

Draft Environmental Assessment

# St. Peter/Resurrection Elementary School Improved Project

Jackson County, Mississippi

*September 2008*



**FEMA**

**U.S. Department of Homeland Security**  
FEMA-1604-DR-MS  
Transitional Recovery Office – Biloxi, MS

*This document was prepared by*



600 Parsippany Road, Third Floor  
Parsippany, NJ 07054

200 Orchard Ridge Drive, Suite 101  
Gaithersburg, MD 20878

Contract No. HSFEHQ-06-D-0489  
Task Order No. HSFEHQ-06-J-0003

15708003.00200

# TABLE OF CONTENTS

---

1.0	INTRODUCTION .....	1
2.0	PURPOSE AND NEED .....	1
3.0	ALTERNATIVES .....	1
4.0	AFFECTED ENVIRONMENT AND IMPACTS .....	2
	4.1 Geology and Soils .....	4
	4.2 Water Resources.....	5
	4.3 Transportation .....	7
	4.4 Environmental Justice .....	7
	4.5 Air Quality.....	8
	4.6 Noise .....	9
	4.7 Biological Resources .....	9
	4.8 Cultural Resources.....	10
5.0	CUMULATIVE IMPACTS.....	11
7.0	AGENCY COORDINATION AND PERMITS.....	12
8.0	CONCLUSIONS .....	12
9.0	REFERENCES .....	14
Appendix A	Figures	
Appendix B	Agency Coordination	
Appendix C	Eight-Step Planning Process for Floodplains	



## ACRONYMS AND ABBREVIATIONS

---

ABFE	advisory base flood elevation
amsl	above mean sea level
APE	Area of Potential Effects
BFE	Base Flood Elevation
BMP	Best Management Practice
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
dB	decibel
DFIRM	Digital Flood Insurance Rate Map
DNL	Day-Night Average Sound Level
EA	Environmental Assessment
EO	Executive Order
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
MDEQ	Mississippi Department of Environmental Quality
MDMR	Mississippi Department of Marine Resources
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NISTAC	Nationwide Infrastructure Support Technical Assistance Consultants
NO <sub>2</sub>	nitrogen dioxide
NOAA	National Ocean and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NWI	National Wetlands Inventory
O <sub>3</sub>	ozone
OSHA	Occupational Safety and Health Administration
Pb	lead
PM <sub>2.5</sub>	particulate matter less than 2.5 microns
PM <sub>10</sub>	particulate matter less than 10 microns
RCES	Resurrection Catholic Elementary School



## ACRONYMS AND ABBREVIATIONS

---

SHPO	State Historic Preservation Office
SO <sub>2</sub>	sulfur dioxide
SPAS	St. Peter the Apostle School
SWPPP	Storm Water Pollution Prevention Plan
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service



---

## **1.0 INTRODUCTION**

On August 29, 2005, Hurricane Katrina struck the Mississippi Gulf Coast, causing extensive damage. Subsequently, a Presidential Disaster Declaration, FEMA-1604-DR-MS, was signed for Katrina.

The Catholic Diocese of Biloxi, Mississippi, has submitted an application for Federal Emergency Management Agency (FEMA) funding under FEMA's Public Assistance Program being administered in response to FEMA-1604-DR-MS for the proposed relocation of St. Peter the Apostle School to the Resurrection Catholic Elementary School campus. Both schools are located in Pascagoula, Mississippi.

In accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 93-288, as amended, and implementing regulations at 44 Code of Federal Regulations (CFR) Part 206, FEMA is required to review the environmental effects of the proposed action prior to making a funding decision. This Environmental Assessment (EA) has been prepared in accordance with FEMA's National Environmental Policy Act (NEPA) regulations found in 44 CFR Part 10.

## **2.0 PURPOSE AND NEED**

St. Peter the Apostle School (SPAS) was located at 1703 Telephone Road in Pascagoula (Figure 1 in Appendix A) and included a main academic building, a combination cafeteria and gymnasium, a metal classroom building, and a storage shed. The school provided private K-6<sup>th</sup> grade education with a capacity of 180 students. On August 29, 2005, Hurricane Katrina made landfall in Mississippi, inundating the SPAS campus with 8 to 12 feet of water, which resulted in damages in excess of the 50% repair/replacement ratio, meeting FEMA's criteria for replacement of the SPAS campus. In accordance with FEMA's policy for FEMA-1604-DR-MS, the former SPAS campus will be returned to grade and revegetated.

