Lee County Floodplain Management Plan Status Report – October 2015

Purpose

The Lee County Board of County Commissioners adopted the Joint Unified Local Mitigation Strategy for Lee County, Florida in February 2007, and updated it in December 2011. The Local Mitigation Strategy will be updated, reviewed by the Florida Department of Emergency Management and adopted again in 2016.

The strategy also serves as the County's floodplain management plan. This report documents progress made on the goals and objectives contained in the strategy. It was prepared by the County's CRS Coordinator. Copies of the report are available for review at the Division of Public Safety's Administrative Office located at 14752 Ben C. Pratt/Six Mile Cypress Parkway in Fort Myers, Florida. A notice of its availability is located on the Division of Public Safety's website.

<u>Background</u>

The strategy was prepared to promote mitigation from hazards posing a threat to the communities within Lee County. It was also restructured to serve as the County's flood plain management plan that assessed the flooding problem of the unincorporated areas of Lee County, inventoried the flood hazard areas, reviews possible activities to remedy identified flooding problems, selected appropriate alternatives, and formulated an implementation schedule.

Review of Approved Action Plan

The attached report lists by goal, the project description, its cost and funding source, participating agency(s), hazard addressed (see key below), community benefited by project and its status.

Projects not completed or are behind schedule and why

Projects are on schedule.

| Project Description Cost/Fund Source Participating Agency Hazard Addressed Beneficiary Status |
|---|
|---|

Programs & Projects Supporting Preventive Mitigation Activities

| Continue programs supporting Comprehensive Plan initiatives, Land Development Code regulations | \$2.8 million/ Unincorporated MSTU \$1million/ | Lee County, Dept. Of Community Development, Planning Division, Development Services Division Cape Coral Dept. Of | TC, TH, FL, CE, WF, TR | Unincorporated Lee County | On-going; Lee's significant Comp Plan update revises the Conservation and Coastal Management Element and creates a new Community Safety and Well Being element to address natural disasters among other safety issues |
|--|---|---|---------------------------|--|---|
| | Cape Coral* | Community Development, Planning & Growth Management Division | | Cape Coral | On-going |
| Purchase land parcels to promote open space preservation in hazard prone areas | \$65 million/ Conservation 2020 Fund | Lee County Lands/Parks & Recreation, South Florida Water Management District | FL, CE, TC | All communities in Lee County | On-going |
| Continue enforcement of current floodplain and other land development regulations | \$9.1 million/ Unincorporated MSTU | Lee County, Dept. Of Community Development, Development Services | FL, TC | Unincorporated Lee County | On-going |
| | \$6.1 million/ Cape Coral | Cape Coral Dept. Of Community Development, Building Division, Code Compliance Division | | Cape Coral | |
| Continue current surface water management program | \$340,000 for FY16; \$250,000 annual budget; \$1.4 million invested since LMS was adopted / Unincorporated M STU | Lee County Surface Water, Natural Resources Division Cape | FL, TC | Unincorporated Lee County, Bonita Springs, Cape Coral | On-going |

| | | LMS Approved Ac | ction Plan | | |
|---|--|--|---------------------|---|---|
| Project Description | Cost/Fund Source | Participating Agency | Hazard Addressed | Beneficiary | Status |
| | | | | | |
| | \$332,184 / Cape Coral | Coral Public Works Dept. | | | |
| | C – Tropical Cyclones, TR – T Prought/Extreme Heat, FR – F | | torms/Lightning, FL | - Flooding, WF - Wildfire, CE | - Coastal |
| Continue current drainage system maintenance program of county canals & roadside ditches. | \$4.2 million / Lee County Department of Transportation | Lee County Dept. Of Transportation, Canal & Roadway/Pipe/Ditch Maintenance Programs | FL, TC | Unincorporated Lee County, Bonita Springs | On-going |
| Implement Long Range Beach Erosion Control Budget Plan | Captiva and Northern Sanibel /Lee County Beach Management; local assessments by CEPD, bed tax, state grant / \$20 million construction. | Federal, FDEP, Lee County, Other Local | CE, TC | Unincorporated Lee County, Bonita Springs, Fort Myers Beach, Bonita Springs | Constructed Dec 2013 |
| | Captiva and Northern Sanibel /Lee County Beach Management; local assessments by CEPD, bed tax, state grant / \$500,000. | | | | Ongoing monitoring and management |
| | Estero Island/ Lee County Beach Management, FDEP / \$4 million. | | | | Constructed Dec 2011 |
| | Estero Island/ Lee County Beach Management, FDEP / \$70,000. | | | | Ongoing monitoring and management |

