



2025 Plaquemines Parish Hazard Mitigation Plan Update

Planning Committee Meeting

October 28, 2024



Introductions

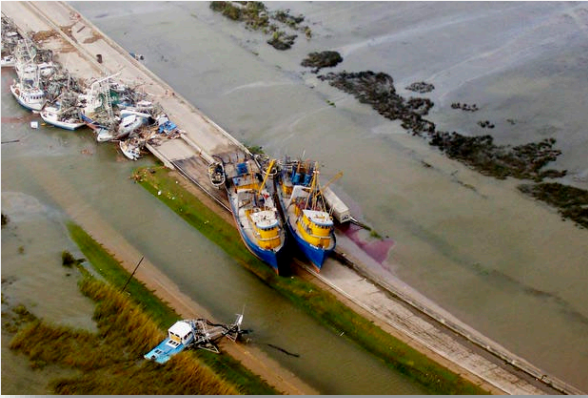
- **Plaquemines Parish OHSEP Director**
 - Patrick Harvey – Director
- **Stephenson Disaster Management Institute (SDMI) at LSU**
 - Chris Rippetoe – Hazard Mitigation Program Manager
 - Jason Martin – Emergency Management Analyst
 - Brian Stevens – Special Projects Manager
- **Governor's Office of Homeland Security and Emergency Preparedness**
 - Jeffrey Giering – State Hazard Mitigation Officer
 - Marion Pearson – Hazard Mitigation Planner



Who is SDMI?

- Stephenson Disaster Management Institute (SDMI) at Louisiana State University
- Non-Academic, Applied Research Unit on campus
- Specialize in providing programmatic support and decision making tools for state and local emergency managers
 - Hazard Mitigation Plans
 - Emergency Operations Plans
 - Geographic Information Systems
 - Application Development
 - Data Visualization
 - Aerial Imagery Collection/Processing





The Hazard Mitigation Plan: What is in it for us?



Hazard Mitigation Is...

- Any action taken to reduce long term risk to life and property;
- On-going process that occurs before, during, and after disasters;
- Mitigation actions help prevent damage to a community's infrastructure, economic, cultural and environmental assets;
- Minimize operational downtime and accelerate recovery of government and the private sector after an event;
- ***Implementation of mitigation actions leads to building stronger, safer and smarter!***



Federal HM Plan Requirements

CODE OF FEDERAL REGULATIONS

44

Revised as of October 1, 2018

Emergency Management
and
Assistance

- Disaster Mitigation Act of 2000 (DMA 2000)
 - **Section 322** of the Act specifically addresses mitigation planning and requires state and local governments to prepare multi-hazard mitigation plans as a precondition for receiving FEMA mitigation project grants.
- Title 44 Code of Federal Regulations (CFR) §201.6 for FEMA approval and eligibility to apply for FEMA Hazard Mitigation Assistance

Why Have a Hazard Mitigation Plan

- Planning efforts help our communities become more sustainable and disaster-resilient
 - Focuses efforts on the hazards, disaster-prone areas and identifying appropriate mitigation actions for future projects
- Must have a FEMA approved plan as a condition for receiving certain types of non-emergency disaster assistance
- **No Plan = No Mitigation Money = No Project Funding**



HM Plan Update Guidelines

- The plan must be updated every 5 years
- Re-assess hazard identification and risk assessment
 - Consider any changes since the last plan update, and address events that have occurred since the last plan;
- Incorporate additional local planning efforts;
- Report mitigation strategy (projects) progress and discuss adjustments;
- Must have a robust planning committee
 - Include academia, private business/industry, and non-profit groups as stakeholders





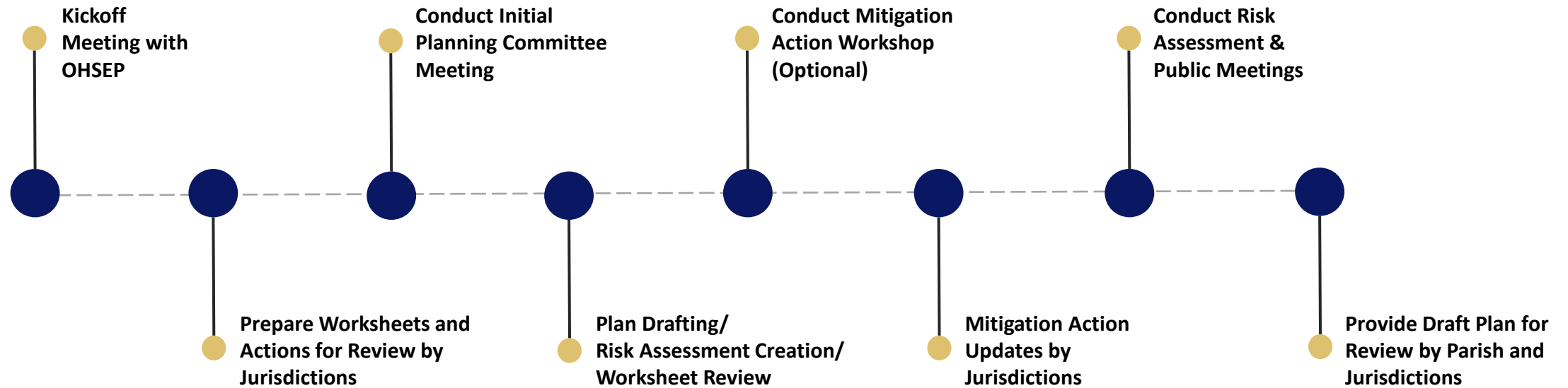
Hazard Mitigation Planning is a process that identifies natural hazard risks and develops strategies to reduce these risks.