SPAS faculty, staff, and students currently utilize temporary facilities located on the campus of Resurrection Catholic Elementary School (RCES) at 3704 Quinn Drive in Pascagoula. These facilities are neither expected nor intended to withstand many months of regular use and are not considered a long-term solution. Consequently, there is a need to provide SPAS with a permanent facility in a location that will effectively serve the community.

## **3.0 ALTERNATIVES**

This section describes the alternatives that were considered in addressing the purpose and need stated in Section 2. Two alternatives were evaluated: the No Action Alternative, and the Proposed Action Alternative, which is the permanent relocation of SPAS to the RCES campus.

### Alternative 1: No Action

Under the No Action Alternative, the SPAS campus would not be replaced and SPAS faculty, staff, and students would continue to utilize temporary facilities located on the campus of RCES.



## Alternative 2: Relocation of SPAS to the RCES Campus (Proposed Action)

Under the Proposed Action Alternative, the Catholic Diocese of Biloxi would permanently relocate SPAS facilities and students to the RCES campus, which is located approximately 3 miles southeast of the former SPAS campus (Figure 2 in Appendix A). The consolidation of the two schools would more effectively serve the community. The proposed project site is within the 100-year floodplain Zone AE with a Base Flood Elevation (BFE) of 14 feet and the portion of the campus to be used for the construction of the new facilities is located within the Advisory Base Flood Elevation (ABFE). However, the proposed project site is outside of the coastal high hazard zone based on post-Katrina maps. There are no practicable alternatives to building within the floodplain, as most of Pascagoula is within the 100-year floodplain. FEMA's Eight-Step Planning Process for Floodplains has been completed to identify, minimize, and mitigate floodplain impacts (Appendix C).

The proposed project site is bound on the west by Martin Street, on the north and east by RCES buildings and grounds, and on the south by private residences. Access would be provided via Martin Street and Quinn Drive. The proposed project site is previously disturbed land consisting of an open, grassy field behind existing school buildings. The new facility will tie into existing municipal water, electric, sewer, and telephone utilities on the RCES campus.

The new facility would be a 15,131-square-foot building containing 5 new classrooms with a combined student capacity of 150 students, as well as a multi-use gymnasium/cafeteria/stage, office space, and restroom facilities (Figure 3 in Appendix A). In addition, existing office space in RCES Building A would be converted to a single, large classroom with a 30-student capacity. The student capacity of RCES will be increased by 180 students, which was the former capacity of SPAS. The new facility would be constructed on an elevated concrete slab supported by a system of concrete piers, footings, and grade beams to an elevation of 14 + 1 feet based on the BFE.

## **4.0 AFFECTED ENVIRONMENT AND IMPACTS**

The following table summarizes the potential impacts of the Proposed Action Alternative and conditions or mitigation measures to offset those impacts. Following the summary table, any areas where potential impacts were identified will be discussed in greater detail.

<b>Affected Environment</b>	<b>Impacts</b>	<b>Mitigation</b>
<b>Geology and Soils</b>	No impacts to geology are anticipated. Short-term minor impacts to soils may occur during construction.  Since the proposed project site is located within the Pascagoula city limits, no conversion of farmland would occur.	Appropriate Best Management Practices (BMPs), such as installing silt fences and revegetating bare soils, would minimize runoff.
<b>Surface Water</b>	Temporary short-term impacts to downstream surface water are possible during construction activities.	A Stormwater Pollution Prevention Plan (SWPPP) and a National Pollutant Discharge Elimination System (NPDES) permit must be



