Programmatic Environmental Assessment

Hazard Mitigation Actions

State of Mississippi FEMA-DR-1604-MS *November 2005*



Programmatic Environmental Assessment Hazard Mitigation Actions under Section 406 and 404 (Stafford Act) FEMA-DR-1604-MS

1. Introduction

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) is mandated by the U.S. Congress to administer Federal disaster assistance pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), PL 93-288, as amended. Section 403 of the Stafford Act provides FEMA the authority to fund the restoration of eligible facilities that have sustained damage due to a Presidentially declared disaster. Section 406 contains a provision for the funding additional measures, not required by applicable codes and standards (further described in 44 CFR 206.226) that will enhance a facility's ability to resist similar damage in future events.

In providing discretionary authority for the addition of hazard mitigation measures to permanent work restoration, Congress recognized that, during the repair of damaged components of facilities, there would be unique opportunities to prevent recurrence of similar damage from future, similar disaster events. These measures are in addition to any measures undertaken to comply with applicable codes and standards, although such compliance, itself, could be considered a form of mitigation.

Section 406 mitigation funding and Section 404 hazard mitigation funding are distinct. Proposals for measures intended to benefit undamaged facilities, and measures not directly related to the damaged elements for which restoration work on a facility is performed are candidates for funding under Section 404. Section 406 funding is more appropriately viewed as stemming from, and related directly to, the repair work required as a result of the disaster. If a combination of Section 404 and Section 406 funding is intended, the Section 404 application should be submitted in a timely manner.

Section 406 hazard mitigation funding under the Stafford Act is a discretionary spending program. While the law provides that the President may authorize funds for eligible projects, it does not require funding. FEMA, Grantee and Subgrantee interests in disaster resistance must be balanced with the supplemental nature of disaster assistance and FEMA's obligation for the prudent stewardship of Federal disaster funds. Once approved under Section 406, the hazard mitigation becomes a condition of Federal Disaster Assistance and the applicant is required to perform the work.

1.1 Purpose of and Need for Action

As a result of Hurricane Katrina, FEMA was authorized under a Presidential disaster declaration, dated August 29, 2005 (FEMA-DR-1604-MS), to provide assistance in the following counties in the State of Mississippi: Adams, Amite, Attala, Claiborne, Choctaw, Clarke, Copiah, Covington, Forrest, Franklin, George, Greene, Hancock, Harrison, Hinds, Jackson, Jasper, Jefferson, Jefferson Davis, Jones, Kemper, Lamar, Lauderdale, Lawrence, Leake, Lincoln, Lowndes,

Madison, Marion, Neshoba, Newton, Noxubee, Oktibbeha, Pearl River, Perry, Pike, Rankin, Scott, Simpson, Smith, Stone, Walthall, Warren, Wayne, Wilkinson, Winston, and Yazoo. The purpose of this action is to fulfill FEMA's mandate under the Public Assistance Program to expeditiously provide disaster relief for Hurricane Katrina communities in the designated areas of Mississippi.

1.2 Purpose, Scope, and Use of the Programmatic Environmental Assessment

The National Environmental Policy Act of 1969 (NEPA) and its implementing regulations at 40 C.F.R. Part 1500 and 44 C.F.R. Part 10 direct FEMA to take into consideration the environmental consequences of proposed actions during the decision-making process. FEMA must comply with NEPA before making federal funds available for disaster response, recovery, and mitigation, including implementation of the Public Assistance and Hazard Mitigation Grant Programs.

The Stafford Act and FEMA's implementing regulations for NEPA provide for the exemption of certain actions from NEPA and the exclusion of other actions from full review under NEPA. For all other actions, FEMA ensures compliance with NEPA through the preparation of an Environmental Assessment (EA). An EA is a concise public document that serves to provide evidence of the environmental impacts of a proposed action. The assessment includes alternatives to aid in decision making and concludes with one of two findings: a Finding of No Significant Impact (FONSI) or a Notice of Intent to prepare an Environmental Impact Statement (EIS). FEMA must prepare an EIS when significant environmental impacts are anticipated and cannot be mitigated.

FEMA has determined through experience that the majority of the typical recurring actions proposed for funding, and for which an EA is required, can be grouped by type of action or location. These groups of actions can be evaluated in a Programmatic Environmental Assessment (PEA) for compliance with NEPA and its implementing regulations without the need to develop and produce a stand-alone EA for every action.

This PEA evaluates typical actions undertaken by FEMA to implement the Public Assistance and Hazard Mitigation Grants Programs to provide disaster relief to Mississippi communities as a result of Hurricane Katrina. It applies immediately to all proposed actions described in this document under disaster FEMA-DR-1604-MS. This PEA also provides the public and decision-makers with the information required to understand and evaluate the potential environmental consequences of these actions.

FEMA will use this PEA to determine the level of environmental analysis and documentation required under NEPA for any proposed action under these programs in Mississippi, given the available site-specific information. If the alternatives, levels of analysis, and site-specific information of an action proposed for FEMA funding are fully and accurately described in this PEA, FEMA will prepare a memorandum documenting this determination. This memorandum would state that FEMA has reviewed the proposed action, alternatives, and potential direct, indirect and cumulative impacts and found them to be accurately described by this PEA and its associated FONSI. No further documentation would be required to comply with NEPA. Because FEMA would be required to implement the mitigation measures contained in the PEA, the

memorandum would summarize the mitigation measures to be undertaken for the action and alternatives. A sample memorandum is provided in Appendix A.

If the specific action is expected to (1) create impacts not described in the PEA; (2) create impacts greater in magnitude, extent, or duration than those described in the PEA; or (3) require mitigation measures to keep impacts below significant levels that are not described in the PEA; then a Supplemental Environmental Assessment (SEA) and corresponding FONSI would be prepared to address the specific action. The SEA would be tiered from this PEA, in accordance with 40 CFR Part 1508.28. Actions that are determined, during the preparation of the SEA, to require a more detailed or broader environmental review will be subject to the stand-alone EA process.

1.3 Cumulative Impacts

Cumulative impacts are defined as environmental effects that are greater in magnitude, extent, or duration than the direct and indirect effects of the proposed FEMA-associated action when combined with the effects of other current and future actions, regardless of the proponent. Cumulative impacts will be considered when determining the compatibility of this PEA for specific actions. If cumulative impacts are identified, they will be considered in an SEA. If no cumulative impacts would be created and the specific action is found to be accurately described in this PEA and PEA FONSI, a prepared memorandum would state that cumulative impacts would not occur from the proposed action.

1.4 Proposed Actions by Type/Category

Section 406 provides discretionary authority to fund mitigation measures in conjunction with the repair of damaged facilities. The mitigation measures must be related to eligible disaster-related damages and must directly reduce the potential of future, similar disaster damages to the eligible facility. These opportunities usually present themselves during the repair/replacement efforts. In addition FEMA may use Section 404, Hazard Mitigation Grant Program funds, for certain hazard mitigation actions. Attachment A identifies by category and type the actions that FEMA, in cooperation with MEMA, has identified as cost effective Hazard Mitigation Measures to be considered for implementation during the reconstruction and recovery phase of this disaster for which Section 406 and Section 404 funding may be available. Affected environment, environmental consequences, and environmental mitigation measures are evaluated in this document towards these type and category of actions, rather than by project specific description.

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¹ Tiering refers to incorporating, by reference, the general assessments and discussions from this PEA into a focused SEA. The SEA would focus on the particular effects of the specific action.

2. Alternatives

This section describes typical actions, including the No Action Alternative, that FEMA could be undertake in order to administer and implement Hazard Mitigation Measures under its 406 and 404 programs to the affected communities in Mississippi as a result of Hurricane Katrina.

2.1 Alternative 1: No Action

Inclusion of a No Action Alternative in the environmental analysis and documentation is required under NEPA and is defined as maintaining the status quo, with no FEMA funding for any alternative action. This alternative evaluates the effects of not providing eligible assistance for a specific action and provides a benchmark against which the other alternative may be evaluated.

Under the No Action Alternative, FEMA would not provide disaster assistance for the reconstruction for damaged public facilities and hazard mitigation measures to protect such facilities from future damages. The No Action Alternative would forego the benefits and purposes of both the 404 and 406 programs. The No Action alternative is common to all type of proposed actions.

2.2 Alternative 2: Implementation of Hazard Mitigation Measures for Existing Facilities (Sec. 404 and 406)

This alternative consists of the implementation of Hazard Mitigation Measures as condition of Federal Disaster Assistance and the applicant is required to perform the approved additional work. Attachment A identifies these measures by category depending on the type of damaged facility it refers to, as well as by level of environmental impact expected. It includes measures intended to benefit undamaged facilities, and measures not directly related to the damaged elements for which restoration work on a facility is performed, and are candidates for funding under Section 404. It may also include combinations of Section 404 and Section 406 funded actions.

2.3 Alternative 3: Implementation of Hazard Mitigation Measures -New Construction (Sec. 404 and 406)

This alternative consists of actions again as identified in Attachment A, Category 3, and is primarily addressing new construction. Under Section 406, new construction can be required as result of the implementation of the Executive Orders 11988 (Floodplain Management) and 11990 (Wetland Protection), as well as due to the extent of the sustained damage. Under Section 404 new construction may be required to protect critical facilities.

2.4 Alternative considered and not evaluated: Repair to Pre-disaster Conditions without Mitigation Measures

Repairs to pre-disaster conditions are actions that are statutorily excluded from NEPA and the preparation of environmental impact statements and environmental assessments by Section 316 of the Stafford Act. For this reason this alternative will not be evaluated in this document.

3.0 Affected Environment, Environmental Consequences, and Mitigation Measures

The following subsections discuss the regulatory setting and the existing conditions for 12 resource areas in Mississippi:

- Geology and Soils
- Air Quality
- Water Resources
- Biological Resources
- Cultural Resources
- Socioeconomics
- Traffic and Transportation

This discussion is broad and regional in nature. It does not include a complete inventory of each resource but does provide information to characterize those resources.

This section also describes the potential impacts that each alternative could have on the identified resources. When mitigation is appropriate to avoid or reduce adverse impacts, these measures are also described

3.1.1 Geology and Soils

3.1.1 Affected Environment

3.1.1.1 Regulatory Setting

The Farmland Protection Policy Act (FPPA) require federal agencies to evaluate the effects (direct and indirect) of their activities before taking any action that could result in converting designated prime or unique farmland for nonagricultural purposes. If an action would adversely affect farmland preservation, alternative actions that could avoid or lessen adverse effects must be considered. Determination of the level of impact to prime and unique farmland or farmland of statewide and local importance is done by the lead federal agency, which inventories farmlands affected by the proposed action and scores part of an AD 1006 Form, Farmland Conversion Impact Rating, for each alternative. In consultation with the lead federal agency NRCS completes the AD 1006 Form and determines the level of consideration for protection of farmlands that needs to occur under the Act.

3.1.1.2 Existing Conditions

Mississippi's land mass is a product of the sediment deposited by the Mississippi River at its confluence with the Gulf of Mexico. Its coastal delta and landform is influenced by the constant deposition of sediment from the Mississippi River and the erosional effect of wave action from the Gulf of Mexico. This wave action has produced the beaches, coastal marshes, and barrier islands that can be found along the area's coast.

3.1.2 Environmental Consequences and Mitigation Measures

3.1.2.1 Alternative 1: No Action

This alternative does not include any FEMA action. Therefore, FEMA would not be required to comply with the FPPA.

Alternative 1 does not have the potential to affect geology or soils.

3.1.2.2 Alternative 2: Mitigation Measures to Existing Facilities (Sec.404 and 406)

3.1.2.2.1. Drainage/Bridges/Roads

Where this alternative consists of performing work under *Category 1* (See Attachment A), the scope of work proposed does not have the potential to affect geology or soils. This alternative complies with FPPA.

Where this alternative consists of performing work under *Category 2* (See Attachment A), area soils would likely be disturbed during construction. Soil loss would occur directly from disturbance or indirectly via wind or water. FEMA would implement best management practices (BMPs), such as developing and implementing an erosion and sedimentation control plan, using silt fences or hay bales, revegetating disturbed soils, and maintaining site soil stockpiles, to prevent soils from eroding and dispersing off-site. If the site is within incorporated city limits or does not contain prime, unique, or important soils, the action complies with FPPA and no further documentation is required.

The potential exists due to new construction to convert agricultural land to other uses. If farmland is proposed for construction of new facilities, FEMA would determine if the proposed site is within the limits of an incorporated city or if the site contains state-listed prime, unique, or important soils. If the site is within incorporated city limits or does not contain prime, unique, or important soils, the action complies with FPPA and no further documentation is required. Otherwise, FEMA would prepare the appropriate sections of an AD-1006 Farmland Conversion Impact Rating Form for the action, coordinate with the NRCS to determine the overall impact of the conversion, and document the results of FPPA compliance in a SEA.