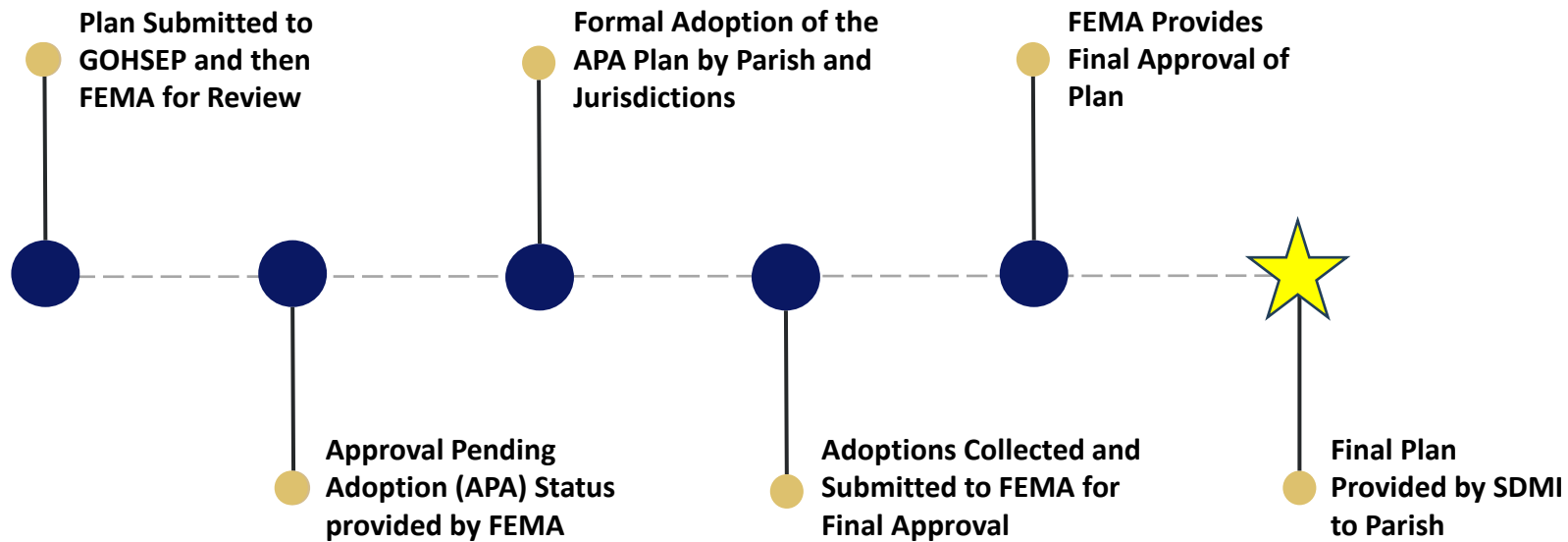
Plan Update Process



Plan Update Process Timeline



Plan Approval Timeline



Planning Committee Expectations

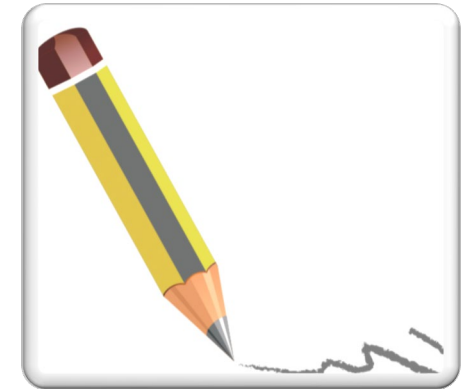
- Parish Director will serve as the main liaison/POC throughout the planning process
- Parish **MUST** show active participation in the planning process by the following:
 - Completing state required worksheets;
 - Identifying and updating specific mitigation actions (projects);
 - Have representation at meetings;
 - Report to community and gather feedback from appropriate agencies;
 - Adopt the final plan.



