



Memorandum

To: Mayor Clay Madden,
City Council

From: Lauren Brinkman, *CFM*, Floodplain Administrator

Subject: Hazard Mitigation Plan Implementation – CRS Progress Report

Date: July 30, 2021

Resolution 20-20, September 1, 2020, adopted the *St. Tammany Parish Hazard Mitigation Update - 2020*. The *Plan* instructs the Floodplain Administrator to continue monitoring implementation of the *Plan Update* and prepare a written progress report to the Mayor and City Council each year. This memo is our progress report through July 31, 2021.

For credit under the Community Rating System, this memo must be distributed to the media and made available to the public. It is being sent to the City's Journal of Record. Copies of this report are available for review at City Hall, 3101 East Causeway Approach. A notice of its availability is being posted on the City's website.

Background

The *St. Tammany Parish Hazard Mitigation Update – 2020* was drafted by the Steering Committee during a series of meetings held throughout 2019, in collaboration with community stakeholders and the general public. The *Plan* (a) documents the St. Tammany Parish Hazard Mitigation Plan Update (HMPU) process; (b) identifies natural hazards and risks within the parish; and (c) identifies the parish's hazard mitigation strategy to make St. Tammany Parish less vulnerable and more disaster resilient. It also includes mitigation project scoping to further identify scopes of work, funding sources, and implementation timing requirements of proposed selected mitigation projects. Information in the plan is used to help guide and coordinate mitigation and local policy decisions affecting future land use.

Every community faces different hazards, and every community has different resources and interests to address its challenges. For Mandeville, the *Plan* reviews a variety of measures that can reduce the problems and/or protect people and property when flooding occurs. Measures include maintenance on drainage systems, upgrading the storm drainage system, maintenance of right-of-ways, flood proofing, elevation of SRL/RL structures, wind retrofit of public buildings, building regulations, and public information. The *Plan* includes twenty-four (24) action items specific to Mandeville to help reduce or prevent flood damage.

The Disaster Mitigation Act (DMA 2000) requires State and local governments to prepare and update Hazard Mitigation Plans (HMP) every five (5) years. The *St. Tammany Hazard Mitigation Plan Update –2020* was adopted in 2020 and will require an update in the year 2025. Mandeville is one of many communities participating in this multi-jurisdictional plan.

A review of the *Plan's* action items:

The twenty-four (24) action items identified in the *Plan* (Section 4, 29-32) are reviewed here. Each action item includes an *Jurisdiction-Specific Action, Action Description, Funding Source, Timeframe, Responsible Party/Agency/Department, Hazard, and Status*.

Action Item Status:

Of the *Plan's* twenty-four (24) action items, nine (9) are new and fifteen (15) are ongoing, annual or maintenance activities. The City has completed 0 action items, and 12 action items that were carried over. In summary, the ongoing action items are listed below:

- Ongoing Action Items include: Elevation of SRL/RL Structures, Sewerage Treatment Plant Flood Mitigation, Wind Retrofit and Flood Mitigation of Public Buildings, Coastal Restoration, Expansion and Improvement of Canals and Culverts, Backup Power for Critical Facilities, Drainage Improvements, Community Education, Participation in FEMA Grant Programs, Seawall Improvements, Community Rating System Participation, Enforcement of Regulations and Building Code Standards, Creation of a Master Drainage Plan, Adoption of International Building Codes and Regulation of New Development, Enhancing Public Awareness, Improving Potable Water Supply, Flood Proofing Critical Structures, Road Elevation, Upgrading Pumping Stations, Improving Communication Systems, and Adopting Water Conservation Measures.

The city has completed or is implementing 100% of the *Plan's* recommendations.

Recommendations

1. City staff should continue their jobs of implementing the *Plan's* ongoing recommendations.
2. The City should continue its participation in the Regional Planning Commission and work with neighboring communities to reduce stormwater and drainage problems that cross corporate boundaries.

