

**Hazard Mitigation Plan
Annual Progress
Report 2023**

| Jefferson Parish | | | | | | | | | | | | |
|-----------------------|-------------------------|--|---|----------|--|--------------------------|---|------|--------------------------------|--|---|--|
| Action ID | Old Action ID and Goals | Description | Hazard(s) Addressed | Priority | Responsible Coordinating Entity | Potential Funding Agency | (B/C) Benefit-Costs (TF) Technical Feasibility | Cost | Anticipated Year of Completion | Implementation Status Update 2021 | Implementation Status Update 2022 | Implementation Status Update 2023 |
| Preventative | | | | | | | | | | | | |
| P-1 | F-5, SS-7, G4 | Adopt freeboard | Flood, Storm Surge | 7-High | JP FPHM | n/a | Provides a margin of safety against unknown flood depths while taking into account sea level rise and subsidence. Can ultimately reduce the amount of flooding a home would experience, lower flood insurance premiums, and provide the community with CRS points which in turn also lowers flood insurance premiums. | | 2025 | Updating ordinance in August 2021. All new residential structures in AE/VE inside levee must meet BFE +1. For areas outside levee must be BFE +2 ft. For all residential substantial improvements in AE/VE must meet BFE +1. Non-residential structures outside the levee must meet BFE+2 for new construction and BFE+1 for substantial improvements. | Adopted in August 2021. All new residential structures in AE/VE inside levee must meet BFE +1. For areas outside levee must be BFE +2 ft. For all residential substantial improvements in AE/VE must meet BFE +1. Non-residential structures outside the levee must meet BFE+2 for new construction and BFE+1 for substantial improvements. | The parish has made efforts to reduce the number of building permits issued in vulnerable areas and to try to ensure any construction that takes place in those areas is safe and minimizes risk. In general, permit issuance has trended downwards over the past several years. Efforts will continue going forward. Adopting non-residential freeboard +1 ft inside levee and +2 ft outside levee in fall of 2023. |
| P-2 | F-9, H&TS-4, SS-6, G4 | Issue fewer permits for building in vulnerable areas and/or adopt stronger bldg. codes "study" | Flood, Hurricane and Tropical Storms, Storm Surge | 6-Medium | JP Planning, JP Code | n/a | Reduce the localized flooding problems that would occur with new development, keep neighborhoods safe from disasters, and fortify structures to better withstand flood and wind. Reduce the number of buildings susceptible to storm surge, thereby, keeping communities safe and damage cost low. | | 2025 | The parish has made efforts to reduce the number of building permits issued in vulnerable areas and to try to ensure any construction that takes place in those areas is safe and minimizes risk. In general, permit issuance has trended downwards over the past several years. Efforts will continue going forward. | The parish has made efforts to reduce the number of building permits issued in vulnerable areas and to try to ensure any construction that takes place in those areas is safe and minimizes risk. In general, permit issuance has trended downwards over the past several years. Efforts will continue going forward. | The parish has made efforts to reduce the number of building permits issued in vulnerable areas and to try to ensure any construction that takes place in those areas is safe and minimizes risk. In general, permit issuance has trended downwards over the past several years. Efforts will continue going forward. |
| P-3 | SS-2, G1 | Maintain 100 Year levee protection to ensure continued protection | Storm Surge | 7-High | SELFPA-E/W, USACE | n/a | Reduce surge damage and cost to homeowner, government, and NFIP. | | 2025 | Ongoing. All of the gates and structures in the hurricane system are exercised by the local levee districts multiple times a year. | Ongoing. All of the gates and structures in the hurricane system are exercised by the local levee districts multiple times a year. | Ongoing. All of the gates and structures in the hurricane system are exercised by the local levee districts multiple times a year. |
| P-4 | | Update Comprehensive Plan | All Hazards | 7-High | JP Planning | CDBG | Good planning is a key preventative measure and helps reduce the likelihood that new construction will be built in high risk areas without mitigative measures. | | 2020 | Envision Jefferson 2040 adopted Ordinance No. 25916, November 6, 2019. See Chapter 25, Article VI of Jefferson parish Code of Ordinances. The adopted Comp Plan incorporates the HM Plan as part of the Natural Hazards & Resources element | No update at this time. | Adopted the Jefferson Parish Green Infrastructure Plan as a subplan of the Comprehensive Plan on March 15, 2023 - Ordinance No. 26577. |
| P-5 | | Increase Open Space Areas | Flood | 7-High | JP Planning | n/a | Open spaces such as parks can help provide additional pervious surface areas to allow for infiltration and reduce flooding | | 2025 | No specific action at this time. Implementation of this may require amendment to subdivision regulations and/or coordination with Recreation Department. | No specific action at this time. Implementation of this may require amendment to subdivision regulations and/or coordination with Recreation Department. | The Bucktown Living Shoreline will create approximately 40 additional acres of Open Space Marsh Habitat. |
| P-6 | | Perform Regular Maintenance of Drainage System | Flood | 6-Medium | JP Drainage | JP Drainage | Ensuring drainage systems are maintained can have major impacts as this allows water to be managed in a way that minimizes flooding. | | 2025 | Drainage system is maintained by department crews all year long | Drainage system is maintained by Drainage Department crews all year long. | New drainage system maintenance procedural study underway. Drainage system is maintained by Drainage Department crews all year long. |
| P-7 | | Update Capital Improvements Plan | All Hazards | 7-High | JP Capital Projects | JP Capital Projects | A capital improvements plan can help direct funding to the highest priority projects and ensure that projects that reduce risk are being identified | | 2025 | Departments work annually with Jefferson Parish Capital Projects team to develop project ideas. FPHM and ECM will begin working with Capital Projects to encourage projects that reduce risk rise to the top. | No update at this time. | No update at this time. |
| P-8 | | Update the Repetitive Loss Area Analysis (RLAA) annually | Flood | 7-High | JP FPHM | JP FPHM | RLAAs generate specific guidance on mitigation solutions for individual buildings or areas and help property owners reduce their risk of future flooding by providing an understanding of flood risk, flooding sources, and resources for mitigation. | | 2025 | Annual report will be completed | 2021 annual report was completed in July of 2021. 2022 annual report was completed in July of 2022. | 2023 annual report will be completed in July of 2023. 5-year plan update will be done in 2024. |
| P-9 | | Develop a local tree inventory and maintenance schedule for trees located in rights-of way | Hurricane and Tropical Storms, Tornadoes, Winter Storms | 3-Low | JP Planning | JP Planning | If trees located within municipality owned rights-of-way fail and damage personal property or cause personal injury or death, there has been a legal trend that courts have placed a reasonable responsibility on the owner of the tree to maintain it. | | 2025 | Planning has discussed starting an inventory based on our review of landscape plans/subdivisions, but that would be an inventory on private property and limited to commercial districts and very limited residential areas with tree preservation requirements where the department could gather data. | No update at this time. | Submitted a Hazard Mitigation grant application for DR-4611 to assist with tree inventory and reducing non-native trees in River Ridge; applied for an Urban and Community Forestry Action Plan grant to improve the tree canopy and create shaded walking spaces for residents and visitors in Avondale, Louisiana. |
| Floodplain Management | | | | | | | | | | | | |
| FP-1 | | Evaluate efficacy of future conditions mapping | Flood | 5-Medium | JP FPHM, JP GIS | FEMA | Future conditions mapping identifies areas of future risk that may not be suitable for development and therefore can reduce future losses | | 2025 | FPHM and ECM have worked through a Silver Jackets grant to Model the Catouache Basin and are now working to determine if areas are unable to be developed. | Completed the Watershed Management Plan in August 2021. | New drainage system maintenance procedural study is underway, which will include mapping areas of future risk. |
| FP-2 | | Update Stormwater Management Regulations (ex. compensatory storage for new construction, drainage study with new development, program for rain garden/green infrastructure incentives, permeable surface requirements, sewer backup/overflow protection program) | Flood | 5-Medium | JP Environmental, JP Code, JP Engineering, JP Public Works, JP FPHM, JP Planning | FEMA, CWSRLF | Stormwater management regulations can be extremely cost-effective and help manage water in a way that reduces localized flooding which is a major issue in many areas of the parish | | 2025 | On-going, consultant led study expected to be complete by December 2021. Parish currently has Low Impact Development (LID) regulations in Landscape Regulations. LID requires a stormwater management plan that integrates Best Management Practices into other required plans for site. However, LID is voluntary, with the parish offering incentives for developers who submit applications utilizing LID techniques. | An Integrated Green Infrastructure Plan was drafted by the Consultant for the Stormwater Management Study and Planning is making final revisions with an anticipated adoption in August 2022. | Adopted the Jefferson Parish Green Infrastructure Plan as a subplan of the Comprehensive Plan on March 15, 2023 - Ordinance No. 26577. |

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| JP Environmental, JP Code, JP Engineering, JP Public ,A17 JP Planning | | Develop a Watershed Master Plan (WMP) | Flood | 5-Medium | JP Environmental, JP Code, JP Engineering, JP Public, JP Planning | FEMA, CWSRLF | The objective of watershed master planning is to provide the communities within a watershed with a tool they can use to make decisions that will reduce the increased flooding from development on a watershed-wide basis. A WMP is more comprehensive than a stormwater runoff plan and while creating a WMP may be difficult, the benefits are great. | | 2025 | Watershed Master Plan still in development and expected to be finished by the end of 2021. | Watershed Master Plan completed and adopted in August 2021. | Watershed Master Plan completed and adopted in August 2021. |
| Property Protection | | | | | | | | | | | | |
| PP-1 | F-1, SS-3, G1 | Elevate, Acquire, Reconstruct, Relocate or Floodproof private and public structures and infrastructure in flood-prone and surge-prone areas | Flood, Storm Surge | 7-High | JP FPHM | FEMA, HUD, CPRA, DNR, DEQ | By removing structures from the floodplain and raising structures above the BFE, homeowners suffer less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$1.5 B | 2020 | Ongoing. For elevation/recon and onsite green infrastructure: FMA 2018 - 77 approved properties. FMA 2019 - 165 approved properties. FMA 2020 - 192 pending properties. | Ongoing. For elevation/recon and onsite green infrastructure: FMA/BRIC 2021 – 315 pending properties; FMA SWIFT 2022 – 25 pending properties; HMGP (4577 and LWI) – 30 pending properties. | Ongoing. For elevation/recon and onsite green infrastructure: FMA 2022 – 132 pending properties; HMGP (4611) –214 pending properties. |
| PP-2 | H&TS-1, T-3, G1 | Fortify critical infrastructure, including lift stations, with storm shutters, upgraded roofs, and generators | Hurricane and Tropical Storms, Tornadoes | 6-Medium | JP Gen Services, Dept. Heads, JP Risk Mngt, JP FPHM | FEMA, HUD | Provide extra protection to critical infrastructure from potential wind damage, thus allowing operations to continue during hurricanes and tropical storms and improving the chance a community can thrive after a tornado. | \$100 M | 2025 | Engineering underway for automatic generator transfer switches at four gyms that serve as shelters during hurricanes. Pending funding for generators at the East Bank and West Bank Animal Shelters. | Engineering completed automatic generator transfer switches at four gyms that serve as shelters during hurricanes. Construction bids going back out as all bids came in over budget. Animal Shelter generators approved. Subbing in new location in place of East Bank Animal Shelter since the building was damaged during Hurricane Ida. Pending funding for generator at Terrytown Playground. | No update at this time. |
| PP-3 | T-1 G2 | Construct Safe Rooms | Tornadoes | 3-Low | JP FPHM JUMP | PDM, HMGP | Provides security and peace of mind, protects residents from tornadoes, and has the potential to increase the value of one's home. | | 2025 | The saferoom at the Jefferson Parish Sewer building has been completed and should be protecting workers for the 2021 storm season | The saferoom at the Jefferson Parish Sewer building has been completed and will be protecting workers during the 2022 storm season. | Submitted application in December, 2022, for competitive grant funding to construct a new safe room. |
| PP-4 | T-2, G4 | Harden structures for wind impact | Tornadoes | 6-Medium | JP FPHM | PDM, HMGP | Better protect homes from strong winds that could speed recovery after a tornado. | | 2025 | FPHM and ECM will work with Capital Projects and General Services to identify structures that may need Wind Retrofitting | Delayed due to Hurricane Ida. FPHM and ECM will work with Capital Projects and General Services to identify structures that may need wind retrofitting. | In order to protect residential structures from future wind events, wind mitigation was included in all HMGP elevation applications. |
| Natural Resource Protection | | | | | | | | | | | | |
| NRP-1 | SS-4, G1, G3 | Increase coastal protection | Storm Surge | 7-High | JP Coastal | CPRA, RESTORE Act, USACE | Better coastal protection could help to prolong the presence of the coastline and continue to provide protection against storms as well as economic gain from tourist destinations. | \$2 B | 2025 | JP created a Coastal Strategic Action Plan that identifies projects and funding strategies. | Worked with CWWPRA agencies and have various projects moving to design and construction in the Barataria Basin. - Coastal | Working with CPRA for the Mid-Barataria Diversion and how mitigation funds for that project can benefit the Barataria basin projects JP has planned. |
| NRP-2 | SS-5 G1, G3 | Build back marsh | Storm Surge | 7-High | JP Coastal | CPRA | Replenish the first lines of defense against hurricanes and surge. This will protect homes from catastrophic levels of damage. | \$2 B | 2025 | 3 large scale projects are in design as well as 4 small projects that will create marsh and reduce storm surge. NOAA is constructing a large marsh creation project south of the Pen. | Moved 1 additional large scale marsh creation project to design. Working with CWWPRA and CPRA for funding of projects. | Upper Barataria Terrace Project was funded by NFWF. Construction is expected to begin in November 2023. Bucktown Living Shoreline Project was fully funded with additional money from NOAA and will be in construction by Summer 2023. |
| NRP-3 | SS-8, G3 | Fund more erosion mitigation projects (research alternative materials) | Storm Surge | 7-High | JP Coastal | CPRA, GOMESA | Erosion projects will help establish a stronger coastline that protects people and property and reduces or prevents devastating damage from storm surge | \$2 B | 2025 | Through the 2022 Capital Outlay bill additional funds were provided to complete the Grand Isle Back Bay Breakwaters. Also in late 2021 CPRA completed the beach nourishment and Gulf Side Breakwaters for a portion of Grand Isle. | CPRA through surplus funds are constructing the Chenier Caminada breakwaters. Working to submit HMGP applications for other Coastal projects. | Project at Kenner to use excess material from spillway being envisioned to create marsh creation cells. |
| NRP-4 | | Improve water quality | Flood, Storm Surge | 5-Medium | JP Water, JP Environmental | | Improving water quality has many beneficial consequences including better drinking water and ecosystem conservation as well as impacts to public health and well-being and recreational use | | 2025 | Ongoing. Sample the canals regularly and do multiple drain marking events throughout the year to promote no dumping. | Ongoing. Sample the canals regularly and do multiple drain marking events throughout the year to promote no dumping. | Coastal: Project at Kenner to use excess material from the spillway being envisioned to create marsh creation cells. Environmental: Ongoing. Sample the canals regularly and do multiple drain marking events throughout the year to promote no dumping |
| Structural Projects | | | | | | | | | | | | |
| SP-1 | F-2, G3 | Increase storm water protection management including retention and detention basins | Flood | 6-Medium | JP Drainage, JP Environ | FEMA, HUD, CAP OUTLAY, USACE, private entities | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$20 M | 2020 | Ongoing. Clean and flush drains as part of regular maintenance. | Ongoing. Clean and flush drains as part of regular maintenance. | Bayou Metairie Park green infrastructure project completed; applying for the GNOF 100 Years Challenge to add potential detention/retention storage capacity under the Yenni Building Parking Lot and at Mike Miley Playground. |

