HMGP, Flood Mitigation Assistance (FMA) Program, etc.

List of Mitigation Initiatives

The LMS Working Group has established a list of mitigation projects. The list contains projects that are eligible for HMGP, FMA, and other federal and state funding. Many of the projects listed help to mitigate the potential of flood hazards.

See Attachment A to the report for the complete Prioritized Project List. Of those listed, the following projects were submitted to the Florida Division of Emergency Management for eligibility consideration of Hurricane Irma HMGP funding.

- Project #PC-14: Manhole Dish Project – Reduce stormwater from entering sewer collection
- Project #PC-15: 5 Lift Station Generators

As referenced in the previous section, the list is a living document and routinely updated. Additional consideration by the Working Group is anticipated due to the ranking process also being modified through the LMS rewrite.

Of the originally listed projects, most have been completed since being placed on the list. The following section provides an inventory of “Weir Canal Palm Coast” and “Bridge Rehabilitation”. Photographs have been provided for the projects that were in construction in the previous report and now completed.

Weir Canal Palm Coast projects:

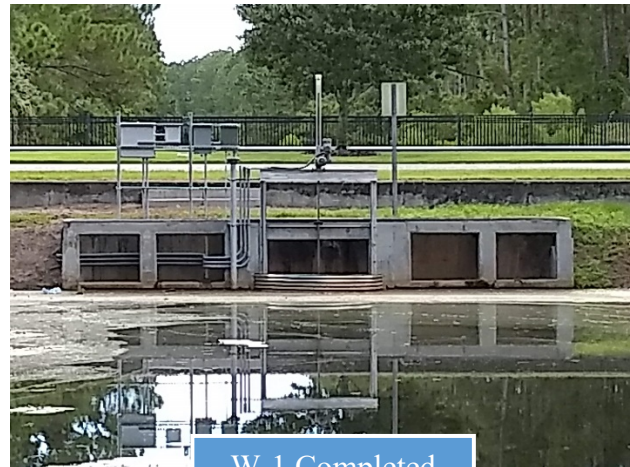
-LO-1: Completed (reported in 2015)
-PA-1: Completed (reported in 2015, an Emergency Project)
-BS-2: Completed (2017)
-W-1: Completed (2018)
-K-1: Completed (2018)
-L-1: Completed (2018)

Bridge Rehabilitation projects:

-734063: Completed (2017)
-734064: Completed (2018)



W-1 Construction



W-1 Completed



K-1 Construction



K-1 Completed

Beyond LMS projects, the City maintains a well-structured and rigid maintenance schedule of the stormwater drainage network that reduces the risk of flooding hazards. The following section inventories maintenance activities conducted since the last report in August 2018.

- Swale maintenance and rehabilitation (29.5 miles)
- Valley gutters (5 pipes; 225 linear feet)
- Culvert pipe replacement (17 pipes; 1,121 linear feet)
- Culvert pipe cleaning (3,631 pipes; 94,406 linear feet)
- Drainage ditch maintenance (376 miles 2x per year)
- Freshwater canal weed control (493 acres continual maintenance)

Enhanced Stormwater Management Program

Beginning in October 2018, the City implemented a new enhanced stormwater program. This program includes improvements to level of service and a greater emphasis on maintenance of major waterways, pipe crossings, ditches, inspection programs, and an accelerated Capital Improvement Program. This enhanced program is focused on a more proactive approach to maintenance and improvements. Recent improvements to the maintenance program have included full Geographic Information System (GIS) mapping and documentation of all swale issues and work performed. Staff is currently working on the inclusion of ditch maintenance and pipe replacements to a GIS mapping program. The infrastructure assets are being field verified with a new inspection program concurrently commencing. Since the release of the last report, a new Stormwater & Engineering Department with 55 employees was established that consolidated functions of Community Development and Public Works departments. The recently formed Stormwater Division within the Stormwater and Engineering Department includes the addition of personnel and specialized equipment to help meet the needs of the enhanced program. The reorganization was driven by the referenced enhanced stormwater management program to address aging infrastructure as well as drainage issues across Palm Coast.

The City is also pursuing service contracts from consultants and contractors to help perform maintenance that is outside of current staff and equipment capabilities. Staff has performed several ditch clearing projects that have resulted in positive improvements to neighborhood drainage systems. Additionally, neighborhood-wide ditch projects are in the planning stages with anticipated completion dates within the next reporting cycle. The enhanced stormwater program also includes the development of a City-wide Stormwater Master Plan.



The Citywide Stormwater Master Plan will identify Base Flood Elevations (BFE) in previously unstudied areas, identify areas susceptible to potential flooding, areas in need of improvements and additional maintenance, and assist the City with developing a Capital Improvements Program that will better address areas of concern and identify projects that will provide the greatest benefit to the citizens of Palm Coast. The Master Plan modeling will also assist in better identifying potential impacts from new development and aide the development community in providing the most efficient lowest impact stormwater management facilities.

The Stormwater Master Plan is a living document that will continue to be refined and built upon as more data and improved technologies are developed.

The actions taken within the section(s) above are part of the City of Palm Coast 5-year Capital Improvement Plan (CIP). See Attachment B for the existing approved budget.

CRS Program Participation

The LMS references the importance and benefit of the City's participation in the Community Rating System (CRS) of the National Flood Insurance Program (NFIP). Under the CRS, the City undertakes flood protection measures beyond the minimum requirements of the NFIP. By doing so, the City achieved a

“Class 4” certification, resulting in a 30% discount of flood insurance premiums issued within the Special Flood Hazard Area (SFHA) in the City effective on May 1, 2017. For properties outside SFHA, 10% discount will remain the same. No discounts are applicable to those holders of preferred risk policies that are already significantly discounted. As a result of Palm Coast’s CRS participation, policy holders realize an annual savings of approximately \$100,000. Approximately 5,500 Palm Coast citizens and businesses currently have active flood insurance policies.

The City achieves CRS points by undertaking various activities that promote flood protection. These activities are conducted by Floodplain Managers and various City departments. Following is a summary of certain ongoing activities by the Floodplain Managers and various departments:

Activity	Departments	CRS Activity #
Collect, review, and maintain elevation certificates. Provide copies to the public.	Floodplain Managers/ Planning/ Zoning/ Stormwater and Engineering	310
Provide Flood Insurance Rate Map (FIRM) information. Provide Flood Zone Determination Letters to the public. Review, maintain and update FEMA Letters of Map Amendments or Revisions. Provide flood insurance information.	Floodplain Managers	320
Provide outreach to the community. Provide flood protection information.	Floodplain Managers	330
Provide flood protection information at the library and on City website	Floodplain Managers/ Information Technology/ Flagler County Public Library	350
Provide technical advice and assistance to public with flooding conditions. Annually publicize the service.	Floodplain Managers/ Stormwater and Engineering	360
Encourage residents and businesses to purchase flood insurance coverage	Floodplain Managers	370
Preserve floodplain in open space and public acquisition.	Planning	420
Maintaining higher regulatory standards. Provide low density areas for floodplain properties. Review new development for compliance. Enforcement of regulations.	Floodplain Managers/ Planning/ Stormwater and Engineering/ Building Division/ Code Enforcement	430
Maintain and use digitized maps. Day to day management of the floodplain. Maintenance of elevation reference marks.	Floodplain Managers/ Information Technology/ Stormwater and Engineering	440
Stormwater management, soil and erosion control, and water quality. Review building elevation to meet floodplain regulations.	Stormwater and Engineering/ Building Division/Planning/ Floodplain Managers	450
Maintain repetitive loss records. Provide yearly notice of property protection.	Floodplain Managers	502

Implement and update Floodplain Management Plan.	Flagler County/ Planning/ Capital Improvements/ Floodplain Managers	510
Drainage system maintenance. Enforce and publicize stream dumping regulations.	Floodplain Managers/ Stormwater and Engineering	540
Emergency response program.	Stormwater and Engineering/ Fire Department /Flagler County EMS	610

These activities are now reviewed through a new centralized collection process for annual recertification purposes for all CRS communities. The Team transmitted the annual recertification package on April 25, 2019 and received a partial determination on April 30, 2019 from the reviewing ISO reviewer that City of Palm Coast's floodplain management program remains consistent with the CRS standard. Staff is awaiting the final determination that includes the review of submitted elevation certificates.

