

Draft Environmental Assessment

# Bay-Waveland Garden Center Relocation Project

Hancock County, Mississippi

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**FEMA**

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

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## ACRONYMS AND ABBREVIATIONS

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ABFE	advisory base flood elevation
ACHP	Advisory Council on Historic Preservation
ADA	Americans with Disabilities Act
AMSL	above mean sea level
APE	Area of Potential Effects
BMP	Best Management Practice
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CPC	Center for Plant Conservation
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
dB	decibel
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
MDAH	Mississippi Department of Archives and History
MDEQ	Mississippi Department of Environmental Quality
MDMR	Mississippi Department of Marine Resources
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation 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 Resources Conservation Service
NRHP	National Register of Historic Places
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



## ACRONYMS AND ABBREVIATIONS

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PM <sub>10</sub>	particulate matter less than 10 microns
SHPO	State Historic Preservation Office
SO <sub>2</sub>	sulfur dioxide
STP	shovel test pit
SWPPP	Storm Water Pollution Prevention Plan
THPO	Tribal Historic Preservation Office
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service



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## **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 City of Bay St. Louis, 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 the Bay-Waveland Garden Center building.

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**

The Bay-Waveland Garden Center was housed in the former R.W. Taylor Private School building, located at 116 Leonhard Avenue in Bay St. Louis (Figure 1 in Appendix A). The Craftsman Bungalow style, 1,176-square-foot, single-story, wood frame building was originally built in 1915-1916, and was listed on the National Register of Historic Places. The building served the members of the Bay-Waveland Garden Center who are active in the beautification of Highway 90 and other areas of Bay St. Louis. The building was completely destroyed by Katrina's storm surge, with only the concrete building slab remaining. Damages to the building exceeded the 50% repair/replacement ratio, meeting FEMA's criteria for replacement. In accordance with FEMA's policy for FEMA-1604-DR-MS, the former Garden Center property will be returned to grade and revegetated.

The Garden Center currently has no facility. Consequently, there is a need to provide the Bay-Waveland Garden Center with a facility located in an area less likely to flood in order to maintain the center's activities.

## **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 relocation and reconstruction of the Garden Center to a less flood-prone area.

### Alternative 1: No Action

Under the No Action Alternative, the Bay-Waveland Garden Center building would not be replaced. Without a facility, the Garden Center could not function and beautification projects along Highway 90 and in other areas of Bay St. Louis would not occur.



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## Alternative 2: Relocation and Rebuilding of Bay-Waveland Garden Center (Proposed Action)

Under the Proposed Action Alternative, the City of Bay St. Louis would relocate the Garden Center to a less flood-prone area. A new Garden Center building would be constructed on a 0.4-acre undeveloped portion of a larger, City-owned lot located on the northeast corner of Highway 90 and Main Street in Bay St. Louis (Figure 2 in Appendix A). The proposed site is approximately 1,200 feet east of the Highway 90-Main Street intersection and outside of the 100-year floodplain and the ABFE.

The proposed project site is bound on the west by the City Hall complex, on the north by private residences, on the east by a City storage and staging area, and on the south by Main Street, from which access would be provided to the new building. An area immediately west of the proposed project site was temporarily used by the City for housing mobile trailers, which provided emergency services and operations immediately after Hurricane Katrina. The proposed project site consists of mowed grass with a few trees along the eastern edge of the site. The new building will utilize municipal water, electric, sewer, and telephone utilities that presently serve Main Street businesses.

The new building would be a single-story 1,380-square-foot building that would include an assembly room, stage, ADA-compliant restrooms, kitchen, and porch (Figure 3 in Appendix A). The new building would replicate the historic nature of the original building. The new building will be a wood-frame building raised on rusticated cement block piers in the Craftsman Bungalow style, with elaborate column capitals, rake board brackets, heavy gauge corrugated metal roofing, beaded board walls and ceilings, salvaged heart pine flooring, period French doors and windows, and other Craftsman details. The building would be constructed on compacted fill on the site. A small paved parking lot would be located at the rear of the building, with driveway access on the west side of the building.

