

Draft Programmatic Environmental Assessment

# Hazard Mitigation Grant Program Exception

States of Louisiana and Mississippi

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## **List of Acronyms**

ABFE	Advisory Base Flood Elevation
ACHP	Advisory Council on Historic Preservation
BFE	base flood elevation
BMP	best management practice
CAA	Clean Air Act
CWA	Clean Water Act
CBRA	Coastal Barrier Resources Act
CBU	Coastal Barrier Resources System Unit
CFR	Code of Federal Regulations
CMD	Coastal Management Division
CMP	Coastal Management Program
CUP	Coastal Use Permit
CZMA	Coastal Zone Management Act
EA	environmental assessment
EFH	Essential Fish Habitat
EHP	environmental and historic preservation
E.O.	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FIRM	Flood Insurance Rate Map
FWS	U.S. Fish and Wildlife Service
GCR	General Conformity Rule
GIS	Geographic Information System
HMGP	Hazard Mitigation Grant Program
LDEQ	Louisiana Department of Environmental Quality
LDNR	Louisiana Department of Natural Resources
LCRP	Louisiana Coastal Resource Program
MDEQ	Mississippi Department of Environmental Quality
MSA	Magnuson-Stevens Fishery Conservation and Management Act
MDMR	Mississippi Department of Marine Resources
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRHP	National Register of Historic Places
OMB	Office of Management and Budget
PA	Programmatic Agreement
PEA	programmatic environmental assessment
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SWPPP	Stormwater Pollution Prevention Plan
THPO	Tribal Historic Preservation Officer
USACE	U.S. Army Corps of Engineers

## **I. Introduction: The Hazard Mitigation Grant Program**

Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288), as amended, authorizes FEMA to contribute up to 75 percent of the cost of hazard mitigation measures that are determined to be cost-effective and which substantially reduce the risk of future damage, hardship, loss, or suffering in any area affected by a major disaster. The regulations governing this Hazard Mitigation Grant Program (HMGP) can be found at 44 Code of Federal Regulations (CFR) Part 206 Subpart N. The HMGP Desk Reference contains the program's guidance and can be found at <http://www.fema.gov/library/viewRecord.do?id=1472>.

The objective of the HMGP is to enable the implementation of long-term hazard mitigation measures during the immediate recovery from a disaster to reduce the loss of life and property from a disaster. Grants under HMGP are made available Statewide, and the hazard mitigation activities funded may not necessarily relate to the damages caused by the incident. They are intended to accomplish hazard mitigation beyond that which would otherwise be addressed independently.

Under the HMGP, a declared State identifies and submits hazard mitigation proposals from eligible applicants, typically state and local government entities, to FEMA for approval. FEMA reviews these proposals to determine if they meet the program's eligibility requirements, including: conforming to the State Hazard Mitigation Plan and the applicable local mitigation plan, providing a beneficial impact upon the designated disaster area, solving a problem independently or constituting a functional portion of a solution, being cost-effective, being feasible, and meeting the hazard mitigation program objectives. Projects initiated before FEMA approval and grant award are ineligible for HMGP funding.

One element of FEMA's approval process is an environmental and historic preservation (EHP) compliance review to ensure that projects meet various Federal EHP requirements. These requirements include review under the National Environmental Policy Act (NEPA), consultation under Section 7 of the Endangered Species Act (ESA), consultation under Section 106 of the National Historic Preservation Act (NHPA), the eight-step decisionmaking process outlined in 44 CFR Part 9 for floodplain management and wetland protection, limiting activities under the Coastal Barriers Resources Act (CBRA), conformity under the Coastal Zone Management Act (CZMA), evaluation of impacts to prime and unique farmlands under the Farmland Protection Policy Act, compliance with Executive Order (E.O.) 12898 - Environmental Justice, general conformity determinations under the Clean Air Act (CAA), and ensuring appropriate permits under the Clean Water Act (CWA), including Section 404 permits and Section 402 permits, among others.

## **II. Purpose and Need**

In the aftermath of Hurricanes Katrina and Rita, some individual property owners and communities in the impacted areas of Louisiana and Mississippi proactively engaged in

hazard mitigation activities in an effort to recover from the damages and mitigate at-risk properties against future damage. Such activities may have been eligible for funding under the HMGP or could have been used to meet the non-Federal match requirement of the program had they obtained FEMA approval before the activities started. However, under HMGP requirements, projects initiated or completed prior to FEMA approval are not eligible for funding.

Hurricanes Katrina and Rita decimated the capability of local governments in the impacted areas of Louisiana and Mississippi and left communities without resources to assign to the identification, development, and timely application and implementation of hazard mitigation initiatives under the HMGP. Communities in these impacted areas were not in a position to engage in the required HMGP application process until more than two years after the catastrophic hurricanes. These unique circumstances did not occur in any other Gulf Coast States in the aftermath of the hurricanes, and FEMA is not aware of any other situations where virtually all communities affected by a major disaster were impacted to such an extent as to be unable to develop and submit hazard mitigation applications within the established HMGP timeframes.

In light of these unique circumstances, FEMA has requested and received a waiver from the White House's Office of Management and Budget (OMB) allowing it to develop a framework for implementing a limited exception to federal program requirements. Thus, the Agency is now considering an exception that would allow initiated and completed mitigation actions, implemented in the course of repair activities on structures damaged from these events in Louisiana and Mississippi, to become eligible for grant consideration. The costs of such actions, if determined to meet all other federal requirements, could then count towards the State's non-federal match requirements under the HMGP or, in some cases, could be partially reimbursed.

### **III. Program Alternatives**

This section discusses reasonable alternatives available to FEMA for deciding whether to implement a program exception from the requirement of FEMA approval before projects are initiated.

#### ***A. No Action Alternative***

Under this alternative FEMA would not implement a program exception. Only those projects that have not been initiated prior to FEMA approval and meet all HMGP requirements would be eligible for funding under HMGP in Louisiana and Mississippi.

#### ***B. Program Exception Implementation Alternatives***

Under these alternatives FEMA would implement a program exception for hazard mitigation projects initiated prior to FEMA approval if they were undertaken in Louisiana and Mississippi as a direct result of Hurricanes Katrina or Rita and in conjunction with the repair or restoration of a structure or facility damaged by the events. This would not include activities associated with a structure or facility that was not damaged by the event, nor the mitigation or construction of new buildings, facilities, or infrastructure

unless replacing a structure or facility that was damaged by the event. These projects must meet all other program eligibility and federal compliance requirements.

The States would submit initiated or completed hazard mitigation projects to FEMA for approval. The States would ensure that all appropriate documentation for each project is included with the project. FEMA will review projects to ensure they meet benefit-cost and engineering feasibility eligibility requirements.

Projects must obtain and comply with all applicable permits (e.g. National Pollution Discharge Elimination System [NPDES] permits, CWA Section 404 General or Individual Permits, Stormwater Pollution Prevention Plans [SWPPP], Incidental Take permits [ESA Section 10(a)(1)(b)], building permits for construction in the floodplain, coastal use permits, etc.). Projects that did not obtain applicable permits and properly implement permit conditions would not be eligible for HMGP funding.

The following alternatives are being considered for implementing the program exception:

#### **Alternative B-1: Exception for hazard mitigation measures to residential and commercial structures**

This alternative would make the exception available for hazard mitigation measures to residential and commercial structures that were damaged by Hurricanes Katrina or Rita. These hazard mitigation measures are limited to:

- Retrofitting residential and commercial structures for hazard protection
- Elevation of residential and commercial structures
- Mitigation Reconstruction of residential and commercial structures
- Demolition of existing residential and commercial structures where a prospective acquisition or mitigation reconstruction is proposed

Under this alternative FEMA would limit the applicability of the exception to actions initiated without FEMA approval at the date of announcement of the decision to implement the program exception. Projects not yet initiated at the announcement date would be subject to the normal HMGP procedures.

#### **Alternative B-2: Exception for hazard mitigation measures to residential and commercial structures with extension period**

This alternative addresses the same range of activities as Alternative B-1 but would extend the applicability of the exception for 60 days after the announcement is made. The intent of this period is to provide property owners with sufficient notice of the HMGP requirements and to allow sufficient time to finish any administrative and planning work (e.g., receipt of permits, execution of contracts, etc.) that was ongoing at the time of announcement. Any projects not initiated by the 60th day after the date of announcement would be subject to the normal HMGP procedures.

### Alternative B-3: Exception for hazard mitigation measures to residential and commercial structures, and to damaged public structures and facilities

This alternative would make the exception available to the activities included in Alternative B-1 and to hazard mitigation activities conducted in the course of the repair of public structures or facilities, including eligible private non-profit (PNP) buildings and facilities as defined in 44 CFR 206.221(e), damaged by the events. These activities include retrofits, elevations, Mitigation Reconstruction, and demolition (where a prospective acquisition or mitigation reconstruction is proposed) of residential, commercial and public structures and the following actions for public structures or facilities:

- Relocation of public facilities
- Minor, structure-specific flood control projects, such as floodgates or minor floodwalls
- Retrofit of stormwater management facilities
- Infrastructure protection measures
- Construction of associated safe rooms

For public structures and facilities the activities are subject to the following restrictions:

- The community has submitted an application prior to the state deadline for submission, but due to the lack of capacity, the State did not forward it to FEMA
- The mitigation measures to public or eligible private non-profit buildings or facilities cannot be eligible for FEMA's Public Assistance mitigation.

As is the case for Alternative B-1, this alternative would limit the applicability of the exception to actions initiated by the date of the announcement of the decision to implement the exception. Projects not yet initiated at that date would be subject to the normal HMGP procedures.

### Alternative B-4: Exception for hazard mitigation measures to residential and commercial structures, and to damaged public structures and facilities with extension period

This alternative addresses the same range of activities as Alternative B-3 but would extend the applicability of the exception for 60 days after the announcement is made. Any projects not yet initiated by the 60th day after the date of announcement would be subject to the normal HMGP procedures.

## ***C. Alternatives Considered but Dismissed***

The following alternatives were considered and dismissed because they did not meet the purpose and need:

**Geographic Scope Beyond Mississippi and Louisiana** – This alternative would have allowed the exception of initiated or completed hazard mitigation actions beyond these two States. This alternative was dismissed because it does not meet the purpose and need. The unique circumstances triggering the need for the program exception are only present in Mississippi and Louisiana as a result of Hurricanes Katrina and Rita.

**Hazard Mitigation Activities Not Associated with the Repair or Restoration of Damaged Structures** - This alternative would have allowed the exception for initiated or completed hazard mitigation actions that did not relate to the repair or restoration of damaged structures. This alternative was dismissed because it does not meet the purpose and need.