3.1.2.2.2. Water/Power

Where this alternative consists of performing work under *Category 1* (See Attachment A), the scope of work proposed doesn't have the potential to affect geology or soils. This alternative complies with FPPA.

Where this alternative consists of performing work under *Category 2* (See Attachment A), area soils would likely be disturbed during construction. Soil loss would occur directly from disturbance or indirectly via wind or water. FEMA would implement best management practices (BMPs), such as developing and implementing an erosion and sedimentation control plan, using silt fences or hay bales, revegetating disturbed soils, and maintaining site soil stockpiles, to prevent soils from eroding and dispersing off-site. If the site is within incorporated city limits or does not contain prime, unique, or important soils, the action complies with FPPA and no further documentation is required.

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3.1.2.2.3. Buildings

Where this alternative consists of performing work under *Category 1 and 2* (See Attachment A), the scope of work proposed doesn't have the potential to affect geology or soils. This alternative complies with FPPA.

3.1.2.2.4. Shoreline Structures

Where this alternative consists of performing work under *Category 1, and 2* (See Attachment A), the scope of work proposed doesn't have the potential to affect geology or soils. This alternative complies with FPPA.

3.1.2.3 Alternative 3: Mitigation as New Construction (Sec. 404 and 406)

Independently from the type of facility, this alternative consists of performing new construction work under *Category 3* (See Attachment A); area soils would likely be disturbed during construction. Soil loss would occur directly from disturbance or indirectly via wind or water. FEMA would implement best management practices (BMPs), such as developing and implementing an erosion and sedimentation control plan, using silt fences or hay bales, revegetating disturbed soils, and maintaining site soil stockpiles, to prevent soils from eroding and dispersing off-site. If the site is within incorporated city limits or does not contain prime, unique, or important soils, the action complies with FPPA and no further documentation is required.

The potential exists due to new construction to convert agricultural land to other uses. If farmland is proposed for construction of new facilities, FEMA would determine if the proposed site is within the limits of an incorporated city or if the site contains state-listed prime, unique, or important soils. If the site is within incorporated city limits or does not contain prime, unique, or important soils, the action complies with FPPA and no further documentation is required. Otherwise, FEMA would prepare the appropriate sections of an AD-1006 Farmland Conversion Impact Rating Form for the action, coordinate with the NRCS to determine the overall impact of the conversion, and document the results of FPPA compliance in a SEA.

3.2 Air Quality

3.2.1 Affected Environment

3.2.1.1 Regulatory Setting

The Clean Air Act (CAA) requires that the U.S. Environmental Protection Agency (USEPA) establish primary and secondary National Ambient Air Quality Standards (NAAQS) for air pollutants that are considered harmful to the public and environment. Primary NAAQS are established at levels necessary, with an adequate margin of safety, to protect the public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Similarly, secondary NAAQS specify the levels of air quality determined appropriate to protect the public welfare from any known or anticipated adverse effects associated with air contaminants. The pollutants for which USEPA has established ambient concentration standards are called criteria pollutants and include ozone (O3), respirable particulates that have aerodynamic diameters of 10 micrometers or less (PM10), fine particles with aerodynamic diameters less than 2.5 micrometers, (PM2.5), carbon monoxide (CO), nitrogen dioxide (NO2), sulfur dioxide (SO2), and lead (Pb).

The CAA also requires USEPA to assign a designation to each area of the United States regarding compliance with the NAAQS. The USEPA categorizes the level of compliance or noncompliance as follows: attainment (area currently meets the NAAQS), maintenance (area currently meets the NAAQS but has previously been out of compliance), and nonattainment (area currently does not meet the NAAQS).

EPA has delegated its CAA enforcement authority to the Mississippi Department of Environmental Quality (MDEQ), Air Quality Division. The MDEQ air quality standards are identical to the federal standards except that MDEQ also has odor standards.

3.2.1.2 Existing Conditions

MDEQ has a network of monitoring stations throughout the state that measure and record ambient air quality. Based on these measurements, Mississippi is in attainment of all NAAQS. As a result, transportation and general conformity requirements do not apply to federally funded or approved activities in state.

3.2.2 Environmental Consequences and Mitigation Measures

3.2.2.1 Alternative 1: No Action

Under the No Action Alternative, no localized or regional effects to air quality are expected.

3.2.2.2 Alternative 2: Mitigation Measures to Existing Facilities (Sec.404 and 406)

3.2.2.2.1. Drainage/Bridges/Roads

Where this alternative consists of performing work under *Category 1* (See Attachment A), the scope of work proposed would not involve any construction-related activities that would generate fugitive dust (PM10) or exhaust emissions.

Where this alternative consists of performing work under *Category 2* (See Attachment A), such construction may generate temporary increases in equipment exhaust emissions and fugitive dust. However, the temporary increase in equipment exhaust is expected to be negligible as long as the equipment is well maintained and idling is minimized. Asphalt paving emit volatile organic compounds (precursors to O3) as it cures, but this is also expected to be negligible. Finally, with periodic watering of active construction areas, particularly areas close to any nearby sensitive receptors (e.g., hospitals, senior citizen homes, schools), impacts from fugitive dust are anticipated to be negligible.

3.2.2.2.2. *Water/Power*

Where this Alternative consists of performing work under *Category 1* (See Attachment A), the scope of work proposed would not involve any construction-related activities that would generate fugitive dust (PM10) or exhaust emissions.

Where this alternative consists of performing work under *Category 2* (See Attachment A), such action may generate temporary increases in equipment exhaust emissions and fugitive dust. However, the temporary increase in equipment exhaust is expected to be negligible as long as the equipment is well maintained and idling is minimized. The periodic watering of active construction areas, particularly areas close to any nearby sensitive receptors (e.g., hospitals, senior citizen homes, schools), impacts from fugitive dust are anticipated to be negligible.

3.2.2.2.3. Buildings

Where this Alternative consists of performing work under *Category 1* and *Category 2* (See Attachment A), the scope of work may generate temporary increases in equipment exhaust emissions and fugitive dust. However, the temporary increase in equipment exhaust is expected to be negligible as long as the equipment is well maintained and idling is minimized. The periodic watering of active construction areas, particularly areas close to any nearby sensitive receptors (e.g., hospitals, senior citizen homes, schools), impacts from fugitive dust are anticipated to be negligible.

3.2.2.2.4. Shoreline Structures

Where this alternative consists of performing work under *Category 2* (See Attachment A), the scope of work may generate temporary increases in equipment exhaust emissions and fugitive dust. However, the temporary increase in equipment exhaust is expected to be negligible as long as the equipment is well maintained and idling is minimized. Asphalt paving emit volatile organic compounds (precursors to O3) as it cures, but this is also expected to be negligible. Finally, with periodic watering of active construction areas, particularly areas close to any nearby sensitive receptors (e.g., hospitals, senior citizen homes, schools), impacts from fugitive dust are anticipated to be negligible.

3.2.2.3 Alternative 3: Mitigation as New Construction (Sec. 404 and 406)

This Alternative consists of performing work under *Category 3* (See Attachment A), which would involve new construction for any of the project types. Such construction would generate temporary increases in equipment exhaust emissions and fugitive dust. However, the temporary increase in equipment exhaust is expected to be negligible as long as the equipment is well maintained and idling is minimized. In addition, with periodic watering of active construction areas, particularly areas close to any nearby sensitive receptors (e.g., hospitals, senior citizen homes, schools), impacts from fugitive dust are anticipated to be negligible.

Generators, boiler plants, parking lots, or other auxiliary facilities may be constructed and may result in increase emissions of criteria pollutants. FEMA would ensure that all equipment meets state and federal standards and that appropriate permits from the MDEQ are obtained when needed. The MDEQ permitting process would ensure that any equipment requiring a permit has a negligible impact on air quality. Any stationary equipment exempt from permitting requirements are expected to be negligible sources of emissions.

When the new facilities are in use, increased emissions from vehicles owned by the users of these new facilities are not expected to adversely affect air quality regionally. However, changes in local traffic patterns would result in changes in localized concentrations of CO at intersections. If traffic volumes or delays at nearby intersections increase substantially compared to previous levels, CO concentrations at these intersections may need to be examined more carefully (through a CO Hotspots analysis) to ensure the NAAQS for CO is not being exceeded. FEMA would consult with the local transportation agency to determine if increased traffic is expected to reduce level of service (LOS) by more than 1 unit. If the local transportation agency determines that the LOS could decrease on roads surrounding the proposed new building site by more than 1 unit, FEMA would consult with MDEQ determine whether a CO Hotspots analysis is needed. If MDEQ determines that this analysis is required, FEMA would document the results of the analysis in a SEA.

3.3 WATER RESOURCES

3.3.1 Affected Environment

3.3.1.1 Regulatory Setting

The Clean Water Act (CWA) establishes the basic structure for regulating pollutant discharges to navigable waters of the United States. It sets forth procedures for effluent limitations, water quality standards and implementation plans, national performance standards, and point source (e.g., municipal wastewater discharges) and nonpoint source programs (e.g., stormwater). The CWA also establishes the National Pollutant Discharge Elimination System (NPDES) under Sections 401 and 402 and permits for dredged or fill material under Section 404.

The U.S. Army Corps of Engineers (USACE) is charged with regulating the disposal of dredged and fill materials under Section 404 of the CWA. A Section 404 permit from the USACE must be obtained for any dredge or fill activities within jurisdictional waters of the U.S. During the permit review process, the USACE determines the type of permit appropriate for the proposed action. Two types of permits are issued by the USACE: (1) General Permits, issued on a state, regional, and nationwide basis and covering a variety of activities, including minimal individual and cumulative adverse affects and (2) Individual Permits, issued for a case-specific activity.

Section 401 of the CWA specifies that states must certify that any activity subject to a permit issued by a federal agency, such as a CWA Section 404 permit, meets all state water quality standards. Water quality certification is also necessary when a project qualifies for a General Permit, even if the activity does not need to be reported to the USACE.

The Wild and Scenic Rivers Act (WSRA) preserves selected rivers in a free-flowing condition and protects their local environments. These rivers possess outstanding scenic, recreation, geologic, fish and wildlife, historic, or cultural values.

The Coastal Zone Management Act of 1972 authorizes the Coastal Zone Management Program (CZMP), which is a federal-state partnership dedicated to comprehensive management of the nation's coastal resources. By making federal funds available, the laws encourage states to preserve, protect and, where possible, restore or enhance valuable natural coastal resources such as wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs as well as the fish and wildlife using those habitats. Any federal agency whose activities directly affect the coastal zone will, to the maximum extent practicable, be consistent with approved state management programs. The Mississippi Department of Marine Resources 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).

EO 11988 (Floodplain Management) requires federal agencies to take action to minimize occupancy and modification of floodplains. Furthermore, EO 11988 requires that federal agencies proposing to site an action in a 100-year floodplain must consider alternatives to avoid adverse effects and incompatible development in the floodplain. In accordance with 44 CFR Part 9, critical actions, such as developing hazardous waste facilities, hospitals, or utility plants, must be undertaken outside of a 500-year floodplain. If no practicable alternatives exist to siting an

action in the floodplain, the action must be designed to minimize potential harm to or within the floodplain. Furthermore, a notice must be publicly circulated explaining the action and the reasons for siting it in the floodplain. When evaluating actions in the floodplain, FEMA applies the decision process described in 44 CFR Part 9, referred to as the Eight-Step Process, to ensure that its actions are consistent with EO 11988. By its nature, the NEPA compliance process involves the same basic decision-making process as the Eight-Step Process.

As with EO 11988, EO 11990 (Protection of Wetlands) requires federal agencies to follow avoidance, mitigation, and preservation procedures with public input before proposing new construction in wetlands. The implementation of EO 11990 is described in 44 CFR Part 9. As with EO 11988, the Eight-Step Process is used to evaluate the potential effects of an action on wetlands. As discussed in the Clean Water Act subsection above, formal legal protection of jurisdictional wetlands is promulgated through Section 404 of the CWA. A permit from the USACE may be required if an action has the potential to affect wetlands.

3.3.1.2 Existing Conditions

Mississippi has 15 major aquifers that are used to supply freshwater for domestic and industrial supplies. Groundwater supplies 80% of the water used in Mississippi; only two municipalities get water from surface-water sources. About 2 billion gal/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.

3.3.2 Environmental Consequences and Mitigation Measures

3.3.2.1 Alternative 1: No Action

This alternative does not include any FEMA action. Therefore, FEMA would not be required to comply with the CWA, CZMA, EO 11988, EO 11990, or WSRA.

Alternative 1 does not have the potential to affect water resources.

3.3.2.2 Alternative 2: Mitigation Measures to Existing Facilities (Sec.404 and 406)

3.3.2.2.1 <u>Drainage/Bridges/Roads</u>

Where this alternative consists of performing work under *Category 1* and *Category 2* (See Attachment A), the scope of work may have some impacts to the floodplains. FEMA would comply with the agency's regulations Eight-Step Process to determine if the proposed structure is in the floodplain, affects the floodplain, or may be impacted by floods. If a structure proposed

for retrofit is found not to be in the floodplain, to affect the floodplain or to be affected by floods, then the project will be in compliance with EO 11988 and no further documentation will be required. If a structure proposed for retrofit is in the floodplain, affects the floodplain or is affected by floods FEMA will document the analysis performed with the mitigation and minimization measures proposed in a SEA.

