



Draft Environmental Assessment

Kiowa County Commons

Greensburg, KS

FEMA-1699-DR-KS

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FEMA

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ACRONYMS AND ABBREVIATIONS

CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
EA	Environmental Assessment
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FPPA	Farmland Protection Policy Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
ROI	Region of Influence
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Department of the Interior, Fish and Wildlife Service

1 INTRODUCTION

The city of Greensburg, Kansas is located in the south-central portion of the state and is the seat of Kiowa County. The Kiowa County Library, the Kiowa County Museum, and the entire city of Greensburg, Kansas experienced substantial damage from an Enhanced Fujita Scale Category 5 tornado estimated at up to 1.7 miles in diameter that made a direct hit on Greensburg, virtually destroying the entire community of 1,574 residents on May 4, 2007. On May 7, 2007, President Bush declared a major disaster in the State of Kansas (FEMA-1699-DR-KS) pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, 42 U.S.C. Section 5121-5206. The incident period began on May 4, 2007, and closed June 7, 2007. Initially nine (9) counties were declared, with 31 additional counties added by August 1, 2007.

The National Environmental Policy Act (NEPA) requires that Federal agencies evaluate the environmental impacts of their proposed actions and the natural and human environment before deciding to fund an action. The President's Council on Environmental Quality (CEQ) has developed a series of regulations for implementing the NEPA. These regulations are included in Title 40 of the Code of Federal Regulations (CFR), Parts 1500–1508. They require the preparation of an Environmental Assessment (EA) that includes an evaluation of alternative means of addressing the purpose and need for Federal action and a discussion of the potential environmental impacts of the proposed Federal action. An EA provides the evidence and analysis to determine whether the proposed Federal action will have a significant adverse effect on the human environment. An EA, related to a FEMA program, must be prepared according to the requirements of the Stafford Act and 44 CFR, Part 10. This section of the Federal Code requires that the Federal Emergency Management Agency (FEMA) take environmental considerations into account when authorizing funding or approving actions. This EA was conducted in accordance with both CEQ and FEMA regulations for NEPA.

2 PURPOSE AND NEED FOR FEDERAL ACTION

Pursuant to Section 406 of the Robert T. Stafford Disaster and Emergency Assistance Act of 1988, as amended, the city of Greensburg has requested funding through FEMA Public Assistance Program. FEMA's Public Assistance Program provides supplemental Federal disaster grant assistance for the repair, replacement, or restoration of disaster damaged, publicly owned facilities. Work that is eligible for this grant assistance is classified as either emergency work or permanent work. The purpose of this project is to assist the Greensburg residents in their recovery from the natural disaster by using the FEMA Public Assistance Program to fund the construction of a new combined Kiowa County Library and Museum.

The need for the project is to replace and upgrade the destroyed Kiowa County Library and Kiowa County Historical Museum in response to a devastating tornado that struck Greensburg, Kiowa County, Kansas, on May 4, 2007.

Other libraries in the area are limited to:

- Mullinville Library, 10 miles west of Greensburg in Mullinville, KS
- Haviland City Library, 10 miles east of Greensburg in Haviland, KS
- Bucklin City Library, 20 miles west of Greensburg, Bucklin, KS
- Kinsley Library, 27 miles north of Greensburg, Kinsley, KS
- Wilmore Community Center and Library, 27 miles southeast of Greensburg, Wilmore, KS

This is the only museum in Kiowa County. The closest museum to capture relics and artifacts of Kiowa County history would be the Edwards County Historical Society Museum, ~27 miles north of Greensburg in Kinsley, KS.

3 ALTERNATIVES

NEPA requires the investigation and evaluation of a range of reasonable project alternatives, including impacts to the natural and human environment as part of the planning process. FEMA has elected to use a fatal flaw process, narrowing the focus of this EA on the Proposed Alternative and No Action Alternatives only. The discussion also includes some alternatives analyzed and dismissed, and not carried forward through the remainder of the EA.