Certified Floodplain Manager Program

The Association of State Floodplain Managers (ASFPM) has established a national program for professional certification of floodplain managers. The program recognizes continuing education and professional development that enhances the knowledge and performance of local, state, federal, and private-sector floodplain managers. As referenced, two staff members in the City's Planning Division, one in the City Manager's Office, and two in the Stormwater & Engineering Department have achieved the status of Certified Floodplain Manager (CFM). These certifications reflect the City's commitment to professional services in implementing the City's Floodplain Management Plan.

Training

The City CFM staff have participated in many training sessions to maintain the required Continuing Education Units (CEU) and beyond. Two staff attended the Annual Florida Floodplain Manager's Conference in April. Numerous other training activities were conducted amongst the remaining Certified Floodplain Managers to maintain their certifications.

Outreach

City staff targets opportunities to initiate and partner with external agencies to educate the general public regarding floodplain management and associated effects on insurance policies and safety matters. Each Spring, an informational brochure is released to the public via a utility bill insert. In addition, staff participates in various events to promote flood awareness, and the [City's website](#) serves as a resource for tips and other helpful information.

- Annual Intracoastal Waterway Cleanup (September 9, 2018)
- Flagler County Home Show (January 26-27, 2019)
- Arbor Day Celebration (May 4, 2019)
- Regional Leadership Academy (January 30, 2019)
- Stormwater Public Outreach Meeting(s)
(March 25, 2019, August 2, 2019, and August 20, 2019)

2019 Home Show
104 flood determinations issued



Flood Insurance Rate Maps and Flood Insurance Study

On June 6, 2018, the updated Flood Insurance Rate Maps and Study took effect. Since the new FIRMs took effect, Team members have been busy with the increase volume of requests for flood zone determinations because of residents receiving lender letters notifying that flood zone(s) changed and resulting mandate to purchase flood insurance. The notifications started hitting households the week of June 19th. During this reporting cycle, CFMs responded to 77 requests for a flood zone determination beyond those issued during the Flagler County Home Show.

Summary

The Flagler County Local Mitigation Strategy (LMS), which serves as the City's Floodplain Management Plan under the Community Rating System (CRS) of the National Flood Insurance Program (NFIP), was formally adopted by the City of Palm Coast City Council on May 17, 2016. As part of the LMS, the City accounts for Mitigation Initiative Projects and associated status. Two weir projects and ongoing stormwater maintenance have been completed since the 2018 annual report with many other structures planned for rehabilitation / construction in future years as part of the Stormwater Master Plan.

As part of the CRS participation requirements, the City of Palm Coast participates in annual recertification through Insurance Services Office (ISO). Activities are undertaken by various City departments on an ongoing basis to retain the CRS certification, which results in substantial discounts to flood insurance premiums in the City of Palm Coast.

These activities are now reviewed through a new centralized collection process for annual recertification purposes for all CRS communities. On April 25, 2019, Staff transmitted the recertification package and received a partial determination on April 30, 2019 from the reviewing ISO reviewer. The City of Palm Coast's floodplain management program remains consistent with the CRS standard and remains a "Class 4" community. Staff is awaiting the final determination that includes the review of submitted elevation certificates.

For insurance holders located within a special flood hazard area (A and AE zones), a 30% reduction is applied at renewal which is an average savings of \$120 per policy. For properties outside the Special Flood Hazard Area, 10% discount remains the same.

City staff have steadily improved educational outreach activities beyond previous years. These activities are critical to expand awareness regarding the importance of infrastructure maintenance, flood insurance, emergency preparedness and City services. The [City website content](#), publications, utility bill inserts, and annual event venue elements have been enhanced to include information on the Flood Insurance Rate Map changes that took effect on June 6, 2018 and the City's Enhanced Stormwater Management Program.

Attachment A

File #	Rank	Score	Project Name	Project Description	Hazard Mitigated*/ Jurisdiction	Agency Representative	Time frame	Possible Funding Source(s)	New or Existing Buildings/ Infrastructure	2016 Goal/ Objective	Status**	Last Updated	Notes
PC-6		80	PEP Panel Replacement	Retrofit PEP Panel with current upgraded panel with new power receptacle to allow operation be portable generator during extended FPL power loss.	All Hazards/ Palm Coast	City of Palm Coast	7 yrs	HMGP, Ad Valorem Tax	Existing Infrastructure	Goal 1 Minimize Impacts	ongoing	2/17/2016	Input from Danny Ashburn (July 6th): All new installations are panels with side mounted receptacles. When staff is performing pep maintenance and they find the old style aluminum panels they are replaced with the newer panels. In the future as staffing and workload allows the plan is to go into each individual section and change out all panels without receptacles. The program is still in progress but the five year timeline needs to be increased.
MDJ-24		77	Develop a Community Wildfire Protection Plan	Develop a countywide CWPP and integrate it in with the LMS. Wildfire is one of Flagler's most threatening hazards.	Wildfires/ All Jurisdictions	Florida Forest Service	1 year	Florida Forest Service, PDM	New & Existing Bldgs & Infrs	All Goals	In Process	11/15/2018	Work has begun with efforts by Julie Allen
MJD-1		77	Backup Generator @ Government Services Complex Lift Station	Purchase & install 75kw backup generator for the utility lift station at the Flagler Co. Gov. Services Complex. Complex has backup but sewer does not.	Wind, Flood/City of Bunnell & Flagler Co.	Flagler County	<12 months	HMGP, PDM	Existing Infrastructure	Obj 1.6 Improve resiliency of water/sewer facilities	Submitted under DR-4337	11/18/2015	generator would operate bunnell infrastructure but services a Flagler county building
MJD-2		75	Backup Generator @ Inmate Admin Facility	Purchase & install 200kw backup generator for the utility lift station and the admin center at the Flagler Co. inmate facility.	Wind/ City of Bunnell/ Flagler County	Flagler County	<12 months	HMGP, PDM	Existing Infrastructure	Obj 1.6 Improve resiliency of water/sewer facilities	in progress	11/15/2018	
BNL-9		74	Hardening of Bunnell City Hall	Harden Bunnell City Hall	Wind/ City of Bunnell	City of Bunnell	2015	HMGP, PDM, capital funds	Existing Buildings	1.3; 1.7	in progress	12/10/2016	Procurement came back significantly higher than grant award
MJD-23		70	Stormwater Analysis along 100 near Airport and FPC	Engineering study to plan for mitigation of longstanding stormwater drainage issues along SR 100 in front of Target and FPC	Floods/ Palm Coast/ All Jurisdictions	School Board, COPC, DOT, Flagler Co.	2 yrs	HMGP, CDBG, School Board Tax; FDOT	New &Existing Infrastructure and Bldgs	Obj. 1.2 Identify mitigation projects	Updated	2/27/2016	rough estimate of \$200,000 in planning funds
FHF-2		70	Increase Emergency Back Up Generation Power	Add an additional generator to be able to run chillers and keep hospital operational during power outages. Currently they can only operate emergency lights and some power with their generators	Wind, Power Failure/ All Jurisdictions	Florida Hospital Flagler	<2 years	HMGP, PDM, hospital funds	Existing Buildings	Goal 1; Obj 4.3	contract issued	11/15/2018	
FHF-1		70	FHF Windstorm Resistance Mitigation Retrofit	Retrofit the portions of the building to new critical facility standards which would include new impact windows and hardening of walls	Wind/ All Jurisdictions	Florida Hospital Flagler	<1 year	HMGP, PDM, hospital funds	Existing Buildings	Goal 1; Obj 4.3	submitted under DR-4337	11/15/2018	
MJD-7		70	Harden Flagler County Fire Station #51	Install impact resistant windows and doors and generator	Wind/ Flagler County	Flagler County BOCC	<12 months	HMGP, PDM, capital funds	Existing Buildings	Obj 1.7 Retrofit structures	in progress	11/15/2018	
MJD-8		70	Harden Flagler County Fire Station #71	Install impact resistant windows and doors and add a generator	Wind/ Flagler County	Flagler County BOCC	<12 months	HMGP, PDM, capital funds	Existing Buildings	Obj 1.7 Retrofit structures	in progress	11/15/2018	
PC-12		70	City Hall Generator	Install a generator at COPC City Hall so that it can continue to provide essential governmental services during power failure situations	Power Failure/City of Palm Coast	City of Palm Coast	<2	HMGP, PDM, Capital program funds, R&R	Existing Buildings	Obj 1.1; Obj. 6.2	in progress	1/2/2019	Reevaluating cost and overall project needs. BCA will have to be run again. Generator needed to be upsized from original project submission
FLG-11		70	Generator @ Hidden Trails Community Center	Add a 125kw generator to the Hidden Trails Community Center	Power Failure/ Flagler County	Flagler County	<1 yr	HMGP, PDM, Capital funds	Existing Infrastructure	Obj 1.2 and 3.1	in progress	11/15/2018	
MDJ-25		70	Inmate Facility Generator	Install a 750 KW Generator to fully power the jail and repurpose the existing generator	Power Failure/ All Jurisdictions	Flagler County	<1 yr	HMGP, PDM, Capital funds	Existing buildings	Obj 1.2 and 1.7	in progress	11/15/2018	
PC-10		69	PEP Area Pump Station Generators	Provide stationary generator at each of the 15 Pump Station Locations with an automatic transfer switch	Power Failure, Flooding/ City of Palm Coast	City of Palm Coast	<1 yr	HMGP, PDM, Capital program funds, R&R	Existing Infrastructure	1.6; 1.7	contract issued	11/15/2018	
PC-11		69	PC Wastewater Collection System Lift Station Generators	Provide a stationary generator and automatic transfer station at each of the 15 lift station locations	Power Failure/City of Palm Coast	City of Palm Coast	<1	HMGP, PDM, Capital program funds, R&R	Existing Infrastructure	1.6; 1.7	contract issued	11/15/2018	contracts received. Bids came back high for engineering. Will submit actual bids after jan 15h to update contract budget sheets and BCA can be re-run
FLB-2		69	Wastewater Pump & Lift Station Generators	purchase 5 portable generators for to ensure operation of lift stations during power outages greater than 12 hours	Floods/ Flagler Beach	City of Flagler Beach	6 months	HMGP, PDM, CIP Fund	Existing Infrastructure	Obj 1.7 & Obj 1.6 resiliency of water/sewer facilities	contract issued	11/15/2018	
FLG-10		69	Individual Lift Station Generators	Add 5 generators to certain lift stations throughout the county	Power Failure/ Flagler County	Flagler County	<1 yr	HMGP, PDM, Capital funds	Existing Infrastructure	Obj 1.6	contract issued	11/15/2018	

