

SCALE: 1" = 2000'
April 26th, 2013

W.B. MINING, LLC.
FISHTRAP MINE NO. 2
(APPROXIMATELY 421 ACRES TOTAL)



PROJECT AREA MAP

SECTIONS 34 & 35, TOWNSHIP 16 SOUTH, RANGE 5 WEST,
SECTIONS 2 & 3, TOWNSHIP 17 SOUTH, RANGE 5 WEST,
ALL IN JEFFERSON COUNTY, ALABAMA
AS FOUND ON THE SYLVAN SPRINGS, ALABAMA USGS QUAD.

MEC
mcgehee engineering corp
1000 17th Ave SW
Birmingham, AL 35201-3451
Telephone: 205-921-0000 Fax: 205-732-1101
Email: info@mcgehee.com

REVISION R-3

Latitude: 33°35'39" N
Longitude: 87°02'27" W



STATE OF ALABAMA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
64 NORTH UNION STREET, SUITE 464
MONTGOMERY, ALABAMA 36130

ROBERT BENTLEY
GOVERNOR

N. GUNTER GUY, JR.
COMMISSIONER

CURTIS JONES
DEPUTY COMMISSIONER

PATRICIA J. POWELL, DIRECTOR
STATE LANDS DIVISION

TELEPHONE (334) 242-3484
FAX NO (334) 242-0999

July 15, 2013

Ms. Amber Tubbs
McGehee Engineering Corp.
P.O. Box 3431
Jasper, AL 35502-3431

RE: Sensitive Species Information request
W. B. Mining, LLC - Fishtrap Mine No. 2

Dear Ms. Tubbs:

The Natural Heritage Section office received your e-mail dated 4/4/2013 addressed to Ashley Peters on 4/4/2013 and has since developed the following information pertaining to sensitive species (state protected, and federally listed candidate, threatened, and endangered species). I have enclosed a list of sensitive species which the Natural Heritage Section Database or the U.S. Fish and Wildlife Service have indicated occur or have occurred in Jefferson County. Additionally, I have listed some potentially helpful and informative web sites at the end of this letter.

The Natural Heritage Section database contains numerous records of sensitive species in Jefferson County. Our database indicates the area of interest has had no biological survey performed at the delineated location, by our staff or any individuals referenced in our database. Therefore we can make no accurate assessment to the past or current inhabitancy of any federal or state protected species at that location. A biological survey conducted by trained professionals is the most accurate way to ensure that no sensitive species are jeopardized by the development activities.

The closest sensitive species is recorded in our database as occurring approximately 5.1 miles from the subject site. This federally listed endangered species (Cahaba Shiner) inhabits primarily the main channel of the upper Cahaba River. It is threatened by high nutrient loads from upstream settlements, pollutants from the Birmingham area, siltation



«AddressBlock»

7/15/2013

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and is possibly adversely affected by strip-mining activities and chlorine from sewage treatment facilities.*

I hope this information will be useful to you. The provided information is to help you in fulfilling your necessary legal obligations. This does not constitute any form of Section 7 consultation. The Natural Heritage Section recommends that the U. S. Fish and Wildlife Service field office in Daphne be contacted for Section 7 consultations.

The information does not suggest that protected species are not at this location. The specific location of a sensitive species is considered confidential information by a State Lands Division Regulation and can be released only to individuals who enter into a confidentiality and indemnity contract with the State Lands Division.

The Natural Heritage Section provides this information as a service to the people of Alabama. The NHS acts as a clearing house for species distribution data. We happily accept any information environmental researchers are willing to donate. Sensitive species exact locations are kept confidential. If you would be willing to donate any information to this database, we will be better able to assist all individuals interested in environmental compliance.

Sincerely,



Ashley Peters
Database Manager
Natural Heritage Section

Enclosures

*Paraphrased Information from NatureServe. 2006. NatureServe Explorer: An online encyclopedia of life [web application]. Version 5.0. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: August 18, 2006).

Potentially helpful web sites

Information about federally listed species
<http://daphne.fws.gov/es/specieslst.htm>
<http://www.pfmt.org/wildlife/endangered/>

«AddressBlock»

7/15/2013

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<http://www.natureserve.org/explorer/>

State Protected Species Regulations:

<http://www.outdooralabama.com/hunting/regulations/regs.cfm>

ALABAMA'S FEDERALLY LISTED AND STATE PROTECTED SPECIES (BY COUNTY)

This is a list of protected species that are believed to occur in the designated county and the legal protection status of each species. This list is a combination of the U.S. Fish and Wildlife Service (Daphne field office) federally listed species county and state lists and the Alabama State Lands Division's Natural Heritage Section (SLD-NHS) Database of species occurrence data. This list is continually being updated, and, therefore, it may be incomplete or inaccurate and is provided strictly for informational purposes. Site specific information can be provided by the Alabama SLD-NHS and/or the U.S. Fish and Wildlife Service (Daphne field office) prior to project activities. To be certain of occurrence, surveys should be conducted by qualified biologists to determine if a sensitive species occurs within a project area. Species not listed for a given county does not imply that they do not occur there, only that their occurrence there is as yet unrecorded by these two agencies. This list is currently under review and reflects only our current understanding of species distributions. It also does not constitute any form of Section 7 consultation. The Alabama SLD-NHS recommends that the U.S. Fish and Wildlife Service field office in Daphne be contacted for Section 7 consultations.

Jefferson

| Protection Status | Common Name | Scientific Name | Applicable State Regulation |
|-----------------------------|------------------------------|-------------------------------|------------------------------------|
| Candidate | Black Warrior River Waterdog | <i>Necturus alabamensis</i> | |
| Candidate/ State Protected | Rush Darter | <i>Etheostoma phytophilum</i> | 220-2-.92 (1) (a) |
| Endangered | Leafy Prairie Clover | <i>Dalea foliosa</i> | |
| Endangered/ State Protected | Cahaba Shiner | <i>Notropis cahabae</i> | 220-2-.92 (1) (a) |
| Endangered/ State Protected | Plicate Rocksnail | <i>Leptoxis plicata</i> | 220-2-.98 (1) (a) |
| Endangered/ State Protected | Southern Clubshell | <i>Pleurobema decisum</i> | 220-2-.98 (1) (a) |
| Endangered/ State Protected | Triangular Kidneyshell | <i>Ptychobranhus greenii</i> | 220-2-.98 (1) (a) |
| Endangered/ State Protected | Upland Combshell | <i>Epioblasma metastrata</i> | 220-2-.98 (1) (a) |
| Endangered/ State Protected | Vermilion Darter | <i>Etheostoma chermocki</i> | 220-2-.92 (1) (a) |
| Endangered/ State Protected | Watercress Darter | <i>Etheostoma nuchale</i> | 220-2-.92 (1) (a) |
| State Protected | Cooper's Hawk | <i>Accipiter cooperi</i> | 220-2-.92 (1) (d) |
| Threatened/ State Protected | Blue Shiner | <i>Cyprinella caerulea</i> | 220-2-.92 (1) (a) |
| Threatened/ State Protected | Finelined Pocketbook | <i>Hamiota altilis</i> | 220-2-.98 (1) (a) |
| Threatened/ State Protected | Flattened Musk Turtle | <i>Sternotherus depressus</i> | Section 9-11-269 |
| Threatened/ State Protected | Goldline Darter | <i>Percina aurolineata</i> | 220-2-.92 (1) (a) |
| Threatened/ State Protected | Orangenacre Mucket | <i>Hamiota perovalis</i> | 220-2-.98 (1) (a) |

Key to codes on list:

Endangered - Federally listed as an endangered species by the U. S. Fish and Wildlife Service

Threatened - Federally listed as a threatened species by the U. S. Fish and Wildlife Service

Candidate - Federally listed as a candidate species by the U. S. Fish and Wildlife Service

Experimental - Species is protected throughout its range, except for the nonessential experimental population, by the U. S. Fish and Wildlife Service

State Protected - It is unlawful to take, capture or kill; possess, sell or trade for anything of monetary value, or offer to sell or trade these species. Alabama Regulations relating to game, fish and furbearing animals. 2009-2010. Alabama Department of Conservation and Natural Resources. See <http://www.outdooralabama.com/hunting/regulations/regs.cfm> for more information.

Notes:

- Bald eagle (*Haliaeetus leucocephalus*), red-cockaded woodpecker (*Picoides borealis*) and the American peregrine falcon (*Falco peregrinus anatum*) may occur in any county, if habitat exists.
- Wood stork: July - October
- Bald eagle (*Haliaeetus leucocephalus*) has been delisted. This species is still protected by the non-game species regulation and the migratory bird act. This species distribution is statewide but it is most likely to be observed near large rivers and reservoirs.
- Sea turtles: Only loggerhead is potential nester, the rest are in coastal waters.
- Black bear (*Ursus americanus* sp.) - known to exist in Mobile County, but not listed.
- Gulf moccasinshell (*Mediondus penicillatus*), oval pigtoe (*Pleurobema pyriforme*), Chipola slabshell (*Eliptio chipolaensis*), and purple bankclimber (*Elliptoideus sloatianus*) are freshwater mussels of the family Unionidae found only in eastern Gulf Slope streams draining the Apalachicolan Region, defined as streams from the Escambia to the Suwannee river systems, and occurring in southeast Alabama, southwest Georgia, and north Florida. All are listed as "Endangered".
- Fanshell (*Cyprogenia stegaria*), oyster mussel (*Epioblasma capsaeformis*), and Catspaw (purple cat's paw pearl mussel) (*Epioblasma obliquata obliquata*) are historically known to be found in the Tennessee River system and drainage.
- Gentian pinkroot (*Spigelia gentianoides*) has been historically found along the Alabama-Florida border.
- West Indian Manatee (*Trichechus manatus*) has been known to move north along the gulf coast west to Louisiana.

2006 - TA - 0869

| | | | | |
|-------------------|--------------|---------|---------|-------------|
| Post-it® Fax Note | 7671 | Date | 6-28-13 | # of pages▶ |
| To | Amber Tubbs | From | USFWS | |
| Co Dept. | | Co. | | |
| Phone # | | Phone # | | |
| Fax # | 251-221-7721 | Fax # | | |



June 18, 2013



U.S. Fish and Wildlife Service
 1208-B - Daphne, Alabama 36526
 Phone: 251-441-5181 Fax: 251-441-6222

William J. Pearson
 Field Survey
 U.S. Department of Interior
 Fish & Wildlife Service
 Daphne ES Field Office
 1208-B Main Street
 Daphne, AL 36526

Based upon our records and the information provided in your letter, we agree with your findings that no federally listed species/critical habitat occur in the project area. If project design changes are made, please submit new plans for review.

William J. Pearson
 William J. Pearson, Field Supervisor
 Date: 6-28-2013

RE: WB Mining, LLC -- Fishtrap No. 2 Mine -- Revision R-3

Dear Mr. William J. Pearson 2006 - TA - 0869

We are in the process of applying for a mining permit revision for the area described below and would like to request comments from your office in order to proceed with this project.

WB Mining, LLC, wants to expand mining operations in Jefferson County, Alabama. In order to accommodate its business expansion in Jefferson County, WB Mining, LLC, wants to permit 380 acres at the project site located in Sections 34 & 35, Township 16 South, Range 5 West, Sections 2 & 3, Township 17 South, Range 5 West all on the Sylvan Springs, Alabama U.S.G.S Quadrangle as found in Jefferson County, Alabama. The proposed site location is shown on the attached 2000' scale project area map attachment "B".

The proposed 380 acres project received a habitat study in April of 2013. In the study it states that there was no habitat or presence found for the listed, threatened and endangered species and that no evidence was found or observed for the presence or possible presence of these listed species. I have attached a copy of this study for you in attachment "C".

The project consists of adding area that has been previously disturbed through timber harvesting and/or existing gas well roads & pads.

The boundary of this revision was specifically designed to avoid as many jurisdictional waters as possible and still allow for the project. In addition to the planned avoidance, WB Mining, LLC plans to adhere to the Alabama Surface Mining Commission Administrative Code, Chapter 880-X-10C, PERFORMANCE STANDARDS SURFACE MINING ACTIVITIES, and will develop an erosion control plan tailored to the mining operation that will be submitted and reviewed by qualified professionals from the Alabama Surface Mining Commission. The mine plan will closely adhere to the protective measure in the ADEM regulations sections 335-6-10.06 (a) and (c) to maintain minimum water quality conditions applicable to all state waters as stated within the approved and existing ADEM NPDES permit. There are two separate NPDES Permits that will cover the project area. ADEM NPDES Permit No. AL0073075 will cover the drainage that flows to the south / southwest and ADEM NPDES Permit No. AL0070211 will cover the drainage to the north.

Additionally both NPDES Permit have some maximum and average limitations as set forth by ADEM for these NPDES Permit and are as follows: The pH limit is between 6.0 - 9.0 s.u.; TSS maximum limit is 70 mg/l and the average is 35 mg/l; Fe maximum limit is 6.0 mg/l and the average is 3.0 mg/l; Mn maximum limit is 4.0 mg/l and the average is 2.0 mg/l. In addition to these parameters the NPDES Permit No. AL0070075 also has requirements for Toxicity Testing along with testing for Silver & Total Dissolved Solids.

These NPDES Permits have multiple Sediment Basins that will address and filter the runoff from this project site prior to entering into Fishtrap Branch, and/or the Unnamed Tributary Village Creek. These basins are identified as basin 001, 001A & 001B, on NPDES Permit AL0070211 009E & 009AE, 010P on NPDES Permit No. AL0073075. I have attached a basin location map for reference in attachment "D".

These sediment basins have storm detentions to absorb any increase of surface run-off, if it should occur. The overall quantity of flow to downstream will not be adversely affected. The Sediment Basins were designed for a 10 year 24 hour stormwater event at the primary spillway with a design of 25 year 6 hour at the emergency spillway

WB Mining, LLC will adhere to the current requirements for the inspections of BMPs that are in strict accordance with both Alabama Surface Mining Commission (ASMC) and Alabama Department of Environmental Management (ADEM) Rules and Regulations and are as follows:

Sediment basins are inspected semi-monthly for erosion, instability, etc., with maintenance performed as necessary. Sediment basins are examined quarterly for structural weakness, instability, slope failure, or other hazardous conditions with maintenance performed as necessary. Formal inspections are made annually, by a qualified registered professional engineer or other qualified person under the direction of a professional engineer, including any reports or modifications, in accordance with 880-X-10C-.20[1(j)] of the Alabama Surface Mining Regulations.

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USF&W Submittal June 18th, 2013
WB Mining, LLC – Fishtrap No. 2 Mine – Revision R-3

In addition to the frequent inspections (listed above) made by WB Mining, LLC personnel or their agents, monthly inspections of the BMPs are performed by ASMC inspectors during the active mining phase. Following a phase II bond release, the ASMC inspections are performed quarterly until the final bond release.

WB Mining, LLC will ensure that the water quality is monitored to assure discharges/runoff does not increase stream solids beyond the state water quality standards. All surface water samples will be taken by the grab method. Flow rate measurements of surface water samples will be performed in accordance with ASTM D3858, 10.9.6, p.101 "Standard Practice for Open Channel Flow Measurement of Water by Velocity - Area Method".

All surface water samples are analyzed for at a minimum the pH, Total Iron, Total Manganese, Total Suspended Solids, and reported to the Alabama Department of Environmental Management and Alabama Surface Mining Commission to maintain and ensure adherence to the State's water quality standards required in the approved ADEM NPDES permits.

The approved BMP's structures will be inspected within 24 hours of each significant rainfall event and immediate corrective action will be taken if erosion or soil runoff is observed.

WB Mining, LLC will immediately re-vegetate any disturbed areas that are not actively being mined and execute any work that results in exposed earth or slopes leading to the surface waters during periods when significant rainfall is not present.

In addition the area to be impacted will be restored immediately following the mineral extraction operation. Through the BMP's required by the Alabama Surface Mining Commission (ASMC) and the Alabama Department of Environmental Management (ADEM) State Water Quality Standards WB Mining, LLC believes the project will not have any adverse downstream effects on any Threatened and Endangered Species outside the project area.

Surface water within the permit area consists of runoff in direct response to rainfall. Therefore as mentioned above with the revised and reduced boundary there are no perennial or intermittent streams or springs located within the permit boundary.

Therefore based intentional drainage course avoidance design of the project area and the information provided above would you concur that the project activities will have no adverse effect on any endangered and threatened species and that no further species consultation will be required.

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USF&W Submittal June 18th, 2013
WB Mining, LLC-- Fishtrap No. 2 Mine -- Revision R-3

I would like to thank you for your co-operation concerning this matter and would appreciate your comments at your earliest convenience. If you should have any questions or need additional information, please do not hesitate to contact our office.

Sincerely,

McGehee Engineering Corp.

Amber Tubbs

Amber Tubbs
Project Manager,

Enclosure:

- (A) Project Notification Summary
- (B) Project Area Map 2000 Scale
- (C) Habitat Study - McGehee Engineering Corporation - April of 2013
- (D) Basin Location Map

BIOLOGICAL HABITAT ASSESSMENT

INDIANA BAT SURVEY

W B MINING

FISHTRAP NO. 2 MINE

REVISION R-3

**Prepared For:
W B MINING**

**421 acres +/-
Sections 34 & 35, Township 16 South, Range 5 West
Sections 2 & 3, Township 17 South, Range 5 West**

**ALL IN
JEFFERSON COUNTY ALABAMA**

June 14th, 2013

**MCGEHEE
ENGINEERING CORP.
P. O. Box 3431
450 19th Street West
Jasper, Alabama 35502-3431
Telephone: (205) 221-0686
Fax: (205) 221-7721**

L. Stephen Blankenship
Email: stephenb@mcgehee.org

BIOLOGICAL HABITAT ASSESSMENT

INDIANA BAT SURVEY

Prepared For:

WB MINING, LLC

FISHTRAP NO. 2 MINE

REVISION R-3

421 acres +/-

Section 34 & 35 Township 16 South, Range 5 West

Section 2 & 3 Township 17 South, Range 5 West

ALL IN

JEFFERSON COUNTY ALABAMA

Prepared by:

MCGEHEE ENGINEERING CORP.

P. O. Box 3431

450 19th Street West

Jasper, Alabama 35502-3431

Telephone: (205) 221-0686

Fax: (205) 221-7721

Email: stephenb@mcgehee.org

Executive Summary

McGehee Engineering Corporation performed a biological habitat assessment survey for habitat and the possible presence of the species federally listed as endangered, threatened, or of concern in March and April of 2013. The study was conducted on the proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project area. The proposed project area consists of approximately 421 acres located in Sections 34 & 35, Township 16 South, and Range 5 West, and Sections 2 & 3, Township 17 South, and Range 5 West all in Jefferson County.

The proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project area consists of upland area, with some intermittent and ephemeral drains, a few small low grade wetlands and a shallow disconnected upland pond. Porter Road, power line and gas line routes, and gas well pad roads allow easy access to most of the proposed project area, with the exception being the eastern area around Village Creek. Village Creek is not in the proposed boundary and or the study area and has a 100 foot buffer between the boundary and the study area. The upland area has been disturbed through road development, gas and power line routes, silvaculture and a family dwelling. The upland areas, upon which the roads, power and gas line routes and pond sits, has gently inclined slopes that are vegetated with upland grasses and herbs, pines, various hardwoods and some nonnative invasive species. The steeply inclined slopes of the intermittent and ephemeral drains are vegetated with hardwoods, some pines with some invasive species. The wetlands are primarily vegetated with facultative tree species, with some facultative wetland and obligate tree species, and many obligate and facultative wetland herbaceous species. However, the wetlands are more of an emergent linear type wetland created from the topography alternations or located in the bottom of steep hollows. The proposed project is located in a heavily mined area with current mining west and north of the proposed boundary. The proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project boundary lays either side of Porter Road and southwest of Miller Steam Plant.

The biological habitat assessment survey focused on the Indiana bat, as can be found in Table 2.1. Other T, E & C species listed in Jefferson County along with the Bald Eagle, Wood Stork and the Red Cockaded Woodpecker were studied in previous surveys (McGehee 2013).

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Chapter 1. Proposed Project Review

1.1 Introduction

McGehee Engineering Corporation performed a biological habitat assessment survey for habitat and the possible presence of the species federally listed as endangered, threatened, or of concern on March and April of 2013. The study was conducted on the proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project area. The proposed project area consists of approximately 421 acres located in Sections 34 & 35, Township 16 South, Range 5 West, Sections 2 & 3, Township 17 South, Range 5 West, all on the Sylvan Springs, Alabama U.S.G.S Quadrangle as found in Jefferson County, Alabama. The proposed site location is shown on the attached 2000' scale project area map attachment "B".

The proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project area consists of upland area, some intermittent and ephemeral drains, a few wetlands and a shallow disconnected upland pond. Porter Road, power line and gas line routes, and gas well pad roads allow easy access to most of the proposed project area, with the exception being the eastern area around Village Creek. Village Creek is not in the proposed boundary and or the study area and has a 100 foot buffer between the boundary and the study area. The upland area has been disturbed through road development, gas and power line routes, silvaculture and a family dwelling. The upland areas, upon which the roads, power and gas line routes and pond sits, has gently inclined slopes that are vegetated with upland grasses and herbs, pines, many hardwoods and some nonnative invasive species. The steeply inclined slopes of the intermittent and ephemeral drains are vegetated with hardwoods, some pines with some invasive species. The wetlands are primarily vegetated with facultative tree species, with some facultative wetland and obligate tree species, and many obligate and facultative wetland herbaceous species. The proposed project is located in a heavily mined area with current mining west and north of the proposed boundary. The proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project boundary lays east and west of Porter Road and southwest of Miller Steam Plant.

Active and previous mining operations surround the proposed project boundary.

1.2 Project Location

WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project consists of approximately 421 acres and is located in Sections 34 & 35, Township 16 South, and Range 5 West, and Sections 2 & 3, Township 17 South, and Range 5 West as located in Jefferson County, Alabama on the Sylvan Springs, Alabama U.S.G.S Quadrangle. The proposed site location is shown below on the attached project area map Figure 1. (Appendix "A")

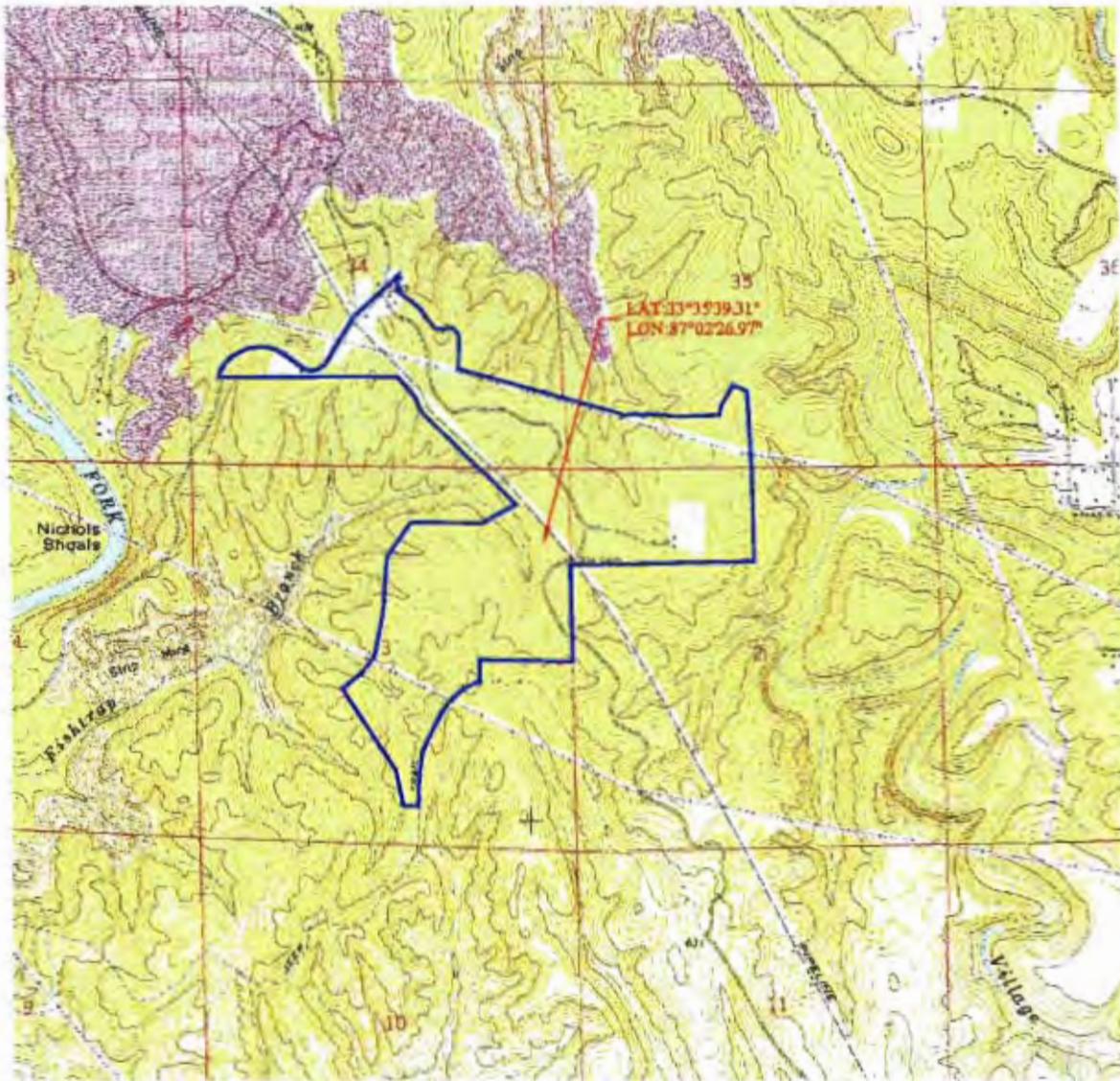


Figure 1. Project Area Map. *(not to scale)*

Chapter 2. Threatened & Endangered Species List

2.1 Species Identification

The U.S. Fish and Wildlife Service (USFWS) threatened, endangered, and candidate species list for Jefferson County was reviewed by a qualified biologist in order to determine species potentially occurring in the project vicinity (Table 2.1). In addition, the Alabama Natural Heritage Section Database that contains numerous records of sensitive species in Alabama was queried to provide a list of special status species and habitats that may have been documented as occurring within the project area and/or the project vicinity.

Table 2.1. Indiana Bat Specie for Jefferson County.

| Common Name <i>Scientific Name</i> | Status | General Habitat |
|---|----------|---|
| Indiana Bat <i>Myotis sodalis</i> | <i>E</i> | Lives in a variety of summer habitats including floodplain and riparian zones with upland area nearby for roosting in > 5 inch diameter trees with exfoliating bark and Limestone caves and sometimes mines for winter hibernation and mating |

Key to codes on list:

- **E** – Endangered
- **T** - Threatened
- **BGEPA** - Bald & Golden Eagle
- **C** - Candidate Species
- **(P)** - Possible Occurrence

Chapter 3. Methodology

3.1 Methodology

The subject property was surveyed by McGehee Engineering Corp. (MEC) for the occurrence and potential for occurrence for species protected or listed by the U.S. Fish and Wildlife Service (USFWS), based on known habitat preferences and geographical distribution. The principal surveyor for this site was Biologist Wes Lamon of McGehee Engineering Corp.

The study site was surveyed by completely traversing the site in a zigzag pattern at approximately 20 meters intervals. Survey conditions are described in Table 3.1. Prior to performing the field reconnaissance, MEC performed a review of aerial photographs of the project site and a pedestrian survey was conducted by MEC biologist to identify vegetation communities and land uses, perform general habitat assessment for plants and animals; assess the potential for nesting or roosting activity by birds and/or bats within the general study area. This survey focuses on the Indiana bats. All other species were studied in previous surveys.

Table 3.1. Survey Conditions

Date: March 5th, 2013

| Temperature (°F) | Wind (MPH) | Sky Cover % |
|------------------|------------|-------------|
| 39° | 5-12 | 50% |

Date: March 27th, 2013

| Temperature (°F) | Wind (MPH) | Sky Cover % |
|------------------|------------|-------------|
| 55° | 0-4 | 0% |

Date: April 12th, 2013

| Temperature (°F) | Wind (MPH) | Sky Cover % |
|------------------|------------|-------------|
| 70° | 1-5 | 0% |

Date: April 18th, 2013

| Temperature (°F) | Wind (MPH) | Sky Cover % |
|------------------|------------|-------------|
| 70° | 7-12 | 70% |

Date: April 22nd, 2013

| Temperature (°F) | Wind (MPH) | Sky Cover % |
|------------------|------------|-------------|
| 75° | 3-10 | 30% |

Date: April 23rd, 2013

| Temperature (°F) | Wind (MPH) | Sky Cover % |
|------------------|------------|-------------|
| 64° | 6-12 | 80% |

Date: April 25th, 2013

| Temperature (°F) | Wind (MPH) | Sky Cover % |
|------------------|------------|-------------|
| 77° | 2-6 | 20% |

As part of the field reconnaissance, MEC also conducted a delineation of potentially jurisdictional wetlands and waters of the U.S. as it relates to Section 404 of the Clean Water Act in accordance to the 1987 "*Corps of Engineers Wetlands Delineation Manual*": Wetlands Research Program Technical Report Y-87-1.

| | |
|---------------------------------|--|
| USGS Quadrangle Map | Sylvan Springs, Alabama USGS Quad Revised 1982 |
| National Wetlands Inventory Map | Sylvan Springs, Alabama NWI Quad developed 1981 |
| SCS Soil Survey | Jefferson County NRCS Web Survey |
| Aerial Photos | Google Image Dated: 09-04-2010 |
| Plant Database | United States Department of Agriculture / Natural Resources Conservation Services Web Database |
| FEMA Flood Map | Federal Emergency Management DFIRM Database FIRMettes Jefferson County |

Chapter 4. Environmental Setting

4.1 General Habitat Description

The proposed WB Mining, LLC – Fishtrap No. 2 Revision R-3 project area is located in Sylvan Springs, AL and lays east and west of Porter Road and southwest of Miller Steam Plant. Portions of the property consist of existing road beds, power and gas line routes, areas of recent silvaculture and a family dwelling. Uses of the area have been natural gas extraction, power transmission and silvaculture. The proposed project area is disturbed in upland areas and undisturbed in drain areas. These areas are vegetated with pines, hardwoods, native and nonnative invasive herbs, shrubs and vines. The project site of approximately 421 acres mostly consists of the following vegetation species:

Tree Stratum

American Beech (*Fagus grandifolia*)
American Hornbeam (*Carpinus caroliniana*)
Bear Oak (*Quercus ilicifolia*)
Black Cherry (*Prunus serotina*)
Black Gum (*Nyssa sylvatica*)
Black Oak (*Quercus velutina*)
Black Willow (*Salix nigra*)
Chestnut Oak (*Quercus prinus*)
Eastern Hophornbeam (*Ostrya virginiana*)
Eastern Red Cedar (*Juniperus virginiana*)
Eastern Redbud (*Cercis canadensis*)
Loblolly Pine (*Pinus taeda*)
Mockernut Hickory (*Carya tomentosa*)
Post Oak (*Quercus stellata*)
Red Maple (*Acer rubrum*)
Sassafras (*Sassafras albidum*)
Scarlet Oak (*Quercus coccinea*)
Shagbark Hickory (*Carya ovata*)
Slippery Elm (*Ulmus rubra*)
Sourwood (*Oxydendrum arboreum*)
Southern Red Oak (*Quercus falcata*)
Sugar Maple (*Acer sacchrum*)
Sweet Gum (*Liquidambar styraciflua*)
Sycamore (*Platanus occidentalis*)
Turkey Oak (*Quercus laevis*)
Umbrella Magnolia (*Magnolia tripetala*)
Virginia Pine (*Pinus virginiana*)
Water Oak (*Quercus nigra*)

White Oak (*Quercus alba*)
Yellow Poplar (*Liriodendron tulipifera*)

Sapling Stratum

American Beech (*Fagus grandifolia*)
American Holly (*Ilex opaca*)
American Hornbeam (*Carpinus caroliniana*)
Bear Oak (*Quercus ilicifolia*)
Black Cherry (*Prunus serotina*)
Black Oak (*Quercus velutina*)
Black Willow (*Salix nigra*)
Chestnut Oak (*Quercus prinus*)
Eastern Hophornbeam (*Ostrya virginiana*)
Eastern Red Cedar (*Juniperus virginiana*)
Eastern Redbud (*Cercis canadensis*)
Flowering Dogwood (*Cornus florida*)
Loblolly Pine (*Pinus taeda*)
Mockernut Hickory (*Carya tomentosa*)
Post Oak (*Quercus stellata*)
Red Maple (*Acer rubrum*)
Sassafras (*Sassafras albidum*)
Scarlet Oak (*Quercus coccinea*)
Shagbark Hickory (*Carya ovata*)
Slippery Elm (*Ulmus rubra*)
Sourwood (*Oxydendrum arboreum*)
Southern Red Oak (*Quercus falcata*)
Sugar Maple (*Acer saccharum*)
Sweet Gum (*Liquidambar styraciflua*)
Sycamore (*Platanus occidentalis*)
Turkey Oak (*Quercus laevis*)
Umbrella Magnolia (*Magnolia tripetala*)
Virginia Pine (*Pinus virginiana*)
Water Oak (*Quercus nigra*)
White Oak (*Quercus alba*)
Yellow Poplar (*Liriodendron tulipifera*)

Shrub Stratum

American Beech (*Fagus grandifolia*)
American Holly (*Ilex opaca*)
American Hornbeam (*Carpinus caroliniana*)
Bear Oak (*Quercus ilicifolia*)
Black Cherry (*Prunus serotina*)

Black Oak (*Quercus velutina*)
Black Willow (*Salix nigra*)
Chestnut Oak (*Quercus prinus*)
Chinese Privet (*Ligustrum sinense*)
Eastern Hophornbeam (*Ostrya virginiana*)
Eastern Red Cedar (*Juniperus virginiana*)
Eastern Redbud (*Cercis canadensis*)
Flowering Dogwood (*Cornus florida*)
Loblolly Pine (*Pinus taeda*)
Mimosa (*Albizia julibrissin*)
Mockernut Hickory (*Carya tomentosa*)
Oakleaf Hydrangea (*Hydrangea quercifolia*)
Post Oak (*Quercus stellata*)
Red Maple (*Acer rubrum*)
Sassafras (*Sassafras albidum*)
Scarlet Oak (*Quercus coccinea*)
Smooth Sumac (*Rhus glabra*)
Sourwood (*Oxydendrum arboreum*)
Southern Red Oak (*Quercus falcata*)
Sugar Maple (*Acer saccharum*)
Sweet Gum (*Liquidambar styraciflua*)
Tree of Heaven (*Ailanthus altissima*)
Turkey Oak (*Quercus laevis*)
Umbrella Magnolia (*Magnolia tripetala*)
Virginia Pine (*Pinus virginiana*)
Water Oak (*Quercus nigra*)
White Oak (*Quercus alba*)
Yellow Poplar (*Liriodendron tulipifera*)

Herbaceous Stratum

Annual Ragweed (*Ambrosia artemisiifolia*)
Big Bluestem (*Andropogon gerardii*)
Blackberry (*Rubus betulifolius*)
Blackeyed Susan (*Rudbeckia hirta*)
Blue Phlox (*Phlox divaricata*)
Bluestem Broom sedge (*Andropogon virginicus*)
Bonset (*Brickellia eupatorioides*)
Canada Golden Rod (*Solidago altissima*)
Christmas Fern (*Polystichum acrostichoides*)
Common Milkweed (*Asclepias syriaca*)
Coreopsis (*Coreopsis auriculata*)
Cut Leaf Blackberry (*Rubus laciniatus*)
Daisy Fleabane (*Rigeron philadelphicus*)
Downy Phlox (*Phlox pilosa*)

Dwarf Cinquefoil (*Potentilla canadensis*)
Early Spiderwort (*Tradescantia virginiana*)
Fire Pink or Scarlet Catchfly (*Silene virginica*)
Foxtail Meadow grass (*Alopecurus pratensis*)
Golden Ragwort (*Sencio aureus*)
Hawkweed (*Rigia biflora*)
Horseweed (*Conyza canadensis*)
Indian grass (*Sorghastrum nutans*)
May Apple (*Podophyllum peltatum*)
Meadow Fescue (*Festuca pratensis*)
Mountain or Pink Phlox (*Phlox ovata*)
Muhly Grass (*Muhlenbergia schreberi*)
Nepalese Brown Top (*Microstegium vimineum*) (*Eulalia viminea*)
Netted Chain fern (*Woodwardia aerolata*)
Northern Dewberry (*Rubus flagellaris*)
Oxalis (*Oxalis violaceae*)
Poverty Grass (*Danthonia spichata*)
Shooting Star (*Dodecatheon meadia*)
Soft Rush (*Juncus effusus*)
Solomon's Seal (*Polygonatum biflorum*)
Southern Dewberry (*Rubus trivialis*)
Southern Maiden Hair fern (*Adiantum capillus-veneris*)
Tall Fescue (*Festuca arundinacea*)
Tall Spiderwort (*Tradescantia ohioensis*)
Tree of Heaven (*Ailanthus altissima*)
Yankee weed (*Eupatorium compostifolium*)

