Draft Environmental Assessment

Stateline Road

Greenlee County

FEMA-1586-DR-AZ, PW #171

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FEMA

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A Coordination Letters

ADEM	Arizona Division of Emergency Management
ADEQ	Arizona Department of Environmental Quality
ADWR	Arizona Department of Water Resources
AZPDES	Arizona Pollutant Discharge Elimination System
BMP	Best Management Practice
CASTNET	Clean Air Status and Trends Network
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CFS	cubic feet per second
County	Greenlee County
CWA	Clean Water Act
dBA	decibels
$dBAL_{eq}$	average A-weighted decibels
DOI	Department of the Interior
EA	Environmental Assessment
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
ft	feet
FR	Federal Register
NAAQS	National Ambient Air Quality Standard
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NISTAC	National Infrastructure Support Technical Assistance Team
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
PA	Public Assistance (Program)

$PM_{2.5}$	particulate matter less than 2.5 micrometers in diameter
PM_{10}	particulate matter less than 10 micrometers in diameter
SHPO	State Historic Preservation Officer
SWPPP	Storm Water Pollution Prevention Plan
URS	URS Corporation
USACE	United States Army Corps of Engineers
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

Greenlee County (County) has applied through the Arizona Division of Emergency Management (ADEM) to the Federal Emergency Management Agency (FEMA) Region IX Public Assistance (PA) Program for a grant to repair flood damage from the February 2005 winter storms done to Stateline Road in unincorporated Greenlee County, Arizona. The grant would also supply funds to install bank protection along the southern bank of the Gila River to prevent future flooding. FEMA proposes to provide these funds through the PA Program pursuant to Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act , Public Law 93-288, as amended, and its implementing regulations found at Title 44 of the Code of Federal Regulations (44 CFR) Part 206.

FEMA has prepared this Environmental Assessment (EA) to evaluate the impacts of the proposed PA project. The EA has been prepared according to the requirements of the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality (CEQ) regulations implementing NEPA (Title 40 of the CFR Parts 1500–1508), and FEMA's implementing regulations (44 CFR Part 10).

The EA process provides steps and procedures to evaluate the potential environmental, social, and economic impacts of a Proposed Action and alternatives as well as an opportunity for the public and local, state/territorial, and other federal agencies to provide input and/or comment through a public comment period. These potential impacts are measured by their context and intensity, as defined in the CEQ regulations.

The PA assists states and communities with implementing sustained hazard mitigation programs to reduce overall risk to the population and structures, while also reducing reliance on funding from actual disaster declarations. During the February 2005 winter storms, floodwaters of the Gila River damaged Stateline Road and the adjacent bank protection facilities, which are located in unincorporated Greenlee County adjacent to the New Mexico state border. This event was designated as FEMA-AZ-DR1586. This major disaster declaration allows FEMA to provide funds to ADEM for eligible PA projects in Greenlee and Graham Counties, Arizona.

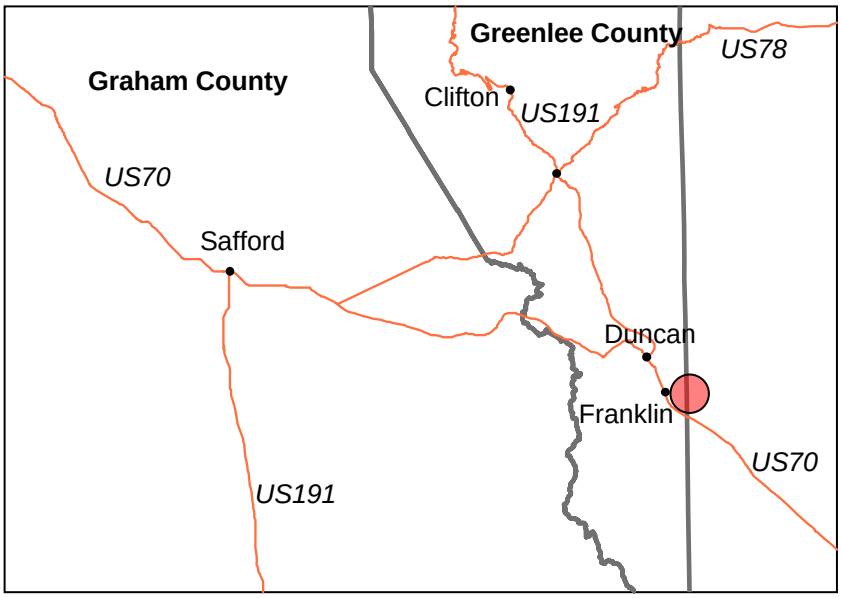
Greenlee County maintains Stateline Road for the benefit of the local irrigation district, the local utility company, the public, and local property owners. Stateline Road is the primary route for vehicles accessing agricultural pump stations in the area and utility lines adjacent to Stateline Road. Traffic on Stateline Road consists of local residents, farm vehicles, utility line workers, and county employees.

The February 2005 winter storms caused floodwaters of the Gila River to erode and wash away approximately 296,000 cubic yards of local soils (500 feet[ft] x 800 ft by 20 ft) at the proposed project site. This damage included approximately 1,300 linear feet of Stateline Road and approximately 500 linear feet of river bank and bank protection facilities along the pre-storm southern bank of the Gila River. The bank and road protection facilities destroyed in the flood included a wall constructed of 60-foot-long railroad rails, which were driven in place, and enclosed with flat bed railroad cars placed on end. Damage to the Gila River bank protection facilities has rendered land on the southern bank of the Gila River, including the remaining segments of Stateline Road, more susceptible to erosion from future floodwaters. In addition, flood damage had made passage on Stateline Road impossible; thus, eliminating access to irrigation pumps, utility lines, and agricultural fields. Therefore, the County has determined that the function of Stateline Road needs to be restored in a manner that would reduce the potential of the road being damaged during future flood events.

The proposed project would re-align Stateline Road and install new bank protection along the southern bank of the Gila River. New bank protection would reduce potential damage to Stateline Road, agricultural fields, and irrigation pumps during future flood events, while the re-aligned roadway would restore access to these facilities.

