**DRAFT ENVIRONMENTAL ASSESSMENT**

# GROUP EMERGENCY HOUSING AT THE MARTIN SITE NEAR PINE GROVE, WETZEL COUNTY, WEST VIRGINIA

FEMA 1558-DR-WV

FEMA

*Prepared for*

Federal Emergency Management Agency
Region III
One Independence Mall, Sixth Floor
615 Chestnut Street
Philadelphia, PA 19106-4404

November 23, 2004

URS

Prepared by:

URS Group, Inc.
Gaithersburg, Maryland
King of Prussia, Pennsylvania
15702357

# TABLE OF CONTENTS


**Section 1 Introduction ..... 1-1**

1.1 Background ..... 1-1
1.2 FEMA Individual Assistance Program ..... 1-1
1.3 Purpose and Need for Action ..... 1-1
1.4 Purpose and Scope of Document ..... 1-1
1.5 The Environmental Review Process ..... 1-2
1.6 The Construction Process ..... 1-2

**Section 2 Alternatives Analysis ..... 2-1**

2.1 Introduction ..... 2-1
2.2 Alternative 1 – No Action ..... 2-1
2.3 Alternative 2 – Proposed Action ..... 2-1
2.4 Site Description ..... 2-2

**Section 3 Affected Environment and Environmental Consequences ..... 3-1**

3.1 Geology, Geohazards, and Soils ..... 3-1
3.1.1 Affected Environment ..... 3-1
3.1.2 Environmental Consequences ..... 3-1
3.2 Water Resources ..... 3-2
3.2.1 Affected Environment ..... 3-3
3.2.1.1 Groundwater ..... 3-3
3.2.1.2 Surface Water ..... 3-3
3.2.2 Environmental Consequences ..... 3-3
3.2.2.1 Groundwater ..... 3-4
3.2.2.2 Surface Water ..... 3-4
3.3 Floodplain Management (EO 11988) ..... 3-5
3.3.1 Affected Environment ..... 3-5
3.3.2 Environmental Consequences ..... 3-6
3.4 Biological Resources ..... 3-6
3.4.1 Affected Environment ..... 3-6
3.4.1.1 Vegetation ..... 3-6
3.4.1.2 Wildlife ..... 3-8
3.4.2 Environmental Consequences ..... 3-8
3.5 Protected Species ..... 3-8
3.5.1 Affected Environment ..... 3-8
3.5.2 Environmental Consequences ..... 3-9
3.6 Cultural Resources ..... 3-9
3.6.1 Affected Environment ..... 3-9
3.6.2 Environmental Consequences ..... 3-10
3.7 Hazardous Materials and Waste ..... 3-10
3.7.1 Affected Environment ..... 3-11
3.7.2 Environmental Consequences ..... 3-12
3.8 Air Quality ..... 3-12
3.8.1 Affected Environment ..... 3-12
3.8.2 Environmental Consequences ..... 3-13
3.9 Noise ..... 3-14

3.9.1 Affected Environment ..... 3-14
3.9.2 Environmental Consequences ..... 3-14
3.10 Socioeconomic Resources ..... 3-15
3.10.1 Affected Environment ..... 3-15
3.10.2 Environmental Consequences ..... 3-15
3.11 Environmental Justice (EO 12898) ..... 3-16
3.11.1 Affected Environment ..... 3-16
3.11.2 Environmental Consequences ..... 3-16
3.12 Visual Impacts ..... 3-17
3.12.1 Affected Environment ..... 3-17
3.12.2 Environmental Consequences ..... 3-17
3.13 Traffic ..... 3-18
3.13.1 Affected Environment ..... 3-18
3.13.2 Environmental Consequences ..... 3-18
3.14 Utilities ..... 3-19
3.14.1 Affected Environment ..... 3-19
3.14.2 Environmental Consequences ..... 3-19
3.15 Safety and Security ..... 3-20
3.15.1 Affected Environment ..... 3-20
3.15.2 Environmental Consequences ..... 3-20

**Section 4 Public Participation ..... 3-20**

**Section 5 Mitigation Actions ..... 5-1**

**Section 6 Public Notice ..... 6-1**

**Section 7 Agencies Consulted ..... 7-1**

**Section 8 Bibliography ..... 8-1**

**Figures**

Figure 1 Martin Temporary Group Housing Site Conceptual Plan ..... 2-3
Figure 2 Proposed Project Location ..... 2-4
Figure 3 Martin Estates Floodplain Map ..... 3-7

**Tables**

Table 1 Socioeconomic Comparisons ..... 3-15
Table 2 Racial Distribution ..... 3-17

**Appendices**

Appendix A Agency Consultation Letters
Appendix B Environmental Site Assessment Search Results
Appendix C Site Photographs

## 1.1 BACKGROUND

As a result of damages from severe storms from the remnants of Hurricane Ivan, the Federal Emergency Management Agency (FEMA) was authorized to provide federal assistance to designated disaster areas in West Virginia. The Presidential disaster declaration occurred on September 20, 2004, and was officially designated as FEMA-1558-DR-WV. The declared disaster area comprises 20 counties in western West Virginia, including Berkeley, Brooke, Cabell, Clay, Hancock, Jackson, Kanawha, Lincoln, Logan, Marshall, Mason, Mingo, Morgan, Ohio, Pleasants, Putman, Tyler, Wetzel, Wirt, and Wood Counties. Many residents in the worst affected counties, including Marshall and Wetzel Counties, have been displaced by flood or landslide damage to their homes. Providing temporary housing to this displaced population, through FEMA's Individual Assistance Program, is one element of the federal assistance available. FEMA has determined there is an urgent need to provide this type of assistance. Accordingly, FEMA is proposing to build group housing as one of the options to help satisfy the demand for housing.

This Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), the President's Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500-1800), and FEMA's regulations implementing NEPA (44 CFR 10.9). The purpose of this EA is to analyze potential impacts of temporary and transient emergency group housing for disaster victims as part of an expedited environmental review process. FEMA will use the findings in this EA to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

## 1.2 FEMA INDIVIDUAL ASSISTANCE PROGRAM

FEMA proposes to administer federal disaster assistance funds pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121-5206, as amended (Stafford Act). Section 408 of the Stafford Act authorizes the Individual Assistance Program to provide for interim housing to disaster victims whose homes have been rendered uninhabitable. Assistance may be administered in several forms, including temporary housing, home repair assistance, temporary rental assistance, and mortgage assistance. Temporary housing may include the purchase or lease of unoccupied habitable dwellings, mobile homes, travel trailers, or other readily available dwellings. When temporary group housing is required, FEMA prefers to place mobile homes or travel trailers on the victims' properties, in existing mobile home parks, or to relocate the victims to existing rental units. When those primary options have been exhausted, FEMA may build temporary group mobile home or travel trailer parks. Communities in the Pine Grove and Jacksonburg areas of Wetzel County, West Virginia, have been identified as requiring temporary group housing.

## 1.3 PURPOSE AND NEED FOR ACTION

Severe storms impacted West Virginia between September 16 and 17, 2004, causing flooding and landslides in many areas. Many residents were evacuated to shelters. As of November 15, 2004, approximately 292 dwellings had been destroyed, 507 sustained major damage, and 671

sustained minor damage. As of November 22, 2004, FEMA had received 7,300 requests for Individual Assistance. Much of the need for temporary housing is in Marshall and Wetzel Counties, where many homes were destroyed or are uninhabitable.

As of November 22, 2004, the Individual Assistance Pre-placement Interviews for a group manufactured home site include 24 requests, thus far, from Marshall, and Wetzel Counties. In response to these requests for a group housing site, FEMA has identified the need to provide temporary group housing in Wetzel County, West Virginia, and specifically to the victim cluster area.

## 1.4 PURPOSE AND SCOPE OF DOCUMENT

The purpose of this document is to assist FEMA in fulfilling its environmental review responsibilities under NEPA and serve as a vehicle to document compliance under other applicable environmental laws. Laws and Executive Orders addressed through this EA include: the Clean Air Act, Clean Water Act, Endangered Species Act, National Historic Preservation Act, Executive Order 11988 (Floodplain Management), Executive Order 11990 (Protection of Wetlands), Executive Order 12898 (Environmental Justice), and the Farmland Protection Policy Act. Other resource areas evaluated in this EA include noise, visual resources, traffic, socioeconomics, safety and security, and hazardous and toxic waste. The scope of FEMA's environmental review includes evaluating project alternatives, characterizing the affected environment, identifying potential environmental impacts, and outlining ways to reduce or minimize adverse affects. This EA examines the site-specific environmental impacts associated with building a proposed FEMA group housing park at the Martin group housing site in Wetzel County, West Virginia.