Woody Vine Stratum

Eastern Poison Ivy (*Toxicodendron radicans*)
Honeysuckle (*Lonicera x bella*)
Japanese Honeysuckle (*Lonicera japonica*)
Muscadine (*Vitis rotundifolia*)
Roundleaf Green Briar (*Smilax rotundifolia*)
Saw Briar (*Smilax bona-nox*)
Virginia Creeper (*Parthenocissus quinquefolia*)
Yellow Jessamine or Carolina Jasmine (*Gelsemium sempervirens*)

The proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project area consists of upland area, many intermittent and ephemeral drains, 4 wetlands and a shallow disconnected upland pond. Porter Road, power line and gas line routes, and gas well pad roads allow easy access to most of the proposed project area, with the exception being the eastern area around Village Creek. Village Creek is not is the proposed boundary. The upland area has been disturbed through road development, gas and power line routes, silvaculture and a family dwelling. The upland areas, upon which the roads, power and gas line routes and pond sits, has gently inclined slopes that are vegetated with upland grasses and herbs, pines, many hardwoods and some nonnative invasive species. The steeply inclined slopes of the intermittent and ephemeral drains are vegetated with hardwoods, some pines, many native herbs and wildflowers and some invasive species. The wetlands are primarily vegetated with facultative tree species, with some facultative wetland and obligate tree species, and many obligate and facultative wetland herbaceous species. Most of Porter road and the gas well roads are vegetated with 10 to 15 year old Loblolly pine (*Pinus taeda*) and slightly younger Virginia Pines (*P. virginiana*). There is also a thin growth of young hardwoods, including White oak (*Quercus alba*), Chestnut oak (*Q. prinus*), Sweetgums (*Liquidambar styraciflua*), Sourwood (*Oxydendrum arboreum*) and Yellow Poplar (*Liriodendron tulipifera*), and a few nonnative invasive plants including Chinese Privet (*Ligustrum sinense*), Mimosa (*Albizia julibrissin*), Tree of Heaven (*Ailanthus altissima*) and Japanese Honeysuckle (*Lonicera japonica*). The drains within the proposed boundary are steep and natural. The vegetation is predominantly hardwoods including the above mentioned hardwoods along with American Beech (*Fagus grandifolia*), Flowering Dogwood (*Cornus florida*), American Hophornbeam (*Ostrya virginiana*), American Hornbeam (*Carpinus caroliniana*), Red Maple (*Acer rubrum*), Sugar Maple (*A. saccharum*), Umbrella Magnolia (*Magnolia tripetala*) and Bear Oak (*Quercus ilicifolia*). The shrub story is thick with Oakleaf Hydrangea (*Hydrangea quercifolia*), Red Buckeye (*Aesculus pavia*) and Bottlebrush Buckeye (*A. Parviflora*). There are also many native wildflowers, herbs and ferns along these banks including Christmas fern (*Polystichum acrostichoides*), May Apple (*Podophyllum peltatum*), Fire Pink (*Silene virginica*), Blue Phlox (*Phlox divaricata*), Golden Ragwort (*Senecio aureus*), Shooting Star (*Dodecatheon meadia*), Solomon's Seal (*Polygonatum biflorum*), Coreopsis (*Coreopsis auriculata*), Daisy Fleabane (*Rigeron philidelphicus*), Hawkweed (*Rigeron biflora*), Mountain Phlox (*Phlox ovata*), Early Spiderwort (*Tradescantia virginiana*) and Tall Spiderwort (*T. ohioensis*). Wetlands were found within the proposed boundary; the first is at 12A and is the creation of a shallow pond. The second is at 16A and is at the headwaters of a drain. Many intermittent and ephemeral streams were located within the proposed boundary and are listed in detail in a report to ACOE. The proposed project is located in a heavily mined area with current mining west and north of the proposed boundary. The proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project boundary lays east and west of Porter Road and southwest of Miller Steam Plant.

There are two primary soil groups within the project. The first is Montevallo-Nauvoo association, steep that are well drained. The other is Nauvoo fine sandy loam, 8 to 15 percent slopes which are well drained. All soil types are partially hydric. The soils identified in the field matched the USDA Soil data profile therefore a more detailed description of the soil as well as the soil maps can be found in Appendix C.

Chapter 5. Habitat Study Results

5.1 Terrestrial and Terrestrial Habitat Species

- a. **Indiana Bat** (*Myotis sodalis*) – Potential habitat for this species exists for summer roosting within the project boundary. However, there are no limestone caves or abandoned underground mines on or adjacent to this project site. There are no perennial waterways on this project site.

5.1.1 Summary

Potential summer roost habitat for the Indiana bats exists within the proposed project boundary. There are no perennial waters with riparian buffers. There are upland areas with exfoliating trees >5 inches in diameter within the proposed project boundary. No caves or old mines of Limestone or any formation were discovered within the proposed boundary for winter hibernacula. No evidence was found or observed for the presence or possible presence of the Indiana bat. USFWS and ADCNR were contacted about this potential summer habitat and McGehee Engineering was directed to the 2010, 2011, and 2012 annual Final Reports of bat surveys by M. Keith Hudson, for the state of Alabama. The most recent of these, the 2012 Alabama Department of Conservation and Natural Resource's study records indicate that this bat is present only in low numbers in and around caves in northern Alabama. The absence of any caves or perennial waterways within the project boundary makes this species' presence highly unlikely. No other studies are recommended.

Chapter 6. References

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Department of the Interior – Fish & Wildlife Service Biological Report 88(26.2) May 1988
- NC Division of Water Quality. 2010. *Methodology for Identification of Intermittent and Perennial Streams and their Origins, Version 4.11*. North Carolina Department of Environment and Natural Resources, Division of water Quality. Raleigh, NC.
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- U.S. Fish and Wildlife Services. April 2013. *Endangered Species List – List of Species by County for Walker County Alabama*.

Chapter 7. Signatures of Preparers

Prepared by:



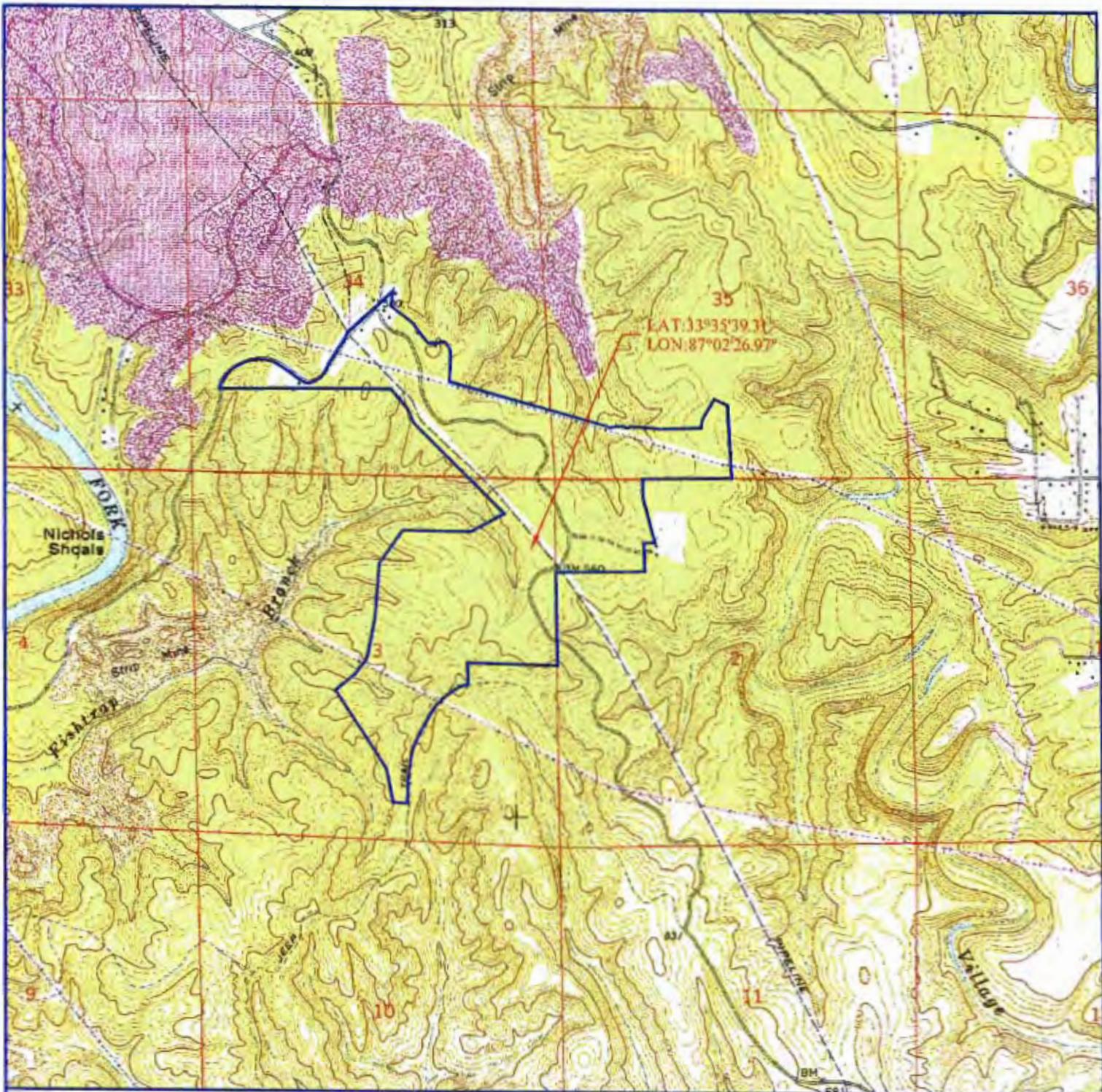
Wes Lamon
Biologist

Reviewed by:



L. Stephen Blankenship
*Environmental Manager /
Wetland Specialist*

Appendix A — Project Area Map



SCALE: 1" = 2000'
 March 19th, 2013

W.B. MINING, LLC.
FISHTRAP MINE NO. 2
 (APPROXIMATELY 380 ACRES TOTAL)



PROJECT AREA MAP

SECTIONS 34 & 35, TOWNSHIP 16 SOUTH, RANGE 5 WEST,
 SECTIONS 2 & 3, TOWNSHIP 17 SOUTH, RANGE 5 WEST,
 ALL IN JEFFERSON COUNTY, ALABAMA
 AS FOUND ON THE SYLVAN SPRINGS, ALABAMA USGS QUAD.

MEC
 mcgehee engineering corp
 6044 VFW Ave. 3421
 Jasper, Alabama 35222-4121
 telephone: 205-221-0280 fax: 205-773-1171
 email: jw@mcgehee.com

REVISION R-3

Latitude: 33°35'39" N
 Longitude: 87°02'27" W

Appendix B — Photographic Log

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *03-05-13*

Photo No. *P3050444*
Point No. *005*



Description:
 This is a view of an upland road at point 5.

- Dominant Vegetation:**
- *Pinus taeda*
 - *Pinus virginiana*
 - *Andropogon virginicus*
 - *Festuca pratensis*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *03-05-13*

Photo No. *P3050446*
Point No. *004*



Description:
 This is a view of the vegetation at point 5.

Dominant Vegetation:
 Same as above.

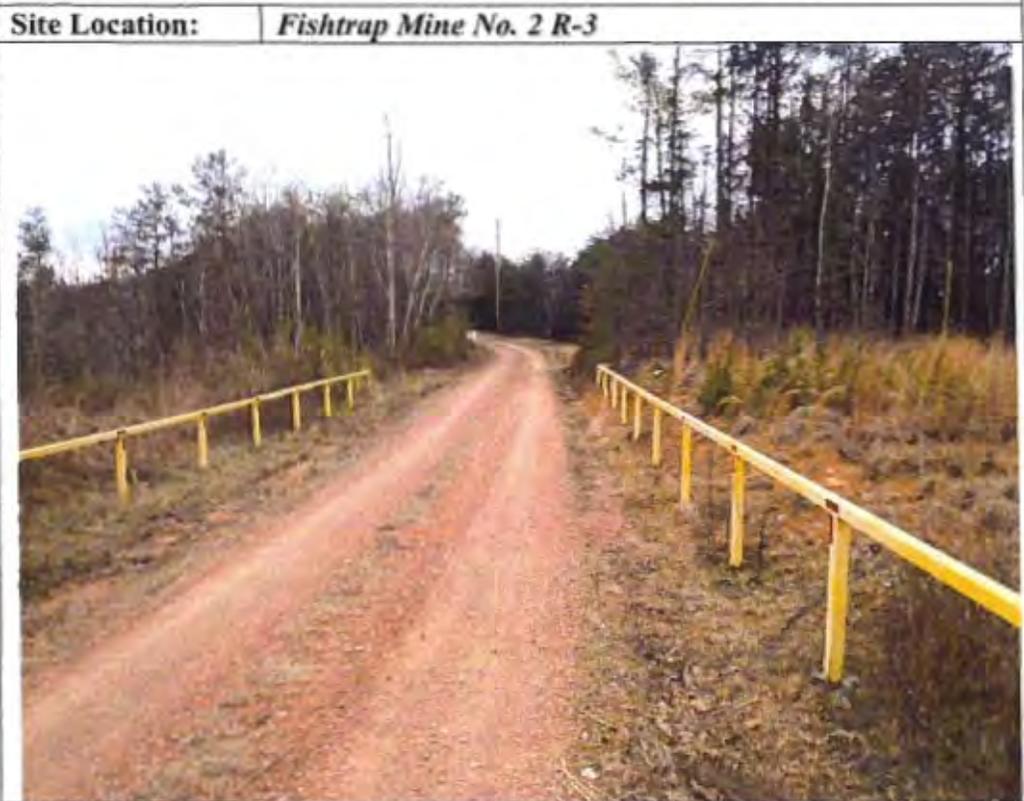
McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *03-05-13*

Photo No. *P3050450*
Point No. *06*



Description:

This is a view an upland road at point 6.

Dominant Vegetation:

- *Pinus taeda*
- *Pinus virginiana*
- *Andropogon virginicus*
- *Festuca pratensis*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *03-05-13*

Photo No. *P3050455*
Point No. *06*



Description:

This is a view of the vegetation at point 6.

Dominant Vegetation:

Same as above.

McGehee Engineering

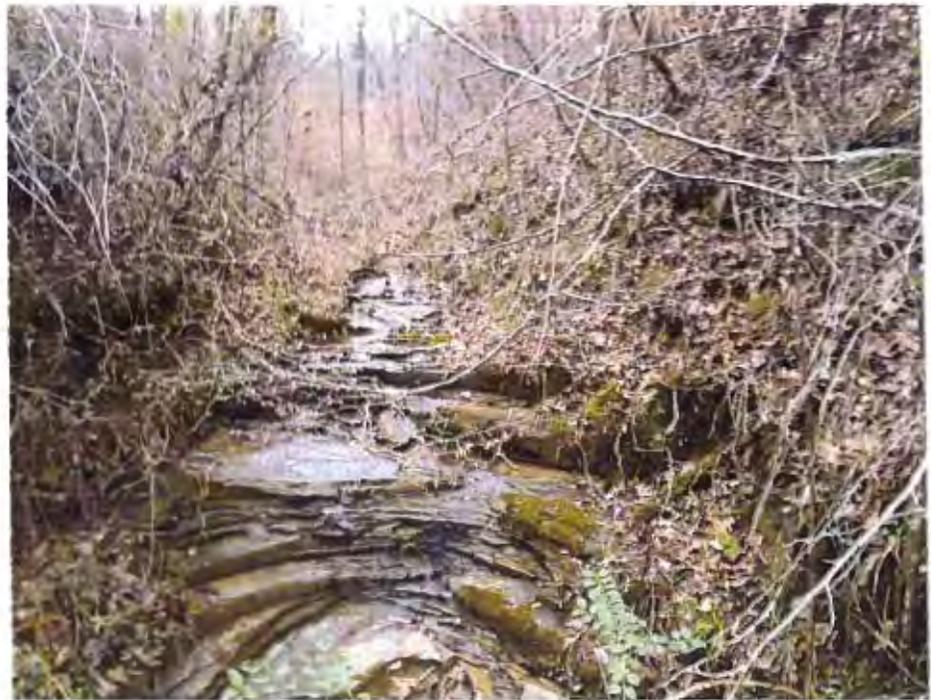
Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *03-05-13*

Photo No. *P3050474*
Point No. *008*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:
This is a view of the intermittent drain at point 8.

Dominant Vegetation:

- *Pinus taeda*
- *Fagus grandifolia*
- *Quercus alba*
- *Liquidambar styraciflua*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *03-05-13*

Photo No. *P30504*
Point No. *008*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:
This is a downstream view of the intermittent drain at point 8.

Dominant Vegetation:
Same as above.

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: 03-05-13

Photo No. P3050470
Point No. 08A

Site Location: *Fishtrap Mine No. 2 R-3*



Description:

This is a view of the ephemeral drain at point 8A. This is the location of the Int/Eph break.

Dominant Vegetation:

- *Fagus grandifolia*
- *Pinus taeda*
- *Quercus alba*
- *Quercus prinus*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: 03-05-13

Photo No. P3050471
Point No. 08A

Site Location: *Fishtrap Mine No. 2 R-3*



Description:

This is a view of the vegetation at point 8A.

Dominant Vegetation:

Same as above.

McGehee Engineering**Photographic Log****Client Name:***W.B. Mining, LLC.***Site Location:***Fishtrap Mine No. 2 R-3***Date:** *03-08-13***Photo No.** *P3050486***Point No.** *08B***Description:**

This is a view of the beginning of the ephemeral drain at point 8B.

Dominant Vegetation:

- *Pinus taeda*
- *Fagus grandifolia*
- *Pinus virginiana*
- *Ostrya virginiana*

**McGehee Engineering****Photographic Log****Client Name:***W.B. Mining, LLC.***Site Location:***Fishtrap Mine No. 2 R-3***Date:** *03-08-13***Photo No.** *P3050485***Point No.** *08B***Description:**

This is a view of the vegetation at point 8B.