## IV. Summary of Impacts

	Alternative A, No Action	Alternative B-1, Measures to residential and commercial structures	Alternative B-2, Measures to residential and commercial structures/ extension period	Alternative B-3, Measures to residential and commercial structures and public structures and facilities	Alternative B-4, Measures to residential and commercial structures and public structures and facilities/ extension period
<b>A. Air Quality</b>	No Impacts	Negligible Impacts	Negligible Impacts	Negligible Impacts	Negligible Impacts
<b>B. Water Resources</b>	No Impacts	Negligible Impacts	Negligible Impacts	Minor Impacts	Minor Impacts
<b>C. Floodplains</b>	No Impacts	Negligible Impacts	Negligible Impacts	Minor Impacts. Projects with moderate to substantial effects that cannot be mitigated will not be approved.	Minor Impacts. Projects with moderate to substantial effects that cannot be mitigated will not be approved.
<b>D. Coastal Resources</b>	No Impacts	Negligible Impacts	Negligible Impacts	Minor Impacts	Minor Impacts
<b>E. Biological Resources</b>	No Impacts	Negligible Impacts	Negligible Impacts	Minor Impacts. Projects with moderate to substantial effects that cannot be mitigated will not be approved.	Minor Impacts. Projects with moderate to substantial effects that cannot be mitigated will not be approved.
<b>F. Historic Properties(1)</b>	No Impacts	Adverse Effects. FEMA will consult with appropriate SHPO, THPO, and the ACHP and develop Programmatic Agreements to address these effects.	Adverse Effects. FEMA will consult with appropriate SHPO, THPO, and the ACHP and develop Programmatic Agreements to address these effects.	Adverse Effects. FEMA will consult with appropriate SHPO, THPO, and the ACHP and develop Programmatic Agreements to address these effects.	Adverse Effects. FEMA will consult with appropriate SHPO, THPO, and the ACHP and develop Programmatic Agreements to address these effects.
<b>G. Environmental Justice</b>	No Impacts	Negligible Impacts	Negligible Impacts	Minor Impacts. Projects with disproportionate high and adverse environmental or health impacts to minority and low income populations that cannot be mitigated will not be approved.	Minor Impacts. Projects with disproportionate high and adverse environmental or health impacts to minority and low income populations that cannot be mitigated will not be approved.

(1) SHPO refers to State Historic Preservation Officer, THPO refers to Tribal Historic Preservation Officer, and ACHP refers to Advisory Council on Historic Preservation.

## V. Current Conditions and Environmental Impacts

FEMA’s EHP staff has considerable experience in the review of HMGP-eligible activities and the typical impacts associated with these activities.

As a result FEMA has developed categorical exclusions under NEPA, 44 CFR Part 10.8(d)(2), for HMGP activities that typically have no significant impact to the human environment and do not require further NEPA analysis. These activities include:

- Acquisition of properties and associated demolition, where the property acquired will be dedicated to open space in perpetuity
- Installation of utility and communication systems that use existing facilities or infrastructure rights of way
- Physical relocation of individual structures
- Reconstruction, elevation, retrofitting, and upgrading to current codes and standards of structures in a manner that substantially conforms to the pre-existing design, function, and location
- Improvements to facilities and construction of small-scale hazard mitigation measures in existing developed areas with substantially completed infrastructures when:
  - the immediate project area has been disturbed
  - the actions do not alter basic functions
  - the actions do not exceed capacity of other system components (e.g. hydrologic systems, traffic, public infrastructure, etc.)
  - the actions do not modify intended land uses
  - the operation of the completed project does not have an adverse impact to the environment

When hazard mitigation actions that would typically be covered by these NEPA categorical exclusions include elements that would cause impacts to the human environment, like impacts to floodplains, endangered species, historic properties, and environmental justice issues, there may be a need to develop an environmental assessment (EA) to evaluate these impacts. Examples of EAs for some typical HMGP-eligible activities can be found at <http://www.fema.gov/plan/ehp/envdocuments>. These documents are incorporated by reference in this programmatic environmental assessment (PEA). In particular, this PEA incorporates the following documents:

<b>HMGP-Eligible Activity</b>	<b>Project Title</b>	<b>Web link</b>
Flood Control Projects	Garfield and Walter’s Subdivision Drainage Improvement Projects, Bay County, MI	<a href="http://www.fema.gov/library/viewRecord.do?id=2715">http://www.fema.gov/library/viewRecord.do?id=2715</a>
	Flint River Flood Mitigation	<a href="http://www.fema.gov/pdf/plan/eh">http://www.fema.gov/pdf/plan/eh</a>

	Alternatives in Saginaw County, MI	<a href="#">p/flint-river-ea.pdf</a>
	Cambria Flood Mitigation Project, San Luis Obispo County, CA	<a href="http://www.fema.gov/library/viewRecord.do?id=2100">http://www.fema.gov/library/viewRecord.do?id=2100</a>
	City of Titusville Flood Protection Project, Crawford County, PA	<a href="http://www.fema.gov/library/viewRecord.do?id=2183">http://www.fema.gov/library/viewRecord.do?id=2183</a>
Retrofits/ Structure Hardening	Waterloo High School Seismic Upgrade Project, Monroe County, IL	<a href="http://www.fema.gov/library/viewRecord.do?id=2527">http://www.fema.gov/library/viewRecord.do?id=2527</a>
Infrastructure Improvements	Elm Avenue Stormwater Diversion Project, Wright County, MN	<a href="http://www.fema.gov/pdf/plan/ehp/elmavenue-fea.pdf">http://www.fema.gov/pdf/plan/ehp/elmavenue-fea.pdf</a>
	East Side Stormwater Lift Station, Wright County, MN	<a href="http://www.fema.gov/pdf/plan/ehp/eastside-fea.pdf">http://www.fema.gov/pdf/plan/ehp/eastside-fea.pdf</a>
	Flood Mitigation for Pumping Station No. 1, Genesee County, MI	<a href="http://www.fema.gov/library/viewRecord.do?id=1953">http://www.fema.gov/library/viewRecord.do?id=1953</a>
Drainage Improvement	West Dietz Creek Drainage Improvement Project, City of Schertz, TX (Supplemental)	<a href="http://www.fema.gov/library/viewRecord.do?id=1948">http://www.fema.gov/library/viewRecord.do?id=1948</a>
	Storm Drain Improvement Project, Ione, CA	<a href="http://www.fema.gov/library/viewRecord.do?id=2007">http://www.fema.gov/library/viewRecord.do?id=2007</a>
Programmatic Assessments	Programmatic Environmental Assessment for Hazard Mitigation Actions in Mississippi	<a href="http://www.fema.gov/pdf/plan/ehp/Miss_EA.pdf">http://www.fema.gov/pdf/plan/ehp/Miss_EA.pdf</a>
	Programmatic Environmental Assessment for Typical Recurring Actions, Flood, Earthquake, Fire, Rain, and Wind Disasters in California	<a href="http://www.fema.gov/pdf/plan/ehp/cal_pea.pdf">http://www.fema.gov/pdf/plan/ehp/cal_pea.pdf</a>

Through its vast experience performing environmental reviews on similar project types throughout the Gulf States and the country, FEMA determined that the proposed alternatives may have raised concerns with following environmental considerations: air

quality, water resources, floodplains, coastal resources, biological resources, historic properties, and environmental justice.

The following sections describe the environmental impacts of the reasonable alternatives for the implementation of the program exception. This evaluation is done by each of the areas of concern identified above. In the first part of the discussion of each resource area there will be a brief description of current environmental conditions in each State. The second part describes the baseline for each resource, explaining what environmental impacts likely occurred as a result of the implementation of hazard mitigation measures by project proponents. The impacts of initiated or completed actions are characterized using a scale of negligible, minor, moderate, or substantial effects. This part also discusses how the environmental review would have been conducted if FEMA had an opportunity to perform this review prior to project initiation.

The final section of the discussion of each resource area focuses on the environmental impacts of each of the identified alternatives. Each of the alternatives contains an assessment of the likely impacts of the alternative to the human environment using a scale of no impacts, negligible, minor, moderate, or significant impacts. In addition, each alternative has a discussion on the loss of opportunity to enhance the environment and minimizes impacts to the resource to the maximum extent possible.

## ***A. Air Quality***

### **1. Current Conditions**

#### **Louisiana**

The U.S. Environmental Protection Agency (EPA) has delegated its CAA enforcement authority to the Louisiana Department of Environmental Quality (LDEQ). The State's air quality standards are identical to the Federal standards and are codified in Louisiana Administrative Code 33:III.711. The LDEQ also has fugitive dust emission control requirements and related best management practices (BMP) in its regulations, which pertain to all activities that emit particulate matter

The parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge are the only nonattainment areas for ozone in Louisiana. All parishes in Louisiana are classified as attainment for all other criteria pollutants designated under the CAA.

To address ozone in nonattainment areas, the Louisiana State Implementation Plan (SIP) mandates that a new project must not result in an increase in volatile organic compounds or NO<sub>2</sub> emissions when compared to not taking action in both the long and short terms. The proposed action must not result in any new violations or increases of Federal or State ambient air quality standards.

#### **Mississippi**

The U.S. EPA has delegated its CAA enforcement authority to the Mississippi Department of Environmental Quality (MDEQ), Air Quality Division. The State's air

quality standards are identical to the Federal standards except that MDEQ also has odor standards.

MDEQ has a network of monitoring stations throughout the State that measures and records ambient air quality. Based on these measurements, Mississippi is in attainment of all criteria pollutants designated under the CAA. As a result, General Conformity Rule (GCR) requirements do not apply to federally funded or approved activities in the State.

## **2. Environmental Impacts**

### **Baseline**

Project proponents have undertaken hazard mitigation activities. These activities likely caused short-term and negligible impacts to air quality.

Fugitive dust emissions from ground disturbance and emissions from combustion engines associated with construction activities were likely the most common impacts resulting from all hazard mitigation project types. Fugitive dust emissions would be less likely to have occurred for building retrofits and elevations. For most project types considered for approval, emissions would have only occurred during construction and would have been negligible due to the small scale of the activity. In cases where a project had the potential to cause measurable air quality emissions, FEMA assumes that the impacts were kept to negligible levels by incorporating BMPs (such as watering construction areas, maintaining spoil piles, applying pollution-abatement equipment to mechanical equipment, and keeping construction vehicles properly maintained) and complying with conditions of air quality permits, construction permits, and local ordinances.

Project proponents would have been responsible for compliance with all provisions of the CAA that have been delegated to the State, as well as obtaining all applicable air quality permits from the LDEQ or MDEQ, following local ordinances, and obtaining construction permits.

Through its EHP review process FEMA would have evaluated each HMGP project application for its potential to affect air quality. For most project types considered for approval, air emissions would be so minor that no formal GCR would be conducted. For projects that have the potential to adversely affect air quality, FEMA would have conducted an analysis for compliance with the GCR of the CAA before initiation of each project. By following this procedure, FEMA would ensure that each project conformed to the SIP. However, Mississippi is in attainment of all criteria pollutants designated under the CAA and GCR requirements do not apply to FEMA-approved activities in the State. Therefore, all projects in Mississippi would have been performed in compliance with the GCR. In Louisiana, all but five parishes are in attainment for all criteria pollutants designated under the CAA. Similarly, GCR requirements do not apply to FEMA-approved activities in these parishes.

A GCR review would have been required for those projects that had the potential to adversely affect air quality in the five parishes that are in nonattainment areas for ozone

(i.e., Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge). Based on FEMA's experience, the following project types normally result in air quality emissions well below the emissions threshold rates for GCR review of all criteria pollutants, including ozone precursors: relocations of homes, demolitions, retrofitting structures, elevations, reconstruction, infrastructure protection measures, and safe room construction. The remaining project types (i.e. relocation of public facilities, flood control projects, and stormwater management) would have been evaluated for GCR compliance and conformity with the SIP.