Arizona

Graham/Greenlee County



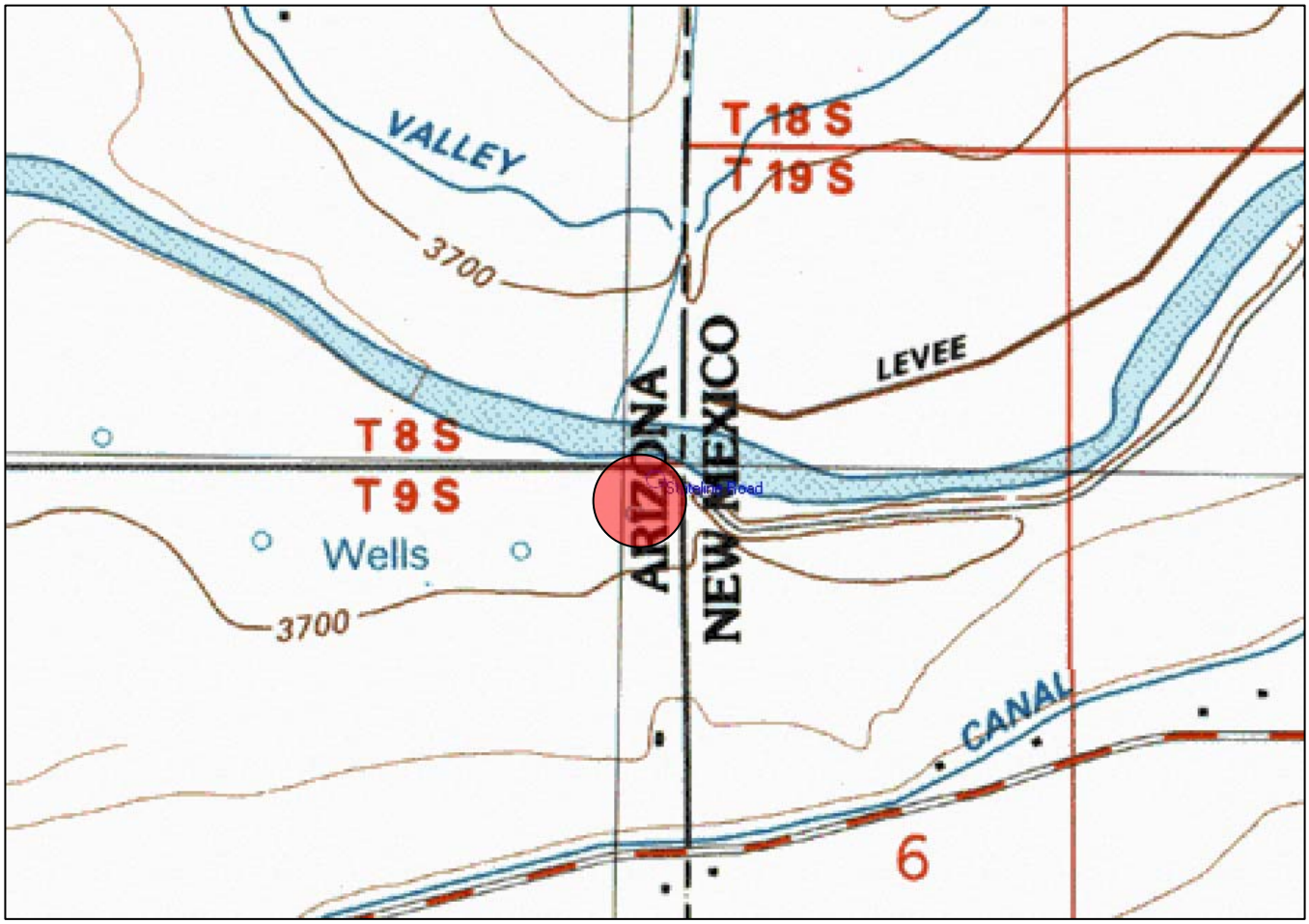


Figure 1. Stateline Road General Project Location

Township 8 South, Range 32 East, Section 3
Township 9 South, Range 32 East, Section 34
Duncan Quadrangle

● Project Area

N

3.1 ALTERNATIVES

3.1.1 Alternative 1: No Action

Inclusion of a No Action Alternative in the environmental analysis and documentation is required under NEPA. The No Action Alternative is defined as maintaining the status quo with no FEMA funding for any alternative action. The No Action Alternative is used to evaluate the effects of not providing eligible assistance for the project, thus providing a benchmark against which "action alternatives" may be evaluated. For the purpose of this alternative, it is assumed that Greenlee Country would be unable to implement the Proposed Action for lack of federal assistance, and that Stateline Road would remain un-repaired and a flood hazard would remain unmitigated at the project site. Economic losses from flood damage would occur if the project area experienced a flood. Adverse environmental, health, and safety effects resulting from flooding would not be mitigated.

3.1.2 Alternative 2: Proposed Action

The Proposed Action would consist of re-aligning the destroyed stretch of Stateline Road and the installation of bank protection facilities. The re-aligned Stateline Road would be approximately 1,300 feet in length and 20 feet in width, adjacent to the southern bank of the Gila River. As with the remaining existing segments of Stateline Road, this new road segment would be constructed of dirt and gravel. Bank protection would be placed on the south bank of the Gila River adjacent to the re-aligned Stateline Road. The construction of the bank protection facilities would consist of the installation of stacks of large cement-filled tires, which would mostly be buried and held in place with rail steel and cables. Approximately 75 tire stacks would be installed. Tires would be half filled with concrete with a 12-inch sleeve in the middle. The number of tires in each stack would vary, but should general number six tires per stack. Rail steel would be driven into the ground through the sleeve. Each stack of tires and steel would be tied to adjacent stacks using steel cable. Most of the tire stacks would be buried behind the existing riverbank. Engineering fabric would be placed between tire stacks and the backside bank away from the river. Excavated areas created to install the tire stacks would be backfilled with native soil and leveled. Some of the tires would be exposed on the bank facing the river.

At two locations, tires would be placed into the river in single rows that would roughly be perpendicular to the adjacent riverbank. For each row, the tire stack furthest from the riverbank would be installed at or below the river bottom. Each stack closer to the riverbank would have more material exposed above the river bottom. The final profile of each row would slope into the river with successively more of the tire stack buried below the river bottom. Approximately 700 linear feet of bank protection is proposed. The tires would be provided by Phelps Dodge Mining Company and would consist of used tires from mine haul vehicles.

Construction of Stateline Road and the bank protection facility would involve excavation and grading of soil. Equipment to be used would include a wheel tire loader (Cat 950), bulldozers, excavators, backhoes, a dump truck, an equipment service truck, pickups, and a flatbed trailer. Access to the project site would be from Stateline Road. Equipment and materials would be stored at staging areas located on adjacent agriculture fields owned by local property owners. Staging would occur on previously disturbed soils. Erosion protection measures during

construction would consist of placing silt fencing and straw-bails perpendicular to the slope and contours. Native vegetation at the construction site (mesquite trees, acacia trees, grasses, and thistle) would be removed. Following construction, the construction site would be seeded with shrubs and grasses native to the area. Construction of both project components is estimated to take 90 days and would be performed between July and October to avoid peak flows in the Gila River.