| Project Description | Cost/Fund Source | Participating Agency | Hazard Addressed | Beneficiary | Status |
|---------------------|---|----------------------|------------------|-------------|--|
| riojeet Description | | - and paring regime) | 1102010110010000 | Denomina | |
| | Lovers Key / Lee County Beach Management / \$3.2 million construction. | | | | Construction completed Dec 2014 |
| | Lovers Key / Lee County Beach Management / \$700,000. | | | | Ongoing monitoring and management |
| | Bonita Beach / Lee County Beach Management, bed tax, FDEP / \$1.8 million. | | | | Construction completed Sept 2014; Monitoring ongoing |
| | Bonita Beach / Lee County Beach Management, bed tax, FDEP / \$232,000. | | | | Ongoing monitoring and management |
| | Blind Pass/ Lee County Beach Management, FDEP / \$615,000 | | | | Constructed Apr 2013 |
| | Blind Pass/ Lee County Beach Management, FDEP / \$393,000. | | | | Monitoring ongoing; Inlet Management Plan Study underway |
| | \$9.8 million Gasparilla Island / US Army Corps**, Lee County Beach Management, FDEP | | | | Constructed Dec 2013; Monitoring Ongoing |

Hazard Addressed

Beneficiary

Status

Participating Agency

| J | | 1 0 0 7 | | 3 | |
|-------------------------|----------------------------|--------------------------|--------|----------------------------|-----------------|
| | | | | | |
| City of Fort Myers Dean | \$2.8 million / | FEMA, City of Fort | FL, TC | City of Fort Myers | Completed in |
| Park Neighborhood | Hazard Mitigation Grant | Myers Public Works | | | 2012 |
| Engineering & Drainage | Program Program | | | | |
| Improvements | | | | | |
| - | | | | | |
| | | | | | |
| Manuals Branch | \$1.9 million / | FEMA, City of Fort | FL, TC | City of Fort Myers | Construction |
| Watershed Improvement | Hazard Mitigation Grant | Myers Public Works | | | project was re- |
| Drainage Projects | Program | | | | advertised. |
| C J | | | | | |
| Continue to implement | Program staff time/General | Lee County, Cities, | DR | Unincorporated Lee County, | On-going |
| water restriction | Fund | South Florida Water | | all cities | |
| ordinances | | Management District | | | |
| Enact burn bans when | Program staff time/All | Lee County Public | WF | Unincorporated Lee County, | On-going |
| drought conditions | Hazards MSTU | Safety, Florida Division | | all cities | |
| warrant it | | of Forestry, Lee County | | | |
| | | Fire Chiefs Association | | | |

Programs and Projects Supporting Property Protection Activities

Cost/Fund Source

Project Description

| Purchase appropriate | \$132,442 / | FEMA, Lee County | FL,TC | Unincorporated Lee County, | Purchased four |
|----------------------------|--------------------------------|------------------------|-------|----------------------------|------------------|
| repetitive loss properties | Flood Mitigation | Dept. Of Public Works, | | Bonita Springs, Fort Myers | properties; nine |
| | Assistance Program & | Division of County | | Beach, Fort Myers | properties |
| | EMPA Trust Fund | Lands, Division of | | | demolished by |
| | | Public Safety | | | owners, |
| | \$575,672 / | | | | including one in |
| | Hazard Mitigation Grant | | | | Fort Myers in |
| | Program | | | | 2012 |

Hazard Key: TC – Tropical Cyclones, TR – Tornadoes, TH – Thunderstorms/Lightning, FL – Flooding, WF – Wildfire, CE – Coastal Erosion, DR – Drought/Extreme Heat, FR – Freezes/Winter Storms

Hazard Addressed

Beneficiary

Status

Sept. 2, 2014 (12-month

timeframe)

