

**ECONOMIC DEVELOPMENT GRANT FOR SITE CLEARING  
AND BUILDING DEMOLITION  
ENVIRONMENTAL ASSESSMENT**  
Panola County, Mississippi

**Prepared by:**  
TENNESSEE VALLEY AUTHORITY  
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### **Purpose and Need for Action**

An integral part of the mission of the Tennessee Valley Authority (TVA) is to promote economic development within the Tennessee Valley. TVA provides financial assistance for projects within the TVA service area for economic development. The multi-year economic development program is designed to bring to market new/improved sites and facilities within the TVA area and position communities to compete successfully for new jobs and investment.

Panola Partnership, Inc., an economic development corporation in Panola County, Mississippi, has requested a TVA economic development grant to fund the demolition of abandoned farm structures and the removal of trees and brush on portions of an approximately 294-acre tract on the north side of Batesville, Mississippi, (see Figure 1) to be marketed for large-scale development. Due to the presence of floodplains and wetlands on parts of the site, approximately 70 percent of the 294-acre tract is considered developable. The proposed clearing and building demolitions would occur on the developable portion of the property and would facilitate the marketing of the property.

### **Proposed Action**

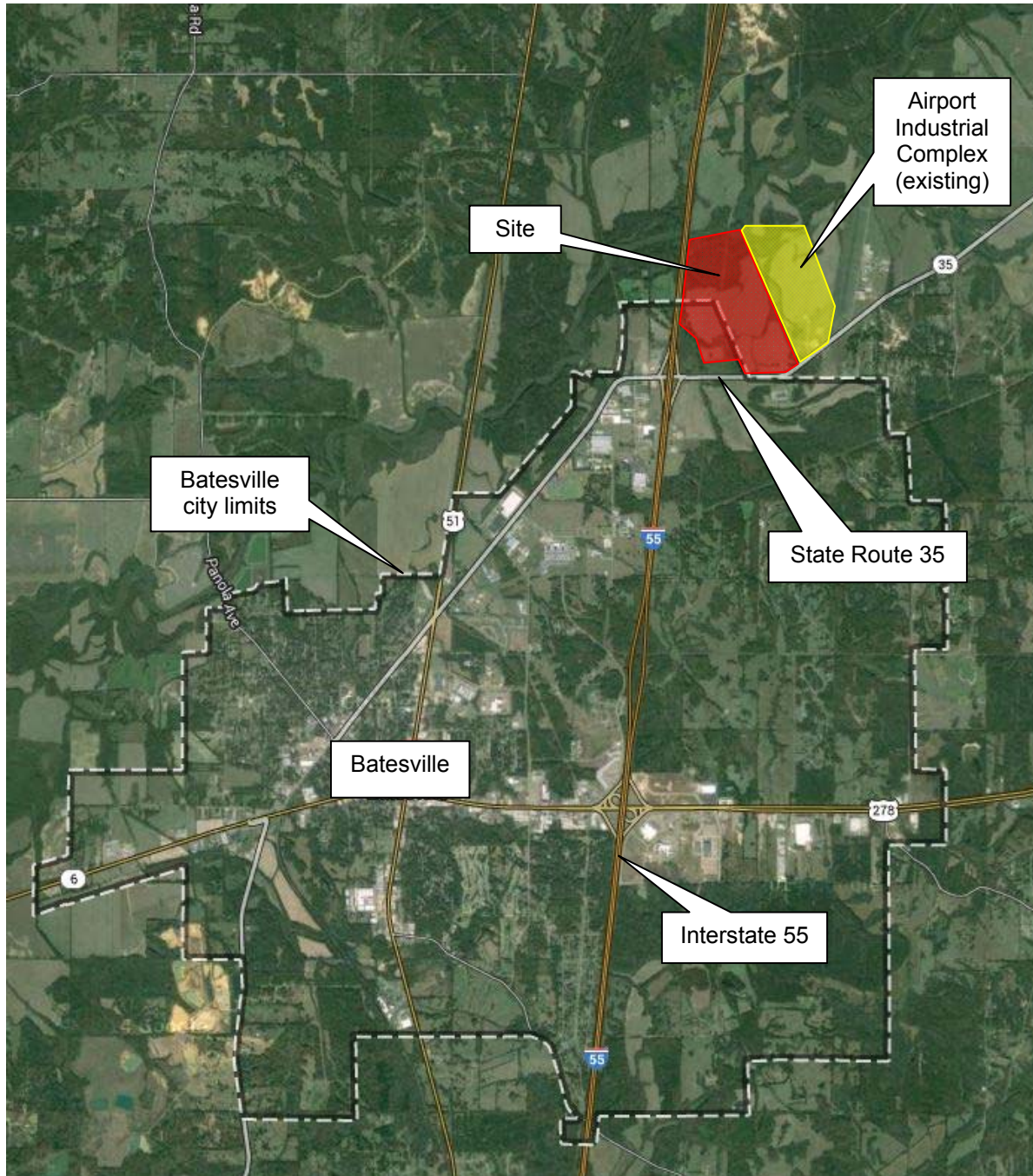
TVA proposes to provide an economic development grant to Panola Partnership for the purpose of clearing approximately 22.6 acres of trees and brush, demolishing several abandoned farm buildings, and removing debris and abandoned farm equipment. The actions to be undertaken by the Panola Partnership are described below.

- Originally, the Panola Partnership proposed to remove approximately 27 acres of trees and brush on the site. Areas originally proposed for clearing are identified in red on Figure 2. However, a field reconnaissance by TVA indicated a 4.4-acre wetland situated in an area to be cleared. The Panola Partnership subsequently excluded this wetland from clearing or other disturbance. Thus, the Panola Partnership proposes to clear approximately 22.6 acres of trees and brush. Some of the areas to be cleared are located along old fence lines and along ditches. Other areas to be cleared are adjacent to buildings to be demolished. The developable area of the 294-acre property is outlined by the orange border in Figure 2. The adjacent Airport Industrial Complex is delineated by the yellow border.
- Demolish and remove various abandoned buildings on the property. Most of these structures are pole barns or frame structures and are in various stages of disrepair. The main area where the abandoned buildings would be removed is shown on Figure 2. Additional farm sheds to be demolished are located along the main site access road, which connects to State Route 35. An abandoned house fronting State Route 35 would also be demolished.

Portions of the 294-acre property, especially the areas along the Little Tallahatchie River, will not be developed due to the presence of wetlands or floodplains. Thus, the developable area within the 294-acre property constitutes approximately 202.6 acres. The proposed grant to Panola Partners would help prepare the tract so that the developable area could be marketed to potential buyers or tenants.