This type of work may also have the potential to increase impervious surfaces, reduce groundwater recharge, and adversely affect water quality through the transmission of sediment, debris, oils, and hazardous substances into surface waters. During the retrofits suggested in Category 1 and Category 2 (See Attachment A), FEMA would mitigate these impacts by applying BMPs to reduce transport of sediment, debris, oils, and hazardous substances. FEMA would consult with the local agency responsible for stormwater management to determine if the existing facility has adequate stormwater conveyance capacity under this alternative. If FEMA and the local responsible agency determine that the stormwater system is not adequate, FEMA would coordinate with the agency to adapt, increase, or modify the stormwater system as necessary and appropriate. This coordination and any associated actions would be documented in an SEA. If the existing stormwater system is adequate, no further document would be necessary. Finally, FEMA would consult with appropriate agencies regarding NPDES permitting, water quality certification, and CZMA compliance for the retrofitting of these facilities. For activities not exempt from NPDES permitting or water quality certification or not consistent with Mississippi's CMP, FEMA would document permitting and other requirements to comply with CWA and CZMA in a SEA.

3.3.2.2.2. Water/Power

Where this alternative consists of performing work under *Category 1* and *Category 2* (See Attachment A) for power-related projects the scope of work proposed would not involve any impacts to the floodplain.

Where this alternative consist of performing work under *Category* 1 and *Category* 2 (See Attachment A) for water infrastructure projects, the scope of work may have some impacts to the floodplains. FEMA would comply with the agency's regulations Eight-Step Process to determine if the proposed structure is in the floodplain, affects the floodplain, or may be impacted by floods. If a structure proposed for retrofit is found not to be in the floodplain, to affect the floodplain or to be affected by floods, then the project will be in compliance with EO 11988 and no further documentation will be required. If a structure proposed for retrofit is in the floodplain, affects the floodplain or is affected by floods FEMA will document the analysis performed with the mitigation and minimization measures proposed in a SEA.

The retrofits in suggested in *Category 2* for power-related actions and *Category 1* and *Category 2* for water infrastructure projects may also have the potential to increase impervious surfaces, reduce groundwater recharge, and adversely affect water quality through the transmission of sediment, debris, oils, and hazardous substances into surface waters. During the retrofit actions, FEMA would mitigate these impacts by applying BMPs to reduce transport of sediment, debris, oils, and hazardous substances. FEMA would consult with the local agency responsible for

stormwater management to determine if the existing facility has adequate stormwater conveyance capacity under this alternative. If FEMA and the local responsible agency determine that the stormwater system is not adequate, FEMA would coordinate with the agency to adapt, increase, or modify the stormwater system as necessary and appropriate. This coordination and any associated actions would be documented in an SEA. If the existing stormwater system is adequate, no further document would be necessary. Finally, FEMA would consult with appropriate agencies regarding NPDES permitting, water quality certification, and CZMA compliance for the retrofitting of these facilities. For activities not exempt from NPDES permitting or water quality certification or not consistent with Mississippi's CMP, FEMA would document permitting and other requirements to comply with CWA and CZMA in a SEA.

3.3.2.2.3. <u>Buildings</u>

Where this alternative consists of performing work under *Category 1* and *Category 2* (See Attachment A) the scope of work proposed would not involve any impacts to the floodplain nor would they have the potential to increase impervious surfaces, reduce groundwater recharge, and adversely affect water quality through the transmission of sediment, debris, oils, and hazardous substances into surface waters. Procuring and retrofitting existing structures do not have the potential to affect water resources. Only commercial products applied in accordance with manufacturers' specifications would be used to clean and sanitize buildings; thus no impact to groundwater or surface water quality would occur. Thus, this alternative complies with CWA, CZMA, EO 11990, and WSRA. FEMA would review the location of the proposed structure to determine if it is in the floodplain. If a structure proposed for retrofit to dwelling units is not in the floodplain, the project is in compliance with EO 11988 and no further documentation is required. If a structure proposed for retrofit to dwelling units is in the floodplain, FEMA would comply with EO 11988 by applying the Eight-Step Process and documenting the results in a SEA.

3.3.2.2.4. Shoreline Structures

Where this alternative consists of performing work under *Category 2* (See Attachment A) the scope of work proposed would likely adversely affect water quality through the disturbance of sediment in surface waters. FEMA would consult with appropriate agencies regarding NPDES permitting, water quality certification, and CZMA compliance for these actions. For activities not exempt from NPDES permitting or water quality certification or not consistent with Mississippi's CMP, FEMA would document permitting and other requirements to comply with CWA and CZMA in a SEA.

3.3.2.3 Alternative 3: Mitigation as New Construction (Sec. 404 and 406)

This Alternative consists of performing work under *Category 3* (See Attachment A), which would involve new construction for any of the project types. FEMA would comply with the agency's regulations Eight-Step Process to determine if the proposed structure is in the

floodplain, affects the floodplain, or may be impacted by floods. If a structure proposed for retrofit is found not to be in the floodplain, to affect the floodplain or to be affected by floods, then the project will be in compliance with EO 11988 and no further documentation will be required. If a structure proposed for retrofit is in the floodplain, affects the floodplain or is affected by floods FEMA will document the analysis performed with the mitigation and minimization measures proposed in a SEA. The same process will be used to determine if the new construction affects a wetland. FEMA would follow the same procedure to determine if ancillary activities funded by FEMA, like construction of parking lots or boiler plants among others, would impact a wetland or floodplain or would be affected by the floodplain.

New construction and operation of ancillary facilities have the potential to increase impervious surfaces, reduce groundwater recharge, and adversely affect water quality through the transmission of sediment, debris, oils, and hazardous substances into surface waters. During construction, FEMA would mitigate these impacts by applying BMPs (as described in Section 3.1.2.3) to reduce transport of sediment, debris, oils, and hazardous substances. As described in Section 3.8.2.3, FEMA would consult with the local agency responsible for stormwater management to determine if the existing facility has adequate stormwater conveyance capacity under this alternative. If FEMA and the local responsible agency determine that the stormwater system is not adequate. FEMA would coordinate with the agency to adapt, increase, or modify the stormwater system as necessary and appropriate. This coordination and any associated actions would be documented in an SEA. If the existing stormwater system is adequate, no further document would be necessary. Finally, FEMA would consult with appropriate agencies regarding NPDES permitting, water quality certification, and CZMA compliance for construction and operation of ancillary facilities. For activities not exempt from NPDES permitting or water quality certification or not consistent with Mississippi's CMP, FEMA would document permitting and other requirements to comply with CWA and CZMA in a SEA.

3.4 Biological Resources

3.4.1 Affected Environment

3.4.1.1 Regulatory Setting

The Endangered Species Act (ESA) establishes a federal program to conserve, protect, and restore threatened and endangered plants and animals and their habitats. Section 7 of the ESA mandates that all federal agencies must ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a threatened or endangered species or result in the destruction of critical habitat for these species. To accomplish this, federal agencies must consult with the U.S. Fish and Wildlife Service (USFWS) or the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries) when taking action that has the potential to affect species listed as endangered or threatened or proposed for threatened or endangered listing. FEMA has coordinated with USFWS and NOAA Fisheries to implement a procedure for the expedient review of actions falling within the scope of the alternatives described in Section 2. This expedient review is authorized under 50 CFR 402.05(a).

The Migratory Bird Treaty Act (MBTA) makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandoning eggs or young) may be considered a take and is potentially punishable by fines and/or imprisonment. If an action is determined to cause a potential take of migratory birds, as described above, then a consultation process with the USFWS needs to be initiated to determine measures to minimize or avoid these impacts. This consultation should start as an informal process.

The Fish and Wildlife Coordination Act (FWCA) was enacted to protect fish and wildlife when federal actions result in the control or modification of a natural stream or body of water. The statute requires federal agencies to take into consideration the effect that water-related projects would have on fish and wildlife resources, take actions to prevent loss or damage to these resources, and provide for the development and improvement of these resources. For an action resulting in the control or modification of a body of water, the federal agency must consult with the USFWS or NOAA Fisheries (as appropriate) and the Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) to develop measures to mitigate action-related losses of fish and wildlife resources. These measures need to be included in some kind of public documentation for the action, and where possible, the federal lead agency must incorporate the measures in the plans for the action.

The Magnuson-Stevens Fishery Conservation and Management Act (as amended), also known as the Sustainable Fisheries Act, requires all federal agencies to consult with the NOAA Fisheries on activities or proposed activities authorized, funded, or undertaken by that agency that may adversely affect Essential Fish Habitat (EFH). The EFH provisions of the Sustainable Fisheries Act are designed to protect fisheries habitat from being lost due to disturbance and degradation.

EO 13112 (Invasive Species) was created to prevent the introduction of invasive species and to provide for their control. Under this order, the federal government may "not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the U.S. or elsewhere unless, pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions."

3.4.1.2 Existing Conditions

The State of Mississippi has 32 species of animals and 4 species of plants listed as federally threatened or endangered. Appendix B contains a list of these species and their status under the ESA.

3.4.2 Environmental Consequences and Mitigation Measures

3.4.2.1 Alternative 1: No Action

This alternative does not include any FEMA action. Therefore, FEMA would not be required to consult with USFWS, NOAA Fisheries, or MDWFP to comply with the ESA, MBTA, FWCA, or the Sustainable Fisheries Act. Similarly, compliance with EO 13112 is not required.

Alternative 1 does not have the potential to affect sensitive biological resources.

3.4.2.2 Alternative 2: Mitigation Measures to Existing Facilities (Sec.404 and 406)

3.4.2.2.1 <u>Drainage/Bridges/Roads</u>

Where this alternative consists of performing work under *Category 1* (See Attachment A), the scope of work will not have the potential to affect sensitive biological resources. FEMA has no requirement to consult with USFWS, NOAA Fisheries, or MDWFP to comply with the ESA, MBTA, FWCA, or the Sustainable Fisheries Act and compliance with these laws is met with no further documentation. Similarly, compliance with EO 13112 is met without further documentation.

Where this alternative consists of performing work under *Category 2* (See Attachment A), the scope of work may have the potential to affect threatened or endangered species or their habitats, migratory birds, natural waterways, or EFH. If EFMA determines that the project has this potential it will initiate an expedited review process. FEMA would notify USFWS or NOAA Fisheries of the project location and the project description. USFWS or NOAA Fisheries would respond after receiving this information to notify FEMA if additional consultation is required. If USFWS or NOAA Fisheries determines that additional consultation is required under Section 7 of the ESA, MBTA, FWCA, or the Sustainable Fisheries Act, the results of this consultation would be documented in a SEA. If USFWS or NOAA Fisheries determines that no additional consultation is required, FEMA would consider the project to be in compliance with Section 7 of the ESA, MBTA, FWCA, and the Sustainable Fisheries Act and no further documentation is required.

3.4.2.2.2 *Water/Power*

Where this alternative consists of performing work under *Category 1* and *Category 2* (See Attachment A) the scope of work will not have the potential to affect sensitive biological resources. FEMA has no requirement to consult with USFWS, NOAA Fisheries, or MDWFP to comply with the ESA, MBTA, FWCA, or the Sustainable Fisheries Act and compliance with these laws is met with no further documentation. Similarly, compliance with EO 13112 is met without further documentation.

3.4.2.2.3 Buildings

Where this alternative consists of performing work under *Category 1* and *Category 2* (See Attachment A) the scope of work will not have the potential to affect sensitive biological resources. FEMA has no requirement to consult with USFWS, NOAA Fisheries, or MDWFP to comply with the ESA, MBTA, FWCA, or the Sustainable Fisheries Act and compliance with these laws is met with no further documentation. Similarly, compliance with EO 13112 is met without further documentation.

3.4.2.2.4 *Shoreline Structures*

Where this alternative consists of performing work under *Category 2* (See Attachment A) the scope of work proposed would likely adversely affect water quality through the disturbance of sediment in surface waters. This may have the potential to affect threatened or endangered species or their habitats, natural waterways, or EFH. If EFMA determines that the project has this potential it will initiate an expedited review process. FEMA would notify USFWS or NOAA Fisheries of the project location and the project description. USFWS or NOAA Fisheries would respond after receiving this information to notify FEMA if additional consultation is required. If USFWS or NOAA Fisheries determines that additional consultation is required under Section 7 of the ESA, FWCA, or the Sustainable Fisheries Act, the results of this consultation would be documented in a SEA. If USFWS or NOAA Fisheries determines that no additional consultation is required, FEMA would consider the project to be in compliance with Section 7 of the ESA, FWCA, and the Sustainable Fisheries Act and no further documentation is required.