## **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 city limits of Bay St. Louis, soils are not considered farmland. Therefore, 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>	No impacts to floodplains will occur.	None.
<b>Waters of the U.S. including Wetlands</b>	No impacts to waters of the U.S. including wetlands will occur.	None.
<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.	Construction vehicles and equipment would be stored on-site during project construction and appropriate signage would be posted on affected roadways.
<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>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 normal business hours and equipment would meet all local,



Affected Environment	Impacts	Mitigation
		state, and federal noise regulations.
<b>Biological Resources</b>	There is no suitable habitat for any federally listed flora and fauna species at the proposed project site. Therefore, there would be no impacts to threatened or endangered species.	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 the Ocilla Series. The series consists of loamy sand with somewhat poorly drained, moderately permeable soils formed in sandy and loamy marine sediments. These soils are found on low uplands and stream terraces. Slopes range from 0 to 10 percent (USDA/NRCS, 1997). Depth to the water table range is over 53 inches. The components of Ocilla Series are listed as a partially hydric soil (EDR, 2008). Since the proposed project site was previously undeveloped, native soils are currently exposed. The proposed project site is level with elevation around 20 feet above mean sea level and water percolates straight down. The area surrounding the proposed project site slopes gently east toward St. Louis Bay (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 Hancock 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). Furthermore, the proposed project site is within the city limits of Bay St. Louis. The proposed project site has not been developed and does not contain underground utilities and foundations.

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. Minimal disturbance to native soils would occur during the development of the property. The applicant would be required to submit a SWPPP. Implementation of appropriate BMPs would be required at the construction location. BMPs could include the installation of silt fences and the revegetation of soils to minimize the potential for erosion.

On April 10, 2008, a letter requesting project review was sent to the Natural Resources Conservation Service (NRCS) (Appendix B). NRCS confirmed that the proposed project site is



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not considered prime farmland since it is within the city limits (Thornton, pers. comm.) and stated in a letter dated June 13, 2008, that it has no concerns with this project (Appendix B).

## **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 proposed project site slopes slightly downward from the south to the north, with elevations ranging from 20 feet to 16 feet above mean sea level (amsl). The nearest freshwater stream is located approximately ½ mile northeast of the proposed project site while the Mississippi Sound is approximately 1 mile east of the proposed project site.

No drainage structures are present on the proposed site; however, there are stormwater drains located along Main Street. A site visit conducted by FEMA Environmental and Historic Preservation Specialists on March 28, 2008, verified these findings. Previous site visits revealed that surface water tends to settle on the site.

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 during construction. The applicant would be required to submit a SWPPP and NPDES permit application 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 April 10, 2008, letters requesting project review were sent to the U.S. Environmental Protection Agency Water Management Division, the Mississippi Department of Environmental Quality Office of Pollution Control, and the Mississippi Soil and Water Conservation Commission (Appendix B). To date, no responses have been received.

### **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 were examined during the preparation of this EA. The conventional FIRM shows the proposed project site to be located in Flood Zone C (FEMA, 1983; Community Panel Number 285251 00004 B), while the Preliminary Digital FIRM shows the proposed project site to be located in Flood Zone X (MDEQ, 2007; Community Panel Number 285251 0354 D), both of which are outside of 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 the proposed site is located outside of the ABFE Inland Limit (FEMA, 2006; ABFE Map Number MS-G11).



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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, no adverse impacts to the floodplain would occur. The proposed project site is located outside of the 100-year floodplain and ABFE inland limit and would not impede natural floodplain uses.

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

The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or filled 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 U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Map for the proposed project area indicated that no wetlands are located on or immediately adjacent to the proposed project site (USFWS, 2008a). A site visit conducted by FEMA Environmental and Historic Preservation staff on March 28, 2008, confirmed that no wetlands occur on the proposed project site. Live oak (*Quercus virginiana*) and southern magnolia (*Magnolia grandiflora*) trees were identified. The 1987 *Corps of Engineers Wetlands Delineation Manual* requires the presence of all three parameters (greater than 50% dominance of hydrophytic vegetation, evidence of hydric soils, and hydrologic indicators) for an area to be considered a wetland (USACE, 1987). There were no hydric soils, hydrophytic plants, or hydrologic indicators identified on the proposed project site; therefore, the site does not contain wetlands.

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.

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

On April 10, 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, the MDMR responded that the Department had no objections to the proposed project provided there are no direct or indirect impacts to coastal wetlands (Appendix B).

### 4.3 Transportation

The proposed project site is located on the northeast corner of Highway 90 and Main Street. Access to the proposed project site would be provided from Main Street (Figure 2 in Appendix A).



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No Action Alternative – Under the No Action Alternative, there would be no changes to transportation or traffic, because the Bay-Waveland Garden Center building would not be replaced and the Garden Center would continue not to function.

Proposed Action Alternative – Under the Proposed Action Alternative, access to the new facility for the Bay-Waveland Garden Center would be from Main Street, which is classified as a Collector/Rural Major Collector Street (GRPC, 2003).

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.

On April 10, 2008, a letter requesting project review was sent to the Mississippi Department of Transportation; to date, no response has been received.