File #	Rank	Score	Project Name	Project Description	Hazard Mitigated*/ Jurisdiction	Agency Representative	Time frame	Possible Funding Source(s)	New or Existing Buildings/ Infrastructure	2016 Goal/ Objective	Status**	Last Updated	Notes
FLB-4		66	Potable Well Generators	Well 10 and 12R do not have backup power. During a power outage, it is important to continue to provide water to the populace, without overtaxing other two wells.	Wind/Flood/ Flagler Beach	City of Flagler Beach	1 year	CIP Fund, HMGP PDM	Existing Infrastructure	Obj 1.6 Improve resiliency of water/sewer facilities	contract issued	11/15/2018	
FLG-1		64	Malacompra Drainage System- Phase 1	Construction of backbone system including stormwater ponds and outfall	Flood/ Flagler County	Flagler County BOCC	<24 months	HMGP, PDM, FMA, legislative funds	New & Existing Infrastructure	Obj 1.3, 1.6, 1.7, 1.8, 1.9	out for bid	1/2/2019	initial bids came back high- out for bid again
FLG-2		64	Malacompra Drainage System- Phase 2	Construction of the main trunk line	Flood/ Flagler County	Flagler County BOCC	<24 months	HMGP, PDM, FMA, legislative funds	New & Existing Infrastructure	Obj. 1.6 Improve resiliency of water/sewer facilities	Planning complete	3/3/2016	\$4 million?
FLG-3		64	Malacompra Drainage System- Phase 3	Construction of side street lateral collectors in the Marineland Acres subdivision	Flood/ Flagler County	Flagler County BOCC	<24 months	HMGP, PDM, FMA, legislative funds	New & Existing Infrastructure	Obj. 1.6 Improve resiliency of water/sewer facilities	Planning complete	3/3/2016	\$6 million?
MJD-6		62	Harden Flagler County Fire Station #31	Install impact resistant windows and doors	Wind/ Flagler County	Flagler County BOCC	<12 months	HMGP, PDM, capital funds	Existing Buildings	Obj 1.7 Retrofit structures	deferred	9/18/2014	rough estimate for FDEM of \$150,000
BNL-7		70	Hardening of Bunnell Fire Station	Flagler County will apply on behalf of the City of Bunnell to Harden the Bunnell Fire Station and add generator	Wind/ City of Bunnell	Flagler County	2018	HMGP, PDM, capital funds	Existing Buildings	Obj 1.7 Retrofit structures	Submitted under DR-4337 & HLMP	11/15/2018	
SB-3		64	Bunnell Elementary Generator Wiring	Add wiring to make building 10 have full generator backup	Power Failure/ All Jurisdictions	Flagler County School Board	1 year	HMGP, PDM, general funds	Existing Buildings	Goal 1; Obj 1.1 & 1.2	in progress	6/19/2018	project was awarded under Hurricane Loss Mitigation Program (State Shelter Retrofit Program) at 100% funding in January 2018
SB-4		62	Rymfire Generator Wiring	add transfer switches and buildings 4 & 6 to existing generator	Power Failure/ All Jurisdictions	Flagler County School Board	1 year	HMGP, PDM, general funds	Existing Buildings	Goal 1; Obj 1.1 & 1.2	in progress	6/19/2018	project was awarded under Hurricane Loss Mitigation Program (State Shelter Retrofit Program) at 100% funding in January 2018
FLG-6		62	Replace and Repurpose Generator at Justice Center	Replace existing 300 KW generator at the County's Justice Center with a 600 KW generator so that the entire building will have backup power and move existing generator to a fire station	Wind/Flagler County	Flagler County BOCC	1 year	HMGP, PDM, Capital Funds	Existing Buildings	Goal 1 Minimize Impacts	under contract DR-4283	11/15/2018	
FLB-3		60	Rebuild/Enhance Wastewater Pump Station #2	Above-ground pump is rusting away rapidly. Brand new pumps need to be installed below-ground, with a complete rebuild and upgrade of connecting infrastructure.	Floods/Winds/ Flagler Beach	City of Flagler Beach	7 months	CIP Fund, HMGP PDM	Existing Infrastructure	Obj. 1.7	Application Materials Complete	2/17/2016	
FLG-7		60	Bay Drive Park Drainage Project	Bay Drive Park routinely floods due to heavy rains. Drainage improvements are needed so that homeowners can access their properties	Severe Storms, Flood, Trop Cyclones/Flagler County	Flagler County BOCC (Engineering)	9 months	Capital Funds, park grant	Existing Buildings	Goal 1 Minimize Impacts	In Progress	12/17/2018	Out for bid- incorporated into Malacompra drainage project
BNL-8		58	Hardening of Bunnell Public Works Facility	Harden the Bunnell Public Works Facility	Wind/ City of Bunnell	City of Bunnell	2017	HMGP, PDM, capital funds	Existing Buildings	Obj 1.7 Retrofit structures	Updated	12/9/2016	rough estimate for FDEM of \$200,000
PC-13		56	Community Center Generator	Install a generator at the COPC community center so that it can serve as a comfort and information station during power outages	Power Failure/City of Palm Coast	City of Palm Coast	2018	HMGP, PDM, Capital program funds, R&R	Existing Buildings	Obj. 6.2; 5.2	in progress	1/2/2019	not cost effective using FEMA's BCA toolkit- being funded using city funds
FLB-6		56	Alleviate Nuisance Ponding on A1A in Flagler Beach	During normal rainfall events, A1A in Flagler Beach becomes littered with larges, deep puddles.	Flood/ Flagler Beach	City of Flagler Beach	3 years	FDOT, FDEP, PDM, FMA	Existing Infrastructure	Goal 1 Minimize Impacts; Goal 2; Goal 4	New	3/2/2016	DOT has jurisdiction of A1A roadway in Flagler Beach. In certain areas this will be addressed by A1A
MJD-11		66	Harden the Flagler County Health Department Building	Install impact resistant windows and doors	Wind/All Municipalities	Flagler County BOCC	<12 months	HMGP, PDM, capital funds	Existing Buildings	Obj 1.7 Retrofit structures	Submitted under DR-4337 & PDM	11/15/2018	
FLG-4		56	Restoration of Shoreline in Styles Creek at Princess Place Preserve in Flagler County	Restore enhanced erosion areas along the meanders of Styles Creek from Pellicer Creek to the Island House at the Preserve	Erosion/Flagler County	Flagler County BOCC Land Management	TBD	USFWS, NERT	Existing Infrastructure	Objs. 2.4 Enhance coastal ecosystems; 2.5 ID long term erosion solutions	Still current	12/27/2016	