Dominant Vegetation:

Same as above.



McGehee Engineering

Photographic Log

Client Name:

Site Location:

Fishtrap Mine No. 2 R-3

W.B. Mining, LLC.

Date: 03-05-13

Photo No. P3050466

Point No. 009

Description:

This is a view of the ephemeral drain at point 9.

Dominant Vegetation:

- *Fagus grandifolia*
- *Quercus alba*
- *Quercus prinus*
- *Pinus taeda*



McGehee Engineering

Photographic Log

Client Name:

Site Location:

Fishtrap Mine No. 2 R-3

W.B. Mining, LLC.

Date: 03-05-13

Photo No. P3050468

Point No. 009

Description:

This is a view of the vegetation at point 9.

Dominant Vegetation:

Same as above.



McGehee Engineering

Photographic Log

Client Name:

Site Location:

Fishtrap Mine No. 2 R-3

W.B. Mining, LLC.

Date: 03-05-13

Photo No. P3050463

Point No. 09A

Description:

This is a view of the beginning of the ephemeral drain at point 9A.

Dominant Vegetation:

- *Fagus grandifolia*
- *Carpinus caroliniana*
- *Pinus taeda*
- *Quercus alba*



McGehee Engineering

Photographic Log

Client Name:

Site Location:

Fishtrap Mine No. 2 R-3

W.B. Mining, LLC.

Date: 03-05-13

Photo No. P3050464

Point No. 09A

Description:

This is a view of the vegetation at point 9A.

Dominant Vegetation:

Same as above.



McGehee Engineering

Photographic Log

Client Name:

W.B. Mining, LLC.

Site Location:

Fishtrap Mine No. 2 R-3

Date: 03-05-13

Photo No. P3050487

Point No. 010

Description:

This is a view of Porter Road and vegetation at point 10.

Dominant Vegetation:

- *Pinus taeda*
- *Pinus virginiana*
- *Quercus alba*
- *Quercus stellata*



McGehee Engineering

Photographic Log

Client Name:

W.B. Mining, LLC.

Site Location:

Fishtrap Mine No. 2 R-3

Date: 03-05-13

Photo No. P3050488

Point No. 010

Description:

This is a view of Porter Road and vegetation at point 10.

Dominant Vegetation:

Same as above.



McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *03-05-13*

Photo No. *P3050496*
Point No. *011*



Description:
This is a view of the Porter Road and vegetation at point 11.

Dominant Vegetation:

- *Pinus taeda*
- *Pinus virginiana*
- *Quercus alba*
- *Quercus stellata*

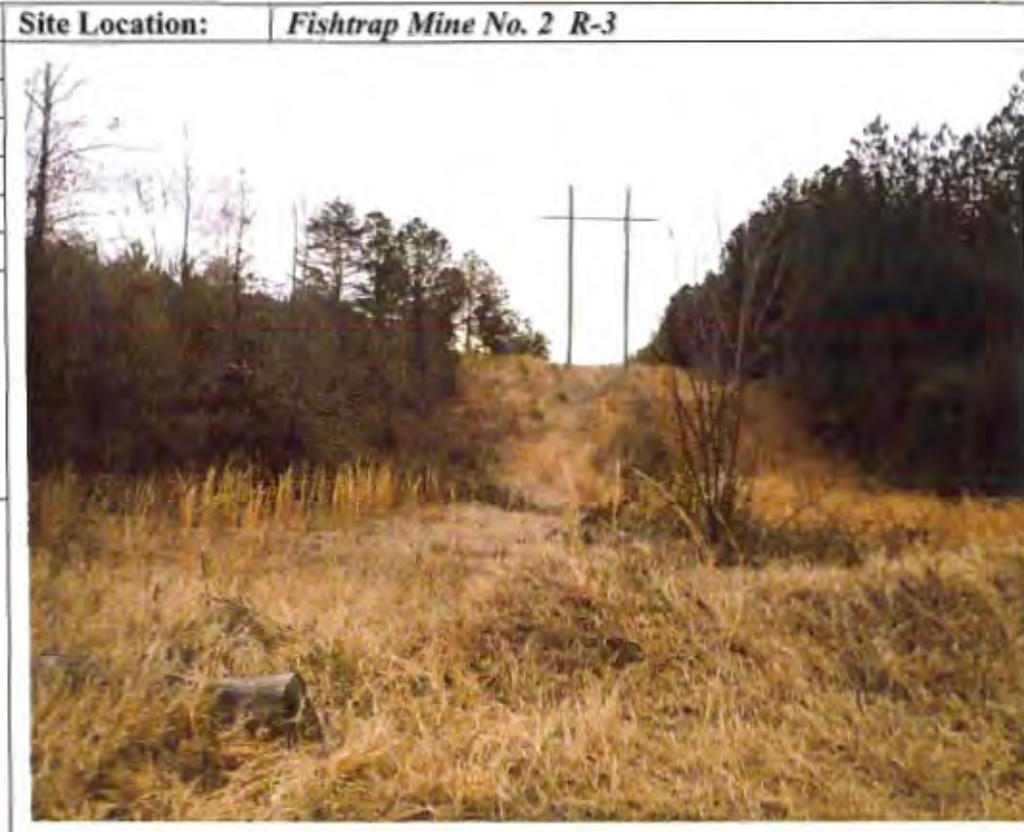
McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *03-05-13*

Photo No. *P3050498*
Point No. *011*



Description:
This is a view of a power line cut intersecting Porter Road at point 11.

Dominant Vegetation:

- *Pinus taeda*
- *Pinus virginiana*
- *Quercus alba*
- *Andropogon virginicus*
- *Ligustrum sinense*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *04-12-13*

Photo No. *P4120099*
Point No. *012*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:
This is a view of the intermittent drain at point 12 below the vegetation

- Dominant Vegetation:**
- *Pinus taeda*
 - *Acer rubrum*
 - *Liriodendron tulipifera*
 - *Lonicera japonica*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *04-12-13*

Photo No. *P4120094*
Point No. *012*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:
This is a view of the vegetation at point 12.

Dominant Vegetation:
Same as above.

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *04-12-13*

Photo No. *P4120079*
Point No. *12A*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:
 This is a view of the wetland at point 12A.

- Dominant Vegetation:**
- *Scirpus cyperinus*
 - *Pinus taeda*
 - *Acer rubrum*
 - *Andropogon virginicus*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *04-12-13*

Photo No. *P4120083*
Point No. *12A*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:
 This is another view of the wetland at point 12A.

Dominant Vegetation:
 Same as above.

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *04-12-13*

Photo No. *P4120086*
Point No. *12B*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:

This is a view of the ephemeral drain at point 12B. This picture was taken within 24 hours of a 1" rain event.

Dominant Vegetation:

- *Pinus taeda*
- *Ligustrum sinense*
- *Rubus betulifolius*
- *Lonicera japonica*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *04-12-13*

Photo No. *P4120088*
Point No. *12B*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:

This is a view of the vegetation along the ephemeral drain at point 12B.

Dominant Vegetation:

Same as above.

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *04-18-13*

Photo No. *P4120086*
Point No. *12C*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:
This is a view of the beginning of the ephemeral drain at point 12C.

Dominant Vegetation:

- *Albizia julibrissin*
- *Ligustrum sinense*
- *Rubus betulifolius*
- *Lonicera japonica*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *04-18-13*

Photo No. *P4120088*
Point No. *12C*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:
This is also view of the ephemeral drain at point 12C.

Dominant Vegetation:
Same as above.

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *03-27-13*

Photo No. *P3270171*
Point No. *015*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:

This is a view of the intermittent drain at point 15.

- Dominant Vegetation:**
- *Pinus taeda*
 - *Liriodendron tulipifera*
 - *Acer rubrum*
 - *Lonicera japonica*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *03-27-13*

Photo No. *P3270174*
Point No. *015*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:

This is a view of the vegetation at point 15.

Dominant Vegetation:

Same as above.

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: 03-27-13

Photo No. P3270175
Point No. 15A

Site Location: *Fishtrap Mine No. 2 R-3*



Description:
 This is a view of the beginning of the intermittent drain at point 15A.

- Dominant Vegetation:**
- *Liquidambar styraciflua*
 - *Lonicera japonica*
 - *Rubus betulifolius*
 - *Pinus taeda*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: 03-27-13

Photo No. 3270178
Point No. 15A

Site Location: *Fishtrap Mine No. 2 R-3*



Description:
 This is a view of the vegetation at point 15A.

Dominant Vegetation:
 Same as above.

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: 04-18-13

Photo No. P4180124
Point No. 016

Site Location: *Fishtrap Mine No. 2 R-3*



Description:

This is a view of the intermittent drain at point 16.

Dominant Vegetation:

- *Liquidambar styraciflua*
- *Ostrya virginiana*
- *Liriodendron tulipifera*
- *Aesculus pavia*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: 04-18-13

Photo No. P4180120
Point No. 016

Site Location: *Fishtrap Mine No. 2 R-3*



Description:

This is a view of the vegetation at point 16.

Dominant Vegetation:

Same as above.

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *04-18-13*

Photo No. *P4180135*
Point No. *16A*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:
This is a view of the wetland at point 16A.

- Dominant Vegetation:**
- *Juncus effusus*
 - *Woodwardia aerolata*
 - *Acer rubrum*
 - *Salix nigra*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *04-18-13*

Photo No. *P4180128*
Point No. *16A*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:

Dominant Vegetation:
Same as above.

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: 04-22-13

Photo No. P4220218
Point No. 17A

Site Location: *Fishtrap Mine No. 2 R-3*



Description:
This is a view of the beginning of the intermittent drain at point 17A.

- Dominant Vegetation:**
- *Liquidambar styraciflua*
 - *Rubus betulifolius*
 - *Ligustrum sinense*
 - *Liriodendron tulipifera*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: 04-22-13

Photo No. P4220215
Point No. 17A

Site Location: *Fishtrap Mine No. 2 R-3*



Description:
This is a view of the vegetation at point 17A.

Dominant Vegetation:
Same as above.

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: 04-22-13

Photo No. P4220224
Point No. 021

Site Location: *Fishtrap Mine No. 2 R-3*



Description:

This is a view of the intermittent drain at point 21.

Dominant Vegetation:

- *Ligustrum sinense*
- *Aesculus pavia*
- *Arundinaria gigantea*
- *Acer rubrum*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: 04-22-13

Photo No. P4220226
Point No. 021

Site Location: *Fishtrap Mine No. 2 R-3*



Description:

This is a view of vegetation at point 21.

Dominant Vegetation:

Same as above.

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *04-23-13*

Photo No. *P4230002*

Point No. *21A*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:

This is a view of the beginning of the intermittent drain at point 21A.

- Dominant Vegetation:**
- *Pinus taeda*
 - *Liriodendron tulipifera*
 - *Acer rubrum*
 - *Rubus betulifolius*

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Date: *04-23-13*

Photo No. *P4230011*

Point No. *21A*

Site Location: *Fishtrap Mine No. 2 R-3*



Description:

This is a view of the vegetation at point 21A.

Dominant Vegetation:

Same as above.

McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Site Location: *Fishtrap Mine No. 2 R-3*

Date: *04-25-13*

Photo No. *P4250001*

Point No. *024*

Description:

This is a view of a dwelling and vegetation at point 24.

Dominant Vegetation:

- *Acer rubrum*
- *Pinus taeda*
- *Ligustrum sinense*
- *Festuca pratensis*



McGehee Engineering

Photographic Log

Client Name:
W.B. Mining, LLC.

Site Location: *Fishtrap Mine No. 2 R-3*

Date: *04-25-13*

Photo No. *P4250002*

Point No. *024*

Description:

This is a view of a dwelling and vegetation at point 24.

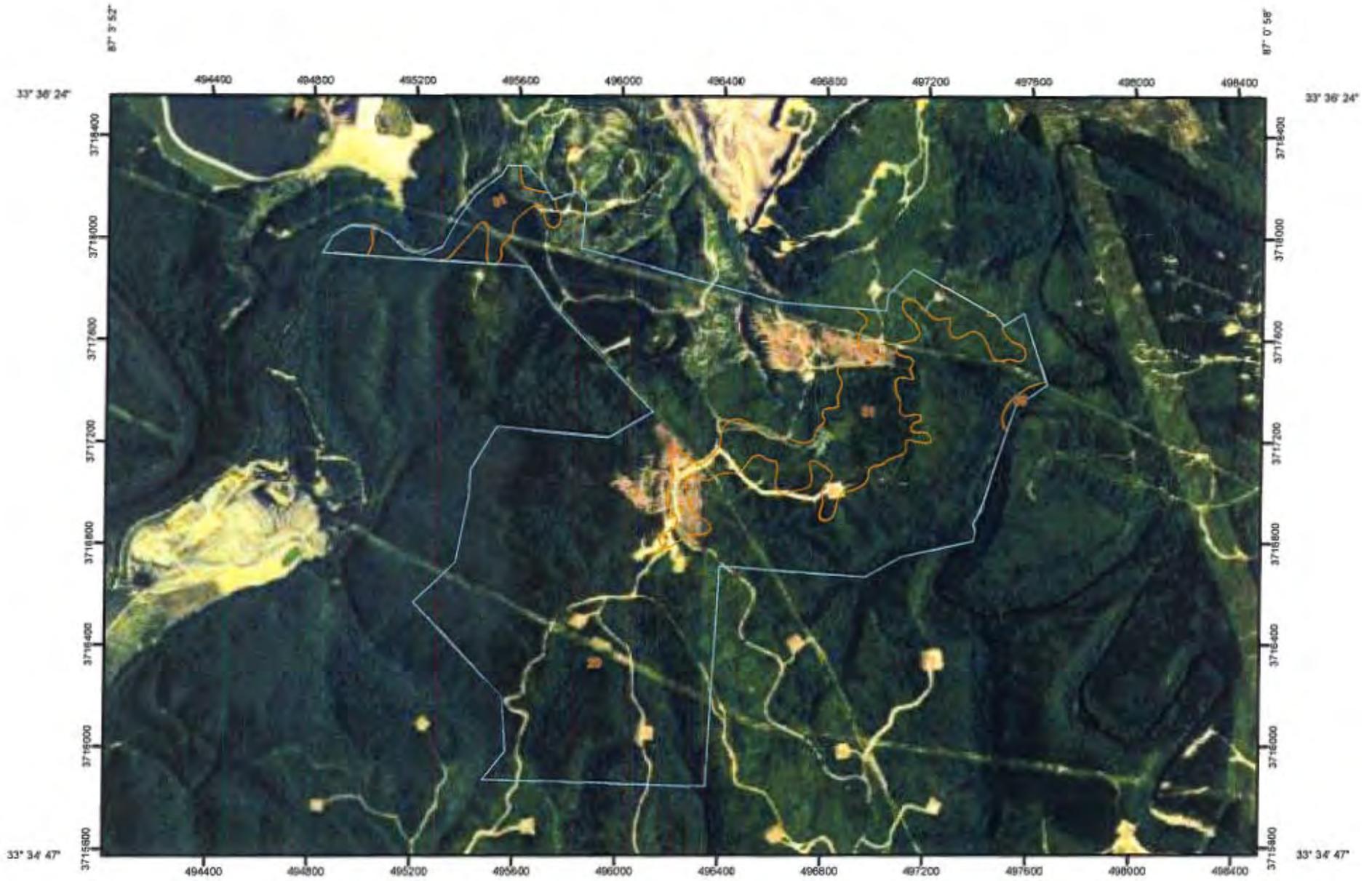
Dominant Vegetation:

Same as above.



Appendix C — Soil Map

Soil Map—Jefferson County, Alabama



Map Scale: 1:21,400 if printed on A size (8.5" x 11") sheet.