## Background

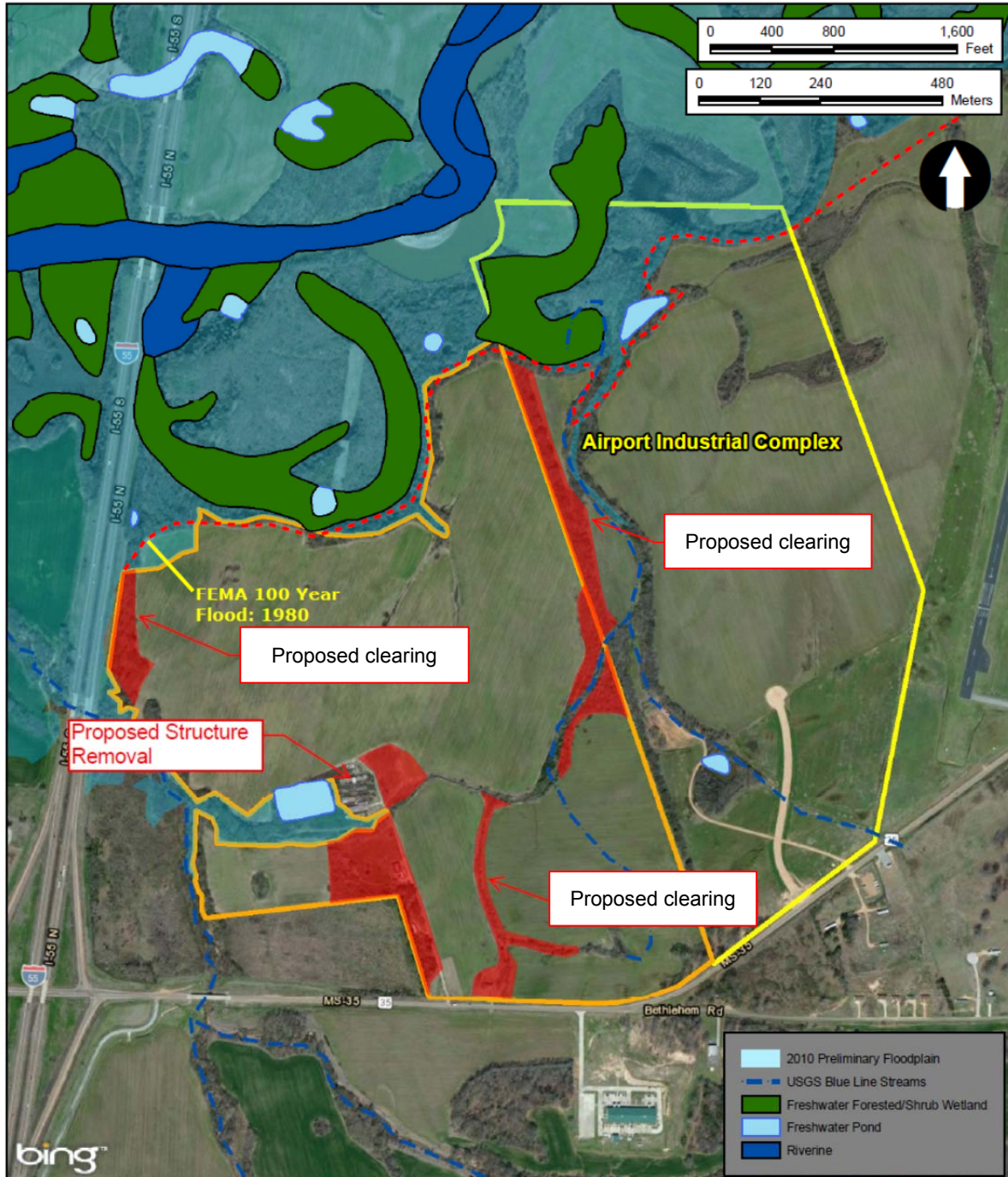
The Panola Partnership purchased the entire 294-acre tract with the intent of expanding the existing Airport Industrial Park, which borders the subject property on the east. Prior to purchase, due diligence studies were conducted on the property to ensure no outstanding environmental concerns or hazards existed on the property. The Panola Partnership intends to develop the site and eventually market it for large-scale development.



Source: Google maps

**Figure 1. Vicinity Map of the Proposed Industrial Park Expansion**





Source: Terracon (2013)

**Figure 2. Aerial View of the Proposed Industrial Park Expansion**

### **Other Environmental Reviews and Documentation**

A Phase I Environmental Site Assessment of the 294-acre site was performed consistent with the procedures included in ASTM E 1527-05 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process) by Terracon Consultants, Inc. (2013). The primary purpose of this study was to determine the presence of any

recognized environmental concerns or other environmental liabilities on the subject property. As part of the Phase I study, Terracon also conducted a limited review of threatened and endangered species and a cursory assessment of onsite waters of the United States, including wetlands.

TVA conducted an onsite survey on March 17, 2015. In that survey, a 4.4-acre jurisdictional wetland was delineated.

Tennessee Valley Archaeological Research conducted a Phase I cultural resources survey (Dadiego et al. 2015) on the subject property. The historic architectural survey indicated a newly documented architectural resource, a house constructed about 1940, within the area to be affected.

### **Permits, Licenses, and Approvals**

The provision of financial assistance to the Panola Partnership for the proposed activities is not subject to any TVA permits or licenses. However, the actions to be undertaken by the Panola partnership could require the following permits.

- *A Large Construction General Permit for Land Disturbing Activities of Five (5) or More Acres* from the Mississippi Department of Environmental Quality (MDEQ) under Section 402 of the federal Clean Water Act would be required. This permit requires the preparation of a Stormwater Pollution Prevention Plan. The Stormwater Pollution Prevention Plan includes measures such as best management practices (BMPs) that will be taken to avoid erosion and to prevent sedimentation during and following ground-disturbing activities.
- A permit from the Mississippi Forestry Commission, as well as any other applicable state and local permits, would be necessary if onsite open-air burning of brush and debris would be conducted. Specific standards for open burning are set forth in MDEQ regulations documented in *11 Mississippi Administrative Code Part 2, Chapter 1*.

The Panola Partnership consulted with the MDEQ concerning the closure of the two onsite lagoons adjacent to the buildings proposed for demolition. In a letter of March 25, 2014, MDEQ responded that closure is no longer an environmental concern to the agency (Attachment A).

### **Alternatives**

Scoping by TVA determined that from the standpoint of NEPA, two viable alternatives are available. These are the Action Alternative and the No Action Alternative. These alternatives are described below.

#### **No Action Alternative**

Under the No Action Alternative, TVA would not provide the requested funding to the Panola Partnership. In this case, the Panola Partnership could pursue funding elsewhere or, perhaps, postpone or cancel the project. In the event alternate funding were secured, the proposed site clearing and demolition could proceed, and potential environmental effects would likely be comparable to those anticipated from implementing the Action Alternative. In the event the project is postponed, any environmental effects would be delayed for the duration of the postponement. If the project were cancelled, no direct

environmental effects are anticipated, as environmental conditions on the site would remain essentially unchanged from current conditions for the foreseeable future.

### **Action Alternative**

Under the Action Alternative, TVA would provide the requested funding. Consequently, approximately 22.6 acres of the proposed development site would be cleared of trees and brush. Clearing would be accomplished with motorized equipment such as bulldozers, backhoes, and trackhoes. Woody debris would be placed in piles or windrows and would likely be burned onsite. Most of the area to be cleared does not contain merchantable timber.

Various onsite buildings and structures would be demolished. This would be accomplished with much of the same heavy equipment used for the clearing operations. Demolition debris, including building contents, would be removed and disposed of in accordance with all applicable regulations. The clearing and demolition would be undertaken by the Panola Partnership or its contractors.

The Panola Partnership is responsible for ensuring that its contractors use appropriate and practicable measures, such as BMPs to prevent or minimize erosion and the subsequent movement of sediment offsite during and following site clearing. The Panola Partnership is also responsible for ensuring that its contractors implement appropriate precautionary measures to prevent spills or accidental releases of fuels, lubricants, petroleum products or other materials or chemicals.

The Panola Partnership is responsible for ensuring that the disposal of all debris and other materials is conducted in an environmentally responsible manner, including disposal of any special wastes or hazardous materials in landfills or disposal facilities approved for handling such wastes and in compliance with all applicable local, state, and federal regulations. The Panola Partnership is responsible for securing all necessary federal, state, and local permits and licenses. TVA assumes that the Panola Partnership will comply with all applicable federal, state, and local laws and regulations in undertaking the proposed site preparations.

### **Preferred Alternative**

TVA's preferred alternative is the Action Alternative.

## **Affected Environment and Anticipated Impacts**

### **Site Description**

The 294-acre site is nearly flat and exhibits only about 5 feet of surface relief, excluding incised streams. Interstate 55 and State Route 35 border the site to the west and south, respectively. Most of the land to the south of State Route 35 bordering the site is farmland; however, the Mississippi Highway Patrol occupies a complex to the southeast of the site. The Little Tallahatchie River and its wide floodplain and associated wetland areas form the northern border, while the existing Airport Industrial Complex borders the site to the east.

The site has been used extensively for agricultural purposes. Previously, the property was used for a hog farming operation. Most of the developable area on the site is used for row crops and hay. The various fields are separated by wooded fencerows and vegetation that have become established along ditches and drains. Most of the area containing the buildings to be demolished has become overgrown with brush and lies near the center of

the property. An abandoned house proposed for demolition is situated on State Route 35 near the entrance to the property.