## Alternatives

### **Alternative A, No Action Alternative**

FEMA would not implement a program exception. This alternative would not have impacts on air quality.

FEMA would not lose its ability to ensure that all HMGP grant funds are used in a manner that avoid impacts to air quality to the maximum extent practicable and enhances the environment.

### **Alternative B, Program Exception Implementation Alternatives**

#### *Alternative B-1, Exception for Hazard Mitigation Measures for Residential and Commercial Structures*

FEMA's inability to review projects with the potential to affect air quality prior to project initiation precluded FEMA from performing an analysis to ensure compliance with the GCR. However, as described above, most these activities would have had emissions below the threshold rates. Therefore, projects would have been conducted in compliance with the GCR and the impacts of this alternative on air quality would be negligible.

Since the effects of these initiated actions to air quality were negligible, FEMA would not lose its ability to ensure that all HMGP grant funds are used in a manner that minimizes impacts to air quality to the maximum extent practical and enhances the environment.

#### *Alternative B-2, Exception for Hazard Mitigation Measures for Residential and Commercial Structures with Extension Period*

For projects already initiated, impacts would occur as described for Alternative B-1.

The 60-day extension period for the applicability of the exception may result in a higher number of projects subject to the exception. However, as described for Alternative B-1, the types of projects involved in Alternative B-2 would cause negligible effects to air quality and would be conducted in compliance with the GCR. The impacts of this alternative on air quality would be negligible.

Since the effects of these actions to air quality are expected to be negligible, FEMA would not lose its ability to ensure that all HMGP grant funds are used in a manner that minimizes impacts to air quality to the maximum extent practical and enhances the environment.

*Alternative B-3, Exception for Hazard Mitigation Measures to Residential and Commercial Structures, and to Public Structures and Facilities*

As described for Alternative B-1 and B-2, hazard mitigation to residential and commercial structures, would have resulted in negligible effects to air quality and would have complied with the GCR.

The following project types had some potential to affect air quality: relocation of public facilities, flood control projects, and stormwater management. As described in Baseline, all impacts for such projects were likely kept to negligible levels by incorporating BMPs (such as watering construction areas, maintaining spoil piles, applying pollution-abatement equipment to mechanical equipment, and keeping construction vehicles properly maintained) and complying with conditions of air quality permits, construction permits, and local ordinances. Thus, impacts from these project types would have been negligible and these project types are assumed to have complied with the GCR. The impacts of this alternative on air quality would be negligible.

Since the effects of these completed actions to air quality were negligible, FEMA would not lose its ability to ensure that all HMGP grant funds are used in a manner that minimizes impacts to air quality to the maximum extent practical and enhances the environment.

*Alternative B-4, Exception for Hazard Mitigation Measures to Residential and Commercial Structures, and to Public Structures and Facilities with Extension Period*

For projects already initiated, impacts would occur as described for Alternative B-3.

The 60-day extension period for the applicability of the exception may result in a higher number of projects subject to the exceptions. However, as described for Alternative B-3, the types of projects involved would cause negligible effects to air quality and are assumed to comply with the GCR. The impacts of this alternative to air quality would be negligible.

Since the effects of these actions to air quality are expected to be negligible, FEMA would not lose its ability to ensure that all HMGP grant funds are used in a manner that minimize impacts to air quality to the maximum extent practical and enhances the environment.

## **B. Water Resources**

### **1. Current Conditions**

#### Louisiana

The LDEQ manages certification under CWA Section 401 to ensure compliance with State water quality standards. Water quality certification is obtained from the LDEQ prior to project approval. In addition, LDEQ administers the stormwater pollution prevention permitting and monitoring program, which requires a SWPPP for any construction activity that would affect more than one acre of land.

Louisiana has assessed about 13 percent of rivers and streams, 55 percent of lakes and reservoirs, 63 percent of bays and estuaries, and 12 percent of its wetlands. Of the assessed rivers and streams, 17 percent are considered to be in attainment and 83 percent are considered to be impaired. Six percent of the assessed lakes and reservoirs are considered to be in attainment and 93 percent are considered to be impaired. Fifty percent of the assessed bays and estuaries are considered to be in attainment and 50 percent are considered to be impaired. Fifty seven percent of the assessed wetlands are considered to be in attainment while 43 percent are considered to be impaired. (EPA, 2004). Mercury, total suspended solids, low dissolved oxygen, invasive species and total fecal coliform are thought to be major causes of stream impairments. A list of impaired waters can be found at [http://iaspub.epa.gov/tmdl/state\\_rept.control?p\\_state=LA&p\\_cycle=2002](http://iaspub.epa.gov/tmdl/state_rept.control?p_state=LA&p_cycle=2002).

Groundwater is the source of drinking water for 61 percent of Louisiana's residents. Of this 61 percent, 12 percent obtain water from domestic wells and 49 percent receive water from public water supplies. The major sources of groundwater come from the Sparta Aquifer in north Louisiana, the Mississippi River Alluvial Aquifer, the Chicot Aquifer in southwest Louisiana, and the Southern Hills Aquifer in the southeastern part of the State (Southern Regional Water Program, 2006). Louisiana also has a number of rivers, lakes, and reservoirs that are used as public water supplies.

The only wild and scenic river in Louisiana is the Saline Bayou from the Saline Lake upstream to the Kisatchie National Forest. This stretch is designated as scenic and noted for "vegetation, animal and bird life, and calm black water."

Louisiana has approximately 3 million acres of wetlands that extend as much as 80 miles inland and along the coast for about 185 miles (U.S. Geological Survey, 1995). Louisiana is home to approximately 40 percent of the wetlands in the continental United States. The function and value of wetlands include: surface water storage (flood control), shoreline stabilization (wave damage protection/shoreline erosion control), sediment deposition, removal and nutrient cycling (water quality protection), supporting aquatic productivity (fishing, shell fishing, and waterfowl hunting), production of trees, production of peaty soils, and provision of plant and wildlife habitat (FWS, 2006a).

#### Mississippi



Mississippi has adopted comprehensive regulations for conducting Section 401 Water Quality Certifications, enabling the State to review Federal licenses and permits for compliance with State water quality standards.

Sources of nonpoint pollution, such as urban runoff and failing septic systems, are responsible for the majority of the impaired surface waters in Mississippi. Of the river 9 percent of rivers and stream miles assessed, 43 percent have good rating for aquatic life support, 4 percent for fish consumption, 61 percent for primary contact (recreational), and 62 percent for secondary contact. Fifty seven percent are impaired for aquatic life support, 95 percent for fish consumption, 39 percent for primary contact, and 38 percent for secondary contact. Sediment, atmospheric deposition, and channelization are the primary identifiable sources of contamination. (EPA, 2004). Metals and nutrients are the most common pollutants impacting bays and estuaries (EPA, 2000). A list of impaired is available at [http://iaspub.epa.gov/tmdl/state\\_rept.control?p\\_state=MS&p\\_cycle=2004](http://iaspub.epa.gov/tmdl/state_rept.control?p_state=MS&p_cycle=2004).

Mississippi has 15 major aquifers that are used to supply freshwater for domestic and industrial supplies. Groundwater supplies 80 percent of the water used in Mississippi; only two municipalities get water from surface-water sources. About 2 billion gallons per day of freshwater are withdrawn from the Mississippi River alluvial aquifer in the Delta.

The only wild and scenic river in Mississippi is the reach of Black Creek from Bridge Landing upstream to Moody's Landing. This reach is designated as "scenic" meaning that it is undeveloped, occasionally accessible by road, with shorelines or watersheds largely undeveloped.

## **2. Environmental Impacts**

### **Baseline**

Project proponents have undertaken hazard mitigation activities. These activities likely caused negligible to minor impacts to water resources, including wetlands.

The following hazard mitigation project types had the potential to impact water resources by affecting water quality, local hydrology, or wetlands: flood control, stormwater management, reconstruction of structures, relocation of structures, and infrastructure protection measures.

Through its EHP review process FEMA would have evaluated each HMGP project application for compliance with 44 CFR Part 9 - Floodplains Management and Wetland Protection and the Wild and Scenic Rivers Act before initiation of each project. Part 9 provides FEMA's procedures for compliance with E.O. 11988 and E.O. 11990 and establishes an eight-step decisionmaking process for ensuring Federal funds are not used for actions adversely affecting wetlands.

During its Part 9 compliance process FEMA would have determined if the project would affect wetlands and if there are practicable alternatives to avoid affecting wetlands. If a Federal action must be undertaken that impacts wetlands, then FEMA would find

methods for minimizing the impacts. By following this procedure, FEMA would ensure that each project conforms to these rules and avoids, minimizes, or mitigates for impacts to wetlands and wild or scenic rivers to the maximum extent possible.

Through its EHP review process, FEMA would have evaluated each HMGP project application for its potential to affect water resources. FEMA would have worked with the proponent to modify the project, if needed, in a manner that takes into account impacts to water resources. If necessary, FEMA would have also established grant conditions, such as implementation of erosion and sediment control plans or wetlands mitigation, to minimize impacts to water resources. Some of the changes could have altered the cost of the project and could have impacted its design. These additional costs, under some circumstances, may have become eligible for funding. Taking these measures would allow FEMA to ensure that all its funds are used in a manner that, to the extent practical, does not adversely impact water resources and enhances the environment.

For projects that had the potential to affect water resources, proponents would have been required to comply with all provisions of the CWA. Projects that involve discharge to water bodies or construction of at least 1 acre would have required proponents to obtain and follow conditions of NPDES permits from LDEQ or MDEQ. Projects that resulted in dredge or fill of wetlands would have required proponents obtain and implement the terms of wetland permits (State permits or CWA 404 permits). The issuance of a CWA 404 permit would have required proponents obtain and follow the conditions of CWA Section 401 Water Quality Certifications from LDEQ or MDEQ. Proponents would have been required to obtain local construction permits and comply with all local ordinances.

## Alternatives

### **Alternative A, No Action Alternative**

FEMA would not implement a program exception. This action would not have effects on water resources.

FEMA would not lose its ability to ensure that all HMGP grant funds are used in a manner that avoid impacts to water resources to the maximum extent practicable and enhances the environment.

### **Alternative B, Program Exception Implementation Alternatives**

#### *Alternative B-1, Exception for Hazard Mitigation Measures for Residential and Commercial Structures*

Reconstruction and relocation of structures are the only project types under this alternative with potential to impact water resources by affecting water quality, local hydrology, or wetlands. Since most projects with the potential to affect water resources would have been avoided or minimized through measures imposed by appropriate

regulatory agencies, the impacts of this alternative on water resources would be negligible.

FEMA would not lose its ability to ensure that all HMGP grant funds are used in a manner that minimizes impacts to water resources to maximum extent practical and enhances the environment.

*Alternative B-2, Exception for Hazard Mitigation Measures for Residential and Commercial Structures with Extension Period*

For projects already initiated, impacts would occur as described for Alternative B-1.

The 60-day extension period for the applicability of the exception may result in a higher number of projects subject to the exception. However, as described for Alternative B-1, the activities would have been regulated even without Federal involvement. Thus, the impacts of this alternative on water resources will be negligible.