Participating Agency

| Freeboard requirement for new construction located in the X Zone of floodplain | Program staff time/General Fund, Unincorporated MSTU | Lee County, Community Development Dept, County Attorney's Office | FL, TC | Unincorporated Lee County | Adopted by County, August 2000 |
|---|--|--|------------|---|--|
| Retrofit eligible repetitive loss properties | \$273,827 / Flood Mitigation Assistance Program, Residential Construction Mitigation Program | FEMA, Florida Dept. Of Community Affairs, Lee County, Division of Public Safety | FL, TC | Unincorporated Lee County, Bonita Springs, Fort Myers Beach | Elevated eight repetitive loss properties to date. |
| Elevation of Private Residences, Fort Myers Beach | \$193,095 / Hazard Mitigation Grant Program | FEMA, Town of Fort Myers Beach | FL, TC | Fort Myers Beach | Application denied by FEMA |
| Edison and Ford Winter Estates Wind Retrofit | \$458,709 / Hazard Mitigation Grant Program | FEMA, City of Fort Myers | TC, TH, TR | City of Fort Myers | Completed in 2012 |
| Cape Coral Residential | \$175,000/ RCMP Grant | City of Cape Coral | TC, TR, TH | City of Cape Coral | Project initiated |

Programs Supporting Natural Resource Protection Activities

Awarded by FDEM

Cost/Fund Source

Project Description

Construction Mitigation

Program (RCMP) Grant

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|--|---------------------|------------------------|----|---------------------------|-----------|--|--|--|
| Continue current | \$50,000 / | Lee County Dept. Of | FL | Unincorporated Lee County | On –going | | | |
| wetland | Unincorporated MSTU | Community | | | | | | |
| coordinating/evaluation | | Development Services | | | | | | |
| program with state and | | Division, Florida DEP, | | | | | | |
| water management | | South Florida WMD | | | | | | |
| agencies. | | | | | | | | |

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Structural Projects Keeping Hazard Impact from Identified Vulnerable Areas

| North Estero Drainage Project | \$659,419 / Hazard Mitigation Grant Program | FEMA. Town of Fort Myers Beach | FL, TC | Fort Myers Beach | Project 95% complete. |
|--|---|-----------------------------------|--------|------------------|---|
| Fort Myers Beach Basin-based Drainage Improvement Projects | \$350,000 / Hazard Mitigation Grant Program | FEMA, Town of Fort Myers Beach | FL,TC | Fort Myers Beach | Benefit Cost analysis completed. Construction funding available. |

Programs Supporting Emergency Service Protection Activities

| Continue current hazard warning program | General Fund/All-Hazards MSTU | Lee County, Division of Public Safety, Division of Natural Resources Management | All Hazards | Unincorporated Lee County, all cities | On-going |
|--|---------------------------------------|--|----------------------|--|---|
| Increase the number of shelter spaces to house population vulnerable to natural hazards | \$2,450,000 / All-Hazards MSTU | Lee County Division of Public Safety | FL,TC, TR, FR, WF | Unincorporated Lee County, all cities | Ongoing. Annual work plan completed each year |
| Open cold weather shelters when forecasted temperatures fall below 40 degrees F | Program staff time | Salvation Army, Fort Myers Refuge Center | FR | Unincorporated Lee County, all cities | On-going |
| Identify suitable sites for temporary housing facilities | Program staff time/General Fund | Lee County, Dept of Human Services, Division of Public Safety, County Attorney's Office, Disaster Advisory Council | FL, TC, TR, | Unincorporated Lee County, all cities | On-going |

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|---------------------|------------------|----------------------|------------------|-------------|--------|--|--|

| Enact Five hundred year critical facility elevation requirement | Program staff time/General Fund | Municipal community development/attorney offices | FL, TC | Unincorporated Lee County | Enacted by County |
|---|---|--|-------------|---|--|
| Continue to develop health and safety emergency plans supporting county comprehensive emergency management plan | Program staff time/General Fund, Unincorporated MSTU, All- Hazards MSTU | Lee County, Division of Public Safety, affected county state and municipal agencies | All Hazards | Unincorporated Lee County, all cities | As of Sep 2014, 118 healthcare facility plans are reviewed annually. |
| Recreation Gym Wind Retrofit, Bonita Springs | \$1,125,000 / Hazard Mitigation Grant Program | FEMA. City of Bonita Springs Public Works | TH, TR, TC | Bonita Springs | Discontinued in 2014 |
| Public Safety Building Retrofits, Fort Myers | \$285,475/Hazard Mitigation Grant Program | FEMA, City of Fort Myers Fire and Police Departments | TH, TR, TC | Fort Myers | Completed June 2009 |
| Gulf Coast Village Wind Retrofit, Cape Coral | \$441,371/Hazard Mitigation Grant Program | FEMA, Gulf Care, Inc. | TH, TR, TC | Cape Coral | Approved and completed in March 2007 |
| Public Works Center Wind Retrofit, Fort Myers | \$90,000/Hazard Mitigation Grant Program | FEMA, City of Fort Myers Public Works Department | TH, TR, TC | Fort Myers | Completed June 2009 |
| Sanibel City Hall Wind Retrofit | \$105,000/Hazard Mitigation Grant Program | FEMA, City of Sanibel | TH, TR, TC | Sanibel | Completed |
| Lehigh Acres Fuel Reduction Program | \$691,995 / All Hazards MSTU \$350,000 / Division of Forestry | Florida Division of Forestry/Lee County | WF | Lehigh Acres in Unincorporated Lee County | Completed |
| Cape Coral Emergency Operations Center Expansion | \$1 million / All Hazards MSTU | Cape Coral | All Hazards | Cape Coral | Completed |