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| SP-2 | F-4, G1 | Implement drainage improvement projects in flood-prone areas | Flood | 7-High | JP Drainage | FEMA, HUD, MILLAGE, CAP OUTLAY | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$500 M | 2020 | Completed 2020: Breux Ditch, Goose Bayou Pump Station, Greg Court, Mounes Box Culvert Ph.1, Westwego 1 Pump Station pump addition Drainage Improvements Under Construction: Avron Drainage Improvements, Mounes Box Culvert Ph. 4, Bayou Segnette Bridge deck. | Completed 2021: Mounes phase 1, Brown Canal phase 2, Hurricane Ida cleanup, new bridge at Bayou Segnette pump station. | Ongoing construction of Mounes phase 4. Completed Lime Street, Pritchard Ditch, Stall Ditch, Manson Ditch, and Midway Drive improvements. |
| SP-3 | F-7, G1 | Install increased permanent pumps to alleviate flooding | Flood | 5-Medium | JP Drainage | F, H, M, CAP, USACE | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$100 M | 2020 | New 60cfs Goose Bayou pump station was constructed south of the existing Goose Bayou station. | Lake Cataouatche 1 pump station relocation started, engine replacements at Suburban pump station underway, electrical system being replaced at Hero pump station. | Began design of 2000cfs upgrade at Estelle pump station. |
| SP-4 | F-10, G1 | Implement failover systems as well as study and implement diversion projects for the Miss River | Flood | 4-Low | JP Coastal | F, H, CPRA, Capital | Failover systems and diversions can help direct water in ways that prevent large volumes of water that cause flooding to build in certain areas. | \$200 M | 2025 | The State of Louisiana is leading the effort to create diversion for the Miss River. A draft EIS was released in 2021 and has finished public comment. | CRPA and other agencies are looking at the Ama diversion and Mid-Barataria is schedule to move to construction in Winter of 2022. | Mid-Barataria should begin construction by early 2024 |
| SP-5 | | Install reservoirs/storage tanks | Flood | 5-Medium | JP Drainage | F, H, M, CAP | Reservoirs and storage tanks can provide a means of controlling water flow and volumes to reduce flood risk. | | 2025 | Drainage has not constructed any reservoirs or installed any storage tanks. | Drainage has not constructed any reservoirs or installed any storage tanks. | Applying for the GNOF 100 Years Challenge to add potential detention/retention storage capacity under the Yenni Building Parking Lot and at Mike Miley Playground. |
| SP-6 | | Channel modifications | Flood | 5-Medium | JP Drainage | F, H, M, CAP | Channel modifications can help to control the flow and volume of water and reduce flooding in certain areas | | 2025 | Waggaman Canal was rerouted around the landfill. | New Canal A being excavated between Leo Kerner Parkway and Pipeline Canal. | Labranche Canal excavation underway in Bridge City between railroad and Bridge City Avenue. |
| Emergency Services | | | | | | | | | | | | |
| ES-1 | H&TS-5, G1 | Widen the bridges to expedite evacuation | Hurricane and Tropical Storms | 5-Medium | JP Streets, Cap. Projects | DOTD, capital outlay | Allows for more efficient traffic flow during evacuation. | \$500 M | 2025 | The Kerner Bridge from Lafitte to Barataria is going through the Solicitation of Views and Public Comment Period. The Causeway bridge over Airline Hwy is being refurbished. | No update at this time. | Completed the Goose Bayou Bridge widening project. |
| ES-2 | | Install hazard warning systems | All Hazards | 7-High | JP Emergency Management | JP EM | Hazard warning systems can save lives and can be installed for reasonable fees | | 2025 | JPALERT system is used to send out warnings during severe weather events. | JPALERT system continues to be used to send out warnings during severe weather events. The system is maintained and additional messages are pre-drafted to be sent out if risk is imminent to the jurisdiction. | JPALERT system continues to be used to send out warnings during severe weather events such as two tornado incidents in March & December 2022. The system is maintained and additional messages are pre-drafted to be sent out if risk is imminent to the jurisdiction. |
| ES-3 | | Carry out shelter operations planning | All Hazards | 7-High | JP Emergency Management | JP EM | Shelters provide citizens with safe refuge before, during, and after hazard events and are critical to protecting life and safety | | 2025 | Ongoing. There are at least 2 shelters (one for each side of the river) that could be used at any times for any hazard. Plans with parish departments and outside agencies are involved. Opened a shelter on the West Bank during 2020 hurricane season for residents in lower Jefferson. The shelter followed COVID-19 protocols. | Temporary safe haven shelter was organized and operated during severe weather risk for residents affected by Hurricane Ida and still living in trailers not sustainable for strong damaging winds. In addition, three shelters were open during the recovery phase following Hurricane Ida. Shelter planning meetings were scheduled for all departments/agencies involved. Shelter trainings were developed and conducted for potential site staff. Shelter inventory was determined and has been organized and stored at the EOC. | Temporary safe haven shelters were organized and operated during the March & December 2022 severe weather events. Identified pre-determined shelter locations and developed shelter team trainings such as: shelter fundamentals, shelter manager, and psychological first aid. Logistics planning with General Services and JPRD have been conducted for generator support for facility and bathroom combo trailers. |
| ES-4 | | Implement emergency response training and exercises | All Hazards | 7-High | JP Emergency Management | JP EM | Training and exercises help ensure responders are prepared and can take action to reduce loss of life and injury during a disaster. | | 2025 | JP EM hosts one annual refresher training for our EOC activation teams followed by an annual Readiness Exercise before hurricane season. Also facilitate the Public Assisted Evacuation full-scale exercise that was at the East Bank location. JP EM is a participant in a Region 1 table-top and full-scale Mass Casualty Incident & Mass Rescue Operations exercise: attended initial planning meeting, future mid-term and final planning meeting. | JP EM conducted EOC Activation Team training which included an exercise in the Operations Room using the new updated WebEOC system. The annual Public Assisted Evacuation is scheduled for next week at the Alario Center to demonstrate JP's preparedness, but to identify any room for improvements from state and local partners. Hurricane preparedness meeting will continue all year long. | Conducted annual EOC Activation Team Training for all department and outside agency liaisons. The annual Public Assisted Evacuation was conducted at the Alario Center, with the inaugural logistical training for support staff. Three planning meetings were conducted pre-exercise followed by a redesign of site layout and creation of Stakeholder Guidebook. Hosted USACE Local government Liaison Training. Participated in Waterford III radiological functional exercise at Alario Center. Conducted Evacuation Making Decision table top exercise. Participated in Rail/Waterways USCG tabletop exercise. Hosted META for Disaster Summit for regional agencies. Participated in Mass Vaccination full-scale exercise in October & November 2022. |
| Public Education and Awareness | | | | | | | | | | | | |
| PEA-1 | F-3, H&TS-3, G2 | Encourage and educate public regarding small-scale flood mitigation projects and small-scale wind mitigation projects homeowners can employ | Flood, Hurricane and Tropical Storms | 5-Medium | JP FPHM, JUMP | FEMA, HUD, PRIV. FUNDS, CPRA | Homeowners will be empowered to protect themselves with low-cost, DIY projects and suffer less flood and wind damage. | \$10 M | 2025 | Ongoing. Conduct site visits per request. | Ongoing. Conducted numerous site visits from mid 2021 to summer 2022. Two of these visits resulted in recommendations for small scale green infrastructure mitigation options. | Ongoing. Conducted multiple visits with one resulting in the homeowner entering into an elevation grant. Continue to conduct site visits upon request. |
| PEA-2 | F-6, G2 | Encourage the purchase of flood insurance | Flood | 7-High | JP FPHM, JUMP | n/a | Enables homeowners to financially recover from the devastating effects of flooding as quickly as possible. Serves to educate area residents that any homeowner, regardless of location, can purchase flood insurance. | | 2025 | Ongoing. Created specific flood insurance promotion outreach projects as part of the PPI; one of which is the creation of a video by Parish President Lee Sheng. Planning to create more brochures and bilingual literature. | Ongoing. Created specific flood insurance promotion outreach projects as part of the PPI. Planning to create more brochures and bilingual literature. Refreshing our current FEMA brochures with updated versions that reflex the changes that resulted from Risk Rating 2.0. | Ongoing. Created specific flood insurance promotion outreach projects as part of the PPI. Planning to create more brochures and bilingual literature. Refreshing our current FEMA brochures with updated versions that reflex the changes that resulted from Risk Rating 2.0. |

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| PEA-3 | F-8, G2, G4 | Educate public on not dumping and cleaning catch basins; enforce penalties for dumping | Flood | 7-High | JP FPHM, JP Environ, JP Drainage | n/a | An informed public is better able to respond to and protect themselves from flooding. | | 2025 | Ongoing. Label storm drains with educational markers at various locations and events. Educate the public at tabling events. Working on relaunching the Brooms to Basins interactive Adopt a Catch Basin site. | Ongoing. Labeled storm drains with educational markers at various locations and events. Educated the public at multiple tabling events. | Ongoing. Labeled storm drains with educational markers at various locations and events. Educated the public at multiple tabling events. |
| PEA-4 | H&TS-2, SS-1, G2 | Educate public on risks, preparedness measures, evacuation procedures, and generator safety | Hurricane and Tropical Storms, Storm Surge | 6-Medium | JP EM, JP Fire, JP FPHM, JUMP | n/a | An informed public is better able to respond to and protect themselves from hurricanes and storm surge. | | 2025 | JPEM hosts a press conference during the week of hurricane season to review these topics and prepare the public. Collaborate with the PIO to send out messages through our JPALERT system as well as on social media. Work with Timberlane Together: Safety First by giving out hurricane prep materials. | JPEM hosts a press conference during the week of hurricane season to review these topics and prepare the public. Collaborate with the PIO to send out messages through our JPALERT system as well as on social media. Work with Timberlane Together: Safety First by giving out hurricane prep materials. | JPEM hosts the annual hurricane preparedness press conference. Attend civic association meetings to provide hurricane preparedness tips, EOC programs, and seasonal outlook. Interviews with the media. Collaborate with the PIO to produce messages through JPALERT and social media. |
| PEA-5 | | Implement school-based education program combined with environmental education program | All Hazards | 5-Medium | JP FPHM, JP School Board | n/a | Beginning education programs at a young age will help build an informed populace that better understands how to mitigate risks | | 2025 | Participating in two summer camps in 2021. Will feature the wave action model and floodplain model. | Participated in two summer camps in 2021 and two in 2022. The floodplain model was one of numerous tools used to educate the children about flood risk and mitigation methodologies utilized today. | 2023 and 2024 participation in summer camps has been planned out. The Stormwater team continues to implement their Sewer Science program in Jefferson Parish classrooms. |
| PEA-6 | | Develop public postings/displays and put on hazard expositions | All Hazards | 5-Medium | JP FPHM, JP Coastal | n/a | Public displays can help push out key messages about what the public can do to reduce risk | | 2025 | Ongoing. Provide press releases from the PIO office, messages in water bill, and communicate via the Parish Website and Social Media forums. | High water mark signs and Endangered species signs have been posted. | Creating signage at Bucktown about the species and habitat as well as explaining the way living shorelines protect our habitat. |

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| Preventative | | | | | | | | | | | | |
| P-1 | F-5, G4 | Adopt freeboard | Flood | 6-Medium | Gretna Building and Regulatory Inspections | n/a | Provides a margin of safety against unknown flood depths while taking into account sea level rise and subsidence. Can ultimately reduce the amount of flooding a home would experience, lower flood insurance premiums, and provide the community with CRS points which in turn also lowers flood insurance premiums. | | 2025 | We continue to maintained a Higher Regulatory Standard Base Flood Elevations (36 inches above Centerline of the Street) as the higher regulatory standard for new construction. We are currently looking at option on how to adopt freeboard while keeping our higher regulatory standards. The City understands freeboard is a requirement and anticipates having it adopted within the next year. | We continue to maintained a Higher Regulatory Standard Base Flood Elevations (36 inches above Centerline of the Street) as the higher regulatory standard for new construction. We are currently looking at option on how to adopt freeboard while keeping our higher regulatory standards. The City understands freeboard is a requirement and anticipates having it adopted before our 5 year cycle visit | Adoption of Freeboard shall take place with the City for Adoption in September 2023. Additionally, We continue to maintained a Higher Regulatory Standard Base Flood Elevations (36 inches above Centerline of the Street) as the higher regulatory standard for new construction. |
| P-2 | F-9, G1 | Technology redundancy | Flood | 7-High | Gretna IT Manager | GCH Gretna | Backing up technology at multiple locations can reduce disruption in productivity and operations. | | 2025 | Ongoing. Implemented server virtualization for faster recovery capabilities, relocated critical application servers to new hardened facility that is elevated and equipped with redundant/failover power and internet access. Maintain disaster recovery redundancy with primary financial software vendor. Servers have officially been moved. | Majority has been completed. Currently we awaiting network switches to fully implement. Delay due to supply chain issues as a result of pandemic. | A new fully virtualized environment is now in production with better failover capabilities. A new back up and recovery system has been implemented featuring faster recovery capabilities. |
| P-3 | SS-2, G1 | Maintain 100 Year levee protection to ensure continued protection | Storm Surge | 7-High | SELPFA-E/W, USACE | n/a | Reduce surge damage and cost to homeowner, government, and NFIP. | | 2025 | Ongoing. All of the gates and structures in the hurricane system are exercised by the local levee districts multiple times a year. | Ongoing. All of the gates and structures in the hurricane system are exercised by the local levee districts multiple times a year. | Ongoing. All of the gates and structures in the hurricane system are exercised by the local levee districts multiple times a year. |
| P-4 | | Update Comprehensive Plan | All Hazards | 7-High | Gretna Planning and Zoning | CDBG | Good planning is a key preventative measure and helps reduce the likelihood that new construction will be built in high risk areas without mitigative measures. | | 2020 | Ongoing. Gretna Comprehensive Plan was adopted in 2019. The Unified Development Code (UDC) was subsequently adopted the same year. It is continuously being updated to align with development goals. That process includes Planning and Zoning Commission and City Council approvals. | Ongoing. Gretna Comprehensive Plan was adopted in 2019. The Unified Development Code (UDC) was subsequently adopted the same year. It is continuously being updated to align with development goals. That process includes Planning and Zoning Commission and City Council approvals. | Ongoing. Gretna Comprehensive Plan was adopted in 2019. The Unified Development Code (UDC) was subsequently adopted the same year. It is continuously being updated to align with development goals. That process includes Planning and Zoning Commission and City Council approvals. |
| P-5 | | Increase Open Space Areas | Flood | 7-High | Gretna Planning and Zoning | n/a | Open spaces such as parks can help provide additional pervious surface areas to allow for infiltration and reduce flooding | | 2025 | Ongoing. Gretna's UDC mandates in some cases and encourages greenspace wherever possible. This is an ongoing initiative through routine planning and zoning approvals. This includes residential and commercial development, as well as the best use of publicly owned property. | Ongoing. Gretna's UDC mandates in some cases and encourages greenspace wherever possible. This is an ongoing initiative through routine planning and zoning approvals. This includes residential and commercial development, as well as the best use of publicly owned property. | Ongoing. Gretna's UDC mandates in some cases and encourages greenspace wherever possible. This is an ongoing initiative through routine planning and zoning approvals. This includes residential and commercial development, as well as the best use of publicly owned property. |
| P-6 | | Perform Regular Maintenance of Drainage System | Flood | 6-Medium | Gretna Public Works | JP Drainage | Ensuring drainage systems are maintained can have major impacts as this allows water to be managed in a way that minimizes flooding. | | 2025 | Gretna Public Works performs drainage maintenance daily throughout the year on a scheduled program. Additionally they perform precautionary maintenance prior to any anticipated storm or weather event. | Gretna Public Works performs drainage maintenance daily throughout the year on a scheduled program. Additionally they perform precautionary maintenance prior to any anticipated storm or weather event. | City of Gretna contracted a company who inventoried, inspected and cleaned the entire drainage network. Data collected is now being utilized for a hydrology/watershed study of our entire City. Gretna Public Works performs drainage maintenance daily throughout the year on a scheduled program which is now captured in a work order program. Additionally they perform precautionary maintenance prior to any anticipated storm or weather event. |
| P-7 | | Update Capital Improvements Plan | All Hazards | 7-High | Gretna Planning and Zoning, Gretna Administration | JP Capital Projects | A capital improvements plan can help direct funding to the highest priority projects and ensure that projects that reduce risk are being identified | | 2025 | Ongoing. City of Gretna Streets CIP is updated annually based on status of damage, priorities and available funding. Other capital projects funded with grants are managed to maximize external funds and match to critical infrastructure priorities. | Ongoing. City of Gretna Streets CIP is updated annually based on status of damage, priorities and available funding. Other capital projects funded with grants are managed to maximize external funds and match to critical infrastructure priorities. | Ongoing. City of Gretna Streets CIP is updated annually based on status of damage, priorities and available funding. Other capital projects funded with grants are managed to maximize external funds and match to critical infrastructure priorities. |
| Floodplain Management | | | | | | | | | | | | |
| FP-1 | | Evaluate efficacy of future conditions mapping | Flood | 5-Medium | JP FPHM, JP GIS | FEMA | Future conditions mapping identifies areas of future risk that may not be suitable for development and therefore can reduce future losses | | 2025 | Available land in Gretna has been fully developed; however, if a structure is demolished and property can be redeveloped the new construction would be held to the higher regulatory standard. | Available land in Gretna has been fully developed; however, if a structure is demolished and property can be redeveloped the new construction would be held to the higher regulatory standard. | City of Gretna has contracted CSRS to perform a comprehensive watershed analysis, modeling, and plan for the city and all future development while identifying areas of risk and avenues of mitigation coupled with our Comprehensive Zoning Plan. |
| FP-2 | | Update Stormwater Management Regulations (ex. compensatory storage for new construction, drainage study with new development, program for rain garden/green infrastructure incentives, permeable surface requirements, sewer backup/overflow protection program) | Flood | 5-Medium | Gretna Planning and Zoning | FEMA, CWSRLF | Stormwater management regulations can be extremely cost-effective and help manage water in a way that reduces localized flooding which is a major issue in many areas of the parish | | 2025 | Ongoing. This is addressed by ordinance in the City's UDC in several sections - and continues to be implemented on a site planning basis. Examples include 50% greenspace requirement for residential front yards, 50% permeable coverage requirement for new commercial parking lots, and planted buffer and screening requirements for new commercial development. | Ongoing. This is addressed by ordinance in the City's UDC in several sections - and continues to be implemented on a site planning basis. Examples include 50% greenspace requirement for residential front yards, 50% permeable coverage requirement for new commercial parking lots, and planted buffer and screening requirements for new commercial development. | Ongoing. This is addressed by ordinance in the City's UDC in several sections - and continues to be implemented on a site planning basis. Examples include 50% greenspace requirement for residential front yards, 50% permeable coverage requirement for new commercial parking lots, and planted buffer and screening requirements for new commercial development. |
| Property Protection | | | | | | | | | | | | |
| PP-1 | F-1, G1 | Elevate, Acquire, Reconstruct, Relocate or Flood proof private and public structures and infrastructure in flood-prone areas | Flood | 7-High | JP FPHM | FEMA, HUD, CPRA, DNR, DEQ | By removing structures from the floodplain, homeowners suffer less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$1 B | 2020 | Ongoing. For elevation/recon and onsite green infrastructure: FEMA 2018 - 77 approved properties. FEMA 2019 - 165 approved properties. FEMA 2020 - 192 pending properties. | Ongoing. For elevation/recon and onsite green infrastructure: FEMA/BRIC 2021 – 315 pending properties; FEMA SWIFT 2022 – 25 pending properties; HMGP (4577 and LWI) – 30 pending properties. | Ongoing. For elevation/recon and onsite green infrastructure: FEMA 2022 – 132 pending properties; HMGP (4611) – 214 pending properties. |