**2025
PLAQUEMINES PARISH
HAZARD MITIGATION PLAN**



Plan Development



Plan Layout

- **Section 1: Introduction**
 - Parish Description
 - Updated Census & Economic Data
- **Section 2: Hazard Identification and Parish-wide Risk Assessment**
- **Section 3: Capability Assessment**
- **Section 4: Mitigation Strategies**
 - Action updates
 - New actions



Plan Layout

- **Appendix A: Planning Process**
- **Appendix B: Plan Maintenance**
- **Appendix C: Parish Critical Facilities**
- **Appendix D: Plan Adoption**
- **Appendix E: State Required Worksheets**



Section 1: Introduction

- Parish Description & Geography
- Updated Census Information
 - Total Population
 - Population Density
 - Percent Change Over Time
- Economic update
 - Detail major economic sectors
 - New companies that are having a positive economic impact on the parish



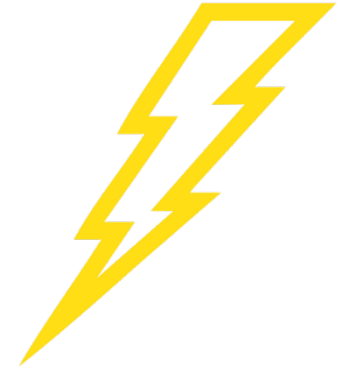
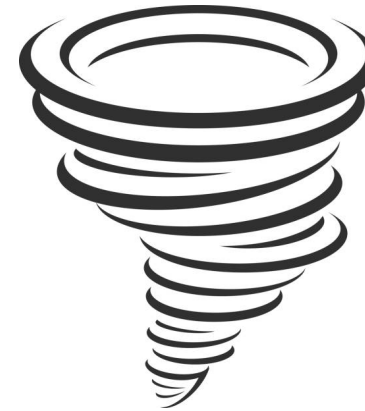
Section 2: Hazard Identification and Risk Assessment

- Previously Profiled Hazards
- Newly Identified Hazards
- Previous Occurrences
- Probability of Future Events
- Potential Losses due to an Event
- Zoning and Land Use
- Impacts on Critical Facilities
- Impacts from Future Development
- Future Impacts due to Climate Change



Hazard Identification and Risk Assessment

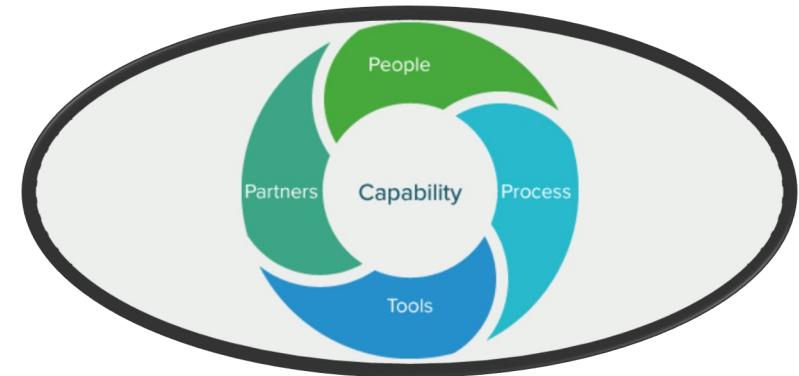
- Coastal Hazards
- Flooding
- Levee Failure
- Saltwater Intrusion
- Sinkholes
- Thunderstorms
- Tornadoes
- Tropical Cyclones



Section 3: Capability Assessment

Primary types of capabilities for reducing long-term vulnerability through mitigation planning are:

- Planning and Regulatory
- Administrative and Technical
- Financial
- Educational and Outreach



Section 4: Mitigation Strategies

Goals

1. Reduce losses to existing and future property due to hazards
2. Protect the health and well-being of the people of Plaquemines Parish from negative effects of hazards
3. Ensure the abilities of emergency services providers to continue operating during hazardous events
4. Protect existing public and private infrastructure from damage



Section 4: Mitigation Strategies

- Mitigation Action status update for previous actions/projects
- New Mitigation Actions identified for 2025 Update



