



**United States Department of Agriculture  
Rural Development**

October 13, 2010

**SUBJECT:** Finding of No Significant Impact (FONSI)  
BlueFire Fulton Renewable Energy LLC  
City of Fulton, Mississippi

DESCRIPTION OF ACTION

The U.S. Department of Agriculture, Rural Business-Cooperative Service (RBS) has received an application from BlueFire Fulton Renewable Energy, LLC to guarantee a loan under the Biorefinery Assistance Program. The purpose of the loan would be to construct and operate a cellulosic ethanol biorefinery. The proposal, the Fulton Project, would produce up to 19 million gallons of fuel grade ethanol per year at its peak capacity. The facility would be located in Fulton, Itawamba County, Mississippi. The environmental analysis of this proposed action is contained in an Environmental Assessment (EA) prepared by the Department of Energy (DOE) for a similar loan guarantee to BlueFire Fulton Renewable Energy, LLC; RBS has adopted that EA for this proposed action.

The facility would utilize advanced cellulose-to-ethanol conversion technologies to convert woody biomass to ethanol. The facility would require 427,680 dry tons of biomass per year. The biomass would be obtained from unmerchantable timber, logging residues and/or merchantable timber. Timberland comprises approximately 63.3 percent of the total land within a 75-mile radius of the Fulton Project site. Land ownership of the timberlands is predominantly private, 89.8 percent, with 8.0 percent Federal land and 2.3 percent State lands. The total excess biomass supply of 2,165,421 tons per year is greater than 3.3 times the 651,638 green tons per year required by the Fulton Project. The site's easy access to barge and rail would also allow for procurement of feedstock from outside the 75-mile radius. Other biomass from agricultural (residues) or urban (cellulosic municipal solid waste) sources may also be utilized as the volumes and infrastructure for these sources become more economical. These would provide supplemental biomass for long term operations.

The anticipated 18 million gallons of ethanol per year output is expected to directly displace 18 million gallons of gasoline per year, thereby contributing to the overall reduction of CO<sub>2</sub> emissions in the U.S. By use of biomass instead of fossil fuels the facility is estimated to off-set up to 306,288 tons per year of anthropogenic CO<sub>2</sub>.

1400 Independence Ave, S.W. Washington, DC 20250-0700  
Web: <http://www.rurdev.usda.gov>

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Washington, DC 20250-9410 or call (800)795-3272 (voice) or (202) 720-6382 (TDD).

The Proposal would impact approximately 13.5 acres of wetlands on-site. Approximately 12 acres of wetlands would be cleared and approximately 1.48 acres of wetlands would be filled. A permit application with the U.S. Army Corps of Engineers for these impacts and proposed compensatory mitigation is currently under review. The mitigation would consist of restoration of 7.5 acres of former bottomland hardwood forested wetlands located in Monroe County, Mississippi. This proposal would have moderate, adverse effects to wetlands/waterways, and minor adverse effects to air quality, water quality, and local flora and fauna. All of the environmental impacts identified in the EA are anticipated to be short-term and minor except for the consumption of wood and water which are anticipated to be long-term but minor. None of the impacts poses a significant adverse effect to the natural or human environment.

#### BASIS FOR FINDINGS

As required by the National Environmental Policy Act and agency regulations, RBS has reviewed and adopted the DOE EA that assessed the potential environmental effects of the proposal. After consideration of the applicant's proposal, the EA and DOE FONSI, and comments from Federal and State environmental regulatory and natural resource agencies, the agency has determined that the proposal does not constitute a major Federal Action significantly affecting the quality of the natural or human environment. Therefore, RBS will not prepare an Environmental Impact Statement for this proposal.


The Applicant must obtain and comply with all appropriate Federal, State, and local permits and approvals required for construction and operation of the biorefinery, and implement DOE's Mitigation Action Plan (MAP) in order to minimize potential impacts and this requirement shall be incorporated and enforceable through the Agency's Conditional Commitment for Guarantee.