## 1.5 THE ENVIRONMENTAL REVIEW PROCESS

In order to meet the urgent needs of disaster victims in need of temporary housing, FEMA has implemented an expedited environmental review process. Under this process, FEMA has initiated coordination and consultation with regulatory and resource agencies as early as possible, typically by telephone or e-mail. This NEPA EA was drafted based on a site evaluation conducted on November 18, 2004, document research, and agency information. An electronic version of the Draft EA will be provided to interested agencies prior to and during the public comment period. The public participation period will be brief, as necessitated by the emergency circumstances. Agency coordination and consultation will be deemed complete at the end of the public comment period. FEMA believes that this process will allow for sufficient action analysis and meet the goal of providing timely federal assistance to disaster victims.

## 1.6 THE CONSTRUCTION PROCESS

The U.S. Army Corps of Engineers (USACE) has been mission-assigned the task of site design, which includes obtaining environmental permitting, and overseeing site construction. FEMA will convey to the USACE any design or agency concerns, or construction constraints identified during this environmental review process, along with mitigation measures.

## 2.1 INTRODUCTION

The purpose of the alternatives analysis is to provide alternatives to address the identified need. Federally assisted housing options (including hotel/rental assistance and siting a mobile home or travel trailer on-site or in an existing park) have been exhausted for the victim cluster area. Accordingly, the remaining alternative is to build a group housing site.

While FEMA initially considered approximately 34 potential sites in the victim cluster area, these sites were subsequently dismissed as not viable. Some of the factors that narrow the number of viable site alternatives are listed below.

- The regional topography, comprised of mountain hilltops, steep slopes, and narrow stream valleys, limits the number and size of suitable building sites, which in turn limits the number of alternative building sites.
- Many available land parcels in this region that appear suitable for temporary group housing are in the 100-year floodplain.
- Many landowners are reluctant to lease their property for the purposes of temporary group housing.
- Past land use left many open land parcels in this region unsuitable for temporary group housing (e.g., reclaimed mine sites and dumps have a high potential for containing hazardous materials which may preclude development or dramatically increase the cost of site development).
- Many victims tend to prefer relocating close to their former home to keep children in the same school district, and to remain close to their jobs and extended families.
- A parcel's lack of needed utilities can result in unacceptable time delays or significantly increase development costs.
- Time delays to negotiate use of a site can preclude its viability.

While a good faith effort was made to include site alternatives, the above constraints have limited this EA to one suitable site alternative to address the identified victim cluster area need for housing.

## 2.2 ALTERNATIVE 1 – NO ACTION

The No Action Alternative entails no construction or preparation of a site for temporary group housing for disaster victims. Consequently, people displaced by flooding and landslides would likely rent housing available on the open market, remain in housing provided by family members or friends, or remain in facilities which are structurally unsafe or unsanitary.

## 2.3 ALTERNATIVE 2 – PROPOSED ACTION

The Proposed Action provides group housing for people displaced by flooding and landslides in Pine Grove and Jacksonburg in Wetzel County, West Virginia. With this alternative, disaster victims will be temporarily relocated to a group housing site, and housed in manufactured

housing (e.g., mobile homes or travel trailers). Under the Proposed Action Alternative, 5 to 6 mobile homes or travel trailers would be placed on lots approximately 40 feet wide by 80 feet long, at a density of 6 to 8 units per acre (Figure 1). This proposed project would require the clearing of existing vegetation as well as grading to level the ground surface for the construction of roads and placement of utilities, including water, electricity, telephone and an onsite sewer treatment plant. The Moundsville Public Service District (PSD) would supply potable water to the site adjacent to and within the access road right-of-way. Site construction would utilize appropriate erosion and sediment control measures, such as silt fences and erosion control blankets. FEMA would support the housing assistance up to 18 months, which may be extended if necessary.

## 2.4 SITE DESCRIPTION

The proposed group housing site is located near Pine Grove in Wetzel County, West Virginia (Figure 2). The site is approximately 1.15 acres and is comprised of a nearly level tract of land. Presently, the parcel is characterized as graded fill material that has been colonized by common herbaceous field vegetation. Once the site of a school, this site apparently has been raised by fill approximately 8 feet above the adjacent parcels of land. The site is bordered on the east by an apartment complex and on the west by a flat open field. Route 20, which defines the northern perimeter, provides at-grade access to the site. All surface water flows south to Fishing Creek at the toe of slope. The site is outside of the regulated 100-year floodplain.

Known previous uses of the site were determined by analyzing West Virginia Department of Environmental Protection (WVDEP) Geographic Information System (GIS) interactive maps (WVDEP, 2004a). These maps indicate that abandoned mines existed approximate ½ mile southwest of the site.

**Figure 1**. Proposed Martin Site Group Housing Site Location

Figure 2. Proposed Project Area Location
U.S. Geological Survey Pine Grove 7.5 Minute Quadrangle
Project Area Coordinates 39° 33.73N, 80° 41.54W

## 3.1 GEOLOGY, GEOHAZARDS, AND SOILS

### 3.1.1 Affected Environment

West Virginia is nicknamed the "mountain state" for its rugged terrain and steep valleys. The climate is similar to other Mid-Atlantic States and is generally of the humid continental type, with hot summers (except in the highest areas) and cool to cold winters. The average temperature is 72 degrees Fahrenheit (º F) in July and 32 º F in January. The four seasons are nearly equal in length, though mountainous regions may have slightly longer winters.

West Virginia has the highest mean altitude (1,500 feet) of any state east of the Mississippi. The topography of West Virginia varies greatly from 240 feet above mean sea level (amsl) (near Harpers Ferry where the Shenandoah River joins the Potomac River) to 4,860 feet amsl at Spruce Knob in Pendleton County. The far eastern portion of the State falls within the Valley and Ridge Physiographic Province, and the remaining western portion of the State falls within the Appalachian Plateau Physiographic Province. The boundary of the two provinces is called the Allegheny Front, which is characterized by an abrupt change in topography, stratigraphy, and structure.

Wetzel County is located in the Appalachian Plateau Physiographic Region. The Appalachian Plateau province covers two-thirds of the state. This province is characterized by near-horizontal sedimentary layers that were laid down between the Cambrian and the Pennsylvanian Ages (WVGES, 1999). These rock layers consist of shale, siltstone, sandstone, limestone, and the Alma Coal seam. The region is considered a mature plateau with narrow, steep-walled valleys caused by erosion. There are numerous small streams that dissected the plateau to form intricate, dendritic drainage patterns of valleys. The steep-walled valleys and thin soil cover cause rainwater to run off quickly, resulting in severe flooding during rain events and exacerbating periods of drought. Strip-mining for coal and other geologic resources and timber harvesting further exacerbate the amount of rainwater run-off (NRCS, 1972). The topography of the project site is flat to gently sloping.

The Wetzel County Soil Survey indicated that there is one soil type for the project area: smoothed Udorthents (Us). These soils are found in areas that were disturbed by road construction or earth moving activities, and in urban and industrial areas. These soils have highly variable depth, color, and texture. Slope ranges from 0 to 70% and the depth to bedrock is more than 40 inches. As highly disturbed soils, Udorthents soils are estimated to be well-drained, have slow to moderately rapid permeability and rare flooding potential (Dilliplane, 2004). The presence of fill material on the site was confirmed during the November 18 site visit.

### 3.1.2 Environmental Consequences

***No Action Alternative***

The No Action Alternative would have no impacts upon geology or soils because no physical changes would occur.