3.1 Kiowa County Commons (Proposed Alternative)

The proposed alternative is to incorporate efficiency and better serve the public interest to support a project called the Kiowa County Commons located at 320 South Main Street, Greensburg, Kansas, 67054-1728. The Commons will be a comprehensive learning and discovery center, blending the library with other complementary services, including the museum, the Kiowa County branch of Kansas State University's Research and Extension office, and a public Media Center. The first floor of the Commons will be shared between the library, museum, and Extension office. The total square footage of the first floor will be 14,338. While each entity will have its own dedicated space, a large portion of the first floor will consist of areas shared by all occupants of the Commons. These shared areas include a lobby/atrium, a large conference room and television studio, various electrical, mechanical, and janitorial closets, and public restrooms.

The building also contains a second story over its southern wing totaling 4,913 square feet, bringing the square footage of the entire building to 19,251. This second story will contain a number of areas that are also shared amongst the occupants of the Commons, including additional building systems rooms, shared office space, a small radio studio, and a small conference room. The second floor also houses the workstations that make up the Media Center which will give the public the opportunity to create and edit their own high-definition multimedia content and share it with the rest of the community. Combining the library with these other functions and sharing space in this manner provides many benefits. From a practical perspective, the shared spaces reduce the building's overall area and total cost. The combination also encourages cooperation to take advantage of the synergy between the various entities. For example, the library may maintain a special section that has more detailed information about the subject of a multimedia exhibit prepared by the museum in the building's television and radio studios. Such complimentary functions enhance the facility's value to the public and are precisely why it has been designed to be highly integrated with many shared assets.

After the disaster, FEMA activated the Long-Term Community Recovery program, which integrated assistance from the State of Kansas and federal agencies focused on the community's long-term recovery goals after the tornado on May 4, 2007. The program provided coordination of resources and planning services in support of the area's recovery effort. This Long-Term Community Recovery Plan process expressed the Greensburg and Kiowa County community's vision for recovery in the aftermath of the tornado. This Recovery Plan was the result of an intensive 12-week process involving many meetings and discussions among the citizens, civic groups, business owners, local, state, and federal officials, and the long-term recovery planning team.

As a result of this process, Greensburg and Kiowa County have a unique opportunity to become the national leader in the design and construction of highly efficient and environmentally sound facilities. Projects such as the proposed Kiowa County Commons can become the model for environmental and energy efficient design and construction. The City of Greensburg and Kiowa County could become the leaders in developing a sustainable community. Designing and constructing public facilities to meet the most stringent environmental and energy efficient standards will increase the sustainability and add unique elements to Greensburg and Kiowa County. Few public buildings in the country have been designed and built to meet the United

State's Green Building Council's Leadership in energy and environmental design (LEED)® Platinum standard. The construction is anticipated to start in the 4th quarter of 2009 with completion in the 2nd quarter of 2009.

3.2 No Action/No Construction Alternative

The No Action/No Construction Alternative would eliminate the library and museum from the city of Greensburg recovery and reconstruction. There are other existing libraries in the vicinity that could be used by the citizens of Greensburg:

- Mullinville Library, 10 miles west of Greensburg in Mullinville, KS
- Haviland City Library, 10 miles east of Greensburg in Haviland, KS
- Bucklin City Library, 20 miles west of Greensburg, Bucklin, KS
- Kinsley Library, 27 miles north of Greensburg, Kinsley, KS
- Wilmore Community Center and Library, 27 miles southeast of Greensburg, Wilmore, KS

This is the only museum in Kiowa County. The closest museum to capture relics and artifacts of Kiowa County history would be the Edwards County Historical Society Museum, ~27 miles north of Greensburg in Kinsley, KS.