FEMA would not lose its ability to ensure that all HMGP grant funds are used in a manner that minimizes impacts to water resources to the maximum extent practical and enhances the environment.

*Alternative B-3, Exception for Hazard Mitigation Measures to Residential and Commercial Structures, and to Public Structures and Facilities*

As described in the Baseline, only the following project types would have resulted in potential impacts to water resources: flood control, stormwater management, reconstruction of structures, relocation of structures, and infrastructure protection measures. Impacts associated with reconstruction and relocation of structures were described for Alternative B-1. Impacts associated with these other project types would be subject to the same restrictions as described for reconstruction and relocation. The impacts of this alternative on water resources would be minor.

FEMA would not lose its ability to ensure that all HMGP grant funds are used in a manner that minimizes impacts to water resources to the maximum extent practical and enhances the environment.

*Alternative B-4, Exception for Hazard Mitigation Measures to Residential and Commercial Structures, and to Public Structures and Facilities with Extension Period*

For projects already initiated, impacts would occur as described for Alternative B-3.

The 60-day extension period for the applicability of the exception may result in a higher number of projects subject to the exception. However, as described for Alternative B-3,

the activities would have been regulated even without Federal involvement. Thus, the impacts of this alternative on water resources would be minor.

FEMA would not lose its ability to ensure that all HMGP grant funds are used in a manner that minimizes impacts to water resources to the maximum extent practical and enhances the environment.

## ***C. Floodplains***

### **1. Current Conditions**

#### **Louisiana**

Louisiana floodplains consist of large interconnected lakes, meandering rivers, and coastal flood sources from inland bays and open coasts. Louisiana is largely comprised of a unique and extensive system of wetlands and marshes (also known as bayous) that make up the broad coastal lowlands. In some areas of coastal Louisiana, these lowland bayous and marshes extend up to 20 miles inland. These coastal lowlands eventually merge into topographic areas with well defined rises, depressions, and confined floodplains. The principal river flood problems are due to heavy rainfall and runoff from frontal systems that pass over or become stationary over the area, with the eventual rise of water levels causing an overflow of the bayous, streams, and rivers into surrounding floodplains. The coastal lowlands are subject to flooding and wave actions caused by hurricane storm surge and associated intense rainfall. A majority of the residential and commercial development is centered in major urban cities inland of the coast and along interstate highways, with large agriculture and forestry interests confined to rural areas in the northern reaches of the coastal counties and further inland.

Within Louisiana, the coastal development pressure is limited to the special levee districts that can offer a system of flood protection measures (levees) to protect residents from hurricane storm surge flooding. The levees themselves change the flow and direction of rivers and streams and alter the coastal hydrology resulting in significant subsidence and loss of the coastal wetlands resulting in increased flood potential. Further inland, urbanized areas are constructing flood protection measures with dikes, floodwalls, and levees to mitigate potential flood damages from both river and coastal flooding.

Within the State, the Louisiana Department of Natural Resources (LDNR) has a regulatory authority over floodplain and permitting authority over all new projects. In Parishes and incorporated communities, the local building department or planning office will enforce development and building regulations using the FEMA flood data. Additional floodplain management authority extends to the special taxing districts within Louisiana established to operate levee districts to maintain flood protection structures, sometimes encompassing several incorporated communities.

In the aftermath of Hurricanes Katrina and Rita, FEMA issued Recovery Maps with Advisory Base Flood Elevations (ABFE) that reflect current flood hazards in the impacted areas. This information was intended to be used to assist in the recovery efforts

of these communities. Thirty-eight communities have adopted the ABFE, three communities are in process of adoption, and one community has rejected them. Appendix A provides a table with the communities that adopted these ABFE. FEMA intends to release preliminary digital Flood Insurance Rate Maps (pre-DFIRM) in the near future depicting the current flood hazards of the area as part of the normal FIRM consultation and adoption process.

## Mississippi

Mississippi floodplains consist of an extensive network of marshes, wetlands, and rivers, as well as coastal flood sources comprised of open coastal beaches and inland bays. These coastal lowlands extend up broad river floodplains of the Pearl and Pascagoula Rivers, and merge into topographic areas with well defined rises, depressions, and confined floodplains. The principal river flood problems in Mississippi are also due to heavy rainfall and runoff from frontal systems that pass over or become stationary over the area. The heavy rains result in rise of water levels within the watercourse, and overflow of these bayous, streams, and rivers into surrounding floodplains. The coastal lowlands are subject to flooding and wave actions caused by hurricane storm surge and associated intense rainfall. A majority of the residential and commercial development is centered in major urban coastal cities or along interstate highways, with large agriculture and forestry interests confined to rural areas in the northern reaches of the coastal counties and further inland.

Within Mississippi, coastal development pressure is intense with major urban cities in need of new transportation and infrastructure following the devastation caused by Hurricane Katrina. The USACE has developed a series of projects under the Mississippi Coastal Improvement Program to build flood defenses along the coast to resist hurricane storm surge and waves and protect community residents. Further inland of the coast, communities are seeing increased development as residents move inland to avoid damaging hurricanes, which places additional pressure on natural resources and in some cases decreases floodplain storage capacity. Some inland urbanized areas are constructing flood protection measures with dikes, floodwalls, and levees to mitigate potential flood damages from both river and coastal flooding.

The MDEQ has a regulatory authority over floodplain and permitting authority over all new projects, while within counties and local incorporated communities, the local building department or planning office enforces development and building regulations using the FEMA flood data.

In the aftermath of Hurricanes Katrina and Rita, FEMA issued Recovery Maps with ABFE that reflect current flood hazards in the impacted areas. This information was intended to be used to assist in the recovery efforts of these communities. Six communities have adopted these and the remaining eight have adopted free-boards on top of the effective Flood Insurance Rate Maps (FIRM). Appendix A provides a table with the status of these communities. FEMA intends to release preliminary digital Flood Insurance Rate Maps (pre-DFIRM) in the near future depicting the current flood hazards of the area as part of the normal FIRM consultation and adoption process.

## 2. Environmental Impacts

### Baseline

Project proponents have undertaken hazard mitigation activities. These activities would have caused negligible to substantial impacts to floodplains and may have been constructed with reduced protection against future floods.

Generally the types of activities with the potential to adversely affect floodplains include flood control projects, stormwater management projects, construction in previously undisturbed lands, and some infrastructure protection measures. Flood control projects and stormwater management projects have the potential to modify hydrologic conditions upstream and downstream and change the dynamics of the floodplains. These types of projects may require hydrologic and hydraulic engineering studies to ensure that they are feasible and do not place additional properties at risk of future flooding. Other effects of these types of projects include impacts to the natural and beneficial values of floodplains like floodwater storage and conveyance, floodwater velocity, flood peaks, and recharge of groundwater. Other construction related projects may adversely affect natural and beneficial functions of the floodplain like regulation of floodwater velocity, regulation of flood peaks, and groundwater recharge by removing vegetation cover.

The hazard mitigation measures associated with structures would have negligible impacts to floodplains. Demolitions where a prospective acquisition is proposed would ensure that the land is left as open space after existing buildings are demolished and would enhance natural and beneficial functions of floodplains. Elevations, building retrofits, relocation, and reconstruction projects would ensure that structures are protected against impacts from future floods. To be eligible for the HMGP these activities would need to meet program requirements, such as elevation to the ABFE (or pre-DFIRM if available) and compliance with local floodplain ordinances.

Through its EHP review process, FEMA would have evaluated each HMGP project application for compliance with 44 CFR Part 9 – Floodplain Management and Wetland Protection, before the initiation of each project. FEMA's procedures for compliance with E.O. 11988 and E.O. 11990 comprise Part 9. It establishes an eight-step decisionmaking process for ensuring wise use of Federal funds, avoidance of the long- and short-term adverse impacts associated with the occupancy and modification of floodplains, and avoidance of the direct or indirect support of floodplain development whenever there is a practicable alternative.

During its 44 CFR Part 9 compliance process, FEMA would have determined if the project would take place in the floodplain and if there were practicable alternatives outside the floodplain. If the action had to be undertaken in the floodplain, then FEMA would have found methods for minimizing the potential harm to people and property. FEMA would also have identified methods for minimizing harm to the floodplain's natural and beneficial values and, where possible, restoring and preserving these values. FEMA's minimization standards may be more stringent than the required standards under local floodplain ordinances. Examples include applicability of minimization standards to

non-insurable structures, restrictions on the use of FEMA funds for projects that encroach on floodways, elevation to the BFE in accordance to the best available data, and locating critical actions outside of the 500-year floodplain when practical. Under Part 9, FEMA would use available ABFE or Preliminary Floodplain Rate Map data, when available, as they constitute the best available data.

FEMA would have worked with the project proponent to modify the project, if needed, in a manner that takes into account impacts of the project to the floodplain and impacts from floods to the project. As a result of its review pursuant to Part 9, FEMA would have established grant conditions to avoid, minimize, or compensate for impacts to and from floodplains. Some of the changes could have altered the cost of the project and could have impacted its design. These additional costs may, under certain circumstances, have become eligible for funding. Taking these measures would allow FEMA to ensure that all its funds are spent wisely, are used in a manner that enhances the environment, and to the extent practical minimize impacts floodplains.

Private and public actions would have been required to comply with local floodplain ordinances, including obtaining the appropriate floodplain development permits for construction in the 100-year floodplain.

## Alternatives

### **Alternative A, No Action Alternative**

FEMA would not implement a program exception. This alternative would not have effects to floodplains.

FEMA would not lose its ability to ensure that all HMGP grant funds are used in a manner that minimizes impacts to floodplains to the maximum extent practicable and enhances the environment.

### **Alternative B, Program Exception Implementation Alternatives**

#### *Alternative B-1, Exception for Hazard Mitigation Measures for Residential and Commercial Structures*

Under this alternative FEMA would not approve projects that did not meet the program requirements, such as elevations below ABFE (or pre-DFIRM if available). Meeting these requirements would ensure that the effects to and from floodplains are negligible. This alternative would have negligible effects to floodplains.

FEMA would not lose its ability to ensure that all HMGP grant funds are used in a manner that minimizes impacts to floodplains to the maximum extent practicable and enhances the environment.

*Alternative B-2, Exception for Hazard Mitigation Measures for Residential and Commercial Structures with Extension Period*

For projects already initiated, impacts would occur as described for Alternative B-1.

The additional 60-day extension period for the applicability of the exception may result in a higher number of projects subject to the exception but an equal level of impacts to floodplains as identified in Alternative B-1. This alternative may provide proponents with an incentive to initiate projects before FEMA resumes its normal procedures. However, to be eligible the project would have to meet program requirements, which would ensure that the impacts to and from floodplains are negligible. Thus, this alternative would result in similar levels of impacts as Alternative B-1.