| City of Gretna | | | | | | | | | | | | |
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| Action ID | Old Action ID and Goals | Description | Hazard(s) Addressed | Priority | Responsible Coordinating Entity | Potential Funding Agency | (B/C) Benefit-Costs (TF) Technical Feasibility | Cost | Anticipated Year of Completion | Implementation Status Update 2021 | Implementation Status Update 2022 | Implementation Status Update 2023 |
| PP-2 | H&TS-1 G1 | Fortify critical infrastructure with storm shutters, upgraded roofs, and generators | Hurricane and Tropical Storms | 6-Medium | Gretna Planning, Gretna Police Dept; Gretna Public Utilities | FEMA, HUD | Provide extra protection to critical infrastructure from potential wind damage, thus allowing operations to continue during hurricanes and tropical storms. | \$50 M | 2025 | Ongoing. The General Government Building wind retrofit project in Gretna was approved Sept 2015. New Police Department building has been completed designed to withstand wind and flood hazards and with backup generators. Mel Ott Multipurpose Center (a designated emergency operation location) has been retrofitted with backup power generation. FEMA, SHPO.City Hall Wind Retrofit construction started and expected to complete Fall 2021. | Ongoing. New Construction underway for a state of the art Gretna Fire Station built to current building codes, elevated to our higher regulatory standards, location in the X zone. New Police Department building has been completed designed to withstand wind and flood hazards and with backup generators. Mel Ott Multipurpose Center (a designated emergency operation location) has been retrofitted with backup power generation. FEMA, SHPO.Gretna City Hall Wind Retrofit construction completed. | Ongoing. New Construction for a state of the art Gretna Fire Station built to current building codes and elevated to higher regulatory standards for new construction even though it is in an X zone, has been substantially completed with underground storm water storage as a part of the project. Additionally, the City has applied for a grant for two generators; one for Gretna City Hall to continue daily operation following an event and for one the Cultural Arts Center. Which act as Gretna 's Commissary prior to and following and event. |
| PP-3 | T-1, G2 | Construct Safe Rooms | Tornadoes | 4-Low | JP FPHM | n/a | Provides security and peace of mind, protects residents from tornadoes, and has the potential to increase the value of one's home. | | 2025 | Several buildings in Gretna have been built to act as safe rooms including the EOC, JP Government Building, and Gretna Police Department. The 2nd floor of the water production plant has hardened control rooms and offices. The city will continue to evaluate the need for further safe rooms. | Several buildings in Gretna have been built to act as safe rooms including the EOC, JP Government Building, and Gretna Police Department. The 2nd floor of the water production plant has hardened control rooms and offices. The city will continue to evaluate the need for further safe rooms. | Several buildings in Gretna have been built to act as safe rooms including the EOC, JP Government Building, and Gretna Police Department. The 2nd floor of the water production plant has hardened control rooms and offices. The city will continue to evaluate the need for further safe rooms. |
| PP-4 | T-2, G4 | Harden structures for wind impact | Tornadoes | 6-Medium | JP FPHM | n/a | Better protect homes from strong winds that could speed recovery after a tornado. | | 2025 | Many structures have been constructed in compliance with the current building codes and the city will continue to make sure that this takes place going forward. Currently Gretna City Hall is being hardened by a wind retrofit project. | Many structures have been constructed in compliance with the current building codes and the city will continue to make sure that this takes place going forward. Gretna City Hall has been hardened by a wind retrofit project that has now been completed. | All new construction and additions are constructed to current and adopted state building code from the International Code Council to meet and withstand high wind requirements for our area. Additionally the City required a high wind certificate during framing from a licensed design professional to sign off prior to closing walls. |
| Natural Resource Protection | | | | | | | | | | | | |
| NRP-3 | | Improve water quality | Flood, Storm Surge | 5-Medium | Gretna Planning and Zoning | | Improving water quality has many beneficial consequences including better drinking water and ecosystem conservation as well as impacts to public health and well-being and recreational use | | 2025 | Generally, Gretna's UDC Stormwater Requirements reduce non-point source pollution and improve water quality. Specifically the Gretna City Park LA-SAFE funded stormwater mitigation project will have a substantial impact on water quality ecosystem restoration. New city projects incorporate green infrastructure concepts such as bioswales and pervious surfaces which help to filtrate and clean runoff. | Generally, Gretna's UDC Stormwater Requirements reduce non-point source pollution and improve water quality. Specifically the Gretna City Park LA-SAFE funded stormwater mitigation project will have a substantial impact on water quality ecosystem restoration. New city projects incorporate green infrastructure concepts such as bioswales and pervious surfaces which help to filtrate and clean runoff. | Generally, Gretna's UDC Stormwater Requirements reduce non-point source pollution and improve water quality. Specifically the Gretna City Park LA-SAFE funded stormwater mitigation project will have a substantial impact on water quality ecosystem restoration. New city projects incorporate green infrastructure concepts such as bioswales and pervious surfaces which help to filtrate and clean runoff. |
| Structural Projects | | | | | | | | | | | | |
| SP-1 | F-2, G3 | Increase storm water protection management including retention and detention basins | Flood | 7-High | Gretna Planning | FEMA, HUD, CAP OUTLAY, USACE | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$20 M | 2020 | Ongoing. - 4 th Street Extension project is complete. - Gretna City Park project – implementation of GI, habitat preservation is under construction. - 5th Street Improvement project to include GI and drainage is currently in the design phase. - Downtown Drainage Project Phase 1 which includes public plaza upgrades and green infrastructure is complete. - 25th Street Resilience District (Gretna City Park and 25th Street Canal) - structural and nonstructural interventions to address concentrations of RL/SRL props (57 acre feet of storage) is pending funding. - Incorporating stormwater/GI BMPs in all major public infrastructure projects; updating codes to incentivize and mandate stormwater/GI BMPs for private development. 2019 Q2 construction start on first major GI demonstration that includes public plaza upgrades alongside GI in downtown. - Developing partnership with USACE for more detailed flood vulnerability analysis. USACE study expected to be completed in Fall 2021. Downtown Drainage Project Phase 1 is complete with subsurface storage for stormwater detention. Phase 2 work is planned for construction in 2022. | Ongoing. - 4th Street Extension project is complete. - Gretna City Park project – implementation of GI, habitat preservation is under construction. - 5th Street Improvement project to include GI and drainage is currently in the design phase. - Downtown Drainage Project Phase 1 which includes public plaza upgrades and green infrastructure is complete. - 25th Street Resilience District (Gretna City Park and 25th Street Canal) - structural and nonstructural interventions to address concentrations of RL/SRL props (57 acre feet of storage) is pending funding. - Incorporating stormwater/GI BMPs in all major public infrastructure projects; updating codes to incentivize and mandate stormwater/GI BMPs for private development. 2019 Q2 construction start on first major GI demonstration that includes public plaza upgrades alongside GI in downtown. - Developing partnership with USACE for more detailed flood vulnerability analysis. USACE study expected to be completed in Fall 2021. Downtown Drainage Project Phase 1 is complete with subsurface storage for stormwater detention. Phase 2 work is planned for construction in 2022. | Ongoing. - 4th Street Extension project is complete. - Gretna City Park project – implementation of GI, habitat preservation is complete - 5th Street Improvement project to include GI and drainage is currently in the design phase. - Downtown Drainage Project Phase 1 and 2 which includes public plaza upgrades and green infrastructure is complete - 25th Street Resilience District (Gretna City Park and 25th Street Canal) - structural and nonstructural interventions to address concentrations of RL/SRL props (57 acre feet of storage) is pending funding. - Incorporating stormwater/GI BMPs in all major public infrastructure projects; updating codes to incentivize and mandate stormwater/GI BMPs for private development. - Developing partnership with USACE for more detailed flood vulnerability analysis. USACE study expected to be completed in Fall 2021. Downtown Drainage Project Phase 1 is complete with subsurface storage for stormwater detention. Phase 2 completed in 2023 |
| SP-2 | F-4, G1 | Implement drainage improvement projects in flood-prone areas | Flood | 6-Medium | Gretna Planning | FEMA, HUD, MILLAGE, CAP OUTLAY | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$500 M | 2020 | Ongoing. Projects detailed in SP-1 above also impact flood prone areas and are equally applicable here. UPDATE: Gretna Resilience District projects ongoing - City Park project is under construction. 25th Street Canal Improvements expected to commence in 2022 (currently in environmental review). Both of these projects address the most flood prone neighborhoods in the City, which are also one of the highest concentration of SRL properties in the state. | Ongoing. Projects detailed in SP-1 above also impact flood prone areas and are equally applicable here. UPDATE: Gretna Resilience District projects ongoing - City Park project is under construction. 25th Street Canal Improvements expected to commence in 2022 (currently in environmental review). Both of these projects address the most flood prone neighborhoods in the City, which are also one of the highest concentration of SRL properties in the state. | Ongoing. Projects detailed in SP-1 above also impact flood prone areas and are equally applicable here. UPDATE: Gretna Resilience District projects ongoing - City Park project is under construction. 25th Street Canal Improvements expected to commence in 2024 (currently in environmental review). Both of these projects address the most flood prone neighborhoods in the City, which are also one of the highest concentration of SRL properties in the state. |

| City of Gretna | | | | | | | | | | | | |
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| Action ID | Old Action ID and Goals | Description | Hazard(s) Addressed | Priority | Responsible Coordinating Entity | Potential Funding Agency | (B/C) Benefit-Costs (TF) Technical Feasibility | Cost | Anticipated Year of Completion | Implementation Status Update 2021 | Implementation Status Update 2022 | Implementation Status Update 2023 |
| SP-3 | F-7, G1 | Install increased permanent pumps to alleviate flooding | Flood | 6-Medium | Gretna Planning | F, H, M, CAP | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$100 M | 2020 | Ongoing. In design, submitted for FMA 2017 but wasn't funded. Submitted again in FMA 2018. Pending approval. UPDATE: 25th Street Canal Improvements Project will include a new pump station, still in design and has not been officially awarded yet. | Ongoing. In design, submitted for FMA 2017 but wasn't funded. Submitted again in FMA 2018. Pending approval. UPDATE: 25th Street Canal Improvements Project will include a new pump station, in review pending benefit cost analysis. | Ongoing. In design, submitted for FMA 2017 but wasn't funded. Submitted again in FMA 2018. Pending approval. UPDATE: 25th Street Canal Improvements Project will include a new pump station, in review pending benefit cost analysis. |
| SP-4 | | Install reservoirs/storage tanks | Flood | 5-Medium | Gretna Planning | F, H, M, CAP | Reservoirs and storage tanks can provide a means of controlling water flow and volumes to reduce flood risk. | | 2025 | The Downtown Drainage project includes subsurface storage tanks designed to release water slowly into the drainage system and ground water. | The Downtown Drainage project included subsurface storage tanks designed to release water slowly into the drainage system and ground water. Project completed. Downtown Drainage Phase 2 out for bid. | Drainage Phase 2 completed |
| SP-5 | | Channel modifications | Flood | 5-Medium | Gretna Planning | F, H, M, CAP | Channel modifications can help to control the flow and volume of water and reduce flooding in certain areas | | 2025 | New Action - 25th Street Canal Improvements expected to commence in 2022 - The channel is currently aged and the new canal improvement will increase capacity and will reduce flooding. | 25th Street Canal Improvements expected to commence in 2022 - The channel is currently aged and the new canal improvement will increase capacity and will reduce flooding | 25th Street Canal Improvements expected to commence in 2024 - The channel is currently aged and the new canal improvement will increase capacity and will reduce flooding |
| Emergency Services | | | | | | | | | | | | |
| ES-1 | | Install hazard warning systems | All Hazards | 7-High | City Administration | JP EM | Hazard warning systems can save lives and can be installed for reasonable fees | | 2025 | JPALERT system is used to send out warnings during severe weather events. | JPALERT system is used to send out warnings during severe weather events. | JPALERT system is used to send out warnings during severe weather events. |
| ES-2 | | Carry out shelter operations planning | All Hazards | 7-High | City Administration | JP EM | Shelters provide citizens with safe refuge before, during, and after hazard events and are critical to protecting life and safety | | 2025 | Gretna offers evacuation assistance to all its citizens who request it and in concert with Jefferson Parish to get all citizens evacuated safely and to safety. Jefferson Parish operates a shelter on both sides of the Mississippi River. | Gretna offers evacuation assistance to all its citizens who request it and in concert with Jefferson Parish to get all citizens evacuated safely and to safety. Jefferson Parish operates a shelter on both sides of the Mississippi River. | Gretna offers evacuation assistance to all its citizens who request it and in concert with Jefferson Parish to get all citizens evacuated safely and to safety. Jefferson Parish operates a shelter on both sides of the Mississippi River. |
| ES-3 | | Implement emergency response training and exercises | All Hazards | 7-High | JP Emergency Management, City and Police Administration | JP EM | Training and exercises help ensure responders are prepared and can take action to reduce loss of life and injury during a disaster. | | 2025 | Gretna participates in all of JP EM emergency response and training exercises. This is scheduled through JP EM, JP and our Jefferson United Mitigation Professional (JUMP) CRS users group. | Gretna participates in all of JP EM emergency response and training exercises. Recent on 5.23.22. This is scheduled through JP EM, JP and our Jefferson United Mitigation Professional (JUMP) CRS users group. | Gretna participates in all of JP EM emergency response and training exercises. Recent on 5.05.23. This is scheduled through JP EM, JP and our Jefferson United Mitigation Professional (JUMP) CRS users group. |
| Public Education and Awareness | | | | | | | | | | | | |
| PEA-1 | F-3, H&TS-3, G2 | Encourage and educate public regarding small-scale flood mitigation projects and small-scale wind mitigation projects homeowners can employ | Flood, Hurricane and Tropical Storms | 6-Medium | JP FPHM, JUMP, Gretna Building | FEMA, HUD, PRIV. FUNDS, CPRA | Homeowners will be empowered to protect themselves with low-cost, DIY projects and suffer less flood and wind damage. | \$10 M | 2025 | Ongoing. City adopted generator safety ordinance in building codes in 2016. City enforces wind load regulations on all new construction. Ongoing outreach as part of PPI. | Home owners cannot exceed 50% of green space in their front yard. They are encouraged to use permeable applications rather than concrete. City enforces wind load regulations on all new construction. Ongoing outreach as part of PPI. | JP provides pointers to City residents regarding small projects to protect themselves from flood damage. Additionally the JP mailer is distributed to all residents and our website provides education on how to protect from flood and wind event. Lastly, homeowners must maintain at least 50% of green space in their front yard. They are encouraged to use permeable applications rather than concrete. City enforces wind load regulations on all new construction. Ongoing outreach as part of PPI. |
| PEA-2 | F-6, G2 | Encourage the purchase of flood insurance | Flood | 7-High | JP FPHM, JUMP; Gretna Building | n/a | Enables homeowners to financially recover from the devastating effects of flooding as quickly as possible. Serves to educate area residents that any homeowner, regardless of location, can purchase flood insurance. | | 2025 | Ongoing. Created specific flood insurance promotion outreach projects as part of the PPI. Implementing the PPI. Video produced featuring Mayor Constant to promote purchase of flood insurance published on web, social media, and shown at public meetings. | Ongoing. Created specific flood insurance promotion outreach projects as part of the PPI. Implementing the PPI. Video produced featuring Mayor Constant to promote purchase of flood insurance published on web, social media, and shown at public meetings. Message that X zones can flood too. | Ongoing. Created specific flood insurance promotion outreach projects as part of the PPI. Implementing the PPI. Video produced featuring Mayor Constant to promote purchase of flood insurance published on web, social media, and shown at public meetings. Message that X zones can flood too. |
| PEA-3 | F-8, G2 | Educate public on not dumping and cleaning catch basins; enforce penalties for dumping | Flood | 6-Medium | JP FPHM, JP Environ, JUMP; Gretna Building | n/a | An informed public is better able to respond to and protect themselves from flooding. | | 2025 | Ongoing. Hosted several MS4 workshops targeted at contractors, builders, and building inspectors. Labeled storm drains with "No Dumping" Markers at various locations and events including the Pontchartrain Conservancy Storm Sweep in May 2021 and will host a drain cleanup event in October 2021 in the City of Gretna; updated drain markers to include 2 nd message. | Ongoing. Hosted several MS4 workshops targeted at contractors, builders, and building inspectors. Labeled storm drains with "No Dumping" Markers at various locations and attended events including the Pontchartrain Conservancy Storm Sweep and hosted a drain cleanup event on 4.1.22 in the City of Gretna; updated drain markers to include 2nd message, City of Gretna has officially have been honored to achieve a 2nd win for Cleanest City in our population for the state. | Ongoing. Attended workshops targeted at contractors, builders, and building inspectors. Labeled storm drains with "No Dumping" Markers at various locations and attended events including the Pontchartrain Conservancy Storm Sweep and hosted a drain cleanup event on October 2022 in the City of Gretna; updated drain markers to include 2nd message, City of Gretna has officially have been honored to achieve a 2nd win for Cleanest City in our population for the state. Mayor hosts an independent clean up city in October. |
| PEA-4 | H&TS-2, SS-1, G2 | Educate public on risks, preparedness measures, evacuation procedures, and generator safety | Hurricane and Tropical Storms, Storm Surge | 6-Medium | JP EM, JP Fire, JP FPHM, JUMP; Gretna Building | n/a | An informed public is better able to respond to and protect themselves from hurricanes and storm surge. | | 2025 | Ongoing. Implementing projects identified in the PPI. Publish social media posts and website articles in advance of approaching tropical events promoting generator safety. City also pre-registers at-risk populations for evacuation assistance. We provide a checklist and guidelines to residents wishing to install a permanent generator. | Ongoing. Implementing projects identified in the PPI. Publish social media posts and website articles in advance of approaching tropical events promoting generator safety. City also pre-registers at-risk populations for evacuation assistance. We provide a checklist and guidelines to residents wishing to install a permanent generator. | Ongoing. Implementing projects identified in the PPI. Publish social media posts and website articles in advance of approaching tropical events promoting generator safety. City also pre-registers at-risk populations for evacuation assistance. We provide a checklist and guidelines to residents wishing to install a permanent generator and the fire department provides brochures on generator safety. |