3.3 Actions Considered But Dismissed

The destroyed library was originally a 4,218 square foot slab-on-grade single story building located at 102 S. Main Street. The original project was to reconstruct the library with like square footage at the same location. This option was dismissed through the long-term recovery planning and through opportunity to combine the library with other similar functions thereby increasing value to the community.

The destroyed museum was originally a 9,698 square foot two-story building with partial basement located on the west side in the 100 block of S. Main St. The original project was to reconstruct the museum with like square footage at the same location. This option was dismissed through the long-term recovery planning and through opportunity to combine the museum with other similar functions thereby increasing value to the community.

4 AFFECTED ENVIRONMENT AND CONSEQUENCES

The city of Greensburg is located in Kiowa County in the south-central portion of Kansas and is the seat of Kiowa County. Kiowa County was established in 1886. Greensburg was founded in 1886, and was named for stagecoach driver D.R. "Cannonball" Green. Green was elected Kiowa County's first representative in the Kansas legislature in 1889 (Kiowa County, Kansas, 2008). Greensburg is an incorporated city in Kansas with a Mayor-Council style of government and a population of approximately 1,574 (U.S. Department of Commerce, 2000). Greensburg is located close to the intersection of U.S. Highway 183 and U.S. Highway 400.

Chapter 5 describes the existing environmental conditions that may be affected by the proposed construction of the Kiowa County Commons and uses the No-action/No Construction Alternative as a baseline for comparison.

This chapter also describes the potential environmental consequences of the proposed alternative by comparing them with the potentially affected environmental components. Proposed activities were also evaluated against existing environmental documentation on current and planned actions and information on anticipated future projects to determine the potential for cumulative impacts. The potential for significant environmental consequences was evaluated utilizing the context and intensity considerations as defined in CEQ regulations for implementing the procedural provisions of NEPA (40 CFR 1508.27).

4.1 Geology and Soils

Kiowa County, Kansas, is divided between the Arkansas River Lowlands and the High Plains geologic regions (physiographic provinces). Greensburg is located at the confluence of these two regions. The Arkansas River Lowlands are generally characterized as flat alluvial plains comprised of sand, silt, gravel, and rocks deposited by the Arkansas River over the past 10 million years. The High Plains region includes vast flatlands and gently rolling hills developed on sediments from erosion of the Rocky Mountains during the Tertiary Geologic Period the last two million years (U.S. Department of Homeland Security, 2007).

The Farmland Protection Policy Act (FPPA) was enacted in 1981 (P.L. 98-98) to minimize the unnecessary conversion of farmland to nonagricultural uses as a result of Federal actions. In addition, the act seeks to ensure that Federal programs are administered in a manner that will be compatible with State and Local policies and programs that have been developed to protect farmland. The policy of the Natural Resources Conservation Service (NRCS) is to protect significant agricultural lands from conversions that are irreversible and that result in the loss of essential food and environmental resources. The NRCS has developed criteria for assessing the efforts of Federal actions on converting farmland to other uses, including Farmland Conversion Impact Rating form AD-1066 that documents a site-scoring evaluation process to assess its potential agricultural value.

4.1.1 Geology and Soil Consequences of the Proposed Alternative

The topography of the proposed construction site is flat. Information from the U.S. Department of Agriculture Natural Resources Conservation Service shows one soil type present on the site; Farnum loam, 0 to 1 percent slopes. Farnum loam (Map Unit 5892) is found with 1 to 3 percent slope and are deep, well drained moderately permeable soil on uplands. Individual areas are irregular in shape and range from 20 to 500 acres in size. This soil is moderately well suited to dwellings and septic tank absorption fields (U.S. Department of Agriculture, 1986).

In accordance with Section 1541 of the FPPA, the proposed alternative was reviewed for potential impacts on prime farmlands. Although all areas of soil classification 5892, Farnum loam are considered prime farmland, the U.S. Department of Agriculture identifies that proposed projects on land already in

urban development or water storage are not subject to the provisions FPPA. Thus there will be no impacts to prime farmlands.