*Alternative B-3, Exception for Hazard Mitigation Measures to Residential and Commercial Structures, and to Public Structures and Facilities*

Under this alternative FEMA would not approve projects that had moderate to substantial effects to floodplains. FEMA may approve projects that had negligible to minor impacts to floodplains if they were conducted in a manner consistent with local floodplain ordinances. FEMA would screen flood control projects, stormwater management projects, and projects involving construction in undisturbed land to determine if they would cause moderate to substantial effects to floodplains or encourage development in the floodplain. FEMA would not approve these projects unless their effects can be mitigated. This alternative would result in minor impacts to floodplains because FEMA would limit approval to projects with negligible to minor effects to floodplains and those that do not encourage development in the floodplain.

However, under this alternative FEMA would lose its ability to ensure that all its grant funds are used in a manner that enhances the environment and minimizes impacts to and from floodplains to the maximum extent practical. Environmental mitigation may be used to reduce effects to the floodplains, but this would be limited to remedial mitigation actions rather than proactive measures like changes in design or other measures that would have been available before the project started. Additionally, the opportunity to capture true costs of these projects, which include potential EHP mitigation like changes in design, would have not been captured.

Therefore, the amount of grant funds that would be used in a manner that enhances the environment, avoids or minimizes impacts to and from floodplains beyond what would be required by local flood plain ordinances to the maximum extent practical, and takes into account true project costs would be reduced in Louisiana and Mississippi to a small number of hazard mitigation projects that have not yet started.

*Alternative B-4, Exception for Hazard Mitigation Measures to Residential and Commercial Structures, and to Public Structures and Facilities with Extension Period*



The additional 60-day extension period for the applicability of the exception may result in a higher number of projects subject to the exception and an increased number of impacts to floodplains than Alternative B-3. These impacts would be minor because the projects would need to meet HMGP eligibility requirements.

As with Alternative B-3, FEMA would not approve projects that had moderate to substantial effects to floodplains. FEMA may approve projects that had negligible to minor impacts to floodplains if they were conducted in a manner consistent with local floodplain ordinances. FEMA would screen flood control projects, stormwater management projects, and projects involving construction in undisturbed land to determine if they would cause moderate to substantial effects to floodplains or encourage development in the floodplain. FEMA would not approve these projects unless their effects can be mitigated. This alternative would result in minor impacts to floodplains because FEMA would limit approval to projects with negligible to minor effects to floodplains and those that do not encourage development in the floodplain.

Like Alternative B-3, FEMA's ability to ensure that all HMGP grant funds are used in a manner that enhances the environment, avoids or minimizes impacts to and from floodplains beyond what would be required by local flood plain ordinances to the maximum extent practical, and takes into account true project costs would be reduced in Louisiana and Mississippi to a small number of hazard mitigation projects that have not yet started.

## ***D. Coastal Resources***

### **1. Current Conditions**

#### **Louisiana**

The Coastal Management Division (CMD) of the Louisiana Department of Natural Resources (LDNR) is charged with implementing the Louisiana Coastal Resource Program (LCRP). The LCRP makes the final determination on whether activities of Federal agencies are consistent with the LCRP. Consistency determinations are required for activities that are federally funded, licensed, or permitted.

Throughout the State of Louisiana, communities and parishes have local ordinances and regulations that regulate land use and zoning in their respective jurisdictions.

Coastal Louisiana is home to an abundant and unique system of wetlands and marshes that is commonly referred to as the bayou. These bayous are a vital part of the State's ecosystem that serve as stormwater protection and preserve water quality while providing a natural habitat to an abundance of fisheries. The LCRP is charged with implementing and managing the coastal resource programs in Louisiana under the CZMA and CBRA, which protect coastal resources. The LCRP regulates activities that may increase the loss of wetlands and aquatic resources and resolves conflicts between coastal resource users.

This helps to create a coastal environment that protects natural resources and reduces conflicts between the natural and built environments.

## Mississippi

The Mississippi Department of Marine Resources (MDMR) supervises land acquisition and construction within the Mississippi Coastal Zone. FEMA must conduct its activities in a manner consistent with Mississippi's federally approved Coastal Management Program (CMP).

Mississippi has developed a Coastal Preserves Program to acquire, protect, and manage sensitive coastal wetland habitats. The State has identified 20 coastal preserve sites and has obtained title for approximately 30,000 acres of coastal wetland habitat.

In the past, coastal waters suffered from elevated bacterial counts due to wastewater discharge from private and public sewage systems. This problem has been partially alleviated by the construction of regional wastewater treatment facilities.

## **2. Environmental Impacts**

### Baseline

Project proponents have undertaken hazard mitigation activities. These activities would have caused negligible to minor impacts to coastal uses and resources.

In Louisiana, the following hazard mitigation activities would have been subject to a Coastal Use Permit (CUP): flood control projects, stormwater management projects, infrastructure protection measures, and any activity impacting wetlands. Through its CUP process Louisiana's CMD would have identified methods for minimizing impacts to coastal resources.

In Mississippi, hazard mitigation activities that would have required a permit would have been those that impact wetlands (Coastal Zone Wetland Permit) and construction activities equal or greater than one acre. Typically these would include flood control projects, stormwater management projects, and infrastructure protection measures.

Since hazard mitigation projects would have been required to meet the States' enforceable policies process regardless of Federal involvement, FEMA assumes that the impacts of these activities were addressed at the time of permit approval and therefore the impacts are negligible to minor.

Through its EHP review process, FEMA would evaluate each HMGP project application for compliance with the CBRA before the initiation of each project. FEMA would not approve projects that are in a Coastal Barrier Resources System (CBRS) unit. FEMA would follow Federal Consistency regulations, 15 CFR 930.90, governing the consistency determinations with CMPs. FEMA would require project proponents to submit applications of coastal projects to the designated State agency (Mississippi's DMR and Louisiana's CMD) for consistency review. Through this review FEMA would

ensure that the activities to be approved will be consistent with the enforceable policies of the States' CMPs.

Proponents are assumed to have complied with the enforceable policies of the applicable State's CMP. FEMA would consider hazard mitigation activities undertaken at CBRS units ineligible for assistance. Thus, the agency would not approve these activities irrespective of when they were initiated or completed.

## Alternatives

### **Alternative A, No Action Alternative**

FEMA would not implement a program exception. This alternative would have no effects on coastal uses and resources.

FEMA would not lose its ability to ensure that all HMGP grant funds are used in a manner that minimizes impacts to coastal uses and resources to the maximum extent practicable and enhances the environment.

### **Alternative B, Program Exception Implementation Alternatives**

#### *Alternative B-1, Exception for Hazard Mitigation Measures for Residential and Commercial Structures*

Activities covered under this alternative FEMA would have negligible effects to coastal uses and resources. This alternative would have negligible impacts to coastal uses and resources.

Since the effects of these actions to coastal uses and resources are negligible, FEMA would not lose its ability to ensure that all its grant funds are used in a manner that enhances the coastal environment and minimizes impacts to coastal uses and resources to the maximum extent practical.

#### *Alternative B-2, Exception for Hazard Mitigation Measures for Residential and Commercial Structures with Extension Period*

For projects already initiated, impacts would occur as described for Alternative B-1.

The additional 60-day extension period for the applicability of the exception may result in a higher number of projects subject to the exception but an equal level of effects to coastal uses and resources as identified in Alternative B-1. However, the effects of these types of actions to coastal uses and resources would be negligible. Thus, this alternative would result in similar levels of impacts as Alternative B-1

*Alternative B-3, Exception for Hazard Mitigation Measures to Residential and Commercial Structures, and to Public Structures and Facilities*

Some activities covered under this alternative would have effects on coastal uses and resources. However, because the projects would be subject to the enforceable coastal polices regardless of Federal assistance they would have resulted in minor effects. Thus, this alternative would have minor effects to coastal uses and resources.

FEMA would not lose its ability to ensure that all its grant funds are used in a manner that enhances the coastal environment and minimizes impacts to coastal uses and resources to the maximum extent practical.

*Alternative B-4, Exception for Hazard Mitigation Measures to Residential and Commercial Structures, and to Public Structures and Facilities with Extension Period*

The additional 60-day extension period for the applicability of the exception may result in a higher number of projects subject to the exception but an equal level of impacts to coastal uses and resources as identified in Alternative B-3. Some activities covered under this alternative would have effects on coastal uses and resources. However, because the projects would be subject to the enforceable coastal polices regardless of Federal assistance they would have resulted in minor effects. Thus, this alternative would result in similar levels of impacts as Alternative B-3.

## ***E. Biological Resources***

### **1. Current Conditions**

#### **Louisiana**

According to the U.S. Fish and Wildlife Service (FWS), there are 25 animals, including aquatic species, and four plants listed as federally threatened or endangered in Louisiana. The following table lists endangered and threatened species in Louisiana:

Endangered Species		Threatened Species	
Common Name	Species Name	Common Name	Species Name
<b>Animals</b>		<b>Animals</b>	
Brown Pelican	<i>Pelecanus occidentalis</i>	Louisiana Black Bear	<i>Ursus americanus luteolus</i>
Fat Pocketbook	<i>Potamilus capax</i>	Bald Eagle	<i>Haliaeetus leucocephalus</i>
Leatherback Sea Turtle	<i>Dermochelys coriacea</i>	Piping Plover	<i>Charadrius melodus</i>
Alabama Sturgeon	<i>Scaphirhynchus suttkusi</i>	Green Sea Turtle	<i>Chelonia mydas</i>
Pallid Sturgeon	<i>Scaphirhynchus albus</i>	Loggerhead Sea Turtle	<i>Caretta caretta</i>
Interior Least Tern	<i>Sterna antillarum</i>	Gulf Sturgeon	<i>Acipenser oxyrinchus desotoi</i>
Red-cockaded Woodpecker	<i>Picooides borealis</i>	Gopher Tortoise	<i>Gopherus polyphemus</i>
West Indian Manatee	<i>Trichechus manatus</i>	Ringed Map Turtle	<i>Graptemys oculifera</i>
Eskimo Curlew	<i>Numenius borealis</i>	Alabama Heelsplitter	<i>Potamilus inflatus</i>
Mississippi gopher frog	<i>Rana capito servosa</i>	Louisiana Pearlshell	<i>Margaritifera hembeli</i>
Pink Mucket	<i>Lampsilis abrupta</i>		
Kemp's ridley Sea Turtle	<i>Lepidochelys kemp</i>		
Black-capped Vireo	<i>Vireo atricapilla</i>		
Hawksbill Sea Turtle	<i>Eretmochelys imbricata</i>		
American burying Beetle	<i>Nicrophorus americanus</i>		
<b>Plants</b>		<b>Plants</b>	
Louisiana Quillwort	<i>Isoetes louisianensis</i>	Earth fruit	<i>Geocarpon minimum</i>
Pondberry	<i>Lindera melissifolia</i>		
American Chaffseed	<i>Schwalbea americana</i>		

The generic amendment to the Gulf of Mexico Fishery Management Plan identifies Essential Fish Habitat (EFH) along the coast to be intertidal emergent wetlands, submergent aquatic vegetation, estuarine waters, and mud, sand, and shell water bottoms. Wetlands associated with estuarine waters in the coastal region are identified as EFH for postlarval/juvenile and subadult brown shrimp (*Penaeus aztecus*) and white shrimp (*Penaeus setiferus*) and juvenile and subadult red drum (*Sciaenops ocellatus*) (Gulf Council, 2005). Use of the region by those species is largely dependent on prevailing salinity levels, which fluctuate with varying degrees of freshwater influence.