***Proposed Action Alternative***

The Proposed Action Alternative would require the construction tasks described in Section 2.3. The site selection process facilitated the identification and avoidance of any protected or problematic geological conditions, such as landslide or mine blow-out risk areas. However, existing stable vegetation and the absence of mining preclude these conditions from occurring within the project area. Loss of vegetation may increase short-term soil erosion; however, the site is very flat, and applying appropriate control measures during construction would mitigate any potential for soil erosion. Minor site grading could potentially result in some soil compaction due to the presence of heavy machinery, but most of the site is already composed of compacted fill. Soil compaction tests would be completed, as appropriate, before siting mobile homes to assure suitability. No adverse effect to geology is anticipated. Site development would not require excavation to bedrock. Asbestos was removed from the former school that once occupied this site. However, a report provided by the Wetzel County Board of Education indicates that the asbestos was removed and disposed of properly (Holbert, 1988).

The Natural Resources Conservation Service (NRCS) has determined that the site area does not contain Prime or Unique Farmland, Statewide Important Farmland, or Locally Important Farmland; therefore, the Proposed Action would not impact Prime or Unique Farmland, under the Farmland Policy Protection Act (Dilliplane, 2004; Appendix A).

Considering the Proposed Action's scope of work and based on the best information available, this Alternative has little potential for significant cumulative effects to geologic and soil resources when combined with past, present, and reasonably foreseeable future area actions.

## 3.2 WATER RESOURCES

The Clean Water Act (CWA) is a widely encompassing federal statute regulating activities and discharges that may impact the chemical and biological integrity of the nation's waters. Under Sections 401, 402, and 404, regulations have been established that often apply to activities undertaken by local communities during emergency disaster-related events. The WVDEP is the state agency responsible for enforcing compliance with water quality standards.

Under Section 401 of the CWA, a Water Quality Certification from the state is required prior to any discharge into waters of the United States. The Water Quality Certification certifies that the action complies with state water quality standards.

Section 402 establishes the National Pollution Discharge Elimination System (NPDES) and its stormwater pollution prevention permitting and monitoring program. The objective of the stormwater regulations is to prevent the discharge of stormwater contaminated with pollutants into local water bodies. For any construction activities that would disturb one or more acres of land, Section 402 requires a Storm Water Pollution Prevention Plan (SWPPP).

Section 404 regulates the discharge of dredged or fill materials into navigable waters and waters of the United States, including streams and wetlands. The USACE, Huntington District, regulates activities in the project area that may affect these waters. Any activity that may impact navigable waters or waters of the U.S. must be coordinated with this federal agency.

Executive Order (EO) 11990, Wetland Protection, requires federal agencies to consider direct and indirect impacts to wetlands that may result from federal actions, and directs them to provide leadership in minimizing the destruction, loss, or degradation of wetlands. Section 2 of this EO states that, in furtherance of NEPA, agencies shall avoid undertaking or assisting in new construction located in wetlands unless there is no practical alternative.

### 3.2.1 Affected Environment

#### *3.2.1.1 Groundwater*

Groundwater in the Appalachian Plateau Province moves mostly in a network of narrow fractures within a few hundred feet of the land surface, and drains toward the nearest stream. Wells normally tap only a few of the many local fractures. The ridgetops bound each local aquifer, which generally are affected only by local contaminant sources. In small areas of the basin where caves and solution cavities in limestone bedrock are common, wells can have high yields but are susceptible to contamination from fecal bacteria, pesticides, and other toxic chemicals.

All or portions of the Lower Ohio, Middle Ohio I, Middle Ohio 2, Upper Ohio I, Upper Ohio 2, Little, Lower and Upper Kanawha, Elk, Twelvepole, Upper and Lower Guyandotte, Coal, Gauley, Lower New, Big Sandy, Potomac Drains, and Cacapon watersheds are found in the declared disaster area. Most of the rural population of the declared disaster area uses either individual groundwater wells or other sources such as springs, cisterns, and bottled water as sources of drinking water. Per the EPA website, there are no sole source aquifers within the declared disaster area (EPA, 2004). Groundwater on this property is thought to drain in a southerly direction to Fishing Creek, adjacent to the project area, where it becomes surface water. All ground water at the proposed site ultimately enters the Ohio River.

#### *3.2.1.2 Surface Water*

Surface water resources within the declared disaster area are generally limited to wide valley-shaped first, second, and third order streams, which empty into larger river systems and eventually flow into the Ohio River. In addition, there are man-made ponds, reservoirs, and sedimentation basins.

There is also surface water on the proposed project site. Fishing Creek runs along the southern perimeter of the site. It runs approximately parallel to Route 20, flowing off-site toward the Ohio River. No other surface waters were observed at the project area.

Similar to ground water, surface water drains in a southerly direction to adjacent Fishing Creek which flows towards the Ohio River. This drainage area is comprised of 63 square miles, and is characterized as 88.73 percent forested, 9.78 percent agricultural use, and 0.71 percent low- and high-intensity developed (WVDEP, 2004a).

The United States Fish and Wildlife Service (USFWS) maintains the National Wetland Inventory (NWI), a database containing mapped wetlands. According to this data, there are no wetlands in the project area, as confirmed during the November 18 field evaluation. Therefore, no wetland permitting would be required.

### 3.2.2 Environmental Consequences

#### *3.2.2.1 Groundwater*

***No Action Alternative***

The No Action Alternative would not affect groundwater resources since no construction would occur.

***Proposed Action Alternative***

Potential impacts to groundwater quality would involve both surface waters, which receive their base flows from groundwater, and wells used for potable water. Groundwater resources in the declared disaster area include geologic formations with aquifers. Fractured sandstone is one of the best sources of groundwater. Some construction activities can create additional fractures or blockages in these water-bearing strata that may alter the quantity of groundwater. Local wells and streams could then experience temporary or permanent loss of groundwater quantity, although sometimes fracturing can increase the water capacity of a particular geologic stratum. However, since construction on this site would be limited to surficial disturbance, no effect to groundwater quality is expected.

Construction activities can lead to sediment in surface water that can infiltrate the groundwater system. However, due to the limited extent of construction activities associated with installing housing structures, impacts to groundwater would likely be negligible. Groundwater would not be used for drinking water on-site. Potable water would be supplied via the Moundsville PSD. Construction activities associated with the Proposed Action Alternative are not expected to have a long-term adverse impact on groundwater resources. The depth of bedrock precludes impacting underlying bedrock formations.

Considering the action's scope of work and based on the best information available, the Proposed Action Alternative has little potential for significant cumulative effects on groundwater when combined with past, present, and reasonably foreseeable future area actions.

#### *3.2.2.2 Surface Water*

***No Action Alternative***

The No Action Alternative would not change the existing hydrologic or water quality conditions because no physical changes would occur.

***Proposed Action Alternative***

The Proposed Action Alternative would have short term, minimal impacts to surface water quality due to the temporary loss of ground cover at the Martin group housing site during grading. A NPDES permit would be issued through the state, and a SWPPP would be developed. Silt fencing and erosion control blankets would also be utilized to minimize water quality impacts from housing implementation activities.

The Proposed Action Alternative is not anticipated to result in any long-term adverse effects to surface water resources or water quality. WVDEP concurrence is pending. Per EO 11990, work in wetlands would be avoided because wetlands do not exist on this site.

To dispose of sanitary waste generated at the site, a connection to the municipal sewer will be made. A joint permit from WVDEP and the West Virginia Board of Public Health would not be necessary.

Considering the action's scope of work and based on the best information available, the Proposed Action Alternative has little potential for significant cumulative effects to water resources when combined with past, present, and reasonably foreseeable future area actions.

## 3.3 FLOODPLAIN MANAGEMENT (EO 11988)

EO 11988 outlines the responsibilities of federal agencies in the role of floodplain management. Each agency is required to evaluate the potential effects of actions on floodplains, and should avoid undertaking actions, which directly or indirectly encourage development in the floodplain or adversely affect natural floodplain benefits. FEMA uses an Eight-Step Planning Process to comply with EO 11988 as promulgated in 44 CFR Part 9. FEMA policy states that manufactured homes, as temporary group housing, may be placed in the 100-year floodplain (Zone A) only if there are no practicable alternatives and mitigation can be implemented.

The 100-year floodplain designates the area subject to inundation from a flood having a one percent chance of occurring in any given year. This flood is referred to as the "100-year flood" or "base flood." The frequency of such flooding may be more or less often than once every 100 years. In circumstances known as "critical actions," the regulated flood prone area is defined by the 500-year floodplain. The 500-year floodplain designates the area subject to inundation from a flood having a 0.2 percent chance of occurring in any given year.