Affected Environment	Impacts	Mitigation
		obtained prior to construction. Appropriate BMPs, such as installing silt fences and revegetating bare soils, would minimize runoff.
<b>Groundwater</b>	No impacts to groundwater are anticipated.	None.
<b>Floodplains</b>	There are no practicable alternatives to building within the floodplain, as most of Pascagoula is within the 100-year floodplain. FEMA's Eight-Step Planning Process for Floodplains has been completed to identify, minimize, and mitigate floodplain impacts.	The new facility would be constructed on an elevated concrete slab supported by a system of concrete piers, footings, and grade beams to an elevation of 14 + 1 feet based on the BFE.
<b>Waters of the U.S. including Wetlands</b>	No impacts to waters of the U.S., including wetlands, would occur.	Appropriate BMPs, such as installing silt fences and stabilizing soils would minimize runoff into downstream water resources.
<b>Transportation</b>	There would be a minor temporary increase in the volume of construction traffic on roads in the immediate vicinity of the proposed project site. There would be minor long-term impacts to traffic levels in the vicinity of the RCES campus as a result of the increased number of students, parents, and staff accessing the campus.	Construction vehicles and equipment would be stored on-site during project construction and appropriate signage would be posted on affected roadways. Traffic devices including signal lights and/or stop signs may be installed during or on completion of construction to mitigate minor long-term impacts to traffic levels.
<b>Public Health and Safety</b>	None.	All construction activities would be performed using qualified personnel and in accordance with the standards specified in Occupational Safety and Health Administration (OSHA) regulations. Appropriate signage and barriers would be in place prior to construction activities to alert pedestrians and motorists of project activities.
<b>Hazardous Materials</b>	No hazardous materials or waste impacts are anticipated.	Any hazardous materials discovered, generated, or used during construction would be disposed and handled in accordance with applicable local, state, and federal regulations.
<b>Socioeconomic Resources</b>	No adverse socioeconomic impacts are anticipated.	None.

<b>Affected Environment</b>	<b>Impacts</b>	<b>Mitigation</b>
<b>Environmental Justice</b>	No disproportionately high or adverse effect on minority or low-income populations is anticipated.	None.
<b>Air Quality</b>	Short-term impacts to air quality would occur during the construction period.	Construction contractors would be required to water down construction areas when necessary; fuel-burning equipment running times would be kept to a minimum; engines would be properly maintained.
<b>Noise</b>	Short-term noise impacts would occur at the proposed project site during the construction period.	Construction would occur during scheduled hours and equipment would meet all local, state, and federal noise regulations.
<b>Biological Resources</b>	Approximately .35 acre of mowed grass would be removed.	None.
<b>Cultural Resources</b>	No impacts to cultural resources are anticipated.	None.

#### 4.1 Geology and Soils

The proposed project site is underlain by coastal deposits, an unconsolidated geologic formation consisting of loam, sand, gravel, and clay (MARIS, 2008).

The proposed project site contains soils classified as Ocilla loamy sand (USDA/NRCS, 2007). The Ocilla series consists of somewhat poorly drained, moderately permeable soils formed in sandy and loamy marine sediments. These soils are formed on low uplands and stream terraces with slopes of 0 to 10 percent (USDA/NRCS, 1997). Depth to the water table is 12 to 30 inches. Ocilla loamy sand is not listed as a hydric soil (USDA/NRCS, 2007). The proposed project site has not been previously developed. It was historically used as pasture land for approximately 60 years. When the RCES campus was built, soil was placed on the proposed project site to form a crown to aid in drainage. The proposed project site is approximately 10 feet above mean sea level (amsl). The area surrounding the proposed project site slopes gently southwest toward Chico Bayou (EDR, 2008) (Figure 1 in Appendix A).

The Farmland Protection Policy Act states that federal agencies must “minimize the extent to which federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses...” According to the U.S. Department of Agriculture Soil Survey for Jackson County, the proposed project site does not contain soils classified as prime farmland (USDA/NRCS, 2008). The proposed project site contains soils that are used mostly for forestry (USDA/NRCS, 1997).

No Action Alternative – Under the No Action Alternative, no impacts to geology or soils would occur.

Proposed Action Alternative – Under the Proposed Action Alternative, no impacts to geology are anticipated. Short-term impacts to non-native soils, and possibly native soils beneath, would occur during the construction period. The applicant would be required to submit an SWPPP.



---

Implementation of appropriate BMPs, including the installation of silt fences and the revegetation of soils immediately upon completion of construction to minimize the potential for erosion, would be required at the construction location.

On May 12, 2008, an agency consultation letter requesting project review was sent to the Natural Resources Conservation Service (NRCS) (Appendix B). The NRCS responded in a letter dated June 13, 2008 stating that the NRCS had no concerns due to this project because the new site is on an existing school campus in the city. NRCS confirmed in a prior consultation that any proposed project sites located within city limits are not considered prime farmland (Thornton, pers. comm.).

## **4.2 Water Resources**

### **4.2.1 Surface Water**

The Clean Water Act (CWA), as amended in 1977, established the basic framework for regulating discharges of pollutants into the waters of the United States.

