



CITY OF FLAGLER BEACH

Floodplain Management Annual Progress Report

September 12, 2016

EXECUTIVE SUMMARY

As part of its continuing participation in the Community Rating System (CRS) of the National Flood Insurance Program (NFIP), the City of Flagler Beach presents its ANNUAL PROGRESS REPORT ON FLOODPLAIN MANAGEMENT to the Insurance Services Office (ISO).

FLAGLER COUNTY LOCAL MITIGATION STRATEGY

The City manages its flood mitigation projects in cooperation with the Flagler County Local Mitigation Strategy (LMS) Workgroup. Flagler County's LMS was developed in 1999 by a multi-jurisdictional group representing the County, the Towns of Beverly Beach and Marineland, and the Cities of Bunnell, Palm Coast, and Flagler Beach. The LMS document is in compliance with the Federal Disaster Mitigation Act of 2000 (44 CFR 201.6) and has been approved by FEMA and the Florida Department of Emergency Management (FDEM).

Coordination efforts have improved dramatically over the last two years, largely due to the hiring by the County of two employees who have been successful in securing grants and are dedicated in their mitigation efforts. But there is always room for improvement. To that end, a planning grant was acquired and used to hire Taylor Engineering to research previous water-related projects and integrate this information with proposals for new projects based on needs and priorities.

An update to the LMS occurred in 2016. The City of Flagler Beach provided input for that revision and adopted it by passing Resolution 2016-28 on June 9, 2016. The Flagler County LMS document can be viewed at www.flagleremergency.com, under the sidebar "Important Information."

Current Projects

The 2016 LMS document includes a MITIGATION INITIATIVE PROJECTS LIST for Flagler County. Appendix F lists prioritized projects specific to a city or town, or their project may be combined with Flagler County. Recently removed from the list for Flagler Beach is our Pier Hardening Project. A summary of that project follows.

Flagler Beach Pier

Damage sustained at the City-owned pier in the wake of Tropical Storm Fay in 2008 prompted an application for a FEMA Hazard Mitigation Grant in August 2009. A few years passed before the City was selected as a recipient, but in July of 2012, a cost-share agreement was awarded, with a Federal cost share of 75%, and the City responsible for payment of the remaining 25%. In 2012, Quentin L. Hampton Associates, Inc. (QLHA) of Port Orange, Florida, was contracted for the design engineering and

permitting aspect of the project. In 2013, Structural Preservation Systems, LLC of Sarasota, Florida, was awarded the construction contract. Work on the Pier Hardening began in January 2014 and was completed in September of that year.

The FEMA grant was administered through the state’s Florida Division of Emergency Management as a subgrant agreement, executed October 29, 2012. Four Modifications to the original subgrant were made between 2012 and 2016. The first modification allocated more money for construction when it was discovered that additional pilings had suffered damage. The second modification allowed for financial coverage of the engineering design and inspections. The third and fourth modifications extended the time frame for formal close-out of the project. This became necessary at the final inspection in July 2015, when it was apparent that the City no longer had the proper turtle-friendly lights installed on the pier. FDEM allowed the City additional time - twice - to procure a FEMA-approved working light system, and, as funds were still available, agreed to continue to cover the cost at a 75/25 percent cost-share. FDEM also agreed to include payment for more durable aluminum environmental signs for the pier, provided by Oceanshore Graphics. Paperwork was recently filed with FDEM for reimbursement of the pier lights and signs. Receipt of these funds should close out this major project.

Flagler Beach Pier Hardening Project, 2012- 2016 FEMA Hazard Mitigation Grant Program, Project No. 1785-49-R FDEM and City of Flagler Beach Subgrant Agreement, Contract No. 13-HM-3E-04-28-01-287						
Date	Event	Description	Total	Federal, 75%	City, 25%	
10.29.2012	Construction Grant Executed	Initial	\$ 908,251	\$ 908,251	\$ 681,188	\$ 227,063
1.21.2014	Construction Modification 1	Increase	\$ 215,833	\$ 1,196,094	\$ 897,071	\$ 299,023
8.18.2014	Engineering Modification 2	Increase	\$ 121,840	\$ 1,317,934	\$ 988,451	\$ 329,483
9.23.2015	Modification 3	Extend Expiration Date to 4.30.2016				
4.15.2016	Modification 4	Extend Expiration Date to 7.30.2016				
7.30.2016	Work complete prior to Expiration Date	FEMA-approved Lights and Signage	\$ 28,445	\$ 21,334	\$ 7,111	
9.6.2016		TOTALS:	\$1,346,379	\$1,009,785	\$ 336,595	
	Deductions from City’s Share:	Pledge: Flagler Co Tourist Development Council:			\$ 160,000	
		Pledge: Flagler County:			\$ 72,000	
		Pledge: City of Bunnell:			\$ 2,000	
		City’s Adjusted Share:			\$ 102,595	

Ocean Palm Subdivision and Golf Course Stormwater Project

Flagler Beach continues in its efforts to address stormwater ponding and potential flooding issues by including Ocean Palm Subdivision in the Prioritized Project List of the LMS. Fortunately, the City has been able to acquire two funding sources on its own this year.