Floodplains are designated on national Flood Insurance Rate Maps (FIRMs) or Flood Hazard Boundary Maps (FHBMs) for communities that participate in the National Flood Insurance Program (NFIP). The NFIP and its implementing regulations (44 CFR 59 through 77) stipulate minimum standards for floodplain development in communities that participate in the program. Local governments incorporate these standards, or in some cases more stringent standards, into their floodplain ordinances. In addition to mapping locations of 100-year and 500-year floodplain boundaries, many FIRMs and FHBMs map the base flood elevation, which is the estimated elevation of a 100-year flood. FIRMs and FHBMs delineate floodplains with other descriptors; the most important of these are the floodway and the 100-year coastal, high hazard floodplain. The floodway is defined as the river channel or other watercourse and adjacent land areas that are required to remain free from development. These areas function to discharge the base flood without cumulatively increasing the water surface elevation.

### 3.3.1 Affected Environment

According to the FIRMs for this area (Panel No. 540207 0065 A, effective April 4, 1983), the project site is located in Zone C, outside of the 100-year floodplain (Figure 3). The closest floodplain to the site is less than 300 feet to the south of the site along the banks of Fishing Creek.

### 3.3.2 Environmental Consequences

***No Action Alternative***

Under the No Action Alternative, no impacts to the floodplain would occur because no changes to the physical environment would take place.

***Proposed Action Alternative***

FIRM data and site visits show that the entire site is located outside the floodplain. Accordingly, no impacts to the floodplain are anticipated, per EO 11988.

Since no activities would occur in the floodplain, no cumulative floodplain effects are expected from the Proposed Action Alternative when combined with past, present, and reasonably foreseeable future area actions.

## 3.4 BIOLOGICAL RESOURCES

### 3.4.1 Affected Environment

#### *3.4.1.1 Vegetation*

Land use and land cover in the declared disaster area are typical of a rural environment in rugged terrain. There are steep to very steep valleys and ridgetops mostly covered by deciduous forest. Historically, this area supported an oak/spruce/hemlock forest before the early 20$^{th}$ century. However, due to extensive mining and lumbering, most of this forest has been replaced with oak/pine and some maple/hickory forests.

The proposed Martin Site group housing site is comprised of a flat parcel of land, vegetated with mostly upland herbaceous vegetation including Queen Anne's lace (*Daucus carota*), butter-and-eggs (*Linaria vulgaris*), red clover (*Trifolium pratense*), and grasses (*Gramineae* sp.), and along the base of slope, adjacent to Fishing Creek, the site is sparsely vegetated with box-elder (*Acer negundo*) and sycamore (*Platanus occidentalis*).

Figure 3. Flood Insurance Rate Map

Community Panel No. 540207 0065 A
Wetzel County, West Virginia

#### *3.4.1.2 Wildlife*

The wildlife found on and adjacent to the Martin group housing site includes species typically found in rural residential communities like whitetailed deer (*Odocoileus virginianus*), American robin (*Turdus migratorius*), northern mockingbird (*Mimus polyglottos*), house sparrow (*Passer domesticus*), and grey squirrel (*Sciurus carolinensis*). Other common mammals that occur in the area include raccoon (*Procyon lotor*), deer mouse (*Peromyscus maniculatus*), and little brown myotis (*Myotis lucifugus*). The ruby-throated hummingbird (*Archilochus colubris)* is a migrant species found during the breeding season. The northern ringneck snake (*Diadophis punctatus edwardsii*), the northern fence lizard (*Sceloporus undulates*), and the eastern box turtle (*Terrapene carolina carolina*) are common reptiles found throughout the state.

### 3.4.2 Environmental Consequences

***No Action Alternative***

No impacts to biological resources would occur under the No Action Alternative because no changes to the physical environment would take place.

***Proposed Action Alternative***

Under the Proposed Action Alternative, portions of the site would be cleared of vegetation. This impact would be considered minimal as the vegetation consists of common grass and weedy species with relatively low habitat value. Upon the completion of construction, native species would be used to revegetate the site where necessary.

The Proposed Action Alternative would result in temporary impacts to other wildlife resources due to construction activity in the existing habitat. The introduction of machinery and personnel would result in wildlife temporarily vacating the area. However, these impacts would be short term, and typical wildlife activity for the area would resume once implementation of the emergency housing project was completed.

Considering the action's scope of work and based on the best information available, the Proposed Action Alternative has little potential for significant cumulative effects on biological resources when combined with past, present, and reasonably foreseeable future area actions.

## 3.5 PROTECTED SPECIES

Section 7 of the Endangered Species Act of 1973 requires FEMA to consult with the USFWS and, if applicable, the National Marine Fisheries Service (NMFS), to determine if proposed FEMA-funded projects may affect threatened and endangered species and/or their critical habitat.

### 3.5.1 Affected Environment

In accordance with Section 7 of the Endangered Species Act (ESA) of 1973, the project area was evaluated for potential occurrences of federally listed species. Federal and state threatened and

endangered species that may occur within the project area were identified through correspondence with the West Virginia Non-game Wildlife and Natural Heritage Program and the USFWS (Appendix A). One federally listed species, the Indiana bat (*Myotis sodalis*), has been recorded in Wetzel County, but is not known to exist in the project area. No state listed threatened or endangered species, or their critical habitat, are known to exist in the project area (Sargent, 2004).

### 3.5.2 Environmental Consequences

***No Action Alternative***

Under the No Action Alternative, no physical changes to habitat critical to threatened and endangered species would occur and there would be no impact to protected species.

***Proposed Action Alternative***

Since no threatened or endangered species are known to exist at the proposed group housing site, the Proposed Action Alternative would have no effect on protected species. Although the Indiana bat has been recorded in Wetzel County, no threatened or endangered species, or their critical habitat, are known to exist in the project area (Sargent, 2004). The USFWS concurred with this finding (Douglas, 2004).

Considering the action's scope of work and based on the best information available regarding species occurrence, the Proposed Action Alternative has little potential for significant cumulative effects to threatened and endangered species when combined with past, present, and reasonably foreseeable future area actions.

## 3.6 CULTURAL RESOURCES

The National Historic Preservation Act of 1966 (NHPA), as amended, was passed by Congress to create a National Historic Preservation Program (NHPP). The NHPA established the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Offices (SHPO), and the National Register of Historic Places (NRHP). Consideration of impacts to historic properties is mandated under Section 106 of the NHPA, as amended, and implemented by 36 CFR Part 800. Requirements include the identification of significant historic properties and a determination whether these properties may be affected by the proposed federally funded or assisted project. For the purposes of Section 106, historic properties are defined as archaeological sites, buildings, structures, districts, or objects that are listed in, or are eligible for listing, in the NRHP (36 CFR 60.4). Coordination under Section 106 must be completed prior to initiating any action.

As defined in 36 CFR Part 800.16(d), the Area of Potential Effect (APE) "is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist." In addition to identifying historic properties that may exist in the proposed project's APE, the federal agency must also determine, in consultation with the appropriate State Historic Preservation Officer (SHPO), what effect, if any, the action would have on historic properties. Moreover, if the project would have an adverse effect to these properties, the federal agency must consult with the SHPO on ways to avoid, minimize, or mitigate the adverse effect.

### 3.6.1 Affected Environment

The project's APE for archaeological resources is defined as the proposed construction limits of disturbance. The limits of disturbance for this project are described in Section 2.3 of this document. The APE for architectural resources is defined as the archaeological APE, plus the project's viewshed. Due to the surrounding topography, the viewshed for architectural resources is limited to several physical barriers. Steeply sloped terrain is located to the north and to the south; Morgan Ridge is located to the north, with Eightmile Ridge situated to the south. Large trees block the viewshed on the western side of the property boundary line and extant housing units, several units high, are situated to the east.

Records research was conducted at the West Virginia Division of Culture and History, the regulatory agency for cultural resources, on September 19, 2004, by a Cultural Resource Management (CRM) professional who meets the *Secretary of Interior's Standards* for the professional discipline of Archaeology (36 CFR Part 61). There were no archaeological or architectural resources listed in State files and there are no cultural resource properties listed in the National Register of Historic Places within the project's APE.