Plaquemines Parish Previous Mitigation Actions						
Jurisdiction-Specific Action	Action Description	Funding Source	Time	Responsible Party, Agency, or Department	Hazard	Status
OP1: Levee Maintenance	Maintain and expand existing levee protection to ensure levees do not fail during a storm surge event.	Local, Regional, and Federal	1-5 Years	Plaquemines Parish Government, Plaquemines OHSEP	Flooding, Coastal Hazards, Levee Failure	Ongoing
OP2: Elevation and Acquisition	Elevate, acquire, or pilot reconstruct all RL and SRL structures in Plaquemines Parish.	Local, Regional, and Federal	1-5 Years	Plaquemines Parish Government, Plaquemines OHSEP	Flooding, Coastal Hazards, Levee Failure	Ongoing
OP3: Drainage Projects	Widen drainage ditches and upgrade culverts.	HMGP, Local, and Regional	1-5 Years	Plaquemines Parish Government, Plaquemines Parish Engineering Public Works Dept.	Flooding	Ongoing
OP4: Pump Stations Capacity	Upgrade existing pump station capacity and add new pump stations.	HMGP, Local, and Regional	1-5 Years	Plaquemines Parish Government, Plaquemines OHSEP	Flooding, Coastal Hazards, Levee Failure	Ongoing
OP5: Block Valves for Pump Stations	Upgrade existing pump stations by installing block valves to prevent against backwater flooding.	HMGP, Local, and Regional	1-5 Years	Plaquemines Parish Government, Plaquemines OHSEP	Flooding, Coastal Hazards	Ongoing
OP6: Wind Retrofit	Wind Retrofit all Critical Facilities against tornadoes and tropical cyclones.	HMGP, Local, and Regional	1-5 Years	Plaquemines Parish Government, Plaquemines OHSEP, Plaquemines Parish Engineering & Public Works Dept.	Tornadoes, Tropical Cyclones	Ongoing
OP7: Pump Station Fuel Tank Hardening	Upgrade existing pump station fuel tanks to harden against wind and storm surge damage from tornadoes and tropical cyclones.	HMGP, Local, and Regional	1-5 Years	Plaquemines Parish Government, Plaquemines OHSEP, Plaquemines Parish Engineering & Public Works Dept.	Tornadoes, Tropical Cyclones	Ongoing



Appendix A: Planning Process

- Overview of planning process
- Planning committee members identified
- Meeting documentation and summaries
- Discussion of neighboring community participation
- Discussion of integration of other parish plans into the HM Plan

Appendix B: Plan Maintenance

- Review of HM plan **annual** maintenance by the Plaquemines Parish OHSEP Director.
- Assign responsible parties for review and edits of the plan



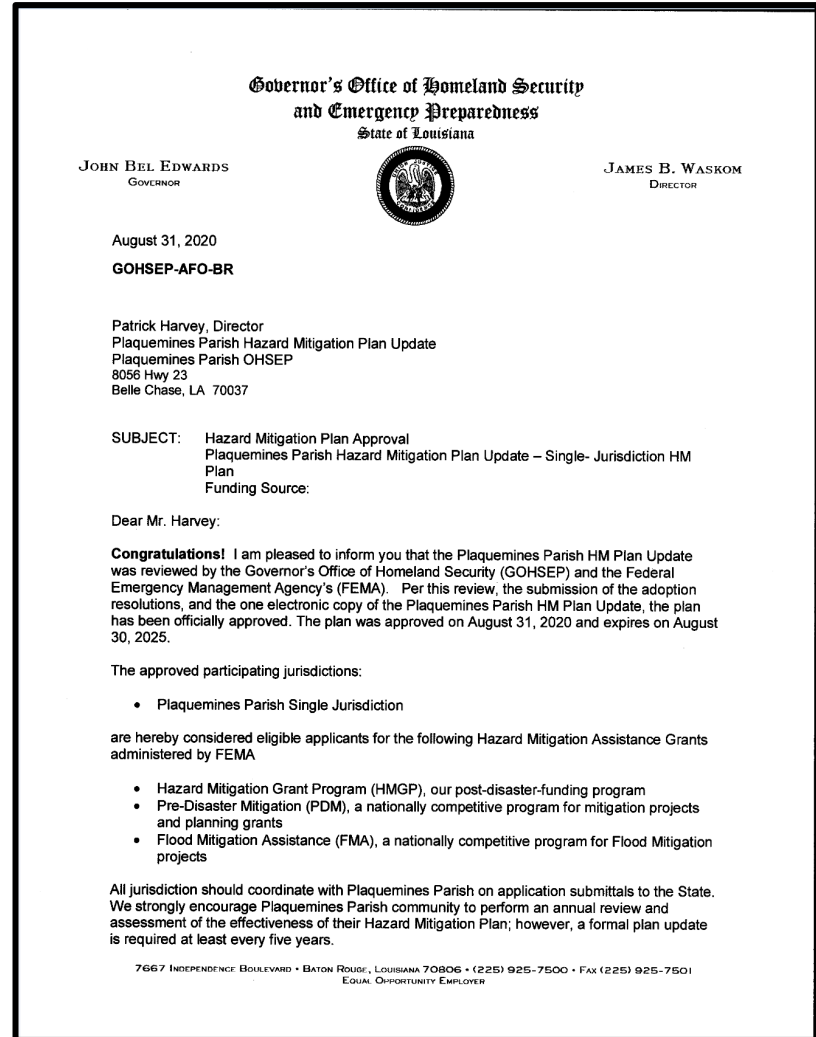
Appendix C: Critical Facilities

- Updated list of critical facilities by jurisdiction
- Will identify which hazards within the risk assessment pose a threat to each facility
- Facilities must be parish or jurisdiction owned