3.4.2.3 Alternative 3: Mitigation as New Construction (Sec. 404 and 406)

This Alternative consists of performing work under *Category 3* (See Attachment A), which would involve new construction for any of the project types. The scopes of work under this alternative may have the potential to affect threatened or endangered species or their habitats, migratory birds, natural waterways, or EFH. If EFMA determines that the project has this potential it will initiate an expedited review process. FEMA would notify USFWS or NOAA Fisheries of the project location and the project description. USFWS or NOAA Fisheries would respond after receiving this information to notify FEMA if additional consultation is required. If USFWS or NOAA Fisheries determines that additional consultation is required under Section 7 of the ESA, MBTA, FWCA, or the Sustainable Fisheries Act, the results of this consultation would be documented in a SEA. If USFWS or NOAA Fisheries determines that no additional consultation is required, FEMA would consider the project to be in compliance with Section 7 of the ESA, MBTA, FWCA, and the Sustainable Fisheries Act and no further documentation is required.

FEMA would also evaluate the impacts of FEMA funded auxiliary facilities, such as constructing parking lots or boiler plants, to determine their potential to affect threatened or endangered species or their habitats, migratory birds, natural waterways, or EFH. If FEMA determines that the project has no potential to affect threatened and endangered species or their habitats, migratory birds, natural waterways, or EFH, the project to be in compliance with

Section 7 of the ESA, MBTA, FWCA, and the Sustainable Fisheries Act and no further documentation is required. If EFMA determines that the auxiliary facility has this potential it will initiate an expedited review process. FEMA would notify USFWS or NOAA Fisheries of the project location and the project description. USFWS or NOAA Fisheries would respond after receiving this information to notify FEMA if additional consultation is required. If USFWS or NOAA Fisheries determines that additional consultation is required under Section 7 of the ESA, MBTA, FWCA, or the Sustainable Fisheries Act, the results of this consultation would be documented in a SEA. If USFWS or NOAA Fisheries determines that no additional consultation is required, FEMA would consider the project to be in compliance with Section 7 of the ESA, MBTA, FWCA, and the Sustainable Fisheries Act and no further documentation is required.

3.5 Cultural Resources

3.5.1 Affected Environment

3.5.1.1 Regulatory Setting

The National Historic Preservation Act (NHPA) declares federal policy to protect historic sites and values in cooperation with other nations, states, and local governments. Subsequent amendments designated the State Historic Preservation Officer (SHPO) as the individual responsible for administering state-level programs. Section 106 of the NHPA and implementing regulations (36 CFR 800) outline the procedures to be followed in the documentation, evaluation, and mitigation of impacts for cultural resources. The Section 106 process applies to any federal undertaking that has the potential to affect cultural resources. The Section 106 process includes identifying significant historic properties and districts that may be affected by an action and mitigating adverse effects to properties listed, or eligible for listing, in the National Register of Historic Places (NRHP) (36 CFR 60.4). FEMA, the Mississippi SHPO, and the Mississippi Emergency Management Agency (MEMA) have executed a Programmatic Agreement (PA) to streamline the Section 106 review process. A copy of the PA is provided in Appendix C.

3.5.1.2 Existing Conditions

The State of Mississippi has various historic districts listed in the NRHP. FEMA has identified close to 170 National Register Historic Districts in Mississippi, of which 22 are located within the impact area. FEMA has also identified close to 1,200 individual structures that are registered in the National Registry for the state of Mississippi. The agency is working closely with the State Historic Preservation Office in identifying historic properties in the NRHP or eligible to the NRHP that may be affected by the temporary housing actions.

The Choctaw tribe has historical and cultural ties to areas in Mississippi. FEMA will be working with the Choctaw tribe's Tribal Historic Preservation Officer (THPO) to identify religious and culturally significant properties that may be impacted by the temporary housing actions.

3.5.2 Environmental Consequences and Mitigation Measures

3.5.2.1 Alternative 1: No Action

This alternative does not include any FEMA undertaking. Therefore, no cultural resources review would be required of FEMA under Section 106 of the NHPA or the PA.

Since FEMA does not participate in any activities under the No Action Alternative, it does not need to take into consideration individuals, local governments, and the state's actions on historic structures. Neither would FEMA need to take into consideration impacts to archaeological resources associated with built-environment resources, or coincidentally in proximity to such resources under the No Action Alternative.

3.5.2.2 Alternative 2: Mitigation Measures to Existing Facilities (Sec.404 and 406)

3.5.2.2.1 <u>Drainage/Bridges/Roads</u>

Where this alternative consists of performing work under *Category 1* and *Category 2* (See Attachment A) for drainage projects and roads, the scope of work will likely fall under the Programmatic Allowances of the Programmatic Agreement (PA) among FEMA, SHPO, and MEMA. FEMA would determine if the scope of work falls under the Programmatic Allowances. Per Stipulations III through VI of the PA, in concert with Programmatic Allowances I.A., I.B. and III of the PA, FEMA has no requirement to consult with SHPO for these actions, and compliance with Section 106 of the NHPA is met with no further documentation. For those actions that do not fall within the Programmatic Allowances, FEMA would follow the procedures in Stipulation VI of the PA. If FEMA finds that an undertaking may affect a historic property, the agency will document the consultation required, including stipulated mitigation measures, in a SEA.

Where this alternative consist of performing work under *Category 1* and *Category 2*(See Attachment A) for bridges, the scope of work may have the potential to affect cultural resources. For these actions FEMA would follow the procedures in Stipulation VI of the PA. If FEMA finds that an undertaking may affect a historic property, the agency will document the consultation required, including stipulated mitigation measures, in a SEA.

3.5.2.2.2 Water/Power

Where this alternative consists of performing work under *Category 1* and *Category 2* (See Attachment A), the scope of work will likely fall under the Programmatic Allowances of the Programmatic Agreement (PA) among FEMA, SHPO, and MEMA. FEMA would determine if the scope of work falls under the Programmatic Allowances. Per Stipulations III through VI of the PA, in concert with Programmatic Allowances I.C, I.F, and I.I. of the PA, FEMA has no requirement to consult with SHPO for these actions, and compliance with Section 106 of the NHPA is met with no further documentation. For those actions that do not fall within the Programmatic Allowances, FEMA would follow the procedures in Stipulation VI of the PA. If

FEMA finds that an undertaking may affect a historic property, the agency will document the consultation required, including stipulated mitigation measures, in a SEA.

3.5.2.2.3 *Buildings*

Where this alternative consists of performing work under *Category 1* and *Category 2* (See Attachment A), the scope of work will not likely affect cultural resources. Stipulation VI.A of the PA limits the area of potential effects (APE) for building rehabilitation to the facility being modified. Thus, for actions consisting of retrofitting buildings less than 45 years of age, there is no need for cultural resource review, and the action would comply with Section 106 of the NHPA with no further documentation needed. For facilities 45 years or older the Programmatic Allowances of the Programmatic Agreement (PA) among FEMA, SHPO, and MEMA. FEMA would likely apply. Per Stipulations III through VI of the PA, in concert with Programmatic Allowance II of the PA, FEMA has no requirement to consult with SHPO for these actions, and compliance with Section 106 of the NHPA is met with no further documentation. For those actions that do not fall within the Programmatic Allowances, FEMA would follow the procedures in Stipulation VI of the PA. If FEMA finds that an undertaking may affect a historic property, the agency will document the consultation required, including stipulated mitigation measures, in a SEA.

3.5.2.2.4 Shoreline Structures

Where this alternative consists of performing work under *Category 2* (See Attachment A), the scope of work will likely fall under the Programmatic Allowances of the Programmatic Agreement (PA) among FEMA, SHPO, and MEMA. FEMA would determine if the scope of work falls under the Programmatic Allowances. Per Stipulations III through VI of the PA, in concert with Programmatic Allowance I.J. of the PA, FEMA has no requirement to consult with SHPO for these actions, and compliance with Section 106 of the NHPA is met with no further documentation. For those actions that do not fall within the Programmatic Allowances, FEMA would follow the procedures in Stipulation VI of the PA. If FEMA finds that an undertaking may affect a historic property, the agency will document the consultation required, including stipulated mitigation measures, in a SEA.

3.5.2.3 Alternative 3: Mitigation as New Construction (Sec. 404 and 406)

This Alternative consists of performing work under *Category 3* (See Attachment A), which would involve new construction for any of the project types. The scopes of work under this alternative may have the potential to affect cultural resources by causing direct or indirect effects to a potentially historic, cultural resource in the vicinity. It can also involve ground-disturbing activity that could disturb subsurface cultural resources. FEMA will evaluate if Stipulations V and VI of the PA, in concert with Programmatic Allowance I (stating that ground disturbing activities and site work does not require SHPO review when all work is performed in previously disturbed or archaeologically surveyed areas) applies to the action. If ground-disturbing activities

meet these conditions, the action would comply with Section 106 of the NHPA with no further documentation needed. For those actions that do not meet these conditions FEMA would follow the procedures in Stipulation VI of the PA. If FEMA finds that an undertaking may affect a historic property, the agency will document the consultation required, including stipulated mitigation measures, in a SEA.

This Alternative could also involve the development of auxiliary facilities like parking lots and utility stations. FEMA will evaluate if Stipulations V and VI of the PA, in concert with Programmatic Allowance I (stating that ground disturbing activities and site work does not require SHPO review when all work is performed in previously disturbed or archaeologically surveyed areas) applies to the action. If ground-disturbing activities meet these conditions, the action would comply with Section 106 of the NHPA with no further documentation needed. For those actions that do not meet these conditions FEMA would follow the procedures in Stipulation VI of the PA. If FEMA finds that an undertaking may affect a historic property, the agency will document the consultation required, including stipulated mitigation measures, in a SEA

If FEMA and SHPO are unable to follow the stipulations of the PA as described above for any reason, FEMA would invoke Stipulation X of the PA on dispute resolution. The results of this consultation would be documented in a SEA. Similarly, in the event unexpected discoveries are encountered, FEMA would invoke Stipulation IX of the PA, initiate consultation, and document the results of this consultation in a SEA.

3.6 Socioeconomics

3.6.1 Affected Environment

EO 12898 (Federal Actions to Address Environmental Justice in Minority and Low-Income Populations) requires federal lead agencies to ensure rights established under Title IV of the Civil Rights Act of 1964 when analyzing environmental effects. FEMA and most federal lead agencies determine impacts to low-income and minority communities as part of the NEPA compliance process. Agencies are required to identify and correct programs, policies, and activities that have disproportionately high and adverse human health or environmental effects on minority or low-income populations. EO 12898 also tasks federal agencies with ensuring that public notifications regarding environmental issues are concise, understandable, and readily accessible.

EO 13045 (Protection of Children from Environmental Health Risks and Safety Risks) required federal agencies to identify and assess health risks and safety risks that may disproportionately affect children. As with EO 12898, FEMA and most federal lead agencies determine impacts to children as part of the NEPA compliance process. Agencies must ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.

3.6.2 Environmental Consequences and Mitigation Measures

3.6.2.1 Alternative 1: No Action

Although there is no requirement for compliance with EOs 12898 and 13045 when there are no federal actions, Alternative 1 would likely result in disproportionate health and safety risks to low-income and minority persons and to children, as these groups will be most likely to be affected by the lack of public infrastructure if not restored or repaired

3.6.2.2 Alternative 2: Mitigation Measures to Existing Facilities (Sec.404 and 406)

This alternative will not likely have disproportionately high and adverse human health and environmental effects on minority or low-income populations. This alternative will not likely produce health risks and safety risks that may disproportionately affect children.

3.6.2.3 Alternative 3: Mitigation as New Construction (Sec. 404 and 406)

This alternative may cause some adverse human health and environmental effects on minority or low-income populations due to the temporary increases in equipment exhaust emissions and fugitive dust, increase in emissions of criteria pollutants due to the construction of auxiliary facilities, and increase in emissions from vehicles owned by the users of these new facilities. FEMA would ensure that the impacts of these new constructions do not pose any disproportionately high and adverse human health and environmental effects to minority or low-income communities or disproportionately affect children by following the procedures set forth in Section 3.2.2.3. If this condition cannot be met, disproportionately high and adverse impacts to low-income and minority populations are likely to occur and FEMA would document these impacts and mitigation measures in a SEA.

3.7 Traffic and Transportation

3.7.1 Affected Environment

The Mississippi Department of Transportation (MDOT) is responsible for the design, construction, and maintenance of the State of Mississippi's highway system as well as the portion of federal interstate highways within Mississippi's boundaries. Arterials, connectors, rural roads, and local roads are constructed and maintained by county or city governments.

3.7.2 Environmental Consequences and Mitigation Measures

3.7.2.1 Alternative 1: No Action

Under this alternative no localized or regional effects to transportation are expected.

3.7.2.2 Alternative 2: Mitigation Measures to Existing Facilities (Sec.404 and 406)

This alternative will not result in increased traffic volume.