The nearest freshwater stream, Bayou Chico, is located approximately 0.2 mile west of the proposed project site; the Mississippi Sound is approximately 0.8 mile to the south, and Bayou Casotte is approximately 1.0 mile to the east. Elevation of the proposed project site is approximately 10 feet amsl. Two drainage ditches located on the property drain to Martin Street. One drainage ditch extends along the southern boundary of the property, while the other drainage ditch extends behind the existing school buildings. Stormwater from the proposed site enters the stormwater drain on Martin Street. A site visit conducted by FEMA and Nationwide Infrastructure Support Technical Assistance Consultants (NISTAC) staff on June 1, 2007 verified these findings.

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no adverse impacts to surface water.

Proposed Action Alternative – Under the Proposed Action Alternative, short-term impacts to downstream surface waters could occur during the construction period due to erosion of soils. The applicant would be required to submit SWPPP and NPDES permit applications prior to construction. To reduce impacts to surface water, the applicant would implement appropriate BMPs, such as installing silt fences and revegetating bare soils.

On May 12, 2008, agency consultation letters requesting project review were sent to the U.S. Environmental Protection Agency (EPA) Water Management Division, the Mississippi Department of Environmental Quality Office of Pollution Control, and the Mississippi Soil and Water Conservation Commission (Appendix B). In a response letter dated June 9, 2008, the Mississippi Department on Environmental Quality stated that from the information reviewed, there is no adverse environmental impact from this type of project. No response has been received to date from the EPA Water Management Division or the Mississippi Soil and Water Conservation Commission.

### **4.2.2 Floodplains**

Executive Order (EO) 11988 (Floodplain Management) requires federal agencies to avoid direct or indirect support of development within the 100-year floodplain whenever there is a practicable

---



---

alternative. FEMA uses Flood Insurance Rate Maps (FIRMs) to identify the regulatory 100-year floodplain for the National Flood Insurance Program. Consistent with EO 11988, both conventional FIRMs and Preliminary Digital FIRMs (DFIRMs) were examined during the preparation of this EA. The conventional FIRM (FEMA, 1984; Community Panel Number 285260 0006 C) places the proposed project site in Flood Zone A9 and the DFIRM (MDEQ, 2007; Community Panel Number 285260 0432 G) places the proposed project site in Flood Zone AE. Flood Zones A9 and AE are both within the 100-year floodplain. FEMA has also developed ABFE Maps based on a flood frequency analysis completed by FEMA that update the flood risk data with information on storms that have occurred in the past 25+ years, including (but not limited to) Hurricane Katrina. The ABFE maps show that a portion of the proposed site is located within the ABFE (FEMA, 2006; ABFE Map Number MS-H37). However, the proposed project site is outside of the coastal high hazard zone based on post-Katrina DFIRM maps.

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts to floodplains.

Proposed Action Alternative – Under the Proposed Action Alternative, impacts to the floodplain would occur. The proposed project site is within the 100-year floodplain and impervious cover would be increased. However, the new facility would be constructed on an elevated concrete slab supported by a system of concrete piers, footings, and grade beams to an elevation of 14 + 1 feet based on the DFIRM. In accordance with EO 11988, FEMA’s Eight-Step Planning Process for Floodplains was completed to identify, minimize, and mitigate floodplain impacts (Appendix C). There are no practicable alternatives to building within the floodplain as most of Pascagoula is within the 100-year floodplain.

#### 4.2.3 Waters of the U.S. including Wetlands

The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into waters of the U.S., including wetlands, pursuant to Section 404 of the CWA. Additionally, EO 11990 (Protection of Wetlands) requires federal agencies to avoid, to the extent possible, adverse impact of wetlands.

A review of the National Wetlands Inventory (NWI) Map for the proposed project site indicates that no wetlands are located on or immediately adjacent to the proposed project site (USFWS, 2007). A site visit conducted by FEMA and NISTAC staff on June 1, 2007 confirmed that no wetlands occur on the proposed project site. For an area to be considered a wetland, the 1987 *Corps of Engineers Wetlands Delineation Manual* requires the area to have wetland hydrology, hydrophytic vegetation (greater than 50 % dominance), and hydric soils (USACE, 1987). There was no evidence of wetland hydrology and the plant community, dominated by centipede grass (*Eremochloa ophiuroides*) and live oak (*Quercus virginiana*), was not hydrophytic. Project site soils were identified during a June 19, 2007, site visit as disturbed fill material.

The Coastal Zone Management Act (CZMA) enables coastal states, including Mississippi, to designate state coastal zone boundaries and develop coastal management programs to improve protection of sensitive shoreline resources and guide sustainable use of coastal areas. According to the National Oceanic and Atmospheric Administration (NOAA), the proposed project site is located within the Mississippi Coastal Zone (NOAA, 2004).