File #	Rank	Score	Project Name	Project Description	Hazard Mitigated*/ Jurisdiction	Agency Representative	Time frame	Possible Funding Source(s)	New or Existing Buildings/ Infrastructure	2016 Goal/ Objective	Status**	Last Updated	Notes
PC-4		54	Drought Mitigation Pumps permanently installed at weirs	Install high volume, low pressure water pumps at the sites of the Cities Surface Water Control Structures (SWCS) to pump stormwater upstream to recharge upstream aquifers and control water levels. A co-located SCADA System would provide automatic recharge during drought conditions, replenishing the ground water table and maintaining the proper head pressure to reduce possible saltwater intrusion.	Drought, Saltwater Intrusion/Palm Coast	City of Palm Coast	5 years	HMGP, Ad Valorem Tax, PDM, SJRWMD	New equipment at Existing Infrastructure	Goal 1 Minimize Impacts	Feasibility Study in Progress	2/17/2016	Feasibility study in progress by SJWMD; next step would be modeling and then implementation
PC-5		54	Water Resource weir installed on St Joe Canal at corner of US-1 and Palm Coast Parkway	Constructing a Water Resource Control Structure (WRCS) on St Joe Canal at the corner of US-1 and Palm Coast Parkway to hold back ground water to replenish and rehydrate the well fields west of US-1	Drought, saltwater intrusion /Palm Coast	City of Palm Coast	5 years	HMGP, PDM, Ad Valorem Tax	New Infrastructure	Goal 1 Minimize Impacts	Being Studied	2/17/2016	Being Studied for feasibility by SJWMD
FLB-5		52	Ocean Palm Subdivision Stormwater Improvement	New swales, pipes, outfall, retention ponds and improvements to an existing outfall to help mitigate flooding to homes in the surrounding area	Flood/ Flagler Beach	City of Flagler Beach	6 months	CIP Fund, HMGP PDM, Legislative	New & Existing Infrastructure	Goal 1 Minimize Impacts	In Progress	2/18/2016	money received and study in progress
MJD-9		62	Harden Flagler County Public Library and add Generator	Install impact resistant windows and doors and generator	Wind, Power failure / Flagler County	Flagler County BOCC	<12 months	HMGP, PDM, capital funds	Existing Buildings	Obj 1.7 Retrofit structures	Submitted under DR-4337	11/15/2018	
MJD-13		52	Westside Drainage System Planning & Permitting (Phase 1)	Conduct a conceptual study of major drainage systems to improve the efficiency of drainage and improve water quality in Western Flagler Co.	Flood/ Flagler County	Flagler County BOCC	<12 months	HMGP, PDM, FMA, legislative funds	New & Existing Infrastructure	Objs. 1.2, 1.6, 1.7, 1.9	New	9/18/2014	need at least \$200,000 to conduct a study
MJD-14		48	Demo Rebuild of Fire Station 92 & FireFlight hanger	Construct a new Fire Station #92 outside the floodprone area and build a bigger station to house fire admin.	Flood/ Flagler County	Flagler County BOCC	<36 months	HMGP, PDM, FMA, capital funds, taxes	New & Existing Buildings	Objs. 1.8, 2.2	updated	1/2/2019	Fireflight relocated across airport campus. Station 92 flooded during Irma and was cleaned after. Design is occurring for a new fire station
MJD-16		48	Elevation/reconstruction of Fire Station #81	Elevate the current station in the floodprone area and harden the facility to withstand 150mph winds	Wind & Flood/ Flagler County	Flagler County BOCC	<36 months	HMGP, PDM, capital funds, taxes	New & Existing Buildings	Objs. 1.1, 1.7	deferred	1/2/2019	preference would be for a new station.
MJD-19		48	Emergency Preparedness and Local Mitigation Strategy Educational Pamphlet	All hazard/ all jurisdiction flip page guidebook on all hazard preparedness for the residents of Flagler County as well as education on benefits of joining LMS Taskforce	All Hazard/ All Jurisdictions	Flagler County Emergency Management	1-1.5 yrs	Ad Valorem Tax, EMPA, HMGP	New Infrastructure	Goal 3 Promote community awareness of mitigation	ongoing	11/15/2018	brochures created and handed out throughout the year
FFS-1		47	County Hazardous Vegetation Wildfire Mitigation	Create defensible space, reduce fuel loads throughout county property	Wildfire/All Jurisdictions	Florida Forest Service	1 year	HMGP, General Fund	Existing Buildings and Infrastructure	Goal 2	deferred	3/13/2017	FFS is continually doing wildfire mitigation. More specific locations will be identified during final stages of CWPP. Current project is not specific.
MJD-10		36	Harden the UF/IFAS Extension Office	Install impact resistant windows and doors	Wind/ Flagler County	Flagler County BOCC	<12 months	HMGP, PDM, capital funds	Existing Buildings	Obj 1.7 Retrofit structures	New	9/18/2014	unsure if this is actually a feasible hardening project.
MJD-21		35	Flagler County Shore Protection Project	Protect shoreline from increasing rate of erosion and deteriorating dune system	Floods, Tropical Cyclones, Severe Storms/All Jurisdictions	Flagler County Engineering	<1 yr	HMGP, CDBG, Ad Valorem Tax	Existing Infrastructure	Objs. 2.4 Enhance coastal ecosystems; 2.5 ID erosion solutions	in progress	12/22/2016	Erosion study completed in Feb 2014. Hurricane Matthew wiped out portions of A1A so this project may be revised and implemented in 2017
FLG-12		69	County Hazardous Vegetation Wildfire Mitigation	Create defensible space, reduce fuel loads throughout county property	Wildfire/Flagler County	Flagler County BOCC Land Management	1 year	HMGP, General Fund	Existing Buildings and Infrastructure	Goal 2	under contract DR-4283	11/15/2018	
FLG-13		69	Portable Generators	Purchase 4 portable generators to take around to lift stations throughout the county	Power Failure/ Flagler County	Flagler County General Services	<1 yr	HMGP, General Fund	Existing Buildings	1.6; 1.7	under contract DR-4283	11/15/2018	HMGP application revised to include 4 generators instead of the 1 originally submitted.
FLG-14		69	Haw Creek Community Center Generator	Purchase a permanent generator so the community center can function as a comfort station and POD post disaster	Power Failure/ Flagler County	Flagler County General Services	<1 yr	HMGP, General Fund	Existing Buildings	1.6; 1.7	under contract DR-4283	11/15/2018	
FLG-15		69	Espanola Community Center	Purchase a permanent generator so the community center can function as a comfort station and POD post disaster	Power Failure/ Flagler County	Flagler County General Services	<1 yr	HMGP, General Fund	Existing Buildings	1.6; 1.7	under contract DR-4283	11/15/2018	