3.7.2.3 Alternative 3: Mitigation as New Construction (Sec. 404 and 406)

This Alternative may result in increased traffic volumes as a result of the relocation of new facilities and with new roads. FEMA would consult with the local transportation agency to determine if increased residential traffic is expected to reduce LOS by more than 1 unit. If the local transportation agency determines that the LOS could decrease on roads surrounding the proposed temporary housing site by more than 1 unit, FEMA would perform a traffic study and document the results in a SEA.

4.0 List of Preparers

4.1 FEMA

Alessandro Amaglio, Environmental Liaison Officer, FEMA-DR-1604-MS Jomar Maldonado, Environmental Program Specialist

Programmatic Environmental Assessment	406 and 404 Hazard Mitigation for FEMA-DR-1604-MS
Atta	achment A
1 2000	

406 and 404 Hazard Mitigation for FEMA-DR-1604-MS

Programmatic Environmental Assessment

TYPE	CATEGORY 1	CATEGORY 2	CATEGORY 3
A Drainage/bridges/Roads	Restraining cables on bridges - Installation of cables to restrain a bridge from being washed off piers or abutments. Bridges – Where bridges have been damaged or destroyed when girders, beams and decking systems are displaced by storm surges, install girder and deck uplift tiedowns	Low span bridges - Demolish/replace damaged low span bridges or other crossings that act to collect debris, increase flooding, and/or can be severely damaged Debris traps - Installing traps upstream of a culvert to prevent culverts from becoming clogged	1. Drainage structures - When drainage structures are destroyed, replacing the structure with multiple structures or a larger structure. However, structures need to be considered with regard to a total drainage system and should not be replaced without a watershed hydrology study.
	to prevent their displacement from the substructure. 3. Culverts - Install energy dissipaters upstream of culverts to slow storm water flows and minimize erosion of embankments at the entry and discharge of the culverts.	by vegetation. 3. Drainage ditches – If the storm water velocity in ditches is too great and causes embankment erosion, increase the capacity of the ditch by enlarging the cross section or realigning the ditch to minimize erosion.	2. Bridges – Where bridges and their embankments have been damaged due to debris blockage accumulating on in-stream piers, replace multi-span bridges with designs having fewer piers in stream channel to minimize blockage and resulting turbulence
		4. Drainage ditches – Where the velocity of storm water in ditches is too great and causes erosion, line ditches to minimize erosion. This also serves to increase the hydraulic efficiency of the ditches. 5. Gabion baskets, riprap, sheetpiling, and geotextile fabric installation - Installation to control	3. Roadways - Where roadways and embankments are damaged by erosion caused by flow in adjacent water courses, relocate the road alignment to another, higher area to avoid or minimize future damage.
	the ditches. Drainage piping – If the volume of storm water creates a flooded area due to the inability of down-stream drainage piping to handle the flow, increase the size of piping to provide added capacity. Note that there is a generally accepted two "size" increase limit within the context of 406 Mitigation Roadways – Where roadways are damaged	erosion. 6. Headwalls and wing walls - Installation to control erosion 7. Bridges – If bridge spread footings have been damaged or exposed by scour conditions, lower bridge footings sufficiently below the scour line.	
	,	8. Bridges – To protect bridge piers from debris impact or to increase the hydraulic efficiency around piers, install flow deflectors and pier bullnoses on upstream piers. 9. Bridges – Where spread footings have been undercut by scour, underpin footings using piling or similar construction to assure support.	
	10. Signage – If sign panels and their supports have failed, replace with a stronger type or system of supports and panels. Consider using multiple support posts and stronger panels and fasteners. Traffic signals 11. When traffic signal controls are damaged by flood waters, elevate or flood proof electrical controls to avoid damage to sensitive components.		
		7.0	

406 and 404 Hazard Mitigation for FEMA-DR-1604-MS
grammatic Environmental Assessment

1. Burying power lines.										
1. Access covers - When feasible, access covers can be elevated to the hydraulic grade line. There are a number of devices that prevent infiltration into access holes.	Repair, lining or encasement of damaged sections to prevent infiltration or structural collapse. Relocating sections of damaged sewer lines to avoid damage from slip-out on roads or to avoid damage to lines crossing a stream or drainage area. In areas where there are flooding problems caused by reverse flow in storm or sanitary sewers, install backflow preventers	Equipment or controls in a pump station that are subject to damage from the 100-year flood can be elevated. Pump station buildings can be dry floodproofed. Installation of camlocks, transfer switches, and electrical panels to ease the hook-up of portable	emergency generators. Damaged by storm water inundation, replace them with submersible or inline pumps as appropriate. If pump motors or their controls are damaged as a result of being submerged while energized, install divinity all dault circuit interrupters (GFCIs) to reduce or plining a submerged while energized.	If pump station equipment is damaged as a result of inundation resulting from power failure, install transfer switches, circuit isolation and/quick connect capability to facilitate rapid connection of backup power.	Underground pipelines - Installation of shut-off valves (based on accepted practice) so that damaged sections of pipeline can be isolated.	 3. Electric power distribution Pad-mounted transformers - elevating above the base flood elevation, or lowering them or burying them in non-flood, high-wind areas. 	Using multiple poles to support transformers. Replacing damaged poles with higher-class pole, or with a different material pole such as replacing wood poles with spun concrete. Adding guy wire or other additional support to	power lines. Removing large diameter communication lines from	Providing looped distribution service or other redundancies in the electrical service to critical	facilities. 28
1. Access or to the hydra prevent infil	2. Sewer lines - Repa preve Preloc Gama lines In are rever:	. 2. Pump stations - • Equipme subject televated floodpro • Installat electrical	• •	• 8 4 8.4	•	3. Electric J	• • •	•	•	21
B. Water/Power										

406 and 404 Hazard Mitigation for FEMA-DR-1604-MS

Programmatic Environmental Assessment

I. Relocation of buildings that suffered repetitive damages out of the floodzone(EO 11988). Z. Where critical facilities or systems are damaged by any storms because they are in a vulnerable area, relocate the critical building or function to a safer location.
 Low slope roofs - Replacement of the entire roof with a roof covering with a secondary membrane and a fully adhered roof covering that is not subject to progress ve failure, such as a modified bitumen. Metamically fastened insulation or membranes are not acceptable. Curbing and flashing - Single membrane and built up roofs can be susceptible to progressive failure from flashing and curbing failure. These tiems should be inspected and repaired or replaced. National Roofing Contractors can provide technical advice. Ballasted roof systems - Roof systems with gravel or other small ballast should be replaced with ballast of sufficient weight that it does not become airborne causing increased damages. Roof-mounted equipment should be attached to a foundation that will resist expected wind forces. Hurricane clips and pressures beneath softs and eventuage, strengthen the soft in and eventuage. For structures having roof damage due to wind pressures beneath softs and eventuage, strengthen the soft in and eventuages. When there is roof system damage or water intrusion due to damage. To roof openings such as hatches and skylights, either eliminate or strengthen the openings to avoid future damage. For gable roofs damaged by wind, replace the golfe end-framing with hipped roof framing to reduce wind forces (lower edge pressures; reduced projected wind area) and strengthen the roof framing. If the roofing system may have the added advantage of directing water upgrade the flashing and gutter systems. Upgrade the flashing and gutter systems. Upgrade the flashing and gutter systems. Upgrade by enter wind and/or water, upgrade the flashing and gutter systems. Upgrade the flashing and gutter systems. Upgrade the flashing and gutter systems. Upgrade the flashing and four damage. In Roofing equipment – Where rooftop equipment has been damaged by either wind and own your citieal facilities such as hospitals. In In In
Buildings substantially damaged under NFIP regulations - Repair, dry floodproofing, or levation so they are protected to meet minimum NFIP regulations. Buildings not substantially damaged under NFIP regulations - If technically feasible, dry floodproofing. Electrical panels, machinery rooms, emergency generators can be elevated above the BFE or dry floodproofed. If dry floodproofing. Electrical panels, machinery rooms, emergency generators can be elevated above the BFE or dry floodproofed. Where spread footings have been undercut by soout, underpin footings using piling or similar construction to assure support. Siding -If siding has been damaged by wind, replace with a stronger siding with stronger attachment to the wall sheathing and structure. Venting - Where there has been water damage caused by water intrusion through venting systems, replace the vents with driven resistant material) in mullions to prevent breakage and fallout in the event of prevent breakage and or have caused damage to other facilities, anchor the building so foundations to prevent water infinition of roof, wall and other structural systems, install framing connectors along the foundation. Where damage has resulted from wind and water intrusion around weather stripping on elements along the load path to the foundation. Where damage has been caused by windingors and/or windows, upgrade the weather stripping to prevent water infiltration. Where damage has been damaged due to foundation induced failure of doors, replace the doors with stronger units. This applies to the door fame, doors and/or windows, upgrade the weather stripping to prevent water infiltration. Where damage has connectors and anchors. Anchoring of mechanical and electrical depor
C. Buildings 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.

406 and 404 Hazard Mitigation for FEMA-DR-1604-MS	
Programmatic Environmental Assessment	

D. Shoreline Structures	Marine Piers – If marine piers have been	e piers have been	Shoreline protective structures and systems –
	damaged by storm-surge uplift and	se uplift and	Where protective systems have failed to stay in
	buoyancy, install struct	puoyancy, install structure and decking with	place and properly protect the shoreline,
	uplift-resistant tiedowns and fasteners.	s and fasteners.	change to an alternate, properly engineered
			design to avoid future damage.



Appendix A

Note to PEA Users: This memorandum describes a fictitious project in a fictitious county in Mississippi. It is to be used only as a sample.

Memorandum of National Environmental Policy Act (NEPA) Compliance Under the Federal Emergency Management Agency (FEMA) Programmatic Environmental Assessment (PEA) on 406 and 404 Hazard Mitigation Measures (FEMA-DR-1604-MS)

Mississippi Department of Wildlife, Fisheries, and Parks Low Span Bridge Replacement at William Miller State Park

FEMA, the Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP), and the Mississippi Emergency Management Agency (MEMA) propose to replace a low span bridge with a higher span bridge to prevent collection of debris and increase on flooding at the site in William Miller State Park, Hammond County, Mississippi. The proposed action involves the construction of a new clear bridge at Stillwater Campground in the park; access roads and circulation roads already exist. Upstream of the existing bridge there is a residential neighborhood that is regularly flooded by water trapped by the debris accumulating at the bridge.

FEMA reviewed the proposed action and its potential long-term, adverse direct, indirect, and cumulative impacts on the natural environment and determined that the PEA and the associated Finding of No Significant Impact fully and accurately describe the proposed action and its potential impacts. Thus, no further documentation is required by FEMA to comply with NEPA. MDWFP has no other projects proposed at the park in the future except for park operations and routine maintenance. Further the County of Hammond Department of Planning has received no applications for subdivisions or other development projects in the vicinity of the park. Thus, no cumulative impacts are expected.

MDWFP and MEMA would be required to incorporate the following mitigation measure into the proposed action, as described in the PEA:

• Implementation of BMPs (Sections 3.1.2.3 and 3.3.2.3 of the PEA).

Preparer:	
Title:	
Date:	



Appendix B

List of Endangered and Threatened Species in Mississippi

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

Programmatic Environmental Assessment	

Appendix C

406 and 404 Hazard Mitigation for FEMA-DR-1604-MS

PROGRAMMATIC AGREEMENT AMONG

THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE MISSISSIPPI STATE HISTORIC PRESERVATION OFFICE THE MISSISSIPPI EMERGENCY MANAGEMENT AGENCY

WHEREAS, the Federal Emergency Management Agency (FEMA), which has been incorporated into the Department of Homeland Security, Emergency Preparedness and Response Directorate, makes assistance available to States, communities, and other eligible entities through its Programs for disaster housing; hazard mitigation; prevention of, and preparedness for, emergencies and disasters; and the repair, restoration and replacement of public infrastructure pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §\$5121-5206, (Stafford Act), the National Flood Insurance Act of 1968, as amended, 42 U.S.C. § 4001 et seq., the Federal Fire Prevention and Control Act of 1974, as amended, 15 U.S.C. § 2201 et seq., and implementing regulations contained in Title 44 of the Code of Federal Regulations (CFR); and

WHEREAS, the Federal Emergency Management Agency (FEMA) proposes to administer the Federal disaster Public Assistance, Hazard Mitigation Grant, Individual and Family Grant, Flood Mitigation Assistance, and Pre-Disaster Mitigation Programs (Programs) pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §§5121-5204c, (Stafford Act), and its implementing regulations contained in Title 44 of the Code of Federal Regulations (44 CFR) Part 206; the National Flood Insurance Reform Act of 1994 and its implementing regulations contained in 44 CFR Part 78; and the Disaster Mitigation Act of 2000 and its implementing regulations; and such other Acts or implementing regulations as are passed from time to time; and

WHEREAS, FEMA has determined that implementation of these Programs will result in Undertakings that may affect properties listed in, or eligible for, the *National Register of Historic Places* (historic properties), and FEMA has consulted with the Mississippi State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (Council), pursuant to 36 CFR Part 800, implementing Sections 106 and 110(f) of the National Historic Preservation Act (NHPA), 16 U.S.C. Part 470; and