Mandeville Previous and New Mitigation Actions

City of Mandeville Action Update								Action	Recommendations
Jurisdiction- Specific Action	Action Description	Funding Source	Timeframe	Responsible Party, Agency, or Department	Hazard	Status	Update 2021		
Elevation of Severe Repetitive Loss, Repetitive Loss and structures below BFE	Currently there are 59 properties listed on FEMA's SRL/RL list Properties will be prioritized based on the SRL / RL. The City elevates properties as funding is made available while developing strategies for coastal and flood control protection and mitigation.	FEMA HMPG and FMA	Ongoing	City of Mandeville Mayor's Office	Flooding, Tropical Cyclone	Carried over	Ongoing	x	
Sewerage Treatment Plant Flood Mitigation	The proposed project would include the construction of either an earthen berm or I-wall surrounding a portion of the sewerage treatment plant to prevent the inundation of flood waters from storm surge. The project will also include the elevation of Ultraviolet lights used in the final stage of sewerage treatment.	FEMA HMPG	1-5 Years	City of Mandeville Mayor's Office	Flooding, Tropical Cyclone	Ongoing	Ongoing	x	
Wind Retrofit of Mandeville Police Department Headquarters	Mandeville Police Department Headquarters will be retrofitted to provide protection from high winds. The Scope of Work includes but is not limited to hardening windows, doors, and mechanical equipment. This retrofit will exceed the International Building Code wind load requirements for this location.	Local, State, Federal	1-5 years	City of Mandeville Mayor's Office	Tropical Cyclone, Wind, Hail, Tornado	Ongoing	Ongoing	x	
Wind Retrofit of Mandeville Community Center	Mandeville Community Center will be retrofitted to provide protection from high winds. Includes but is not limited to hardening windows, doors, and mechanical equipment. This retrofit will exceed the International Building Code wind load requirements for this location.	Local, State, Federal	1-5 years	City of Mandeville Mayor's Office	Tropical Cyclone, Wind, Hail, Tornado	Ongoing	In Progress	x	
Flood mitigation and Wind Retrofit of Mandeville Public Works Department Facilities	Mandeville Public Works Department Facilities will be retrofitted to provide protection from high winds and mitigated from flood waters. The Scope of Work includes but is not limited to hardening windows, doors, and mechanical equipment. The wind retrofit will exceed the International Building Code wind load requirements for this location.	FEMA HMPG	1-5 years	City of Mandeville Mayor's Office	Tropical Cyclone, Wind, Hail, Tornado	Ongoing	Ongoing	x	
Wind Retrofit of Mandeville City Hall	Mandeville City Hall will be retrofitted to provide protection from high winds. The Scope of Work includes but is not limited to hardening windows, doors, and mechanical equipment. This retrofit will exceed the International Building Code wind load requirements for this location.	FEMA HMPG	1-5 Years	City of Mandeville Mayor's Office	Tropical Cyclone, Wind, Hail, Tornado	Ongoing	In Progress	x	
Cypress Swamp/Green Fund Coastal Restoration and Armoring	The proposed project would construct a berm of a yet to be determined type in Lake Pontchartrain in front of an endangered cypress swamp along the shoreline of the City of Mandeville. The berm would armor the identified section of shoreline against continued coastal erosion as well as reduce the velocity of storm runoff thereby allowing suspended sediments to rebuild land.	FEMA HMPG	1-5 Years	City of Mandeville Mayor's Office	Tropical Cyclone, Coastal Hazards, Flooding	Ongoing	In Progress	x	

Expand and enhance canals, culverts and flow capacity.	Upgrade the flow capacity of storm water along Lake Shore Drive; in Golden Glen Subdivision; and along Bayou Chinchuba, Bayou Castine, and Little Bayou Castine by expanding and sloping the canals and replacing any inferior culverts along the major drainage laterals	City Budget and Grants	1-5 years	Street Supervisor/Public Works Director	Flooding, Tropical Cyclone	In progress	Ongoing	x	
Backup power for Critical Facilities	Add Back up power supply/generators at critical locations such as sewer lift stations.	City Budget, Grant, Fire budget	estimated 2025 completion	Public Works and Wastewater Supervisor	Flooding, Tropical Cyclone, Wind, Lightning, Tornado	In progress	Ongoing	x	
Little Bayou Castain Drainage	Madison (Marigny to Little Bayou Castain); Overlay (1,200' x 18") Drainage (36" RCPA)	City Budget, potential for FEMA grant	1-5 years	City Engineer and or Department of Public Works	Flooding, Storm Surge	Ongoing	Ongoing	x	
Continued Community Education	The city continues to provide hazard education to the public through public service advertising, meetings with schools and neighborhood organizations, and distribution of materials at retailers, the library, and city hall	City Budget and Grants	1-5 Years	Mayor's Office and Public Works Director	Flooding, Tropical Cyclone, Wind, Hail, Lightning	New	In Progress	x	
Participation in FEMA grant programs	The city continues active participation in various FEMA grant programs, in particular the HMGP and FMA which has funded multiple elevation projects in Mandeville.	City Budget and Grants	1-5 years	City Building Official; Planning Director and City Floodplain Manager	Flooding, Tropical Cyclone	New	In Progress	x	
Seawall Improvements	Improve seawall along lakeshore drive by increasing its size to better protect structures from Tropical Cyclone and tropical storm induced tidal flooding. (Public opposition to this proposal probably means that it will not be initiated). – Corps of Engineers is currently doing an economic feasibility study	City Budget and Grants	Ongoing - 1-5 years	Public Works Department	Flooding, Tropical Cyclone, Storm Surge	New	Ongoing	x	
Continued Community Rating System Participation and Associated Activities	On October 1, 2018 the city improved from a CRS class 7 to a class 6. This improvement qualifies residents for an additional 5% discount on flood insurance premiums. The city will continue its activities to improve the CRS rating.	City Budget	1-5 Years	City Floodplain Manager	Flooding, Tropical Cyclone, Wind, Lightning, Storm Surge	New	In Progress		x
Continued Enforcement of regulations/building code standards	Continue enforcement of floodplain regulations, subdivision regulations, engineering standards, and building code to ensure that all future development is implemented in such a way that risk from natural hazards is minimized	City Budget	1-5 Years	Floodplain manager/building Official/Public Works Department/City Engineer	Flooding, Tropical Cyclone, Wind, Storm Surge	New	Continuous		x
Master Drainage Plan	Develop a master drainage plan which will evaluate drainage projects at major drainage laterals to determine best method of increasing drainage capacity. Implement recommended projects resulting from drainage plan.	City Budget	1-5 Years	City Engineer and or Department of Public Works	Flooding, Tropical Cyclone	New	Ongoing	x	