Appendix D: Plan Adoption

- Parish council resolution must be adopted, signed, and placed into the final planning document
- The formal adoption must take place **AFTER the plan is issued**
APA status



Appendix E: State Required Worksheets

Each jurisdiction **MUST** fill these out:

- Capability Assessment
- NFIP Worksheet
- Critical Facilities/Building Inventory
- Vulnerable Population



Capability Assessment

Capability Assessment Worksheet - Plaquemines Parish		
Local mitigation capabilities are existing authorities, polices and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities. Please complete the tables and questions in the worksheet as completely as possible.		
Planning and Regulatory		
Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.		
Plans	Yes / No	Comments
Comprehensive / Master Plan	Yes	
Capital Improvements Plan	Yes	
Economic Development Plan	Yes	
Local Emergency Operations Plan	Yes	
Continuity of Operations Plan	No	
Transportation Plan	Yes	
Stormwater Management Plan	No	
Community Wildfire Protection Plan	No	
Other plans (redevelopment, recovery, coastal zone management)	Yes	
Building Code, Permitting and Inspections	Yes / No	Comments
Building Code	Yes	LSUCC
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	Yes	Dist 1 - 5; Dist 2 - 4, Dist 3 - 5, Dist 4 - 5, Dist 5 - 6, Dist 6 - 4, Dist 7 - 5
Site plan review requirements	Yes	
Land Use Planning and Ordinances	Yes / No	Comments
Zoning Ordinance	Yes	Local
Subdivision Ordinance	Yes	Local
Floodplain Ordinance	Yes	FEMA
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	No	
Flood Insurance Rate Maps	Yes	Paper & digital
Acquisition of land for open space and public recreation uses	Yes	
Other	No	

Place answers in Yes/No column, add comments if necessary (i.e. what year the plan was updated last)



National Flood Insurance Program

National Flood Insurance Program (NFIP)	
Plaquemines Parish	
Insurance Summary	
How many NFIP policies are in the community? What is the total premium and coverage?	
How many claims have been paid in the community? What is the total amount of paid claims? How many of the claims were for substantial damage?	
How many structures are exposed to flood risk within the community?	
Describe any areas of flood risk with limited NFIP policy coverage.	
Staff Resources	
Is the Community FPA or NFIP Coordinator certified?	
Is flood plain management an auxiliary function?	
Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)	
What are the barriers to running an effective NFIP program in the community, if any?	
Compliance History	
Is the community in good standing with the NFIP?	
Are there any outstanding compliance issues (i.e., current violations)?	
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	
Is a CAV or CAC scheduled or needed? If so when?	
Regulation	
When did the community enter the NFIP?	
Are the FIRMs digital or paper?	
Do floodplain development regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	
Community Rating System (CRS)	
Does the community participate in CRS?	
What is the community's CRS Class Ranking?	
Does the plan include CRS planning requirements?	