The first award is a Legislative grant from Florida Department of Environmental Protection through a Division of Water Restoration Assistance Grant, Agreement No. LP18010. This is a cost reimbursement type grant for \$200,000, meaning the City pays upfront, but then applies for reimbursement in full. The \$200,000 is earmarked for design and permitting, with the remainder to be used toward construction. On August 11, 2016, the City Commission approved a contract with Quentin L. Hampton Associates, Inc. for design, permitting, and construction contract administration in the amount of \$112,430. The remaining \$87,570 will be applied to construction.

The second award is a cost-share agreement with St. Johns River Water Management District for \$675,000. The cost-share is 77/23%, meaning the District will reimburse the City up to 77% or \$519,750.

The remaining 23%, or \$155,250, is the City's responsibility. These funds may only be applied toward construction costs. The City's purchase of the inactive golf course within the subdivision in spring of 2013 for \$490,000 facilitated our ability to design the stormwater project for maximum mitigation. Water features on the golf course can be used to serve double-duty as retention ponds. QLHA is already working on the design. It is anticipated that the project will be advertised for bid in December 2016, with construction to start in February 2017.

Additional Projects

Other projects included in the LMS list for which it may be possible to secure grants in the future are:

- Portable generators for potable water Wells 10 and 12R. This would allow back-up power during an electrical outage to ensure delivery of raw water to the Water Treatment Plant for processing.
- The retrofitting of 11 of our 25 wastewater lift stations with generators to ensure operation during power outages that exceed 12 hours. This will allow the pumps to continue to operate, lessening the chance of overflow of raw sewage onto streets and into waterways.
- A complete rebuilding of pump station No. 2 and an upgrade to its connecting infrastructure. Again, pump failure could result in spillage of raw sewage.

Not included in the LMS document, largely because attention to this problem is fairly recent - are improvements to our Wastewater Treatment Plant. *Phase 1 Improvements* were completed in July 2016 at a cost of \$912,338. *Phase 2 Improvements* are scheduled for year's end and are anticipated to cost over \$422,000. Payment for both Phases 1 and 2 has been and will be drawn from the City Utility Fund. Proposed *Phase 3 Improvements* could implement a CleanB® Biosolids Treatment technology, eliminating our antiquated drying beds method of sludge disposal and the necessity to haul waste to a certified landfill. At a projected cost of \$1.5 Million, the City initiated an application for a low-interest loan from FDEP's State Revolving Fund in late August, 2016.

STORMWATER BUDGET

In 2005, the City introduced a stormwater fee of \$4.00 per month for the City's 3,000⁺ households with a Utility account. In Fiscal Year 2013, this fee generated about \$203,760. The rate remained unchanged for almost a decade. In Fiscal Year 2015 the City Commission approved a conservative 6% increase to the stormwater fees of \$0.28 per month for its 4500 residents. This added \$14,100 to the stormwater fund. Beginning in FY16, a 5% increase to the fund of \$0.25 per month should yield an additional \$13,500 annually.

FLOODPLAIN ORDINANCE

On February 26, 2015, the City Commission adopted Floodplain Ordinance 2015-03, patterned after the *Revised Model Ordinance* of January 15, 2013. The *Model Ordinance* is a collaborative effort by officials representing the National Flood Insurance Program (NFIP) and the Florida Building Code (FBC).

Passage of the new model ordinance was required in order for the City to maintain its participation in the Community Rating System. Ordinance 2015-03 met the minimum requirements of the NFIP, but

additional higher standards are encouraged by the NFIP, FEMA, and FDEM and have the potential to improve a community's class rating. Higher standards included in the City's 2015 floodplain ordinance included:

1. In Special Flood Hazard Area Zones AE, VE and Coastal A, an increase in the minimum first floor elevation of freeboard from the existing one foot to two feet above base flood elevation (BFE).
2. Requires repetitive flooding over a ten-year period for which the cost of repairs equals or exceeds 25% of the market value be included in the definition of "substantial damage."
3. For a *substantial improvement*, accumulate the costs of improvements and repairs over a ten-year period, the cumulative cost of which equals or exceeds 50% of market value. (This item was actually a weakening of the existing ordinance that looked at the *entire life span* of the structure, regardless of the number of years between improvements.)
4. In VE and Coastal A Zones, limits partitioning of enclosures below elevated buildings.
5. In VE and Coastal A Zones, foundations and construction documents must be prepared and sealed by a registered design professional.