City of Gretna

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| PEA-5 | | Implement school-based education program combined with environmental education program | All Hazards | S-Medium | JP FPHM, JP School Board; Gretna Planning and Zoning | n/a | Beginning education programs at a young age will help build an informed populace that better understands how to mitigate risks | | 2025 | Litter abatement program ongoing with school outreach and student contests related to stormwater management and quality of life. Recently awarded cleanest city for the Cleanest City Campaign in Gretna's population division. Campaign focused on anti-litter and cleaning of storm drains. | Litter abatement program ongoing with school outreach and student contests related to stormwater management and quality of life. Recently awarded for a second time cleanest city for the Cleanest City Campaign in Gretna's population division. Campaign focused on anti-litter and cleaning of storm drains. | Litter abatement program ongoing with school outreach and student contests related to stormwater management and quality of life. Two time awarded cleanest city for the Cleanest City Campaign in Gretna's population division and overall winner of state in 2022. Campaign focused on anti-litter and cleaning of storm drains. |
| PEA-6 | | Develop public postings/displays and put on hazard expositions | All Hazards | S-Medium | JP FPHM, JP Coastal | n/a | Public displays can help push out key messages about what the public can do to reduce risk | | 2025 | Gretna provides press releases from the Mayor's office, messages on the message board at Mel Ott Park, messages in water bills, and communicate via the City Website and Social Media forums. We are developing a mobile app for communication with Gretna constituents. | Gretna provides press releases from the Mayor's office, messages on the message board at Mel Ott Park, messages in water bills, and communicate via the City Website and Social Media forums. We initiated our mobile app for communication with Gretna constituents. | Gretna provides press releases from the Mayor's office, messages on the message board at Mel Ott Park, messages in water bills, and communicate via the City Website and Social Media forums. We initiated our mobile app for communication with Gretna constituents. |

| City of Harahan | | | | | | | | | | | | |
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| Preventative | | | | | | | | | | | | |
| P-1 | F-5, G4 | Adopt freeboard | Flood | 7-High | JP FPHM | n/a | Provides a margin of safety against unknown flood depths while taking into account sea level rise and subsidence. Can ultimately reduce the amount of flooding a home would experience, lower flood insurance premiums, and provide the community with CRS points which in turn also lowers flood insurance premiums. | | 2025 | Ongoing. Most of the city is located in a zone X and the building code has feet above the CLS. | No update at this time. | The city is preparing to update CRS and requalify. Will be discussing freeboard as we move through the process. |
| P-2 | H&TS-4 G4 | Issue fewer permits for building in vulnerable areas | Hurricane and Tropical Storms | 6-Medium | JP Planning | n/a | Reduce the localized flooding and roofing problems that would occur with new development | | 2025 | The city has been working to reduce the number of permits issued in vulnerable areas and will continue to do so. | The city has been working to reduce the number of permits issued in vulnerable areas and will continue to do so. | The city has been working to reduce the number of permits issued in vulnerable areas and will continue to do so. |
| P-3 | SS-2, G1 | Maintain 100 Year levee protection to ensure continued protection | Storm Surge | 6-Medium | SELFPA-E/W, USACE | n/a | Reduce surge damage and cost to homeowner, government, and NFIP. | | 2025 | Ongoing. All of the gates and structures in the hurricane system are exercised by the local levee districts multiple times a year. | Ongoing. All of the gates and structures in the hurricane system are exercised by the local levee districts multiple times a year. | Ongoing. All of the gates and structures in the hurricane system are exercised by the local levee districts multiple times a year. |
| P-4 | | Update Comprehensive Plan | All Hazards | 7-High | JP Planning | CDBG | Good planning is a key preventative measure and helps reduce the likelihood that new construction will be built in high risk areas without mitigative measures. | | 2020 | No comprehensive plan in place at this time. | No update at this time. | An update of the master plan has been approved and should be completed in the next 12-18 months |
| P-5 | | Increase Open Space Areas | Flood | 7-High | JP Planning | n/a | Open spaces such as parks can help provide additional pervious surface areas to allow for infiltration and reduce flooding | | 2025 | Working to preserve and maintain open space along the batture | No update at this time. | Working to preserve and maintain open space along the batture and where ever feasible. |
| P-6 | | Perform Regular Maintenance of Drainage System | Flood | 6-Medium | JP Drainage | JP Drainage | Ensuring drainage systems are maintained can have major impacts as this allows water to be managed in a way that minimizes flooding. | | 2025 | Drainage system is maintained by department crews all year long for the City's roads. The State DOTD maintains Jefferson Hwy and Hickory. | Drainage system is maintained by department crews all year long for the City's roads. The State DOTD maintains Jefferson Hwy and Hickory. | Drainage system is maintained by department crews all year long for the City's roads. Updated maintenance schedules and tracking processes are under development |
| P-7 | | Update Capital Improvements Plan | All Hazards | 7-High | JP Capital Projects | JP Capital Projects | A capital improvements plan can help direct funding to the highest priority projects and ensure that projects that reduce risk are being identified | | 2025 | Working on Sewer improvements due to high river infiltration. Received money from Capital Outlay and Colonial Development group to expedite Sewer improvements. | No update at this time. | The City has begun rehabilitating the sewer plant and upgrading of lift stations. |
| Floodplain Management | | | | | | | | | | | | |
| FP-1 | | Evaluate efficacy of future conditions mapping | Flood | 5-Medium | JP FPHM, JP GIS | FEMA | Future conditions mapping identifies areas of future risk that may not be suitable for development and therefore can reduce future losses | | 2025 | As part of the Colonial Club development H&H work was done to see how future development would impact drainage and the development must mitigate that | No update at this time. | No update at this time. |
| FP-2 | | Update Stormwater Management Regulations (ex. compensatory storage for new construction, drainage study with new development, program for rain garden/green infrastructure incentives, permeable surface requirements, sewer backup/overflow protection program) | Flood | 5-Medium | JP Environmental, JP Code, JP Engineering, JP Public Works, JP FPHM, JP Sewerage, JP Planning | FEMA, CWSRLF | Stormwater management regulations can be extremely cost-effective and help manage water in a way that reduces localized flooding which is a major issue in many areas of the parish | | 2025 | Working on updating. Delayed by COVID. | No update at this time. | Stormwater management regulations/LID/green infrastructure may be addressed in future amendments to development regulations, action concurrent with master plan updates. Updated sewer overflow/back-up and FOG device regulations were approved by city council in March. Updating city SWMP is in progress. |
| Property Protection | | | | | | | | | | | | |

| City of Harahan | | | | | | | | | | | | |
|-----------------------------|-------------------------|--|-------------------------------|----------|--|--------------------------------|---|---------|--------------------------------|---|--|---|
| Action ID | Old Action ID and Goals | Description | Hazard(s) Addressed | Priority | Responsible Coordinating Entity | Potential Funding Agency | (B/C) Benefit-Costs (TF) Technical Feasibility | Cost | Anticipated Year of Completion | Implementation Status Update 2021 | Implementation Status Update 2022 | Implementation Status Update 2023 |
| PP-1 | F-1, G1 | Elevate, Acquire, Reconstruct, Relocate or Flood proof private and public structures and infrastructure in flood-prone areas | Flood | 7-High | JP FPHM | FEMA, HUD, CPRA, DNR, DEQ | By removing structures from the floodplain, homeowners suffer less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$1 B | 2020 | Ongoing. For elevation/recon and onsite green infrastructure: FMA 2018 - 77 approved properties. FMA 2019 - 165 approved properties. FMA 2020 - 192 pending properties. | Ongoing. For elevation/recon and onsite green infrastructure: FMA/BRIC 2021 – 315 pending properties; FMA SWIFT 2022 – 25 pending properties; HMGP (4577 and LWI) – 30 pending properties. | Ongoing. For elevation/recon and onsite green infrastructure: FMA 2022 – 132 pending properties; HMGP (4611) –214 pending properties. |
| PP-2 | H&TS-1 G1 | Fortify critical infrastructure with storm shutters, upgraded roofs, and generators | Hurricane and Tropical Storms | 6-Medium | JP Gen Services, JP Risk Mngt, JP FPHM | FEMA, HUD | Provide extra protection to critical infrastructure from potential wind damage, thus allowing operations to continue during hurricanes and tropical storms. | \$50 M | 2025 | Wind retrofit projects for sites in Harahan has been approved. | Projects delayed due to Hurricane Ida. No update at this time. | The city has begun upgrading and hardening some city buildings while waiting for approvals of wind retrofits at specific sites. |
| PP-3 | T-1, G2 | Encourage the construction of safe rooms | Tornadoes | 5-Medium | JP FPHM JUMP | n/a | Provides security and peace of mind, protects residents from tornadoes, and has the potential to increase the value of one's home. | | 2025 | The city is working to do more outreach to encourage safe rooms. | The Parish will continue to evaluate options to build safe rooms. | The City will continue to evaluate options to build safe rooms. |
| PP-4 | T-2, G4 | Harden structures for wind impact | Tornadoes | 6-Medium | JP Planning | n/a | Better protect homes from strong winds that could speed recovery after a tornado. | | 2025 | The city has been encouraging high wind protection in new construction and will continue to evaluate ways to ensure buildings are built to a high level of wind resistance. | The city has been encouraging high wind protection in new construction and will continue to evaluate ways to ensure buildings are built to a high level of wind resistance. | The city encourages high wind protection in new construction by enforcing building codes and will continue to evaluate ways to ensure buildings are built to a high level of wind resistance. |
| Natural Resource Protection | | | | | | | | | | | | |
| NRP-1 | | Improve water quality | Flood, Storm Surge | 5-Medium | JP Water, JP Environmental | | Improving water quality has many beneficial consequences including better drinking water and ecosystem conservation as well as impacts to public health and well-being and recreational use | | 2025 | Participates in MS4 program and conducts regular sampling. Also hosted a drain marking event in the city to promote no dumping. | Participates in MS4 program and conducts regular sampling. | Participant in MS4 task group. Updated sewer overflow and FOG device regulations in March. Updating city SWMP. |
| Structural Projects | | | | | | | | | | | | |
| SP-1 | F-2, G3 | Increase storm water protection management including retention and detention basins | Flood | 7-High | JP Drainage | FEMA, HUD, CAP OUTLAY, USACE | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$20 M | 2020 | Additional measures being evaluated. The Colonial Country Club has plans for water retention. | Delayed due to Hurricane Ida. No update at this time. | Flood mitigation grant |
| SP-2 | F-4, G1 | Implement drainage improvement projects in flood-prone areas | Flood | 6-Medium | JP Drainage | FEMA, HUD, MILLAGE, CAP OUTLAY | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$500 M | 2025 | Pump to the River LOMR application is still under review to amend the map panel reflecting the project. There is also a need for a drainage under Jefferson Highway. | Pump to the River project completed. Three full panel revised after LOMR went into effect on December 29, 2021. | Flood mitigation grant |
| SP-3 | | Install reservoirs/storage tanks | Flood | 5-Medium | JP Drainage | F, H, M, CAP | Reservoirs and storage tanks can provide a means of controlling water flow and volumes to reduce flood risk. | | 2025 | The Colonial Country Club has plans for water retention | Delayed due to Hurricane Ida. No update at this time. | Retention is part of the grant at Zeringue Park |
| SP-4 | | Channel modifications | Flood | 5-Medium | JP Drainage | F, H, M, CAP | Channel modifications can help to control the flow and volume of water and reduce flooding in certain areas | | 2025 | Not feasible in the city | Not feasible in the city | Not feasible in the city |
| Emergency Services | | | | | | | | | | | | |

| City of Harahan | | | | | | | | | | | | |
|--------------------------------|-------------------------|---|--|----------|----------------------------------|------------------------------|---|--------|--------------------------------|--|--|--|
| Action ID | Old Action ID and Goals | Description | Hazard(s) Addressed | Priority | Responsible Coordinating Entity | Potential Funding Agency | (B/C) Benefit-Costs (TF) Technical Feasibility | Cost | Anticipated Year of Completion | Implementation Status Update 2021 | Implementation Status Update 2022 | Implementation Status Update 2023 |
| ES-1 | | Install hazard warning systems | All Hazards | 7-High | JP Emergency Management | JP EM | Hazard warning systems can save lives and can be installed for reasonable fees | | 2025 | JPALERT system is used to send out warnings during severe weather events. | JPALERT system is used to send out warnings during severe weather events. | JPALERT system is used to send out warnings during severe weather events. |
| ES-2 | | Carry out shelter operations planning | All Hazards | 7-High | JP Emergency Management | JP EM | Shelters provide citizens with safe refuge before, during, and after hazard events and are critical to protecting life and safety | | 2025 | Harahan offers evacuation assistance to all its citizens who request it and in concert with Jefferson Parish to get all citizens evacuated safely and to safety. Jefferson Parish operates a shelter on both sides of the Mississippi River. | Harahan offers evacuation assistance to all its citizens who request it and in concert with Jefferson Parish to get all citizens evacuated safely and to safety. Jefferson Parish operates a shelter on both sides of the Mississippi River. | Harahan offers evacuation assistance to all its citizens who request it and in concert with Jefferson Parish to get all citizens evacuated safely and to safety. Jefferson Parish operates a shelter on both sides of the Mississippi River. |
| ES-3 | | Implement emergency response training and exercises | All Hazards | 7-High | JP Emergency Management | JP EM | Training and exercises help ensure responders are prepared and can take action to reduce loss of life and injury during a disaster. | | 2025 | Harahan participates in all of JPEM emergency response and training exercises. The City met to discuss plans and perform drills. | No update at this time. | Harahan participates in all of JPEM emergency response and training exercises |
| Public Education and Awareness | | | | | | | | | | | | |
| PEA-1 | F-3, H&TS-3, G2 | Encourage and educate public regarding small-scale flood mitigation projects and small-scale wind mitigation projects homeowners can employ | Flood, Hurricane and Tropical Storms | 5-Medium | JP FPHM, JUMP | FEMA, HUD, PRIV. FUNDS, CPRA | Homeowners will be empowered to protect themselves with low-cost, DIY projects and suffer less flood and wind damage. | \$10 M | 2025 | Ongoing. Outreach takes place through PPI outreach. The city has developed a tie-in for outreach with its MS4 initiative and is developing additional materials to align with this. | Ongoing. Outreach takes place through PPI outreach. The city has developed a tie-in for outreach with its MS4 initiative and is developing additional materials to align with this. | Ongoing. Outreach takes place through PPI outreach. The city has developed a tie-in for outreach with its MS4 initiative and is developing additional materials to align with this. |
| PEA-2 | F-6, G2 | Encourage the purchase of flood insurance | Flood | 7-High | JP FPHM, JUMP | n/a | Enables homeowners to financially recover from the devastating effects of flooding as quickly as possible. Serves to educate area residents that any homeowner, regardless of location, can purchase flood insurance. | | 2025 | Ongoing. Created specific flood insurance promotion outreach projects as part of the PPI. Implementing the PPI. Video produced featuring the new mayor promoting the purchase of flood insurance will be filmed in the fall of 2021. | No update at this time. | To be updated concurrently with CRS |
| PEA-3 | F-7, G2 | Educate public on not dumping and cleaning catch basins | Flood | 6-Medium | JP FPHM, JP Environ, JP Drainage | n/a | An informed public is better able to respond to and protect themselves from flooding. | | 2025 | Ongoing. Labeled storm drains with "No Dumping" Markers at various locations in Harahan as part of the Pontchartrain Conservancy Storm Sweep in May 2021. | No update at this time. | To be updated concurrently with CRS |
| PEA-4 | H&TS-2, SS-1 G2 | Educate public on risks, preparedness measures, evacuation procedures, and generator safety | Hurricane and Tropical Storms, Storm Surge | 6-Medium | JP EM, JP Fire, JP FPHM, JUMP | n/a | An informed public is better able to respond to and protect themselves from hurricanes and storm surge. | | 2025 | Ongoing. Implementing projects identified in the PPI. | Ongoing. Implementing projects identified in the PPI. | Implementing projects identified in the PPI. |
| PEA-5 | | Implement school-based education program combined with environmental education program | All Hazards | 5-Medium | JP FPHM, JP School Board | n/a | Beginning education programs at a young age will help build an informed populace that better understands how to mitigate risks | | 2025 | Considering projects for schools within the City - Harahan Elementary, St. Rita, and Faith Lutheran | Delayed due to Hurricane Ida. No update at this time. | To be updated concurrently with CRS |
| PEA-6 | | Develop public postings/displays and put on hazard expositions | All Hazards | 5-Medium | JP FPHM, JP Coastal | n/a | Public displays can help push out key messages about what the public can do to reduce risk | | 2025 | Implement projects as part of the PPI | Implement projects as part of the PPI | To be updated concurrently with CRS |