- FEMA can provide this information, or local/parish floodplain managers



Building Inventory

Plaquemines Parish Owned Building Information								
Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type
Belle Chasse Elementary School	School	539 F Edward Hebert Boulevard	Belle Chasse	29.89271091	-89.97442154	\$16,645,000	1993	Concrete
Belle Chasse Middle School	School	13476 Louisiana 23	Belle Chasse	29.73170346	-90.00765911	\$17,532,608	1955	Concrete
Belle Chasse High School	School	8346 Louisiana 23	Belle Chasse	29.855084	-89.986613	\$25,282,010	1958	Concrete
Boothville-Venice Elementary School	School	1 Oiler Drive	Boothville	29.3362089	-89.40614662	\$17,955,000	1975	Concrete
South Plaquemines Elementary School	School	311 Civic Drive	Port Sulphur	29.47702884	-89.69587647	\$31,009,059	2014	Concrete
South Plaquemines High School	School	34121 Louisiana 23	Buras	29.36639048	-89.571664	\$42,730,854	2013	Concrete
Plaquemines Parish Library - Belle Chasse Branch	Library	8442 Louisiana 23	Belle Chasse	29.85288602	-89.98738298	\$903,000		Concrete
Plaquemines Parish Library - Buras Branch	Library	35572 Louisiana 11	Buras	29.35505758	-89.52857848	\$3,400,000		Concrete
Plaquemines Parish Sheriff's Office	Law Enforcement	8022 Louisiana 23	Belle Chasse	29.859967	-89.99271	\$3,400,000		Concrete
Plaquemines Parish Detention Center	Law Enforcement	16801 Louisiana 15	Davant	29.59852126	-89.82469493	\$98,000,000		Concrete
Belle Chasse Fire Department No. 3	Fire & SAR	13476 Louisiana 23	Belle Chasse	29.73145628	-90.00625335	\$266,000		Metal
Braithwaite Fire Department	Fire & SAR	7163 Louisiana 39	Braithwaite	29.76465048	-90.01681897	\$381,000		Metal
O'Brien Fire Station	Fire & SAR	31725 Louisiana 23	Buras	29.415777	-89.612943	\$800,000		Metal
Boothville-Venice Volunteer Fire Station	Fire & SAR	42661 Louisiana 23	Venice	29.280489	-89.359516	\$7,165,000		Concrete
Buras Volunteer Fire Department	Fire & SAR	35410 Louisiana 23	Buras	29.358123	-89.532143	\$3,544,000		Concrete
Belle Chasse Volunteer Fire Department	Fire & SAR	216 Engineers Road	Belle Chasse	29.87322172	-90.01400958	\$767,000		Metal
Port Sulphur Fire Department	Fire & SAR	114 Civic Drive	Port Sulphur	29.47991641	-89.69490782	\$6,900,000		Concrete
Port Sulphur EMS	EMS	114 Civic Drive	Port Sulphur	29.479799	-89.69505			Concrete
Plaquemines Parish Government Building	Government	8056 Louisiana 23	Belle Chasse	29.859303	-89.991907	\$3,152,000		Concrete
Plaquemines Parish Government Annex Building	Government	301 Main St	Belle Chasse	29.856796	-89.983583	\$2,800,000		Metal
Plaquemines Parish Government Complex	Government	333 F Edward Hebert Boulevard	Belle Chasse	29.896769	-89.979355	\$20,000,000		Concrete
Belle Chasse Water Treatment Plant	Water Treatment	107 E Cuevas St Belle Chasse	Belle Chasse	29.853973	-89.984769	\$2,500,000		Concrete
Port Sulphur Water Treatment Plant	Water Treatment	228969 Hwy 23 Port Sulphur	Port Sulphur	29.57171	-89.80426			Concrete
Boothville Water Treatment Plant	Water Treatment	38903 Hwy 23 Boothville	Boothville	29.352744	89.440814	\$660,000		Concrete
Dalcour Water Treatment Plant	Water Treatment	170 Water Plant Rd	Braithwaite	29.857895	-89.922159	\$500,000		Concrete
Ponte a la Hache Water Treatment Plant	Water Treatment	17581 Hwy 15 PALH	Pointe a la Hache	29.586281	-89.807102	\$423,000		Concrete
Belle Chasse Wastewater Treatment Plant	Wastewater Treatment	126 Sewer Plant Rd Belle Chasse	Belle Chasse	29.481758	-90.04915	\$661,000		Concrete
Port Sulphur Wastewater Treatment Plant	Wastewater Treatment	180 Lee Dr, Port Sulphur	Port Sulphur	29.48223	-89.701512	\$2,300,000		Concrete
Buras Wastewater Treatment Plant	Wastewater Treatment	120 Eldorado Dr, Buras	Buras	29.34173	-89.516918	\$900,000		Concrete
Boothville Wastewater Treatment Plant	Wastewater Treatment	135 Sewer Plant Rd Boothville	Boothville	29.315745	-89.385583	\$200,000		Concrete
Davant Wastewater Treatment Plant	Wastewater Treatment	15337 Hwy 15 Davant	Davant	29.62163	-89.867127			Concrete
Braithwaite Wastewater Treatment Plant	Wastewater Treatment	1165 Hwy 39 Braithwaite	Braithwaite	29.852986	-89.90943			Concrete
Ironton Oxidation Pond	Wastewater Treatment	17200 Hwy 23 Ironton	Ironton	29.637983	-89.970359			
Myrtle Grove Oxidation Pond	Wastewater Treatment	17200 Hwy 23 Ironton	Ironton	29.637983	-89.970359			
Belle Chasse Pump Station No. 1	Pumping Station	294 Pump Station Road	Belle Chasse	29.852584	-90.019209	\$7,000,000	1964	Metal
Belle Chasse Pump Station No. 2	Pumping Station	5307 Forest Park Lane	Belle Chasse	29.895858	-89.997646	\$7,000,000	1996	Metal
Barriere Road Pump Station	Pumping Station		Belle Chasse	29.85588	-90.021382			Metal