The site is crossed by a 161-kV transmission line. Electric service is provided by the Tallahatchie Valley Electric Power Association. Gas, water, and sewer service to the site is provided by the City of Batesville.

### **Impacts Evaluated**

In the vicinity of the subject property, the Little Tallahatchie River is not suitable for commercial navigation traffic. Because no clearing or demolition would occur near the river, undertaking the proposed project would not affect navigation interests.

The subject property is zoned as Industrial, I-2, which permits the property to be used for a variety of industrial, commercial, and municipal uses. The federal Farmland Protection Policy Act (FPPA) is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. However, properties such as the subject property that have been zoned for urban development are not considered farmlands subject to the requirements of the FPPA. Accordingly, there would be no loss of prime farmlands resulting from the proposed federal action.

According to the National Wild and Scenic Rivers System website (2015), no streams that are designated as Wild and Scenic Rivers are located near the project site. Likewise, no streams listed on the Nationwide Rivers Inventory for Mississippi are present in the vicinity of the project (U.S. National Park Service 2015). Thus, no effects to any Wild and Scenic Rivers or streams on the Nationwide Rivers Inventory are anticipated. A review of the TVA Regional Natural Heritage Project database indicated no natural areas occur within 5 miles of the project area. Therefore, no direct, indirect or cumulative effects to natural areas would occur.

No public or private recreation facilities are located within approximately 2 miles of the project site. Thus, the proposed site development is not expected to affect any local recreational opportunities or facilities. For similar reasons, no cumulative or long-term effects to recreation resources are foreseeable.

The site is situated adjacent to the intersection of Interstate 55 and State Route 35. According to Mississippi Department of Transportation data (2015), the annual average daily traffic count (AADT) on Interstate 55 in the vicinity is 20,000. AADT on State Route 35 a short distance east of the project area is 1,800. The northbound ramp from State Route 35 onto Interstate 55 has an AADT of 2,400, while the southbound ramp AADT is 2,200. Because of the limited number of workers on the site required for clearing and demolition and the short timeframe of the proposed work, any direct or indirect effects to local traffic are expected to be temporary and minor. Because the site is close to the interstate and because AADT levels are relatively low, any foreseeable long-term effects to local vehicular traffic and the level of service provided by local roadways are expected to be minor.

### ***Water Resources and Water Quality***

The subject property is nearly flat and exhibits very little topographic relief. Surface drainage is generally to the north to the Little Tallahatchie River. Several onsite ditches drain to the north, while Buck Horn Creek, a tributary to the Little Tallahatchie River drains the southwestern corner of the property.



Section 303(d) of the Clean Water Act requires the state to identify water bodies that do not meet one or more applicable water quality standards and for which Total Maximum Daily Loads are needed. The Little Tallahatchie River in the vicinity of the site and Buck Horn Creek are not listed on the Mississippi 2012 303(d) List of Impaired Waters for biological impairment (MDEQ 2012).

The site contains two waste water treatment lagoons, which are near several of the structures scheduled for demolition. Closure of such facilities normally requires approval from the MDEQ. In a letter of March 25, 2014, MDEQ responded that closure is no longer an environmental concern to the agency.

Estimated depth to the first occurrence of groundwater is approximately 8 to 18 feet (Terracon 2013). However, this can vary depending on precipitation and other hydrogeological features. A search of available databases revealed no leaking underground storage tanks within a 0.5-mile radius of the site; however, four underground fuel storage tanks are located in the vicinity (Terracon 2013). Contamination of groundwater supplies can potentially occur from the introduction of contaminants into areas that serve as recharge areas for groundwater. Contaminants include soil sediment from construction, spilled fuel, petroleum products, and chemicals.

During the proposed clearing and building demolitions, BMPs and best construction practices would be employed and activities would be accomplished in compliance with applicable storm water permitting requirements. Therefore, any direct or indirect effects to local surface water quality or groundwater supplies or quality from the proposed clearing and demolitions are expected to be temporary and minor.

Over the long-term, the developable portions of the site are likely to be developed. The eventual presence of buildings and associated hard surfaces on the property could increase the amount of impermeable surface and possibly lead to faster runoff of onsite precipitation. However, activities that could affect surface water and groundwater quality would be subject to state and federal regulations. Water and sewer service at the site would be supplied by the City of Batesville; thus, extraction of onsite groundwater for future water supplies is unlikely. Thus, the proposed action is not expected to contribute to measurable cumulative impacts effects to water resources within the foreseeable future.

## ***Biological Resources***

### **Plants**

Aerial photos, topographic maps, and a site visit conducted by Terracon Consultants, Inc. indicate that the parcel proposed for development is composed of farm land and wooded areas in various stages of succession. Much of the site has been heavily disturbed by previous land uses, particularly agriculture. Topographic maps and National Wetland Inventory data (U.S. Fish and Wildlife Service 2014) indicate emergent and forested wetlands occur near the Little Tallahatchie River and in forested strips in the southwest portion of the property near Buck Horn Creek.

Executive Order (EO) 13112 serves to prevent the introduction of invasive species and provides for their control to minimize the economic, ecological, and human health impacts that those species potentially cause. In this context, invasive species are nonnative species that invade natural areas, displace native species, and degrade ecological communities or ecosystem processes. Disturbances associated with activities, such as agriculture, can encourage invasion and establishment of weedy plants. Because much of

the developable area of the proposed development site has been farmed and subjected to repeated disturbance, various invasive plant species occur extensively on the site.

Adoption of the Action Alternative would have a very minor effect to terrestrial life of the region. Most forested and herbaceous communities currently found on the site do not support native plant communities with conservation value. Forested wetlands found in the northern portions of the project area, which do contain native plant communities, would not be impacted by the proposed site development. Eventually, portions of the Panola Partnership's property could be permanently converted to other land uses, but these areas do not support unique plant communities. Thus, long-term and cumulative effects to local plant communities are expected to be minor.

#### Wildlife

Landscape features within and surrounding the project area consist of early successional (pasture and agricultural) fields, forested wetlands, pine forest fragments, deciduous forest blocks and stream corridors, ponds, dirt roads, and abandoned farm structures. TVA conducted field reviews of the project area March 2015.

Agricultural fields offer habitat to a variety of common bird species such as brown-headed cowbird, brown thrasher, common grackle, dickcissel, eastern bluebird, eastern kingbird, eastern meadowlark, field sparrow, grasshopper sparrow, house finch, and red-winged blackbird (National Geographic 2002; Turcotte and Watts 1999). Mammals likely present in this habitat include eastern cottontail, hispid cotton rat, red fox and striped skunk (Kays and Wilson 2002; Reid 2006). Farm ponds within agricultural settings provide habitat for common amphibians and reptiles. Amphibians likely present include American bullfrog, American toad, southern leopard frog, spring peeper, as well as upland chorus frog. Reptiles with the potential to occur in the project area include blackmask racer, five-lined skink, gray rat snake, smooth earth snake, and speckled kingsnake (Conant and Collins 1998).

Forested wetlands and stream corridors present within the project footprint provide resources for birds including Acadian flycatcher, blue grosbeak, hooded warbler, indigo buntings, northern parula, red-bellied woodpecker, and wood thrush (National Geographic 2002). American beaver, cotton mouse, eastern woodrat, muskrat, and nutria are common mammals in wetland, forested wetlands and aquatic communities of northern Mississippi. Cottonmouth, eastern garter snake, midland brown snake, rough green snake, and timber rattlesnake are reptiles likely present within this habitat type (Conant and Collins 1998; Gibbons and Dorcas 2005). Typical amphibians include bronze frog, gray treefrog, green treefrog, eastern red-spotted newt, spotted salamander, and three-line salamander (Conant and Collins 1998).