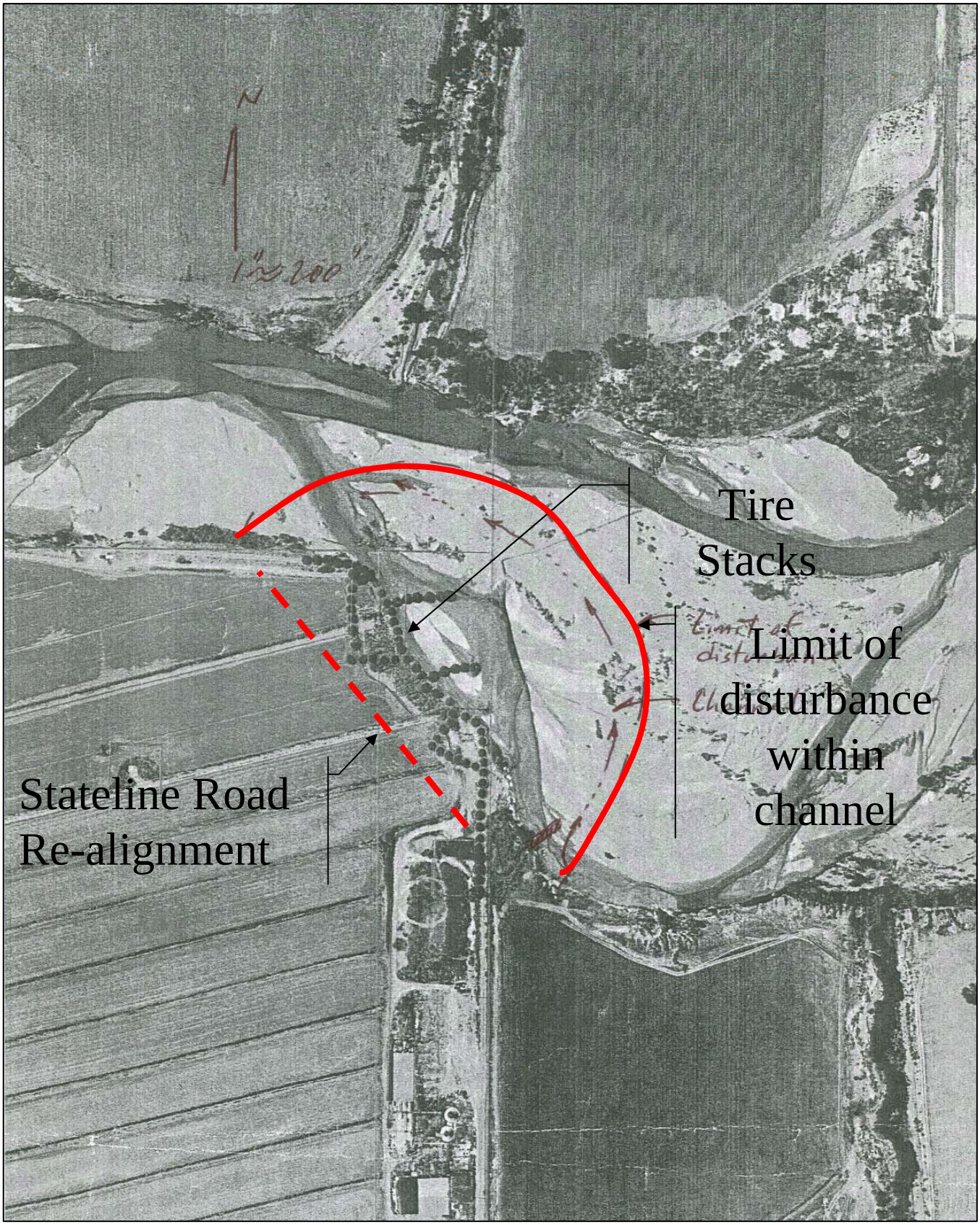


Figure 2. Stateline Road Action Area

This section describes existing conditions in the project area, evaluates the potential for the No Action Alternative and the Proposed Action to result in direct and indirect impacts on the environment, and discusses mitigation measures to avoid or minimize these impacts. This section focuses on the environmental resources for which some level of impact may result including: geology, seismicity, and soils; air quality; water resources; biological resources; cultural resources; socioeconomics and safety; land use and planning; transportation; noise; and visual resources. No other resource areas require evaluation pursuant to NEPA.

4.1 GEOLOGY, SEISMICITY, AND SOILS

4.1.1 Geology

The project area is within the Basin and Range physiographic province, a landscape characterized by numerous mountain ranges that rise abruptly from broad, plain-like valleys or basins. In Arizona, these mountain ranges and associated basins generally trend north-south or northwest-southeast. Relatively recent episodes of continental rifting, volcanism, erosion, and sedimentation dominate this region, and a combination of processes gradually filled the basins with sediments from adjacent mountain ranges (USFS 1994). Erosion cycles are now dissecting these deposits and modifying the rift valley through transport and deposition processes. Several types of landforms exist in the Basin and Range province, each covering about an equal area. They are: 1) plains with low mountains, 2) plains with high hills, 3) open high hills, and 4) tablelands (USFS 1994). The Stateline Road study area is specifically in the Duncan Valley Basin, which is an elongated valley surrounded by the Peloncillo Mountains to the west and the Big Lue Mountains to the east (ADWR 2005). Elevations in this basin range from about 6,571 to 3,336 feet. As is typical in the Basin and Range province, ephemeral streams in each valley connect to a through-flowing river, which in this case is the Gila River. Flow rates in these rivers are low to moderate, except during periods of heavy rain, when large amounts of surface runoff can occur.

4.1.1.1 Alternative 1: No Action

Under the No Action Alternative, no impacts would occur to geological resources at the project site.

4.1.1.2 Alternative 2: Proposed Action

Under the Proposed Action, no impacts would occur to geological resources at the project site.

4.1.2 Seismicity

Greenlee County is seismically quiet with noticeable earthquakes felt less than once per few decades. The last major earthquake in the Arizona region occurred on May 3, 1887 and had its epicenter near Bavispe, Mexico, about 190 miles southeast of Tucson (USGS 1970). However, slight readjustments to changing conditions do occur. There are two northwest-trending normal faults near Clifton, Greenlee County with a slip rate of less than 0.2 millimeter per year (USGS 2006a). Ground ruptures associated with prehistoric earthquakes exist near the towns of Green

Valley and Gila Bend, Arizona, located about 200 and 260 miles west of the project area, respectively.

Executive Order (EO) 12699, Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction, requires newly constructed buildings to meet standards for seismic safety set by the National Earthquake Hazard Reduction Program. However, EO 12699 applies only to construction of new buildings that are to be used or intended for sheltering persons or property. Because the proposed action does not involve new building construction, EO 12699 does not apply.

4.1.2.1 Alternative 1: No Action

Under the No Action Alternative, no impacts would occur to the existing seismicity.

4.1.2.2 Alternative 2: Proposed Action

Under the Proposed Action, the potential for earthquakes remains unchanged. The most likely failure mechanism for the Stateline Road and Gila River bank reinforcement is deformation during a seismic event. If the road or reinforcement were to be damaged during an earthquake, access to the agriculture lands in the project area would be interrupted and flooding in the event of large storms would be likely. However, because the road and bank reinforcements are in a sparsely-populated section of Greenlee County and their immediate surroundings are agricultural fields, structural damage would pose no major risk to people or facilities. Evacuation routes would not be altered by implementation of the Proposed Action.

4.1.3 Soils

The soils in the project area consist of silty clay loams typical of the Gila River Valley (NRCS 2007). These soils have a moderate to high susceptibility to sheet and rill erosion by water; however, the soils have low to moderate runoff rates due to the study area's low grade, which mitigates this susceptibility somewhat (NRCS 2007). The soils are currently subject to occasional flooding from the Gila River during prolonged, heavy rainfall.

A U.S. Department of the Interior (DOI), Bureau of Reclamation study on the geomorphology of the Upper Gila River Basin found that the Gila River has migrated within the Pima Soil Boundary (i.e., the Gila River floodplain that is comprised of the Pima silty clay loam soil type) for the last several hundred years (DOI 2004). Within this boundary, areas of young alluvium are particularly prone to erosion because they are part of the active channel migration zone that often sees lateral river movement (DOI 2004). The majority of erosion occurs during high flow events (DOI 2004).

The soils under Gila River itself are made up of alluvial materials up to several thousand feet thick. Beneath this are finer-grained substances with locally-concentrated salt deposits (ADWR 2005).

4.1.3.1 Alternative 1: No Action

Under the No Action Alternative, no short-term construction impacts would occur to soils within the project area.

Over the long term, the lack of implementing the Proposed Action would lead to increased susceptibility to flooding in the project area, resulting in increased soil erosion. Silty clay loam soils would be washed away and replaced with torrifluvent riverwash complex soil types. Remaining segments of Stateline Road and adjacent agricultural field would experience increase soil erosion from flooding resulting in further destruction of Stateline Road and loss of productive agricultural fields.

4.1.3.2 Alternative 2: Proposed Action

Under the Proposed Action Alternative, short-term impacts on soils generated from construction activities would include wind and water erosion during excavation, as well as compaction from heavy equipment moving across the soil. To minimize erosion and compaction during construction, the County would apply best management practices (BMPs), such as installing silt fences and staging equipment along existing roads, where possible. In addition, the areas disturbed and/or compacted as a result of the project would be revegetated with native plants following completion of construction, thereby reducing the potential for long-term erosion.

Over the long term, implementing the Proposed Action would reduce the risk of flood damage to Stateline Road and adjacent agricultural field resulting in less potential for soils to be washed away. Therefore, the Proposed Action could reduce long-term impacts on soils compared to what could be expected under the No Action Alternative.

4.2 AIR QUALITY

The Clean Air Act is a comprehensive federal law that regulates air emissions from area, stationary, and mobile sources. It authorizes the United States Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQSs) to protect public health and the environment. The NAAQSs include standards for the following five criteria pollutants: nitrogen dioxide, ozone, carbon monoxide, sulfur dioxide, and particulate matter less than 10 micrometers in diameter (PM_{10}). In addition, new NAAQSs for ozone and particulate matter less than 2.5 micrometers in diameter ($PM_{2.5}$) have been implemented. Areas where the monitored concentration of a pollutant exceeds the NAAQS are classified as being in nonattainment for that pollutant.