File #	Rank	Score	Project Name	Project Description	Hazard Mitigated*/ Jurisdiction	Agency Representative	Time frame	Possible Funding Source(s)	New or Existing Buildings/ Infrastructure	2016 Goal/ Objective	Status**	Last Updated	Notes
MDJ-26		68	Humane Society Generator	Add a generator to the humane society	Power Failure/ All Jurisdictions	Humane Society	<1 year	HMGP, donations	Existing Building	Goal 1; 4.2; 6.2	Submitted under DR-4337 & HLMP	11/15/2018	
SB-5		68	Matanzas High School Generator	Add a generator to Matanzas High so it can serve as a shelter	Power Failure/ All Jurisdictions	School Board	<1 year	HMGP, capital funds	Existing Building	Goal 1; Obj 1.1 & 1.2	Submitted under DR-4337	11/15/2018	also submitted under HMGP for Hurricane Michael DR-4399
PC-14		77	Manhole Dish Project	install flood prevention devices to reduce inflow and infiltration into central sewer system	Floods/ Palm Coast	City of Palm Coast	<1 year	Capital R & R	Existing Infrastructure	Goals 1 & 2	Submitted under DR-4337	11/15/2018	
FLG-17		52	Alred House Mitigation Reconstruction	Demo & rebuild the Alred house in Marineland Acres	Floods/ Flagler County	Flagler County	<2 years	HMGP, FMA	Existing Building	1.3; 1.7	deferred	11/15/2018	Federal cost share max is 150,000; not cost effective
GH-1		58	Grand Haven Village Center N. Retrofit	Harden the Village Center North Bldg to serve as a comfort station and EOC for the community	All Hazards/ Palm Coast	Grand Haven CDD	<3 years	HMGP, GH CDD, PDM	Existing Building	1.0; 1.2; 1.7	deferred	11/15/2018	not cost effective using FEMA's BCA toolkit; construction planned on building may result in new, impact windows
MDJ-27		70	Harden Fire Station #72 (Red Roof In)	Harden building with impact windows, doors and bay doors, add a 200kw generator	Wind, Power Failure/ All Jurisdictions	Flagler County BOCC	<1 year	HMGP, capital funds, PDM	Existing Building	Goal 1; Obj 1.7	New	12/17/2018	building evaluation and project scoping still under way
FLG-18		62	Harden Government Services Bldg #2	Install impact glass and doors on entire building	Wind/ Flagler County	Flagler County BOCC	1 year	HMGP, capital funds, PDM	Existing Building	Goal 1; Obj 1.7	New	12/7/2017	estimate approx \$500,000 for new windows but will be very disruptive to offices to install
FLG-16		77	Fixed Generator at Well fields	Purchase 2 (100KW) generators to power Plantation Bay and Eagle Lakes wellfields during power outage situations	Power failure/Flagler County	Flagler County BOCC	1 year	HMGP, PDM, Capital funds	Existing Infrastructure	Goal 1; obj 1.6;1.7	Submitted under DR-4337	11/15/2018	
FLG-19		52	Guttmann House First Floor Removal	Remove existing bathroom, 2 bedrooms and perhaps laundry room that is below BFE and convert to open space	Floods/ Flagler County	Flagler County BOCC	<1 year	HMGP, homeowner, NFIP (ICC), FMA	Existing Building	1.3; 1.7	in progress	11/15/2018	not cost effective under FEMA BCA- Homeowners to complete project on their own.
PC-15		77	5 Pump Station Generators	Add 5 generators to certain lift stations throughout the city of Palm Coast	Power Failure/ Palm Coast	City of Palm Coast	<1 year	HMGP, capital funds	Existing Infrastructure	1.6; 1.7	Submitted under DR-4337	11/15/2018	
FLG-20		62	Harden New Palm Coast Sheriff's Office Substation & add generator	Harden New Palm Coast Sheriff's Office Substation & add generator	Power failure/All Jurisdictions	Flagler County BOCC	<1 year	HMGP, capital funds	Existing Infrastructure	1.6; 1.7	Submitted under DR-4337	11/15/2018	impact windows being installed as part of building remodel
FLG-21		58	Harden the Hammock Community Center & add generator	Harden the Hammock Community Center and add a generator	Wind/Flagler County	Flagler County BOCC	<1 year	HMGP, capital funds	Existing Infrastructure	1.6; 1.7	deferred	11/15/2018	location not ideal for permanent generator and wind hardening
BNL-10		69	2 Bunnel Lift Station Generators	install generator, transfer switch and concrete pad at 2 lift stations in Bunnell	Power Failure/City of Bunnell	City of Bunnell	<1 year	HMGP, capital funds	Existing Infrastructure	Obj 1.6 Improve resiliency of water/sewer facilities	Submitted under DR-4337	11/15/2018	
FLG-22		59	Malacompra Greenway Wildfire Mitigation	Remove approximately 90 acres of dead vegetation posing a wildfire threat	Wildfire/Flagler County	Flagler County BOCC	<1	HMGP	Existing Buildings	Goal 2	Submitted under DR-4337	11/15/2018	submitted again under HMGP for Hurricane Michael DR-4399
FLB-7		62	S. Central Drainage Project	Construct open swales on Central Ave and buy exfiltration pipes on Daytona Ave, collecting water for recharge and channeling the flow to the saltwater marsh and ICW W of Flagler Ave.	Flood/Flagler Beach	City of Flagler Beach	<1	HMGP	New & existing bldgs & infrastructure	1.5; 1.6	in progress	2/27/2019	funded under SJRWMD program. Project moving forward

*Hazards mitigated do not necessarily match up to the hazards identified in Section 4 of the LMS Plan; hazards may be attributed to the impacts caused by the various hazards identified in Section 4. For example, "Power Outage" may appear in the hazard mitigated column which would equate to projects that have power failure as an impact such as tropical cyclones, tornadoes and severe storms. If the hazard mitigated is listed as "Wind," it refers to hazards that contain high wind, such as tropical cyclones, severe storms, & tornadoes. The "Flood" hazard would mitigate hazards such as sea level rise, coastal flooding, storm surge & floods.

**Deferred projects are listed as such due to a lack of funding.



Attachment B

City of Palm Coast Next Year Budget Analysis

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178,051

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4,133,059

		2018 Revised Budget	2018 Projected Amount	2019 Requested Amount
5420/5422	TOTAL STORMWATER FUND EXPENDITURES	8,751,546	8,929,597	12,884,605
54205509	STORMWATER CONSTRUCTION MGT & ENGINEERING	1,733,488	1,712,282	5,030,484
012000	SALARIES AND WAGES	0	0	707,001
	EXISTING SALARIES & WAGES		0	555,848
	NEW STORMWATER SYSTEM SPECIALIST (FULLY BURDENED)		0	79,092
	NEW PROJECT COORDINATOR (FULLY BURDENED)		0	72,061
012010	CAR/CELL ALLOWANCE	0	0	4,840
014000	OVERTIME	0	0	10,000
021000	FICA TAXES	0	0	35,081
021100	MEDICARE	0	0	8,211
022000	RETIREMENT CONTRIBUTIONS	0	0	65,417
023000	HEALTH INSURANCE	0	0	102,214
023030	LIFE INSURANCE	0	0	2,486
023035	DISABILITY	0	0	2,457
024000	WORKERS COMPENSATION	0	0	14,730
	PERSONAL SERVICES	0	0	952,437
031000	PROFESSIONAL SERVICES	105,000	127,503	331,000
	Detail for PROFESSIONAL SERVICES			
	STORMWATER RATE STUDY		20,000	0
	LIDAR (cost share)		37,503	0
	MS4 PERMIT ANNUAL EXPENSES		60,000	71,000
	MASTER PLANNING SERVICES		0	210,000
	Stormwater capital Projcet Design Services		10,000	50,000
034000	OTHER CONTRACTUAL SVCS	528,488	520,088	501,200
	Detail for OTHER CONTRACTUAL SVCS			
	WEED CONTROL ON FRESHWATER CANALS		452,388	408,000
	WEED CONTROL COST SHARE RIBBON LAKE		600	600
	ALTERNATIVE TREATMENTS ON FRESHWATER CANALS		0	20,000
	CANAL BANK CLEARING		5,000	5,000
	ANNUAL TELEMETY SUBSCRIPTION		4,800	6,600
	Upgrade Bulldog & Clubhouse GC to Mission Communications Units		35,000	1,000
	WATER CONTROL REPLACEMENT EQUIPMENT		2,500	30,000
	SEDIMENT REMOVAL		12,800	5,000
	PUMP STATION MAINTENANCE & REPAIR		7,000	10,000
	WATER CONTROL SCADA SUPPORT & SERVICE		0	15,000