#### **4.4 Public Health and Safety**

Safety and security issues considered in this EA include the health and safety of the area residents and the general public and the protection of personnel involved in activities related to the proposed construction of the police station.

EO 13045, Protection of Children, requires federal agencies to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children. There are three schools located within 1 mile of the proposed project site, but none adjacent to the site.

No Action Alternative – Under the No Action Alternative, no construction would occur and the safety of the general public would remain unchanged.

Proposed Action Alternative – Under the Proposed Action Alternative, construction activities could present safety risks to those performing the activities. To minimize risks to safety and human health, all construction activities would be performed using qualified personnel trained in all appropriate safety precautions, including the proper use of the appropriate equipment. Additionally, all activities will be conducted in a safe manner in accordance with the standards specified in OSHA regulations. To alert motorists and pedestrians of project activities, appropriate signage and barriers would be on site prior to and during construction activities.

Although the construction would occur near residential areas, appropriate construction barriers would be in place to protect the area and local residents, including children.

#### **4.5 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.



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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 benefit all populations within Bay St. Louis, as well as travelers passing through the area, as the Garden Center would resume beautification projects along Highway 90 and in other areas of Bay St. Louis.

#### **4.6 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 U.S. Environmental Protection Agency (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.

#### **4.7 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 nine schools, seven churches, residential homes, and a hospital. Residential homes are located adjacent to the proposed project site. The closest school, the Small Blessings Preschool, is located approximately 0.2 mile to the northwest. The closest church, the Lagniappe Presbyterian Church, is approximately 0.25 mile to the northwest. Hancock Medical Center is located approximately 0.75 mile to the west. A noise ordinance exists for the City of Bay St. Louis.

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 during normal business hours. Equipment and machinery utilized on the proposed project site would meet all local, state, and federal noise regulations including the Bay St. Louis noise ordinance. Normal activities at the Bay-Waveland Garden Center would not generate noise levels to violate the ordinance and are unlikely to affect sensitive receptors in the area.

#### 4.8 Biological Resources

The proposed project site for the Bay-Waveland Garden Center has been previously disturbed. FEMA Environmental and Historic Preservation staff conducted a site visit on March 28, 2008, and observed a cleared parcel of land consisting of grass and few trees. Immediately to the east of the site is a staging area for heavy equipment while the area immediately to the west of the proposed site was formerly used as a temporary housing site.

The USFWS lists the following federally endangered (E) and threatened (T) animal species for Hancock County (USFWS, 2008b):

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
Green turtle	<i>Chelonia mydas</i>	T
Loggerhead turtle	<i>Caretta caretta</i>	T
Gulf sturgeon	<i>Acipenser oxyrhynchus desotoi</i>	T (CH)
Inflated heelsplitter	<i>Potamilus inflatus</i>	T
Louisiana quillwort	<i>Isoetes louisianensis</i>	E
Leatherback turtle	<i>Dermochelys comacea</i>	E
Kemp's Ridley turtle	<i>Lepidochelys kempii</i>	E
West Indian manatee	<i>Trichechus manatus</i>	E
Brown pelican	<i>Pelecanus occidentalis</i>	E
(CH) = critical habitat		



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The site visit conducted on March 28, 2008, 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 – There is no suitable habitat for any federally listed flora and fauna species at the proposed project site. Therefore, under the Proposed Action Alternative, there would be no impacts to threatened or endangered species.

On April 10, 2008, a letter requesting project review was sent to the USFWS Service Jackson Field Office. To date, no response has been received.

#### **4.9 Cultural Resources**

Section 106 of the National Historic Preservation Act (NHPA), as amended, and implemented by 36 CFR Part 800, requires federal agencies to consider the effects of their actions on historic properties and provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on federal projects that will have an effect on historic properties prior to implementation. Historic properties are defined as archeological sites, standing structures, or other historic resources listed in or eligible for listing in the National Register of Historic Places (NRHP).

On March 13, 2008, a FEMA Historic Preservation Specialist and Environmental Specialist conducted an assessment of the project's potential to affect historic properties within the Area of Potential Effects (APE). (A FEMA Architectural Historian, qualified under Secretary of the Interior's Professional Qualifications Standards (36 CFR Part 61), later visited the site to confirm the assessment's findings.) 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 archeological resources, the APE consists of the 0.437 acres of the project site to be cleared for construction of the Bay-Waveland Garden Center; 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 coordination with the Mississippi State Historic Preservation Office (SHPO).