Small areas of evergreen forests observed during field surveys were typically pine forests. These forests provide habitat for other common terrestrial wildlife. Barred owl, brown creeper, golden-crowned kinglet, hermit thrush, pine siskin, pine warbler, red-breasted nuthatch, summer tanager, wild turkey, yellow-rumped warbler and yellow-throated warblers all utilize this habitat (National Geographic 2002; Turcotte and Watts 1999). Cotton deermouse and white-footed deermouse, eastern fox squirrel, Seminole bat and wild boar are mammals that may utilize resources found in pine forests (Kays and Wilson 2002; Reid 2006). Eastern hognose snake, eastern narrowmouth toad, eastern spadefoot toad, Fowler's toad, and northern scarlet snakes are found in open pine forests in this region (Conant and Collins 1998, Gibbons and Dorcas 2005).

Upland deciduous forests and forested edge habitat around fields within the project area provide habitat for an array of common terrestrial animal species. Birds typically found in this type of habitat include Baltimore oriole, barred owl, downy and hairy woodpecker, eastern screech-owl, eastern towhee, eastern wood-pewee, red-tailed hawk, rose-breasted grosbeak, white-breasted nuthatch, and yellow-billed cuckoo (National Geographic 2002; Turcotte and Watts 1999). This area also provides foraging and roosting habitat for several species of bat, particularly in areas where the forest understory is more open. Some examples of bat species likely found within this habitat include big brown bat, little brown bat, eastern red bat, evening bat, hoary bat, Rafinesque's big-eared bat, silver-haired bat, and tricolored bat. Coyote, eastern chipmunk, eastern woodrat, North American deer mouse, and woodland vole are other mammals that may be present within this habitat (Kays and Wilson 2002; Reid 2006). Gray rat snake and midland brown snake, as well as scarlet kingsnake, are all common reptiles of this habitat (Gibbons and Dorcas 2005).

Review of the TVA Regional Natural Heritage database on March 23, 2015, indicated that no recorded caves occur within three miles of the project area and no caves were reported from field reviews. No other unique or important terrestrial habitats were documented in the project area. Review of these data also indicated no aggregations of migratory birds or colonial wading bird colonies are known from the project area. The nearest recorded wading bird colony occurs approximately 35.5 miles from the project area. No other indications of migratory bird aggregations or colonial wading bird colonies were reported from the field reviews.

Any wildlife (primarily common, habituated species) currently using disturbed areas (agricultural crop lands and buildings) may be displaced by increased levels of disturbance during clearing and demolition actions, but would likely return to the project area upon completion of these actions. Common wildlife found in forested areas or areas with brushy habitat would be permanently displaced when vegetation is removed. Individuals that may be immobile during the clearing and building demolition may be affected directly. This could be the case if these activities took place during breeding/nesting seasons. In addition, habitat removal likely would disperse wildlife into surrounding areas in an attempt to find new food sources, shelter sources and to reestablish territories, potentially resulting in added stress or energy use. Because relatively large areas of similar forested habitat exist in the surrounding area and along the Little Tallahatchie River, displaced animals would likely be absorbed into these habitats. Thus, populations of common wildlife species are not likely to be affected adversely by the proposed actions.

Eventual development of the site as an industrial park would result in the loss of much of the available wildlife habitat on the site. However, similar available habitats are available on adjoining properties in the immediate area, and displaced mobile wildlife would likely relocate to nearby areas. Likewise the vegetative cover on the site would likely change from a mixture of agricultural fields, linear wood lines, and brush to an industrial or commercial setting. Because similar habitats exist in the area, this cumulative loss of habitat would be minor, and populations of terrestrial species common to the area are not likely to be affected adversely.

#### Aquatic Life

A March 2015 field survey of the site documented one perennial and four ephemeral streams occurring within the project boundary. Under the Action Alternative, aquatic life could be affected directly by the alteration of habitat conditions or indirectly due to modification of the riparian zone and storm water runoff resulting from activities associated

with the proposed site preparation. Potential impacts due to removal of streamside vegetation within the riparian zone include increased erosion and siltation, loss of in-stream habitat, and increased stream temperatures. Other potential clearing impacts include alteration of stream banks and stream bottoms by heavy equipment and runoff of herbicides into streams.

The establishment of streamside management zones (SMZs) and implementation of BMPs identified in state and local permit conditions can effectively minimize the potential for impacts to water quality and instream habitat for aquatic organisms. The perennial stream and the four ephemeral streams would be protected by implementing BMPs prescribed in the Stormwater Pollution Prevention Plan. BMPs are designed in part to minimize disturbance of riparian areas and prevent subsequent erosion and sedimentation that can be carried to streams. Because appropriate BMPs would be implemented during site preparation and work, impacts to aquatic life would be temporary and insignificant as a result of the proposed TVA action.

#### Threatened and Endangered Species

The federal Endangered Species Act (ESA) provides broad protection for species of fish, wildlife, and plants that are listed as threatened or endangered in the United States or elsewhere. Endangered species are those that have been determined to be in danger of extinction throughout all or a significant portion of their range. Threatened species are those determined to likely become endangered within the foreseeable future. Section 7 of the ESA requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) when a proposed action may affect endangered or threatened species or Designated Critical Habitat.

The State of Mississippi also provides protection for species considered threatened, endangered or deemed in need of management within the state other than those federally listed under the ESA. The listing is handled by the Mississippi Department of Wildlife, Fisheries, and Parks. Additionally, the Mississippi Natural Heritage Program and TVA both maintain databases of species considered threatened, endangered, special concern or tracked in Mississippi. Species listed by the state or the federal government that have the potential to occur in vicinity of the proposed industrial park are listed in Table 1.

**Table 1. State-listed and Federally Listed Species with Potential to Occur in the Vicinity of the Proposed Project**

Common Name	Scientific Name	Federal Status <sup>1</sup>	State Status <sup>1</sup> (Rank <sup>2</sup> )
<b>Birds</b>			
Bald eagle	<i>Haliaeetus leucocephalus</i>	DM	END (S2B)
<b>Mammals</b>			
Northern long-eared bat <sup>3</sup>	<i>Myotis septentrionalis</i>	THR	TRKD (S3)
Indiana bat <sup>3</sup>	<i>Myotis sodalis</i> <sup>3</sup>	END	END (SH)
<b>Fishes</b>			
Steelcolor shiner	<i>Cyprinella whipplei</i>		TRKD (S2)

Source: TVA Regional Natural Heritage Database and USFWS Environmental Conservation Online System (<http://ecos.fws.gov/ecos/home.action>) extracted 03/23/2015.

<sup>1</sup> Status Codes: C=Candidate; DM=Delisted but still monitored; END=Endangered; TRKD=Tracked.

<sup>2</sup> State Ranks: S2=Imperiled; S2B=Imperiled breeding population; S3=Vulnerable; SH=historic record.

<sup>3</sup> USFWS has determined this species has the potential to exist in Panola County, Mississippi, although no records are known to date.

Review of the TVA Regional Natural Heritage database (queried February 2015) indicates that no state-listed plant species have been previously documented within 5 miles of the project area. No federally listed plant species are known to occur in Panola County, Mississippi, and no designated critical habitat for plant species occurs in the project area. Due to the current and past land use practices and the obvious lack of suitable habitat, no state-listed threatened and endangered plant species are likely to be found in the project area. Field surveys conducted in March 2015 indicated no federally listed plant species occur on the site.

No individual plants or habitat capable of supporting listed plant species occur in portions of the project area where work would occur. Although there would be onsite disturbances, these actions would have no impact on federal or state-listed plants.

A review of the TVA Regional Natural Heritage database did not result in any records of Mississippi state-listed, federally listed, or federally protected terrestrial animal species within 3 miles of the project area. Review of the database also found that one federally protected terrestrial animal species, the bald eagle, has been reported from Panola County, Mississippi.