| City of Kenner | | | | | | | | | | | | |
|-----------------------|-------------------------|--|-------------------------------|----------|---------------------------------|---------------------------|---|--------|--------------------------------|---|---|--|
| Action ID | Old Action ID and Goals | Description | Hazard(s) Addressed | Priority | Responsible Coordinating Entity | Potential Funding Agency | (B/C) Benefit-Costs (TF) Technical Feasibility | Cost | Anticipated Year of Completion | Implementation Status Update 2021 | Implementation Status Update 2022 | Implementation Status Update 2023 |
| Preventative | | | | | | | | | | | | |
| P-1 | F-5, G4 | Adopt freeboard | Flood | 7-High | Kenner Code, JP Code | n/a | Provides a margin of safety against unknown flood depths while taking into account sea level rise and subsidence. Can ultimately reduce the amount of flooding a home would experience, lower flood insurance premiums, and provide the community with CRS points which in turn also lowers flood insurance premiums. | | 2025 | Complete. New ordinance adopted in Dec. 2017. All new structures and substantial improvement in AE must be elevated above -3.5. Depending on BFE, FRB is either 2.5 ft, 1.5 ft, or 0.5 ft. It is anticipated that a stricter standard may be adopted for freeboard going forward, so this action will remain in place. | COMPLETED RESIDENTIAL: AE/VE: 2ft above BFE X: 1.5ft above crown of street COMMERCIAL: AE/VE: 2ft above BFE X: .5ft above crown of street | Completed. New ordinance adopted in Dec. 2017. All new residential structures and substantial improvement in AE must be elevated to the highest of: -3.5, 2 ft of freeboard or 18" above the crown of the street. All new commercial structures and substantial improvement in AD must be elevated to the highest of: -3.5, 2 ft of freeboard or 6" above the crown of the street. The regulations for X Zone are identical minus the freeboard requirement. |
| P-2 | H&TS-4 G4 | Adopt and Enforce Strict and uniform bldg. codes | Hurricane and Tropical Storms | 6-Medium | Kenner Code, JP Code | n/a | Fortify structures to better withstand flood and wind. | | 2025 | Ongoing. The city has adopted uniform building codes but will keep this action in place as updates may be required in the future. | Ongoing. The city has adopted uniform building codes but will keep this action in place. There are some updates under consideration at this time. | Ongoing. The city has adopted uniform building codes but will keep this action in place. There are some updates under consideration at this time. |
| P-3 | SS-2, G1 | Maintain 100 Year levee protection to ensure continued protection | Storm Surge | 6-Medium | SELFPA-E/W, USACE | n/a | Reduce surge damage and cost to homeowner, government, and NFIP. | | 2025 | Ongoing. All of the gates and structures in the hurricane system are exercised by the local levee districts multiple times a year. | Ongoing. All of the gates and structures in the hurricane system are exercised by the local levee districts multiple times a year. | Ongoing. All of the gates and structures in the hurricane system are exercised by the local levee districts multiple times a year. |
| P-4 | | Update Comprehensive Plan | All Hazards | 7-High | Kenner Code | CDBG | Good planning is a key preventative measure and helps reduce the likelihood that new construction will be built in high risk areas without mitigative measures. | | 2020 | City's comprehensive plan requires updating every 5 years. Planning will begin working on the update soon. | Expect update to begin this calendar year | Planning has begun the process of updating the comprehensive plan and anticipates update complete by end of 2023. |
| P-5 | | Increase Open Space Areas | Flood | 7-High | City of Kenner | n/a | Open spaces such as parks can help provide additional pervious surface areas to allow for infiltration and reduce flooding | | 2025 | No Update | No update at this time | No update at this time |
| P-6 | | Perform Regular Maintenance of Drainage System | Flood | 6-Medium | City of Kenner | JP Drainage | Ensuring drainage systems are maintained can have major impacts as this allows water to be managed in a way that minimizes flooding. | | 2025 | Currently performing improvements to south Kenner ditches. Document maintenance schedule and proactive activities. Need to get Work Orders from Field Services. Also, should add that a comprehensive plan for televising of subsurface drainage is being developed. | Coordinating policy and procedure for problematic ditches and developing a schedule for maintenance for open ditches. Expected completion this calendar year. | Coordinating policy and procedure for problematic ditches and developing a schedule for maintenance for open ditches. 95% of all open ditches cleaned and excavated between Oct. 2022 and Feb. 2023. Open ditches maintained by grass cutting constant, spray content, inspection and plant removal by in house crews. |
| P-7 | | Update Capital Improvements Plan | All Hazards | 7-High | City of Kenner | JP Capital Projects | A capital improvements plan can help direct funding to the highest priority projects and ensure that projects that reduce risk are being identified | | 2025 | The City has prioritized the present needs of the drainage system. These prioritizations will guide the City in its upgrades going forward. Recent funding from Capital Outlay was obtained for items of work identified in the prioritization. | Continue to request funding through Capital Outlay with a focus on hazard mitigation and hardening of structures/infrastructure. Continue to budget required match money in the City's Capital budget. | Continue to request funding through Capital Outlay with a focus on hazard mitigation and hardening of structures/infrastructure. Continue to budget required match money in the City's Capital budget. |
| Floodplain Management | | | | | | | | | | | | |
| FP-1 | | Evaluate efficacy of future conditions mapping | Flood | 5-Medium | JP FPHM, JP GIS | FEMA | Future conditions mapping identifies areas of future risk that may not be suitable for development and therefore can reduce future losses | | 2025 | New Action -Coordinating with GIS consultant; ongoing | Ongoing. | Not Active at this time. |
| FP-2 | | Update Stormwater Management Regulations (ex. compensatory storage for new construction, drainage study with new development, program for rain garden/green infrastructure incentives, permeable surface requirements, sewer backup/overflow protection program) | Flood | 5-Medium | City of Kenner | FEMA, CWSRLF | Stormwater management regulations can be extremely cost-effective and help manage water in a way that reduces localized flooding which is a major issue in many areas of the parish | | 2025 | New Action. Review all stormwater mgmt. ords and establish incentives for those who implement BMPs and permeable surfaces during development/redevelopment. Draft and Implement additional amendments recommended in recent Green Infrastructure/Low Impact Development Program. More stringent detention requirements are being developed. | Stormwater Management, green infrastructure and LID regulations have been reviewed. Proposed revisions to development codes ongoing with a focus on more stringent detention requirements and additional requirements for developments are being drafted. | City has an adopted Stormwater Management Regulations as part of the Unified Development Code |
| Property Protection | | | | | | | | | | | | |
| PP-1 | F-1, G1 | Elevate, Acquire, Reconstruct, Relocate or Flood proof private and public structures and infrastructure in flood-prone areas | Flood | 7-High | JP FPHM | FEMA, HUD, CPRA, DNR, DEQ | By removing structures from the floodplain, homeowners suffer less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$1 B | 2020 | Ongoing. 498 elevation/recon properties and Rep Loss structures approved since 2015. Pending approval for elevation/recon/floodproof/and onsite green infrastructure for 154 properties. | Ongoing. For elevation/recon and onsite green infrastructure: FMA/BRIC 2021 – 315 pending properties; FMA SWIFT 2022 – 25 pending properties; HMGP (4577 and LWI) – 30 pending properties. | Ongoing. For elevation/recon and onsite green infrastructure: FMA 2022 – 132 pending properties; HMGP (4611) –214 pending properties. |
| PP-2 | H&TS-1 G1 | Fortify critical infrastructure with storm shutters, upgraded roofs, and generators | Hurricane and Tropical Storms | 6-Medium | City of Kenner, Kenner Police | FEMA, HUD | Provide extra protection to critical infrastructure from potential wind damage, thus allowing operations to continue during hurricanes and tropical storms. | \$50 M | 2025 | Ongoing. Kenner Jail wind retrofit project was approved Sept 2015. Storm shutters added to police complex and public works complex in 2016. Looking to add storm shutters to the city hall building as well. Created risk profiles for city facilities as part of new plan update. | Shutters on Kenner's EOC and KPD HQ facilities are installed and operated during all severe weather events. Reconstruction of city offices is under consideration by legislative body at this time with a focus on resilience and hardening structural integrity. | Shutters on Kenner's EOC and KPD HQ facilities are installed and operated during all severe weather events. Reconstruction of city offices is under consideration by legislative body at this time with a focus on resilience and hardening structural integrity, including new structures constructed as a result of Hurricane Ida. |

| City of Kenner | | | | | | | | | | | | |
|--------------------------------|-------------------------|---|---------------------|----------|---|--------------------------------|---|---------|--------------------------------|--|--|---|
| Action ID | Old Action ID and Goals | Description | Hazard(s) Addressed | Priority | Responsible Coordinating Entity | Potential Funding Agency | (B/C) Benefit-Costs (TF) Technical Feasibility | Cost | Anticipated Year of Completion | Implementation Status Update 2021 | Implementation Status Update 2022 | Implementation Status Update 2023 |
| PP-3 | T-1, G2 | Construct Safe Rooms | Tornadoes | 5-Medium | JP FPHM, JUMP, City of Kenner | n/a | Provides security and peace of mind, protects residents from tornadoes, and has the potential to increase the value of one's home. | | 2025 | Few safe rooms have been constructed due to feasibility as these would often need to be built in high risk flood zones. However, the parish will continue to evaluate options to build safe rooms and further enhance structural integrity of buildings, especially residences, to reduce wind damage risk. | Few safe rooms have been constructed due to feasibility as these would often need to be built in high risk flood zones. However, the parish will continue to evaluate options to build safe rooms and further enhance structural integrity of buildings, especially residences, to reduce wind damage risk. | Few safe rooms have been constructed due to feasibility as these would often need to be built in high risk flood zones. However, the parish will continue to evaluate options to build safe rooms and further enhance structural integrity of buildings, especially residences, to reduce wind damage risk. |
| PP-4 | T-2, G4 | Harden structures for wind impact | Tornadoes | 6-Medium | JP FPHM, JUMP, City of Kenner | n/a | Better protect homes from strong winds that could speed recovery after a tornado. | | 2025 | Some structures have been hardened as they have been refurbished in accordance with the building code, ICC and IBC, which currently require 150 mph loads. However, there is still a need for building hardening of additional structures, so this action will remain in place and addressed as needed/feasible. | Some structures have been hardened as they have been refurbished in accordance with the building code, ICC and IBC, which currently require 150 mph loads. However, there is still a need for building hardening of additional structures, so this action will remain in place and addressed as needed/feasible. | There is still a need for building hardening of additional structures, so this action will remain in place and addressed as needed/feasible. |
| Natural Resource Protection | | | | | | | | | | | | |
| NRP-1 | | Improve water quality | Flood, Storm Surge | 5-Medium | City of Kenner | | Improving water quality has many beneficial consequences including better drinking water and ecosystem conservation as well as impacts to public health and well-being and recreational use | | 2025 | STORMWATER BMPs/Green Infrastructure | Stormwater Management, green infrastructure and LID regulations have been reviewed. Proposed revisions to development codes ongoing with a focus on more stringent detention requirements and additional requirements for developments are being drafted. | Stormwater Management, green infrastructure and LID regulations have been reviewed. Proposed revisions to development codes ongoing with a focus on more stringent detention requirements and additional requirements for developments are being drafted. |
| Structural Projects | | | | | | | | | | | | |
| SP-1 | F-2, G3 | Increase storm water protection management including retention and detention basins | Flood | 7-High | City of Kenner | FEMA, HUD, CAP OUTLAY, USACE | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$20 M | 2020 | Ongoing. Manson Ditch Retention Pond-Phase 1 approved April 2015. Parish has established a Stormwater Mngt Committee to review applicable codes for potential amendment. In 2017, created implementation plan for stormwater Mngt on residential lots and passed legislation approving the use of permeable surfaces for off street parking. Installation of grass guard in Grand Isle. Approximately 194 properties were approved to install green infrastructure for storm water detention modifications and applied for an additional 79 sites in FMA 2018. | City has applied for funding through Capital Outlay for a pump to the river station to be located in South Kenner | City has applied for funding through Capital Outlay for a pump to the river station to be located in South Kenner, Woodlake drainage pump station and Airport pump station expansion. |
| SP-2 | F-4, G1 | Implement drainage improvement projects in flood-prone areas | Flood | 6-Medium | City of Kenner | FEMA, HUD, MILLAGE, CAP OUTLAY | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$500 M | 2020 | Ongoing. Rivertown Drainage Project completed in 2018. | The South Kenner Drainage Project is currently under review by FEMA. This project will provide much needed relief to the drainage system. Drainage improvements in Lincoln Manor (Rep Loss Area) Phase II. Compromise St drainage improvements. Susan Park drainage improvements. | The South Kenner Drainage Project is finalized. This project will provide much needed relief to the drainage system. Drainage improvements in Lincoln Manor (Rep Loss Area) Phase II. Compromise St drainage improvements. Susan Park drainage improvements. |
| SP-3 | F-7, G1 | Install increased permanent pumps to alleviate flooding | Flood | 4-Low | City of Kenner | F, H, M, CAP | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$100 M | 2020 | Ongoing. Massive pumping station at new airport expansion facility completed in 2018. | City has applied for funding through Capital Outlay for a pump to the river station to be located in South Kenner | City has applied for funding through Capital Outlay for a pump to the river station to be located in South Kenner and Woodlake drainage pump station in north Kenner. South Kenner Pump to the River, phase I. Woodlake Drainage Pump station. Airport Pump station expansion (2-pumps) |
| SP-5 | | Install reservoirs/storage tanks | Flood | 5-Medium | City of Kenner | F, H, M, CAP | Reservoirs and storage tanks can provide a means of controlling water flow and volumes to reduce flood risk. | | 2025 | New Action | The city does not currently have plans to install reservoirs or storage tanks. | The city does not currently have plans to install reservoirs or storage tanks. |
| SP-6 | | Channel modifications | Flood | 5-Medium | City of Kenner | F, H, M, CAP | Channel modifications can help to control the flow and volume of water and reduce flooding in certain areas | | 2025 | New Action | Currently in design to model Bainbridge Canal. | Bainbridge canal improvements (Airport to Veterans Blvd). |
| Emergency Services | | | | | | | | | | | | |
| ES-1 | | Install hazard warning systems | All Hazards | 7-High | City of Kenner | JP EM | Hazard warning systems can save lives and can be installed for reasonable fees | | 2025 | New Action | City promotes participation in Parishwide JP Alert system on its website and in annual hurricane preparedness activities. City is evaluating feasibility of a secondary community alert system for municipal messaging capability. | City promotes participation in Parishwide JP Alert system on its website and in annual hurricane preparedness activities. |
| ES-2 | | Carry out shelter operations planning | All Hazards | 7-High | City of Kenner | JP EM | Shelters provide citizens with safe refuge before, during, and after hazard events and are critical to protecting life and safety | | 2025 | New Action | City maintains list of ARC approved shelters within the municipality which can be activated with parish and ARC support. | City maintains list of ARC approved shelters within the municipality which can be activated with parish and ARC support. Some sites remain limited due to Ida damage. |
| ES-3 | | Implement emergency response training and exercises | All Hazards | 7-High | JP Emergency Management, Kenner Emergency Management, City and Police Administrations | JP EM | Training and exercises help ensure responders are prepared and can take action to reduce loss of life and injury during a disaster. | | 2025 | New Action | City participates in federal, state and parish level training exercises and promotes NIMS and ICS training for staff. | City encourages acquisition of flood insurance in messaging appearing year-round on its updated webpage. |
| Public Education and Awareness | | | | | | | | | | | | |