A pedestrian survey of the project area was conducted on September 20, 2004. The project site consists of compacted fill, consisting of clay and clay loam, road gravel, and other fill material, from a recently demolished school and from road cut material. At the southernmost point, nearest Fishing Creek, the fill is nearly 20 feet thick, while at the northernmost point, adjacent to S.R. 20, the fill is approximately 5 to 10 feet in thickness. As such, there were no archaeological resources identified within the proposed construction area or within the APE. Based on the disturbance caused by filling and subsequent soil compaction at the project site, there is a low potential for finding intact archaeological sites within the project area's APE. Additionally, there were no architectural resources within the project's architectural APE.

### 3.6.2 Environmental Consequences

***No Action Alternative***

Under the No Action Alternative, FEMA would not provide funds for temporary group housing. Under the No Action Alternative, there would be no effects to any historic properties and/or cultural resources, as construction activities would not occur.

***Proposed Action Alternative***

Under the Proposed Action Alternative, no effects to historic properties are anticipated because no historic properties were identified within either the Archaeological or Architectural Resources APEs. Thus, it is FEMA's finding that the Proposed Action Alternative would affect no historic properties, which is pending concurrence from the SHPO (Appendix A).

Although no historic properties were identified at the site, in accordance with the NHPA, should unanticipated historic or cultural materials be found during construction, all construction activities shall cease immediately within 100 feet of the remains until their cultural affiliation and ultimate disposition are determined in consultation with the WV SHPO.

## 3.7 HAZARDOUS MATERIALS AND WASTE

Hazardous materials and toxic wastes are primarily regulated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA), and their reauthorizing amendments, the Superfund Amendments and Reauthorization Act (SARA), and the Hazardous and Solid Waste Amendments (HSWA). The intent of these statutes is to remediate release of hazardous materials to the environment, regulate proper management and disposal of hazardous waste and materials, prevent and provide response to spills, manage solid wastes, and promote resource recovery. The objectives of both CERCLA and RCRA are to promote the protection of human health and the environment, as well as conserve valuable material and energy resources. Under these laws, materials defined as hazardous or toxic must be managed under state and federal permitting requirements for staging, handling, storage, treatment, and disposal to prevent release to the environment and impacts to human health and/or the environment.

### 3.7.1 Affected Environment

An abbreviated Phase I Environmental Site Assessment (ESA) for hazardous and toxic waste was conducted for the proposed project site. This assessment consisted of a search of existing state and federal databases for known problem sites and spill locations and an on-site field evaluation. No apparent hazardous contamination was observed within or near the site during the field visit.

A background Phase I database report was prepared by Environmental Data Resources, Inc. (EDR) on November 19, 2004 (see Appendix B). The EDR report did not identify any mapped sites within one mile of the project site. However, 17 unmapped orphan sites, mainly associated with underground storage tanks (USTs), small quantity generators, and leaking underground storage tanks (LUSTs) were identified near the project site. Nine of the orphan sites are located on Route 20 in the town of Pine Grove. In addition to sites listed as USTs and LUSTs, there is one voluntary remediation site (VCP) called Dominion's Hep and one CERCLIS No Further Remedial Action Planned (NFRAP) site where a red substance was observed in Fishing Creek. (Appendix B). NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly, or the contamination was not serious enough to require Superfund action of National Priority List (NPL) consideration. No red coloring was observed in Fishing Creek during the site visit. There are no sites containing leaking underground storage tanks, generators, RCRA violators, VCP sites or CERCLA sites reported on the EDR immediately adjacent to or within the proposed Martin group housing site. EDR also identified an oil or gas line immediately east of the proposed site, and railroad tracks belonging to the Baltimore and Ohio railroad are located south of the proposed site and Fishing Creek. During the site visit, a farm pump and a well casing were observed onsite and no evidence of hazardous waste was observed.

The WVDEP website identified one abandoned mine land (AML) site within 1 mile of the proposed site. The AML site is located within one half mile southeast and across Fishing Creek from the Martin site.

### 3.7.2 Environmental Consequences

***No Action Alternative***

The No Action Alternative would not result in any impacts related to hazardous materials or waste since no construction would occur.

***Proposed Action Alternative***

There are no hazardous waste sites reported on the EDR report immediately adjacent to or within the Martin group housing site. The red discoloration reported in Fishing Creek was not observed during the site visit, and no further remedial action is planned. The Baltimore and Ohio railroad tracks are located on the opposite side of the creek from the site, and therefore do not pose a hazardous waste concern to the proposed site. Asbestos was removed from the former school that once occupied this site. However, a report provided by the Wetzel County Board of Education indicates that the asbestos was removed and disposed of properly (Holbert, 1988).

Although there is no evidence of hazardous materials on site; if these are encountered during construction, all hazardous materials shall be either remediated, abated, or disposed of as appropriate, and otherwise handled in accordance with applicable local, state, and federal regulations. Alternatively, the site could be abandoned in view of finding another site that better meets the identified purpose and need.

Considering the action's scope of work and apparent lack of hazardous materials or wastes, the Proposed Action Alternative has little potential for significant cumulative effects involving hazardous materials and wastes when combined with past, present, and reasonably foreseeable future area actions.

## 3.8 AIR QUALITY

### 3.8.1 Affected Environment

The Clean Air Act (CAA), which was last amended in 1990, establishes National Ambient Air Quality Standards (NAAQS) for criteria air pollutants to protect and enhance the quality of the nation's air resources, to promote public health and welfare, and to otherwise encourage and promote air pollution prevention and control programs. Section 176(c) of the CAA requires that federal agencies ensure that their activities are in conformance with federally approved State Implementation Plans (SIPs) that were established to improve ambient air quality. On November 30, 1993, the Environmental Protection Agency (EPA) published its final General Conformity Rule to implement Section 176(c). EPA's final rule addresses how federal agencies are to demonstrate that the activities they engage in conform to federally approved SIPs. The State of West Virginia air quality standards are identical to the federal standards. EPA has delegated its CAA enforcement authority to the WVDEP, Air Quality Division. Ambient air quality is monitored in various counties within the declared disaster area, by a network of monitoring stations maintained by the state.

To comply with the mandates of the CAA amendments, West Virginia has developed a SIP for air pollution control. The West Virginia SIP mandates that a new project must not result in an increase in volatile organic compounds or oxides of nitrogen emissions when compared to the

No Action alternative in both the long and short term. The proposed action must also not result in any new violations or exacerbations of federal or state ambient air quality standards.

The EPA office of Air Quality Planning and Standards has set the NAAQS for seven principal pollutants, (called "criteria" pollutants) that include carbon monoxide, nitrogen dioxide, sulfur dioxide, ozone, lead, particulate matter with a diameter of 10 microns, and particulate matter with a diameter of 2.5 microns. The CAA also requires the EPA to assign a designation to each area of the United States regarding compliance with the NAAQS. The EPA 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
- Nonattainment – area currently does not meet the NAAQS

The CAA, under 42 U.S.C. 7506(c)(1), prohibits federal agencies from funding, permitting, or licensing any project that does not conform to an applicable SIP. The State of West Virginia has developed its own federally approved SIP, with ambient air quality regulations that are identical to national standards. Wetzel County is in attainment with both federal and state air quality standards (English, 2004).

### 3.8.2 Environmental Consequences

***No Action Alternative***

Under the No Action Alternative, no activities affecting air quality would occur.

***Proposed Action Alternative***

The Proposed Action would result in activities that would produce a minor increase in vehicle emissions and dust particles. Tractor-trailers would transport mobile homes to the site. During construction of the group housing site at the Martin property, grading equipment would be required for site preparation. While the use of such equipment would create a temporary increase in emissions, no long-term effects upon air quality in Wetzel County are anticipated. Federal or state air quality attainment levels would not likely be exceeded.

Periodic wetting of the site during construction would reduce fugitive dust. Sensitive land uses, such as hospitals, senior citizen homes, or schools are located near the project area. An apartment complex and a residential home occur within 1,000 feet of the site. Although it is not expected, vegetation burning could occur during construction to dispose of woody material. Any burning of vegetation would require coordination with the WVDEP, Air Quality Division (English, 2004; Appendix A). Any potential effects to air quality would cease following the completion of FEMA's action.