City of Palm Coast Next Year Budget Analysis

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		2018 Revised Budget	2018 Projected Amount	2019 Requested Amount
040000	TRAVEL & EXTERNAL TRAINING	0	0	15,173
	AMERICAN SOCIETY OF FLOODPLAIN MANAGERS (ASFM) FFMA CONFERENCE			3,150
	FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) MOT TRAINING			870
	FLORIDA LAKE MANAGEMENT SOCIETY ANNUAL SYMPOSIUM			1,600
	FLORIDA STORMWATER ASSOCIATION (FSA) CONFERENCE			1,700
	FLORIDA STORMWATER ASSOCIATION (FSA) TRAINING			1,763
	IMAGINIT TECHNOLOGIES AUTOCAD TRAINING			2,790
	SCADA MAINTENANCE & OPERATION TRAINING			3,000
	ADDITIONAL TRAINING AND ITEMS TO MAINTAIN/RENEW LICENSES & CERTIFICATIONS			300
052000	OPERATING SUPP&EQUIPUNDER\$5K	0	0	11,960
	TRUCK & HAND TOOLS, MISC. SUPPLIES			1,500
	CALIBRATION & REPLACEMENT OF MINOR/SMALL SURVEY EQUIPMENT			2,000
	UNIFORM SHIRTS 62 SHIRTS @ \$30/SHIRT			1,860
	Boot Stipends - CM&E Staff			1,000
	4GB SURFACE FOR NEW SWALE SPECIALIST INCLUDING 24" MONITOR & 30" MONITOR		0	2,800
	4GB Surface for new Project Coordinator including 1 24" monitor & 1 30" monitor		0	2,800
052005	FUEL CHARGE	0	8,000	8,000
054000	BOOKS, PUB, SUBSCRIP, MEMBERSH	0	0	3,714
	ASSOCIATION OF STATE FLOODPLAIN MANAGERS (ASFPM) MEMBERSHIP			450
	FLORIDA FLOODPLAIN MANAGERS ASSOCIATION (FEMEA) MEMBERSHIP			180
	FLORIDA LAKE MANAGEMENT SOCIETY (FLMS) MEMBERSHIP			35
	FLORIDA STORMWATER ASSOCIATION (FSA) MEMBERSHIP			1,250
	FLORIDA SURVEYING & MAPPING SOCIETY (FSMS) MEMBERSHIP			279
	AMERICAN SOCIETY OF FLOODPLAIN MANAGERS (ASFM) LICENSE/CERTIFICATION			100
	AUTODESK CERTIFICATION			200
	FLORIDA BOARD OF PROFESSIONAL ENGINEERS (FBPE) LICENSE/CERTIFICATION			100
	FLORIDA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES (FDACHS) BUREAU OF LICENSING &			200
	NATIONAL SOCIETY OF PROFESSIONAL SURVEYORS (NSPS) LICENSE/CERTIFICATION			420
	UNITED STATES COAST GUARD LICENSES/CERTIFICATIONS			0
	ADDITIONAL MEMBERSHIPS, LICENSES & CERTIFICATIONS			250
	BOOKS, PUBLISHINGS & EDUCATIONAL			250
OPERATING EXPENDITURES		633,488	655,591	871,047



City of Palm Coast Next Year Budget Analysis

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			2018 Revised Budget	2018 Projected Amount	2019 Requested Amount
063000	55001	CONTROL STRUCTURE REPLACEMENT	234,000	226,638	740,000
		STRUCTURE REPAIRS		10,000	20,000
		W-1		216,638	0
		L-4 (Royal Palm Pkwy)		0	720,000
063000	55230	CANAL PIPE & SEAWALL REPLACEME	50,000	50,000	75,000
		Canal End Seawalls		0	65,000
		Fleming Ct @ Florance Ct		35,000	0
		Pipes thru Seawalls		15,000	10,000
063000	55232	MAJOR CANAL CROSSING	96,000	80,053	2,365,000
		Major Crossings - W-1		80,053	950,000
		BELLE TERRE BLVD PIPELINING		0	150,000
		EMERGENCY PIPELINING		0	275,000
		WALKER WATERWAY @ PINE LAKES PKWY (clean/inspect/line		0	75,000
		M-2 (OKR @ Big Mulberry Creek)		0	750,000
		ACMP Sesame Blvd @ Seminole Waterway		0	150,000
		DOT CROSSING INSPECTIONS		0	15,000
063000	81027	CONTROL STRUCTURE - SJRWMD - WEIR GRANT	700,000	700,000	0
		L-1 WEIR		350,000	0
		K-1 WEIR		350,000	0
CME CAPITAL EXPENDITURES			1,100,000	1,056,691	3,180,000
091501		TRANSFER TO FLEET FUND	0	0	27,000
		FRONTIER 4X4 FOR NEW PROJECT COORDINATOR POSITION		0	27,000
91525		TRANSFER TO IT FUND	0	0	0
OTHER			0	0	27,000



City of Palm Coast Next Year Budget Analysis

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			2018 Revised Budget	2018 Projected Amount	2019 Requested Amount
54205511	STORMWATER MAINTENANCE		3,509,629	3,712,563	4,751,301
012000		SALARIES AND WAGES	254,468	230,000	87,860
		Existing Salaries & Wages		230,000	118,075
		Move 50% of PW Manager to Fleet Fund		0	(30,215)
012010		CAR/CELL ALLOWANCE	2,990	2,990	1,565
014000		OVERTIME	10,000	5,000	0
014999		OVERTIME - SPECIAL EVENTS	0	0	0
021000		FICA TAXES	16,585	16,585	5,546
021100		MEDICARE	3,881	3,881	1,298
022000		RETIREMENT CONTRIBUTIONS	31,738	31,738	8,731
023000		HEALTH INSURANCE	50,400	48,460	14,592
023030		LIFE INSURANCE	1,189	1,633	332
023035		DISABILITY	1,178	1,178	328
024000		WORKERS COMPENSATION	18,104	18,104	4,211
025000		STATE UNEMPLOYMENT COMP	0	0	0
Non-Project Staff			390,533	359,569	124,463
012000	55003	SALARIES AND WAGES	222,411	222,411	228,017
012010	55003	CAR/CELL ALLOWANCE	1,040	1,040	1,240
014000	55003	OVERTIME	5,000	5,000	5,000
021000	55003	FICA TAXES	14,167	14,167	14,527
021100	55003	MEDICARE	3,316	3,316	3,402
022000	55003	RETIREMENT CONTRIBUTIONS	27,294	27,294	27,966
023000	55003	HEALTH INSURANCE	60,480	58,386	58,368
023030	55003	LIFE INSURANCE	1,024	1,024	1,063
023035	55003	DISABILITY	1,015	1,015	1,051
024000	55003	WORKERS COMPENSATION	18,986	18,986	15,240
025000	55003	STATE UNEMPLOYMENT COMP	0	0	0
Pipe Crew			354,733	352,639	355,874
012000	55105	SALARIES AND WAGES	595,940	595,940	670,014
		EXISTING SALARIES & WAGES		595,940	613,859
		NEW MW / EO FULLY BURDENED		0	56,155
012010	55105	CAR/CELL ALLOWANCE	1,840	1,840	1,240
014000	55105	OVERTIME	4,000	15,000	5,000
021000	55105	FICA TAXES	37,319	37,319	38,457
021100	55105	MEDICARE	8,732	8,732	8,998
022000	55105	RETIREMENT CONTRIBUTIONS	72,004	72,004	72,626
023000	55105	HEALTH INSURANCE	161,280	155,530	155,648



City of Palm Coast Next Year Budget Analysis

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			2018 Revised Budget	2018 Projected Amount	2019 Requested Amount
023030	55105	LIFE INSURANCE	2,699	2,699	2,761
023035	55105	DISABILITY	2,675	2,675	2,733
024000	55105	WORKERS COMPENSATION	50,089	50,089	39,572
025000	55105	STATE UNEMPLOYMENT COMP	0	0	0
Stormwater System R&R Crews			936,578	941,828	997,049
TOTAL PERSONAL SERVICES STORMWATER MAINTENANCE			1,681,844	1,654,036	1,477,386