| City of Kenner | | | | | | | | | | | | |
|----------------|-------------------------|---|--|----------|--|------------------------------|---|--------|--------------------------------|--|--|---|
| Action ID | Old Action ID and Goals | Description | Hazard(s) Addressed | Priority | Responsible Coordinating Entity | Potential Funding Agency | (B/C) Benefit-Costs (TF) Technical Feasibility | Cost | Anticipated Year of Completion | Implementation Status Update 2021 | Implementation Status Update 2022 | Implementation Status Update 2023 |
| PEA-1 | F-3, H&TS-3, G2 | Encourage and educate public regarding small-scale flood mitigation projects and small-scale wind mitigation projects homeowners can employ | Flood, Hurricane and Tropical Storms | 5-Medium | JP FPHM, JUMP, City of Kenner | FEMA, HUD, PRIV. FUNDS, CPRA | Homeowners will be empowered to protect themselves with low-cost, DIY projects and suffer less flood and wind damage. | \$10 M | 2025 | Ongoing. Conducted numerous site visits from 2015 to 2018 and provided homeowner with flood proofing options and will continue doing so. Three of these visits resulted in recommendations for small scale mitigation options (2 in 2017 and 1 in 2018). Created residential stormwater handouts that were provided to 100 property owners participating in FMA in 2017. | Ongoing. Conducted numerous site visits over the last year and provided homeowners with flood proofing options and will continue doing so. One of these visits resulted in recommendations for small scale mitigation options. Distributed residential stormwater handouts to property owners participating in FMA grants. | Ongoing. Conducted numerous site visits over the last year and provided homeowners with flood proofing options and will continue doing so. Distributed residential stormwater handouts to property owners participating in FMA grants. |
| PEA-2 | F-6, G2 | Encourage the purchase of flood insurance | Flood | 7-High | JP FPHM, JUMP, City of Kenner | n/a | Enables homeowners to financially recover from the devastating effects of flooding as quickly as possible. Serves to educate area residents that any homeowner, regardless of location, can purchase flood insurance. | | 2025 | Ongoing. Created specific flood insurance promotion outreach projects as part of the PPI; one of which is the creation of a video by Mayor Ben Zahn. Kenner updated CRS webpage. Annual article by City EM Director in community newspaper urges residents to acquire/check /update homeowners and flood insurance. | City encourages acquisition of flood insurance in messaging appearing year round on its webpage and in annual hurricane preparedness articles written for widely distributed community newspaper. Updated Flood and Emergency Management GIS dashboard for public use and information. | City encourages acquisition of flood insurance in messaging appearing year round on its webpage and in annual hurricane preparedness articles written for widely distributed community newspaper. Updated Flood and Emergency Management GIS dashboard for public use and information. |
| PEA-3 | F-8, G2 | Educate public on not dumping and cleaning catch basins | Flood | 6-Medium | JP FPHM, JP Environ, JUMP, City of Kenner | n/a | An informed public is better able to respond to and protect themselves from flooding. | | 2025 | Ongoing. Labeled storm drains with "No Dumping" Markers at the Beach Sweep (EB) in 2015 and 2016. Created new drain markers to include 2nd message. Continual messaging during storm events to clean drains through social media and website. | Continual messaging during storm events to clean drains are issued through social media and city website. | City encourages acquisition of flood insurance in messaging appearing year-round on its updated webpage. |
| PEA-4 | H&TS-2, SS-1 G2 | Educate public on risks, preparedness measures, evacuation procedures, and generator safety | Hurricane and Tropical Storms, Storm Surge | 6-Medium | JP EM, JP Fire, JP FPHM, JUMP, City of Kenner | n/a | An informed public is better able to respond to and protect themselves from hurricanes and storm surge. | | 2025 | Ongoing. Applied for EPA Education Grant Sept 2015. Implementing projects identified in the PPI. City website and annual PowerPoint presentations updated with current evacuation guidance. | Fire Department provides video safety guidelines for generator operation and placement as part of city's annual hurricane preparedness activities. | Social Media messaging is provided prior to and during storm events reminding residents of the importance of maintaining clean drains. |
| PEA-5 | SS-3, G2 | Awareness of climate change and environmental impacts | Storm Surge | 6-Medium | JP FMHM, JP Ecosystem and Coastal Management, City of Kenner | n/a | An informed public is better able to respond to and protect themselves from climate change and disasters resulting from climate change. | | 2025 | Ongoing. Requested funding through the NDRC Competition to create an educational component around environmental impacts. Beach Sweep twice a year – participated in Beach Sweep along Lake Pontchartrain. Participated in several outreach events including the NOLA Home and Garden Show to help raise public awareness. | No update at this time. Progress was delayed due to the extensive damage resulting from Hurricane Ida. | Kenner Fire Department provides video safety guidelines for generator operation and placement as part of city's annual hurricane preparedness activities. English and Spanish language hurricane preparedness brochures and literature, including detailed evacuation and re-entry information, are available year-round on the City webpage and hard copies are distributed at community events throughout the storm season. |
| PEA-6 | | Implement school-based education program combined with environmental education program | All Hazards | 5-Medium | JP FPHM, JP School Board, City of Kenner | n/a | Beginning education programs at a young age will help build an informed populace that better understands how to mitigate risks | | 2025 | New Action | Working on obtaining a floodplain model to put on display at the planetarium for school groups. | Working on obtaining a floodplain model to put on display at the planetarium for school groups. |
| PEA-7 | | Develop public postings/displays and put on hazard expositions | All Hazards | 5-Medium | JP FPHM, JP Coastal | n/a | Public displays can help push out key messages about what the public can do to reduce risk | | 2025 | New Action | City maintains webpages addressing various types of natural hazards and promotes emergency preparedness. Flood risk reduction information specifically provided. | City maintains webpages addressing various types of natural hazards and promotes emergency preparedness. Flood risk reduction information specifically provided. |

| City of Westwego | | | | | | | | | | | | |
|-----------------------|-------------------------|--|--|----------|---------------------------------|---------------------------|---|-------|--------------------------------|--|--|--|
| Action ID | Old Action ID and Goals | Description | Hazard(s) Addressed | Priority | Responsible Coordinating Entity | Potential Funding Agency | (B/C) Benefit-Costs (TF) Technical Feasibility | Cost | Anticipated Year of Completion | Implementation Status Update 2021 | Implementation Status Update 2022 | Implementation Status Update 2023 |
| Preventative | | | | | | | | | | | | |
| P-1 | F-5, G4 | Adopt freeboard | Flood | 7-High | City of Westwego | n/a | Provides a margin of safety against unknown flood depths while taking into account sea level rise and subsidence. Can ultimately reduce the amount of flooding a home would experience, lower flood insurance premiums, and provide the community with CRS points which in turn also lowers flood insurance premiums. | | 2025 | Still under consideration. | Adoption to 1-ft of freeboard under consideration before next cycle visit. | Adoption of 1-ft of freeboard will be adopted in August on 2023. |
| P-2 | H&TS-4, SS-3, G4 | Issue fewer permits for building in vulnerable areas | Hurricane and Tropical Storms, Storm Surge | 6-Medium | City of Westwego | n/a | Reduce the localized flooding and roofing problems that would occur with new development. Reduce the number of buildings susceptible to storm surge, thereby, keeping communities safe and damage cost low. | | 2025 | The city has made efforts to reduce the number of building permits issued in vulnerable areas and to try to ensure any construction that takes place in those areas is safe and minimizes risk. However, these efforts will need to continue going forward, so this action will remain in place. | The city has made efforts to reduce the number of building permits issued in vulnerable areas and to try to ensure any construction that takes place in those areas is safe and minimizes risk. However, these efforts will need to continue going forward, so this action will remain in place. | The city has made efforts to reduce the number of building permits issued in vulnerable areas and to try to ensure any construction that takes place in those areas is safe and minimizes risk. However, these efforts will need to continue going forward, so this action will remain in place. |
| P-3 | SS-2, G1 | Maintain 100 Year levee protection to ensure continued protection | Storm Surge | 6-Medium | SELFPA-E/W, USACE | n/a | Reduce surge damage and cost to homeowner, government, and NFIP. | | 2025 | Ongoing. All of the gates and structures in the hurricane system are exercised by the local levee districts multiple times a year. | Ongoing. All of the gates and structures in the hurricane system are exercised by the local levee districts multiple times a year. | Ongoing. All of the gates and structures in the hurricane system are exercised by the local levee districts multiple times a year. |
| P-4 | | Update Comprehensive Plan | All Hazards | 7-High | City of Westwego | CDBG | Good planning is a key preventative measure and helps reduce the likelihood that new construction will be built in high risk areas without mitigative measures. | | 2020 | The city does not have a comprehensive plan in place at this time. | No update at this time. | No update at this time. |
| P-5 | | Increase Open Space Areas | Flood | 7-High | City of Westwego | n/a | Open spaces such as parks can help provide additional pervious surface areas to allow for infiltration and reduce flooding | | 2025 | Working on identifying new areas of open space. | The city is using the neutral ground between US 90 (Westbank Expy) | No update at this time. |
| P-6 | | Perform Regular Maintenance of Drainage System | Flood | 6-Medium | City of Westwego | JP Drainage | Ensuring drainage systems are maintained can have major impacts as this allows water to be managed in a way that minimizes flooding. | | 2025 | Ongoing. Maintenance on the canals and pump stations is performed throughout the year. | Ongoing. Maintenance on the canals and pump stations is performed throughout the year. | Ongoing. Maintenance on the canals and pump stations is performed throughout the year. |
| P-7 | | Update Capital Improvements Plan | All Hazards | 7-High | City of Westwego | JP Capital Projects | A capital improvements plan can help direct funding to the highest priority projects and ensure that projects that reduce risk are being identified | | 2025 | No update at this time. | No update at this time. | No update at this time. |
| Floodplain Management | | | | | | | | | | | | |
| FP-1 | | Evaluate efficacy of future conditions mapping | Flood | 5-Medium | JP FPHM, JP GIS | FEMA | Future conditions mapping identifies areas of future risk that may not be suitable for development and therefore can reduce future losses | | 2025 | CPRA is in the process of updating the Coastal Master Plan which will look at Sea Level Rise and Subsidence to create risk profiles for Coastal Communities | The city is inside the hurricane reduction system. | The city is inside the hurricane reduction system. |
| FP-2 | | Update Stormwater Management Regulations (ex. compensatory storage for new construction, drainage study with new development, program for rain garden/green infrastructure incentives, permeable surface requirements, sewer backup/overflow protection program) | Flood | 5-Medium | City of Westwego | FEMA, CWSRLF | Stormwater management regulations can be extremely cost-effective and help manage water in a way that reduces localized flooding which is a major issue in many areas of the parish | | 2025 | No updates planned at this time. | No updates planned at this time. | No updates planned at this time. |
| Property Protection | | | | | | | | | | | | |
| PP-1 | F-1, G1 | Elevate, Acquire, Reconstruct, Relocate or Flood proof private and public structures and infrastructure in flood-prone areas | Flood | 7-High | JP FPHM | FEMA, HUD, CPRA, DNR, DEQ | By removing structures from the floodplain, homeowners suffer less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$1 B | 2020 | Ongoing. For elevation/recon and onsite green infrastructure: FMA 2018 - 77 approved properties. FMA 2019 - 165 approved properties. FMA 2020 - 192 pending properties. | Ongoing. For elevation/recon and onsite green infrastructure: FMA/BRIC 2021 – 315 pending properties; FMA SWIFT 2022 – 25 pending properties; HMGP (4577 and LWI) – 30 pending properties. | Ongoing. For elevation/recon and onsite green infrastructure: FMA 2022 – 132 pending properties; HMGP (4611) – 214 pending properties. |

| City of Westwego | | | | | | | | | | | | |
|-----------------------------|-------------------------|---|-------------------------------|----------|---------------------------------|--------------------------------|---|---------|--------------------------------|---|--|--|
| Action ID | Old Action ID and Goals | Description | Hazard(s) Addressed | Priority | Responsible Coordinating Entity | Potential Funding Agency | (B/C) Benefit-Costs (TF) Technical Feasibility | Cost | Anticipated Year of Completion | Implementation Status Update 2021 | Implementation Status Update 2022 | Implementation Status Update 2023 |
| PP-2 | H&TS-1 G1 | Fortify critical infrastructure with storm shutters, upgraded roofs, and generators | Hurricane and Tropical Storms | 6-Medium | City of Westwego | FEMA, HUD | Provide extra protection to critical infrastructure from potential wind damage, thus allowing operations to continue during hurricanes and tropical storms. | \$50 M | 2025 | Ongoing. Will work with the parish to identify structures in need of fortification. | Ongoing. Will work with the parish to identify structures in need of fortification. | Ongoing. Will work with the parish to identify structures in need of fortification. |
| PP-3 | T-1, G2 | Construct Safe Rooms | Tornadoes | 5-Medium | JP FPHM, JUMP | n/a | Provides security and peace of mind, protects residents from tornadoes, and has the potential to increase the value of one's home. | | 2025 | Finished new EOC building this year. | Not currently seeking funding for additional safe rooms. | No update at this time. |
| PP-4 | T-2, G4 | Harden structures for wind impact | Tornadoes | 6-Medium | JP FPHM, JUMP | n/a | Better protect homes from strong winds that could speed recovery after a tornado. | | 2025 | The city has been encouraging high wind protection in new construction and will continue to evaluate ways to ensure buildings are built to a high level of wind resistance. | The city has been encouraging high wind protection in new construction and will continue to evaluate ways to ensure buildings are built to a high level of wind resistance. All new constructions should adhere to international wind load criteria. | The city has been encouraging high wind protection in new construction and will continue to evaluate ways to ensure buildings are built to a high level of wind resistance. All new constructions should adhere to international wind load criteria. |
| Natural Resource Protection | | | | | | | | | | | | |
| NRP-1 | | Improve water quality | Flood, Storm Surge | 5-Medium | City of Westwego | | Improving water quality has many beneficial consequences including better drinking water and ecosystem conservation as well as impacts to public health and well-being and recreational use | | 2025 | Participates in MS4 program and conducts regular water sampling. | Participates in MS4 program and conducts regular water sampling. | Participates in MS4 program and conducts regular water sampling. |
| Structural Projects | | | | | | | | | | | | |
| SP-1 | F-2, G3 | Increase storm water protection management including retention and detention basins | Flood | 7-High | City of Westwego | FEMA, HUD, CAP OUTLAY, USACE | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$20 M | 2020 | No projects planned at this time. | No projects planned at this time. | No projects planned at this time. |
| SP-2 | F-4, G1 | Implement drainage improvement projects in flood-prone areas | Flood | 6-Medium | City of Westwego | FEMA, HUD, MILLAGE, CAP OUTLAY | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$500 M | 2020 | No projects planned at this time. | No projects planned at this time. | No projects planned at this time. |
| SP-3 | F-7, G1 | Install increased permanent pumps to alleviate flooding | Flood | 4-Low | City of Westwego | F, H, M, CAP | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$100 M | 2020 | No projects planned at this time. | No projects planned at this time. | No projects planned at this time. |
| SP-4 | | Install reservoirs/storage tanks | Flood | 5-Medium | City of Westwego | F, H, M, CAP | Reservoirs and storage tanks can provide a means of controlling water flow and volumes to reduce flood risk. | | 2025 | No projects planned at this time. | No projects planned at this time. | No projects planned at this time. |
| SP-5 | | Channel modifications | Flood | 5-Medium | City of Westwego | F, H, M, CAP | Channel modifications can help to control the flow and volume of water and reduce flooding in certain areas | | 2025 | Not feasible in the city. | Water now flows using the neutral ground in between the Westbank Expressway. | No update at this time. |
| Emergency Services | | | | | | | | | | | | |
| ES-1 | | Install hazard warning systems | All Hazards | 7-High | City of Westwego | JP EM | Hazard warning systems can save lives and can be installed for reasonable fees | | 2025 | Coordinate with JP Emergency Management utilizing JP Alert. | Coordinate with JP Emergency Management utilizing JP Alert. | Coordinate with JP Emergency Management utilizing JP Alert. |
| ES-2 | | Carry out shelter operations planning | All Hazards | 7-High | City of Westwego | JP EM | Shelters provide citizens with safe refuge before, during, and after hazard events and are critical to protecting life and safety | | 2025 | Westwego does not operate shelters directly; however, they assist at-risk citizens evacuate to designated shelters. | Westwego does not operate shelters directly; however, they assist at-risk citizens evacuate to designated shelters. | Westwego does not operate shelters directly; however, they assist at-risk citizens evacuate to designated shelters. |

| City of Westwego | | | | | | | | | | | | |
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| ES-3 | | Implement emergency response training and exercises | All Hazards | 7-High | JP Emergency Management, City and Police Administrations | JP EM | Training and exercises help ensure responders are prepared and can take action to reduce loss of life and injury during a disaster. | | 2025 | Participated in the parish annual evacuation exercise. | The city constantly works with all first responders to ensure that our citizens are aware of the latest information on the weather conditions by using Facebook and our Website. | The city constantly works with all first responders to ensure that our citizens are aware of the latest information on the weather conditions by using Facebook and our Website. |
| Public Education and Awareness | | | | | | | | | | | | |
| PEA-1 | F-3, H&TS-3, G2 | Encourage and educate public regarding small-scale flood mitigation projects and small-scale wind mitigation projects homeowners can employ | Flood, Hurricane and Tropical Storms | 5-Medium | JP FPHM, JUMP, City of Westwego | FEMA, HUD, PRIV. FUNDS, CPRA | Homeowners will be empowered to protect themselves with low-cost, DIY projects and suffer less flood and wind damage. | \$10 M | 2025 | Ongoing through PPI projects, website, and pamphlets and brochures at City Hall. | Ongoing through PPI projects, website, and pamphlets and brochures at City Hall. | Ongoing through PPI projects, website, and pamphlets and brochures at City Hall. |
| PEA-2 | F-6, G2 | Encourage the purchase of flood insurance | Flood | 7-High | JP FPHM, JUMP, City of Westwego | n/a | Enables homeowners to financially recover from the devastating effects of flooding as quickly as possible. Serves to educate area residents that any homeowner, regardless of location, can purchase flood insurance. | | 2025 | Ongoing. Created specific flood insurance promotion outreach projects as part of the PPI. Implementing the PPI. Video produced featuring the new mayor promoting the purchase of flood insurance will be filmed in the fall of 2021. | Ongoing. Created specific flood insurance promotion outreach projects as part of the PPI. Implementing the PPI. Producing video featuring the new mayor promoting the purchase of flood insurance. | Ongoing. Created specific flood insurance promotion outreach projects as part of the PPI. Implementing the PPI. Producing video featuring the new mayor promoting the purchase of flood insurance. |
| PEA-3 | F-8, G2 | Educate public on not dumping and cleaning catch basins | Flood | 6-Medium | JP FPHM, JP Environ, JUMP, City of Westwego | n/a | An informed public is better able to respond to and protect themselves from flooding. | | 2025 | Ongoing through PPI projects. Working on relaunching the Brooms to Basins interactive Adopt a Catch Basin site. | Ongoing. Label storm drains with educational markers at various locations and events. Educate the public at tabling events. | Ongoing. Label storm drains with educational markers at various locations and events. Educate the public at tabling events. |
| PEA-4 | H&TS-2, SS-1, G2 | Educate public on risks, preparedness measures, evacuation procedures, and generator safety | Hurricane and Tropical Storms, Storm Surge | 6-Medium | JP EM, JP Fire, JP FPHM, JUMP, City of Westwego | n/a | An informed public is better able to respond to and protect themselves from hurricanes and storm surge. | | 2025 | Ongoing. Implement projects identified in the PPI. Collaborate with unincorporated Jefferson Parish to bus residents to the Alario Center. | Ongoing. Implement projects identified in the PPI. Collaborate with unincorporated Jefferson Parish to bus residents to the Alario Center. | Ongoing. Implement projects identified in the PPI. Collaborate with unincorporated Jefferson Parish to bus residents to the Alario Center. |
| PEA-5 | | Implement school-based education program combined with environmental education program | All Hazards | 5-Medium | JP FPHM, JP School Board, City of Westwego | n/a | Beginning education programs at a young age will help build an informed populace that better understands how to mitigate risks | | 2025 | The Westwego City Council works with local schools for storm drain clean up events. | The Westwego City Council works with local schools for storm drain clean up events. | The Westwego City Council works with local schools for storm drain clean up events. |
| PEA-6 | | Develop public postings/displays and put on hazard expositions | All Hazards | 5-Medium | JP FPHM, JP Coastal | n/a | Public displays can help push out key messages about what the public can do to reduce risk | | 2025 | Developing outreach material for distribution. | Currently working on the development of new material for distribution. | No update at this time. |