---

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts to waters of the U.S., including wetlands.

Proposed Action Alternative – No waters of the U.S., including wetlands, are located on the proposed project site. Therefore, under the Proposed Action Alternative, no impacts to waters of the U.S., including wetlands, would occur.

On May 12, 2008, letters requesting project review were sent to the Mississippi Department of Marine Resources (MDMR), Bureau of Wetlands Permitting, and the U.S. Army Corps of Engineers (USACE) Mobile District. In a letter dated May 22, 2008, MDMR stated that it had no objections to the project if no coastal wetlands would be affected. In a response dated June 19, 2008, the USACE stated that no wetlands are located on the project site and no permit would be required (Appendix B).

### **4.3 Transportation**

The proposed project site is located on the southeast corner of Martin Street and Quinn Drive. Access to the proposed project site would be provided from Martin Street (Figure 2 in Appendix A).

No Action Alternative – Under the No Action Alternative, no impacts to transportation, site access, or traffic levels are anticipated.

Proposed Action Alternative – Under the Proposed Action Alternative, access to the new facility would be from Martin Street, which is classified as an “Other Principal Arterials Street” (GRPC, 1999).

There would be a minor temporary increase in the volume of construction traffic on roads in the immediate vicinity of the proposed project site that could potentially result in a slower traffic flow for the duration of the construction phase. To mitigate potential delays, construction vehicles and equipment would be stored on site during project construction and appropriate signage would be posted on affected roadways.

There would be minor long-term impacts to traffic levels in the vicinity of the RCES campus as a result of the increased number of students, parents, and staff accessing the campus. Traffic devices including signal lights and/or stop signs may be installed during or on completion of construction to mitigate the minor long-term impacts to traffic levels.

On May 12, 2008, a letter requesting project review was sent to the Mississippi Department of Transportation; to date, no response has been received.

### **4.4 Environmental Justice**

Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) mandates that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. Socioeconomic and demographic data for the project area were analyzed to determine if the proposed action would have a disproportional impact on minority or low-income persons.

---

No Action Alternative – Under the No Action Alternative, there would be no disproportionately high or adverse impacts on minority or low-income populations.

Proposed Action Alternative – Under the Proposed Action Alternative, there would be no disproportionately high or adverse impacts on minority or low-income populations. Implementation of the Proposed Action would more effectively serve the entire community by consolidating the two schools.

#### **4.5 Air Quality**

The Clean Air Act (CAA) requires that states adopt ambient air quality standards. The standards have been established in order to protect the public from potentially harmful amounts of pollutants. Under the CAA, the EPA establishes primary and secondary air quality standards. Primary air quality standards protect the public health, including the health of “sensitive populations, such as people with asthma, children, and older adults.” Secondary air quality standards protect public welfare by promoting ecosystems health, and preventing decreased visibility and damage to crops and buildings. EPA has set National Ambient Air Quality Standards (NAAQS) for the following six criteria pollutants: ozone (O<sub>3</sub>), particulate matter (PM<sub>2.5</sub>, PM<sub>10</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), and lead (Pb). According to the Mississippi Department of Environmental Quality, the entire state of Mississippi is classified as in attainment, meaning that criteria air pollutants do not exceed the NAAQS (MDEQ, 2002).

No Action Alternative – Under the No Action Alternative, there would be no short- or long-term impacts to air quality because no construction would occur.

Proposed Action Alternative – Under the Proposed Action Alternative, short-term impacts to air quality could occur during construction. To reduce temporary impacts to air quality, the construction contractors would be required to water down construction areas when necessary to minimize particulate matter and dust. Emissions from fuel-burning internal combustion engines (e.g., heavy equipment and earthmoving machinery) could temporarily increase the levels of some of the criteria pollutants, including CO, NO<sub>2</sub>, O<sub>3</sub>, PM<sub>10</sub>, and non-criteria pollutants such as volatile organic compounds. To reduce the emission of criteria pollutants, fuel-burning equipment running times would be kept to a minimum and engines would be properly maintained.

---

## 4.6 Noise

Noise is generally defined as unwanted sound. Sound is most commonly measured in decibels (dB) on the A-weighted scale, which is the scale most similar to the range of sounds that the human ear can hear. The Day-Night Average Sound Level (DNL) is an average measure of sound. The DNL descriptor is accepted by federal agencies as a standard for estimating sound impacts and establishing guidelines for compatible land uses. EPA guidelines, and those of many other federal agencies, state that outdoor sound levels in excess of 55 dB DNL are “normally unacceptable” for noise-sensitive land uses including residences, schools, or hospitals (EPA, 1974).