City of Palm Coast Next Year Budget Analysis

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			2018 Revised Budget	2018 Projected Amount	2019 Requested Amount
034000	55003	OCS - STORMWATER MAINT	62,500	62,500	62,500
		Inmate crew		62,500	62,500
034000	55105	SYSTEM REHAB & RENEWAL	1,050,000	590,000	1,200,000
		DITCH MAINTENANCE		0	450,000
		DESIGN MASTER PLANNING SERVICES		90,000	0
		SWALE MAINTENANCE		450,000	400,000
		DITCH SPRAY PROGRAM (PERSONNEL, EQUIPMENT, OE) NEED TO UPDATE LATER		0	300,000
		Northside London Waterway storage detention		0	0
		DRIVEWAY REPLACEMENTS		50,000	50,000
040000		TRAVEL & EXTERNAL TRAINING	2,500	2,500	2,500
040040		EMPLOYEE IN HOUSE TRAINING	0	0	0
043000		ELECTRICITY	9,785	9,785	9,785
052000		OPERATING SUPP&EQUIPUNDER\$5K	1,000	4,000	8,000
		Boot Stipends - Stormwater Operations (Non Project Employees)		1,000	1,000
		Uniforms (all staff)		3,000	7,000
052000	55003	OPERATING SUPP&EQUIPUNDER\$5K	1,500	1,500	1,500
		BOOT STIPEND FOR PIPE CREW		1,500	1,500
052000	55105	OPERATING SUPP&EQUIPUNDER\$5K	2,500	2,500	2,500
		Boot Stipends for Stormwater Rehab and Renewal Crews		2,500	2,500
052005		FUEL CHARGE	93,000	130,000	145,000
		Stormwater Operation Fuel Charges		130,000	145,000
OPERATING EXPENDITUR			1,222,785	802,785	1,431,785
091501		TRANSFER TO FLEET MANAGEMENT	0	0	697,130
		Bobcat E55 Excavator (ditch maintenance)			63,165
		Bobcat E85 Excavator (ditch maintenance)			86,535
		Bobcat off road UTV (ditch maintenance)			20,280
		Chipper Truck (ditch maintenance)			78,425
		MenziMuck M340 amphibious excavator (ditch maintenance)			389,525
		F350/With Utility Body And Crane (Vac Truck Support Vehicle)			59,200
INTERFUND TRANSFER			0	0	697,130
063000	55003	IMPR - ALL PIPE REPLACEMENTS	530,000	1,180,742	1,145,000
		PIPE REPLACEMENT & VALLEY GUTTERS		500,000	720,000
		PIPE LINING		105,742	250,000
		CONCRETE LINED DITCH (F-SECTION)		0	50,000
		EMERGENCY PIPE REPLACEMENTS		575,000	125,000
063000	55205	IMPR - VALLEY GUTTER	75,000	75,000	0
CAPITAL EXPENDITURES			605,000	1,255,742	1,145,000



City of Palm Coast Next Year Budget Analysis

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		2018 Revised Budget	2018 Projected Amount	2019 Requested Amount
54209099	STORMWATER NON-DEPARTMENTAL	3,508,429	3,504,752	3,102,820
041100	IT&C ALLOCATION	118,134	118,134	112,770
044100	FLEET REPLACEMENT ALLOCATION	405,609	405,609	434,043
	Fleet Lease - CME/Stormwater staff		10,777	14,945
	Fleet Lease - PW/Stormwater staff		394,832	419,098
045001	PROPERTY INSURANCE	55,569	55,569	50,773
045002	LIABILITY INSURANCE	58,826	58,826	58,987
045003	AUTOMOBILE INSURANCE	13,768	13,768	10,925
046100	FLEET MAINTENANCE ALLOCATION	321,369	321,369	281,665
	Fleet Maintenance Allocation - PW/Stormwater staff		312,287	272,680
	Fleet Maintenance Allocation - CME/Stormwater staff		9,082	8,985
046102	FLEET COMMUNICATIONS ALLOCATIO	17,840	17,840	25,500
049000	OTHER CHARGES AND OBLIGATIONS	1,052,555	1,053,878	638,866
	Charge for STORMWATER BILLING (.10 x 426,278 bills per year)		41,727	42,628
	GF ADMIN FEE		240,925	300,973
	Transfer to General Fund - CME (FY 19 portion of staff changed to direct allocation to 54205509)		682,826	185,322
	FACILITIES MAINTENANCE FEE		13,400	34,943
	Paymentus Electronic Payments		75,000	75,000
OPERATING EXPENDITUR		2,043,670	2,044,993	1,613,529
071000	PRINCIPAL	1,123,906	1,123,906	1,152,055
	93040		243,215	249,418
	903070		124,691	128,637
	PNC Bank Loan		756,000	774,000
	NEW DEBT FY 20		0	0
072000	INTEREST	231,002	231,002	223,620
	903040		59,955	53,752
	903070		57,941	53,995
	Bank Loan (PNC)		113,106	115,873
	NEW DEBT FY 20		0	0
073000	OTHER DEBT SERVICE COSTS	5,000	0	0
DEBT		1,359,908	1,354,908	1,375,675
092001	IN-LIEU-OF-TAX TRANSFER	104,851	104,851	113,616
	PILOT		104,851	113,616
099091	CONTINGENCY RESERVE	0	0	0
OTHER		104,851	104,851	113,616



City of Palm Coast Next Year Budget Analysis

2%
(178,051)

47%
(4,133,059)

		2016 Actual	2017 Actual	2018 Original Budget	2018 Revised Budget	2018 YTD Actuals	2018 Projected Amount	2019 Requested Amount
54200000	STORMWATER UTILITY FUND	(7,446,204)	(7,988,141)	(8,751,546)	(8,751,546)	(5,628,043)	(8,929,597)	(12,884,605)
311000	AD VALOREM TAXES	(363,863)	(418,442)	(502,590)	(502,590)	(502,590)	(502,590)	(520,000)
	AD VALOREM TAXES	(363,863)	(418,442)	(502,590)	(502,590)	(502,590)	(502,590)	(520,000)
334362 81027	SJRWMD - WEIR GRANT	0	0	0	(700,000)	0	(700,000)	0
334362	SJRWMD - GRANT - WEIR	0	(334,000)	(700,000)	0	0	0	0
	GRANTS	0	(334,000)	(700,000)	(700,000)	0	(700,000)	0
343920	STORMWATER FEES	(7,038,305)	(7,228,209)	(7,270,000)	(7,270,000)	(5,090,903)	(7,265,627)	(9,764,805)
	Stormwater fee						(7,265,627)	(9,764,805)
	PHYSICAL ENVIRONMENT	(7,038,305)	(7,228,209)	(7,270,000)	(7,270,000)	(5,090,903)	(7,265,627)	(9,764,805)
361100	INTEREST EARNINGS	(4,524)	(6,657)	0	0	(34,550)	0	0
	INTEREST AND OTHER E	(4,524)	(6,657)	0	0	(34,550)	0	0
363215	DEVELOPER CONTRIB	(37,828)	0	0	0	0	0	0
	SPEC ASSESS/IMPACT	(37,828)	0	0	0	0	0	0
384102	PROCEEDS FROM DEBT	0	0	0	0	0	0	(2,460,000)
	DEBT	0	0	0	0	0	0	(2,460,000)
380100	APPROPRIATED FUND BALANCE	0	0	(278,956)	(278,956)	0	(261,380)	(139,800)
	EQUITY ACCOUNTS	0	0	(278,956)	(278,956)	0	(261,380)	(139,800)
389451	GRANTS AND DONATIONS-PCCSC	(1,684)	(832)	0	0	0	0	0
	NONOPERATING SOURCES	(1,684)	(832)	0	0	0	0	0
381000	TRANSFER FROM GENERAL FUND NO	0	0	0	0	0	(200,000)	0
	INTERFUND TRANSFER	0	0	0	0	0	(200,000)	0

City of Palm Coast
5 Year Capital Improvement Plan



STORMWATER MANAGEMENT FUND	FY19 Original	FY 19 Amended	FY 20	FY 21	FY 22	FY 23
Starting Fund Balance	294,361	294,361	154,764	221,214	829,186	1,229,457
Revenues:						
Ad Valorem Taxes	520,000	520,000	521,560	523,125	524,694	526,268
Stormwater Fees	7,287,423	9,765,008	10,810,156	11,899,595	12,995,325	14,097,344
New Debt	-	2,460,000	1,350,000	6,410,000	6,000,000	4,900,000
Total Revenues	7,807,423	12,745,008	12,681,716	18,832,720	19,520,019	19,523,612
Total Available Funds	8,101,784	13,039,369	12,836,480	19,053,934	20,349,205	20,753,069
Operating Expenses:						
Operating Expenditures	5,538,390	5,744,675	6,746,666	6,955,030	8,022,368	8,250,485
- CM&E Personnel	801,284	958,037	1,006,000	1,056,000	1,109,000	1,164,000
- Public Works Personnel	1,421,231	1,477,386	1,551,000	1,628,550	1,709,978	1,795,476
- Inmate Crew	62,500	62,500	62,500	62,500	62,500	62,500
- Other Operating Expenditures	3,252,775	1,870,477	2,110,864	2,195,299	2,283,111	2,374,435
- Debt Service		1,375,675	1,371,569	1,367,948	1,363,785	1,360,079
- New Debt Service Loan 1	-	-	644,133	644,133	644,133	644,133
- New Debt Service Loan 2	-	-	-	-	849,262	849,262
- New Debt Service Loan 3	-	-	-	-	-	-
- Lake Weed Control - Ribbon Lake	600	600	600	600	600	600
Professional Services 031000	331,000	331,000	273,000	275,000	277,000	304,000
- Stormwater Rate Study (Consultant)	-	-	-	-	-	25,000
- City-Wide Infrastructure Stormwater Master Plan	210,000	210,000	150,000	150,000	150,000	150,000
- Stormwater Capital Projects Design Services	50,000	50,000	50,000	50,000	50,000	50,000
- MS4 Permitting Program	71,000	71,000	73,000	75,000	77,000	79,000