4.1.2 Geology and Soil Consequences of the No Action/No Construction Alternative

Under the No-Action Alternative, no construction activities would occur that would potentially impact geology or soil.

4.2 Air Quality

The National Ambient Air Quality Standards established by the U.S. Environmental Protection Agency (EPA) define the allowable concentrations of pollutants that may be reached but not exceeded in a given time period to protect human health (primary standard) and welfare (secondary standard) with a reasonable margin of safety. These standards include maximum concentrations for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, and particulate matter with a diameter of 10 microns or less.

The nearest Air Quality Monitoring System location is in Dodge City and is administered by the Bureau of Air and Radiation Section of the Kansas Department of Health and Environment. Kiowa County is considered an attainment area for all criteria pollutants listed above. Air quality in the project and the surrounding area currently complies with Federal and State air quality standards as indicated by the entire state of Kansas being within an Air Quality Attainment Area. In addition, neither the city of Greensburg nor Kiowa County is covered by the State of Kansas Air Quality State Implementation Plan (Kansas Department of Health and Environment, 2008).

4.2.1 Air Quality Consequences of the Proposed Action

Heavy construction is a source of fugitive dust emissions that may have substantial temporary impact on local air quality. Emissions during construction can be associated with land clearing, ground excavation, earth moving, and construction of a particular activity itself. Dust emissions can vary substantially from day to day depending on the level of activity, the specific operations and the prevailing meteorological conditions. A large portion of the emissions results from equipment traffic over temporary roads at the construction site.

The quantity of dust emissions from construction operations is directly proportional to the area of land being worked, the level of construction activity, the silt content of the soil and the speed and weight of the average vehicle. The quantity of dust emissions is inversely proportional to the soil moisture.

The Environmental Protection Agency (EPA) has performed one study that attempts to relate the emissions from construction directly to an emission factor. Based on field measurement of total suspended particulate (TSP) concentrations surrounding apartment and shopping center construction projects, the approximate emission factor for construction operations is 1.2 tons/acre/month of activity. The factor is most useful for developing estimates of overall emissions from construction scattered throughout a geographical area.

Although the emission factor represents a relatively straightforward means of preparing an area wide emission inventory, several features limit its usefulness for specific construction sites:

- The emissions factor assumes that construction activity occurs 30 days/month
- The conservative nature of the emission factor may result in too high an estimate to be much use for a specific site under construction
- The emission factor provides neither information about which particular construction activities have the greatest emission potential nor guidance for developing an effective dust control plan

To more accurately estimate fugitive emissions from specific construction sites, EPA recommends the construction site be broken down into component operations. This approach to emission estimation uses a phase method to consider the more basic dust sources of vehicle travelling and material handling. The construction project is viewed as several operations, each involving traffic and material movements, and emission factors from these specific sections are then used to generate estimates.

The proposed alternative would impact less than one acre of land. Using the EPA's conservative AP-42 Factor for construction projects of 1.2 tons/acre/month of activity, 1.2 tons of fugitive emissions would be expected per month of activity. Based on numerical estimates, this qualifies as a "de minimus" emission that would not be expected to significantly deteriorate local air quality. Because the proposed alternative would qualify as de minimus, the more accurate and less conservative method of breaking the construction project into components was not pursued. As mentioned above, this is a conservative estimate that provides for the following worst-case approximations:

- The entire site will be impacted the life of the project
- This doesn't account for portions of the area being paved, vegetated, or other methods to reduce fugitive emissions
- Construction activity will take place 30 days/month

Any impacts to air quality will be the result of construction activity and will be minimal, short in duration and temporary.

4.2.2 Air Quality Consequences of the No Action/No Construction Alternative

Under this alternative, no construction activities would take place and there would be no potential impacts to air emissions and/or air quality.