Presently, there are no standing structures on the proposed building site, nor are there previously recorded sites or surveys. A review of archeological site files was undertaken at the Historic Preservation Division of the Mississippi Department of Archives and History (MDAH) in Jackson, Mississippi. This review revealed that the nearest previously recorded sites are over 3,000 feet to the north, east, and south. Site HA558 is an historic site located approximately 4,000 feet to the north; prehistoric sites are recorded near the Bay of St. Louis and located more than 6,000 feet from the proposed project site. The density of sites is relatively low and likely indicates a lack of systematic survey in the area, rather than a low density of sites. Based on distance to present-day water sources, approximately 3,000 feet, the proposed project site is considered to have a low probability for the presence of prehistoric sites.

Extant historic structures are presently located across Main Street and to the south and southwest from the proposed project site. The structures are part of a National Register Historic District in



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Bay St. Louis that dates from 1880 to 1920 and consists of Creole and shotgun style cottages. Within the viewshed of the proposed project site are the following: to the west and to the north are the Bay St. Louis City Hall, police station, warehouses, and maintenance buildings; to the northeast is a more recent residential area along State Street; to the east is a municipal storage yard. The proposed project site is not shown on the 1930 Sanborn map because the area was located outside of the city limits during the early 1900s.

A Phase I archeological survey was conducted on March 13, 2008, to determine the presence/absence of cultural materials and/or subsurface features at the proposed project site. During the Phase I fieldwork, conditions of the area were wet due to several days of rain. The only obvious disturbances to the proposed project site are large water/sewer manholes at the southeast corner of the large lot near the street.

The archeological APE is approximately 190 feet north to south by 100 feet east to west. An east to west base line was overlain across the length of the site with shovel tests pits (STPs) 1 through 4 excavated at 15-meter intervals. STP 5 was excavated at 10 meters to the north of STP 2 and STP 6 was excavated at 5 meters south of STP 1. These additional STPs were excavated to obtain a cross section of the entire width of the APE. All of the shovel tests exhibited an A horizon of very dark gray sandy loam (10YR3/1) from 13 to 20 centimeters thick. In most instances it was buried with one to two fill levels. Below the buried A horizon, a dark gray brown (10YR4/2) subsoil was seen in all of the shovel tests. The subsoil was typically saturated. All soils from the tests were screened through ¼-inch hardware mesh, and all artifacts were bagged according to individual provenience and level. A total of 35 artifacts were recovered from the six shovel tests. No prehistoric artifacts were recovered and only light scatters of historic artifacts were found in the upper O horizon and the buried A horizon. The artifact inventory consisted of corroded nails, pieces of fencing, a fencing staple, shell, glass, cinder, flat rusted metal, small brick fragments, and a single fragment of porcelain historic ceramic.

The low density of artifacts and the distinct regular lower boundary of the A horizon is suggestive of a plow zone, and it is speculated that the past land use was an agricultural field. The artifact scatter is thought to be the result of plowing and flooding, and is not representative of an intact site.

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

Proposed Action Alternative – Under the Proposed Action Alternative, no impacts to archeological or cultural resources are anticipated. Agency consultation letters were submitted to the Mississippi Department of Archives and History (MDAH) and Tribal Historic Preservation Office (THPO) on April 21, 2008 (Appendix B). Since the proposed structure is to be replaced as a replica of the original, the construction of the Bay-Waveland Garden Center in the original Craftsman style will not compromise the viewshed. Based on the low density of artifacts and an absence of features, from an archaeological perspective, the reconstruction of the Bay-Waveland Garden Center will not adversely affect archeological resources. FEMA determined that the undertaking has no adverse effect to historic properties concerning the viewshed and no historic properties affected based on the archeological survey. In a letter dated May 19, 2008, MDAH concurred with FEMA's determinations. No response has been received to date from THPO.

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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) 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.

The City of Bay St. Louis plans to relocate the Central Fire Station to another portion of the parcel on which the new Garden Center is proposed. At this time, the construction schedules of the two projects are unknown. Should they coincide, there may be temporary cumulative impacts in construction-related noise and traffic increases and a potential decrease in air quality. These impacts would be temporary and localized to the vicinity of the construction. No other actions by others were identified as occurring or proposed in the vicinity of the proposed project site.

Bay St. Louis 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 in Bay St. Louis by increasing criteria pollutants 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 the City of Bay St. Louis, 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 City of Bay St. Louis 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.



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## **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, floodplains, waters of the U.S., public health and safety, 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. All short-term impacts will be mitigated utilizing BMPs, such as silt fences, proper equipment maintenance, and appropriate signage.

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## Appendix A

### Figures

## Appendix B

### Agency Coordination