The project area is within an attainment area for all air quality constituents. Stafford, which is about 40 miles away from the study site, is the nearest air monitoring station for PM_{10} to southern Greenlee County (Sundblom, M. 2007). A station at the Chiricahua National Monument, which is about 50 miles away from the study site, is operated by the National Park Service is the nearest monitoring site for ozone and sulfur dioxide levels (EPA 2007). Neither the federal nor the non-federal land in the project area is within an air quality nonattainment area for any air quality constituent. Air quality is stable and uninfluenced by the dispersed development and related vehicular traffic in nearby towns and cities (Sundblom, M. 2007).

4.2.1 Alternative 1: No Action

Under the No Action Alternative, the lack of action would not directly affect air quality.

4.2.2 Alternative 2: Proposed Action

Implementation of the Proposed Action would result in minor, short-term, and localized reduction in air quality. The construction-related effects of the project would be limited to increases of fugitive dust and mobile construction equipment emissions during construction.

Dump trucks and other earth-moving vehicles operating at and near the construction site would generate construction-related fugitive dust. The fugitive dust would result primarily from particulate matter resuspended by excavation and debris removal at the construction site, vehicle movement, dirt tracked onto unpaved areas at access points, and blown materials. These vehicles also would release minor emissions associated with diesel and gasoline combustion, including carbon monoxide and ozone precursors.

To minimize the effects on air quality, the County would maintain properly tuned mechanical equipment, minimize idling time of support vehicles, and employ dust control measures, such as watering construction and staging areas, as necessary.

4.3 WATER RESOURCES

The primary drainage feature in the study area is the Gila River. Headwaters of the Gila River originate in the highlands of the Gila Mountains and flow in a generally westerly direction through Arizona to its confluence with the Colorado River near Yuma, Arizona. Flooding in the Gila River basin is caused primarily by rains from fall and winter storm systems. Extreme flood-producing storms are widespread and generally cover the majority of the Upper Gila River basin. Instantaneous peak discharge data confirm that the largest-magnitude floods occur in the fall and winter and are predominately from rainfall. (DOI 2004)

There are five long-term gaging stations located on the Gila River and the San Francisco River, a tributary of the Gila River. A DOI study (2004) concluded that mean daily flows at these five sites are typically less than about 1,000 cubic feet per second (cfs), and are always higher in the November to April winter season than during the July to October season. Peak discharge probability estimates indicate that at these sites the 2-year flood ranges between 5,210 cfs and 9,650 cfs and the 100-year flood ranges between 44,800 and 175,000 cfs. The nearest gage downstream of the study site is near Clifton, Arizona and was one of the five gages used in the DOI study. On February 13, 2005 this gage read a peak flow of 38,900 cfs; damage to the project site was caused by this flood (USGS 2006b).

The Upper Gila River Watershed covers about 6,000 square miles with elevation changes from 11,000 feet to 2,600 feet above sea level. Because there are locally-concentrated salt deposits below the Gila River's alluvial layer, natural subsurface flow through the aquifer system transmits salts. This increases salinity in the river's water column, leading to concerns about salinity levels for water users in the watershed. However, groundwater quality is in general good with dissolved solids concentrations ranging from about 100 to 2,150 milligrams per liter. Additionally, no significant changes in groundwater levels have been observed. (DOI 2004)

The surface water in the Upper Gila River can be characterized as very hard, slightly alkaline but of good water quality. A 2000 Arizona Department of Environmental Quality (ADEQ) study on water quality in the Upper Gila River Basin found that only 0.51 percent of the samples taken during the course of their study were acute exceedances of water quality standards. Of these samples, seven were for turbidity and eleven were for dissolved oxygen (ADEQ 2000).

4.3.1 Executive Order 11988- Floodplain Management

Federal agencies are required to consider direct and indirect impacts to floodplains that may result from Federally funded actions. EO 11988 requires Federal agencies to take action to avoid or minimize the short-term and long-term adverse impacts associated with the occupancy and modification of floodplains. If there is no practicable alternative to undertaking an action in a floodplain, any potential adverse impacts must be mitigated.

According to the 1985 FEMA Flood Insurance Rate Map (FIRM) for the project area, the project site is in Special Flood Hazard Area Zone A. Zone A Special Flood Hazard Areas are defined as those Special Flood Hazard Areas that are within the 100-year floodplain but have not had their base flood elevations and flood hazard factors determined. The project area was damaged during a flood event in 2005 that shifted the channel of the Gila River to the south by several hundred feet, and portions of the original Stateline Road alignment are now part of the stream channel. The flood washed away existing stream bank stabilization measures, and the project area is now subject to further stream bank erosion, channel migration, and associated damages to infrastructure and farm fields during high flow events. The project would involve bank stabilization construction for the newly formed channel, as well as the realignment of 1,300 linear feet of Stateline Road that was destroyed or undermined.

The effects of the Proposed Action have been reviewed in compliance with EO 11988 and FEMA's implementing regulations (44 CFR Part 9).

4.3.1.1 Alternative 1: No Action

The No Action Alternative would not impact the floodplain within or in the vicinity of the project area. Flooding impacts would continue to occur within the existing floodplain and erosion and associated stream channel migration would continue to wash away property and Stateline Road, resulting in damage to infrastructure and utilities, property damage and socioeconomic losses. Stateline Road would remain impassable, thereby making access difficult to agricultural facilities and utilities in the area.

4.3.1.2 Alternative 2: Proposed Action

Under the Proposed Action, construction would occur within a Special Flood Hazard Area. No feasible alternatives exist outside the floodplain. The project would restore the function of a roadway while protecting the roadway and utilities at the project site from future flood damages. The land use in the area is agricultural, and the project would protect this natural and beneficial function of the floodplain without encouraging the occupancy of the floodplain. The roadway provides access to irrigation systems, agricultural fields, and utility lines, but it does not serve as an access to any residential or commercial development.

No adverse impacts to floodplain values have been identified for the Proposed Action, as flood frequency, magnitude, or duration would not be affected. Implementation of the Proposed Action would not support additional development of the floodplain in the project area and the surrounding area would continue to be used for agriculture, a natural and beneficial use of the floodplain. Accordingly, the Proposed Action Alternative complies with EO 11988.

4.3.2 Water Quality

Section 404 of the Clean Water Act (CWA) establishes a permit program for activities that would discharge dredged or fill material into "waters of the United States." This permit program is authorized by the U.S. Army Corps of Engineers (USACE). "Waters of the United States" is a broad term that includes: (1) waters, lakes, rivers, and streams that are navigable waters of the United States, including adjacent wetlands: (2) tributaries to navigable waters of the United States, including adjacent wetlands: and (3) other waters, such as isolated wetlands and intermittent streams, the degradation or destruction of which could affect interstate commerce.

Under Section 402(p) of the CWA, an Arizona Pollutant Discharge Elimination System (AZPDES) general permit from ADEQ is required for construction activities when one acre or more of land would undergo excavation and/or grading during construction. The main objectives of the permitting program are to reduce erosion, minimize sedimentation, and eliminate the discharge of non-storm water pollutants. All work that meets the disturbance conditions must be permitted.

The primary drainage feature in the project area is the Gila River. Construction for this project will occur in the Gila River riverbed and directly adjacent to it. All construction will be in the Gila River floodplain.

4.3.2.1 Alternative 1: No Action

Under the No Action Alternative, water quality would not be impacted.

4.3.2.2 Alternative 2: Proposed Action

Because project activities may discharge material into the Gila River, the County would be responsible for obtaining a CWA Section 404 permit from the USACE and Section 401 Water Quality Certification from ADEQ before construction commences. The terms and conditions of the CWA Section 404 permit from the USACE and Section 401 Water Quality Certification from ADEQ would be followed by the contractor for work affecting jurisdictional waters within the project area.