## Mississippi

The State of Mississippi has 32 species of animals and four species of plants listed as federally threatened or endangered. The following table lists endangered and threatened species in Mississippi:

Endangered Species		Threatened Species	
Common Name	Species Name	Common Name	Species Name
<b>Animals</b>		<b>Animals</b>	
Indiana Bat	<i>Myotis sodalis</i>	Louisiana Black Bear	<i>Ursus americanus luteolus</i>
Black Clubshell	<i>Pleurobema curtum</i>	Bayou Darter	<i>Etheostoma rubrum</i>
Ovate Clubshell	<i>Pleurobema perovatum</i>	Bald Eagle	<i>Haliaeetus leucocephalus</i>
Southern Clubshell	<i>Pleurobema decisum</i>	Alabama Moccasinshell	<i>Medionidus acutissimus</i>
Southern Combshell	<i>Epioblasma penita</i>	Orangenacre Mucket	<i>Lampsilis perovalis</i>
Mississippi Sandhill Crane	<i>Grus canadensis pulla</i>	Piping Plover	<i>Charadrius melodus</i>
Mississippi Gopher Frog (Wherever found west of Mobile and Tombigbee Rivers in AL, MS, and LA)	<i>Rana capito sevosia</i>	Green Sea Turtle	<i>Chelonia mydas</i>
Brown Pelican	<i>Pelecanus occidentalis</i>	Loggerhead Sea Turtle	<i>Caretta caretta</i>
Flat Pigtoe	<i>Pleurobema marshalli</i>	Gulf Sturgeon	<i>Acipenser oxyrinchus desotoi</i>
Fat Pocketbook	<i>Potamilus capax</i>	Gopher Tortoise	<i>Gopherus polyphemus</i>
Hawksbill Sea Turtle	<i>Eretmochelys imbricata</i>	Ringed Map Turtle	<i>Graptemys oculifera</i>
Kemp's Ridley Sea Turtle	<i>Lepidochelys kempii</i>	Yellow Blotched Map Turtle	<i>Graptemys flavimaculata</i>
Leatherback Sea Turtle	<i>Dermochelys coriacea</i>		
Stirrupshell	<i>Quadrula stapes</i>		
Alabama Sturgeon	<i>Scaphirhynchus suttkusi</i>		
Pallid Sturgeon	<i>Scaphirhynchus albus</i>		
Tern	<i>Sterna antillarum</i>		
Finback Whale	<i>Balaenoptera physalus</i>		
Humbback Whale	<i>Megaptera novaeangliae</i>		
Red-cockaded Woodpecker	<i>Picoides borealis</i>		
<b>Plants</b>		<b>Plants</b>	
Louisiana Quillwort	<i>Isoetes louisianensis</i>	Price's Potato-bean	<i>Apios priceana</i>
Pondberry	<i>Lindera melissifolia</i>		
American Chaffseed	<i>Schwalbea americana</i>		

The generic amendment to the Gulf of Mexico Fishery Management Plan identifies Essential Fish Habitat (EFH) along the coast to be intertidal emergent wetlands, submergent aquatic vegetation, estuarine waters, and mud, sand, and shell water bottoms. Wetlands associated with estuarine waters in the coastal region are identified as EFH for postlarval/juvenile and subadult brown shrimp (*Penaeus aztecus*) and white shrimp (*Penaeus setiferus*) and juvenile and subadult red drum (*Sciaenops ocellatus*) (Gulf Council, 2005). Use of the region by those species is largely dependent on prevailing salinity levels, which fluctuate with varying degrees of freshwater influence.

## 2. Environmental Impacts

### Baseline

Project proponents have undertaken hazard mitigation activities. These activities would have caused negligible to substantial impacts to biological resources.

Generally the types of activities with the potential to have substantial effects on biological resources include flood control projects, stormwater management projects, construction of safe rooms in undisturbed land, relocations of public facilities to undisturbed areas, and some infrastructure protection measures. Structure-related activities like building retrofits, elevations, relocations to previously disturbed areas, and reconstruction would have had negligible impacts to biological resources. Demolitions where there is prospective acquisition proposal would ensure that the acquired land is left as open space after the buildings are demolished and could enhance species habitat. Elevations, building retrofits, and reconstruction in the structure's footprint would not affect listed species or critical habitat because these activities would be limited to the previously disturbed area.

FEMA's inability to review projects with the potential to affect biological resources prior to project initiation precluded FEMA's opportunity to comply with Section 7 of the ESA, Fish and Wildlife Coordination Act, Magnuson-Stevens Fishery Conservation and Management Act (MSA), Marine Mammal Protection Act, and E.O. 13112 (Invasive Species). Proponents are assumed to have complied with Section 10 of the ESA. However, unlike Section 7 of the ESA, Section 10 permits are not required for impacts to designated critical habitat, some threatened species, or endangered or threatened plant species. Impacts to these protected resources would have been avoided, minimized, or compensated for, if FEMA had reviewed these projects under ESA in accordance to its Section 7 responsibilities. Adverse impacts to EFH could have occurred with projects near rivers and the coast. FEMA would have avoided these impacts by ensuring compliance with MSA. Finally, invasive species may have been introduced to project areas by FEMA's lack of project review prior to project initiation through E.O. 13112 compliance.

FEMA would have worked with the proponent to modify the project, if needed, in a manner that takes into account these protected resources. As a result of its coordination efforts, FEMA would have established grant conditions, such as timing for construction, extent of construction area, and types of vegetation that could be removed or introduced, to minimize impacts to biological resources. Some of the changes may have altered the cost of the project and could have impacted its design. These additional costs, under certain circumstances, may have become eligible for funding. Taking these measures would have allowed FEMA to ensure that all its funds are used in a manner that enhances the environment and to the extent practical does not adversely impact biological resources.

Proponents would have been responsible for compliance with the Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, and any State laws to protect biological resources, such LA R.S. 56:1901-07 in Louisiana and MS ST §§ 49-5-103-119 in Mississippi.

## Alternatives

### **Alternative A, No Action Alternative**

FEMA would not implement a program exception. This alternative will have no effect on biological resources.

FEMA would not lose its ability to ensure that all HMGP grant funds are used in a manner that minimizes impacts to biological resources to the maximum extent practicable and enhances the environment.

### **Alternative B, Program Exception Implementation Alternatives**

#### *Alternative B-1, Exception for Hazard Mitigation Measures for Residential and Commercial Structures*

As described under Baseline, structure-related activities like building retrofits, elevations, relocations to previously disturbed areas, and reconstruction would have had negligible effects to biological resources. This alternative would result in negligible impacts to biological resources.

Under this alternative FEMA would not lose its ability to ensure that all its grant funds are used in a manner that enhances the environment and minimizes impacts to biological resources to the maximum extent practical.

#### *Alternative B-2, Exception for Hazard Mitigation Measures for Residential and Commercial Structures with Extension Period*

For projects already initiated, impacts would occur as described for Alternative B-1.

The 60-day extension period for the applicability of the exception would result in a higher number of projects subject to the exception. However, as described for Alternative B-1, the type of projects involved would cause negligible impacts to biological resources. Thus, this alternative would have similar effects as identified for Alternative B-1.

#### *Alternative B-3, Exception for Hazard Mitigation Measures to Residential and Commercial Structures, and to Public Structures and Facilities*

As described in the Baseline, only the following project types would have resulted in potential impacts to biological resources: flood control projects, stormwater management projects, construction of safe rooms in undisturbed land, relocation of public facilities to undisturbed land, and some infrastructure protection measures. FEMA would screen these projects to identify those that had moderate to substantial effects to biological resources. FEMA would not approve these projects unless their effects can be mitigated. This alternative would result in minor impacts to biological resources because FEMA would limit approval of relocation projects to projects with negligible to minor effects.



Under this alternative FEMA would lose its ability to ensure that all its grant funds are used in a manner that enhances the environment and minimizes impacts to biological resources to the maximum extent practical. Environmental mitigation may be used to reduce effects to biological resources, but this would be limited to remedial mitigation actions rather than proactive measures like changes in design or other measures that would have been available before the project started.

*Alternative B-4, Exception for Hazard Mitigation Measures to Residential and Commercial Structures, and to Public Structures and Facilities with Extension Period*

For projects already initiated, impacts would occur as described for Alternative B-3.

The 60-day extension period for the applicability of the exception may result in a higher number of projects subject to the exception and an increased number of projects with impacts to biological resources than Alternative B-3. Thus, this alternative may result in higher adverse impacts than Alternative B-3.

Like Alternative B-3, FEMA would screen flood control projects, stormwater management projects, construction of safe rooms in undisturbed land, relocation of public facilities to undisturbed land, and some infrastructure protection measures to identify those that had moderate to substantial effects to biological resources. FEMA would not approve these projects unless their effects can be mitigated. This alternative would result in minor impacts to biological resources because FEMA would limit approval of relocation projects to projects with negligible to minor effects.

Like Alternative B-3, FEMA would lose its ability to ensure that all its grant funds are used in a manner that enhances the environment and minimizes impacts to biological resources to the maximum extent practical.

## ***F. Historic Properties***

### **1. Current Conditions**

#### **Louisiana**

Louisiana has numerous historic properties. Historic properties are defined as any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP) maintained by the Secretary of the Interior. This term includes properties of traditional religious and cultural importance to an Indian Tribe that meet the National Register criteria. A recent search of the database maintained by the National Park Service (NPS) and the Louisiana State Historic Preservation Officer (SHPO) shows 97 historic districts, 1,101 individual structures, and 37 archaeological sites listed in the NRHP as well as more than 50 National Historic Landmarks throughout the State. Additionally, local historic preservation ordinances also recognize historic buildings, districts, sites, structures, and objects. Many buildings, older neighborhoods, sites, or objects are likely to meet the

definition of an historic property and be subject to consideration under NEPA or meet NRHP criteria and additionally be subject to the NHPA Section 106 review process.

A number of federally recognized Indian tribes once occupied and continue to occupy the lands within the State, and it is anticipated that undertakings in the area may affect historic resources that have religious or cultural significances to these tribes. Federally recognized Indian tribes that may have interest in properties located in a project area include the Chitimacha Tribe of Louisiana, the Coushatta Tribe of Louisiana, the Jena Band of Choctaw Indians, the Tunica-Biloxi Indians of Louisiana, the Caddo Nation of Oklahoma, the Mississippi Band of Choctaw Indians, the Quapaw Tribe of Oklahoma, the Alabama Coushatta Tribe of Texas, the Choctaw Nation of Oklahoma, the Seminole Nation of Oklahoma, and the Seminole Tribe of Florida.

In 2004, FEMA entered into a Statewide Programmatic Agreement (PA) with the Louisiana SHPO, Louisiana Office of Homeland Security and Emergency Preparedness, and Advisory Council on Historic Preservation (LA Statewide PA) to tailor and streamline the process FEMA would follow to meet its Section 106 responsibilities for FEMA-funded and assisted undertakings. The LA Statewide PA outlines review protocols for certain categories of undertakings, but will need to be revised to reflect the needs and concerns of the previously mentioned Federally recognized tribes. FEMA intends to use the process set out in the LA Statewide PA and/or to negotiate a Secondary PA to specifically define the Section 106 review process for the HMGP-related undertakings in Louisiana.