Adoption of International Building Codes and Regulation of New Development	Adopt the current International Building Codes by ordinance, which would result in additional techniques to harden structures and mitigate against damage from hazards.	HMGP, Local	1-5 years	St Tammany Parish Government/ Mandeville Mayor's Office	Coastal Hazards, Flooding, Tropical Cyclone, Termites, Tornadoes, Thunderstorms, Wildfires	New	Ongoing		x				
Enhanced Mitigation Outreach and Education for All Hazards	Increase public awareness of hazards and hazardous areas. Actions may include distribution of public awareness information regarding all hazards and potential mitigation measures; implementation of educational program for children and merchants; Integrate disaster preparedness/mitigation into the public school curriculum, providing public education on the importance of maintaining the ditches, promotion of the purchase of flood insurance for public. Sponsor a "Multi-Hazard Awareness Week", to educate the public on all hazards	HMGP, Federal	1-5 years	City of Mandeville Mayor's Office	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Coastal Hazards, Drought, Fog, Termites, Wildfires, Coastal Hazards	New	Ongoing		x				
Potable Water	Create redundancy of potable water supply to critical facilities, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	HMGP, Federal	1-5 years	City of Mandeville Mayor's Office	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones	New	Ongoing	x					
Flood Proofing Projects	Flood-proof critical structures within Mandeville to help promote continuation of critical services during a storm event	HMGP, Federal	1-5 years	City of Mandeville Mayor's Office	Flooding, Tropical Cyclones	New	Ongoing	x					
Road Elevation	Elevate roads in vulnerable locations prone to flooding and drainage problems.	HMGP, Federal	1-5 years	City of Mandeville Mayor's Office	Flooding, Tropical Cyclones	Ongoing	Ongoing	x					
Pumping Station Projects	Elevate or flood proof pump stations; upgrade existing pump stations by installing block valves to prevent/protect against backwater	HMGP, Federal	1-5 years	City of Mandeville Mayor's Office	Flooding, Tropical Cyclones	In Progress	In Progress	x					
Communication System Upgrades	Implement upgrades and additions to communications systems, including the Auto call out system. Implement a public notification system, such as sirens or a call down system with backup capabilities.	HMGP, Local, regional, and federal	1-5 years	City of Mandeville Mayor's Office	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Fog	In Progress	In Progress	x				2020	2021
Water Conservation Measures	Adopt ordinances requiring water-saving measures in time of drought	HMGP, Local	1-5 years	St Tammany Parish Government/ Mandeville Mayor's Office	Drought	In Progress	In Progress		x	1	carried over	0	carried over
Resiliency Plan	Develop a resiliency plan which will evaluate the City's ability to adapt to climate change and environmental hazards	City Budget and Grants	1-5 Years	City of Mandeville Mayor's Office, Planning Director, City Engineer	Flooding, Tropical Cyclones	New & In progress	New & In progress	x		0	deleted	0	deleted

Land Aquisition	Initiative to aquire land for storm water management and property not suitable for development	City Budget	1-5 Years	City of Mandeville Mayor's Office, Planning Director, City Engineer	Flooding, Tropical	New	New	x		13	in progress, ongoing or continuous	24	in progress, ongoing or continuous
Shoreline Protection	Closure & Restoration of the shoreline wetlands	City Budget and Grants	1-5 Years	City of Mandeville, Public Works Director, City Engineer	Flooding, Coastal Hazards	New	New	x		13	New	3	New
									22	5	27	27	