Vulnerable Populations

Vulnerable Populations Worksheet - Plaquemines Parish					
All Hospitals (Private or Public)					
Name	Address	City	Zip Code	Latitude	Longitude
Ochsner Health Center	7772 Hwy 23	Belle Chasse	70037	29.86423231	-89.99895747
Plaquemines Medical Center	27136 Hwy 23	Port Sulphur	70083	29.50187156	-89.71671523
Nursing Homes (Private or Public)					
Name	Address	City	Zip Code	Latitude	Longitude
Riverbend Nursing Home	13735 Hwy 23	Belle Chasse	70037	29.727619	-89.999352
Mobile Home Parks					
Name	Address	City	Zip Code	Latitude	Longitude
Unknown Mobile Home Park	22 Trey Ln	Belle Chasse	70037	29.81908564	-90.01086919
Unknown Mobile Home Park	106 River Oaks Dr	Belle Chasse	70037	29.79899265	-90.02124789
Unknown Mobile Home Park	116 Badalamenti Ln	Belle Chasse	70037	29.78500612	-90.02381692
Unknown Mobile Home Park	126 W. Oak Grove Ln.	Belle Chasse	70037	29.7693862	-90.02917996
Unknown Mobile Home Park	114 Naomi Dr.	Belle Chasse	70037	29.70309472	-89.99058251
Unknown RV Park	110 Windmill Ln.	Belle Chasse	70037	29.70196911	-89.98995373
Unknown RV Park	14723 Hwy 23	Belle Chasse	70037	29.70599175	-89.98906184
Unknown Mobile Home Park	123 Timber Ridge St.	Belle Chasse	70037	29.87476098	-90.01899906
Pelicans Point	29574 Hwy 23	Port Sulphur	70083	29.45227407	-89.65437445
Gauthier's Get-Away	Nearby: 29820-29828 Louisiana 23	Port Sulphur	70083	29.45068322	-89.64590788
J-Bar Sportsman Lodge and RV Park	32798 Hwy 11	Buras	70041	29.39090492	-89.60352639
Danos Mobile Home Rentals	R P Ln.	Buras	70041	29.33814858	-89.47413114
Kimberly's Kourt	Nearby: 101-199 Moaks Lane	Buras	70041	29.34334807	-89.46689513
Goodman's Trailer Park	Nearby: 100-168 Goodman Lane	Buras	70041	29.35115966	-89.43342838
Unknown Mobile Home Park	121 Ostrica Ln.	Buras	70041	29.34242469	-89.41484151
Jim's RV Sites	Nearby: 41180-41198 Louisiana 23	Buras	70041	29.31389041	-89.38668352
Unknown Mobile Home Park	Yvonne Ln.	Buras	70041	29.31251698	-89.38603406
Delta Dragon RV Park	42101 Highway 23	Buras	70041	29.2926355	-89.36978482
Stumps RV Park	113 Stump Ln.	Venice	70091	29.27499962	-89.35613672
Targa RV Park	193 Sooner Ln.	Venice	70091	29.2724111	-89.3560175
Phi Boothville Housing	100 Ernies Ln.	Boothville	70041	29.33294787	-89.40202936
C&H Mobile Home Park	26180 Hwy 23	Port Sulphur	70083	29.51456901	-89.72609282



Parish Mitigation Survey

- Collects information from citizens regarding their perceptions of local hazards and mitigation efforts
- Results will be included in the plan if there are enough responses