## Mississippi

The State of Mississippi possesses more than 170 National Register Historic Districts and over 1,300 individually listed National Register standing structures and archaeological sites. In addition, Mississippi possesses over 40 National Historic Landmarks. Within the next five years, FEMA will have completed a comprehensive standing structures and archaeological inventory of seven counties in the southern portion of the State. Through FEMA's inventory effort, previously unrecorded and undiscovered historic properties will be documented and integrated into a Geographic Information Systems (GIS) database. Expanded knowledge of historic properties in Mississippi will permit FEMA to more fully consider the potential affects of FEMA-funded actions upon historic properties.

There are seven federally recognized tribes that have historical and cultural ties to Mississippi. The following tribes are likely to demonstrate an interest in FEMA-funded hazard mitigation grant activities in Mississippi: Mississippi Band of Choctaw Indians, Choctaw Nation of Oklahoma, Jena Band of Choctaw Indians, Chickasaw Nation of Oklahoma, Muscogee-Creek Nation, Quapaw Tribe of Indians, and the Tunica-Biloxi of Louisiana. To date, the Mississippi Band of the Choctaw Indians has displayed the greatest level of interest in FEMA-funded actions and its Tribal Historic Preservation Officer (THPO) has requested to be consulted on projects promoting soil disturbance.

In 2004, FEMA entered into a Statewide PA with the Mississippi SHPO and the Mississippi Emergency Management Agency (MS Statewide PA) to tailor and streamline the process FEMA would follow to meet its Section 106 responsibilities for FEMA-funded and assisted undertakings. The MS Statewide PA outlines review protocols for certain categories of undertakings, but will need to be revised to reflect the needs and concerns of the previously mentioned seven federally recognized tribes. FEMA intends to use the process set out in the MS Statewide PA to negotiate a Secondary PA to specifically define the Section 106 review process for the HMGP-related undertakings in Mississippi.

## **2. Environmental Impacts**

### **Baseline**

Project proponents have undertaken hazard mitigation activities. These activities may have caused negligible to substantial adverse effects to historic properties.

Generally, all project types considered in this PEA have the potential to affect historic properties where the project (1) involves a building, structure, site, or object that is at least 50 years of age or properties listed or eligible for listing in the NRHP; (2) takes place within or adjacent to the boundaries of National Register Historic District; or (3) involves ground-disturbing activities within NRHP-listed or eligible sites.

FEMA's inability to review projects with the potential to affect historic properties prior to project initiation precluded FEMA's opportunity to comply with Section 106 of the NHPA. Proponents would have been required to comply with State laws, such as the Antiquities Law of Mississippi and the Louisiana Archeological Treasure Act, and local ordinances protecting historic properties. However, Section 106 of the NHPA applies to many historic properties that would not have been considered under State law or local ordinance. In particular, Section 106 applies not only to resources that are listed in the NRHP but also NRHP-eligible properties, as determined by FEMA, including properties of religious and cultural importance to Indian tribes. Effects to these resources would have been avoided or mitigated, if FEMA had reviewed these projects under Section 106 of the NHPA and its implementing regulations, 36 CFR Part 800.

FEMA would have worked with the project proponent to modify the project, if needed, in a manner that takes into account historic properties. As a result of these consultation efforts, FEMA would have established grant conditions to avoid or mitigate for adverse effects to historic properties, such as ensuring that modifications to historic properties meet the Secretary of Interior Standards, conducting project activities in a manner that complies with local regulatory standards, or monitoring and/or documenting potential or known archaeological sites. Some of the changes may have altered the cost of the project and could have impacted its design. These additional costs, under certain circumstances, may have become eligible for funding. Implementing these measures would have allowed FEMA to ensure that all its funds are used in a manner that, to the extent practical, does not adversely affect historic properties.

### **Alternatives**

## **Alternative A, No Action Alternative**

FEMA would not implement a program exception. This alternative will not have adverse effects on historic properties.

FEMA would retain its ability to ensure that all HMGP grant funds are used in a manner that minimizes adverse effects to historic properties to the maximum extent practicable and enhances the human environment.

## **Alternative B, Program Exception Implementation Alternatives**

### *Alternative B-1, Exception for Hazard Mitigation Measures for Residential and Commercial Structures*

Actions undertaken under this alternative likely had adverse effects on historic properties. Thus, this alternative could have adverse effects to historic properties.

FEMA recognizes that its decision to allow for this HMGP program exception triggers the requirements of Section 106 and will result in financial assistance for the activities deemed eligible for funding (undertakings).

FEMA has determined that the restrictions of Section 110(k) of the NHPA do not apply under these circumstances because the eligible hazard mitigation activities conducted by property owners on or before the announcement of the exception in the States of Louisiana and Mississippi in response to Hurricanes Katrina and Rita were not carried out with the intent to avoid the requirements of Section 106 of NHPA.

FEMA is mindful of the unprecedented circumstances created by Hurricanes Katrina and Rita and intends to negotiate a Programmatic Agreement with the Advisory Council on Historic Preservation (ACHP), SHPOs in Louisiana and Mississippi, and other consulting parties, including interested federally recognized Indian tribes to establish a process for addressing adverse effects of this alternative. This Agreement would be executed in conjunction with the issuance of a Finding of No Significant Impacts (FONSI) for this PEA. Following execution of this Agreement, FEMA would negotiate State-specific Programmatic Agreements to address the State-specific adverse effects of the implementation of the selected alternative.

### *Alternative B-2, Exception for Hazard Mitigation Measures for Residential and Commercial Structures with Extension Period*

The 60-day extension period for the applicability of the exception may result in a higher number of projects subject to the exception and an increased number of potential effects to historic properties than Alternative B-1. Thus, this alternative may result in more projects with adverse effects to historic properties than Alternative B-1.

The intent of the 60-day extension period is to provide property owners with sufficient notice of the HMGP requirements and to allow sufficient time to finish any administrative and planning work (e.g., receipt of permits, execution of contracts, etc.) that was ongoing at the time of announcement.

For this reason, FEMA believes that this alternative would be subject to the same Section 110(k) applicability finding as Alternative B-1.

FEMA will undertake the consultation process described under Alternative B-1.

*Alternative B-3, Exception for Hazard Mitigation Measures to Residential and Commercial Structures, and to Public Structures and Facilities*

This alternative would result in adverse effects to historic properties.

For residential and commercial hazard mitigation activities FEMA will undertake the process outlined in Alternative B-1.

For public structures and facilities' hazard mitigation activities FEMA will screen projects to evaluate their impacts to historic properties. FEMA would not approve projects that had adverse effects to historic properties unless appropriate treatment measures are negotiated as part of the Programmatic Agreement consultation efforts.

*Alternative B-4, Exception for Hazard Mitigation Measures to Residential and Commercial Structures, and to Public Structures and Facilities with Extension Period*

For projects already initiated, impacts would occur as described for Alternative B-3.

The 60-day extension period for the applicability of the exception may result in a higher number of projects subject to the exception and an increased number of potential effects to historic properties than Alternative B-1. Thus, this alternative may result in more projects with adverse effects to historic properties than Alternative B-3.

For residential and commercial hazard mitigation activities, the reasoning and approach of Alternative B-2 would apply.

For public structures and facilities' hazard mitigation activities FEMA will screen projects to evaluate their adverse effects to historic properties. FEMA would not approve projects that had adverse effects to historic properties unless appropriate treatment measures are negotiated as part of the PA consultation efforts.

## ***G. Environmental Justice***

### **1. Current Conditions**

#### **Louisiana**

Based on the 2000 U.S. Census, the population of Louisiana is comprised of the following groups: 64 percent white, 32 percent black or African American, 3 percent Hispanic or Latino (of any race), 1 percent Asian, and 0.6 percent American Indian and Alaskan Native. Comparatively, the population of the United States is comprised of the following groups: 74 percent white, 15 percent Hispanic or Latino (of any race), 12 percent black or African American, 6 percent some other race, 4 percent Asian, 0.8 percent American Indian and Alaskan Native, and 0.1 percent Native Hawaiian and other Pacific Islander. In 2000, 19.6 percent of the population in Louisiana and 15.8 percent of families in Louisiana were living below the poverty level. Comparatively, in 2000, 12.4 percent of the population in the United States and 9.4 percent of families in the United States were living below the poverty level.

#### **Mississippi**

Based on the 2000 U.S. Census, the population of Mississippi is comprised of the following groups: 60 percent white, 37 percent black or African American, 2 percent Hispanic or Latino (of any race), 0.8 percent Asian, 0.6 percent some other race, and 0.4 percent American Indian and Alaskan Native. Comparatively, the population of the United States is comprised of the following groups: 74 percent white, 15 percent Hispanic or Latino (of any race), 12 percent black or African American, 6 percent some other race, 4 percent Asian, 0.8 percent American Indian and Alaskan Native, and 0.1 percent Native Hawaiian and other Pacific Islander. In 2000, 20 percent of the population in Mississippi and 16 percent of families in Mississippi were living below the poverty level. Comparatively, in 2000, 12 percent of the population in the United States and 9 percent of families in the United States were living below the poverty level.

### **2. Environmental Impacts**

#### **Baseline**

Project proponents have undertaken hazard mitigation activities. Most of these activities caused beneficial impacts to minority and low-income populations. However, some activities may have caused disproportionately high and adverse environmental and health impacts to minority and low-income populations.

The impacts of relocations of public facilities include disruption of community integrity, loss of services (e.g., health care, education, protection and safety), visual impacts, and indirect effects related to urban growth and urban decline. Other types of activities with the potential to cause these effects include flood control projects, and stormwater management projects.

FEMA's inability to review projects prevented the agency to identify projects with the potential to cause disproportionately high and adverse environmental and health impacts

to minority and low-income populations prior to project initiation pursuant to E.O. 12898. Such impacts would have been avoided if FEMA had reviewed these projects in accordance with E.O. 12898.

FEMA would have worked with the proponents to modify the project, if needed, in a manner that takes into account disproportionate high and adverse environmental and health impacts to these populations. As a result of its coordination efforts under these requirements, FEMA may have established grant conditions to avoid or minimize these impacts. Some of the changes may have altered the cost of the project and could have impacted its design. These additional costs may have become eligible for funding. Taking these measures would have allowed FEMA to ensure that all its funds are used in a manner that, to the extent practical, does not result in disproportionately high and adverse impacts to minority and low-income populations.

## Alternatives

### **Alternative A, No Action Alternative**

FEMA would not implement a program exception. This alternative will not have effects to minority and low-income populations.

FEMA would not lose its ability to ensure that all HMGP grant funds are used in a manner that avoid impacts to minority and low-income populations to the maximum extent practicable and enhances the environment.

### **Alternative B, Program Exception Implementation Alternatives**

#### *Alternative B-1, Exception for Hazard Mitigation Measures for Residential and Commercial Structures*

As described in the Baseline, hazard mitigation measures for residential and commercial structures would not cause disproportionate high and adverse environmental and health effects to minority or low-income populations. Thus, this alternative would not result in disproportionate high and adverse environmental and health impacts to minority or low-income populations.