4.3 Water Quality, Wetlands, and Floodplains

The United States Army Corps of Engineers (USACE) is responsible for permitting and enforcement functions dealing with building into or discharging dredge or fill material into Waters of the United States. USACE regulations for building or working in navigable waters of the United States are authorized by the Rivers and Harbors Act of 1899. These regulations often go hand in hand with Section 404 of the Clean Water Act, which establishes the USACE permit program for discharging dredged or fill material. The regulations are often used together because building in navigable waters of the United States also constitutes discharging dredged or fill material into water of the United States. In addition to regulating construction or work being done in navigable water of the United States, USACE regulates discharging into wetlands through the Section 404 permit program.

4.3.1 Surface Water Quality Consequences of Proposed Alternative

The soil type identified in Section 5.1, Geology and Soils, Farnum loam, when disturbed during times of construction activity could result in erosion and runoff. Erosion can directly impact surface water quality.

In order to minimize storm water pollutants from the construction activities of the Proposed Action that would impact one acre or more in the State of Kansas, a General National Pollutant Discharge Elimination System (NPDES) Permit, or a waiver of the permit, could be required to be obtained from the Kansas Department of Health and Environment. The General NPDES Permit is obtained by developing a Storm Water Pollution Prevention Plan that implement a series of best management practices (e.g., silt fences, hay bales, etc.). Kiowa County has submitted a permit application to extend sanitary sewer service to the Kiowa County Fairgrounds.

The Contractor would implement specific best management practices to reduce or eliminate runoff impacts during proposed construction activities of the Proposed Action and to reduce the potential for soil

erosion after construction, regardless of whether a NPDES Permit or a waiver from the permit requirement is secured (U.S. Department of Homeland Security, 2007).

There should be no impacts to Waters of the United States, and no Section 404 CWA Permit required.

4.2.2 Surface Water Quality Consequences of the No Action/No Construction Alternative

Under this alternative, no construction activities would take place and there would be no potential impacts to wetlands.

4.3.2 Wetlands

Wetlands are defined by the USACE as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” Executive Order (EO) 11990, Protection of Wetlands, requires Federal agencies to take action to minimize the destruction or modification of wetlands, by considering both direct and indirect impacts to wetlands that may result from Federally funded actions.

Application of an 8-Step Decision-Making process is required to ensure that Federally funded projects are consistent with EO 11990 objectives. By its very nature, the NEPA compliance process involves the same basic decision process to meet the objectives found in the 8-Step Decision-Making Process. The 8-Step Decision-Making Process has been applied through implementation of the NEPA process followed as part of this EA. Activities disturbing jurisdictional wetlands require a permit from the USACE. Two types of authorization are available from the USACE for activities regulated under Section 404 of the Clean Water Act; general permits, which are issued for a specific category of similar activities and include nationwide permits defined in 33 CFR Part 30, and individual permits issued after review of the project, project alternative, and proposed mitigation.

The City of Greensburg, Kansas is in an unmapped area for Flood Insurance Rate Maps. Wetland areas mapped by the National Wetland Inventory maps showed no wetlands in the area of the Kiowa County Fairgrounds.

4.3.2.1 Wetland Consequences of the Proposed Alternative

The Farnum loam in the proposed project area is well-drained and does not meet the criteria for hydric soil, one of the three criteria for identifying wetlands. There would be no impacts to wetlands from the proposed alternative.

4.3.2.2 Wetland Consequences of the No Action/No Construction Alternative

Under this alternative, no construction activities would take place and there would be no potential impacts to wetlands.

4.3.3 Floodplains

The intent of EO 11988, Floodplain Management, is to require Federal agencies to minimize the occupancy and modifications of floodplains. Specifically, EO 11988 prohibits Federal agencies from funding construction in 100-year floodplain (or 500-year floodplain for critical facility) unless there are no practical alternatives. The city of Greensburg, Kansas has a Flood Hazard Boundary Map dated July 30, 1976 and converted by letter to a Flood Insurance Rate Map (FIRM) effective February 1, 1987. This FIRM shows no portions within the incorporated city limits of Greensburg as within the Special Flood Hazard Area.