WHEREAS, FEMA has invited the Advisory Council on Historic Preservation (Council) to enter into formal consultation and become a signatory party to this document, thus affording the Council a reasonable opportunity to comment on all FEMA Programs identified in the Preamble, pursuant to 36 CFR Part 800, implementing Sections 106, and the Council has declined to formally consult or to become a signatory party, pursuant to 36 CFR 800.6(a)(1)(iii); and

WHEREAS, as a result of future disasters and/or enabling legislation, the State of Mississippi will receive financial and technical assistance from FEMA and will in turn provide monies and other assistance to eligible applicants to alleviate the effects of future disaster related damages through FEMA's various grant Programs, and as such the Mississippi Emergency Management Agency (MEMA) will be responsible for administering these Programs, has participated in this consultation, and has been invited to enter into this Programmatic Agreement (Agreement); and

WHEREAS, FEMA, the SHPO, and MEMA, and the Council acknowledge that implementation of these Programs will be more effective if, pursuant to 36 CFR 800.14(b), an Agreement is in place to define roles and responsibilities in the Section 106 review process, eliminate the need for further SHPO and Council review of certain routine activities with little potential to adversely affect historic properties, and promote efficiency so that the effects of Undertakings on historic properties may be considered while delays to FEMA's delivery of disaster assistance are minimized; and

WHEREAS, FEMA has determined that implementation of these Programs will result in Undertakings that may have an effect on historic properties that have religious and cultural significance to Federally recognized tribes (Tribes), and FEMA may request that these Tribes participate in the terms of this Agreement to fulfill the requirements of Section 106;

NOW, THEREFORE, FEMA, the SHPO, and MEMA, and the Council agree that these Programs will be administered in accordance with the following Stipulations to satisfy FEMA's Section 106 responsibilities for all Undertakings. FEMA will not approve funding of any Undertaking until it is reviewed pursuant to this Agreement.

STIPULATIONS

To the extent of its legal authority, and in coordination with the SHPO and MEMA, and the Council, FEMA shall require that the following measures are implemented:

I. LEAD AGENCY COORDINATION

- A. When FEMA is determined to be the Lead Agency, FEMA will coordinate the Section 106 review activities of all Federal agencies and Tribes that participate in Undertakings funded by the Programs.
- B. If a project has been previously reviewed and approved under Section 106 in another Federal program or by another Federal agency, no further review is required, as long as the project is the same one that was reviewed under the other program. The applicant and/or MEMA shall certify to FEMA that a project has not changed (i.e., that the project plans bear the same date as those referenced in the previous comment letter) when submitting a previous comment letter for compliance with Section 106.
- C FEMA may request that a Tribe become a signatory to this Agreement by entering into an Addendum with a signature page, thus accepting the provisions of this Agreement. The

addition of a Tribe without further change to this Agreement will not require an amendment to the Agreement. A sample Tribal Addendum is attached as Appendix A.

II. APPLICABILITY

- A. This Agreement applies immediately upon date of execution and will remain in effect for five (5) years.
- B. FEMA will determine when an Undertaking meets applicable criteria of the Programmatic Allowances (Allowances include restoring various facilities to pre-disaster conditions, human services, and administrative actions) listed in Appendix B. FEMA will document this determination in the project file and authorize the release of funding for the Undertaking without further review and SHPO notification.
- C. For all other activities, FEMA will conduct Section 106 review in accordance with Stipulation V. or VI. of this Agreement.

III. GENERAL

A. Professional Qualifications:

- 1. FEMA will use Federal, State of Mississippi agency, or contractor staff who meet the Secretary of the Interior's (SOI's) Professional Qualifications Standards (Qualifications), as determined by FEMA's Federal Preservation Officer (FPO), in the required disciplines, in making *National Register* eligibility and affect determinations, and in overseeing compliance with this Agreement.
- 2. FEMA acknowledges that Tribes possess special expertise related to properties that possess Tribal religious and cultural significance, and FEMA may utilize this expertise in determining if any such properties are eligible for the *National Register*.
- B. All time designations will be in calendar days. If any party does not comment on a determination related to a proposed action within an agreed upon timeframe, FEMA may assume the party's concurrence with FEMA's determination.

C. FEMA responsibilities:

1. FEMA may request that Federal, State of Mississippi agency, or applicant staff who meet the Qualifications, as determined by FEMA's FPO, conduct the identification and evaluation of historic properties on behalf of FEMA, as described in 36 CFR 800.4(b,c).²

² FEMA will provide 100 percent funding under the Stafford Act through standard procurement procedures for the performance of these delegated activities.

- 2. FEMA will review any *National Register* eligibility recommendations resulting from the performance of these delegated activities.
- 3. FEMA will provide the SHPO and Council with an annual report for the previous calendar year by March 31st of each year that this Agreement is in effect. This report will summarize, as listed below, the actions taken to implement the terms of this Agreement.
 - a. A listing of the projects requiring a cultural resource survey;
 - b. The number of properties added either as Mississippi Landmarks or to the *National Register*;
 - c. A summary of project mitigation measures undertaken, including the use of Memoranda of Agreements;
 - d. A summary of projects requiring archaeological activities;
 - e. A summary of staff training;
 - f. The views of FEMA (Region IV) regarding the effectiveness of the Programmatic Agreement;
 - g. Suggestions for additional actions that could be considered for inclusion in Appendix B.

The parties will review this information to determine if amendments to the Agreement are necessary. Upon the request of any party, a meeting will be held subsequent to the issuance of the annual report to review the report and/or discuss issues in greater detail.

4. FEMA shall ensure that all final reports resulting from Undertakings pursuant to this Agreement will be consistent with applicable SHPO guidelines for such documents.

D. SHPO responsibilities:

- 1. The SHPO will concur or non-concur with FEMA's *National Register* eligibility determinations within the timeframes required by this Agreement.
- 2. The SHPO may delegate some or all of its responsibilities under this Agreement to persons who are not currently members of the SHPO staff and who will serve as SHPO representatives with respect to the actions and decisions required by this Agreement. The SHPO will consult with FEMA about the selection of representatives, the scope of responsibilities delegated, and implementing procedures related to the actions and decisions delegated.

IV. INITIAL COORDINATION FOLLOWING DECLARATION OF A DISASTER

Following a Federal disaster declaration, FEMA will meet with the SHPO and MEMA to establish points of contact and protocols for the implementation of the Agreement. SHPO and MEMA representatives will then attend a historic scoping meeting, where FEMA and MEMA will provide guidance on program issues and processes. MEMA and FEMA, as appropriate, will also present information related to the Section 106 review process to all applicants, at the applicants' briefings and kickoff meetings.

A. FEMA will:

- 1. Determine with the SHPO those previously designated historic properties (standing structures) within the Undertaking's area of potential effect that may not have not retained integrity. This Agreement will only apply to historic properties that retain integrity in the aftermath of the Disaster, pursuant to 36 CFR Part 60. If FEMA and the SHPO do not agree on whether a *National Register* eligible listed property has retained integrity, FEMA will review all Undertakings that may affect the property in accordance with Stipulations V. through VII.
- 2. Consult with other Federal agencies and any Tribes having jurisdiction for Undertakings related to the Programs to ensure compliance with applicable historic preservation laws and regulations.
- 3. Develop with the SHPO a feasible plan for involving the public in the Section 106 review process, pursuant to 36 CFR 800.2(d).
- 4. Upon learning that a National Historic Landmark (NHL) has been damaged as a result of the disaster, FEMA will promptly notify the SHPO and the Secretary of the Interior's Program Manager at the National Park Service's Southeast Regional Office in Atlanta.

B. The SHPO will:

- 1. Provide FEMA with available information about historic properties within the declared Disaster area, including:
 - a. Properties listed in or previously determined eligible for the *National Register* through a Section 106 review or by the SOI;
 - b. Properties listed as Mississippi Landmarks;
 - c. Geographic areas with high potential for archaeological resources, and areas where it is known that there are not any archaeological resources; and

- d. Previously identified Traditional Cultural Properties, and known properties of religious and cultural significance to Tribes.
- 2. Work with FEMA to jointly compile a list of previously identified or unevaluated historic properties, and geographic areas with a high potential for unidentified historic properties.
- 3. Identify SHPO staff or consultants to assist FEMA staff with its Section 106 responsibilities, and to identify in coordination with FEMA specific activities that the SHPO may perform at FEMA's request for specific projects.
- 4. Assist FEMA in identifying any Tribes, organizations, or individuals that may have an interest in historic properties affected by the disaster. FEMA and the SHPO will jointly contact these interested parties to inform them of this Agreement and to request information on the location of damaged historic properties within the area of potential effect.
- 5. Assist local jurisdictions in identifying staging and landfill sites for debris disposal, and sites for chipping of vegetative debris, if applicable, that will have a minimal or no effect on historic properties.

V. EXPEDITED PROJECT REVIEW FOR EMERGENCIES

- A. Immediate rescue and salvage operations conducted to preserve life and improved property are exempt from the provisions of Section 106 (36 CFR Part 800.12(d)).
- B. As a result or in anticipation of a disaster, FEMA may be requested to authorize funding for emergency protective measures in response to an immediate threat to human health and safety or improved property, which may adversely affect historic properties. For all Undertakings that the Federal Coordinating Officer (FCO) determines are of an emergency nature as defined in Section 102(1) of the Stafford Act, and are not exempt from Section 106 review in accordance with Stipulation V.A. above, FEMA will conduct the following expedited review:
 - 1. The expedited review period will begin at the time that FEMA determines that an emergency action is required, and will remain in effect for the time necessary to implement this expedited review, but for not more than 30 days after the time of discovery of the emergency.
 - 2. The FCO will certify in writing to the SHPO the need for FEMA to conduct expedited project review for individual Undertakings. Should FEMA determine that it is necessary to extend the expedited review period beyond 30 days, FEMA will, in 30-day increments, as needed, request an extension in writing from the SHPO and Council. FEMA will immediately assume the SHPO's and Council's concurrence unless otherwise notified. by the Council.

- 3. If it appears that an emergency action will adversely affect a historic property during this expedited review period, FEMA will provide the SHPO with available information about the condition of the property, the proposed action, and prudent and feasible measures that would take the adverse effect into account, requesting the SHPO's comments. FEMA may provide this information through written requests, telephone conversations, meetings, or electronic media. The SHPO will respond to any FEMA request for comments within 3 days after receipt, unless FEMA determines the nature of the emergency action warrants a shorter time period.
- 4. If FEMA does not accept the recommendations provided by the SHPO pursuant to this Stipulation, or the SHPO objects to FEMA's proposal to use the emergency review procedure and/or proposed treatment measures, FEMA will consult with the SHPO to resolve the dispute. If FEMA is unable to resolve the dispute, FEMA will seek the Council's comments. The Council will provide final comments to FEMA within 3 days after receipt of FEMA's request, unless FEMA determines the nature of the emergency action warrants a shorter time period.

VI. STANDARD PROJECT REVIEW

The signatories of this agreement will follow the following review for all non-emergency undertakings, except as provided for in Stipulation II.B.

- A. Area of Potential Effects (APE): For all project review of standing structures the APE will be the individual facility (as defined in 44 CFR 206.201(c)) when an Undertaking is limited to the in-kind repair or rehabilitation of the facility's interior or exterior. FEMA will establish the APE in consultation with the SHPO for all other Undertakings including those that may affect archaeological properties. FEMA will also identify and invite other appropriate parties (such as local governments and the public) to provide information related to the APE.
- B. In accordance with 36 CFR 800.4(b,c), FEMA will determine, in consultation with the SHPO, if the APE contains properties (including archaeological properties) that are listed in or eligible for the *National Register*.

For small projects, as defined in 44 CFR §206.203(c)(2), (less than or equal to \$52,000 in FY2002) under the Public Assistance Program, properties in the APE that are not listed on the *National Register* or as Mississippi Landmarks will not require review by the SHPO. FEMA may approve funding for such projects after documenting its decision in writing in the project files and conclude the review required by this Agreement.

C. If no historic properties are present within the APE, or if an Undertaking is designed to avoid affecting the character defining features of such historic property or properties, FEMA will make a determination of "no historic properties affected" in accordance with 36 CFR 800.4(d)(1). FEMA will notify the SHPO and all consulting parties of this determination and provide supporting documentation. Unless the SHPO or any

- consulting party objects to this determination within 14 days after receipt, FEMA will complete the Section 106 review and may approve funding.
- D. If an Undertaking may affect identified historic properties, or if the SHPO objects to the determination of "no historic properties affected" within 14 days after receipt, FEMA will consult with the SHPO to apply the criteria of adverse effect, pursuant to 36 CFR 800.5(a)(1), or determine if the Undertaking meets the SOI Standards for the Treatment of Historic Properties (Standards), or any other applicable SOI Standards. FEMA will also consider any views provided by consulting parties and the public related to such effects.