Because one or more acres of land would be disturbed, a National Pollutant Discharge Elimination System (NPDES) permit would also be required to comply with CWA Section 402. A Storm Water Pollution Prevention Plan (SWPPP) would be prepared for this project by the County, and the County would be responsible for preparing a SWPPP that would incorporate temporary erosion control measures during construction, permanent erosion control measures when the project is completed, and BMPs for the control and prevention of release of water pollutants. The SWPPP would identify the project scope, anticipated acreage of land disturbance, and the pollution control measures that would be implemented to reduce soil erosion, while containing and minimizing the construction pollutants (including oils, gasoline, and other chemicals released by construction equipment and vehicles) that may be released to surface waters through runoff during a storm event. The County will submit the Notice of Intent (NOI) and the Notice of Termination (NOT) to ADEQ and the EPA. The NOI needs to be submitted to the EPA at least 48 hours prior to the start of construction. Compliance with the SWPPP would ensure that impacts on water quality would be avoided or at least minimized. The County would monitor all mitigation measures encompassing sedimentation and erosion control measures to

affirm that these measures are being followed correctly and are providing the appropriate protection to sensitive areas.

4.4 BIOLOGICAL RESOURCES

Vegetation in the Duncan Valley is classified as Chihuahuan Desertscrub in upland areas, and Riparian Woodland and Riparian Scrub along streams and rivers (Brown 1994). Both creosote bush (*Larrea tridentata*) and tarbush (*Flourensia cernua*) are the most prevalent upland vegetation. Other species include mariola (*Parthenium incanum*) and whitethorn acacia (*Acacia neovernicosa*). Up to 30 species of annuals and perennial forbs are known from Chihuahuan Desertscrub. Among the forbs, desert marigold (*Baileya multitradiata*) is conspicuous. Other forbs include desert zinnia (Zinnia arerosa), little golden zinnia (Zinnia grandiflora), fluffgrass (*Erioneuron pulchellum*), desert holly (*Perezia nana*), and buffalo gourd (*Cucurbita foetidissima*).

Vegetation in the project area has been disturbed by floodwaters, agriculture, road construction and maintenance, and utility line installation and maintenance. As a result of these disturbances, the Riparian Woodland or Riparian Scrub that may have been prevalent at one time is no longer present. Vegetation in the project area now consists primarily of tamarisk (*Tamarix ramosissima*), desert broom (*Baccharis sarothroides*), and Russian thistle (*Salsola kali*). Vegetation structural diversity in the project area is low, with shrubs and forbs of 1 to 2 feet in height dominating. The project area does not contain trees or other prevalent riparian plant species.

4.4.1 Threatened and Endangered Species

The Endangered Species Act (ESA) of 1973 establishes a federal program to conserve, protect, and restore threatened and endangered plants and animals and their habitats. Section 7 of the ESA specifically charges federal agencies with the responsibility of using their authority to conserve threatened and endangered species. All federal agencies must ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a threatened or endangered species or result in the destruction of critical habitat for these species.

FEMA obtained information concerning species that are listed as endangered or threatened, or proposed for listing as endangered or threatened under the ESA that may occur in the project area. The species list for Greenlee County, Arizona maintained by the United States Fish and Wildlife Service (USFWS) contains 12 endangered or threatened species.

To evaluate the potential for the project site to provide suitable habitat for federally listed species, FEMA's consultant, NISTAC, conducted a reconnaissance field survey on February 23, 2006. During the site visit, no federally listed species or species proposed for federal listing were observed. Critical habitat is present in the project area for the razorback sucker (*Xyrauchen texanus*) and southwestern willow flycatcher (*Empidonax traillii extimus*). Federally listed species included in the USFWS lists but excluded from further evaluation are addressed in Table 1.

Table 1 Species Excluded from Detailed Evaluation.

Species	Status	Habitat Requirements	Exclusion Justification
Apache (Arizona) trout *Oncorhynchus apache*	Threatened	Species found in Apache, Gila, Graham, Greenlee, and Navajo counties. Restricted to streams in the upper Salt, Gila, Blue, and Little Colorado drainages in the White Mountains. Occurs in small, cold, high-gradient streams above 5,000 feet elevation. These streams have substrates consisting of boulders, rocks, and gravel, with some sand or silt, and flow through mixed conifer forests and mountain meadows (USFWS 2002a).	The project area is below 5,000 feet and it outside the known range of the upper Gila River.
California Brown Pelican *Pelecanus occidentalis californicus*	Endangered	Most Arizona records are along the Colorado River including north to Davis Dam and even to Lake Mead (La Paz and Yuma counties), and Gila Valley (Maricopa, Pinal, Mojave and Gila counties). Coastal land and islands; species found around many Arizona lakes and rivers (USFWS 2001a).	The project area is outside the current known range of the California brown pelican.
Chiricahua Leopard Frog *Rana chiricahuensis*	Threatened	Streams, rivers, backwaters, ponds, and stock tanks that are mostly free from introduced fish, crayfish, and bullfrogs. Requires permanent or nearly permanent water sources. (USFWS 2006a).	The project area is outside the current known range of the Chiricahua leopard frogs. Predators including the bullfrog are known to occur in the middle reach of the Gila River.
Gila Chub *Gila intermedia*	Endangered	Pools, springs, cienegas, and streams between 2,000 and 3,500 feet. (USFWS 2006b).	The project area is outside the known range of the Gila chub. There is no critical habitat in the project area (70 FR 66664, November 2, 2005).
Gila Trout	Threatened	Gila trout was extirpated from Arizona around 1900, but has recently been repatriated into Dude Creek (Gila County) in September 1999 and Raspberry Creek (Greenlee County) in November 2000. Found in small, high mountain streams at an elevation of approximately 5,000 to 10,000 feet (USFWS 2006c).	The project area is located below 5,000 feet and is outside the current known range of the Gila trout.
Lesser Long-nosed Bat *Leptonycteris curasoae yerbabuenae*	Endangered	Desert scrub habitat with agave and columnar cacti present as food plants below 6,000 feet. (USFWS 2001b).	The project area does not contain roosting habitat or foraging plants known to be used by lesser long-nosed bat.

Table 1 Species Excluded from Detailed Evaluation.

Species	Status	Habitat Requirements	Exclusion Justification
Loach Minnow *Tiaroga cobitis*	Threatened	Present populations are geographically isolated and inhabit the upstream ends of their historical range. The species persists in Arizona only in limited reaches in the East Fork of the White River (Navajo County), Aravaipa Creek, Deer Creek, and Turkey Creek (Graham and Pinal counties), San Francisco and Blue rivers and Eagle, Campbell Blue and Little Blue creeks (Greenlee County). Bottom dweller of small to large perennial creeks and rivers, typically in shallow turbulent riffles with cobble substrate, swift currents, and filamentous algae. Found below 8,000 feet elevation (USFWS 2005a).	The project area is located outside the current known range of the loach minnow.
Mexican Gray Wolf *Canis lupus baileyi*	Endangered	Reintroduced into the Apache National Forest and adjacent Gila National Forest in western New Mexico. Found in chaparral, woodland, and forested areas between 4,000 and 12,000 feet. May cross desert areas. (USFWS 2004a).	The project area is outside the known range of the Mexican gray wolf.
Mexican Spotted Owl	Threatened	Occurs in varied habitat, consisting of mature montane forest and woodland, shady wooded canyons, and steep canyons. In forested habitat, uneven-aged stands with a high canopy closure, high tree density, and a sloped terrain appear to be key habitat components. They can also be found in mixed conifer and pine-oak vegetation types. Generally nests in older forests of mixed conifer or ponderosa pine/Gambel oak. Nests are found in live trees in natural platforms (e.g., dwarf mistletoe brooms), snags, and on canyon walls. Elevation ranges from 4,100 to 9,000 feet (USFWS 2002b).	The project area is outside the current range of the Mexican spotted owl. In addition, the project area doesn't contain habitat known to support this species. There is no critical habitat in the project area (69 FR 53182, August 31, 2004).

Table 1 Species Excluded from Detailed Evaluation.

Species	Status	Habitat Requirements	Exclusion Justification
Spikedace *Meda fulgida*	Threatened	In Arizona, populations are found in the middle Gila River, lower San Pedro River, Aravaipa Creek, Eagle Creek, and the Verde River within Graham, Pinal, Greenlee, and Yavapai counties. Found in moderate to large perennial streams, where it inhabits moderate to fast velocity waters over gravel and rubble substrates. Specific habitat consists of shear zones where rapid flow borders slower flow, areas of sheet flow at the upper ends of mid-channel sand/gravel bars, and eddies at downstream riffle edges. Recurrent flooding helps the spikedace maintain its competitive edge over invading exotic species. Typically, occupied streams are found under 6,000 feet in elevation. (USFWS 2005b).	The project area is outside the current range of the spikedace.