4.3.3.1 Floodplain Consequences of the Proposed Alternative

As there are no floodplains defined within the potential project area, the proposed alternative would not have an impact on floodplains.

4.3.3.2 Floodplain Consequences of the No Action/No Construction Alternative

Under this alternative, no construction activities would take place and there would be no potential impacts to floodplains.

4.4 Biological Resources

Native or naturalized vegetation, wildlife, and the habitats in which they occur are collectively referred to as biological resources. Existing information on plant and animal species and habitat types in the vicinity of the proposed sites was reviewed with special emphasis on the presence of any species listed as threatened or endangered by Federal or State agencies to assess their sensitivity to the effects of the alternatives.

The Endangered Species Act (ESA) of 1973 establishes a Federal program to conserve, protect, and restore threatened or endangered plants and animals and their habitats. ESA specifically charges Federal agencies with the responsibility of using their authority to conserve threatened or endangered species. All Federal agencies must ensure any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction of critical habitat for these species. Threatened, endangered, and candidate species in Kiowa County are limited to (<http://www.fws.gov/mountain-prairie/endssp/CountyLists/Kansas.pdf>)

- Arkansas Darter (*Etheostoma cragini*) – Candidate
- Arkansas River Shiner (*Notropis girardi*) – Threatened
- Lesser Prairie Chicken (*Tympanuchus pallidicinctus*) – Candidate
- Whooping crane (*Grus Americana*) – Endangered

4.4.1 Biological Resource Consequences of the Proposed Alternative

The proposed construction of the Kiowa County Commons at 320 S. Main Street, Greensburg, KS has “no effect” to threatened, endangered, or candidate species simply because no habitat is present.

4.4.2 Biological Resource Consequences of the No Action/No Construction Alternative

Under this alternative, no construction activities would take place and there would be no potential impacts to biological resources.

4.5 Cultural and Historic Resources

In addition to review under NEPA, consideration of impacts to cultural resources is mandated under Section 106 of the National Historic Preservation Act (NHPA), as amended and implemented by 36 CFR Part 800. Requirements include the identification of significant cultural resources that may be impacted by the alternatives. Cultural resources are prehistoric and historic sites, structures, districts, artifacts, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or other reasons.

Only those cultural resources determined to be potentially significant under NHPA are subject to protection from adverse impacts resulting from an undertaking. To be considered significant, a cultural resource must meet one or more of the criteria established by the National Park Service that would make that resource eligible for inclusion in the National Register of Historic Places (NRHP). The term “eligible

for inclusion in the NRHP” includes all properties that meet the NRHP listing criteria, which are specified in the Department of Interior regulations Title 36 CFR 60.4 and NRHP Bulletin 15. Therefore, sites not yet evaluated may be considered potentially eligible for inclusion in the NRHP and, as such, are afforded the same regulatory consideration as nominated properties. Whether prehistoric, historic, or traditional, significant cultural resources are referred to as “historic properties.”

According to past consultation with the Kansas State Historical Society, there are three known historic structures within the affected area of Greensburg. Two of the structures may be eligible for the NRHP, and one structure may be eligible at the state level. Also according to the Kansas State Historical Society, there are no known archaeological sites within the project site of the Proposed Action. The NRHP-eligible historic properties in Greensburg include the Kiowa County Courthouse and the Greensburg Well. The Kiowa County Courthouse (circa 1913-1914), located at 221 E. Florida Avenue, was damaged (still standing and undergoing renovation) during the tornado. The Greensburg Well (circa 1888) has served as a well-known landmark to Kiowa County for many years. The Robinette Building, located at 148 S. Main Street may be eligible at the state level only (degree of damage unknown). Any construction project within 500 linear feet of the Greensburg Well will need to be reviewed in accordance with Kansas State Preservation Statute K.S.A. 75-2724. Otherwise no further consultation regarding cultural and historic resources is necessary.