1. For standing structures only:

- a. If FEMA and the SHPO agree that an Undertaking does not meet the adverse effect criteria or that it meets the Standards, FEMA will make a determination of "no adverse effect" pursuant to 36 CFR 800.5(b). FEMA will notify the SHPO and all consulting parties of this determination and provide supporting documentation pursuant to 36 CFR 800.5(c). Unless the SHPO or any consulting party objects within 14 days after receipt of the notification, FEMA will complete the Section 106 review and may approve funding.
- b. If the SHPO objects to the "no adverse effect" determination, FEMA will attempt to resolve the objection through discussion. If still unresolved, FEMA will request through MEMA that the applicant revise the scope of work to substantially conform to the Standards, in consultation with the SHPO and consulting parties. FEMA also will ensure that the revised scope of work is reviewed for funding eligibility. If the applicant modifies the scope of work to address the objections, FEMA will notify the SHPO and all consulting parties, and provide supporting documentation. Unless the SHPO or any consulting party objects within 14 days after receipt, FEMA will complete the Section 106 review and may approve funding.
- c. If the applicant is unable to, or will not modify the Undertaking to meet the Standards or address the objections, FEMA will initiate adverse effect consultation pursuant to Stipulation VII.

2. For archaeological properties only:

- a. If there is a reasonable potential for archaeological properties to be present within the APE, FEMA will consult with the SHPO to determine the level of effort necessary to identify the anticipated type and location of these properties.
- b. FEMA will initiate adverse effect consultation pursuant to Stipulation VII when consulting parties agree there is an adverse effect, or when a

consulting party objects to a finding of "no adverse effect" whereby identified archaeological properties are avoided or effects minimized through redesign of an Undertaking, or through other procedures/requirements.

VII. RESOLUTION OF ADVERSE EFFECTS FOR HISTORIC PROPERTIES

- A. If FEMA determines that an Undertaking will adversely affect a historic property, and barring objections from Native American groups that have expressed an interest in the site because of its religious or cultural significance, and barring the existence of human remains or associated funerary objects within the site, FEMA will determine if the Undertaking will be reviewed in accordance with 36 CFR 800.6(b), resulting in a Memorandum of Agreement (MOA), or addressed through a Secondary Programmatic Agreement (for a category of projects). Following this decision, FEMA will notify the SHPO, all other consulting parties, and provide the Council with an adverse effect notice, including documentation in accordance with 36 CFR 800.11(e).
 - 1. Memorandum of Agreement: FEMA, in consultation with the SHPO and other affected consulting parties, may develop an MOA in accordance with 36 CFR 800.6(c) to outline measures to treat adverse effects to historic properties. FEMA may consider reasonable alternate treatment measures that serve an equivalent or greater public benefit than standard measures or archaeological data recovery, while promoting the preservation of historic properties. FEMA will attempt to identify all such feasible measures in consultation with the SHPO and other affected consulting parties. Alternate measures may include, but are not limited to, preservation planning, interpretive programs, or development of a historic properties database with Geographic Information Systems.
 - 2. Secondary Programmatic Agreement: FEMA, the SHPO, MEMA, the Council, if participating, and other consulting parties may consult to develop a Secondary Programmatic Agreement to require programmatic conditions and/or treatment measures for multiple, but similar Undertakings by an applicant.
- B. When an Undertaking will adversely affect an archaeological property, and barring objections from Native American groups that have expressed an interest in the site because of its religious or cultural significance, and barring the existence of human remains or associated funerary objects within the site, FEMA may resolve the adverse effect. Resolution may be accomplished treat the adverse effect by providing for the recovery of significant information through archaeological data recovery or other scientific means, assuming avoidance and adverse affect minimization provisions in Stipulation VI have been exhausted. To accomplish this objective, FEMA will follow the SOI's *Guidelines for Archaeological Documentation*, as well as the SHPO's data recovery/documentation guidelines; and consult with the other consulting parties to prepare a data recovery plan, including material and record curation provisions. For sites where FEMA determines extraordinary circumstances exist or when other treatment

- measures are appropriate, FEMA will consult further with the other consulting parties to develop an appropriate approach to resolving the adverse effects.
- C. FEMA will also involve the public in the resolution of adverse effects in accordance with 36 CFR 800.6(a)(4).
- D. When an Undertaking will adversely affect a National Historic Landmark (NHL), FEMA also will notify and invite the Secretary of the Interior (Secretary), through the NHL Program Manager at the National Park Service's Southeast Regional Office in Atlanta, to participate in consultation, pursuant to 36 CFR 800.10(c). When the Council participates in consultation related to an NHL, the Council will report the outcome of the consultation to the Secretary and the FEMA Director.

VIII. CHANGES TO AN APPROVED SCOPE OF WORK

MEMA will notify FEMA as soon as practicable of any proposed change to the approved scope of work for an Undertaking related to a historic property. FEMA will then consult with the SHPO to determine if the change will have an effect on the property. FEMA may authorize the applicant to proceed with the change if it meets an Allowance or if, for a standing structure, the change can be modified to conform to the Standards, or any other applicable SOI Standards. If FEMA determines that the change does not meet an Allowance, or if FEMA and the SHPO determine that the change cannot be modified to conform to the Standards, or any other applicable SOI Standards, FEMA will initiate adverse effect consultation pursuant to Stipulation VII.

IX. UNEXPECTED DISCOVERIES

- A. MEMA will notify FEMA as soon as practicable if it appears that an Undertaking will affect a previously unidentified property that may be historic, including human remains; or affect a known historic property in an unanticipated manner. MEMA will require the applicant to stop construction activities in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the property until FEMA concludes consultation with the SHPO and other affected consulting parties.
- B. FEMA will notify the SHPO and other affected consulting parties of the discovery at the earliest possible time and consult to develop actions to take into account the effects of the Undertaking. FEMA will notify the SHPO and other affected consulting parties of any time constraints, and all parties will mutually agree upon timeframes for this consultation. MEMA and the applicant may participate in this consultation. FEMA will provide the SHPO and other affected consulting parties with written recommendations to take into account the effects of the Undertaking.
- C. If the SHPO does not object to FEMA's recommendations within the agreed upon timeframe, FEMA will require the applicant to modify the scope of work to implement the recommendations. If the SHPO objects to the recommendations, FEMA and the SHPO will consult further to resolve this objection through actions including, but not

limited to, identifying project alternatives that may result in the Undertaking having no adverse effect on historic properties, or proceeding in accordance with Stipulation VII.

X. DISPUTE RESOLUTION

- A. Should the SHPO, MEMA, the Council, or a consulting party object within the timeframe provided by this Agreement to any plans, specifications, or actions provided for review pursuant to this Agreement, FEMA will consult further with the objecting party to seek resolution. If FEMA objects within any such timeframe to any such plans, specifications, or actions, FEMA will consult further with the other parties to seek resolution. If FEMA determines within 14 days of receipt of an objection that the objection cannot be resolved, FEMA will forward to the Council all documentation relevant to the dispute, including FEMA's proposed resolution to the objection.
- B. Any recommendation or comment provided by the Council will pertain only to the subject of the dispute. The responsibility of the signatories to implement all actions pursuant to this Agreement that are not subject to the dispute will remain unchanged.

XI. ANTICIPATORY ACTIONS

- A. FEMA will not grant assistance to an applicant who, with intent to avoid the requirements of this Agreement or Section 106, has intentionally significantly adversely affected a historic property to which the assistance would relate, or having legal power to prevent it, allowed such significant adverse effect to occur. After consulting with the SHPO and Council, FEMA may determine that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant, and will complete consultation for the Undertaking pursuant to Stipulation VII.
- B. FEMA will specifically advise MEMA of this Stipulation and will require that MEMA advise its applicants in writing at their kickoff meetings that they may not initiate construction on projects for which they are seeking Federal funding prior to compliance with this Agreement. MEMA will also advise its applicants that they may jeopardize Federal funding if construction is initiated prior to compliance with this Agreement.

XII. DURATION, AMENDMENTS, AND TERMINATION

- A. Unless terminated pursuant to Stipulation XII.C., below, this Agreement shall remain in effect from the date of execution for five years; until FEMA, in consultation with all other signatories, determines that the terms of this Agreement have been satisfactorily fulfilled and/or the Agreement should be extended.
- B. If any signatory to the Agreement determines that the Agreement cannot be fulfilled, the signatories will consult to seek amendment of the Agreement. Any amendment will be specific to the applicable Disaster unless otherwise agreed to by the signatories.

- C. FEMA, the SHPO, or MEMA, or the Council may terminate this Agreement by providing 30 days' written notice to the other parties, provided that the parties will consult during this period to seek amendments or other actions that would prevent termination. Termination of this Agreement will require compliance with 36 CFR Part 800.
- D. This Agreement may be terminated by the implementation of a subsequent Agreement that explicitly terminates or supersedes this Agreement, or by FEMA's implementation of Alternate Procedures, pursuant to 36 CFR 800.14(a).

XIII. IMPLEMENTATION OF THIS PROGRAMMATIC AGREEMENT

- A. This Agreement may be implemented in counterparts, with a separate page for each signatory, and FEMA will ensure that each party is provided with a complete copy. This Agreement will become effective on the date of the last signature.
- B. FEMA programs authorized by Congress in the future may be included under this Agreement, without amending this Agreement, through written concurrence by FEMA, SHPO, MEMA, the Council, and any other consulting parties.
- C. Execution of this Agreement by all signatory parties the Council and implementation by FEMA evidences that FEMA has taken into account the effects of Undertakings on historic properties and afforded the Council a reasonable opportunity to comment on all of the Programs pursuant to the Stafford Act, the National Flood Insurance Reform Act, and Disaster Mitigation Act; and that FEMA has satisfied its Section 106 responsibilities for all Undertakings.

PROGRAMMATIC AGREEMENT AMONG

THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE MISSISSIPPI STATE HISTORIC PRESERVATION OFFICE, AND THE MISSISSIPPI EMERGENCY MANAGEMENT AGENCY, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION

FEDERAL EMERGENCY MANAGEMENT AGENCY EMERGENCY PREPAREDNESS AND RESPONSE DIRECTORATE

By:	Date:
Kenneth O. Burris Jr., Regional Director	
Region IV	
By:	Date:
William R. Straw, Ph.D., Regional Environmental Officer	
Region IV	

PROGRAMMATIC AGREEMENT AMONG

THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE MISSISSIPPI STATE HISTORIC PRESERVATION OFFICE, AND THE MISSISSIPPI EMERGENCY MANAGEMENT AGENCY, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION

MISSISSIPPI STATE HISTORIC PRESERVATION OFFICE

By:	Date:	
Fibert R Hilliard State Historic Preservation Officer		

PROGRAMMATIC AGREEMENT AMONG

THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE MISSISSIPPI STATE HISTORIC PRESERVATION OFFICE, AND THE MISSISSIPPI EMERGENCY MANAGEMENT AGENCY, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION

MISSISSIPPI EMERGENCY MANAGEMENT AGENCY

By:	Date:
Robert Latham Director	

APPENDIX A

ADDENDUM TO THE PROGRAMMATIC AGREEMENT

AMONG

THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE MISSISSIPPI STATE HISTORIC PRESERVATION OFFICE, AND THE MISSISSIPPI EMERGENCY MANAGEMENT AGENCY AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION

WHEREAS, the Federal Emergency Management Agency (FEMA), which has been incorporated into the Department of Homeland Security, Emergency Preparedness and Response Directorate, makes assistance available to States, communities, and other eligible entities for disaster housing; hazard mitigation; prevention of, and preparedness for, emergencies and disasters; and the repair, restoration and replacement of public infrastructure pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §\$5121-5206, (Stafford Act), the National Flood insurance Act of 1968, as amended, 42 U.S.C. § 4001 et seq., the Federal Fire Prevention and Control Act of 1974, as amended, 15 U.S.C. § 2201 et seq., and implementing regulations contained in Title 44 of the Code of Federal Regulations (CFR); and

WHEREAS, the Federal Emergency Management Agency (FEMA) proposes to administer the Federal disaster Public Assistance, Hazard Mitigation Grant, Individual and Family Grant, Flood Mitigation Assistance, and Pre-Disaster Mitigation Programs (Programs) pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §§5121-5204c, (Stafford Act), and its implementing regulations contained in Title 44 of the Code of Federal Regulations (44 CFR) Part 206; the National Flood Insurance Reform Act of 1994 and its implementing regulations contained in 44 CFR Part 78; and the Disaster Mitigation Act of 2000 and its implementing regulations; and such Acts or implementing regulations as are passed from time to time; and

WHEREAS, FEMA, the Mississippi State Historic Preservation Office (SHPO), and the Mississippi State Emergency Management Agency (MEMA) and the Advisory Council on Historic Preservation (Council) recognize that implementation of these Programs will result in Undertakings that may occur on lands under the jurisdiction of the ______ Indian Tribe (Tribe); and

WHEREAS, FEMA has determined that implementation of these Programs will result in Undertakings that may have an effect on properties of religious and cultural significance to the Tribe, located on or off Tribal lands, that are listed in or eligible for the *National Register of Historic Places* (historic properties), and has consulted with the Tribe and its Tribal Historic Preservation Officer (THPO) pursuant to 36 CFR 800.14(b)(3) of the regulations implementing Section 106 of the National Historic Preservation Act (NHPA);

NOW, THEREFORE, FEMA has consulted with the Tribe and requested that it enter into this Addendum to the Programmatic Agreement (Agreement) to facilitate the Section 106 review of Undertakings that may directly or indirectly affect historic properties of religious and cultural significance on or off Tribal lands.