4.4.1.1 Alternative 1: No Action

Under the No Action Alternative, no new impacts would occur to federally listed threatened or endangered species.

4.4.1.2 Alternative 2: Proposed Action

FEMA initiated consultation with the USFWS for the Proposed Action on May 17, 2007. FEMA determined that the Proposed Action would not adversely affect any federally listed species in the project area. FEMA documented the results of this determination in a Biological Assessment. USFWS concurred with FEMA's determination on July 16, 2007 (Appendix A). The Proposed Action would comply with Section 7 of the ESA.

If federally listed species were to be found in the project area during project activities, work in the area would be halted and the County would take all reasonable measures to avoid or minimize harm to the federally listed species until FEMA further consulted with the USFWS.

4.4.2 Executive Order 11990: Protection of Wetlands

EO 11990 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.

Based on site reconnaissance of the project area and review of the National Wetland Inventory maps, no evidence of wetlands was found in the project area. There is a Freshwater Emergent

Wetland, code PEM1C, listed in the National Wetland Inventory upstream of the project area across the New Mexico border approximately 400 feet to the southeast.

4.4.2.1 Alternative 1: No Action

Under the No Action Alternative, no impacts would occur to wetlands.

4.4.2.2 Alternative 2: Proposed Action

The Proposed Action would not impact wetlands because no wetlands occur in the project area. The Proposed Action would also not impact the Freshwater Emergent Wetland as it is upstream of the project area. Therefore, the Proposed Action complies with EO 11990.

4.4.3 Executive Order 13112: Invasive Species

Under EO 13112, dated February 3, 1999, projects that occur on federal lands or are federally funded must be "subject to the availability of appropriations, and within administration budgetary limits, use relevant programs and authorities to: (i) prevent the introduction of invasive species; (ii) detect and respond rapidly to, and control, populations of such species in a cost-effective and environmentally sound manner; (iii) monitor invasive species populations accurately and reliably; and (iv) provide for restoration of native species and habitat conditions in ecosystems that have been invaded."

Invasive species such as tamarisk and Russian thistle are present in the project area.

4.4.3.1 Alternative 1: No Action

Under the No Action Alternative, no impacts would occur to invasive species.

4.4.3.2 Alternative 2: Proposed Action

Under the Proposed Action, vegetation would be cleared from the construction area, including invasive and native species. Upon completion of the Proposed Action, the cleared areas would be revegetated with native species, thus decreasing invasive species in the project area. The County would ensure that any imported fill or other construction materials would be certified as being free from containing invasive species.

4.5 CULTURAL 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). Requirements include identifying significant historic properties and districts that may be affected by a federal undertaking and mitigating adverse effects to those resources.

A record search found no archaeological sites known to be within or adjacent to the project area. A pedestrian archaeological survey of the area of potential effect also was conducted. No National Register of Historic Places (NRHP)-eligible historic or prehistoric archaeological sites were located during this survey. FEMA documented the results of the record search and pedestrian survey in a Cultural Resources Technical Report (NISTAC 2006).

4.5.1 Alternative 1: No Action

Under the No Action Alternative, no construction activities would occur, but stream erosion would continue. Since no historic resources were identified within or in the vicinity of the project area, no historic resources would be adversely affected by the ongoing stream erosion. Although there are no known archaeological resources within or in the vicinity of the project area, there is a possibility of buried resources and these resources could be adversely affected by the ongoing streambank erosion.

4.5.2 Alternative 2: Proposed Action

FEMA initiated consultation with the Arizona State Historic Preservation Officer (SHPO) for the Proposed Action on November 18, 2005. FEMA determined that no historical properties potentially eligible for the NRHP would be adversely affected by the Proposed Action. FEMA documented the results of this determination in the confidential Cultural Resources Technical Report (NISTAC 2007). SHPO concurred with FEMA's determination on December 2, 2005 (Appendix A). FEMA also consulted with the following Native American Tribes: the Hopi Tribe, San Carlos Apache Tribe, Tohono O'Odham Nation, and the Pascua Yaqui Tribe.

If cultural resources are revealed during project activities, work in the vicinity of the discovery would be halted and the County would take all reasonable measures to avoid or minimize harm to the discovered resource until FEMA further consults with the SHPO.

4.6 SOCIOECONOMICS, ENVIRONMENTAL JUSTICE, PUBLIC HEALTH, AND SAFETY

4.6.1 Socioeconomics and Environmental Justice

According to the U.S. Census Bureau, the project area is in zip code 85534, which contains part of Greenlee County, Arizona, and Hildago County, New Mexico. In the year 2000, the zip code's total population was 3,448. To assess the socioeconomic status of the area, selected U.S. Census 2000 data from the zip code was compared to the same data for the Greenlee County, and the State of Arizona in Table 2. The same data also made it possible to determine whether the project area has a proportion of minority or low-income persons that exceeds the proportion in Greenlee County.

The assessment of whether minority and low-income persons reside in a project area is the first step in complying with EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, dated February 11, 1994. EO 12898 requires federal agencies to make achieving environmental justice part of their missions by identifying and addressing disproportionately high and adverse human health or environmental effects by its programs, policies, and activities on minority and low-income populations. EO 12898 also tasks federal agencies with ensuring that public notifications regarding environmental issues are concise, understandable, and readily accessible.

Consideration also was given to whether high and adverse effects would occur upon minority or low-income persons regardless of their numbers.

This zip code had a total population of 3,448 persons with 85.0 percent white and only 0.3 percent black and 1.0 percent Native American. This was a lower proportion of minority population than in Greenlee County or the State of Arizona. The median family income in this tract was lower at $37,821 than both Greenlee County ($43,523) and the State of Arizona ($46,723). However, the percentage of persons below the poverty level (15.3%) was only slightly higher than the Arizona average. This zip code had about the same ratio of home owners to home renters as the State of Arizona (52.3% and 58.6% own homes, respectively), and a higher ratio than Greenlee County. This zip code could be characterized as an area of below average income with a small number of minorities.

4.6.1.1 Alternative 1: No Action

Under the No Action Alternative, the Stateline Road would remain in poor condition and it and property in its vicinity would be in danger of further erosion during flood events. Because no federal action would occur under the No Action Alternative, compliance with EO 12898 is not required.

4.6.1.2 Alternative 2: Proposed Action

Under the Proposed Action, the socioeconomic impacts are for the most part beneficial. The primary benefit would be the rebuilding of Stateline Road to provide access to the local irrigation district and the addition of bank stabilization measures to prevent future damages to the roadway.

In accordance with EO 12898, no disproportionately high and adverse human health or environmental effects upon minority and low income populations would occur as a result of the project. Pursuant to Title VI, individuals from the area would not be excluded from participation in, denied the benefit of, or subjected to discrimination as a result of the preferred alternative.

4.6.2 Public Health and Safety

Stateline Road provides primary access to irrigation pump stations in the study area and traffic consists of both personal and farm vehicles. Damage to the Gila River bank protection facilities has rendered land on the southern bank of the Gila River, including the remaining segments of Stateline Road, more susceptible to erosion from future floodwaters, which would render the road useless and the area less accessible.