Bald eagles are protected under the Bald and Golden Eagle Protection Act. This species is associated with large, mature trees capable of supporting its massive nests. These are usually found near large waterways where the eagles forage (Turcotte and Watts 1999; USFWS 2007a). Records document the occurrence of one bald eagle nest in Panola County approximately 4.8 miles from the project footprint. Suitable nesting and foraging habitat exists within the project area in mature trees and inundated wetlands. However, no bald eagle nests or resident bald eagle pairs were observed within the project area, including within the project footprint along Buck Horn Creek, the Little Tallahatchie River or an unnamed tributary that runs through the project site, during a field review on March 17, 2015. The nearest known bald eagle nest would not be impacted by the proposed actions. Bald eagles would not be impacted directly or indirectly by TVA's proposed action.

The USFWS has determined that the federally endangered Indiana bat and northern long-eared bat (recently federally listed as threatened) both have potential to occur in the northern portion of the state, although the ranges of these species have not yet been defined at the county level. Indiana bats hibernate in caves in winter and use areas around caves for swarming (mating) in the fall and staging in the spring, prior to migration back to summer habitat. During the summer, Indiana bats roost under the exfoliating bark of dead snags and living trees in mature forests with an open understory and a nearby source of water (Pruitt and TeWinkel 2007; Kurta et al. 2002). Indiana bats are known to change roost trees frequently throughout the season, yet still maintain site fidelity, returning to the same summer roosting areas in subsequent years (USFWS 2007b). No known caves exist within three miles of the project area, and none were observed during field reviews on March 15, 2015. No records of Indiana bats are known from Panola County, Mississippi. The nearest winter roosting hibernacula<sup>1</sup> record is from an abandoned mine greater than 100 miles away from the project in Tishomingo County, Mississippi. This mine has since collapsed and is no longer thought to support hibernating colonies of Indiana bat. The nearest Indiana bat summer roosting record is from a maternity colony documented

<sup>1</sup> *Hibernacula* are places such as caves or mines where bats hibernate during the winter.

approximately 55 miles to the northeast of the project area in Benton County, Mississippi. Foraging habitat exists throughout the proposed action area along forest edges, over forest fragments, fence rows, and other corridors. Drinking water exists over inundated wetlands and farm ponds. During field reviews, forested areas within the project footprint were assessed for Indiana bat summer roosting habitat suitability according to USFWS guidelines (USFWS 2014a). Based on these habitat assessments, TVA has determined that overall, the forested habitat within the project area does not provide suitable summer roosting habitat for Indiana bat. Buildings proposed for demolition found within the project area had no signs of use by bats.

The northern long-eared bat roosts in caves, abandoned mines, and cave-like structures during the winter. During the fall and spring they utilize entrances of caves and the surrounding forested areas for mating. In the summer, northern long-eared bats roost singly or in colonies beneath exfoliating bark or in crevices of both live trees and snags. This species is also known to roost in abandoned buildings and under bridges, although their primary summer roosting sites appear to be trees. Roost selection by northern long-eared bat is similar to that by Indiana bat. However, northern long-eared bats may be more opportunistic in their roost site selection. Northern long-eared bats emerge at dusk to forage below the canopy of mature forests on hillsides and ridges, and occasionally over forest clearings and along riparian areas (USFWS 2013, 2014b).

Foraging habitat exists in the proposed action area along forest edges, over forest fragments, fence rows, and other corridors. Foraging habitat exists throughout the proposed action area along forest edges, over forest fragments, fence rows, and other corridors. Drinking water exists over inundated wetlands and farm ponds. Forested areas within the project footprint were assessed for northern long-eared bat summer roosting habitat suitability during field reviews in March 2015. Based on these habitat assessments, TVA determined that the forested habitat within the project area does not provide suitable summer roosting habitat for northern long-eared bat.

No caves or other winter hibernacula for either Indiana or northern long-eared bat exist in the project area and none would be impacted by proposed actions. Summer roost habitat surveys determined that forested areas within the proposed project area would not support summer roosting by Indiana bats or northern long-eared bats. Buildings proposed for demolition did not exhibit any evidence that bats have previously or are currently roosting in these structures. Thus, suitable roosting habitat for Indiana bat and northern long-eared bat would not be affected by the proposed actions. Foraging habitat for these bat species does exist over, along, and within forest fragments and forested stream corridors. Suitable drinking water and foraging habitat also exists over streams, ponds, and inundated wetlands within project footprint. Similar foraging habitat is abundant in the surrounding landscape, over the Little Tallahatchie River and forested areas. Loss of this small amount of foraging habitat due to the proposed actions would have no measureable effects on foraging bats. Undertaking the proposed actions is not expected to affect the Indiana bat or the northern long-eared bat.

One state-listed fish, the steelcolor shiner, is known to occur within Panola County, Mississippi and/or within the potentially affected Hotopha Creek-Little Tallahatchie River watersheds (Table 1). Aquatic life could be affected by the proposed action either directly by the alteration of habitat conditions or indirectly due to modification of the riparian zone and storm water runoff resulting from construction activities associated with the site preparation. Potential impacts due to removal of streamside vegetation within the riparian



zone include increased erosion and siltation, loss of in-stream habitat, and increased stream temperatures. Other potential construction impacts include alteration of stream banks and stream bottoms by heavy equipment and runoff of herbicides into streams.

No suitable habitat for the state-listed steelcolor shiner occurs on the subject property. Furthermore, no federally listed aquatic species is known to occur within Panola County, or within the potentially affected Hotopha Creek-Little Tallahatchie River watersheds. Therefore, no impacts to threatened or endangered aquatic species are anticipated.

### **Wetlands**

Wetlands are areas inundated by surface water or groundwater such that vegetation adapted to saturated soil conditions is prevalent. Examples include swamps, marshes, bogs, and wet meadows. Wetland fringe areas frequently occur along the edges of most watercourses and impounded waters (both natural and man-made). The Phase I Environmental Site Assessment (Terracon 2013) included a preliminary identification of wetlands based on National Wetlands Inventory maps (USFWS 2014c) and a site reconnaissance. As shown in Figure 2, forested wetlands occur in the floodplain of the Little Tallahatchie River at the northern end of the site. Additional forested wetlands occur along Buck Horn Creek on the southwest side of the property and adjacent to Interstate 55.

TVA conducted a field survey of the site in March 17, 2015, to delineate wetland areas within the areas proposed for clearing. Wetland determinations were performed according to the USACE standards, which require documentation of hydrophytic (wet-site) vegetation, hydric soil, and wetland hydrology. A TVA-developed modification of the Ohio Rapid Assessment Method (Mack 2001) specific to the TVA region (TVA Rapid Assessment Method or "TVARAM") was used to categorize wetlands by their functions, sensitivity to disturbance, rarity, and ability to be replaced.

The March 2015 field survey identified a 4.4-acre forested wetland on the eastern edge of the subject property and within the area proposed for clearing (Figure 3). This wetland is considered "jurisdictional" in that filling it would require a permit under Section 404 of the Clean Water Act. This wetland is associated primarily with an unnamed tributary of the Little Tallahatchie River. However, a ditch connects it to Buck Horn Creek at the southwest side of the property. The presence of this wetland is not indicated in the National Wetland Inventory data (USFWS 2014c). According to the TVARAM, this wetland is a Category 2 wetland, which is characterized by moderate quality and/or degraded but with a reasonable potential for restoration. The Panola Partnership had previously indicated that the wetlands at the north end of the property, as shown in Figure 2, would be avoided and are considered outside the developable portion of the site. TVA informed the Panola Partnership about the presence of the 4.4-acre wetland, and the Partnership agreed to avoid clearing in this additional wetland acreage and remove it from the developable portion of the property. Therefore, no wetlands are located within the developable portion of the proposed industrial park. Thus, there would be no direct effects to onsite wetlands from the proposed site preparations. Because appropriate BMPs would be implemented during the proposed clearing and demolitions, any indirect effects to onsite wetlands are expected to be minor. The proposed action is consistent with the requirements of EO 11990 (Protection of Wetlands).