Considering the action's scope of work and best available information, the Proposed Action Alternative has little potential for significant cumulative effects related to air quality when combined with past, present, and reasonably foreseeable future area actions.

## 3.9 NOISE

Noise, defined as unwanted or unwelcome sound, is federally regulated by the Noise Control Act of 1972 (NCA). Although the NCA tasks EPA to prepare guidelines for acceptable ambient noise levels, it only charges those federal agencies that operate noise-producing facilities or equipment to implement noise standards. By nature of its mission, FEMA does not have statutes defining noise. The Federal Interagency Committee on Urban Noise developed land use compatibility guidelines for noise in terms of day-night average sound level (DNL) measured in decibels (dB). The EPA's guidelines (and those of many federal agencies) state that outdoor sound levels in excess of 65 dB DNL are "normally unacceptable" for noise-sensitive land uses such as residences, schools, and hospitals. Most noise associated with flood-disaster projects is emitted from mechanical equipment used in repair, improvement, construction, and demolition.

### 3.9.1 Affected Environment

Noise reaching the Martin group housing site is from traffic along Route 20. The surrounding land use is mostly rural with the exception of an apartment complex and one residential house located within 1,000 feet west of the proposed site.

### 3.9.2 Environmental Consequences

***No Action Alternative***

Under the No Action Alternative, there would be no change to existing noise levels.

***Proposed Action Alternative***

Under the Proposed Action Alternative, noise levels at the action site would increase as utilities are connected to the mobile home pads. Noise levels associated with preparing the site for emergency housing would be temporary. Construction activities are anticipated to last for approximately 30 days and will take place 12 hours a day. During that time, there may be a minor increase in noise over typical background levels due to construction activities, but excessive noise exposure would not occur, because the apartment complex and a home are about a 1,000 feet from the project site.

As a result of constructing a housing site that will be temporary, ambient noise levels at this site would increase only when the site is occupied by temporary group housing. This increase is not anticipated to adversely affect the surrounding area as a whole because the nature of the noise is similar in type, frequency, and intensity with existing residential noise and traffic in the surrounding area.

Considering the action's scope of work and best available information, the Proposed Action Alternative has little potential for significant cumulative effects related to noise when combined with past, present, and reasonably foreseeable future area actions.

## 3.10 SOCIOECONOMIC RESOURCES

### 3.10.1 Affected Environment

Land use and land cover in the declared disaster area are typical of a rural environment in rugged terrain. There are broad to very steep valleys and ridgetops mostly covered by deciduous forest. The ridgetops have small areas of agricultural and rangeland interspersed throughout forested areas. Sparse rural residential development is found primarily along the ridgetops, or in valleys, but housing density increases closer to towns.

Land use in and surrounding the declared disaster area consists of residential, commercial, and former institutional uses. West Virginia remains in a recession that began nationally early in 2001. The State lost almost 8,000 manufacturing jobs (a percentage job loss of 10.7%) from mostly the glass, metal, and chemical industries. These job losses have been compounded by declines in the construction, transportation, utilities, and information industries (BBER, 2003).

Most of the future job growth is anticipated to come from the service-providing sectors like health care, leisure and hospitality, and professional and business services. However, job gains are expected to be offset by continued job losses in coal mining and manufacturing (BBER, 2003).

The average level below which a family of four was considered in poverty in the United States was $12,674 in 1990 (poverty threshold) and $17,603 in 2000. Within Wetzel County, more individuals and families were in poverty in 1990 (20.5 percent) than in 1980 (13.2 percent). From 1990 to 2000, the poverty rate in the project area decreased slightly to 19.8 percent. (ARC, 2004).

Economic trends for the State of West Virginia show that while the State is experiencing some economic growth compared to prior years, growth continues to fall behind that experienced by other states. In addition, the state continues to lose residents to thriving metropolitan areas in other states due to employment declines in industries such as coal mining, construction, chemical products, and other goods-producing jobs (BBER, 2003).

Land use surrounding the Martin group housing site is rural interspersed with some residential enclaves. Table 1 compares socioeconomic parameters between the census tract in which the Martin group housing site is located and Wetzel County. The census tract containing the Martin housing site has more individuals living below the poverty level than Wetzel County.

**Table 1. Socioeconomic Comparisons**

| *Location* | *Population (P1)* | *Median Household Income (dollars) (P53)* | *Unemployment Rate (percent 16+ years) (DP-3)* | *Persons living below poverty level (percent) (P92)* |
|---|---|---|---|---|
| **Martin Site (Census Tract 305)** | 4,406 | $27,991 | 4.2 % | 20.6 % |
| **Wetzel County** | 17,693 | $30,935 | 5.0 % | 18.8 % |

Source: U.S. Census Bureau, Census 2000. http://factfinder.census.gov

### 3.10.2 Environmental Consequences

***No Action Alternative***

The No Action Alternative would have an adverse impact on flood and landslide victims in the project area. No federal funding would be allocated for group housing at the Martin group housing site and displaced disaster victims would remain dependent upon their family, friends, or hotels for shelter. Other individuals might choose to remain in unsafe structures that have been rendered unsuitable for occupancy due to flooding or landslides, or may be forced to become homeless. The lack of group housing relief could worsen the community's existing economic hardship.

***Proposed Action Alternative***

The Proposed Action Alternative would help to satisfy the emergency housing needs of the victims in Wetzel County by providing housing in a safe environment and removing the economic burden of finding replacement housing. Additionally, emergency housing at the Martin group housing site would help to stabilize the community's economy by providing relief to disaster victims and keeping them close to their current homes. No adverse effects related to socioeconomics are anticipated with the Proposed Action Alternative.

Considering the action's scope of work and best available information, the Proposed Action Alternative has little potential for significant cumulative effects related to socioeconomics when combined with past, present, and reasonably foreseeable future area actions.

## 3.11 ENVIRONMENTAL JUSTICE (EO 12898)

EO 12898 requires that each federal agency identify and address the effects of its programs, policies, and activities on minority and low-income populations. The function of this EO is to avoid disproportionately high and adverse public health or environmental impacts to the target populations. Further, EO 12898 also tasks federal agencies to ensure that public notifications regarding environmental issues are concise, understandable, and readily accessible.

All forms of FEMA disaster housing assistance are available to any affected household that meets the conditions of eligibility. No federal entity or official (or their agent) may discriminate against any individual based on race, color, religion, sex, age, national origin, disability, or economic status.

### 3.11.1 Affected Environment

Within the declared disaster area, the overall population is more than 98 percent white and less than 2 percent minority. In 2000, 17.9 percent of individuals in West Virginia were below the poverty threshold (U.S. Census Bureau, Census 2000). Table 2 compares demographic data in the Martin group housing site area to data for Wetzel County.

**Table 2. Racial Distribution**

| *Location* | *Race (percent)(QT-P3)* | | | |
|---|---|---|---|---|
| | *White* | *Black* | *American Indian, Eskimo, or Aleut* | *Other* |
| **Martin Site (Census Tract 305)** | 99.6 | 0.0 | 0.0 | 0.0 |
| **Wetzel County** | 98.9 % | 0.1 % | 0.1 % | 0.9 % |

Source: U.S. Census Bureau, Census 2000. http://factfinder.census.gov

Disaster recovery for minority and low-income groups is exacerbated by loss of personal transportation, and lack of financial resources to replace lost homes, and other personal property.

### 3.11.2 Environmental Consequences

***No Action Alternative***

Under the No Action Alternative, group housing would not be built and would not be available to individuals affected by flooding or landslides, regardless of economic or ethnic status. This could have a disproportionately high and adverse impact on low income victims. As noted above, victims would remain dependent on other housing options. Living conditions for families below the poverty threshold could continue to worsen, and many other flood victims could be forced into new poverty conditions.

***Proposed Action Alternative***

In compliance with EO 12898, the Proposed Action Alternative site selection poses no disproportionately high and adverse effect on minority or low-income populations. Also, the availability of federal assistance to low-income families is consistent with EO 12898. The census tract for the proposed site contains a smaller percentage of minorities and has more low-income families than Wetzel County. It is anticipated that the demographics of the Martin group housing site residents would be representative of the victim cluster area, because the site is within the same county of most homes damaged as a result of flooding or landslides. Accordingly, the Proposed Action Alternative is expected to benefit all participating populations.