STORMWATER MANAGEMENT FUND		FY19 Original	FY 19 Amended	FY 20	FY 21	FY 22	FY 23
Contractual Services	034000	587,600	520,600	555,000	583,000	587,000	591,000
- Annual Telemetry Subscription - SCADA		6,600	6,600	10,000	11,000	12,000	13,000
- Mission Communication Unit Upgrades		1,000	-	-	-	-	-
- Water Control Equipment Replacement		30,000	31,000	36,000	37,000	38,000	39,000
- Pump Station Maintenance & Repair		7,000	10,000	11,000	12,000	13,000	14,000
- Water Control SCADA Support & Service		15,000	15,000	16,000	17,000	18,000	19,000
- Structure Repairs		20,000	20,000	20,000	20,000	20,000	20,000
- Freshwater Alternative Treatments		20,000	20,000	20,000	20,000	20,000	20,000
- Freshwater Canal Weed Control		478,000	408,000	432,000	456,000	456,000	456,000
- Canal Clearing (Removal of Trees & Underbrush)		5,000	5,000	5,000	5,000	5,000	5,000
- Sediment Removal		5,000	5,000	5,000	5,000	5,000	5,000
Freshwater Canal Dredging	034000	-	-	275,000	2,775,000	2,775,000	2,775,000
- Design		-	-	275,000	275,000	275,000	275,000
- Construction		-	-	-	2,500,000	2,500,000	2,500,000
- Contingency		-	-	-	-	-	-
Projects:							
Saltwater Canal System	55230	50,000	75,000	80,000	85,000	90,000	95,000
- Pipes Thru Seawalls		15,000	10,000	10,000	10,000	10,000	10,000
- Canal End Seawalls		35,000	65,000	70,000	75,000	80,000	85,000
Stormwater Storage/Detention:	TBD						
London Waterway Expansion - Phase I: North side		56,594	-	350,000	1,700,000	-	-
- Design		56,594	-	350,000	-	-	-
- Construction		-	-	-	1,700,000	-	-
London Waterway Expansion - Phase II: 53 Luther Dr.		-	-	-	2,050,000	-	-
- Design		-	-	-	350,000	-	-
- Construction		-	-	-	1,700,000	-	-
Project(s) to be Determined		-	-	-	400,000	2,400,000	2,450,000
- Design		-	-	-	400,000	400,000	450,000
- Construction		-	-	-	-	2,000,000	2,000,000



STORMWATER MANAGEMENT FUND		FY19 Original	FY 19 Amended	FY 20	FY 21	FY 22	FY 23
Control Structure Replacements:		55001					
L-4 Weir Replacement (Royal Palm Parkway)		-	720,000	-	-	-	-
- Design		-	60,000	-	-	-	-
- Construction		-	660,000	-	-	-	-
K-6 Weir Replacement (Smith Trail)		-	-	900,000	-	-	-
- Construction		-	-	900,000	-	-	-
P-1 Weir Replacement (West BT south of Pine Grove)		-	-	-	110,000	1,500,000	-
- Design		-	-	-	110,000	-	-
- Construction		-	-	-	-	1,500,000	-
B-1, B-2, & B-3 (Pop offs for Bellaire Waterway)		-	-	-	-	-	115,000
- Design		-	-	-	-	-	15,000
- Construction		-	-	-	-	-	100,000
Major Pipe & Canal Crossings (Replacements):		55232					
W-1 (Belle Terre @ BTMS)		-	950,000	-	-	-	-
- Design		-	15,000	-	-	-	-
- Construction		-	935,000	-	-	-	-
M-2 (OKR @ Big Mulberry Creek)		-	750,000	-	-	-	-
- Design		-	35,000	-	-	-	-
- Construction		-	715,000	-	-	-	-
Pipe Inspections & Lining		313,200	665,000	510,000	400,000	355,000	750,000
- FDOT Bridge Inspection Program (22 Culverts)		13,200	15,000	15,000			
- Sesame @ Seminole Waterway Extension & Lining		150,000	150,000	-	-	-	-
- W-2 'Walker Waterway @ Pine Lakes Pkwy		-	75,000	-	-	-	-
- Belle Terre Blvd (south of Citation)		-	150,000	-	-	-	-
- Crandal Cove		-	-	150,000	-	-	-
- Florida Park North (No of Foster Ln)		-	-	45,000	-	-	-
- K-2 (7 Oaks Waterway at Sesame Blvd)		-	-	-	100,000	-	-
- K-4 (7 Oaks Waterway at Seminole Woods)		-	-	-	-	55,000	-
- I-2 (Iroquois Waterway Seminole Woods)		-	-	-	-	-	400,000
- PA-1 (Belle Terre @ Parkview Waterway)		-	-	-	-	-	-
- Contingency (Emergency Linings)		150,000	275,000	300,000	300,000	300,000	350,000
Projects to be Determined		-	-	160,000	460,000	470,000	660,000
Capacity Improvements:							
Drainage Improvement Projects (TBD)		TBD	-	275,000	300,000	400,000	750,000



STORMWATER MANAGEMENT FUND	FY19 Original	FY 19 Amended	FY 20	FY 21	FY 22	FY 23
Pipe Replacements:	55003					
Pipe Replacements & Valley Gutters	450,000	720,000	750,000	780,000	810,000	840,000
Pipe Linings	100,000	250,000	285,000	295,000	360,000	405,000
Concrete Lined Ditch (F-section)	-	50,000	450,000	-	-	-
<i>- Design</i>	-	<i>50,000</i>	-	-	-	-
<i>- Construction</i>	-	-	<i>450,000</i>	-	-	-
Emergency Pipe Replacements	-	125,000	125,000	130,000	135,000	140,000
System Maintenance Rehab & Renewal:	55105					
Swale Maintenance Rehab & Renewal	275,000	450,000	450,000	485,000	510,000	535,000
<i>- Swale Maintenance and Rehab.</i>	250,000	400,000	425,000	475,000	500,000	525,000
<i>- Driveway Replacements</i>	25,000	50,000	25,000	10,000	10,000	10,000
Ditch Maintenance and Rehab.	400,000	450,000	200,000	200,000	175,000	125,000
<i>- Ditch Maintenance and Rehab.</i>	400,000	450,000	200,000	200,000	175,000	125,000
Ditch Spray Program	-	300,000	230,600	241,718	253,380	265,611
<i>- Spray Equipment (Purchase FY19)</i>	-	<i>80,000</i>	-	-	-	-
<i>- Spray Staffing and/or Contractor</i>	-	<i>200,000</i>	<i>210,000</i>	<i>220,500</i>	<i>231,525</i>	<i>243,101</i>
<i>- Spraying Chemicals</i>	-	<i>20,000</i>	<i>20,600</i>	<i>21,218</i>	<i>21,855</i>	<i>22,510</i>
New Equipment	-	783,330	-	-	-	-
<i>- Ditch Maintenance Equipment</i>	-	<i>697,130</i>	-	-	-	-
<i>- CM&E Personnel (New Proposed Vehicle)</i>	-	<i>27,000</i>	-	-	-	-
<i>- Public Works Personnel (Proposed Vehicle)</i>	-	<i>59,200</i>	-	-	-	-
TOTAL EXPENDITURES	8,101,784	12,884,605	12,615,266	18,224,748	19,119,748	19,051,096
Available Funds End of Year		154,764	221,214	829,186	1,229,457	1,701,973