MAP LEGEND

| | | |
|---|---|-------------------|
| Area of Interest (AOI) |  | Very Stony Spot |
| Area of Interest (AOI) |  | Wet Spot |
| Soils |  | Other |
| Soil Map Units | Special Line Features | |
| Special Point Features |  | Gully |
|  |  | Short Steep Slope |
|  |  | Other |
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MAP INFORMATION

Map Scale: 1:21,400 if printed on A size (8.5" × 11") sheet.
 The soil surveys that comprise your AOI were mapped at 1:24,000.
 Please rely on the bar scale on each map sheet for accurate map measurements.
 Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 16N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Jefferson County, Alabama
 Survey Area Data: Version 5, Mar 11, 2008

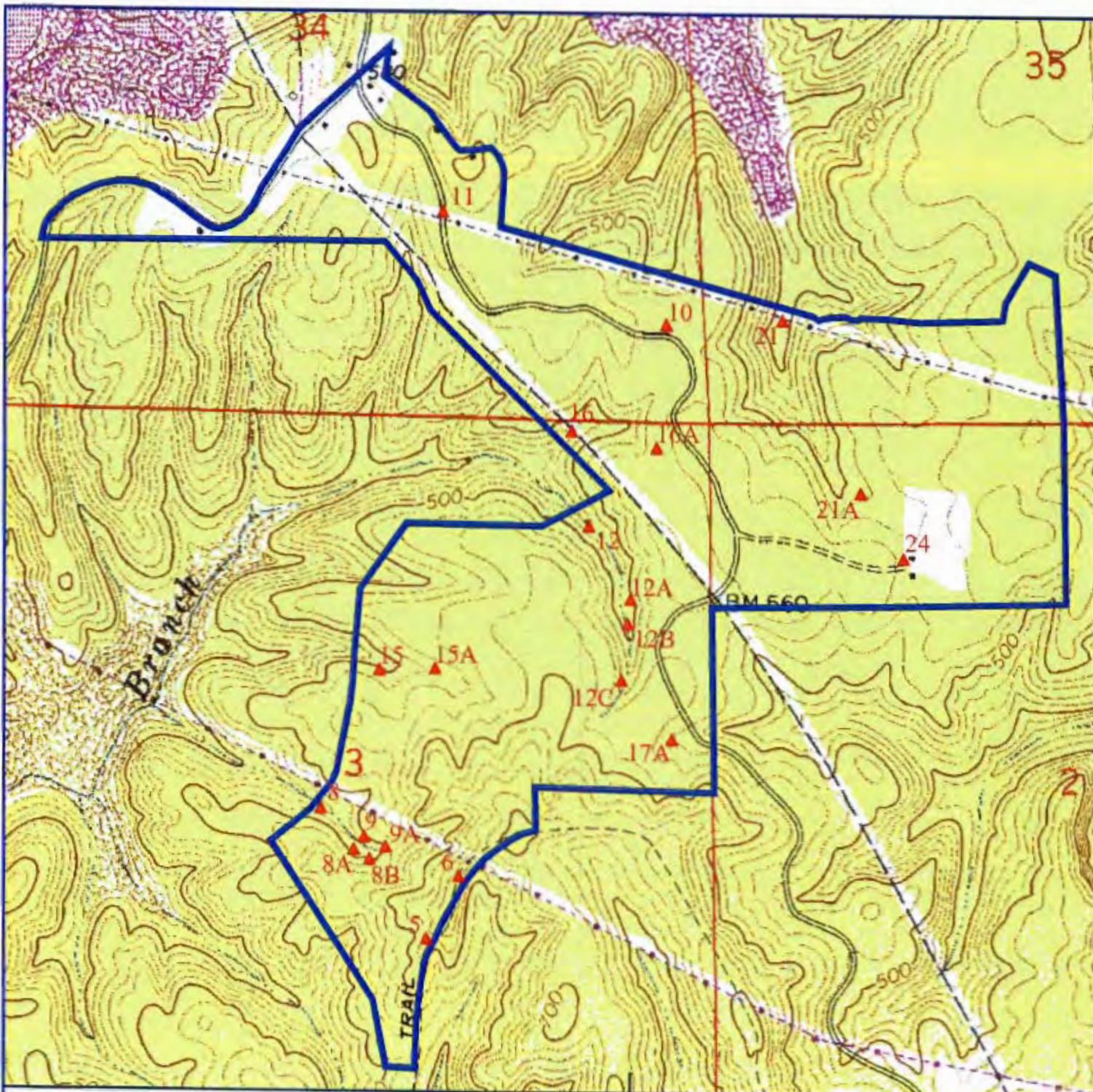
Date(s) aerial images were photographed: 6/23/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

| Jefferson County, Alabama (AL073) | | | |
|------------------------------------|--|--------------|----------------|
| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
| 29 | Montevallo-Nauvoo association, steep | 635.2 | 85.4% |
| 31 | Nauvoo fine sandy loam, 8 to 15 percent slopes | 106.7 | 14.3% |
| 39 | Sullivan-State complex, 0 to 2 percent slopes | 1.9 | 0.3% |
| Totals for Area of Interest | | 743.9 | 100.0% |

Appendix D — Photographic Log Point Map



SCALE: 1" = 1000'
 April 26th, 2013

W.B. MINING, LLC.
 FISHTRAP MINE NO. 2
 (APPROXIMATELY 421 ACRES TOTAL)



PHOTOGRAPHIC LOG POINT MAP

SECTIONS 34 & 35, TOWNSHIP 16 SOUTH, RANGE 5 WEST,
 SECTIONS 2 & 3, TOWNSHIP 17 SOUTH, RANGE 5 WEST,
 ALL IN JEFFERSON COUNTY, ALABAMA
 AS FOUND ON THE SYLVAN SPRINGS, ALABAMA USGS QUAD.

MEC
 mcgohoe engineering corp
 1100 rth for 3411
 Jasper, Alabama 35233-9421
 telephone: (205) 681-0280 fax: 205-772-7121
 email: mec@mcgohoe.com

 REVISION R-3

Latitude: 33°35'39" N
 Longitude: 87°02'27" W

BIOLOGICAL HABITAT ASSESSMENT

WB MINING, LLC

FISHTRAP NO. 2 MINE

REVISION R-3

**Prepared For:
WB MINING, LLC**

**421 acres +/-
Sections 34 & 35, Township 16 South, Range 5 West
Sections 2 & 3, Township 17 South, Range 5 West**

**ALL IN
JEFFERSON COUNTY ALABAMA**

April 26th, 2013

**MCGEHEE
ENGINEERING CORP.
P. O. Box 3431
450 19th Street West
Jasper, Alabama 35502-3431
Telephone: (205) 221-0686
Fax: (205) 221-7721**

**L. Stephen Blankenship
Email: stephenb@mcgehee.org**



BIOLOGICAL HABITAT ASSESSMENT

Prepared For:
WB MINING, LLC

FISHTRAP NO. 2 MINE

REVISION R-3

421 acres +/-
Section 34 & 35 Township 16 South, Range 5 West
Section 2 & 3 Township 17 South, Range 5 West

**ALL IN
JEFFERSON COUNTY ALABAMA**

Prepared by:

MCGEHEE ENGINEERING CORP.

P. O. Box 3431
450 19th Street West
Jasper, Alabama 35502-3431
Telephone: (205) 221-0686
Fax: (205) 221-7721
Email: stephenb@mcgehee.org

Executive Summary

McGehee Engineering Corporation performed a biological habitat assessment survey for habitat and the possible presence of the species federally listed as endangered, threatened, or of concern in March and April of 2013. The study was conducted on the proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project area. The proposed project area consists of approximately 421 acres located in Sections 34 & 35, Township 16 South, and Range 5 West, and Sections 2 & 3, Township 17 South, and Range 5 West all in Jefferson County.

The proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project area consists of upland area, with some intermittent and ephemeral drains, a few small low grade wetlands and a shallow disconnected upland pond. Porter Road, power line and gas line routes, and gas well pad roads allow easy access to most of the proposed project area, with the exception being the eastern area around Village Creek. Village Creek is not in the proposed boundary and or the study area and has a 100 foot buffer between the boundary and the study area. The upland area has been disturbed through road development, gas and power line routes, silviculture and a family dwelling. The upland areas, upon which the roads, power and gas line routes and pond sits, has gently inclined slopes that are vegetated with upland grasses and herbs, pines, various hardwoods and some nonnative invasive species. The steeply inclined slopes of the intermittent and ephemeral drains are vegetated with hardwoods, some pines with some invasive species. The wetlands are primarily vegetated with facultative tree species, with some facultative wetland and obligate tree species, and many obligate and facultative wetland herbaceous species. However, the wetlands are more of an emergent linear type wetland created from the topography alternations or located in the bottom of steep hollows. The proposed project is located in a heavily mined area with current mining west and north of the proposed boundary. The proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project boundary lays either side of Porter Road and southwest of Miller Steam Plant.

The biological habitat assessment survey focused in on T, E & C species listed in Jefferson County as can be found in Table 2.1 along with the Indiana Bat, Bald Eagle, Wood Stork and the Red Cockaded Woodpecker.

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Chapter 1. Proposed Project Review

1.1 Introduction

McGehee Engineering Corporation performed a biological habitat assessment survey for habitat and the possible presence of the species federally listed as endangered, threatened, or of concern on March and April of 2013. The study was conducted on the proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project area. The proposed project area consists of approximately 421 acres located in Sections 34 & 35, Township 16 South, Range 5 West, Sections 2 & 3, Township 17 South, Range 5 West, all on the Sylvan Springs, Alabama U.S.G.S Quadrangle as found in Jefferson County, Alabama. The proposed site location is shown on the attached 2000' scale project area map attachment "B".

The proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project area consists of upland area, some intermittent and ephemeral drains, a few wetlands and a shallow disconnected upland pond. Porter Road, power line and gas line routes, and gas well pad roads allow easy access to most of the proposed project area, with the exception being the eastern area around Village Creek. Village Creek is not in the proposed boundary and or the study area and has a 100 foot buffer between the boundary and the study area. The upland area has been disturbed through road development, gas and power line routes, silvaculture and a family dwelling. The upland areas, upon which the roads, power and gas line routes and pond sits, has gently inclined slopes that are vegetated with upland grasses and herbs, pines, many hardwoods and some nonnative invasive species. The steeply inclined slopes of the intermittent and ephemeral drains are vegetated with hardwoods, some pines with some invasive species. The wetlands are primarily vegetated with facultative tree species, with some facultative wetland and obligate tree species, and many obligate and facultative wetland herbaceous species. The proposed project is located in a heavily mined area with current mining west and north of the proposed boundary. The proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project boundary lays east and west of Porter Road and southwest of Miller Steam Plant.

1.2 Project Location

WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project consists of approximately 421 acres and is located in Sections 34 & 35, Township 16 South, and Range 5 West, and Sections 2 & 3, Township 17 South, and Range 5 West as located in Jefferson County, Alabama on the Sylvan Springs, Alabama U.S.G.S Quadrangle. The proposed site location is shown below on the attached project area map Figure 1. (Appendix “A”)

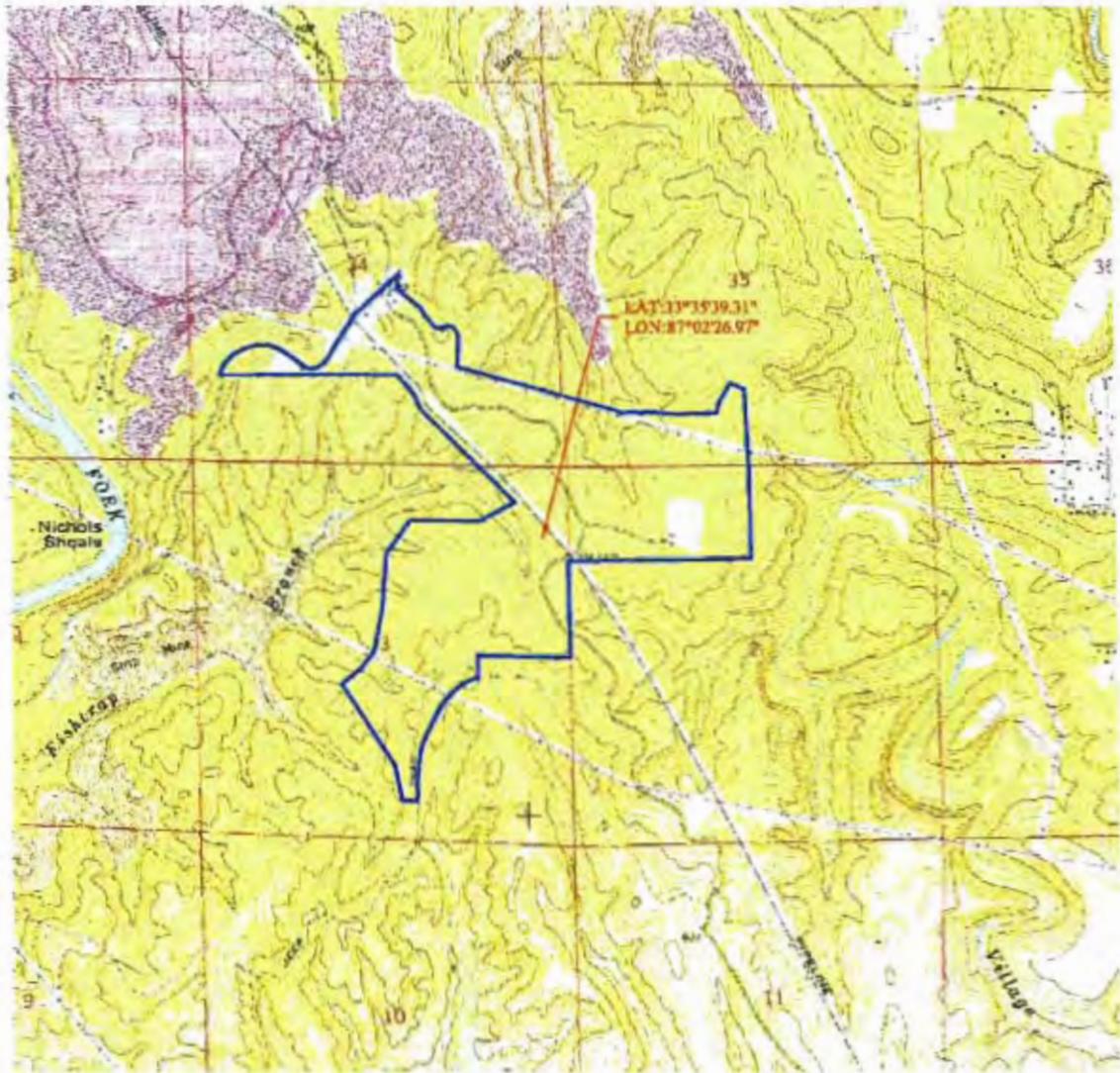


Figure 1. Project Area Map. (not to scale)

Chapter 2. Threatened & Endangered Species

2.1 Species Identification

The U.S. Fish and Wildlife Service (USFWS) threatened, endangered, and candidate species list for Walker County was reviewed by a qualified biologist in order to determine species potentially occurring in the project vicinity (Table 2.1). In addition, the Alabama Natural Heritage Section Database that contains numerous records of sensitive species in Alabama was queried to provide a list of special status species and habitats that may have been documented as occurring within the project area and/or the project vicinity.

Table 2.1. List of Threatened, Endangered and Candidate Species for Jefferson County.

| Common Name <i>Scientific Name</i> | Status | General Habitat |
|--|--------|--|
| Bald eagle <i>Haliaeetus leucocephalus</i> | BGEPA | Large open bodies of water where adequate food exist and human disturbance is limited |
| Wood stork <i>Mycteria americana</i> | E | Freshwater and estuarine wetlands, primarily nesting in cypress or mangrove swamps. Narrow tidal creeks or flooded tidal pools where fish become concentrated |
| Red-cockaded woodpecker <i>Picoides borealis</i> | E | Open, mature and old growth pine ecosystems with minimal hardwood overstory and midstory |
| Indiana Bat <i>Myotis sodalis</i> | E | Lives in a variety of habitats including floodplain and riparian zones for roosting with upland area nearby and caves and sometimes mines for hibernating and mating |
| Gray Bat <i>Myotis grisescens</i> | E | Live in caves year-round; Winter hibernation in deep vertical caves, Summer roost in caves along rivers |
| Plicate rocksnail <i>Leptoxis plicate</i> | E | Shallow gravel and cobble shoals in the flowing waters of the bottom 1/3 (20 miles) of the Locust Fork of the Black Warrior River in Jefferson County |
| Cylindrical Lioplax <i>Lioplax cyclostomaformis</i> | E | Isolated mud deposits found under large rocks in the rapid flowing sections of stream and river shoals |
| Round rocksnail <i>Leptoxis ampla</i> | T | Cobble, gravel, or other hard substrates in the strong currents of riffles and shoals of high water quality streams and rivers |
| Fine-lined pocketbook mussel <i>Hamiota (=Lampsilis) altilis</i> | T | Large rivers to small creek habitats swift flowing riffles and gravel-cobble substrates |
| Ovate clubshell mussel <i>Pleurobema perovatum</i> | E | Sand and gravel bottom free flowing streams and rivers with good water quality and stable stream channels |
| Orange-nacre mucket mussel <i>Hamiota (=Lampsilis) perovalis</i> | T | Large rivers to small creek habitats swift flowing riffles and gravel-cobble substrates |
| Southern clubshell <i>Pleurobema decisum</i> | E | Sand and gravel bottom free flowing streams and rivers with good water quality and stable stream channels |
| Alabama moccasinshell <i>Medionidus acutissimus</i> | T | Small to mid-sized streams with sandy-gravel and gravel substrates with moderate flow |
| Triangular kidneyshell mussel <i>Ptychobranhus greenii</i> | E | Sand and gravel bottom free drainage courses and rivers with good water quality and stable stream channels |

| | | |
|--|---|--|
| Southern pigtoe <i>Pleurobema georgianum</i> | E | Sand and gravel bottom riffles of free flowing streams and rivers with good water quality and stable stream channels |
| Southern acornshell mussel <i>Epioblasma othcaloogensis</i> | E | Streams or rivers with fine gravel bottoms with moderate to strong currents and some shallows |
| Upland combshell mussel <i>Epioblasma metastrata</i> | E | Stable gravel and sand riffles of high water quality streams |
| Dark pigtoe mussel <i>Pluerobema furvum</i> | E | Sand/gravel/cobble shoals and rapids in small rivers and large streams; usually highly oxygenated water with moderate flow |
| Cahaba shiner <i>Notropis cahabae</i> | E | Quiet shallow, 1.6 feet or less, shoals below swift riffle areas and downstream of boulders in sandy patches or gravel beds in the main channel of the Cahaba river |
| Goldline darter <i>Percina aurolineata</i> | T | Moderate to swift current, and water depths 2 feet or more, with gravel or sand substrates interspersed among cobble and small boulders in big and little Cahaba rivers |
| Watercress darter <i>Etheostoma nuchale</i> | E | Slow moving spring fed tributaries to Black Warrior River at mid-depths in dense aquatic vegetation with dense populations of aquatic insect larvae and microcrustaceans. Associated with watercress. |
| Vermilion darter <i>Etheostoma chermocki</i> | E | Swift currents in streams of alternating riffles and pools. Riffles with small limestone rubble and shale cobble. Clean bedrock, sometimes with sand, occurs in pools. Associated with water willow in larger riffles and shoals. Near springs, in swift runs and chutes adjacent to watercress and pondweed all in Turkey Creek |
| Rush darter <i>Etheostoma phytophilum</i> | C | Lives in the reeds and rushes on the edges of small freshwater streams. It needs clear, cool, unpolluted water to survive. |
| Flattened musk turtle <i>Sternotherus depressus</i> | T | Free-flowing creek or small river with pools about 1 m deep or more, with rocks, abundant mollusks, low silt load and deposits, moderate temperature rock-bottomed to sandy substrate |
| Gentian Pinkroot <i>Spigelia gentianoides</i> Var. <i>alabamensis</i> | E | Glades, open, treeless area surrounded by woodlands, over rock formations of Ketona Dolomite. Solis high in calcium & magnesium and low in phosphorus & potassium and pH ranges from 7.4 to 7.6. Soils will also be rock exposed to very thin and prone to drought. |
| Georgia Rock-cress <i>Arabis georgiana</i> | C | Rocky (limestone, shale, granite-gneiss) bluffs and slopes along watercourses; also along sandy, eroding riverbanks |
| Mohr's Barbara's buttons <i>Marshallia mohrii</i> | T | Moist sandy clay soils, along shale bed streams, road side right-of-ways, seasonally wet low swales around natural springs and seeps |
| Georgia Aster <i>Symphotrichum georgianum</i> | C | Upland prairie grassland communities to thinned oak pine woodlands. Most remaining populations survive adjacent to roads, utility rights of way, and other openings |
| Tennessee Yellow-eyed Grass <i>Xyris tennesseensis</i> | E | Gravelly open wet woodlands, with calcareous rock near the surface, seep margins and wet meadows along spring-fed headwater streams |

Key to codes on list:

- E – Endangered
- T - Threatened
- BGEPA - Bald & Golden Eagle
- C - Candidate Species
- (P) - Possible Occurrence

Chapter 3. Methodology

3.1 Methodology

The subject property was surveyed by McGehee Engineering Corp. (MEC) for the occurrence and potential for occurrence for species protected or listed by the U.S. Fish and Wildlife Service (USFWS), based on known habitat preferences and geographical distribution. The principal surveyor for this site was Biologist Wes Lamon of McGehee Engineering Corp.