| Town of Jean Lafitte | | | | | | | | | | | | |
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| Action ID | Old Action ID and Goals | Description | Hazard(s) Addressed | Priority | Responsible Coordinating Entity | Potential Funding Agency | (B/C) Benefit-Costs (TF) Technical Feasibility | Cost | Anticipated Year of Completion | Implementation Status Update 2021 | Implementation Status Update 2022 | Implementation Status Update 2023 |
| Preventative | | | | | | | | | | | | |
| P-1 | F-5, G4 | Adopt freeboard | Flood | 7-High | Town of Jean Lafitte | n/a | Provides a margin of safety against unknown flood depths while taking into account sea level rise and subsidence. Can ultimately reduce the amount of flooding a home would experience, lower flood insurance premiums, and provide the community with CRS points which in turn also lowers flood insurance premiums. | | 2025 | Complete. Adopted 2 ft freeboard. It is anticipated that a stricter standard may be adopted for freeboard going forward, so this action will remain in place. | Complete. Adopted 2 ft freeboard. It is anticipated that a stricter standard may be adopted for freeboard going forward, so this action will remain in place. | Complete. Adopted 2 ft freeboard. It is anticipated that a stricter standard may be adopted for freeboard going forward, so this action will remain in place. |
| P-2 | | Update Comprehensive Plan | All Hazards | 7-High | Town of Jean Lafitte | CDBG | Good planning is a key preventative measure and helps reduce the likelihood that new construction will be built in high risk areas without mitigative measures. | | 2020 | Completion of 2 CPEX Annual Reports: 1. Resilient Jean Lafitte: Flood Preparedness Toolkit 2. Resilient Jean Lafitte: Flood Emergency Preparedness Plan Available at: https://www.cpep.org/resources | Progress delayed due to Hurricane Ida. No update at his time. | Progress delayed due to Hurricane Ida. No update at his time. |
| P-3 | | Increase Open Space Areas | Flood | 7-High | Town of Jean Lafitte | n/a | Open spaces such as parks can help provide additional pervious surface areas to allow for infiltration and reduce flooding | | 2025 | Incorporating GIS to analyze availability of open space areas. | Incorporating GIS to analyze availability of open space areas. | Incorporating GIS to analyze availability of open space areas. |
| P-4 | | Perform Regular Maintenance of Drainage System | Flood | 6-Medium | Town of Jean Lafitte | JP Drainage | Ensuring drainage systems are maintained can have major impacts as this allows water to be managed in a way that minimizes flooding. | | 2025 | Pumps are maintained on a weekly basis. | Pumps are maintained on a weekly basis. | Pumps are maintained on a weekly basis. |
| P-5 | | Update Capital Improvements Plan | All Hazards | 7-High | Town of Jean Lafitte | JP Capital Projects | A capital improvements plan can help direct funding to the highest priority projects and ensure that projects that reduce risk are being identified | | 2025 | No update at this time. | No update at this time. | A comprehensive plan is in development. |
| Floodplain Management | | | | | | | | | | | | |
| FP-1 | | Evaluate efficacy of future conditions mapping | Flood | 5-Medium | JP FPHM, JP GIS | FEMA | Future conditions mapping identifies areas of future risk that may not be suitable for development and therefore can reduce future losses | | 2025 | CPRA is in the process of updating the Coastal Master Plan which will look at Sea Level Rise and Subsidence to create risk profiles for Coastal Communities | Progress delayed due to Hurricane Ida. No update at his time. | Progress delayed due to Hurricane Ida. No update at his time. |
| FP-2 | | Update Stormwater Management Regulations (ex. compensatory storage for new construction, drainage study with new development, program for rain garden/green infrastructure incentives, permeable surface requirements, sewer backup/overflow protection program) | Flood | 5-Medium | Town of Jean Lafitte | FEMA, CWSRLF | Stormwater management regulations can be extremely cost-effective and help manage water in a way that reduces localized flooding which is a major issue in many areas of the parish | | 2025 | Under consideration. | Unable to review due to Hurricane Ida. | Project still delayed due to impacts from Hurricane Ida. |
| Property Protection | | | | | | | | | | | | |
| PP-1 | F-1, SS-3, G1 | Elevate, Acquire, Reconstruct, Relocate or Floodproof private and public structures and infrastructure in flood-prone and surge-prone areas | Flood, Storm Surge | 7-High | JP FPHM | FEMA, HUD, CPRA, DNR, DEQ | By removing structures from the floodplain and raising structures above the BFE, homeowners suffer less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$1 B | 2025 | Ongoing. For elevation/recon and onsite green infrastructure: FMA 2018 - 77 approved properties. FMA 2019 - 165 approved properties. FMA 2020 - 192 pending properties. | Ongoing. For elevation/recon and onsite green infrastructure: FMA/BRIC 2021 – 315 pending properties; FMA SWIFT 2022 – 25 pending properties; HMGP (4577 and LWI) – 30 pending properties. | Ongoing. For elevation/recon and onsite green infrastructure: FMA 2022 – 132 pending properties; HMGP (4611) –214 pending properties. |

| Town of Jean Lafitte | | | | | | | | | | | | |
|-----------------------------|--------------|---|-------------------------------|----------|--------------------------------------|--------------------------------|---|---------|------|---|---|--|
| PP-2 | H&TS-1 G1 | Fortify critical infrastructure with storm shutters, upgraded roofs, and generators | Hurricane and Tropical Storms | 6-Medium | Town of Jean Lafitte | FEMA, HUD | Provide extra protection to critical infrastructure from potential wind damage, thus allowing operations to continue during hurricanes and tropical storms. | \$50 M | 2025 | Wind retrofit project is complete | No update at this time. | No update at this time. |
| PP-3 | H&TS-6 G1 | Emergency generators at sewer treatment plants and lift stations | Hurricane and Tropical Storms | 5-Medium | Town of Jean Lafitte, JP Sewer | FEMA, HUD | Provide continuous source of power during power outages to keep homes protected from flood waters and sewer backup. | | 2025 | Ongoing. Rosethorne Sewer Project is out for bid. | Progress delayed due to Hurricane Ida. No update at his time. | All generators are maintained by Jefferson Parish. |
| PP-4 | T-1, G2 | Construct Safe Rooms | Tornadoes | 5-Medium | JP FPHM, JUMP, Town of Jean Lafitte | n/a | Provides security and peace of mind, protects residents from tornadoes, and has the potential to increase the value of one's home. | | 2025 | Current safe rooms include the EOC, JP Government Building, and the Multipurpose Center. | Current safe rooms include the EOC, JP Government Building, and the Multipurpose Center. | Current safe rooms include the EOC, JP Government Building. |
| PP-5 | T-2, G4 | Harden structures for wind impact | Tornadoes | 6-Medium | JP FPMHM, JUMP, Town of Jean Lafitte | n/a | Better protect homes from strong winds that could speed recovery after a tornado. | | 2025 | Many structures have been constructed in compliance with the current building codes and the town will continue to make sure that this takes place going forward. | Many structures have been constructed in compliance with the current building codes and the town will continue to make sure that this takes place going forward. | Many structures have been constructed in compliance with the current building codes and the town will continue to make sure that this takes place going forward. |
| Natural Resource Protection | | | | | | | | | | | | |
| NRP-1 | H&TS-4 G1 | Barrier construction along bayous to prevent erosion | Hurricane and Tropical Storms | 4-Low | JP FPHM, USACE | USACE | Better coastal protection could help to prolong the presence of the coastline and continue to provide protection against storms as well as economic gain from tourist destinations. | | 2025 | Ongoing. Implementing 7 to 8 foot of tidal surge levees – 10 total levees. Fisher Basin Phase 1 & 2 is complete. Rosethorne bid has been accepted and construction will begin in August. Goose Bayou will go out for bid in late 2021. The other 8 tidal surge levees are all under design. | Ongoing. Implementing 7 to 8 foot of tidal surge levees – 10 total levees. Rosethorne is currently under construction. The other 8 tidal surge levees are all under design. The Goose Bayou Levee Reach project has not got out for bid as the process has been delayed due to damage resulting from Hurricane Ida. | No update at this time. |
| NRP-2 | SS-2, G1, G3 | Build back marsh | Storm Surge | 6-Medium | JP Coastal, JP FPHM | FHWA, FWS | Replenish the first lines of defense against hurricanes and surge. This will protect homes from catastrophic levels of damage. | | 2025 | Permit is complete. Construction begins June 2022. | No update at this time. | NOAA completed BA 207, which is the upper Barataria component of the Large-Scale Barataria Marsh Creation Project. |
| NRP-3 | | Improve water quality | Flood, Storm Surge | 5-Medium | JP Water, JP Environmental | | Improving water quality has many beneficial consequences including better drinking water and ecosystem conservation as well as impacts to public health and well-being and recreational use | | 2025 | Planning on conducting a storm drain marking event in the fall 2021. Multiple plantings in 2020 and 2021 that prevent soil erosion resulting in less turbidity in the water which improves water quality. | Due to Hurricane Ida, projects planned for 2021 will be moved to 2022-2023.. | Conducted storm drain markings and numerous tree plantings in latter 2022 and early 2023. |
| Structural Projects | | | | | | | | | | | | |
| SP-1 | F-2, G3 | Increase storm water protection management including retention and detention basins | Flood | 7-High | Town of Jean Lafitte | FEMA, HUD, CAP OUTLAY, USACE | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$20 M | 2025 | Ongoing. Implementing 7 to 8 foot of tidal surge levees – 10 total levees. Fisher Basin Phase 1 & 2 is complete. Rosethorne bid has been accepted and construction will begin in August. Goose Bayou will go out for bid in late 2021. The other 8 tidal surge levees are all under design. | Progress delayed due to Hurricane Ida. No update at his time. | Construction of the Rosethorne Basin tidal levees in underway. |
| SP-2 | F-4, G1 | Implement drainage improvement projects in flood-prone areas | Flood | 6-Medium | Town of Jean Lafitte | FEMA, HUD, MILLAGE, CAP OUTLAY | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$500 M | 2020 | Jean Lafitte, Oak Drive, and Church Street drainage projects complete. Four projects under design in the town. | Four projects still under design. Delay due to Hurricane Ida. Will go out for bid upon completion of design. | No update at this time. |

| Town of Jean Lafitte | | | | | | | | | | | | |
|--------------------------------|------------------|---|--|----------|--|------------------------------|---|---------|------|--|--|--|
| SP-3 | F-7, G1 | Install increased permanent pumps to alleviate flooding | Flood | 4-Low | Town of Jean Lafitte | F, H, M, CAP | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$100 M | 2020 | Ongoing, no update at this time. | No update at this time. | No update at this time. |
| Emergency Services | | | | | | | | | | | | |
| ES-1 | H&TS-5 G1 | Elevate evacuation routes | Hurricane and Tropical Storms | 5-Medium | Town of Jean Lafitte | DOTD | Alleviates the need to close evacuation routes due to road flooding and helps homeowners seek safety quicker. | | 2025 | Ongoing. Plans are being discussed. | No update at this time. | No update at this time. |
| ES-2 | | Install hazard warning systems | All Hazards | 7-High | Town of Jean Lafitte, JP Emergency Management | JP EM | Hazard warning systems can save lives and can be installed for reasonable fees | | 2025 | Coordinate with JP Emergency Management utilizing JP Alert. | Coordinate with JP Emergency Management utilizing JP Alert. | Coordinate with JP Emergency Management utilizing JP Alert. |
| ES-3 | | Carry out shelter operations planning | All Hazards | 7-High | Town of Jean Lafitte, JP Emergency Management | JP EM | Shelters provide citizens with safe refuge before, during, and after hazard events and are critical to protecting life and safety | | 2025 | Jean Lafitte does not operate shelters directly; however, they assist at-risk citizens evacuate to designated shelters. | Jean Lafitte does not operate shelters directly; however, they assist at-risk citizens evacuate to designated shelters. | Jean Lafitte does not operate shelters directly; however, they assist at-risk citizens evacuate to designated shelters. |
| ES-4 | | Implement emergency response training and exercises | All Hazards | 7-High | JP Emergency Management, Town and Police Administrations | JP EM | Training and exercises help ensure responders are prepared and can take action to reduce loss of life and injury during a disaster. | | 2025 | Participate in both parish and town exercises annually. | Participate in both parish and town exercises annually. | Participate in both parish and town exercises annually. |
| Public Education and Awareness | | | | | | | | | | | | |
| PEA-1 | F-3, H&TS-3, G2 | Encourage and educate public regarding small-scale flood mitigation projects and small-scale wind mitigation projects homeowners can employ | Flood, Hurricane and Tropical Storms | 5-Medium | JP FPHM, JUMP, Town of Jean Lafitte | FEMA, HUD, PRIV. FUNDS, CPRA | Homeowners will be empowered to protect themselves with low-cost, DIY projects and suffer less flood and wind damage. | \$10 M | 2025 | Ongoing. Town enforces wind load regulations on all new construction. Ongoing outreach as part of the multijurisdictional Program for Public Information (PPI). | Ongoing. Town enforces wind load regulations on all new construction. Ongoing outreach as part of the multijurisdictional Program for Public Information (PPI). | Ongoing. Town enforces wind load regulations on all new construction. Ongoing outreach as part of the multijurisdictional Program for Public Information (PPI). |
| PEA-2 | F-6, G2 | Encourage the purchase of flood insurance | Flood | 7-High | JP FPHM, JUMP, Town of Jean Lafitte | n/a | Enables homeowners to financially recover from the devastating effects of flooding as quickly as possible. Serves to educate area residents that any homeowner, regardless of location, can purchase flood insurance. | | 2025 | Ongoing. Created specific flood insurance promotion outreach projects as part of the PPI. Implementing the PPI. Video produced featuring the town mayor promoting the purchase of flood insurance was published on the town website. | Ongoing. Created specific flood insurance promotion outreach projects as part of the PPI. Implementing the PPI. Producing video featuring the new mayor promoting the purchase of flood insurance. | Ongoing. Created specific flood insurance promotion outreach projects as part of the PPI. Implementing the PPI. Producing video featuring the new mayor promoting the purchase of flood insurance. |
| PEA-3 | H&TS-2, SS-1, G2 | Educate public on risks, preparedness measures, evacuation procedures, and generator safety | Hurricane and Tropical Storms, storm Surge | 6-Medium | JP EM, JP Fire, JP FPHM, JUMP, Town of Jean Lafitte | n/a | An informed public is better able to respond to and protect themselves from hurricanes and storm surge. | | 2025 | Ongoing. Implement projects identified in the PPI. Collaborate with unincorporated Jefferson Parish to bus residents to evacuation shelters. | Ongoing. Implement projects identified in the PPI. Collaborate with unincorporated Jefferson Parish to bus residents to evacuation shelters. | Ongoing. Labeled storm drains with educational markers at various locations and events. Educated the public at multiple tabling events. |
| PEA-4 | | Implement school-based education program combined with environmental education program | All Hazards | 5-Medium | JP FPHM, JP School Board, Town of Jean Lafitte | n/a | Beginning education programs at a young age will help build an informed populace that better understands how to mitigate risks | | 2025 | Winner of district and state 2021 Cleanest City Contest. Implement projects identified in the multijurisdictional Program for Public Information (PPI). Ongoing gardening project with schools. | Winner of district and state 2022 Cleanest City Contest. No update regarding school gardening project due to Hurricane Ida. | Winner of district and state 2023 Cleanest City Contest. Winner of the Louisiana Municipal Association's (LMA) Best in Show for the Wetlands Education Center currently under construction. |
| PEA-5 | | Develop public postings/displays and put on hazard expositions | All Hazards | 5-Medium | JP FPHM, JP Coastal | n/a | Public displays can help push out key messages about what the public can do to reduce risk | | 2025 | Developing outreach materials for distribution. | Developing outreach materials for distribution. | Eastern Black Rail threatened species signs erected along elevated boardwalks. |