Table 2 2000 Selected Census Data

	State of Arizona	Greenlee County	Zip Code 85534
2000 Population	5,130,632	8,247	3,448
RACE CHARACTERISTICS			
White (%)	77.9	74.2	85.0
Black (%)	3.6	0.5	0.3
Native American (%)	5.7	1.7	1.0
Asian (%)	2.3	0.2	0.1
Other (%)	13.2	20.0	10.9
Persons of Hispanic Origin (%)	25.3	43.1	26.9
AGE CHARACTERISTICS			
Below 25 years (%)	36.8	39.2	37.7

Table 2 2000 Selected Census Data

	State of Arizona	Greenlee County	Zip Code 85534
25 to 34 years (%)	14.5	12.5	10.6
35 to 54 years (%)	27.2	29.8	27.1
55 to 64 years (%)	8.7	8.5	10.9
65 to 84 years	11.7	9.1	12.4
DISABILITY STATUS			
Population 21 to 64 years (%)	19.4	22.3	22.9
Population 65 years & over (%)	39.7	52.3	55.0
INCOME CHARACTERISTICS			
Median Family Income (1999)	46,723	43,523	37,821
Persons Below Poverty Level(%)	13.9	9.9	15.3
HOUSING CHARACTERISTICS			
Occupied Housing Units	1,901,327	3,117	1,300
Specified Owner Occupied	1,032,103	701	436
Specified Renter Occupied	605,183	1,496	228
OWNER OCCUPIED HOUSING VALUE			
% Under $50,000 (%)	4.9	36.1	35.8
% $50,000-99,999 (%)	30.7	51.9	48.9
% $100,000-149,999 (%)	30.7	9.4	12.4
% $150,000-199,999 (%)	15.2	2.3	2.5
% $200,000-or higher (%)	18.6	2.0	0.5
YEAR STRUCTURE BUILT			
1990-2000 (%)	29.3	10.4	18.3
1980-1989 (%)	24.7	13.4	16.8
1970-1979 (%)	23.6	30.9	26.2
1960 or earlier (%)	22.4	45.5	38.6

4.6.2.1 Alternative 1: No Action

Under the No Action Alternative, access to the study area would continue to be provided by a temporary access road constructed by Greenlee County after the February 2005 winter storms. This road would be under risk of flood damage as the weakened banks of the Gila River are susceptible to erosion and overflowing.

4.6.2.2 Alternative 2: Proposed Action

Implementation of the Proposed Action would rebuild Stateline Road while strengthening the banks of the Gila River in the study area to prevent future storms from washing out the road. This would provide permanent local access to the study area for the local irrigation district, the local utility company, the public, and local property owners.

4.7 LAND USE AND PLANNING

The study area is in an unincorporated section of Greenlee County, Arizona; therefore it is under the jurisdiction of Greenlee County regarding its zoning regulations. The main land use in the project area is agricultural. Lands in the Gila River bottom and adjacent croplands are privately owned. The proposed re-alignment of Stateline Road would be located on private l within the Greenlee County road easement, which is located along the southern bank of the Gila River and

adjacent to agriculture fields. The project area is zoned as multi-residential and single residential (pers. comm. Phil Ronnerud, Greenlee County Engineer).

4.7.1 Alternative 1: No Action

No impacts would occur to land use under the No Action Alternative.

4.7.2 Alternative 2: Proposed Action

No changes would occur to land use under the Proposed Action as the project involves bank stabilization and re-alignment of Stateline Road close to its previous location. Stateline Road will remain within the existing Greenlee County road easement and lands that were zoned for residential uses will remain unchanged. This project will not take away prime and unique farmland. During construction, a staging area will temporarily be on private agricultural land adjacent to Stateline Road and the Gila River, but this area will be returned to its previous use after project completion without permanent effects.

4.8 TRANSPORTATION

The study area is not on or near a main thoroughfare that would be used for medical or emergency access. However, Greenlee County maintains Stateline Road for the benefit of the local irrigation district, the local utility company, the public, and local property owners as Stateline Road is the primary route for vehicles accessing irrigation pump stations and utility lines in the area. Traffic on Stateline Road consists of local residents, farm vehicles, utility line workers, and county employees.

4.8.1 Alternative 1: No Action

Under the No Action Alternative, access to the irrigation pump stations would remain in poor condition and susceptible to flooding.

4.8.2 Alternative 2: Proposed Action

Implementation of the Proposed Action would temporarily cause increased traffic on Stateline Road due to workers and construction vehicles traveling to and from the project area. The County would ensure that no staging areas, construction equipment, or project-related vehicles would obstruct traffic on Stateline Road.

Traffic along Stateline Road would not be substantially or permanently increased as a result of the Proposed Action. Therefore, there would be no long-term negative effects of the project on transportation access. However, since new bank protection would prevent damage to Stateline Road, agricultural fields, and irrigation pumps and the re-aligned roadway would restore access to these facilities, long-term positive effects would result from the proposed action.

4.9 NOISE

Noise is federally regulated by the Noise Control Act of 1972. Although the Noise Control Act tasks the EPA to prepare guidelines for acceptable ambient noise levels, it only charges those

federal agencies that operate noise-producing facilities or equipment with implementing noise standards. By nature of its mission, FEMA does not have statutes defining noise.

Certain land uses are sensitive to noise. Noise-sensitive receptors are located at land uses associated with indoor and/or outdoor activities that may be subject to stress or significant interference from noise. They often include residential dwellings, mobile homes, hotels, motels, hospitals, nursing homes, educational facilities, and libraries. There are no close noise-sensitive land uses in or near the project area. Noise sources in the project area are typical of agricultural areas, primarily farm vehicle traffic.

4.9.1 Alternative 1: No Action

Under the No Action Alternative, noise would remain at current levels.

4.9.2 Alternative 2: Proposed Action

Construction noise is unavoidable but there are no noise-sensitive land uses in the vicinity of the project area. Additionally, the noise would be temporary and limited to the duration of project construction, which would occur over a period of approximately 3 months. The exact complement of noise-producing equipment that would be in use during any particular period is difficult to predict. However, the noise levels from construction activity during various phases of similar construction projects have been evaluated, and their use yields an acceptable prediction of a project's potential noise impacts. Based on EPA (1971) data of similar public works projects, average noise levels generated by the Proposed Action are estimated to be between 88 (backhoe) and 115 (chainsaw) dBA L_{eq} (the energy averaged noise level, in A-weighted decibels) at a distance of 50 feet. Noise levels of this magnitude, although temporary, would be readily audible and would dominate the noise environment in the area during construction operations. Typically, the magnitude of construction noise emission varies over time because construction activity is intermittent and power demands on construction equipment (and the resulting noise output) are cyclical.

The County would be responsible for implementing the following measures to reduce noise levels and their effects to the extent practicable:

- All mobile or fixed noise-producing equipment used on the project that is regulated for noise output by a local, state, or federal agency would comply with such regulation while in the course of project activity.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, would be for safety warning purposes only.
- All project workers exposed to noise levels above 80 dBA would be provided with personal protective equipment for hearing protection (i.e., earplugs and/or earmuffs). Areas where noise levels are routinely expected to exceed 80 dBA would be clearly posted with signs stating "Hearing Protection Required in this Area."

4.10 VISUAL RESOURCES

The existing visual character of the project area includes a mix of topographic features, native vegetation, agricultural fields, and the Gila River. The existing visual character is typical within

the region. Primary viewers adjacent to the project area consist of agriculture workers and motorists on Stateline Road.

4.10.1 Alternative 1: No Action

Under the No Action Alternative, the Gila River would be extremely susceptible to flooding. Visual resources such as the agricultural fields in the area and riparian strands of vegetation could be adversely impacted during future flood events.

4.10.2 Alternative 2: Proposed Action

The Proposed Action would have a temporary effect on the character of the setting. During construction, existing vegetation in the project area would be removed and construction materials and equipment would be stored in the project area. Construction activities would be visible from the Stateline Road and agricultural fields in the vicinity of the project area.

After construction, the visual character of the setting would permanently change. The restoration of the bank protection facilities would consist of the installation of stacks of large cement-filled tires, which although would mostly be buried, some tires would be exposed, changing the visual character of the Gila River. However, excavated areas created to install the tire stacks would be backfilled with native soil and leveled and following construction, the construction site would be seeded with shrubs and grasses native to the area.

Implementation of the Proposed Action would mitigate the region's susceptibility to flooding, thus reducing potential damage to the visual resources in the study area.