The study site was surveyed by completely traversing the site in a zigzag pattern at approximately 20 meter intervals. Survey conditions are described in Table 3.1. Prior to performing the field reconnaissance, MEC performed a review of aerial photographs of the project site and a pedestrian survey was conducted by MEC biologist to identify vegetation communities and land uses, perform general habitat assessment for plants and animals; assess the potential for nesting or roosting activity by birds and/or bats within the general study area. Focused surveys for sensitive aquatic species were not performed because waters were determined to be intermittent and lack sufficient year round flow; however, the potential for habitat for these species was assessed during the survey.

Table 3.1. Survey Conditions

Date: March 5th, 2013

| Temperature (°F) | Wind (MPH) | Sky Cover % |
|------------------|------------|-------------|
| 39° | 5-12 | 50% |

Date: March 27th, 2013

| Temperature (°F) | Wind (MPH) | Sky Cover % |
|------------------|------------|-------------|
| 55° | 0-4 | 0% |

Date: April 12th, 2013

| Temperature (°F) | Wind (MPH) | Sky Cover % |
|------------------|------------|-------------|
| 70° | 1-5 | 0% |

Date: April 18th, 2013

| Temperature (°F) | Wind (MPH) | Sky Cover % |
|------------------|------------|-------------|
| 70° | 7-12 | 70% |

Date: April 22nd, 2013

| Temperature (°F) | Wind (MPH) | Sky Cover % |
|------------------|------------|-------------|
| 75° | 3-10 | 30% |

Date: April 23rd, 2013

| Temperature (°F) | Wind (MPH) | Sky Cover % |
|------------------|------------|-------------|
| 64° | 6-12 | 80% |

Date: April 25th, 2013

| Temperature (°F) | Wind (MPH) | Sky Cover % |
|------------------|------------|-------------|
| 77° | 2-6 | 20% |

As part of the field reconnaissance, MEC also conducted a delineation of potentially jurisdictional wetlands and waters of the U.S. as it relates to Section 404 of the Clean Water Act in accordance to the 1987 "*Corps of Engineers Wetlands Delineation Manual*": Wetlands Research Program Technical Report Y-87-1. Additional Data sources other than mentioned within the report include the following:

| | |
|---------------------------------|--|
| USGS Quadrangle Map | Sylvan Springs, Alabama USGS Quad Revised 1982 |
| National Wetlands Inventory Map | Sylvan Springs, Alabama NWI Quad developed 1981 |
| SCS Soil Survey | Jefferson County NRCS Web Survey |
| Aerial Photos | Google Image Dated: 09-04-2010 |
| Plant Database | United States Department of Agriculture / Natural Resources Conservation Services Web Database |
| FEMA Flood Map | Federal Emergency Management DFIRM Database FIRMettes Jefferson County |

Chapter 4. Environmental Setting

4.1 General Habitat Description

The proposed WB Mining, LLC – Fishtrap No. 2 Revision R-3 project area is located in Sylvan Springs, AL and lays east and west of Porter Road and southwest of Miller Steam Plant. Portions of the property consist of existing road beds, power and gas line routes, areas of recent silvaculture and a family dwelling. Uses of the area have been natural gas extraction, power transmission and silvaculture. The proposed project area is disturbed in upland areas and undisturbed in drain areas. These areas are vegetated with pines, hardwoods, native and nonnative invasive herbs, shrubs and vines. The project site of approximately 421 acres mostly consists of the following vegetation species:

Tree Stratum

American Beech (*Fagus grandifolia*)
American Hornbeam (*Carpinus caroliniana*)
Bear Oak (*Quercus ilicifolia*)
Black Cherry (*Prunus serotina*)
Black Gum (*Nyssa sylvatica*)
Black Oak (*Quercus velutina*)
Black Willow (*Salix nigra*)
Chestnut Oak (*Quercus prinus*)
Eastern Hophornbeam (*Ostrya virginiana*)
Eastern Red Cedar (*Juniperus virginiana*)
Eastern Redbud (*Cercis canadensis*)
Loblolly Pine (*Pinus taeda*)
Mockernut Hickory (*Carya tomentosa*)
Post Oak (*Quercus stellata*)
Red Maple (*Acer rubrum*)
Sassafras (*Sassafras albidum*)
Scarlet Oak (*Quercus coccinea*)
Shagbark Hickory (*Carya ovata*)
Slippery Elm (*Ulmus rubra*)
Sourwood (*Oxydendrum arboreum*)
Southern Red Oak (*Quercus falcata*)
Sugar Maple (*Acer saccharum*)
Sweet Gum (*Liquidambar styraciflua*)
Sycamore (*Platanus occidentalis*)
Turkey Oak (*Quercus laevis*)
Umbrella Magnolia (*Magnolia tripetala*)
Virginia Pine (*Pinus virginiana*)
Water Oak (*Quercus nigra*)
White Oak (*Quercus alba*)
Yellow Poplar (*Liriodendron tulipifera*)

Sapling Stratum

American Beech (*Fagus grandifolia*)
American Holly (*Ilex opaca*)
American Hornbeam (*Carpinus caroliniana*)
Bear Oak (*Quercus ilicifolia*)
Black Cherry (*Prunus serotina*)
Black Oak (*Quercus velutina*)
Black Willow (*Salix nigra*)
Chestnut Oak (*Quercus prinus*)
Eastern Hophornbeam (*Ostrya virginiana*)
Eastern Red Cedar (*Juniperus virginiana*)
Eastern Redbud (*Cercis canadensis*)
Flowering Dogwood (*Cornus florida*)
Loblolly Pine (*Pinus taeda*)
Mockernut Hickory (*Carya tomentosa*)
Post Oak (*Quercus stellata*)
Red Maple (*Acer rubrum*)
Sassafras (*Sassafras albidum*)
Scarlet Oak (*Quercus coccinea*)
Shagbark Hickory (*Carya ovata*)
Slippery Elm (*Ulmus rubra*)
Sourwood (*Oxydendrum arboreum*)
Southern Red Oak (*Quercus falcata*)
Sugar Maple (*Acer saccharum*)
Sweet Gum (*Liquidambar styraciflua*)
Sycamore (*Platanus occidentalis*)
Turkey Oak (*Quercus laevis*)
Umbrella Magnolia (*Magnolia tripetala*)
Virginia Pine (*Pinus virginiana*)
Water Oak (*Quercus nigra*)
White Oak (*Quercus alba*)
Yellow Poplar (*Liriodendron tulipifera*)

Shrub Stratum

American Beech (*Fagus grandifolia*)
American Holly (*Ilex opaca*)
American Hornbeam (*Carpinus caroliniana*)
Bear Oak (*Quercus ilicifolia*)
Black Cherry (*Prunus serotina*)
Black Oak (*Quercus velutina*)
Black Willow (*Salix nigra*)
Chestnut Oak (*Quercus prinus*)
Chinese Privet (*Ligustrum sinense*)
Eastern Hophornbeam (*Ostrya virginiana*)
Eastern Red Cedar (*Juniperus virginiana*)
Eastern Redbud (*Cercis canadensis*)

Flowering Dogwood (*Cornus florida*)
Loblolly Pine (*Pinus taeda*)
Mimosa (*Albizia julibrissin*)
Mockernut Hickory (*Carya tomentosa*)
Oakleaf Hydrangea (*Hydrangea quercifolia*)
Post Oak (*Quercus stellata*)
Red Maple (*Acer rubrum*)
Sassafras (*Sassafras albidum*)
Scarlet Oak (*Quercus coccinea*)
Smooth Sumac (*Rhus glabra*)
Sourwood (*Oxydendrum arboreum*)
Southern Red Oak (*Quercus falcata*)
Sugar Maple (*Acer saccharum*)
Sweet Gum (*Liquidambar styraciflua*)
Tree of Heaven (*Ailanthus altissima*)
Turkey Oak (*Quercus laevis*)
Umbrella Magnolia (*Magnolia tripetala*)
Virginia Pine (*Pinus virginiana*)
Water Oak (*Quercus nigra*)
White Oak (*Quercus alba*)
Yellow Poplar (*Liriodendron tulipifera*)

Herbaceous Stratum

Annual Ragweed (*Ambrosia artemisiifolia*)
Big Bluestem (*Andropogon gerardii*)
Blackberry (*Rubus betulifolius*)
Blackeyed Susan (*Rudbeckia Hirta*)
Blue Phlox (*Phlox divaricata*)
Bluestem Broom sedge (*Andropogon virginicus*)
Bonset (*Brickellia eupatorioides*)
Canada Golden Rod (*Solidago altissima*)
Christmas Fern (*Polystichum acrostichoides*)
Common Milkweed (*Asclepias syriaca*)
Coreopsis (*Coreopsis auriculata*)
Cut Leaf Blackberry (*Rubus laciniatus*)
Daisy Fleabane *Rigeron philidelphicus*)
Downy Phlox (*Phlox pilosa*)
Dwarf Cinquefoil (*Potentilla canadensis*)
Early Spiderwort (*Tradescantia virginiana*)
Fire Pink or Scarlet Catchfly (*Silene virginica*)
Foxtail Meadow grass (*Alopecurus pratensis*)
Golden Ragwort (*Sencio aureus*)
Hawkweed (*Rigia biflora*)
Horseweed (*Conyza canadensis*)
Indian grass (*Sorghastrum nutans*)
May Apple (*Podophyllum peltatum*)
Meadow Fescue (*Festuca pratensis*)

Mountain or Pink Phlox (*Phlox ovata*)
Muhly Grass (*Muhlenbergia schreberi*)
Nepalese Brown Top (*Microstegium vimineum*) (*Eulalia viminea*)
Netted Chain fern (*Woodwardia aerolata*)
Northern Dewberry (*Rubus flagellaris*)
Oxalis (*Oxalis violaceae*)
Poverty Grass (*Danthonia spichata*)
Shooting Star (*Dodecatheon meadia*)
Soft Rush (*Juncus effusus*)
Solomon's Seal (*Polygonatum biflorum*)
Southern Dewberry (*Rubus trivialis*)
Southern Maiden Hair fern (*Adiantum capillus-veneris*)
Tall Fescue (*Festuca arundinacea*)
Tall Spiderwort (*Tradescantia ohioensis*)
Tree of Heaven (*Ailanthus altissima*)
Yankee weed (*Eupatorium compostifolium*)

Woody Vine Stratum

Eastern Poison Ivy (*Toxicodendron radicans*)
Honeysuckle (*Lonicera x bella*)
Japanese Honeysuckle (*Lonicera japonica*)
Muscadine (*Vitis rotundifolia*)
Roundleaf Green Briar (*Smilax rotundifolia*)
Saw Briar (*Smilax bona-nox*)
Virginia Creeper (*Parthenocissus quinquefolia*)
Yellow Jessamine or Carolina Jasmine (*Gelsemium sempervirens*)

The proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project area consists of upland area, many intermittent and ephemeral drains, 4 wetlands and a shallow disconnected upland pond. Porter Road, power line and gas line routes, and gas well pad roads allow easy access to most of the proposed project area, with the exception being the eastern area around Village Creek. Village Creek is not is the proposed boundary. The upland area has been disturbed through road development, gas and power line routes, silvaculture and a family dwelling. The upland areas, upon which the roads, power and gas line routes and pond sits, has gently inclined slopes that are vegetated with upland grasses and herbs, pines, many hardwoods and some nonnative invasive species. The steeply inclined slopes of the intermittent and ephemeral drains are vegetated with hardwoods, some pines, many native herbs and wildflowers and some invasive species. The wetlands are primarily vegetated with facultative tree species, with some facultative wetland and obligate tree species, and many obligate and facultative wetland herbaceous species. Most of Porter road and the gas well roads are vegetated with 10 to 15 year old Loblolly pine (*Pinus taeda*) and slightly younger Virginia Pines (*P. virginiana*). There is also a thin growth of young hardwoods, including White oak (*Quercus alba*), Chestnut oak (*Q. prinus*), Sweetgums (*Liquidambar styraciflua*), Sourwood (*Oxydendrum arboreum*) and Yellow Poplar (*Liriodendron tulipifera*), and a few nonnative invasive plants including Chinese Privet (*Ligustrum sinense*), Mimosa (*Albizia julibrissin*), Tree of Heaven (*Ailanthus altissima*) and Japanese Honeysuckle (*Lonicera japonica*). The drains within the proposed boundary are steep and natural. The vegetation is predominantly hardwoods including the above mentioned hardwoods along with American Beech (*Fagus grandifolia*), Flowering Dogwood (*Cornus florida*), American Hophornbeam (*Ostrya virginiana*), American Hornbeam (*Carpinus caroliniana*), Red Maple (*Acer rubrum*), Sugar Maple (*A. saccharum*), Umbrella Magnolia (*Magnolia tripetala*) and Bear Oak (*Quercus ilicifolia*). The shrub story is thick with Oakleaf Hydrangea (*Hydrangea quercifolia*), Red Buckeye (*Aesculus pavia*) and Bottlebrush Buckeye (*A. Parviflora*). There are also many native wildflowers, herbs and ferns along these banks including Christmas fern (*Polystichum acrostichoides*), May Apple (*Podophyllum peltatum*), Fire Pink (*Silene virginica*), Blue Phlox (*Phlox divaricata*), Golden Ragwort (*Senecio aureus*), Shooting Star (*Dodecatheon meadia*), Solomon's Seal (*Polygonatum biflorum*), Coreopsis (*Coreopsis auriculata*), Daisy Fleabane (*Rigeron philidelphicus*), Hawkweed (*Rigeron biflora*), Mountain Phlox (*Phlox ovata*), Early Spiderwort (*Tradescantia virginiana*) and Tall Spiderwort (*T. ohioensis*). Wetlands were found within the proposed boundary; the first is at 12A and is the creation of a shallow pond. The second is at 16A and is at the headwaters of a drain. Many intermittent and ephemeral streams were located within the proposed boundary and are listed in detail in a report to ACOE. The proposed project is located in a heavily mined area with current mining west and north of the proposed boundary. The proposed WB Mining, LLC – Fishtrap No. 2 Mine -- Revision R-3 project boundary lays east and west of Porter Road and southwest of Miller Steam Plant.

There are two primary soil groups within the project. The first is Montevallo-Nauvoo association, steep that are well drained. The other is Nauvoo fine sandy loam, 8 to 15 percent slopes which are well drained. All soil types are partially hydric. The soils identified in the field matched the USDA Soil data profile therefore a more detailed description of the soil as well as the soil maps can be found in Appendix C.

Chapter 5. Habitat Study Results

5.1 Terrestrial and Terrestrial Habitat Species

- a. **Bald eagle** (*Haliaeetus leucocephalus*) - There was no potential nesting habitat for the Bald Eagles. There were no large trees near open water on or near this site.
- b. **Red-cockaded woodpecker** (*Picoides borealis*) - There were no isolated mature pines of the age and required size that would harbor the Red-cockaded woodpecker on or adjacent to the project site.
- c. **Wood stork** (*Mycteria americana*) - There was no potential nesting habitat for the Wood stork. There were no large trees near open water on or near this site.
- d. **Indiana Bat** (*Myotis sodalis*) – Habitat for this species does not exist. There is no year round flowing water on this site for a riparian roosting area and no caves of the appropriate conditions are nearby. The nearest possible summer roost habitats are outside the proposed boundary along Village Creek, and Locust Fork.
- e. **Gray Bat** (*Myotis grisescens*) – Habitat for this species does not exist. There are no caves located within or adjacent to the proposed project boundary.
- f. **Georgia Aster** (*Symphotrichum georgianum*) – Possible habitat for this species does exist in that it is found in dry openings that have often times been disturbed. Likely habitat would be road sides, utility right-of-ways, and openings similar to original prairie communities. It is highly unlikely that the Georgia Aster exists in this area due to the historical presence of hardwood forests and continuous ongoing disturbance. These areas were explored and the aster was not found.
- g. **Mohr's Barbara's buttons** (*Marshallia mohrii*) – Habitat for this species exists around 16A. The seasonal wetland has a high percentage of nonnative invasive species and lacks the typically preferred soil for this species to survive. The area was explored and this species was not present.
- h. **Gentian Pinkroot** (*Spigelia gentianoides* var. *alabamensis*) – Habitat for this species does not exist. There are no glades located within the project boundary.
- i. **Georgia Rock-cress** (*Arabis georgiana*) -- Habitat for this species does not exist within the proposed boundary. There are no sandstone outcrops.

- j. Tennessee Yellow-eyed grass (*Xyris tennesseensis*)** – Habitat for this species does not exist. There are no groundwater seeps in the area with calcareous rock or required soils for this species to survive.

5.1.1 Summary

Possible habitat was found for Mohr's Barbara's button and Georgia Aster. These possible habitats were explored and the species were not present. No habitat was found for the remainder of the above listed, threatened and endangered species. No evidence was found or observed for the presence or possible presence of these listed species.

5.2 Aquatic and Aquatic Habitat Species

- a. Flattened musk turtle (*Sternotherus depressus*)** – Habitat for this species does not exist. Onsite water has inconsistent flow and is of insufficient depth and incorrect substrate for this species to exist. Habitat exists outside the proposed boundary in Locust Fork and parts of Village Creek.
- b. Fine-lined pocketbook mussel (*Hamiota (=Lampsilis) altilis*)** – Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. Habitat exists outside the proposed boundary in Locust Fork and parts of Village Creek.
- c. Ovate clubshell mussel (*Pleurobema perovatum*)** – Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. Habitat exists outside the proposed boundary in Locust Fork and parts of Village Creek.
- d. Triangular kidneyshell mussel (*Ptychobranthus greenii*)** – Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. Habitat exists outside the proposed boundary in Locust Fork and parts of Village Creek.
- e. Southern clubshell mussel (*Pleurobema decisum*)** – Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. Habitat exists outside the proposed boundary in Locust Fork and parts of Village Creek.
- f. Orange-nacre mucket mussel (*Hamiota (=Lampsilis) perovalis*)** -- Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. Habitat exists outside the proposed boundary in Locust Fork and parts of Village Creek.