There are numerous noise-sensitive areas within a 1-mile radius of the proposed project site including five schools, nine churches and residential homes. Residential homes are located adjacent to the proposed project site. RCES and the Sacred Heart Catholic Church are located on the same campus as the proposed facility. A noise ordinance exists for the City of Pascagoula.

No Action Alternative – Under the No Action Alternative, there would be no short- or long-term impact to noise levels because no construction would occur.

Proposed Action Alternative – Under the Proposed Action Alternative, short-term increases in noise levels are anticipated during the construction period. To reduce noise impacts, construction activities would take place between 7 am and 10 pm in accordance with the local noise ordinance. Equipment and machinery utilized on the proposed project site would meet all local, state, and federal noise regulations including the Pascagoula noise ordinance. Normal activities at the new facility would not generate noise levels to violate the ordinance and are unlikely to affect other sensitive receptors in the area.

## 4.7 Biological Resources

The proposed project site is located on the property of RCES, within a residential neighborhood. The proposed project site is previously disturbed land consisting of an open, grassy field behind existing school buildings. This area was historically used for agriculture and is currently used for school athletic activities. The proposed project site is bordered by the existing RCES and Quinn Drive to the north, playground areas to the east, residential property to the south, and Martin Street to the west.

The U.S. Fish and Wildlife Service (USFWS) lists the following federally endangered (E) and threatened (T) species for Jackson County (USFWS, 2008):

Common Name	Scientific Name	Status
Louisiana black bear	<i>Ursus americanus luteolus</i>	T
Piping plover	<i>Charadrius melodus</i>	T (CH)
Gopher tortoise	<i>Gopherus polyphemus</i>	T
Gulf sturgeon	<i>Acipenser oxyrinchus desotoi</i>	T (CH)
Green turtle	<i>Chelonia mydas</i>	T
Loggerhead turtle	<i>Caretta caretta</i>	T

Yellow-blotched map turtle	<i>Graptemys flavimaculata</i>	T
Mississippi gopher frog	<i>Rana capito sevosa</i> (DPS)	E
Louisiana quillwort	<i>Isoetes louisianensis</i>	E
Leatherback turtle	<i>Dermochelys comacea</i>	E
Kemp's ridley turtle	<i>Lepidochelys kempii</i>	E
Alabama red-bellied turtle	<i>Pseudemys alabamensis</i>	E
West Indian manatee	<i>Trichechus manatus</i>	E
Brown pelican	<i>Pelecanus occidentalis</i>	E
Mississippi sandhill crane	<i>Grus canadensis pulla</i>	E (CH)
Red-cockaded woodpecker	<i>Picoides borealis</i>	E
(CH) = listed with critical habitat		

The site visit conducted on June 1, 2007, confirmed that the proposed project site does not contain habitat for any federally listed species; therefore, it is unlikely that any threatened and endangered species are present.

No Action Alternative – Under the No Action Alternative, there would be no impacts to biological resources.

Proposed Action Alternative – Under the Proposed Action, 0.35 acre of a grass field would be converted to school building use. There is no suitable habitat for any federally listed species at the proposed project site. Therefore, there would be no impacts to threatened or endangered species.

On May 12, 2008, a letter requesting project review was sent to the USFWS Jackson Field Office. In a response dated May 15, 2008, USFWS stated that no federally listed endangered, threatened, or candidate species are present on the proposed project site (see Appendix B).

#### 4.8 Cultural Resources

A FEMA Archeologist and a FEMA Architectural Historian, both qualified in their respective disciplines under the Secretary of the Interior's Professional Qualifications Standards (36 CFR Part 61), conducted an assessment of the project's potential to affect historic properties within the Area of Potential Effects (APE). The APE is the geographic area within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist. For archaeological resources, the APE consists of the proposed site; for above-ground historic properties, the APE is extended out to a 0.5-mile radius around the proposed project site. This APE was previously established through FEMA consultation with the Mississippi State Historic Preservation Office (SHPO).