Opposition to the two feet of freeboard and its impact on *substantial improvement*, largely by the Flagler County Builders Association, resulted in its re-evaluation by the City's Planning and Architectural Review Board and City Commission. In a joint workshop held January 25, 2016, both bodies chose by majority vote to roll-back the two feet of freeboard to one foot and to eliminate the 10-year cumulative cost for substantial improvements. The one foot of freeboard is still considered a higher regulatory standard (although with fewer credited points), but the change to the *substantial improvement* definition now meets only the minimum requirement. Ordinance 2016-01 amending Ordinance 2015-03 was passed on April 14, 2016.

Beginning October 1, 2015, the City of Flagler Beach began issuing permits, performing file reviews, and conducting building inspections for the Town of Beverly Beach, our neighbor to the north. Sandwiched between the Atlantic Ocean and the Intracoastal Waterway, Beverly Beach has 1.1 miles of shoreline and averages about one-quarter mile in width. The entire town is less than one square mile. Beverly Beach has had, and continues to have, a two feet of freeboard ordinance in its floodplain regulations.

RISK MAP

FEMA Region 4 recently completed a multiyear coastal flood risk study for Flagler and Volusia Counties to identify, quantify, and communicate better the flood hazards and associated risks along our coastlines. Flagler County's current flood insurance rate maps (FIRMs), in effect since July 17, 2006, will be replaced sometime in 2017 with these more accurate and detailed maps that include data on storm surge and wave run-up. FEMA held an Open House at the Hammock Community Center in Palm Coast on May 5, 2016 from 4 to 7 PM. It was advertised on the City's utility bill dated April 29, 2016. At this event, Preliminary FIRMs, dated March 15, 2016, were on display for residents to view. Each local community, including Flagler Beach, had at least one Certified Floodplain Manager on hand to assist residents in determining if their flood zone had changed between the effective 2006 maps and the preliminary 2016 maps.

DISASTER PREPAREDNESS GUIDE

Prior to 2015, the *Disaster Preparedness Guide* was a combined effort of Flagler County and the City of Palm Coast. This extensive full-color, photograph-rich magazine has a wealth of information for residents detailing how to prepare before, during, and after an emergency. As of last year, Flagler Beach is now included in this publication. The City logo is on the cover and overleaf. Our Fire Captain's signature can be found alongside his counterparts on the letter to residents. Important contact information for the City, including how to get in touch with its Certified Floodplain Manager, is now available. The City earned this right by helping to fund printing costs and by contributing to the editing. This free professional magazine has a wide distribution and is one to be proud of.

DISASTER PREPAREDNESS CONTRACTS

In the summer of 2015, Flagler Beach participated with the cities of Bunnell and Palm Coast in assisting Flagler County in reviewing submittals to their Requests for Proposals (RFPs) for various disaster-related services. Twenty-one consulting agencies competed for these contracts. The City chose the top two agencies in each of three categories to put under contract. No fees are charged by these consulting agencies until their services are needed.

RFP P041-0-2015 Crowder-Gulf Joint Venture, LLC Philips and Jordan, Inc	Disaster Debris Removal and Disposal Services Removal and disposal of large volumes of debris
RFP P040-0-2015 Tetra Tech, Inc. Thompson Consulting Services	Disaster Debris Monitoring Services By law, the removal and disposal service providers cannot monitor themselves, so another company is needed
RFP P020-0-2015 CDR Maguire, Inc. David M. Shapiro	Disaster Financial Recovery Services Tracking of expenses and documentation to recover funds from FEMA

RESIDENTIAL CONSTRUCTION MITIGATION PROGRAM

Flagler County took the lead in securing grant funds totally \$194,000 and handling the majority of the administration for this program that – when complete – will have provided area residents, fourteen of them in Flagler Beach, with various wind mitigation upgrades to their homes. This may include a new roof, high-impact wind resistant windows, a storm-worthy garage door and similar improvements.

REPORT DISTRIBUTION

A requirement of Element 510 of the Flood Damage Reduction Activities of the NFIP Community Rating System is that this FLOODPLAIN MANAGEMENT ANNUAL PROGRESS REPORT be submitted to its governing body, made available to the public, and released to the media. Therefore, this report has been sent to the City Manager, City Mayor and City Commission; posted on the City's website; and a notice of its availability sent to the *Daytona Beach News-Journal* and the *Palm Coast Observer*. It was prepared by Kay McNeely, Certified Floodplain Manager, Department of Public Works. Copies of these documents are available for public view at Flagler Beach City Hall, 105 South 2nd Street, and the City Library, 315 South 7th Street.