- g. **Alabama moccasinshell mussel** (*Medionidus acutissimus*) -- Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. Habitat exists outside the proposed boundary in Locust Fork and parts of Village Creek.
- h. **Upland combshell mussel** (*Epioblasma metastrata*) - Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. Habitat exists outside the proposed boundary in Locust Fork and parts of Village Creek.
- i. **Dark pigtoe mussel** (*Pleurobema perovatum*) -- Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. Habitat exists outside the proposed boundary in Locust Fork and parts of Village Creek.
- j. **Southern acornshell Mussel** (*Epioblasma othcaloogensis*) -- Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. Habitat exists outside the proposed boundary in Locust Fork and parts of Village Creek.
- k. **Southern pigtoe mussel** (*Pleurobema georgianum*) - Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. Habitat exists outside the proposed boundary in Locust Fork and parts of Village Creek.
- l. **Goldline darter** (*Percina aurolineata*) -- Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. Also this species is only found in the cobble and small boulder area of the big and little Cahaba River.
- m. **Cahaba shiner** (*Notropis cahabae*) -- Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. Also this species is only found in the main channel of the Cahaba River.
- n. **Watercress darter** (*Etheostoma nuchale*) -- Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. Also they are associated with spring fed tributaries to the Black Warrior River.
- o. **Vermilion darter** (*Etheostoma chermocki*) -- Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. Also they are associated with springs, specifically in Turkey Creek.
- p. **Plicate rocksnail** (*Leptoxis plicate*) - Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. They are not suitable to support mussel species. No mussels were found during study. Habitat exists outside the proposed boundary in Locust Fork and Village Creek.

- q. **Cylindrical Lioplax** (*Lioplax cyclostomaformis*) – Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. They are not suitable to support mussel species. No mussels were found during study. Habitat exists outside the proposed boundary in Locust Fork and Village Creek.
- r. **Round Rocksnail** (*Leptoxis ampla*) - Habitat for this species does not exist. Onsite water has inconsistent flow for this species to exist. They are not suitable to support mussel species. No mussels were found during study. Habitat exists outside the proposed boundary in Locust Fork and Village Creek.

5.2.1 Summary

No habitat was found for the above listed, threatened and endangered species within the project boundary. No evidence was found or observed for the presence or possible presence of these listed species within the project boundary. There is no continuous flowing water on this site. The nearest potential habitat of Village Creek and the Locust Fork were not explored.

5.3 Wetlands and Streams

5.3.1 Wetlands

The project area was evaluated according to the 1987 “*Corps of Engineers Wetlands Delineation Manual*”. Small linear type emergent Wetlands were identified at points 12A and 16A.

5.3.2 Streams

The project area was evaluated for jurisdictional waters using the North Carolina Method for determining intermittent and perennial streams. Some intermittent and ephemeral streams were identified within the proposed boundary. There were no Perennial Streams identified within the project area. A detailed determination is discussed the wetland delineation report sent to ACOE.

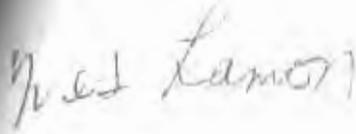
NOTE: The below photographic log and photographic log point map represents the points within the habitat study area. Any numerical anomalies occur because those points are represented in maps used for other regulatory agencies.

Chapter 6. References

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June 2012
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Chapter 7. Signatures of Preparers

Prepared by:



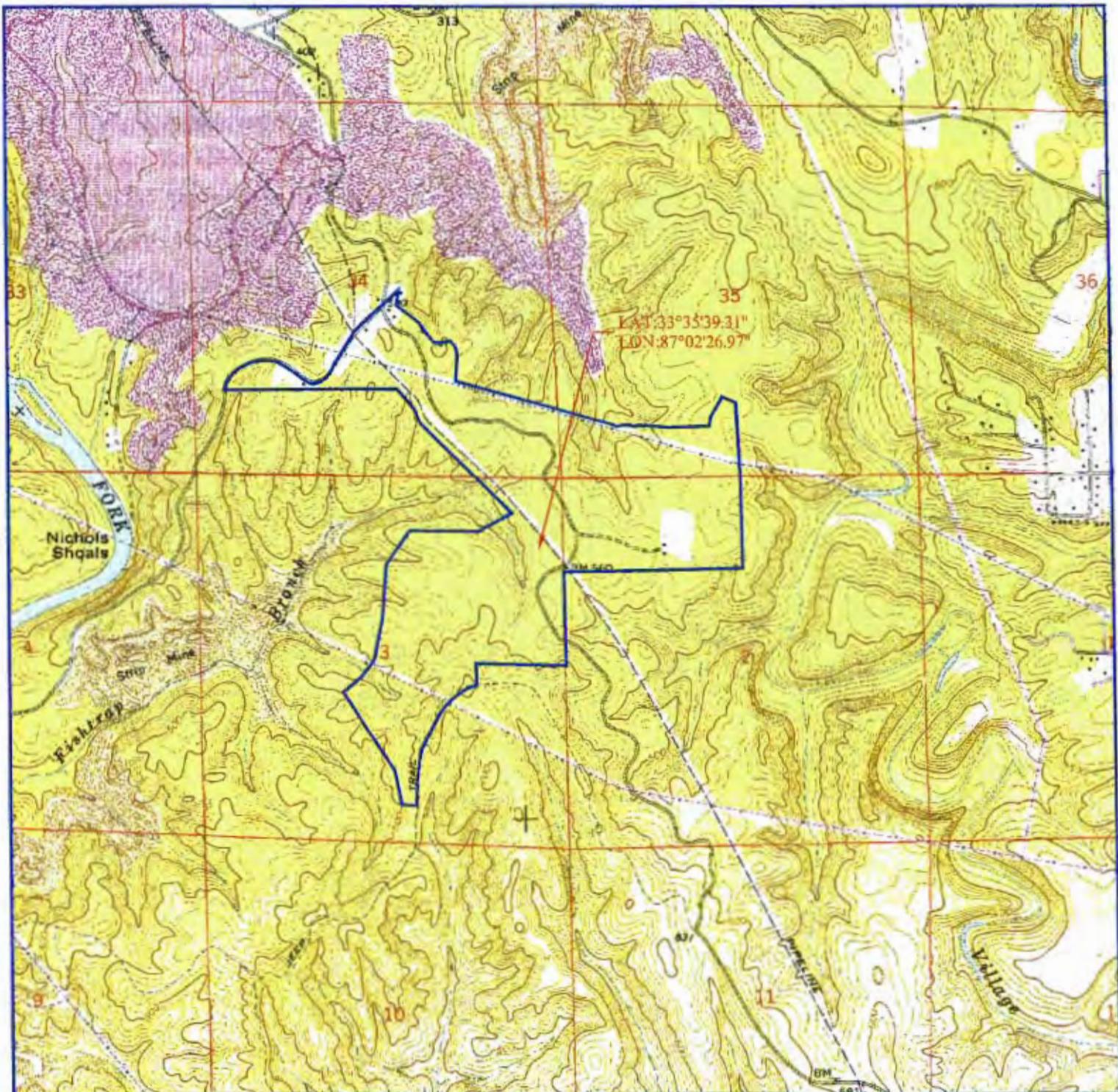
Wes Lamon
Biologist

Reviewed by:



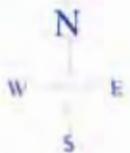
L. Stephen Blankenship
*Environmental Manager /
Wetland Specialist*

Appendix A — Project Area Map



SCALE: 1" = 2000'
April 26th, 2013

W.B. MINING, LLC.
FISHTRAP MINE NO. 2
(APPROXIMATELY 421 ACRES TOTAL)



PROJECT AREA MAP

SECTIONS 34 & 35, TOWNSHIP 16 SOUTH, RANGE 5 WEST,
SECTIONS 2 & 3, TOWNSHIP 17 SOUTH, RANGE 5 WEST,
ALL IN JEFFERSON COUNTY, ALABAMA
AS FOUND ON THE SYLVAN SPRINGS, ALABAMA USGS QUAD.

MEC
mcgehee engineering corp
post office box 3431
jefferson, alabama 35892-3431
telephone: (205) 221-0386 fax: 221-7721
email: staff@mcgehea.com

 REVISION R-3

Latitude: 33°35'39" N
Longitude: 87°02'27" W

Appendix B — Photographic Log

| McGehee Engineering | | Photographic Log | |
|---|--|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: <i>03-05-13</i> | |  | |
| Photo No. <i>P3050444</i> | | | |
| Point No. <i>005</i> | | | |
| Description: This is a view of an upland road at point 5. | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Pinus taeda</i> • <i>Pinus virginiana</i> • <i>Andropogon virginicus</i> • <i>Festuca pratensis</i> | | | |

| McGehee Engineering | | Photographic Log | |
|---|--|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: <i>03-05-13</i> | |  | |
| Photo No. <i>P3050446</i> | | | |
| Point No. <i>004</i> | | | |
| Description: This is a view of the vegetation at point 5. | | | |
| Dominant Vegetation: | | | |
| Same as above. | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| <i>W.B. Mining, LLC.</i> | |  | |
| Date: | <i>03-05-13</i> | | |
| Photo No. | <i>P3050450</i> | | |
| Point No. | <i>06</i> | | |
| Description: | | | |
| This is a view an upland road at point 6. | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Pinus taeda</i> • <i>Pinus virginiana</i> • <i>Andropogon virginicus</i> • <i>Festuca pratensis</i> | | | |

| McGehee Engineering | | Photographic Log | |
|--|-----------------|--|--------------------------------|
| Client Name: | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| <i>W.B. Mining, LLC.</i> | |  | |
| Date: | <i>03-05-13</i> | | |
| Photo No. | <i>P3050455</i> | | |
| Point No. | <i>06</i> | | |
| Description: | | | |
| This is a view of the vegetation at point 6. | | | |
| Dominant Vegetation: | | | |
| Same as above. | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>03-05-13</i> |  | |
| Photo No. | <i>P3050474</i> | | |
| Point No. | <i>008</i> | | |
| Description: | | | |
| This is a view of the intermittent drain at point 8. | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Pinus taeda</i> • <i>Fagus grandifolia</i> • <i>Quercus alba</i> • <i>Liquidambar styraciflua</i> | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>03-05-13</i> |  | |
| Photo No. | <i>P30504</i> | | |
| Point No. | <i>008</i> | | |
| Description: | | | |
| This is a downstream view of the intermittent drain at point 8. | | | |
| Dominant Vegetation: | | | |
| Same as above. | | | |

| McGehee Engineering | | Photographic Log | |
|--|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: <i>03-05-13</i> | |  | |
| Photo No. | <i>P3050470</i> | | |
| Point No. | <i>08A</i> | | |
| Description: This is a view of the ephemeral drain at point 8A. This is the location of the Int/Eph break. | | | |
| Dominant Vegetation: <ul style="list-style-type: none"> • <i>Fagus grandifolia</i> • <i>Pinus taeda</i> • <i>Quercus alba</i> • <i>Quercus prinus</i> | | | |

| McGehee Engineering | | Photographic Log | |
|--|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: <i>03-05-13</i> | |  | |
| Photo No. | <i>P3050471</i> | | |
| Point No. | <i>08A</i> | | |
| Description: This is a view of the vegetation at point 8A. | | | |
| Dominant Vegetation: Same as above. | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>03-08-13</i> |  | |
| Photo No. | <i>P3050486</i> | | |
| Point No. | <i>08B</i> | | |
| Description: | | | |
| This is a view of the beginning of the ephemeral drain at point 8B. | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Pinus taeda</i> • <i>Fagus grandifolia</i> • <i>Pinus virginiana</i> • <i>Ostrya virginiana</i> | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>03-08-13</i> |  | |
| Photo No. | <i>P3050485</i> | | |
| Point No. | <i>08B</i> | | |
| Description: | | | |
| This is a view of the vegetation at point 8B. | | | |
| Dominant Vegetation: | | | |
| Same as above. | | | |

| McGehee Engineering | | Photographic Log | |
|--|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>03-05-13</i> |  | |
| Photo No. | <i>P3050466</i> | | |
| Point No. | <i>009</i> | | |
| Description: | | | |
| This is a view of the ephemeral drain at point 9. | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Fagus grandifolia</i> • <i>Quercus alba</i> • <i>Quercus prinus</i> • <i>Pinus taeda</i> | | | |

| McGehee Engineering | | Photographic Log | |
|--|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>03-05-13</i> |  | |
| Photo No. | <i>P3050468</i> | | |
| Point No. | <i>009</i> | | |
| Description: | | | |
| This is a view of the vegetation at point 9. | | | |
| Dominant Vegetation: | | | |
| Same as above. | | | |

| | | | | |
|--|-----------------|--|--------------------------------|--|
| McGehee Engineering | | Photographic Log | | |
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> | |
| Date: 03-05-13 | |  | | |
| Photo No. | <i>P3050463</i> | | | |
| Point No. | <i>09A</i> | | | |
| Description: | | | | |
| This is a view of the beginning of the ephemeral drain at point 9A. | | | | |
| Dominant Vegetation: | | | | |
| <ul style="list-style-type: none"> • <i>Fagus grandifolia</i> • <i>Carpinus caroliniana</i> • <i>Pinus taeda</i> • <i>Quercus alba</i> | | | | |

| | | | | |
|---|-----------------|--|--------------------------------|--|
| McGehee Engineering | | Photographic Log | | |
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> | |
| Date: 03-05-13 | |  | | |
| Photo No. | <i>P3050464</i> | | | |
| Point No. | <i>09A</i> | | | |
| Description: | | | | |
| This is a view of the vegetation at point 9A. | | | | |
| Dominant Vegetation: | | | | |
| Same as above. | | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>03-05-13</i> |  | |
| Photo No. | <i>P3050487</i> | | |
| Point No. | <i>010</i> | | |
| Description: | | | |
| This is a view of Porter Road and vegetation at point 10. | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Pinus taeda</i> • <i>Pinus virginiana</i> • <i>Quercus alba</i> • <i>Quercus stellata</i> | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>03-05-13</i> |  | |
| Photo No. | <i>P3050488</i> | | |
| Point No. | <i>010</i> | | |
| Description: | | | |
| This is a view of Porter Road and vegetation at point 10. | | | |
| Dominant Vegetation: | | | |
| Same as above. | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>03-05-13</i> |  | |
| Photo No. | <i>P3050496</i> | | |
| Point No. | <i>011</i> | | |
| Description: This is a view of the Porter Road and vegetation at point 11. | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Pinus taeda</i> • <i>Pinus virginiana</i> • <i>Quercus alba</i> • <i>Quercus stellata</i> | | | |

| McGehee Engineering | | Photographic Log | |
|--|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>03-05-13</i> |  | |
| Photo No. | <i>P3050498</i> | | |
| Point No. | <i>011</i> | | |
| Description: This is a view of a power line cut intersecting Porter Road at point 11. | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Pinus taeda</i> • <i>Pinus virginiana</i> • <i>Quercus alba</i> • <i>Andropogon virginicus</i> • <i>Ligustrum sinense</i> | | | |

| McGehee Engineering | | Photographic Log | |
|--|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>04-12-13</i> |  | |
| Photo No. | <i>P4120099</i> | | |
| Point No. | <i>012</i> | | |
| Description: This is a view of the intermittent drain at point 12 below the vegetation | | | |
| Dominant Vegetation: <ul style="list-style-type: none"> • <i>Pinus taeda</i> • <i>Acer rubrum</i> • <i>Liriodendron tulipifera</i> • <i>Lonicera japonica</i> | | | |

| McGehee Engineering | | Photographic Log | |
|--|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>04-12-13</i> |  | |
| Photo No. | <i>P4120094</i> | | |
| Point No. | <i>012</i> | | |
| Description: This is a view of the vegetation at point 12. | | | |
| Dominant Vegetation: Same as above. | | | |

| McGehee Engineering | | Photographic Log | |
|--|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>04-12-13</i> |  | |
| Photo No. | <i>P4120079</i> | | |
| Point No. | <i>12A</i> | | |
| Description: | | | |
| This is a view of the wetland at point 12A. | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Scirpus cyperinus</i> • <i>Pinus taeda</i> • <i>Acer rubrum</i> • <i>Andropogon virginicus</i> | | | |