4.5.1 Cultural and Historic Resource Consequences of the Proposed Alternative

The proposed construction of the Kiowa County Commons would have “no effect” on archaeological resources. The proposed construction project would require approximately six months of construction and would require the use of some heavy equipment including a bulldozer, scraper, and a backhoe. Although no historic properties have been identified within the Area of Potential Effect, if during the course of activities, cultural resources (particularly human remains) are unexpectedly discovered, activities would cease in the immediate area and the Kansas State Historic Preservation Officer and the FEMA Regional Environmental Officer would be notified before work would continue.

The Big Well is at 314 Sycamore Street, this is one block directly west of the proposed construction project and within 500 linear feet. Kansas Department of Emergency Management (KDEM) will consult directly with the Kansas State Historical Society under Kansas State Preservation Statute K.S.A. 75-2724 to identify effects, and if effects are significant to seek ways to avoid, minimize, or mitigate adverse effects.

4.5.2 Cultural and Historic Resource Consequences of the No Action/No Construction Alternative

Under this alternative, no construction activities would take place and there would be no potential impacts to cultural or historic resources.

4.6 Socioeconomic Issues, Including Environmental Justice

Greensburg is a small community with agriculture as its main economic source. Agricultural activities are dominated by the production of wheat, sorghum, forage/feed crops, and soybeans in descending order of acreage. After crop production, livestock production is the next largest agricultural activity. Greensburg commercial district is limited to a one mile stretch along Highway 54 and three blocks north and south of Main Street. With the exception of a small handful of business on the east edge of town along Highway 54 Greensburg’s business base was destroyed. Storefront businesses that were lost include but were not limited to three branch banks, two insurance companies and restaurants; one funeral home, video store, repair business, electrician, furniture store, theater, lumber yard, convenience store, and a hotel. The community has numerous home based businesses (U.S. Department of Commerce, 2007). Greensburg population has increased by 60 percent between 1980 and 2000, from 625 to 1,574 persons. Employment in the area includes a restaurant, a grocery store, and other numerous small businesses (U.S. Census Bureau, 2000). The median household income in the city of Greensburg was \$28,438 in

2000. Approximately 12.4 percent of the residents of Greensburg have income below the poverty level. About 1 percent of the population of Greensburg is considered minority (U.S. Census Bureau, 2000).

On February 11, 1994, President Clinton signed EO 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." The EO directs Federal agencies to focus attention on human health and environmental conditions in minority and/or low-income communities. Its goals are to achieve environmental justice, fostering non-discrimination in Federal programs that substantially affect human health or the environment, and to give minority or low-income communities greater opportunities for public participation in and access to public information on matter relating to human health and the environment. Also identified and addressed, as appropriate, are disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States.

4.6.1 Socioeconomic Consequences of the Proposed Alternative

Activities associated with the implementation of the proposed alternative would be considered a positive impact with an influx of construction workers needed for the approximately six months of construction activities. Construction personnel would provide short-term benefits to the local businesses, which would include the purchase of food, gas, and other services. The proposed action would not displace or adversely affect any nearby residents during the construction phase. Greensburg and Kiowa County have a unique opportunity to become the national leader in the design and construction of highly efficient and environmentally sound facilities. Projects such as the new Kiowa County Commons can become the model for environmental and energy efficient design and construction. The City of Greensburg and Kiowa County could become the leaders in developing a sustainable community. Designing and constructing public facilities to meet the most stringent environmental and energy efficient standards will increase the sustainability and add unique elements to Greensburg and Kiowa County. Few public buildings in the country have been designed and built to meet the US Green Building Council's Leadership in energy and environmental design (LEED) ® Platinum standard.