**Figure 3. Wetlands Within the Proposed Industrial Park Expansion**

Over the long term, future development would occur but would be limited to the defined developable areas of the site. Thus, no long-term direct effects to wetlands are expected. Indirect impacts to wetlands can occur from changes in hydrology associated with upland development and the associated influx of surface water, contaminants, and sediment. Because appropriate BMPs and best construction practices would be implemented in

accordance with applicable storm water permitting requirements and because future actions would be subject to applicable federal, state, and local laws and regulations, indirect and cumulative effects to local wetlands are expected to be minor.

### ***Floodplains***

A floodplain is the relatively level land area along a stream or river that is subjected to periodic flooding. The area subject to a one-percent chance of flooding in any given year is normally called the 100-year floodplain. As a federal agency, TVA is subject to the requirements of EO 11988 (Floodplain Management). The objective of EO 11988 is “to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative” (U.S. Water Resources Council 1978). The EO is not intended to prohibit floodplain development in all cases, but rather to create a consistent government policy against such development under most circumstances. The EO requires that agencies avoid the 100-year floodplain unless there is no practicable alternative.

As shown in Figure 1, defined floodplains occur within the 294-acre property. These floodplains are associated with the Little Tallahatchie River on the north side of the property. Based on Panola County Flood Insurance Rate Map, Panel 110B, the property could be flooded from the Little Tallahatchie River at about Little Tallahatchie River Mile 36.9. The 100-year flood elevation at the proposed project site is approximately elevation 203 (elevation referenced to National Geodetic Vertical Datum 1929). Panola County participates in the National Flood Insurance Program, and any development is subject to these regulations.

No floodplains occur within the developable portion of the property. Although the proposed clearing and demolition work would occur near defined floodplains, no work would occur within a defined floodplain. Because work in a floodplain would be avoided and because BMPs would be implemented to avoid erosion and sedimentation, no direct or indirect effects to floodplains are expected. Nevertheless, consistent with the National Flood Insurance Program, the Panola Partnership would be responsible for contacting the local floodplain administrator to determine any actions necessary to ensure compliance with local floodplain regulations. Thus, no measurable cumulative or long-term effects to floodplains or their functions are expected. The proposed project is consistent with the requirements of EO 11988 (Floodplain Management).

### ***Cultural Resources***

Historic and cultural resources, including archaeological resources, are protected under various federal laws. These include the Archaeological Resources Protection Act, the Native American Graves Protection and Repatriation Act, and the National Historic Preservation Act (NHPA). Section 106 of NHPA requires federal agencies to consult with the respective State Historic Preservation Officer (SHPO) when proposed federal actions could affect these resources.

TVA determined that the Area of Potential Effects (APE) for this undertaking to be the original 27-acre area where vegetation clearing and demolition are proposed, as well as any associated access roads. A portion of a previously-recorded site, 22PA1146, a prehistoric and historic artifact recommended eligible for National Register of Historic Places (NRHP) listing, is located within the APE.

TVA conducted a Phase I cultural resources survey of the APE (Dadiego et al., 2015). The historic architectural survey of the APE resulted in the identification of one newly documented architectural resource (IS-1), a minimal traditional style house that appears to have been constructed about 1940. TVA finds that IS-1 is ineligible for inclusion on the NRHP based on lack of architectural merit and inability to associate the house and/or its original owner(s) with an important historical event or series of events. No previously unrecorded architectural or archaeological sites were identified within the APE.

The eastern portion of site 22PA1146 situated within the APE was revisited. TVA finds that the portion of site 22PA1146 within the current APE holds little additional research value and no additional investigations are recommended for this portion of the site. The remainder of site 22PA1146 falls outside of the APE. To avoid inadvertent effects to that portion of archaeological site 22PA1146 outside the APE, the boundaries of this site outside the APE will be marked, and the Panola Partnership will not conduct any proposed clearing or ground-disturbing activities within the marked portion of site 22PA1146.

TVA finds that no historic properties would be affected by the proposed undertaking. The Mississippi SHPO was consulted in a letter dated April, 7, 2015, regarding TVA's findings. In a letter dated May 8, 2015 (Attachment B), the SHPO stated that the project would have no adverse effects to eligible cultural resources provided the portion of site 22PA1146 outside the APE is avoided. Pursuant to 36 CFR § 800.3(f) (2), TVA also consulted with federally recognized Indian tribes regarding properties that may have religious and cultural significance to their tribe and eligible for the NRHP. TVA received a response from the Chickasaw Nation supporting the undertaking (Attachment C).

### ***Socioeconomic Conditions and Environmental Justice***

According to estimates from the U.S. Census Bureau (2015), the population of Batesville, as of 2010, is 7,463 while the population of Panola County is 34,707. Within Batesville, whites comprise approximately 51.8 percent of the population, and blacks or African Americans constitute approximately 45.2 percent. In the county, whites and blacks or African Americans account for approximately 49.5 percent and 48.6 percent of the population, respectively. Hispanics compose approximately 1.4 percent of the county population and about 2 percent of Batesville's population.

Within Batesville, the median and mean household incomes are \$43,025 and \$57,039, respectively. The per capita income for Batesville is \$20,215, which is comparable to that of the state (\$20,670) but lower than the national average of \$28,051. Approximately 29.1 percent of all persons and 23.5 percent of families living within Batesville are considered to be living on incomes below the poverty level. The unemployment rate for persons over the age of 16 years in Batesville is 8.8 percent.

For Panola County, the unemployment rate is 12.0 percent, while 27.2 percent of the county population lives below the poverty level. Estimated mean and median household incomes for Panola County are \$46,122 and \$36,147, respectively. Per capita income in Panola County is \$17,146, which is lower than that of the state (\$20,670) and the national average of \$28,051.

The proposed clearing and demolition work is expected to require a workforce of 15 or less and would last for about 6 months. Thus, the proposed actions are expected to have only minor direct, indirect or cumulative effects to the local economy or workforce. The eventual development of the site for commercial purposes would create additional jobs and would

likely have long-term beneficial effects to the local economy. In the near term and for the foreseeable future, no disproportionate effects are anticipated to any minority or economically disadvantaged populations.

### ***Aesthetic Resources***

The developable portion of the site is nearly flat and exhibits only about 5 feet of surface relief, excluding incised streams and drains. Interstate 55 and State Route 35 border the site to the west and south, respectively. Most of the land to the south of State Route 35 bordering the site is farmland; however, the Mississippi Highway Patrol occupies a complex to the southeast of the site. The Little Tallahatchie River and its wide floodplain form the northern border, while the existing Airport Industrial Complex borders the site to the east.

The site is generally visible to highway motorists only from Interstate 55 and from State Route 35. However, because of intervening vegetation, the interior of the site, including most of the areas where work would occur, are not especially visible to motorists on either highway. Clearing of onsite vegetation, especially along the Interstate 55 border on the west side of the site could create some temporary minor visual discord during clearing operations. However, once clearing and demolition operations are complete, the overall visual character of the site would be comparable with other nearby agricultural areas. Thus, any changes in visual quality would be minor.

Clearing and demolition would create some noise, mainly from construction equipment. However, noise levels are not expected to be excessive, and work would be conducted during normal working hours. No sensitive receptors (e.g., schools, hospitals) are located near the areas to be cleared. Thus, noise-related effects are expected to be minor. The proposed clearing and building demolitions are not expected to generate any noxious odors.

The eventual development of the industrial park expansion could cause localized visual changes as the site is converted from a predominantly agricultural setting with scattered linear tree lines to a commercial or industrial area. Motorists on Interstate 55 currently have open views of various commercial and industrial facilities west of the Interstate, i.e., to the southwest of the property. From a visual standpoint, the development of the site for industrial or commercial use would be consistent with the visual character of nearby properties and would constitute a minor cumulative long-term effect to the visual character of the area.

### ***Air Quality***

The U.S. Environmental Protection Agency uses an Air Quality Index (AQI) to characterize air quality at a given location. AQI categories range from Good (i.e., values from 0 to 50) to Hazardous (values from 301 to 500). Between 1999 to 2009 (the latest year data are available), the AQI for Panola County improved, dropping from a high of about 53 in 1999 to about 39 in 2009 (USA.Com 2015).