https://lsu.qualtrics.com/jfe/form/SV_7WWHP1p7wYV6reS



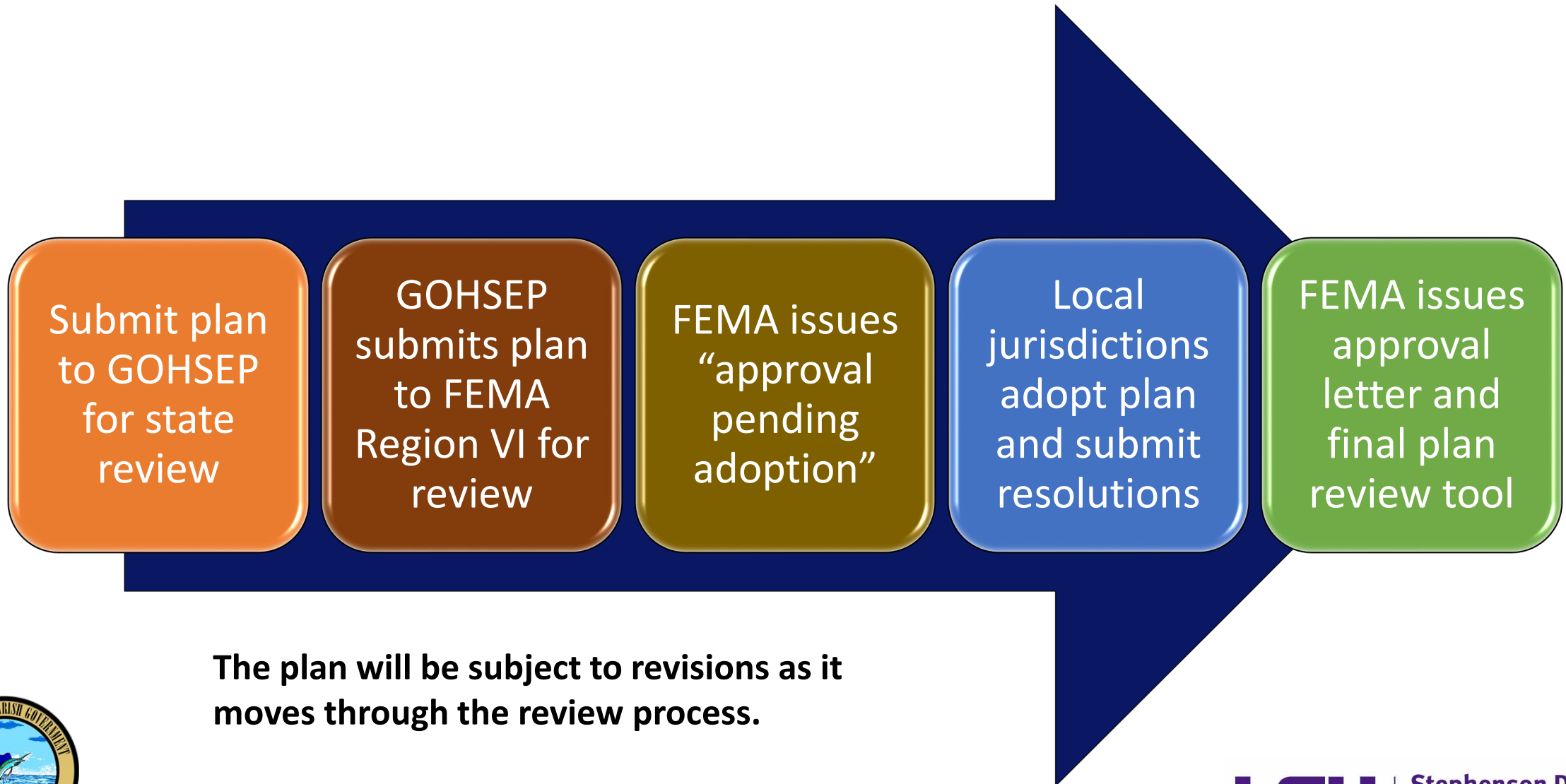
SDMI Hazard Mitigation Website

- Repository for materials used during update process
- <https://hmplans.sdmi.lsu.edu/Home/Parish/Plaquemines>



The screenshot displays the SDMI Hazard Mitigation Website for Plaquemines Parish. The header includes the LSU logo, the text "Stephenson Disaster Management Institute", and a "SDMI HOME" button. The main navigation bar features "HAZARD MITIGATION" and sub-tabs for "Intro", "Events", "FEMA Resources", "Parish Plans", and "Settings". The "Parish Plans" tab is active, showing the "Plaquemines Parish" page. A "PLAN DUE DATE: AUGUST 30 2025" is displayed. The "DEVELOPMENT STATUS" section shows a progress bar with four stages: "PLAN DEVELOPMENT" (yellow), "PLAN REVIEW" (purple), "PLAN ADOPTION" (purple), and "COMPLETED" (purple). The "PLAN DEVELOPMENT" stage is currently active, with a "KICKOFF MEETING SEP 2024" scheduled. The "PLAN REVIEW" and "PLAN ADOPTION" stages are marked "TBD". The "COMPLETED" stage is also marked "TBD". Below this, the "PARTICIPATING JURISDICTIONS" section is empty. A calendar widget shows "SEP 19" and "2025 PLAQUEMINES PARISH HMP KICKOFF MEETING" on "Zoom" from "10:00 AM - 10:30 AM 9/19/2024". The "PREVIOUS PLANS" section lists three documents from 2020: "PLAQUEMINES PARISH INITIAL PLANNING COMMITTEE MEETING", "PLAQUEMINES PARISH PUBLIC MEETING", and "2020 PLAQUEMINES PARISH HAZARD MITIGATION PLAN", each with a "DOWNLOAD" button. The "Survey" section has a button labeled "Access Survey". The footer features the LSU logo.

Plan Approval Process



The Final Product

- **FEMA approved Hazard Mitigation Plan**
 - Meets requirements of Title 44 Code of Regulations (CFR) §201.6 for approval and eligibility to apply for FEMA Hazard Mitigation Assistance grant programs.
 - A hazard mitigation project strategy for each jurisdiction
 - A comprehensive list of jurisdiction owned properties
 - Assessment of natural disaster-related risks and vulnerabilities



Next Steps

- Identify Neighboring Community
 - St. Bernard was used in 2020 Plan
- Worksheet and Mitigation Actions Due Dates
- Dates for Next Meetings
 - Mitigation Action Workshop (Optional)
 - Risk Assessment Review with Committee
 - Public Meeting
- Draft Plan to FEMA
 - 2-3 weeks after the public meeting
- Adoptions
 - AFTER the FEMA Review



Contact Us

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