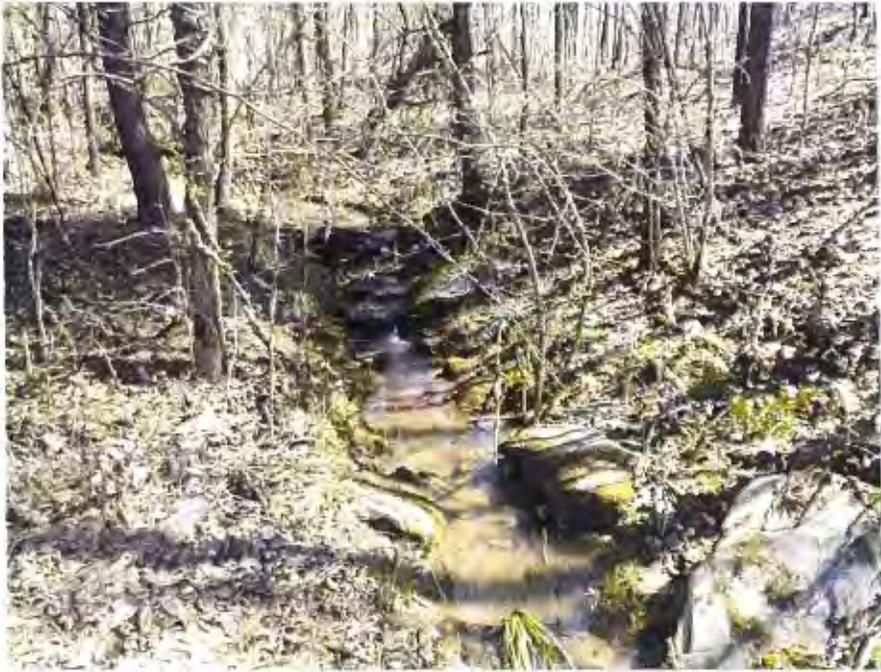
| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>04-12-13</i> |  | |
| Photo No. | <i>P4120083</i> | | |
| Point No. | <i>12A</i> | | |
| Description: | | | |
| This is another view of the wetland at point 12A. | | | |
| Dominant Vegetation: | | | |
| Same as above. | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>04-12-13</i> |  | |
| Photo No. | <i>P4120086</i> | | |
| Point No. | <i>12B</i> | | |
| Description: | | | |
| <p>This is a view of the ephemeral drain at point 12B. This picture was taken within 24 hours of a 1" rain event.</p> | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Pinus taeda</i> • <i>Ligustrum sinense</i> • <i>Rubus betulifolius</i> • <i>Lonicera japonica</i> | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>04-12-13</i> |  | |
| Photo No. | <i>P4120088</i> | | |
| Point No. | <i>12B</i> | | |
| Description: | | | |
| <p>This is a view of the vegetation along the ephemeral drain at point 12B.</p> | | | |
| Dominant Vegetation: | | | |
| <p>Same as above.</p> | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| <i>W.B. Mining, LLC.</i> | |  | |
| Date: | <i>04-18-13</i> | | |
| Photo No. | <i>P4120086</i> | | |
| Point No. | <i>12C</i> | | |
| Description: | | | |
| <p>This is a view of the beginning of the ephemeral drain at point 12C.</p> | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Albizia julibrissin</i> • <i>Ligustrum sinense</i> • <i>Rubus betulifolius</i> • <i>Lonicera japonica</i> | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| <i>W.B. Mining, LLC.</i> | |  | |
| Date: | <i>04-18-13</i> | | |
| Photo No. | <i>P4120088</i> | | |
| Point No. | <i>12C</i> | | |
| Description: | | | |
| <p>This is also view of the ephemeral drain at point 12C.</p> | | | |
| Dominant Vegetation: | | | |
| <p>Same as above.</p> | | | |

| McGehee Engineering | | Photographic Log | |
|--|-----------------|--|--------------------------------|
| Client Name: | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| <i>W.B. Mining, LLC.</i> | |  | |
| Date: | <i>03-27-13</i> | | |
| Photo No. | <i>P3270171</i> | | |
| Point No. | <i>015</i> | | |
| Description: | | | |
| This is a view of the intermittent drain at point 15. | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Pinus taeda</i> • <i>Liriodendron tulipifera</i> • <i>Acer rubrum</i> • <i>Lonicera japonica</i> | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| <i>W.B. Mining, LLC.</i> | |  | |
| Date: | <i>03-27-13</i> | | |
| Photo No. | <i>P3270174</i> | | |
| Point No. | <i>015</i> | | |
| Description: | | | |
| This is a view of the vegetation at point 15. | | | |
| Dominant Vegetation: | | | |
| Same as above. | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| <i>W.B. Mining, LLC.</i> | |  | |
| Date: | <i>03-27-13</i> | | |
| Photo No. | <i>P3270175</i> | | |
| Point No. | <i>15A</i> | | |
| Description: | | | |
| <p>This is a view of the beginning of the intermittent drain at point 15A.</p> | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Liquidambar styraciflua</i> • <i>Lonicera japonica</i> • <i>Rubus betulifolius</i> • <i>Pinus taeda</i> | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| <i>W.B. Mining, LLC.</i> | |  | |
| Date: | <i>03-27-13</i> | | |
| Photo No. | <i>3270178</i> | | |
| Point No. | <i>15A</i> | | |
| Description: | | | |
| <p>This is a view of the vegetation at point 15A.</p> | | | |
| Dominant Vegetation: | | | |
| <p>Same as above.</p> | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>04-18-13</i> |  | |
| Photo No. | <i>P4180124</i> | | |
| Point No. | <i>016</i> | | |
| Description: | | | |
| This is a view of the intermittent drain at point 16. | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Liquidambar styraciflua</i> • <i>Ostrya virginiana</i> • <i>Liriodendron tulipifera</i> • <i>Aesculus pavia</i> | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>04-18-13</i> |  | |
| Photo No. | <i>P4180120</i> | | |
| Point No. | <i>016</i> | | |
| Description: | | | |
| This is a view of the vegetation at point 16. | | | |
| Dominant Vegetation: | | | |
| Same as above. | | | |

| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| <i>W.B. Mining, LLC.</i> | |  | |
| Date: | <i>04-18-13</i> | | |
| Photo No. | <i>P4180135</i> | | |
| Point No. | <i>16A</i> | | |
| Description: | | | |
| This is a view of the wetland at point 16A. | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Juncus effusus</i> • <i>Woodwardia aerolata</i> • <i>Acer rubrum</i> • <i>Salix nigra</i> | | | |

| McGehee Engineering | | Photographic Log | |
|-----------------------------|-----------------|--|--------------------------------|
| Client Name: | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| <i>W.B. Mining, LLC.</i> | |  | |
| Date: | <i>04-18-13</i> | | |
| Photo No. | <i>P4180128</i> | | |
| Point No. | <i>16A</i> | | |
| Description: | | | |
| Dominant Vegetation: | | | |
| Same as above. | | | |

| McGehee Engineering | | Photographic Log | | |
|---|-----------------|--|--------------------------------|--|
| Client Name: | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> | |
| <i>W.B. Mining, LLC.</i> | |  | | |
| Date: | <i>04-22-13</i> | | | |
| Photo No. | <i>P4220218</i> | | | |
| Point No. | <i>17A</i> | | | |
| Description: | | | | |
| <p>This is a view of the beginning of the intermittent drain at point 17A.</p> | | | | |
| Dominant Vegetation: | | | | |
| <ul style="list-style-type: none"> • <i>Liquidambar styraciflua</i> • <i>Rubus betulifolius</i> • <i>Ligustrum sinense</i> • <i>Liriodendron tulipifera</i> | | | | |

| McGehee Engineering | | Photographic Log | | |
|---|-----------------|--|--------------------------------|--|
| Client Name: | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> | |
| <i>W.B. Mining, LLC.</i> | |  | | |
| Date: | <i>04-22-13</i> | | | |
| Photo No. | <i>P4220215</i> | | | |
| Point No. | <i>17A</i> | | | |
| Description: | | | | |
| <p>This is a view of the vegetation at point 17A.</p> | | | | |
| Dominant Vegetation: | | | | |
| <p>Same as above.</p> | | | | |

| McGehee Engineering | | Photographic Log | |
|--|--|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: <i>04-22-13</i> | |  | |
| Photo No. <i>P4220224</i> | | | |
| Point No. <i>021</i> | | | |
| Description: | | | |
| This is a view of the intermittent drain at point 21. | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Ligustrum sinense</i> • <i>Aesculus pavia</i> • <i>Arundinaria gigantea</i> • <i>Acer rubrum</i> | | | |

| McGehee Engineering | | Photographic Log | |
|---|--|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: <i>04-22-13</i> | |  | |
| Photo No. <i>P4220226</i> | | | |
| Point No. <i>021</i> | | | |
| Description: | | | |
| This is a view of vegetation at point 21. | | | |
| Dominant Vegetation: | | | |
| Same as above. | | | |

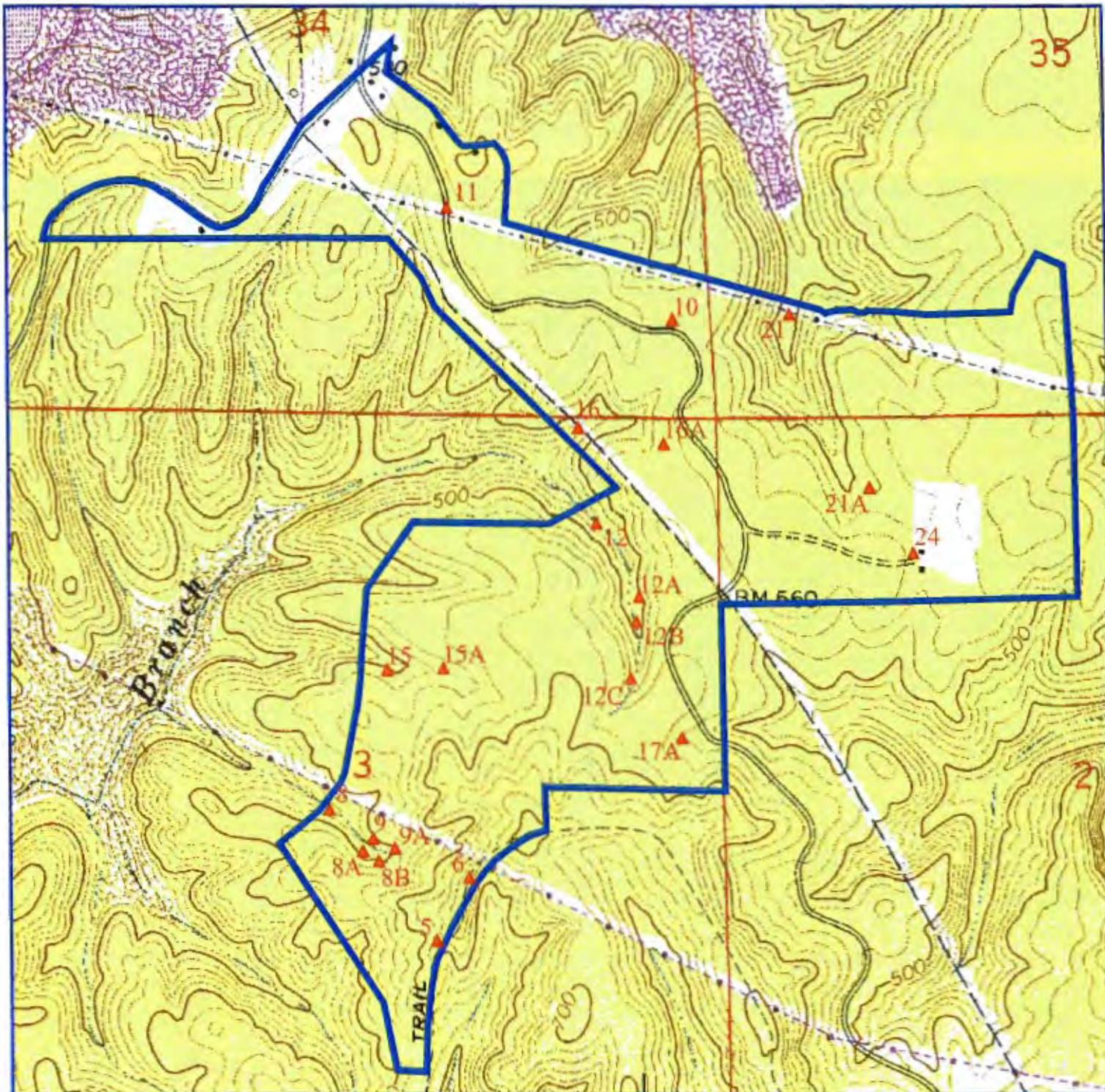
| McGehee Engineering | | Photographic Log | |
|---|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>04-23-13</i> |  | |
| Photo No. | <i>P4230002</i> | | |
| Point No. | <i>21A</i> | | |
| Description: | | | |
| This is a view of the beginning of the intermittent drain at point 21A. | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Pinus taeda</i> • <i>Liriodendron tulipifera</i> • <i>Acer rubrum</i> • <i>Rubus betulifolius</i> | | | |

| McGehee Engineering | | Photographic Log | |
|--|-----------------|--|--------------------------------|
| Client Name: <i>W.B. Mining, LLC.</i> | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| Date: | <i>04-23-13</i> |  | |
| Photo No. | <i>P4230011</i> | | |
| Point No. | <i>21A</i> | | |
| Description: | | | |
| This is a view of the vegetation at point 21A. | | | |
| Dominant Vegetation: | | | |
| Same as above. | | | |

| McGehee Engineering | | Photographic Log | |
|--|-----------------|--|--------------------------------|
| Client Name: | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| <i>W.B. Mining, LLC.</i> | |  | |
| Date: | <i>04-25-13</i> | | |
| Photo No. | <i>P4250001</i> | | |
| Point No. | <i>024</i> | | |
| Description: | | | |
| This is a view of a dwelling and vegetation at point 24. | | | |
| Dominant Vegetation: | | | |
| <ul style="list-style-type: none"> • <i>Acer rubrum</i> • <i>Pinus taeda</i> • <i>Ligustrum sinense</i> • <i>Festuca pratensis</i> | | | |

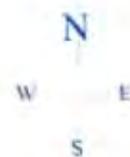
| McGehee Engineering | | Photographic Log | |
|--|-----------------|--|--------------------------------|
| Client Name: | | Site Location: | <i>Fishtrap Mine No. 2 R-3</i> |
| <i>W.B. Mining, LLC.</i> | |  | |
| Date: | <i>04-25-13</i> | | |
| Photo No. | <i>P4250002</i> | | |
| Point No. | <i>024</i> | | |
| Description: | | | |
| This is a view of a dwelling and vegetation at point 24. | | | |
| Dominant Vegetation: | | | |
| Same as above. | | | |

Appendix C — Photo Log Point Location Map



SCALE: 1" = 1000'
April 26th, 2013

W.B. MINING, LLC.
FISHTRAP MINE NO. 2
(APPROXIMATELY 421 ACRES TOTAL)



PHOTOGRAPHIC LOG POINT MAP

SECTIONS 34 & 35, TOWNSHIP 16 SOUTH, RANGE 5 WEST,
SECTIONS 2 & 3, TOWNSHIP 17 SOUTH, RANGE 5 WEST,
ALL IN JEFFERSON COUNTY, ALABAMA
AS FOUND ON THE SYLVAN SPRINGS, ALABAMA USGS QUAD.

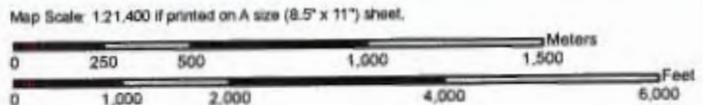
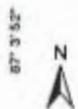
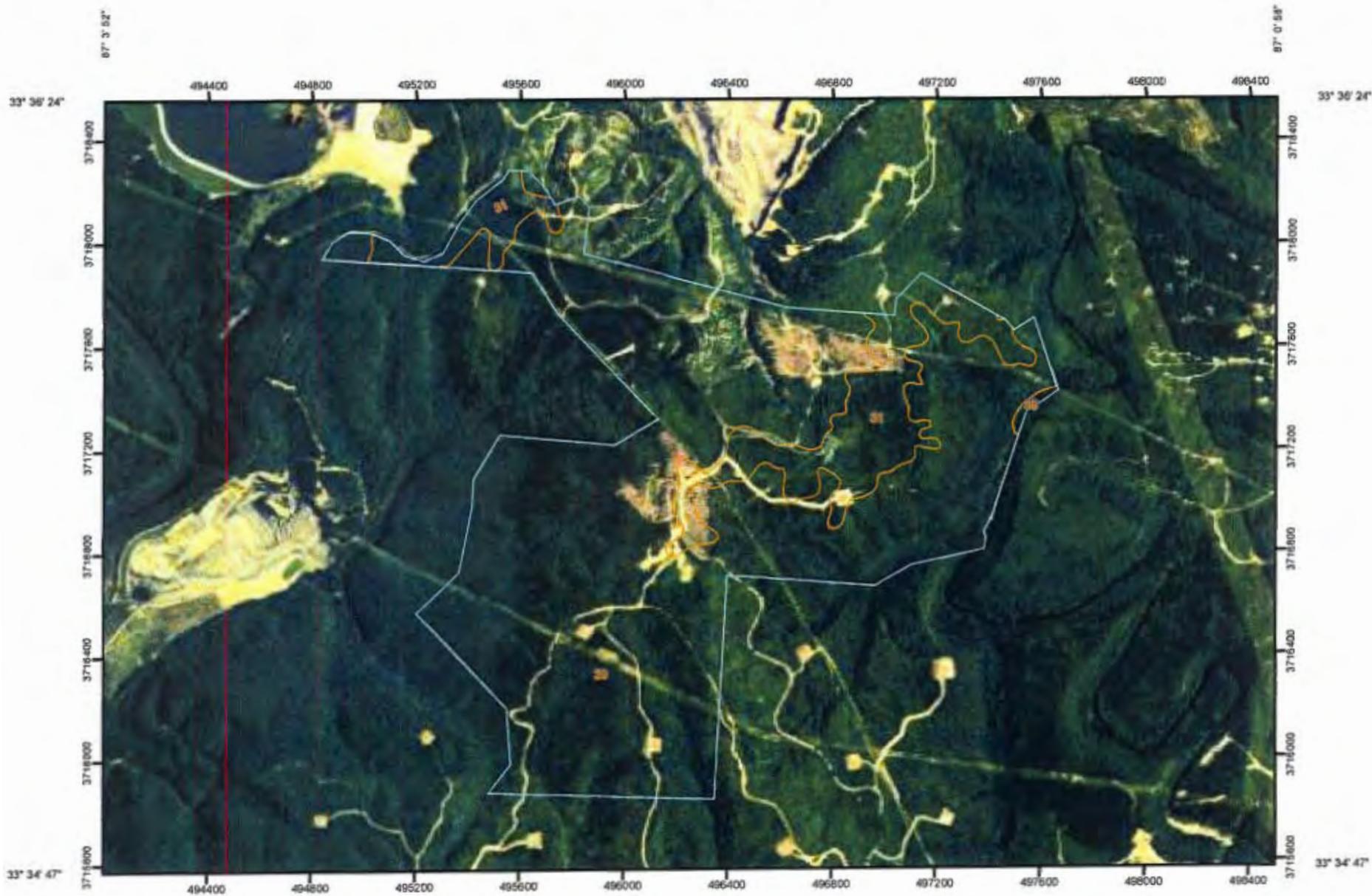


 REVISION R-3

Latitude: 33°35'39" N
Longitude: 87°02'27" W

Appendix D — Soil Map

Soil Map—Jefferson County, Alabama



MAP LEGEND

| | | |
|---|---|-------------------|
| Area of Interest (AOI) |  | Very Stony Spot |
| Area of Interest (AOI) |  | Wet Spot |
| Soils |  | Other |
| Soil Map Units | | |
| Special Point Features | Special Line Features | |
|  |  | Gully |
|  |  | Short Steep Slope |
|  |  | Other |
|  | | |
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MAP INFORMATION

Map Scale: 1:21,400 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 16N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Jefferson County, Alabama
 Survey Area Data: Version 5, Mar 11, 2008

Date(s) aerial images were photographed: 6/23/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

| Jefferson County, Alabama (AL073) | | | |
|------------------------------------|--|--------------|----------------|
| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
| 29 | Montevallo-Nauvoo association, steep | 635.2 | 85.4% |
| 31 | Nauvoo fine sandy loam, 8 to 15 percent slopes | 106.7 | 14.3% |
| 39 | Sullivan-State complex, 0 to 2 percent slopes | 1.9 | 0.3% |
| Totals for Area of Interest | | 743.9 | 100.0% |