STIPULATIONS

FEMA shall require that the following measures be implemented:

[OPTION 1: The THPO has not assumed SHPO responsibilities pursuant to Section 101(d)(2) of the NHPA:]

- 1. FEMA will consult with the ______ THPO in addition to the SHPO, pursuant to this Agreement, for all Undertakings that may affect historic properties of religious and cultural significance to the Tribe, on or off Tribal lands. The THPO agrees to participate in the review of all of these Undertakings in accordance with the terms of the Agreement. For the purposes of this Addendum, all references to "the SHPO" in the Agreement will also refer to the THPO for the review of these Undertakings.
- 2. FEMA will require all Federal agencies participating in an Undertaking to consult with the THPO in addition to the SHPO pursuant to the Agreement and this Addendum.
- 3. This Addendum shall become effective on the last date of signature by FEMA, the SHPO, the THPO, MEMA (if the Grantee), the Council, and any other participating Federal agency.

[OPTION 2: The THPO has assumed SHPO responsibilities pursuant to Section 101(d)(2) of the NHPA:]

- 1. FEMA recognizes that the ______ Tribe has assumed the responsibilities of the SHPO for Section 106 on Tribal lands, pursuant to Section 101(d)(2) of the NHPA, and shall consult with the THPO in lieu of the SHPO, pursuant to this Agreement for all Undertakings that may affect historic properties of religious and cultural significance to the Tribe, on or off Tribal lands. The THPO agrees to participate in the review of all of these Undertakings in accordance with the terms of the Agreement. For the purposes of this Addendum, all references to "the SHPO" in the Agreement will refer only to the THPO for the review of such Undertakings occurring on or affecting historic properties on Tribal lands. All references to the SHPO will refer to both the SHPO and the THPO for the review of such Undertakings that may affect historic properties off Tribal lands, unless the SHPO elects to not participate in this review.
- 2. FEMA will require all Federal agencies participating in an Undertaking to consult with the THPO pursuant to the Agreement and this Addendum.

- 3. The parties recognize that the SHPO shall participate as a consulting party pursuant to the Agreement if an Undertaking will occur on Tribal land but affect historic properties off Tribal land. The SHPO may also participate in consultation if requested in accordance with 36 CFR 800.3(c)(1).
- 4. This Addendum shall become effective on the last date of signature by FEMA, the SHPO, the THPO, MEMA (if the Grantee), the Council, and any other participating Federal agency.

SIGNATORY PARTIES:

FEMA,	the SHI	PO, the	THPO,	MEMA	(if the	Grantee),	the	Council,	and a	ny othe	r part	icipat	ting
Federal	agency									-	_	_	

TRIBAL HISTORIC PRES	ERVATION OFFICE	
By:	Date:	

APPENDIX B: PROGRAMMATIC ALLOWANCES

The following project activities do not require review by the SHPO or Council pursuant to Stipulations III.-VI. This list may be revised without amending this Agreement, with a letter concurred by FEMA and the SHPO.

When referenced in an Allowance, "in kind" shall mean that the result will match all physical and visual aspects of existing historic materials, including form, color, and workmanship. "In kind" mortar will also match the strength and joint tooling of existing historic mortar.

- I. GROUND DISTURBING ACTIVITIES AND SITE WORK, when all work is performed in previously disturbed or archaeologically surveyed areas and is consistent with the Standards, or any other applicable SOI Standards
- A. Ground disturbing activities related to the repair, replacement, or hardening of any footings, foundations, retaining walls, other slope stabilization systems (i.e., gabion baskets, etc.), and utilities (including sewer, water, storm drains, electrical, gas, communication, leach lines, and septic tanks), provided the excavation will not disturb more soil than previously disturbed. This Allowance refers to archaeological review. The Allowance also applies to historic review of such features that are listed in or eligible for the *National Register*, only if the work is in kind.
- B. Substantially in kind repair, replacement, or upgrade of culvert systems within rivers, streams, or drainage ways, including any modest increase in capacity, provided the excavation will not disturb more soil than previously disturbed. This Allowance also applies to related features (such as headwalls and wing walls) that are in or eligible for the *National Register*, only if the work is in kind.
- C. Repair, replacement, or hardening of utilities under existing improved roads/roadways, or within other previously disturbed rights of way.
- D. In kind repair or replacement of driveways, parking lots, and walkways.
- E. In kind repair or replacement of fencing and other freestanding exterior walls.
- F. Substantially in kind repair or replacement of metal utilitarian structures (i.e. pump houses, etc.), including major exposed pipelines. Modern materials may be used, provided their finish is compatible with the context of the site. Structures such as bridges, water towers, and antenna towers are not considered metal utilitarian structures for the purposes of this Allowance.
- G. Installation of temporary structures for uses such as classrooms or offices. This Allowance does not apply to such structures in historic districts.

- H. Installation of scaffolding, temporary barriers (i.e., chain link fences, etc.), polyethylene sheeting, or tarps, provided such work does not result in additional damage, significant loss of historic fabric, or irreversible alterations.
- I. In kind repair or replacement of hardscaping and utilities, such as paving, planters, trellises, irrigation, and lighting.
- J. In kind repair, replacement, or upgrade to codes and standards of existing piers, docks, boat ramps, boardwalks, stands, gazebos, and dune crossovers, provided the footprint will substantially match the existing footprint.
- K. Debris collection from public rights of way, transport, and disposal in existing licensed solid waste facilities. This Allowance does not include establishment or expansion of debris staging areas.
- L. Sediment removal from man-made drainage facilities, including retention/detention basins, ponds, ditches, and canals, to restore the facility to its pre-disaster condition, provided the sediment is used to repair eroded banks or is disposed at an existing licensed or permitted spoil site.
- M. Dewatering flooded developed areas.
- N. Placement of emergency beach berms seaward of improved property where severe erosion has occurred, when work is performed under the authority of an existing US Army Corps of Engineers and or Mississippi Department of Environmental Quality permit for both the sand deposit area and upland or offshore borrow site, including dredge spoil piles.
- II. BUILDINGS, when all work is consistent with the Secretary of Interior's Standards
- A. Interior Floors, Walls, Stairs and Ceilings
 - 1. In kind repairing, replacing, retaining, preserving, protecting, or maintaining of materials or features.
 - 2. In kind repair of interior floors, walls and ceilings. This Allowance also applies to the repair of interior finishes, including plaster and wallboard, provided the repair is restricted to the damaged area and does not affect adjacent materials. The Allowance does not apply to historic architectural finishes such as decorative plaster trim, or plaster substrates for decorative materials such as murals, gold leaf, etc.
 - 3. Repair or replacement of suspended or glued ceiling tiles.
 - 4. Installation of grab bars and other such minor interior modifications for handicapped accessibility.

5. Non-destructive or concealed testing for hazardous materials (lead paint, asbestos, etc.) or damage assessment.

B. Utilities and Mechanicals

- 1. Minor interior mechanical (HVAC), electrical, or plumbing work, limited to upgrading, elevation, or in kind replacement, with the exception of historic fixtures, which must be repaired in kind for this Allowance to apply. This Allowance does not apply to exposed new ductwork.
- 2. Replacement or installation of interior fire detection, fire suppression, or security alarm systems. This Allowance does not apply to exposed wiring such as surface mounted wiring, conduits, piping, etc.

C. Windows and Doors

- 1. In kind repair or replacement of damaged or deteriorated windows and doors.
- 2. Replacement of windowpanes in kind or with clear double or triple glazing, provided the result does not alter the existing window material and form. Also, historic windows or glazing may be treated with clear window films. This Allowance does not apply to the replacement of existing archaic or decorative glass.
- 3. In kind repair of historic door and window hardware.

D. Exterior Walls, Cornices, Porches and Foundations

- 1. Repainting of surfaces, provided that destructive surface preparation treatments are not used, such as water blasting, sandblasting, power sanding, and chemical cleaning.
- 2. In kind repair or partial replacement of porches, cornices, exterior siding, doors, balustrades, stairs, or trim.
- 3. Substantially in kind repair or replacement of signs or awnings.
- 4. Temporary stabilization bracing or shoring, provided such work does not result in additional damage, significant loss of historic fabric, or irreversible alterations.
- 5. Anchoring of walls to floor systems, provided the anchors are embedded and concealed from exterior view, such as in the Hilti systems, and disturbed historic fabric is restored in kind.

- 6. In kind repair or reconstruction of concrete/masonry walls, parapets, chimneys, or cornices, including mortar that matches the color, strength, and joint tooling of historic mortar, where occurring.
- 7. Bracing and reinforcing of chimneys and fireplaces, provided the bracing and reinforcing are either concealed from exterior view or removable in the future.
- 8. Strengthening of foundations and the addition of foundation bolts, provided that visible new work is in kind, including mortar that matches the color, strength, and joint tooling of historic mortar, where occurring.

E. Roofing

In kind repair, replacement, or strengthening of roofing, gutters, or downspouts. Also, cement asbestos shingles may be replaced with asphalt-based shingles, and untreated wood shingles may be replaced with fire resistant wood shingles.

F. Weatherproofing and Insulation

- 1. Caulking and weather-stripping to complement the color of adjacent surfaces.
- 2. In kind replacement or installation of insulation systems, provided that decorative interior plaster, woodwork, or exterior siding is not altered. This Allowance does not apply to urea formaldehyde foam insulation or any other thermal insulation containing water, when installed within wall cavities. Also, the Allowance does not apply to insulation systems that do not include an adequate vapor retarder, or to work in enclosed spaces that are not vented.

G. Seismic Upgrades

The installation of the following seismic upgrades, provided that such upgrades are not visible on the exterior or within character defining historic interiors: cross bracing on pier and post foundations; metal fasteners; collar ties; gussets; tie downs; strapping and anchoring of mechanical, electrical and plumbing equipment; concealed anchoring of furniture; installation of plywood diaphragms beneath first floor joists, above top floor ceiling rafters, and on roofs; and automatic gas shut off valves.

III. ROADS AND ROADWAYS

- A. Repair of roads to pre-disaster geometric design standards and conditions using in kind materials, number and width of lanes, shoulders, medians, curvature, grades, clearances, and side slopes.
- B. Repair of road composition with in kind surface materials to maintain pre-disaster size, traffic capacity, and load classifications of motor vehicles, including the reshaping and compacting of road bed soil and the repair of asphaltic or Portland cement concrete

- pavements. This Allowance does not apply to the repair of brick or stone paving, or the regrading of native materials to reconstruct the roadbed.
- C. Repair of traffic control devices such as traffic signs and signals, delineators, pavement markings, and traffic surveillance systems.
- D. In kind repair of road lighting systems, such as period lighting.
- E. In kind repair of road appurtenances such as curbs, berms, fences, and sidewalks that are not brick or stone.
- F. In kind repair of roadway safety elements such as barriers, guardrails, and impactattenuation devices.

IV. FEES AND SERVICES

- A. Miscellaneous labor costs.
- B. Rental or purchase of vehicles or other motorized equipment.
- C. Builders fees.
- D. Fees for architectural, engineering or other design services, provided the services will not result in an adverse effect on a property listed in or eligible for the *Register*.
- E. Reimbursement of an applicant's insurance deductible, not to exceed \$1,000.

V. HUMAN SERVICES

The following activities relating to implementation of Sections 408, 409, 411, 412, 415, and 416 of the Stafford Act:

- A. Implementation of Federal assistance to individuals and households pursuant to Sections 408 and 411 of the Stafford Act, Individual and Households Programs, including limited funding for minor home repairs/cleaning content replacement, transportation, health care expenses, with the exception of construction and ground disturbing activities associated with temporary housing.
- B. Temporary housing for disaster victims whose homes are uninhabitable, with the exception of potential archeological issues related to temporary housing sites.
- C. Disaster unemployment assistance.
- D. Legal services.
- E. Crisis counseling.

- F. Loans to individuals, businesses, and farmers for the repair, rehabilitation, or replacement of damaged real and personal property.
- G. The Cora Brown Fund, to assist victims of natural disasters for those disaster-related needs that are not met by government agencies or private organizations.

VI. VECTOR CONTROL

Application of pesticides to reduce adverse public health effects, including aerial and truck mounted spraying.

VII. ACQUISITIONS

Funding the administrative action of acquiring properties in buyout projects, including the real estate transaction and excluding demolition.