| Project Description | Cost/Fund Source | Participating Agency | Hazard Addressed | Beneficiary | Status |
|---------------------|------------------|----------------------|------------------|-------------|--------|

Actions to Address Public Information Activities

| Creation of Multijurisdictional Program for Public Information | Committee and staff time | Bonita Springs, Cape Coral, Estero, Fort Myers, Fort Myers Beach, Lee County, Sanibel | FL | Lee County multijurisdictional area | On-going |
|---|--|---|-----------------|--|--|
| Continue implementing Joint Public Information Strategy for All Hazards Plan | \$20,000 / General Fund | Lee County Division of Public Safety, Cape Coral, Fort Myers, Bonita Springs, Fort Myers Beach, Sanibel | All Hazards | Unincorporated Lee County, all cities | On-going |
| Continue current map information programs | \$740,202 / General Revenue, Unincorporated MSTU | Lee County Dept. Of Community Development and GIS Program | FL, TC, WF, CE, | All Lee County Communities | Significant GIS updates for public access to FIRM and hazard-related |
| | \$316,145 / Cape Coral | Cape Coral Information Technology Services, GIS Division | | Cape Coral | info; updates to FIRM letter format and Elevation Cert access |
| Annually send repetitive loss property owners information on ways to reduce flood losses | \$1,000-\$1,000 per jurisdiction/ General Funds | Lee County Community Development, All Cities | FL, TC | Unincorporated Lee County, all cities | Completed annually |
| Conduct hazard & flood awareness workshops in repetitive loss areas, and areas subject to stormwater flooding | \$600 / General Fund | Lee County, Division of Public Safety | TC, TH, FL, TR | Unincorporated Lee County, all cities | Jan-Sep 2014 conducted 65 seminars reaching 2,903 residents |
| Improve participation rate in voluntary real estate disclosure program | Program staff time | Lee County, Division of Public Safety, real estate associations | FL, | Unincorporated Lee County, Fort Myers Bach, Sanibel | On-going |

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Hazard Key: TC – Tropical Cyclones, TR – Tornadoes, TH – Thunderstorms/Lightning, FL – Flooding, WF – Wildfire, CE – Coastal Erosion, DR – Drought/Extreme Heat, FR – Freezes/Winter Storms.

| Reinforce technical | \$50,000 / | Lee County, Dept. Of | FL | Unincorporated Lee County, | On-going |
|---------------------|---------------------|------------------------|----|----------------------------|----------|
| assistance program | General Fund, | Community | | all cities | |
| | Unincorporated MSTU | Development, Dept. Of | | | |
| | _ | Public Works, Division | | | |
| | | of Public Safety, | | | |
| | | Building & Industrial | | | |
| | | Association | | | |
| | | | | | |

Programs or Projects Supporting Pre and Post Disaster Redevelopment and Mitigation Policies and Procedures

| Revise Lee County Post | Program staff time/General | Lee County Division of | All Hazards | Unincorporated Lee County | Completed and |
|-------------------------|----------------------------|------------------------|-------------|---------------------------|-----------------|
| Disaster Ordinance to | Fund | Public Safety | | | adopted by the |
| reflect lessons learned | | | | | Board of County |
| from recent disaster | | | | | Commissioners- |
| experience. | | | | | June 2007 |
| | | | | | |

^{*} Includes \$10,105 for annual mailing of information on flood mitigation to all properties in Cape Coral's floodplain--Cape Coral Department of Community Development, Planning Division

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^{**} From annual appropriations through the US Army Corps of Engineers from Flood Control & Coastal Emergency Funds through PL 84-99 and Shore Protection Construction General