A nonattainment area is an area where air pollution levels exceed the National Ambient Air Quality Standards promulgated under the federal Clean Air Act Amendments of 1970. The criteria air pollutants considered in determining nonattainment include ozone, sulfur dioxide, carbon monoxide, particulate matter, lead, and nitrogen dioxide. Panola County is in attainment for all these criteria air pollutants (U.S. Environmental Protection Agency 2015). However, part of De Soto County, which is adjacent to Panola County on the north, is considered nonattainment for ozone.

The proposed clearing and demolition would generate some air pollution in the form of fugitive dust, particulate matter in equipment exhaust, and possibly, smoke from burning debris. Additionally, carbon monoxide and sulfur dioxide would be generated by equipment exhaust. Because of the short time period required to complete this work, any effects to local air quality would be temporary and localized. These effects are expected to be minor and would not have a major influence on the air quality of Panola County.

Future activities that produce air pollutants, including additional site preparation and the siting of industrial or commercial tenants in the proposed industrial park would be subject to various applicable air quality regulations including Prevention of Significant Deterioration permits under the Clean Air Act. With these measures in place, any reasonably foreseeable long-term effects, including cumulative effects, to local air quality are expected to be minor.

### ***Waste Materials***

A records review conducted as part of the Phase I Environmental Site Assessment (Terracon 2013) determined that there were no outstanding environmental concerns regarding the release of hazardous wastes on the site. However, that report did document the presence of several pieces of abandoned farm equipment, including hydraulic equipment, three 55-gallon drums, three approximately 25-gallon plastic containers, and three electrical transformers (owned by the Tallahatchie Valley Electric Power Association), as well as trash and debris, including concrete. The contents of the drums and plastic containers are unknown but are likely pesticides or other farm chemicals. These containers were not leaking at the time of the site visit. Several of the buildings to be demolished are constructed from creosote pole framing with tin roofs. Others are traditional frame structures.

If asbestos or asbestos-containing material is present, the Panola Partnership would be responsible for submitting a completed State of Mississippi Demolition/Renovation Notification Form to the MDEQ. Subsequently, any asbestos demolition or removal activities would be conducted by the Panola Partnership strictly in accordance with all local, state, and federal regulations applicable to such activities.

The Panola Partnership is responsible for disposal of all debris and other materials associated with the proposed clearing and demolitions in an environmentally responsible manner. This responsibility includes the disposal of any special wastes or hazardous materials in landfills or disposal facilities approved for handling such wastes and in a manner consistent with all applicable local, state, and federal regulations. Thus, any potential direct, indirect or cumulative effects related to wastes associated with the proposed site preparations are expected to be minor.

The eventual occupation and use of the proposed industrial site could result in the production of solid wastes in the form of construction debris and wastes from manufacturing and processing operations. The U.S. Environmental Protection Agency (USEPA) regulates industrial, manufacturing, and commercial solid and hazardous wastes under the Resource Conservation and Recovery Act. Producers of such wastes would be subject to USEPA regulations. Therefore, any long-term foreseeable effects related to waste production are expected to be minor.



### **Mitigation Measures**

To minimize or reduce the environmental effects of the proposed project, the Panola Partnership or its contractors will ensure all earth-disturbing activities are in compliance with storm water permitting requirements and will utilize applicable BMPs to minimize and control erosion and fugitive dust during these actions.

To avoid inadvertent effects to that portion of archaeological site 22PA1146 outside the APE, the boundaries of this site outside the APE will be marked, and the Panola Partnership will not conduct clearing or ground-disturbing activities within the marked portion of the site.

### **TVA Preparers**

Rachel B. Crickmar, Program Manager – Project Management

Adam J. Dattilo, Botanist – Biological Resources, Terrestrial Ecology, and Threatened and Endangered Species

Patricia B. Ezzell, Program Manager – Tribal Relations

Elizabeth Burton Hamrick, Zoologist – Biological Resources, Terrestrial Animals, and Threatened and Endangered Species

Michaelyn S. Harle, Archaeologist – Cultural Resources, National Historic Preservation Act Compliance

Andrew R. Henderson, Aquatic Endangered Species Biologist – Aquatic Ecology and Aquatic Threatened and Endangered Species

Amy B. Henry, Manager – NEPA Compliance and Document Review

Holly G. LeGrand, Biologist – Biological Resources, Terrestrial Resources, and Terrestrial Threatened and Endangered Species

Anita E. Masters, NEPA Project Manager – NEPA Compliance and Document Review

Carrie C. Mays, Civil Engineer – Floodplains

David T. Nestor, Contract Biologist – Biological Resources, Plant Life, and Threatened and Endangered Species

Craig L. Phillips, Aquatic Biologist – Biological Resources, Aquatic Ecology

Kim Pilarski-Hall, Wetlands and Natural Areas Specialist – Wetlands and Natural Areas

James F. Williamson, Contract Senior NEPA Specialist – Document Preparation

### **Agencies and Others Consulted**

The following federal and state agencies and federally recognized Indian Tribes were consulted.

Mississippi Department of Archives and History, Jackson, Mississippi

United States Fish and Wildlife Service, Jackson, Mississippi

Chickasaw Nation

Choctaw Nation of Oklahoma

Jena Band of Choctaw Indians

Mississippi Band of Choctaw Indians

## **References**

- Conant, R. and J. T. Collins. 1998. *A Field Guide to Reptiles and Amphibians: Eastern and Central North America*. 3rd ed. Houghton Mifflin. Boston, Massachusetts.
- Dadiego, D., M. Weaver, K. Wright, and E. Crook. 2015. *A Phase I Cultural Resources Survey of the Airport West Economic Project in Panola County, Mississippi*. Tennessee Valley Archaeological Research, Huntsville, Alabama. Unpublished report submitted to the Tennessee Valley Authority.
- Gibbons, W. and M. Dorcas. 2005. *Snakes of the Southeast*. The University of Georgia Press, Athens.
- Kays, R. W. and D. E. Wilson. 2002. *Mammals of North America*. Princeton University Press, Princeton, New Jersey.
- Kurta, A., S. W. Murray, and D. H. Miller. 2002. Roost selection and movements across the summer landscape. Pages 118-129 in A. Kurta and J. Kennedy, editors. *The Indiana Bat: Biology and Management of an Endangered Species*. Bat Conservation International, Austin, Texas.
- Mack, J. 2001. *Ohio Rapid Assessment Method for Wetlands*, Version 5.0, User's Manual and Scoring Forms. Columbus: Ohio Environmental Protection Agency, Division of Surface Water, 401/Wetland Ecology Unit, EPA Technical Report WET/2001-1.
- Mississippi Department of Environmental Quality. 2012. *Mississippi 2012 Section 303(D) List of Impaired Water Bodies*. Surface Water Division of the Office of Pollution Control. Jackson. Available online at: [http://www.deq.state.ms.us/MDEQ.nsf/0/2E3426DE231CDC0886257A3700697913/\\$file/MS2012Section303dListFINALFORADOPTIONJUNE2012.pdf?OpenElement](http://www.deq.state.ms.us/MDEQ.nsf/0/2E3426DE231CDC0886257A3700697913/$file/MS2012Section303dListFINALFORADOPTIONJUNE2012.pdf?OpenElement). Accessed January 21, 2015.
- Mississippi Department of Transportation. 2015. *MDOT Traffic Count Application*. Available online at: <http://sp.mdot.ms.gov/Office%20of%20Highways/Planning/Maps/Pages/Traffic-Volume-Maps.aspx>. Accessed February 2, 2015.
- National Geographic. 2002. *A Field Guide to the Birds of North America*. 4<sup>th</sup> ed. National Geographic Society, Washington, D.C.
- National Wild and Scenic Rivers System. 2015. Online application available at: <http://www.rivers.gov/mississippi.php>. Accessed March 5, 2015.