On June 1, 2007, the FEMA Archeologist and Architectural Historian visited the APE to determine if any historic properties listed in or eligible for listing in the National Register of Historic Places (NRHP) were present within the APE. According to school officials, the area was used for agricultural purposes for over 60 years. When the RCES campus was built, the proposed

---

site was filled with dirt to raise the elevation and aid in drainage. The APE is currently used for school athletic activities, as it is very level with few obstructions. Visual inspection of the APE did not reveal any evidence of historic properties. The RCES Campus is located in a densely built-up residential area comprised of post-1970 homes. The nearest homes over 50 years of age are approximately 2 miles south and are not visible from the APE.

A search of the Mississippi Department of Archives and History site files and maps indicated that archaeological surveys (73-002 and 01-120) have been completed within a 5-mile radius of the APE. A majority of these surveys have been along the waterways to the south and east and have produced a limited number of recorded sites.

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts to archeological or historic architectural resources.

Proposed Action Alternative – Under the Proposed Action Alternative, no impacts to archeological or historic architectural resources are anticipated. In agency consultation letters dated July 29, 2008, to the SHPO and the Mississippi Band of Choctaw Indians Tribal Historic Preservation Officer (THPO), FEMA determined that, due to the lack of identified historic properties in the APE, the past and present uses of the project site, and the fact that the new structure will be placed on an elevated foundation, “No Historic Properties will be Affected” by the proposed undertaking. In a response letter dated August 15, 2008, the SHPO concurred with FEMA’s determination that the project would have no effect to historic resources (see Appendix B). No response has been received to date from the THPO.

If during the course of work, archeological artifacts (prehistoric or historic) or human remains are discovered, the applicant shall stop work in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. The applicant shall inform their Public Assistance (PA) program contacts in FEMA, who will in turn contact FEMA Historic Preservation Staff. Work will not proceed until FEMA Historic Preservation Staff have completed consultation with the SHPO and the THPO.

## **5.0 CUMULATIVE IMPACTS**

According to the Council on Environmental Quality (CEQ) regulations, cumulative impacts represent the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).” In accordance with NEPA and to the extent reasonable and practical, this EA considered the combined effect of the Proposed Action Alternative and other actions occurring or proposed in the vicinity of the proposed project site.

Pascagoula and the entire Mississippi Gulf coast are undergoing recovery efforts after Hurricane Katrina caused extensive damages. The recovery efforts in the area include demolition, reconstruction, and new construction. These projects and the proposed project may have a cumulative temporary impact on air quality, noise, traffic and surface water in Pascagoula during construction activities. No other cumulative effects are anticipated.



---

## **6.0 PUBLIC INVOLVEMENT**

FEMA is the lead federal agency for conducting the NEPA compliance process for the proposed project in Pascagoula, Mississippi. It is the goal of the lead agency to expedite the preparation and review of NEPA documents and to be responsive to the needs of the community and the purpose and need of the proposed action while meeting the intent of NEPA and complying with all NEPA provisions.

The Catholic Diocese of Biloxi will notify the public of the availability of the draft EA through publication of a public notice in a local newspaper. FEMA will conduct an expedited public comment period commencing on the initial date of publication of the public notice.

## **7.0 AGENCY COORDINATION AND PERMITS**

The following agencies and organizations were contacted by letter requesting project review during the preparation of this EA. Responses received to date are included in Appendix B.

- U.S. Army Corps of Engineers, Mobile District, Alabama
- U.S. Department of Agriculture, Natural Resources Conservation Service
- U.S. Environmental Protection Agency, Region 4, Water Management Division
- U.S. Fish and Wildlife Service, Jackson Field Office
- Mississippi Department of Agriculture and Commerce
- Mississippi Department of Archives and History
- Mississippi Band of Choctaw Indians
- Mississippi Department of Environmental Quality, Office of Pollution Control, Environmental Permits Division
- Mississippi Department of Marine Resources, Bureau of Wetlands Permitting
- Mississippi Department of Transportation, Environmental Division
- Mississippi Soil and Water Conservation Commission

In accordance with applicable local, state, and federal regulations, the applicant would be responsible for acquiring any necessary permits prior to commencing construction at the proposed project site.

## **8.0 CONCLUSIONS**

No impacts to geology, groundwater, waters of the U.S. including wetlands, hazardous materials, socioeconomics, environmental justice, biological resources, or cultural resources are anticipated under the Proposed Action Alternative.

During the construction period, short-term impacts to soils, surface water, transportation, air quality, and noise are anticipated. Short-term impacts will be mitigated utilizing BMPs, such as silt fences, proper equipment maintenance, and appropriate signage. There would be minor long-term impacts to traffic levels in the vicinity of the RCES campus due to the increased school



---

capacity; these would be mitigated with traffic devices. Long-term impacts to the 100-year floodplain would occur. The new facility would be constructed on an elevated concrete slab supported by a system of concrete piers, footings, and grade beams to an elevation of 14 + 1 feet based on the BFE. There are no practicable alternatives to building within the floodplain.