Implementation the proposed alternatives would have little likelihood of having disproportionate impacts on low-income or minority groups. After construction, the improvements created by the proposed action would be beneficial and would not cause adverse environmental or economic impacts specific to any groups or individuals.

4.6.2 Socioeconomic Consequences of the No Action/No Construction Alternative

Under this alternative, no construction activities would take place, eliminating any positive socioeconomic impacts potential for the community.

4.7 Cumulative Impacts, Including Land Use and Planning

Cumulative impacts are defined as the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future action. The City of Greensburg and Kiowa County could become the leaders in developing a sustainable community thus creating a positive cumulative impact for the city of Greensburg and Kiowa County. Designing and constructing public facilities such as the Kiowa County Commons to meet the most stringent environmental and energy efficient standards will increase the sustainability and add unique elements to Greensburg and Kiowa County.

The current land use for the city of Greensburg includes developed land (residential and commercial), street, highway, and railroad rights-of-way, agricultural lands, and the public city dump. The city of Greensburg's land use and zoning regulations are administered and enforced by the Mayor and City Council.

FEMA activated the Long-Term Community Recovery program, which integrated assistance from the State of Kansas and federal agencies focused on the community's long-term recovery goals after the tornado. The program provides coordination of resources and planning services in support of the area's recovery effort. This Long-Term Community Recovery Plan process expresses the Greensburg and Kiowa County community vision for recovery in the aftermath of the tornado. This Recovery Plan was the result of an intensive 12-week process involving many meetings and discussions among the citizens, civic groups, business owners, local, state, and federal officials, and the long-term recovery planning team. A total of four community meetings were held to gain input and feedback on plan ideas and concepts. Attendance at these public meetings averaged 400 people. The Draft Recovery Plan was presented to the community at a public meeting on August 2, 2007. Approximately 350 people attended the meeting and were able to review the draft, discuss issues, and provide input through discussion and posting notes on the plan boards. Projects receiving the most comments and highest priority from the attendees and Public Square stakeholders included:

- Rebuild City and County Buildings
- Rebuild Schools and Expand Educational Opportunities in Kiowa County
- Develop Affordable and Diverse Housing Opportunities
- Rebuild Medical and Emergency Service Facilities

The way a community chooses to rebuild following a disaster impacts not only those who construct and repair in the months and years after the event, but those who will live in the community for generations to come. Decisions made today and in the near future can influence rebuilding in a way that takes advantage of technology and traditional design to reduce the cost of living and makes the most of the assets of the community.

Greensburg and Kiowa County have the unique opportunity to rebuild in a way that will not only replace the parts of the community that were destroyed but will look at the real impact of that rebuilding on the community and the environment. Sustainable or "green" development creates livable, inspirational, and enduring places where the quality of life and the long-term quality of the community will be enhanced rather than depleted. When developing and redeveloping Greensburg and Kiowa County in a sustainable manner, it is important to look at the environmental, social and economic aspects of the community from a holistic perspective.

4.7.1 Land Use and Planning Consequences of the Proposed Alternative

The site of the proposed Kiowa County Commons was previously used by the Greensburg Schools (USD 422) as the location of the High School. The Greensburg Schools (Kindergarten, Elementary, Middle, High) have been consolidated under one project, generally referred to as the Greensburg School and is located east of Main St and South of West Garfield Ave. USD 422 donated this land to support the long term recovery and construction of the Kiowa County Commons.

Public Buildings in Greensburg are being designed and constructed to meet the most stringent environmental and energy efficient standards to increase the sustainability and add unique elements to Greensburg and Kiowa County. Few public buildings in the country have been designed and built to meet the U.S Green Building Council's Leadership in energy and environmental design (LEED) ® Platinum standard.

The proposed alternative fits within and supports the long term recovery plan for the city of Greensburg.

4.7.2 Land Use and Planning Consequences of the No Action/No Construction Alternative

Under this alternative, no construction activities would take place, adversely impacting the land use and planning for this type of facility at this location.

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