



**Village of Key Biscayne
Floodplain Management Plan (FMP)
2010-2013 Annual Progress Report
Submitted September 24, 2013**

For the purpose of this report, the concept of a Repetitive Loss Plan, as used in the National Flood Insurance Program's (NFIP) Community Rating Services (CRS) recertification document, is synonymous with Key Biscayne's Floodplain Management Plan (FMP). Progress on FMP implementation, as required in FMP Section X, falls within the context of CRS compliance Action Plans followed by the Village. Action Plan items are included and tracked through the Miami-Dade County Local Mitigation Strategy (LMS) for the purpose of reducing and minimizing the impact of flooding, particularly in repetitive loss areas, and to obtain assistance with mitigation of flood damage through federal and state funded grants. Updates to the LMS flood project list, submitted and published biannually under Part II-The Projects, are available on the County website at <http://www.miamidade.gov/fire/mitigation.asp>. The status of the current list, as of the latest update in 2009, is summarized below as required under Activity No. 510 of the Annual CRS Recertification.

Project #	Description	Status
1	Comprehensive Review of Local Laws and Regulations	Completed in February 2012 – Revised Flood Ordinance per FEMA comments resulting from Community Assistance Visit September 2011.
2	Stormwater Master Plan (SWMP) Update (formerly Storm Drainage System Upgrade)	Completed in June 2011
3	Flap Gates at Outfalls	Funding secured through SW Utility-Recommendation resulting from SWMP Update
4	Drainage Improvements on East Heather Drive	Funding secured through SW Utility - Recommendation resulting from SWMP Update - Project in Planning Stage for implementation in Fiscal Year 2014 Quarter 1
5	Drainage Improvements on Fernwood Road & Hampton Road	Funding secured through SW Utility – Recommendation resulting from SWMP Update – Project in Planning Stage for implementation in Fiscal Year 2014 Quarter 3 to 4
6	Village Hall Courtyard Improvement	Future Unfunded – being Revised/under Review
7	Stormwater Outfall Rehabilitation	75% complete - Under Construction
8	New Stormwater Outfall Construction	To be updated – No longer being considered. To be designed by developer.
9	Hardening of Village Hall Generator	Future Unfunded
10	Ocean Lane Drive – Drainage Wells	Completed 2012
11	Traffic Signage & Pavement Marking Improvements Master Plan	Future Unfunded - Under review – Funded by Council on September 24, 2013.
12	Feasibility Study for Additional Open Space Preservation	Reviewed/Revised – No longer study
13	Demonstration Project	Future Unfunded
14	Erosion Control Web Q&A and Response System	Funded/On-going
15	CRS Outreach Program	Funded/On-going
16	Environmental Forum	Funded/On-going

In addition to the LMS projects listed above, the following stormwater improvement projects were included as part of the Village's Five Year Capital Improvement Plan and Emergency Repairs. These projects enhanced the Village storm water system and provide significant safety and quality of life improvements for residents. This information was provided by the Public Works Division.

1. Rehabilitation of Stormwater Injection Wells – Completed July 2010
2. Ocean Lane Drive Stormwater Pump Station Upgrade – Completed 2012
3. East Heather Drive Pump Station Upgrade – Completed 2012
4. Galen Drive Stormwater Catch Basins Repairs – Completed 2012
5. Water, Sewer and Reclaimed Water Project – Completed 2011
6. Outfall O-16 Removal and Replacement – Completed September 2013

The FMP includes a number of ongoing tasks that are significant in the mitigation of flood hazards. These tasks extend beyond continued management of "normal" ongoing CRS-mandated activities such as Drainage System Maintenance, Flood Warning, Map Information, Outreach Projects and Library.

The Village's Beach Renourishment Project and Dune Restoration Program are particularly significant in that the beach-dune system represents a barrier island's first line of defense against storm surges. The Village maintains a capital outlay expenditure item for these efforts as part of Activity No. 420.

After several years of permitting, construction on the most recent beach renourishment commenced on June 4, 2012 and was completed on July 17, 2012. The Project placed 37,500 cubic yards of beach compatible fill material along 5,425 linear feet of the Village's shoreline. The permits are valid for subsequent renourishment events over a ten year period.

As stated in the 2009 update, the Village completed a Dune Restoration Program by bringing in approximately 5,000 tons of sand to restore and enhance two specific problem areas along the municipal beachfront, removing all exotic species in the dune area and replacing them with native ones. In June 2013 a coastal dune vegetation report identified 1,265 square yards in need of additional vegetation to help retain sand and preserve the dunes. In August 2013, 2,530 Sea Oats were planted. An FY 2014-2018 Capital Improvements Plan line item was created for the removal of all exotic species invading the Village's beach-dune system. The report identified 1,510 square yards with exotics for removal and replanting with native species. This project is scheduled to be implemented in 2014.

The FMP update report was prepared by the Village Floodplain Manager, the Web Manager and the Public Works Special Projects/CRS Coordinator.

The Village issued a press release to local newspapers.

A copy of this report can be obtained at the Village's website www.keybiscayne.fl.gov