---

## 9.0 REFERENCES

- Environmental Data Resources (EDR), Inc. 2008. *The EDR Radius Map with GeoCheck*. <http://www.edrnet.com>. Accessed April 23, 2008.
- Environmental Protection Agency (EPA). 1974. *EPA Identifies Noise Levels Affecting Health and Welfare*. <http://www.epa.gov/history/topics/noise/01.htm>. Accessed June 16, 2008.
- Federal Emergency Management Agency (FEMA). 1984. *Flood Insurance Rate Map, City of Pascagoula, Mississippi, Jackson County. Community Panel Number 285260 0006 C*. Map Revised March 15, 1984. <http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1>. Accessed May 9, 2008.
- FEMA. 2006. *Hurricane Katrina Surge Inundation and Advisory Base Flood Elevation Maps, Jackson County, Mississippi*. Map Number MS-H37. January 6. [http://www.fema.gov/hazard/flood/recoverydata/katrina/katrina\\_ms\\_jackson.shtm](http://www.fema.gov/hazard/flood/recoverydata/katrina/katrina_ms_jackson.shtm) Accessed May 9, 2008.
- Gulf Regional Planning Commission (GRPC). 1999. *City of Pascagoula Roadway Functional Classifications*. February 9. <http://www.grpc.com/pdf/goulafunclass.pdf> Accessed April 24, 2008.
- Mississippi Automated Resource Information System (MARIS). 2008. *Surface Geology*. <http://www.maris.state.ms.us/HTM/DownloadData/Statewide-Theme.htm> Accessed April 24, 2008.
- Mississippi Department of Environmental Quality (MDEQ). 2002. *New Air Quality Standards*. [http://deq.state.ms.us/MDEQ.nsf/page/Air\\_NewAirQualityStandardsandAttainment?OpenDocument](http://deq.state.ms.us/MDEQ.nsf/page/Air_NewAirQualityStandardsandAttainment?OpenDocument). Accessed April 24, 2008.
- MDEQ. 2007. *Federal Emergency Management Agency Preliminary Flood Insurance Rate Map, Jackson County, Mississippi and Incorporated Areas*. Community Panel Number 285260 0432 G. November 16. <http://geology.deq.ms.gov/floodmaps/status.aspx?county=Jackson> Accessed May 9, 2008.
- National Oceanic and Atmospheric Administration (NOAA). 2004. *State Coastal Zone Boundaries*. <http://coastalmanagement.noaa.gov/mystate/docs/StateCZBoundaries.pdf>. Accessed April 4, 2008.
- Thornton, Ralph. 2008. U.S. Department of Agriculture, Natural Resources Conservation Service (USDA/NRCS). Hattiesburg Area Office, Mississippi. Personal Communication with Mehmet Secilmis of NISTAC on April 3, 2008.
- U.S. Army Corps of Engineers (USACE). 1987. *Corps of Engineers Wetland Delineation Manual*.
- U.S. Census Bureau. 2000. Population and Income. Accessed April 29, 2008.
- USDA/NRCS. 1997. <http://www2.ftw.nrcs.usda.gov/osd/dat/O/OCILLA.html>. Accessed April 24, 2008

- 
- USDA/NRCS. 2007. <http://websoilsurvey.nrcs.usda.gov/app/>. Last modified June 20. Accessed August 21, 2008.
- USDA/NRCS. 2008. <http://soildatamart.nrcs.usda.gov/Download.aspx?Survey=MS045&UseState=MS>. Accessed April 24, 2008.
- U.S. Environmental Protection Agency (EPA). 1974. *EPA Identifies Noise Levels Affecting Health and Welfare*. <http://www.epa.gov/history/topics/noise/01.htm>. Accessed August 2, 2007.
- U.S. Fish and Wildlife Service (USFWS). 2007. *National Wetlands Inventory Maps*. <http://wetlandsfws.er.usgs.gov/wtlnds/launch.html>. Accessed May 9, 2008.
- USFWS. 2008. *Mississippi: List of Threatened and Endangered Species by County*. June.

## Appendix A

### Figures

**Appendix B**  
**Agency Coordination**

## Appendix C

### Eight-Step Planning Process for Floodplains