Considering the action's scope of work and best available information, the Proposed Action Alternative has little potential for significant cumulative effects related to environmental justice when combined with past, present, and reasonably foreseeable future area actions.

## 3.12 VISUAL IMPACTS

### 3.12.1 Affected Environment

The site parcel is comprised of a nearly level bench, approximately rectangular in shape, located to the north of Fishing Creek. The site is bordered by an open field to the east and an apartment to the west. Route 20 runs, at grade, along the southern edge of the property. Across Route 20 is

a residential house. The nature of the site limits the viewshed to the neighboring mountain slopes, apartment complex and residential home.

### 3.12.2 Environmental Consequences

***No Action Alternative***

Under the No Action Alternative there would be no visual impacts because viewscapes would remain as they are.

***Proposed Action Alternative***

Under the Proposed Action Alternative, manufactured housing would be placed on an undeveloped, vegetated lot. The surrounding area is rural with residential enclaves, but the site is currently vacant. The Proposed Action Alternative would alter existing conditions; however, the character of the proposed housing is in keeping with the residential land use in the general vicinity of the site. Due to the low height of the proposed housing units, it is not anticipated that the Proposed Action Alternative would have any long-term adverse effects relative to visual impacts in the project area**.**

Considering the action's scope of work and best available information, the Proposed Action Alternative has little potential for significant cumulative effects related to visual affects when combined with past, present, and reasonably foreseeable future area actions.

## 3.13 TRAFFIC

### 3.13.1 Affected Environment

The Martin group housing site would be accessed via Route 20, a two-lane paved road. Access will be through a proposed short road. Based on sparse regional development, traffic congestion along Route 20 in the Martin group housing site area does not usually occur. The apartment complex can house approximately 12 families and generates little traffic.

### 3.13.2 Environmental Consequences

***No Action Alternative***

Under the No Action Alternative traffic volumes would remain as they are and no impact to traffic would occur.

***Proposed Action Alternative***

Under the Proposed Action Alternative, traffic volumes from the construction of the group housing would increase in the area during construction of utilities and group housing, as well as during group housing occupancy. The greatest increases in traffic are anticipated to occur during construction, which is expected to last approximately 30 days. Traffic increases during construction would be localized, and would not exceed limitations of the current transportation network infrastructure. When the manufactured homes are being delivered, Route 20 may have to be closed down for a few minutes at a time to accommodate the tractor-trailer. After construction, local travelers driving along these roads may experience slightly heavier volumes

at peak traffic times during site occupancy. In order to minimize impacts, a traffic safety plan, which meets State regulations, would be developed, including the use of approved traffic control personnel and signage.

Considering the action's scope of work, and best available information, the Proposed Action Alternative has little potential for significant cumulative effects related to traffic when combined with past, present, and reasonably foreseeable future area actions.

## 3.14 UTILITIES

### 3.14.1 Affected Environment

The region offers services from a variety of providers that include potable water, sanitary wastewater treatment, municipal waste collection, natural gas, electricity, telephone service, fiber optics, and Internet access. At the Martin group housing site, electricity is currently available onsite from Alleghany Electric Power, telephone service is available through Frontier, and municipal water and sewer is available through Moundsville PSD.

### 3.14.2 Environmental Consequences

***No Action Alternative***

Under the No Action Alternative, no group housing would be located at the Martin site, and no impacts to utilities in the area would occur.

***Proposed Action Alternative***

Electricity, telephone, and municipal water and sewer utilities would be installed at the Martin group housing site with little difficulty because these utilities are already located on or near the site. The total number of utility users would not show significant fluctuation, since one of the purposes for constructing group housing is to allow residents to remain in the same general area of their residences, and not be forced to relocate great distances. However, interruptions of utility services may occur during tie-ins of existing utilities to the group housing development. These interruptions would be temporary and localized, and are not expected to impact large numbers of users. Utility site design for this proposed site would be coordinated with city, county, or regulatory engineering or planning departments. These activities would be coordinated with the WVDEP and Department of Health for construction and operation permitting, as well as any future decommissioning. No long-term adverse effects to utilities would result from the Proposed Action Alternative.

Considering the action's scope of work and best available information, the Proposed Action Alternative has little potential for significant cumulative effects related to utilities when combined with past, present, and reasonably foreseeable future area actions.

## 3.15 SAFETY AND SECURITY

### 3.15.1 Affected Environment

Safety and security programs involve the physical and procedural measures to protect people and property. This includes loss prevention and control, which identifies risks or hazardous conditions that may threaten property and/or the safety of residents or the public. These conditions may include, but are not limited to, appropriate fire protection systems, security deficiencies, and the inadequacy of emergency plans and procedures. Currently, the proposed group housing site is vacant, but is located in a rural setting with some residential enclaves.

### 3.15.2 Environmental Consequences

***No Action Alternative***

Under the No Action Alternative, safety and security in the community would be compromised because disaster victims may be forced to occupy flood- or landslide-damaged structures.

***Proposed Action Alternative***

Under the Proposed Action Alternative, group housing would be built at the Martin site. Access to unsafe areas or heavy equipment during the construction activities (e.g., site grading) would be restricted, and signage would warn of unsafe conditions. During site grading and mobile home staging, access to the site would be restricted. Measures would be taken to ensure adequate access to the site for the safe ingress and egress of residential, fire, or emergency vehicles. It is not anticipated that the Proposed Action Alternative would pose safety and security risks to residents.

Considering the action's scope of work and best available information, the Proposed Action Alternative has little potential for significant cumulative effects related to safety and security when combined with past, present, and reasonably foreseeable future area actions.

The objective of the public participation process is to provide parties interested in or affected by the proposed project the opportunity to comment on the draft EA. FEMA used its discretion in determining the public comment period duration necessary to meet its NEPA obligations and other applicable environmental laws, and in consideration of the situation's urgency and action's anticipated level of controversy. A 72-hour public comment period, which has been done previously, was considered sufficient for this proposed action. A public notice will be published in the *Intelligencer* newspaper on November 26, 27, and 29, 2004. The draft EA will be made available to the public at the New Martinsville Public Library, 160 Washington Street, New Martinsville, West Virginia 26155 and will be posted on FEMA's website at http://www.fema.gov/ehp.shtm.

Although no potentially significant adverse environmental effects have been identified, the following mitigation measures are required or recommended to reduce the Proposed Action Alternative's potentially less than significant adverse environmental effects:

1. A WVDEP NPDES General Water Pollution Control Permit would require site design elements to manage the site's stormwater, thereby minimizing potential adverse affects to the stream from site stormwater runoff. An SWPPP would be prepared for the site, addressing its construction and occupancy phase. The SWPP would incorporate best management practices such as installing silt fencing and erosion control blankets between the staging area and stream.
2. Short-term adverse effects to on-site and nearby air quality from fugitive dust caused by site preparation (vegetation removal, burning, clearing and grading) can be reduced by periodically wetting the construction area. Any burning of vegetation would require coordination with the WVDEP, Air Quality Division.
3. Once construction is completed, planting ground cover in exposed areas along with native species landscaping would reduce potentially adverse long-term air quality conditions on-site.
4. Utility installation, including but not limited to water, sewer, electricity, and telephone must be coordinated with the appropriate service suppliers and regulatory agencies.
5. Safety fencing must be erected as a barrier between the proposed housing site and all natural hazards, including the stream and sediment basins proposed by the WVDEP.
6. Access to unsafe areas or heavy equipment during the construction would be restricted, and signage would warn of unsafe conditions.
7. If Route 20 must be temporarily closed to bring in the tractor-trailers, coordination with the West Virginia Department of Highways should be undertaken to determine if permits are required.
8. Proper construction vehicles and equipment storage and maintenance would reduce potential pollutant emissions and hazardous material spills (including fuels, coolants, and lubricants) and consequent soil and water contamination.
9. Although no historic properties were identified at the site, in accordance with the NHPA, should unanticipated historic or cultural materials be found during construction, all construction activities shall cease immediately within 100 feet of the remains until their cultural affiliation and ultimate disposition are determined in consultation with the WV SHPO and other interested parties.
10. The results of a preliminary Environmental Site Assessment found no hazardous materials on site; however, if these are encountered during construction, all hazardous materials shall be either abated, remediated, or disposed of as appropriate, and otherwise handled in accordance with applicable local, state, and federal regulations.