- Pruitt, L. and L. TeWinkel (editors). 2007. *Indiana Bat (Myotis sodalis) Draft Recovery Plan: First Revision*. U.S. Fish and Wildlife Service, Fort Snelling, Minnesota.
- Reid, F. A. 2006. *Mammals of North America*. 4<sup>th</sup> ed. Houghton Mifflin Company, New York.
- Terracon Consultants Inc. 2013. *Phase I Environmental Site Assessment, Batesville Environmental Services, Highway 55 North and Highway 35, Batesville, Panola County, MS*. Terracon Consultants, Inc., Ridgeland, Mississippi. Unpublished report.
- Turcotte, W. H. and D. L. Watts. 1999. *Birds of Mississippi*. University Press of Mississippi, Jackson.
- U.S. Census Bureau. 2015. *American Factfinder*. Available online at: <[http://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml)>. Accessed January 19, 2015.
- U.S. Environmental Protection Agency. 2015. *Mississippi Nonattainment/Maintenance Status for Each County by Year for All criteria Pollutants*. Green Book. Available online at: <[http://www.epa.gov/airquality/greenbook/anayo\\_ms.html](http://www.epa.gov/airquality/greenbook/anayo_ms.html)>. Accessed January 27, 2015.
- U.S. Fish and Wildlife Service. 2007a. *National Bald Eagle Management Guidelines*. Available online: <<http://www.fws.gov/northeast/ecologicalservices/pdf/NationalBaldEagleManagementGuidelines.pdf>>. (Accessed 27 March 2015).
- U.S. Fish and Wildlife Service. 2007b. *Indiana Bat (Myotis sodalis) Draft Recovery Plan: First Revision*. Available online at: <[http://ecos.fws.gov/docs/recovery\\_plan/070416.pdf](http://ecos.fws.gov/docs/recovery_plan/070416.pdf)>. (Accessed 27 March 2015).
- \_\_\_\_\_. 2013. 12-Month Finding on a Petition To List the Eastern Small-Footed Bat and the Northern Long-Eared Bat as Endangered or Threatened Species; Listing the Northern Long-Eared Bat as an Endangered Species; Proposed Rule. Federal Register, 78(101): 61046-61080.
- \_\_\_\_\_. 2014a. *Range-Wide Indiana Bat Summer Survey Guidelines*. Available online at: <<http://www.fws.gov/midwest/endangered/mammals/inba/surveys/pdf/2014IBatSummerSurveyGuidelines13Jan2014.pdf>>. (Accessed 27 March 2015).
- \_\_\_\_\_. 2014b. *Northern Long-eared Bat Interim Conference and Planning*. Available online at: <<http://www.fws.gov/midwest/endangered/mammals/nlba/pdf/NLEBinterimGuidance6Jan2014.pdf>>. (Accessed 27 March 2015).
- \_\_\_\_\_. 2014c. *National Wetlands Inventory*. Wetlands Mapper Application. Online application available : <<http://www.fws.gov/wetlands/Data/Mapper.html>>.

U.S. National Park Service. 2015. *Nationwide Rivers Inventory*. National Center for Recreation & Conservation. Online application available at: <http://www.nps.gov/ncrc/programs/rtca/nri/index.html>. Accessed March 5, 2015.

USA.Com. 2015. *Panola County Air Quality*. Available online at: <http://www.usa.com/panola-county-ms-air-quality.htm>. Accessed January 21, 2015.

### **Attachments**

- A – Letter from the Mississippi Department of Environmental Quality
- B – Response from the Mississippi State Historic Preservation Officer
- C – Responses from Federally Recognized Indian Tribes

**Attachment A – Letter from the Mississippi Department of Environmental Quality**



**STATE OF MISSISSIPPI**

PHIL BRYANT  
GOVERNOR

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

TRUDY D. FISHER, EXECUTIVE DIRECTOR

March 25, 2014

Mr. Milton Wardlaw  
PO Box 2056  
Starkville, MS 39760

Dear Mr. Wardlaw:

Re: Former Wardlaw Hog Farm  
Closure Proposal  
Water Ref. No. MS0049328  
Panola County

We are in receipt of the closure proposal for the former hog farm. The water analyses appear to indicate that the pond which had been previously drained is no longer of an environmental concern to our agency. If you have any questions regarding this matter, please feel free to contact me at (601) 961-5580.

Sincerely,

A handwritten signature in blue ink that reads "Becky Nester".

Becky Nester  
Agricultural Branch  
Environmental Permits Division



1786 PER20000001

OFFICE OF POLLUTION CONTROL

POST OFFICE BOX 2261 • JACKSON, MISSISSIPPI 39225-2261 • TEL: (601) 961-5171 • FAX: (601) 354-6612 • [www.deq.state.ms.us](http://www.deq.state.ms.us)  
AN EQUAL OPPORTUNITY EMPLOYER

**Attachment B – Response from the Mississippi State Historic Preservation Officer**

MISSISSIPPI DEPARTMENT *of* ARCHIVES AND HISTORY



HISTORIC PRESERVATION  
Jim Woodrick, director  
PO Box 571, Jackson, MS 39205-0571  
601-576-6940 • Fax 601-576-6955  
mdah.state.ms.us

Received 5/13/15  
CD

May 8, 2015

Mr. Clinton E. Jones, Senior Manager, Compliance  
Tennessee Valley Archaeological  
400 West Summit Hill Drive  
Knoxville TN 37902

RE: Phase I Archaeological Survey of the Airport West Economic Development  
Project in Panola County, MDAH Project Log #04-057-15, (Report #15-0115),  
Panola County

Dear Mr. Jones:

We have reviewed the revised April 2015 cultural resources survey report by Scott C. Meeks, Principal Investigator with TVAR, received on April 10, 2015, for the above referenced undertaking, pursuant to our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800. After reviewing the information provided, we concur newly recorded architectural resource IS-1 is ineligible for listing in the National Register of Historic Places. We also concur that 22CL1054 is eligible for listing in the National Register of Historic Places. As such, we are not concerned about the demolition of resource IS-1. We also concur that the portion of site 22PA1146 investigated does not appear to contain sufficient research potential to warrant protection. However, we also concur that site 22PA1146 remains eligible outside of the proposed project area. As such, we concur the project will have no adverse effect to eligible cultural resources provided that intact and eligible portion of site 22PA1146 is avoided. With this condition, we have no objection with the project..

There remains a good possibility that unrecorded cultural resources may be encountered during the project. Should this occur, we would appreciate your contacting this office immediately in order that we may offer appropriate comments under 36 CFR 800.13.

Please provide a copy of this letter to Mr. Meeks at TVAR. Please contact me if you have any questions.

Sincerely,

  
Greg Williamson  
Review and Compliance Officer

FOR: Katie Blount  
State Historic Preservation Officer



**Attachment C – Responses from Federally Recognized Indian Tribes**

April 28, 2015

Ms. Patricia Bernard Ezzell  
Senior Program Manager  
Tennessee Valley Authority  
400 West Summit Hill Drive  
Knoxville, TN 37902

Dear Ms. Ezzell:

Thank you for the letter regarding the economic development grant proposal for tree and brush removal as well as removal and demolition of a 1940s abandoned structure (IS 1) in Panola County, Mississippi. The project area is in Section 26, T8S R7W. The Chickasaw Nation accepts the invitation to consult under Section 106 of the National Historic Preservation Act.

We support the proposed undertaking and wish to notify you that the S1/2 and NE1/4 of Section 26 contains the patent of ELIJAH MA TUBBY. This patent dates to the mid-nineteenth century. In the event the agency becomes aware of the need to enforce other statutes we request to be notified under ARPA, AIRFA, NEPA, NAGPRA, NHPA and Professional Standards.

We appreciate your efforts to preserve and protect significant historic properties. If you have any questions, please contact Dr. Timothy Baugh, tribal historic preservation officer, at (580) 272-1106 or [timothy.baugh@chickasaw.net](mailto:timothy.baugh@chickasaw.net).

Sincerely,

Lisa John, Secretary  
Department of Culture & Humanities

cc: [pbezzell@tva.gov](mailto:pbezzell@tva.gov)