Under this alternative FEMA would not lose its ability to ensure that all its grant funds are used in a manner that enhances the environment and minimizes disproportionate high and adverse environmental and health effects to minority and low-income populations to the maximum extent possible.

#### *Alternative B-2, Exception for Hazard Mitigation Measures for Residential and Commercial Structures with Extension Period*

The 60-day extension period for the applicability of the exception may result in a higher number of projects subject to the exception and an increased number of projects

potentially resulting in disproportionately high and adverse impacts to minority and low-income populations compared to Alternative B-1. However, these projects likely had negligible effects on these populations. Thus, this alternative would not result in disproportionately high and adverse impacts to minority and low-income populations than Alternative B-1.

Like Alternative B-1, under this alternative FEMA would lose its ability to ensure that all its grant funds are used in a manner that avoids these impacts to the maximum extent practical.

*Alternative B-3, Exception for Hazard Mitigation Measures to Residential and Commercial Structures, and to Public Structures and Facilities*

FEMA will screen relocations of public facilities, flood control projects, and stormwater management projects to identify those that had disproportionate high and adverse environmental and health effects to low income and minority populations. FEMA would not approve these projects unless their effects can be mitigated. This alternative would result not result in disproportionate high and adverse environmental and health effects to minority or low-income populations because FEMA would limit approval of projects to projects with minor effects.

Under this alternative FEMA would lose its ability to ensure that all its grant funds are used in a manner that enhances the environment and minimizes disproportionate high and adverse environmental and health effects to minority and low-income populations to the maximum extent possible. Environmental mitigation may be used to reduce effects, but this would be limited to remedial mitigation actions rather than proactive measures like changes in location, design or other measures that would have been available before the project started.

*Alternative B-4, Exception for Hazard Mitigation Measures to Residential and Commercial Structures, and to Public Structures and Facilities with Extension Period*

The 60-day extension period for the applicability of the exception may result in a higher number of projects subject to the exception and an increased number of projects potentially resulting in disproportionately high and adverse impacts to minority and low-income populations compared to Alternative B-3. Thus, this alternative may result in more projects with disproportionately high and adverse impacts to minority and low-income populations than Alternative B-3.

FEMA would follow the procedures in Alternative B-3 for screening acquisitions projects and relocations of public facilities.



Like Alternative B-3, under this alternative FEMA would lose its ability to ensure that all its grant funds are used in a manner that avoids these impacts to the maximum extent practical.

## **VI. Cumulative Impacts**

Cumulative impacts represent the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).”

Federal, State, and local government are targeting their recovery efforts at the areas damaged by Hurricanes Katrina and Rita. Federal agencies involved in this effort include USACE, Federal Highways Administration from the U.S. Department of Transportation, the Department of Housing and Urban Development (HUD), and the Small Business Administration (SBA), among others. At the State level programs like Louisiana’s Road Home Program and Mississippi’s Coastal Improvements Program are also being used to assist in these major recovery efforts. FEMA is using its various programs like its Public Assistance grants, Individual Assistance grants, Alternative Housing Pilot Program, and its traditional HMGP to assist in the recovery. These recovery efforts may have cumulative impacts to the areas that may be impacted by implementation of the alternatives, as identified in the analysis (i.e., floodplains, biological resources, historic properties, and minority and low-income populations), and to others that would not be impacted by implementation of the alternatives like wetlands and coastal uses and resources.

FEMA does not expect that Alternatives B-1 and B-2 will have cumulative impacts because their impact to the environment is negligible. An exception may be cumulative effects to historic properties. However, FEMA does not have sufficient project-specific information at this time to quantify these impacts. FEMA would monitor the implementation of the selected alternative for cumulative adverse effects to historic properties. If FEMA identifies significant adverse effects, then it would address these impacts through the NHPA Section 106 consultation process. If FEMA cannot address them, then it would not approve the actions that have been identified as having cumulative adverse effects.

FEMA expects that hazard mitigation measures to public structures and facilities in Alternatives B-3 and B-4 may have some cumulative impacts to floodplains, biological resources, historic properties, and minority and low-income populations when added to the major recovery work that has occurred and that is reasonably foreseeable to occur. Impacts of these alternatives to these areas are expected to be minor compared to the other recovery efforts in the area. However, FEMA does not have sufficient project-specific information at this time to quantify these impacts. FEMA would monitor the implementation of the selected alternative for cumulative impacts. If FEMA identifies significant cumulative impacts, then it would address these impacts through avoidance,

minimization, or compensation. If FEMA cannot address these impacts, then it would not approve the actions that have been identified as having cumulative impacts.

## **VII. Conclusion**

Based on the analysis of impacts the following procedure will be established for the Program Exception Implementation Alternatives:

*Alternatives B-3 and B-4.* Under either of these alternatives the following projects will be screened for floodplain, biological resources, historic properties, and environmental justice considerations:

- Relocation of public facilities
- Minor, structure-specific flood control projects, such as floodgates or minor floodwalls
- Retrofit of stormwater management facilities
- Infrastructure protection measures
- Construction of associated safe rooms

Projects that have moderate to substantial effects to these resources or may cause disproportionate high and adverse effects to minority and low-income populations will not be approved unless their effects can be minimized through environmental mitigation,.

FEMA intends to negotiate a Programmatic Agreement with the Advisory Council on Historic Preservation, SHPOs in Louisiana and Mississippi, and other consulting parties, including interested Federally-recognized Indian tribes, to address adverse effects of the program exception alternatives. This Agreement would be executed in conjunction with the issuance of a FONSI for this PEA. Following execution of this Agreement, FEMA would negotiate State-specific Programmatic Agreements to address the State-specific adverse effects of the implementation of the selected alternative.

## **VIII. Public Involvement**

FEMA will notify the public of the availability of the draft PEA through public notices and press releases in local newspapers in Mississippi and Louisiana. FEMA will conduct a 15-day public comment period starting on Sunday, October 21, 2007 and ending on Sunday, November 4, 2007. Comments may be submitted by fax or mail to the Mississippi and Louisiana Transitional Recovery Offices or by email to [FEMA-pea-comments@dhs.gov](mailto:FEMA-pea-comments@dhs.gov). The document will be available at <http://www.fema.gov/plan/ehp/envdocuments/hmgs-pea.shtm>.

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## Appendix A

### Communities Adopting FEMA ABFE

#### Louisiana

##### LA ABFE Status Report

<b>Parish</b>	<b>Community</b>	<b>ABFE Status</b>	<b>Adoption date</b>
Calcasieu	Calcasieu Parish	Adopted	5-4-2006
	Lake Charles	Adopted	5-17-2006
	Sulphur	Adopted	5-08-2006
	Vinton	Adopted	5-23-2006
	Westlake	Adopted	6-19-2006
Cameron	Cameron Parish	Adopted	4-9-2006
Iberia	Iberia Parish	Adopted	6-14-2006
	City of Jeanerette	Adopted	10-09-2006
	Village of Loreauville	IN PROCESS- Community has no Special Flood Hazard Area. May consider adoption in 2007.	
	City of New Iberia	Adopted by reference to local ordinance.	
Jefferson	Jefferson Parish	Adopted – Effective 8-28-06.	7-19-2006
	City of Grand Isle	Adopted	7-11-2006
	City of Gretna	Adopted	12-11-06
	City of Harahan	Adopted	6-15-2006
	Town of Jean Lafitte	Adopted	9-13-2006
	City of Kenner	Adopted	8-17-2006
	City of Westwego	Adopted	10-09-2006
Lafourche	Lafourche Parish	Adopted	3-27-2007
	Golden Meadow	Adopted	8-21-2006
	Lockport	Adopted	9-26-2006
	Thibodaux	Adopted	10-03-2006
	Orleans Parish	Adopted	8-25-2006
Plaquemines	Plaquemines Parish	Adopted. Effective 4-25-07. <i>FEMA has not issued ABFEs for Southern (Lower) Plaquemines Parish pending USACE Levee evaluation.</i>	1-25-2007
St. Bernard	St. Bernard Parish	Adopted. <i>Effective in 60 days (6-4-07 at 5 pm)</i>	4-3-2007
St. Charles	St. Charles Parish	Adopted	10-16-2006
St. John the Baptist	St. John the Baptist Parish	Rejected Adoption On 9-12-06.	
St. Mary	St. Mary Parish	Adopted	8-23-2006
	Town of Baldwin	Adopted	10-12-2006
	City of Franklin	Adopted	11-21-06
	City of Morgan City	Adopted	7-25-2006
St. Tammany	St. Tammany Parish	Adopted Emergency-Eff. 08-07-06	8-03-2006
	Town of Madisonville	Adopted one foot of freeboard	5-10-2006

Parish	Community	ABFE Status	Adoption date
		which is > ABFE.	
	City of Mandeville	Adopted ABFE + 1 foot freeboard	10-12-2006
	City of Slidell	Adopted ABFE + 1 foot of freeboard.	9-12-2006
Tangipahoa	Tangipahoa Parish	Adopted	10-10-2006
	City of Ponchatoula	Adopted	10-16-2006
Terrebonne Parish	Terrebonne Parish	Adopted	6-28-2006
Vermilion	Vermilion Parish	Adopted	5-15-2006
	Abbeville	Adopted	4-17-2006
	Town of Delcambre	Adopted	7-10-2006
	Town of Erath	IN PROCESS – No action taken since last meeting.	
	Town of Gueydan	IN PROCESS- Presentation on 11-6-06. No action taken. Community waiting on Preliminary maps.	
	City of Kaplan	ABFE landward limits not located in town.	Adoption not necessary

## Mississippi

County	Community	Current Ordinance as of April 26, 2007
Hancock	Bay St. Louis	Existing FIRM + 4 feet freeboard
	Hancock County	Existing FIRM + 4 feet freeboard
	Waveland	Existing FIRM + 4 feet freeboard
Harrison	Biloxi	Existing FIRM + 4 feet freeboard
	D'Iberville	ABFEs north of Interstate 10, and existing FIRM + 4 feet freeboard (V zones only), and Existing FIRM + 3 feet freeboard (A zones only). Also adopted +14 feet elevation in a designated Community Flood Hazard Area.
	Gulfport	ABFEs in their entirety + 0.5 foot freeboard and, in the SFHA where there are no ABFEs, the requirement is the FIRM + 1 foot freeboard
	Harrison County	Existing FIRM + 4 feet freeboard and ABFEs outside SFHA
	Long Beach	Existing FIRM + 3 feet freeboard and ABFEs outside SFHA
	Pass Christian	Existing FIRM + 4 feet freeboard <b>in A zone only</b> , [existing FIRM + 1 foot freeboard in V zone only (no change in V Zone from pre-Katrina Ordinance)]
Jackson	Gautier	Existing FIRM + 5 feet freeboard and ABFEs outside SFHA
	Jackson County	ABFEs in their entirety and, in the SFHA where there are no ABFEs, the existing FIRM, (manufactured homes only add + 1 foot freeboard)
	Moss Point	ABFEs in their entirety (adopted by resolution only)
	Ocean Springs	ABFEs in their entirety + 1 foot of freeboard and, in the SFHA where there are no ABFEs, the requirement is the FIRM + 1 foot freeboard
	Pascagoula	ABFEs in their entirety