The Public Notice was posted as stated below:

## FEMA PUBLIC NOTICE OF AVAILABILITY DRAFT ENVIRONMENTAL ASSESSMENT FOR DEVELOPMENT OF A EMERGENCY HOUSING SITE NEAR PINE GROVE, WETZEL COUNTY

Interested parties are hereby notified that the Federal Emergency Management Agency (FEMA) has prepared an Environmental Assessment (EA) for a proposed manufactured housing (mobile homes or travel trailer) site. The site would house disaster victims displaced by major home damage caused by floods and mudslides that occurred on September 16 and 17, 2004. A Presidential Disaster Declaration, FEMA-1558-DR-WV, was signed on September 20, 2004, for this event.

The proposed action includes developing an approximately 1.15-acre site (termed "Martin site") for manufactured housing units to be located adjacent to State Route 20, approximately 0.9 mile west of the intersection of State Route 20 and County Route 17 in Pine Grove, Wetzel County, West Virginia. Activities would include, where necessary, site clearing, grading, road construction, the placement of utilities (electricity, telephones, water, and sewer), and the transport and hook-up of manufactured homes to the site. Per the National Environmental Policy Act (42 U.S.C. 4371 *et seq.*), and associated environmental statutes, a Draft EA was written to evaluate the Proposed Action's potential impacts on the human and natural environment. The Draft EA considers alternatives, the existing environment, the Proposed Action consequences, and ways to reduce adverse affects.

Due to the emergency nature of this action, the public comment period will be brief – November 26, 27, and 29, 2004. Written comments on the Draft EA can be faxed to FEMA's Disaster Recovery Center in Wheeling at (304) 231-3516; and verbal comments will be accepted at (304) 231-3573 and TTY for hearing or speech-impaired at 800-462-7585; between 8:00 A.M. and 5:00 P.M. The draft EA can be viewed and downloaded from FEMA's website at http://www.fema.gov/ehp/docs.shtm and is also available for public review at the New Martinsville Public Library, 160 Washington Street, New Martinsville, WV 26155. The library hours are Monday, from 10:00 AM to 8:00 PM. On Friday and Saturday the library is open from 10:00 AM to 5:00 PM. If no substantive comments are received, the Draft EA will become final and this initial Public Notice will also serve as the final Public Notice.

***All other questions regarding disaster assistance or the availability of emergency housing should be directed to FEMA's Teleregistration line at 800-621-3362.***

The following agencies were contacted during preparation of this EA:

- Natural Resources Conservation Service Regional Office
- U.S. Army Corps of Engineers – Huntington District
- U.S. Fish and Wildlife Service Regional Office
- West Virginia Bureau of Public Health
- West Virginia Department of Environmental Protection
- West Virginia Department of Environmental Protection, Division of Air Quality
- West Virginia Department of Environmental Protection, Division of Hazardous Waste
- West Virginia Department of Environmental Protection, Division of Mining and Reclamation
- West Virginia Department of Environmental Protection, Division of Waste Management
- West Virginia Department of Environmental Protection, Division of Water Resources
- West Virginia Division of Culture and History, State Historic Preservation Office
- West Virginia Division of Natural Resources, Non-game and Natural Heritage Program
- West Virginia Division of Natural Resource, Public Land Corporation

Anderson, R. 2004. Record of telephone conversation with Roger Anderson. WVDNR Public Land Corporation, Charleston, WV. August 19, 2004. (Appendix A).

Appalachian Regional Commission (ARC). 2004. Appalachian Regional Commission Socioeconomic Data: Marshall County, West Virginia. http://www.arc.gov/index.do?nodeId=56. Site visited November 20, 2004.

Bennett, L. 2004. Record of Communication. WVDEP. Correspondence to be established.

Berkes, R. 2004. Record of telephone conversation with Richard Berkes. USACE. November 23, 2004. (Appendix A).

Bureau of Business and Economic Research (BBER). 2003. *West Virginia Economic Outlook: 2004*. College of Business and Economics, West Virginia University 2003. http://www.bber.wvu.edu/pdf_files/BBER-2003-20.pdf. Site visited December 21, 2003.

Dilliplane, T. 2004. Response letter from Tim Dilliplane. USDA-NRCS November 19, 2004. (Appendix A).

Douglas, B. 2004. Record of telephone conversation with Barbara Douglas. USFWS, Charleston, WV. November 18, 2004. (Appendix A).

English, L. 2004. Record of telephone conversation with Larry English. WVDEP Division of Air Quality, Charleston, WV. November 19 and 22, 2004. (Appendix A).

Environmental Protection Agency. 2004. Sole Source Aquifers. http:// www.epa.gov/safewater/swp/swmssa.html. Site visited November 20, 2004.

Federal Emergency Management Agency (FEMA). 1999. *Programmatic Environmental Assessment for Site Selection and Development for Temporary and Transient Emergency Housing For Disaster Victims in North Carolina*. FEMA-1292-DR-NC Region IV. October 1999.

FEMA. 2001a. *Draft Programmatic Environmental Assessment for Development of Temporary and Transient Emergency Housing For Disaster Victims in Southeast Texas*. FEMA-1379-DR-TX Region VI. July 2001.

FEMA. 2001b. *Draft Programmatic Environmental Assessment for Development of Temporary and Transient Emergency Housing For Disaster Victims in Southern West Virginia*. FEMA-1378-DR-WV Region III. July 2001.

Holmes, J. 2004. Record of Conversation with Josh Holmes. WVDEP Mining and Reclamation. August 26, 2004. (Appendix A).

Holbert, H. 1988. Asbestos Removal Completed During Phase I. March 28, 1998 (Appendix).

Ivy, W. 2004. Record of telephone correspondence with Walt Ivy. WV Bureau of Public Health. November 22, 2004. (Appendix A).

Natural Resources Conservation Service (NRCS). 1972. *Soil Survey of Wetzel County, West Virginia*. U.S. Department of Agriculture (USDA), NRCS.

Perkins, J. 2004. Record of telephone conversation with John Perkins. WVDEP Division of Water and Waste Management, Charleston, WV. August 24, 2004. (Appendix A).

Sargent, B. 2004. Response email from Barbara Sargent. WVDNR Non-game & Natural Heritage, Charleston, WV. November 19, 2004. (Appendix A).

U.S. Census Bureau. (Census). 2000. Census 2000. http://factfinder.census.gov. Site visited November 20, 2004.

U.S. Fish and Wildlife Service (USFWS). 2004. National Wetlands Inventory Mapper. http://wetlandsfws.er.usgs.gov/wtlnds/viewer.htm. Site visited November 20, 2004.

West Virginia Department of Environmental Protection (WVDEP). 2004a. WVDEP Mapping, GIS, and GPS. http://gis.wvdep.org/. Site visited November 20, 2004.

WVDEP-Waste Management. 2004b. Record of Conversation with Brad Swinger. November 22, 2004. (Appendix A).

West Virginia Department of Transportation, Division of Highways (WVDOT). 1999. *Final Environmental Impact Statement for Coalfields Expressway.* November 1999.

WVDOT, 2000a. *Draft Final Environmental Impact Statement for Shawnee Highway.* West Virginia Department of Transportation, Division of Highways. May 2000.

WVDOT, 2000b. *Final Environmental Impact Statement for King Coal Highway.* West Virginia Department of Transportation, Division of Highways. June 2000.

West Virginia Division of Natural Resources (WVDNR). 1996. *West Virginia Stream Map.* Wildlife Resources Section. 1996.

West Virginia Geological & Economic Survey (WVGES). 1999. http://www.wvgs.wvnet.edu/www/geology/geolgeom.htm. Site visited September 6, 2001.

WVGES, 2001. Index for West Virginia Geological & Economic Survey. http://www.wvgs.wvnet.edu/www/index.html. Site visited July 19, 2001.

Zambelli, J. 2004. Record of Conversation with Joe Zambelli. NJDEP Abandoned Mine Lands. November 19, 2004. (Appendix A).

# Appendix A
# Agency Consultation Letters

# Appendix B

# Phase I Environmental Site Assessment Search Result

# Appendix C
# Site Photographs