Town of Grand Isle

| Action ID | Old Action ID and Goals | Description | Hazard(s) Addressed | Priority | Responsible Coordinating Entity | Potential Funding Agency | (B/C) Benefit-Costs (TF) Technical Feasibility | Cost | Anticipated Year of Completion | Implementation Status Update 2020 | Implementation Status Update 2021 | Implementation Status Update 2022 | Implementation Status Update 2023 |
|------------------------------|-------------------------|--|------------------------------|----------|---------------------------------|---------------------------|---|--------|--------------------------------|--|---|--|--|
| Preventative | | | | | | | | | | | | | |
| P-1 | F-5, G4 | Adopt freeboard | Flood | 7-High | Town of Grand Isle | n/a | Provides a margin of safety against unknown flood depths while taking into account sea level rise and subsidence. Can ultimately reduce the amount of flooding a home would experience, lower flood insurance premiums, and provide the community with CRS points which in turn also lowers flood insurance premiums. | | 2025 | Ongoing | Currently regulate that lowest horizontal member, which has to meet Base Flood Elevation. | Currently regulate that the lowest horizontal member has to be at + 1 of the Base Flood Regulation. Since Ida it has been STRONGLY recommended to build at +2 as recommended by the state as elevations are likely to change in the near future. | Currently regulate that the lowest horizontal member has to be at + 1 of the Base Flood Regulation. Since Ida it has been STRONGLY recommended to build at +2 as recommended by the state as elevations are likely to change in the near future. |
| P-2 | | Update Comprehensive Plan | All Hazards | 7-High | Town of Grand Isle | CDBG | Good planning is a key preventative measure and helps reduce the likelihood that new construction will be built in high risk areas without mitigative measures. | | 2020 | New Action | Ongoing | No updates at this time. Progress was delayed by the damage that resulted from Hurricane Ida. | HMGP grant pending, which is needed to update the comprehensive plan. |
| P-3 | | Increase Open Space Areas | Flood | 7-High | Town of Grand Isle | n/a | Open spaces such as parks can help provide additional pervious surface areas to allow for infiltration and reduce flooding | | 2025 | New Action | New subdivisions with a total of 375,000 square feet or 60 lots must provide a park with a minimum of 5000 square feet | No updates at this time. Progress was delayed by the damage that resulted from Hurricane Ida. | No updates at this time. Progress was delayed by the damage that resulted from Hurricane Ida. |
| P-4 | | Perform Regular Maintenance of Drainage System | Flood | 6-Medium | Town of Grand Isle | JP Drainage | Ensuring drainage systems are maintained can have major impacts as this allows water to be managed in a way that minimizes flooding. | | 2025 | New Action | Town employees clean and maintain accessible ditches as needed. | Town employees clean and maintain assessable ditches as needed for town streets. DOTD maintains the 11 state streets | Town employees clean and maintain assessable ditches as needed for town streets. DOTD maintains the 11 state streets |
| P-5 | | Update Capital Improvements Plan | All Hazards | 7-High | Town of Grand Isle | JP Capital Projects | A capital improvements plan can help direct funding to the highest priority projects and ensure that projects that reduce risk are being identified | | 2025 | New Action | No updates at this time. | No updates at this time. Progress was delayed by the damage that resulted from Hurricane Ida. | No update at this time. |
| Floodplain Management | | | | | | | | | | | | | |
| FP-1 | | Evaluate efficacy of future conditions mapping | Flood | 5-Medium | JP FPHM, JP GIS | FEMA | Future conditions mapping identifies areas of future risk that may not be suitable for development and therefore can reduce future losses | | 2025 | New Action | CPRA is in the process of updating the Coastal Master Plan which will look at Sea Level Rise and Subsidence to create risk profiles for Coastal Communities. | No updates at this time. Progress was delayed by the damage that resulted from Hurricane Ida. | No update at this time. |
| FP-2 | | Update Stormwater Management Regulations (ex. compensatory storage for new construction, drainage study with new development, program for rain garden/green infrastructure incentives, permeable surface requirements, sewer backup/overflow protection program) | Flood | 5-Medium | Town of Grand Isle | FEMA, CWSRLF | Stormwater management regulations can be extremely cost-effective and help manage water in a way that reduces localized flooding which is a major issue in many areas of the parish | | 2025 | New Action | No updates at this time. | No updates at this time. Progress was delayed by the damage that resulted from Hurricane Ida. | No update at this time. |
| Property Protection | | | | | | | | | | | | | |
| PP-1 | F-1, S5-3, G1 | Elevate, Acquire, Reconstruct, Relocate or Floodproof private and public structures and infrastructure in flood-prone and surge-prone areas | Flood, Storm Surge | 7-High | JP FPHM | FEMA, HUD, CPRA, DNR, DEQ | By removing structures from the floodplain and raising structures above the BFE, homeowners suffer less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$1 B | 2025 | Ongoing. 498 elevation/recon properties and Rep Loss structures approved since 2015. Pending approval for elevation/recon/floodproof/and onsite green infrastructure for 154 properties. | Ongoing. For elevation/recon and onsite green infrastructure: FMA 2018 - 77 approved properties. FMA 2019 - 165 approved properties. FMA 2020 - 192 pending properties. | Ongoing. For elevation/recon and onsite green infrastructure: FMA/BRIC 2021 – 315 pending properties; FMA SWIFT 2022 – 25 pending properties; HMGP (4577 and LWI) – 30 pending properties. | Ongoing. For elevation/recon and onsite green infrastructure: FMA 2022 – 132 pending properties; HMGP (4611) – 214 pending properties. |
| PP-2 | H&TS-1 G1 | Fortify critical infrastructure with storm shutters, upgraded roofs, and generators | Hurricane and Tropical Storm | 6-Medium | Town of Grand Isle | FEMA, HUD | Provide extra protection to critical infrastructure from potential wind damage, thus allowing operations to continue during hurricanes and tropical storms. | \$50 M | 2025 | Ongoing. Created risk profiles for town facilities as part of new plan update. | The Town will continue to work with Jefferson Parish to identify structures that may need generators and additional wind protection. | The Town will continue to work with Jefferson Parish to identify structures that may need generators and additional wind protection. | The Town will continue to work with Jefferson Parish to identify structures that may need generators and additional wind protection. |
| PP-3 | H&TS-5 G1 | Upgrade and lower water lines to 20 ft below the water surface | Hurricane and Tropical Storm | 5-Medium | JP Water | FEMA, HUD | This would allow uninterrupted water service for residents living in the Town. | | 2025 | Ongoing. Requested funding to continue it through the NDRC Competition but NDRC did not get funded. Trying to secure funding. | Preparing to redo the Lafitte to Grand Isle water line; expecting new line from Lafourche. | Lafourche Parish Water District currently installing new water line along LA-1 just west of Grand Isle and they should be complete mid-summer. Jefferson Parish is in the process of upgrading the main water line from Lafitte to Grand Isle. | SOQ released for design of new water lines. |
| PP-4 | T-1, G2 | Construct Safe Rooms | Tornadoes | 5-Medium | JP FPHM, Town of Grand Isle | n/a | Provides security and peace of mind, protects residents from tornadoes, and has the potential to increase the value of one's home. | | 2025 | Few safe rooms have been constructed due to feasibility as these would often need to be built in high risk flood zones. However, the parish will continue to evaluate options to build safe rooms and further enhance structural integrity of buildings, especially residences, to reduce wind damage risk. | None planned at this time. | None planned at this time. | None planned at this time. |
| PP-5 | T-2, G4 | Harden structures for wind impact | Tornadoes | 6-Medium | JP FPHM, Town of Grand Isle | n/a | Better protect homes from strong winds that could speed recovery after a tornado. | | 2025 | Some structures have been hardened as they have been refurbished in accordance with the building code, ICC and IBC, which currently require 150 mph loads. However, there is still a need for building hardening of additional structures, so this action will remain in place and addressed as needed/feasible. | Ongoing. New construction and substantial improvements need to meet Code. | Ongoing. New construction and substantial improvements need to meet Code. | Ongoing. New construction and substantial improvements need to meet Code. |

| Town of Grand Isle | | | | | | | | | | | | | |
|--------------------------------|-------------------------|---|-------------------------------------|----------|--|--------------------------------|---|---------|--------------------------------|--|--|---|---|
| Action ID | Old Action ID and Goals | Description | Hazard(s) Addressed | Priority | Responsible Coordinating Entity | Potential Funding Agency | (B/C) Benefit-Costs (TF) Technical Feasibility | Cost | Anticipated Year of Completion | Implementation Status Update 2020 | Implementation Status Update 2021 | Implementation Status Update 2022 | Implementation Status Update 2023 |
| Natural Resource Protection | | | | | | | | | | | | | |
| NRP-1 | H&TS-4 G3 | Use debris (fallen trees) after a strong hurricane for coastal restoration (like Christmas tree project) | Hurricane and Tropical Storm | 6-Medium | JP Coastal, Town of Grand Isle | CPRA, JP | Better coastal protection could help to prolong the presence of the coastline and continue to provide protection against storms as well as economic gain from tourist destinations. | | 2025 | Ongoing. No hurricanes between 2015 to 2018 for debris. | Will plan logistics for this project in 2022. | No updates at this time. Progress was delayed by the damage that resulted from Hurricane Ida. | No update at this time. |
| NRP-2 | SS-2, G1, G3 | Increase coastal protection | Storm Surge | 7-High | GUILD | CPRA, GOMESA, RESTORE | Better coastal protection could help to prolong the presence of the coastline and continue to provide protection against storms as well as economic gain from tourist destinations. | | 2025 | Ongoing. Fifi Island Restoration Rock Breakwater Extension has been 60% completed. An additional \$10M is required to complete the project. Plan for protective barrier known as the Gulfside (50% funded at \$30M) and Bayside Shoreline Breakwaters (\$6.5M allocated from CPRA and the balance by GOMESA Bonds) in Grand Isle is in comment period. Caminada Marsh Creation Increment 2 completed. The Bayside Segmented Breakwater project is underway. Following the approval of the JP Multiyear Plan by the Dept. of Treasury, JP will apply for the first 2 rounds of RESTORE dollars and build 8 of the 16 breakwaters. | Through the 2022 Capital Outlay bill additional funds were provided to complete the Grand Isle Back Bay Breakwaters. | GUILD has complete the Bayside Breakwater Project with the exception of 2.5 new breakwaters and 3 rehabilitation breakwater (recapping). CPRA has \$1.7 Million for this task and should be out to bid summer of 2022. | U.S. Army Corps of Engineers committed \$122 million to repair damages to the Grand Isle Federal Dune Project that were sustained during Hurricane Ida. |
| NRP-3 | SS-4, G1, G3 | Natural Shoreline/ Dune Restoration | Storm Surge | 7-High | GUILD | CPRA, GOMESA, RESTORE | Better coastal protection could help to prolong the presence of the coastline and continue to provide protection against storms as well as economic gain from tourist destinations. | | 2025 | Ongoing. Fifi Island Restoration Rock Breakwater Extension has been 60% completed. An additional \$10M is required to complete the project. Plan for protective barrier known as the Gulfside (50% funded at \$30M) and Bayside Shoreline Breakwaters (\$6.5M allocated from CPRA and the balance by GOMESA Bonds) in Grand Isle is in comment period. Caminada Marsh Creation Increment 2 completed. The Bayside Segmented Breakwater project is underway. Following the approval of the JP Multiyear Plan by the Dept. of Treasury, JP will apply for the first 2 rounds of RESTORE dollars and build 8 of the 16 breakwaters. | Also in late 2021 CPRA completed the beach nourishment and Gulf Side Breakwaters for a portion of Grand Isle. | Gulfside breakwater has 2 breakwater under construction (USACE BBA Funding). This project will be complete 2022, contractor is schedule to mobilized June 1, 2022. The current plan for Gulfside breakwater is for the USACE to installation the remaining breakwater (approx. 33 segments). This will be starting sometime in 2023/2024. | U.S. Army Corps of Engineers committed \$122 million to repair damages to the Grand Isle Federal Dune Project that were sustained during Hurricane Ida. |
| NRP-4 | | Improve water quality | Flood, Storm Surge | 5-Medium | JP Water, JP Environmental | | Improving water quality has many beneficial consequences including better drinking water and ecosystem conservation as well as impacts to public health and well-being and recreational use | | 2025 | New Action | Conservation activities delayed due to COVID. | No updates at this time. Progress was delayed by the damage that resulted from Hurricane Ida. | No updates at this time. |
| Structural Projects | | | | | | | | | | | | | |
| SP-1 | F-2, G3 | Increase storm water protection management including retention and detention basins | Flood | 7-High | Town of Grand Isle | FEMA, HUD, CAP OUTLAY, USACE | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$20 M | 2020 | The town has taken several measures to protect against stormwater flooding. However, there is still action to take including the Queen Bess subdivision to Walnut pump station and adding a new pump station along the back side of the island. | The town has designed several back pump stations and created a small Back Bay levee in fall of 2021 | As of 2022 the TOGI/GUILD along with Jefferson Parish has 2 new pump stations (Orange Lane and Chighizola Lane) JP and 2 rehabilitation pump stations (Landry's Hole and Cypress Lane) TOGI/GUILD projects shovel ready. | No update at this time. |
| SP-2 | F-4, G1 | Implement drainage improvement projects in flood-prone areas | Flood | 6-Medium | Town of Grand Isle | FEMA, HUD, MILLAGE, CAP OUTLAY | By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims. | \$500 M | 2020 | The town has taken several measures to protect against stormwater flooding. However, there is still action to take including the Queen Bess subdivision to Walnut pump station and adding a new pump station along the back side of the island. | The town is working to improve storm water drainage along the roadway and areas near the Bay | GUILD is working with CPRA and State on funding for the rehabilitation and with levee improvements. | GUILD is working with CPRA and State on funding for the rehabilitation and with levee improvements. |
| SP-3 | | Install reservoirs/storage tanks | Flood | 5-Medium | Town of Grand Isle | F, H, M, CAP | Reservoirs and storage tanks can provide a means of controlling water flow and volumes to reduce flood risk. | | 2025 | New Action | Not feasible in the town. | Not feasible in the town. | Not feasible in the town. |
| SP-4 | | Channel modifications | Flood | 5-Medium | Town of Grand Isle | F, H, M, CAP | Channel modifications can help to control the flow and volume of water and reduce flooding in certain areas | | 2025 | New Action | None planned at this time. | None planned at this time. | None planned at this time. |
| Emergency Services | | | | | | | | | | | | | |
| ES-1 | | Install hazard warning systems | All Hazards | 7-High | JP Emergency Management | JP EM | Hazard warning systems can save lives and can be installed for reasonable fees | | 2025 | New Action | No warning systems in place within the Town but help is provided for those evacuating. | No warning systems in place within the Town but help is provided for those evacuating. | No warning systems in place within the Town but help is provided for those evacuating. |
| ES-2 | | Carry out shelter operations planning | All Hazards | 7-High | JP Emergency Management | JP EM | Shelters provide citizens with safe refuge before, during, and after hazard events and are critical to protecting life and safety | | 2025 | New Action | Too isolated to open shelters on the Island. | Too isolated to open shelters on the Island. | Too isolated to open shelters on the Island. |
| ES-3 | | Implement emergency response training and exercises | All Hazards | 7-High | JP Emergency Management, Town and Police Administrations | JP EM | Training and exercises help ensure responders are prepared and can take action to reduce loss of life and injury during a disaster. | | 2025 | New Action | The Town does not implement any training exercises at this time. | The Town does not implement any training exercises at this time. | The Town does not implement any training exercises at this time. |
| Public Education and Awareness | | | | | | | | | | | | | |
| PEA-1 | F-3, H&TS-3, G2 | Encourage and educate public regarding small-scale flood mitigation projects and small-scale wind mitigation projects homeowners can employ | Flood, Hurricane and Tropical Storm | 5-Medium | JP FPHM, Town of Grand Isle | FEMA, HUD, PRIV. FUNDS, CPRA | Homeowners will be empowered to protect themselves with low-cost, DIY projects and suffer less flood and wind damage. | \$10 M | 2025 | Ongoing. Conducted numerous site visits from 2015 to 2018 and provided homeowner with flood proofing options and will continue doing so. Three of these visits resulted in recommendations for small scale mitigation options (2 in 2017 and 1 in 2018). Created residential stormwater handouts that were provided to 100 property owners participating in FMA in 2017. | Miss Marsha hazard reduction education materials will be dispersed in Grand Isle. | Work with Jefferson Parish to distribute hazard reduction education materials on the island. | Work with Jefferson Parish to distribute hazard reduction education materials on the island. |

Town of Grand Isle

| Action ID | Old Action ID and Goals | Description | Hazard(s) Addressed | Priority | Responsible Coordinating Entity | Potential Funding Agency | (B/C) Benefit-Costs (TF) Technical Feasibility | Cost | Anticipated Year of Completion | Implementation Status Update 2020 | Implementation Status Update 2021 | Implementation Status Update 2022 | Implementation Status Update 2023 |
|-----------|-------------------------|---|---|----------|--|--------------------------|---|------|--------------------------------|---|---|--|--|
| PEA-2 | F-6, G2 | Encourage the purchase of flood insurance | Flood | 7-High | JP FPHM, Town of Grand Isle | n/a | Enables homeowners to financially recover from the devastating effects of flooding as quickly as possible. Serves to educate area residents that any homeowner, regardless of location, can purchase flood insurance. | | 2025 | Ongoing. Created specific flood insurance promotion outreach projects as part of the PPI. | Ongoing but too cost-prohibitive for many of the residents. | Ongoing, but cost-prohibitive for most residents. Created specific flood insurance promotion outreach projects as part of the PPI. | Ongoing, but cost-prohibitive for most residents. Created specific flood insurance promotion outreach projects as part of the PPI. |
| PEA-3 | H&TS-2, SS-1, G2 | Educate public on risks, preparedness measures, evacuation procedures, and generator safety | Hurricane and Tropical Storm, Storm Surge | 6-Medium | JP EM, JP Fire, JP FPHM, Town of Grand Isle | n/a | An informed public is better able to respond to and protect themselves from hurricanes and storm surge. | | 2025 | Ongoing. Projects have been identified in the PPI. Applied for EPA Education Grant Sept 2015. | Miss Marsha hazard reduction education materials will be dispersed in Grand Isle | Work with Jefferson Parish to distribute hazard reduction education materials on the island. | Work with Jefferson Parish to distribute hazard reduction education materials on the island. |
| PEA-4 | | Implement school-based education program combined with environmental education program | All Hazards | 5-Medium | JP FPHM, JP School Board, Town of Grand Isle | n/a | Beginning education programs at a young age will help build an informed populace that better understands how to mitigate risks | | 2025 | New Action | Grand Isle School received a Grant and hosted a Smithsonian Waterways display to educate visitors and residents about the importance of water for daily life and the hazard potential of water. | No updates at this time. Progress was delayed by the damage that resulted from Hurricane Ida. | No updates at this time. |
| PEA-5 | | Develop public postings/displays and put on hazard expositions | All Hazards | 5-Medium | JP FPHM, JP Ecosystem and Coastal Management | n/a | Public displays can help push out key messages about what the public can do to reduce risk | | 2025 | New Action | JP ECM working with school system to consider postings and displays about natural hazards | No updates at this time. Progress was delayed by the damage that resulted from Hurricane Ida. | No updates at this time. |