The County would be responsible for implementing mitigation measures, including revegetating and contouring finished surfaces to blend with adjacent natural terrain to achieve a natural appearance when the project is complete.

4.11 CUMULATIVE IMPACTS

CEQ defines a cumulative impact 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 actions…" (40 CFR Part 1508.7). No bank stabilization, culvert, or bridge projects are known to have been or currently planed to be built along the river within a several mile reach upstream or downstream of this project. Therefore, no incrementally adverse affects to the environmental are expected as a result of the proposed project.

FEMA is the lead federal agency for conducting the NEPA compliance process for HMGP grants. It is the lead agency's responsibility to expedite the preparation and review of NEPA documents in a way that is responsive to the needs of the County while meeting the spirit and intent of NEPA and complying with all NEPA provisions.

The County and FEMA will circulate the Draft EA for a 2-week public comment period. The public was notified of the Draft EA availability via the FEMA web site, direct mailings to known interested parties, and publication of a public notice in the Copper Era newspaper. During the public comment period, FEMA will accept written comments on the Draft EA addressed to: FEMA Region IX Environmental Officer, 1111 Broadway Street, Suite 1200, Oakland, California 94607. At the end of this period, FEMA will review the comments and consider them in the decision-making process before notifying the public of its final determination.

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7.1 FEDERAL EMERGENCY MANAGEMENT AGENCY

- Alessandro Amaglio, Region IX Environmental Officer

7.2 NISTAC

- Geoff Thornton, Project Manager
- Jean Paul Charpentier, Assistant Project Manager
- Gene Rogge, Senior Archaeologist
- Kate Compton Gore, Archaeologist
- Jennifer Frownfelter, Senior Environmental Planner
- Quentin Bliss, Senior Project Biologist
- Sandy Weir, Environmental Planner
- Jennifer Wennerlund, Senior GIS Specialist
- Brad Norling, Senior Biologist

Appendix A
Coordination Letters

United States Department of the Interior

U.S. Fish and Wildlife Service
Arizona Ecological Services Field Office
2321 West Royal Palm Road, Suite 103
Phoenix, Arizona 85021-4951
Telephone: (602) 242-0210 Fax: (602) 242-2513

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In Reply Refer to:
AESO/SE
22410-2007-I-0345

July 16, 2007

Mr. Alessandro Amaglio
Environmental Officer
U.S. Department of Homeland Security
Federal Emergency Management Agency
1111 Broadway, Suite 1200
Oakland, California 94607-4052

Dear Mr. Amaglio:

Thank you for your correspondence of May 17, 2007, received on May 18, 2007. This letter documents our review of the proposed repair of Stateline Road at the Gila River in Greenlee County, Arizona, in compliance with section 7 of the Endangered Species Act of 1973 (ESA) as amended (16 U.S.C. 1531 et seq.). Your letter concluded that the proposed project may affect, but is not likely to adversely affect the endangered southwestern willow flycatcher (*Empidonax traillii extimus*) and its critical habitat and the endangered razorback sucker (*Xyrauchen texanus*) and its critical habitat. We concur with your determinations and provide our rationales below.

Description of the Proposed Action

A complete description of the proposed action is found in your May 2007 *Biological Assessment, Stateline Road, Greenlee County FEMA-1586-DR-AZ, PW #171* (BA). The proposed action involves the realignment of Stateline Road and the installation of bank protection along the adjacent reach of the Gila River to repair damage sustained during elevated flows in February 2005. Bank protection will include concrete and cable-anchored tire stacks. Minimization measures include the application of aquatic best management practices (BMP) and post-project revegetation of the site.

Determination of Effects

We concur with your determination that the proposed action may affect, but is not likely to adversely affect the southwestern willow flycatcher and razorback sucker, and the species' respective critical habitats, for the following reasons:

Southwestern Willow Flycatcher

- It is extremely unlikely that the southwestern willow flycatcher occurs in the action area of the proposed project based on survey information, habitat availability, etc. Therefore, any potential direct or indirect effects on the species are discountable.

- Project effects are likely to be limited to restoration of the pre-flood meander-bend shape and will not alter the current extent and/or future recruitment of mesic riparian vegetation in the reach. These effects are insignificant.

- The likelihood of any direct or indirect interaction between the proposed action and primary constituent elements is extremely low; therefore, any effects to southwestern willow flycatcher critical habitat are discountable.

Razorback Sucker

- It is extremely unlikely that razorback suckers occur in the action area of the proposed project based on survey information, habitat availability, etc. Therefore, any potential direct or indirect effects on the species are discountable.

- Project effects are likely to be limited to brief alterations which would be primarily outside of the typically wetted perimeter of the Gila River. These effects are insignificant.

- The likelihood of any direct or indirect interaction between the proposed action and primary constituent elements is extremely low; therefore, any effects to razorback sucker critical habitat are discountable.

Thank you for your continued coordination. No further section 7 consultation is required for this project at this time. Should project plans change, or if information on the distribution or abundance of listed species or critical habitat becomes available, this determination may need to be reconsidered. In all future correspondence on this project, please refer to consultation number 22410-2007-I-0345. We also encourage you to coordinate the review of this project with the Arizona Game and Fish Department. Should you require further assistance or if you have any questions, please contact Jason Douglas at (520) 670-6150 (x226) or Sherry Barrett at (x223).

Sincerely,

Steven L. Spangle
Field Supervisor

cc: Assistant Field Supervisor, Fish and Wildlife Service, Tucson, AZ

Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ
Nationwide Infrastructure Support Technical Assistance Consultants, Tucson, AZ
(Attn: J.P. Charpentier)

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SHPO-2007-0280(32045)

U.S. Department of Homeland Security
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

FEMA

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February 1, 2007

Matthew Bilsbarrow, Compliance Specialist/Archaeologist
State Historic Preservation Office
Arizona State Parks
1300 W. Washington Street
Phoenix, Arizona 85007

Re: Repair of Flood-Damaged Stateline Road, Greenlee County, FEMA-1586-DR-AZ, PW # 171

Dear Mr. Bilsbarrow:

Graham County has applied, through the Arizona Division of Emergency Management, to the Federal Emergency Management Agency (FEMA) Region IX Public Assistance Program for funding to repair a segment of Stateline Road that was damaged by flooding of the Gila River in February 2005. The flood was designated Presidential-declared disaster FEMA-1586-DR-AZ. The proposed repairs include:

- realigning a segment of Stateline Road that was washed out along the south bank of the Gila River; and
- replacing bank protection along the adjacent south bank of Gila River.

The funding of the project through the Public Assistance Program would be a federal undertaking. The project is within the purview of the Programmatic Agreement developed between your office, FEMA, Arizona Division of Emergency Management, and the Advisory Council on Historic Preservation for the Rodeo-Chediski Wildfire and then extended to the Severe Storms and Flooding Disaster designated FEMA-1586-DR-AZ on April 27, 2005. In accordance with Stipulation VII of the Programmatic Agreement, FEMA sponsored a cultural resource survey of the area of potential effects. Based on the results of that survey, FEMA made a determination of "no historic properties affected." In accordance with Stipulation VII of the Programmatic Agreement, we are submitting for your review the enclosed report supporting that determination, and may authorize funding for the project unless you object to this determination within 14 days of your receipt of this documentation.

FEMA is consulting with the Hopi Tribe, San Carlos Apache Tribe, White Mountain Apache Tribe, and Fort Sill Apache Tribe of Oklahoma. FEMA will share with you any concerns that these tribes may have. If you have questions, you can contact me at (510) 627-7284, or FEMA's consultant, Gene Rogge of NISTAC, at (602) 861-7414. I look forward to your comments.

Sincerely,

Alessandro Amaglio
Environmental Officer

Enclosure

Cc:
Bryan Brooks, Arizona Division of Emergency Management (w/enclosure)
Phil Ronnerud, Greenlee County (w/enclosure)

Historian William Collins & I concur with
No Historic Properties Affected
2/26/07
Arizona State Historic Preservation Office
Arizona State Parks Board
SHPO-2007-0280