#### FINDINGS

The attached environmental assessment for the subject proposal has been prepared and reviewed by the appropriate Rural Business-Cooperative Service officials. After reviewing the assessment and the supporting materials attached to it, I find that the subject proposal will not significantly affect the quality of the human environment. Therefore, the preparation of an environmental impact statement is not necessary.

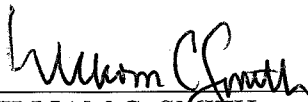
I also find that the assessment properly documents the proposal's status of compliance with the environmental laws and requirements listed therein.

Prepared by:

  
JULIET C. BOCHICCHIO  
Environmental Protection Specialist  
Program Support Staff

*October 13, 2010*  
Date

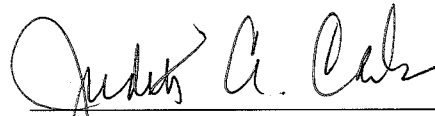
Recommended:

  
\_\_\_\_\_  
WILLIAM C. SMITH  
Director, Energy Division  
Rural Business-Cooperative Service

11/22/10  
Date

  
12/6/10

Approved:

  
\_\_\_\_\_  
JUDITH A. CANALES  
Administrator  
Rural Business-Cooperative Service

12/7/10  
Date

DEPARTMENT OF HOMELAND SECURITY  
 FEDERAL EMERGENCY MANAGEMENT AGENCY  
**STANDARD FLOOD HAZARD DETERMINATION FORM (SFHDF)**

See The Attached  
 Instructions

**O.M.B. No. 1660-0040**  
**Expires December 31, 2011**

**SECTION I - LOAN INFORMATION**

1. LENDER NAME AND ADDRESS BNP Paribas, Americas 787 7th Avenue New York, NY 10019		2. COLLATERAL (Building/Mobile Home/Personal Property) PROPERTY ADDRESS (Legal Description may be attached) Northwest Quarter of Section 1, Township 10 South, Range 8 East, Itawamba County, Mississippi.		
3. LENDER ID NO. 94-1677765	4. LOAN IDENTIFIER ---	5. AMOUNT OF FLOOD INSURANCE REQUIRED 0.00		

**SECTION II**

**A. NATIONAL FLOOD INSURANCE PROGRAM (NFIP) COMMUNITY JURISDICTION**

1. NFIP Community Name City of Fulton	2. County(ies) Itawamba	3. State MS	4. NFIP Community Number 280081
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**B. NATIONAL FLOOD INSURANCE PROGRAM (NFIP) DATA AFFECTING BUILDING/MOBILE HOME**

1. NFIP Map Number or Community-Panel Number (Community name, if not the same as "A") 2800810005C	2. NFIP Map Panel Effective/ Revised Date February 3, 1993	3. LOMA/LOMR <input type="checkbox"/> YES _____ Date	4. Flood Zone X 500	5. No NFIP Map
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**C. FEDERAL FLOOD INSURANCE AVAILABILITY (Check all that apply)**

- 1.  Federal Flood Insurance is available (Community participates in NFIP).  Regular Program  Emergency Program of NFIP
- 2.  Federal Flood Insurance is not available because community is not participating in the NFIP.
- 3.  Building/Mobile Home is in a Coastal Barrier Resources Area (CBRA) or Otherwise Protected Area (OPA). Federal Flood Insurance may not be available.  
 CBRA/OPA Designation Date: \_\_\_\_\_

**D. DETERMINATION**

**IS BUILDING/MOBILE HOME IN SPECIAL FLOOD HAZARD AREA  
 (ZONES CONTAINING THE LETTERS "A" OR "V")?**  YES  NO

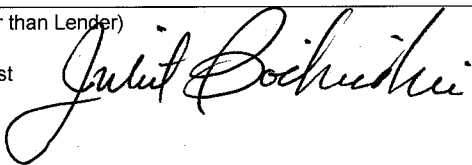
If yes, flood insurance is required by the Flood Disaster Protection Act of 1973.  
 If no, flood insurance is not required by the Flood Disaster Protection Act of 1973.

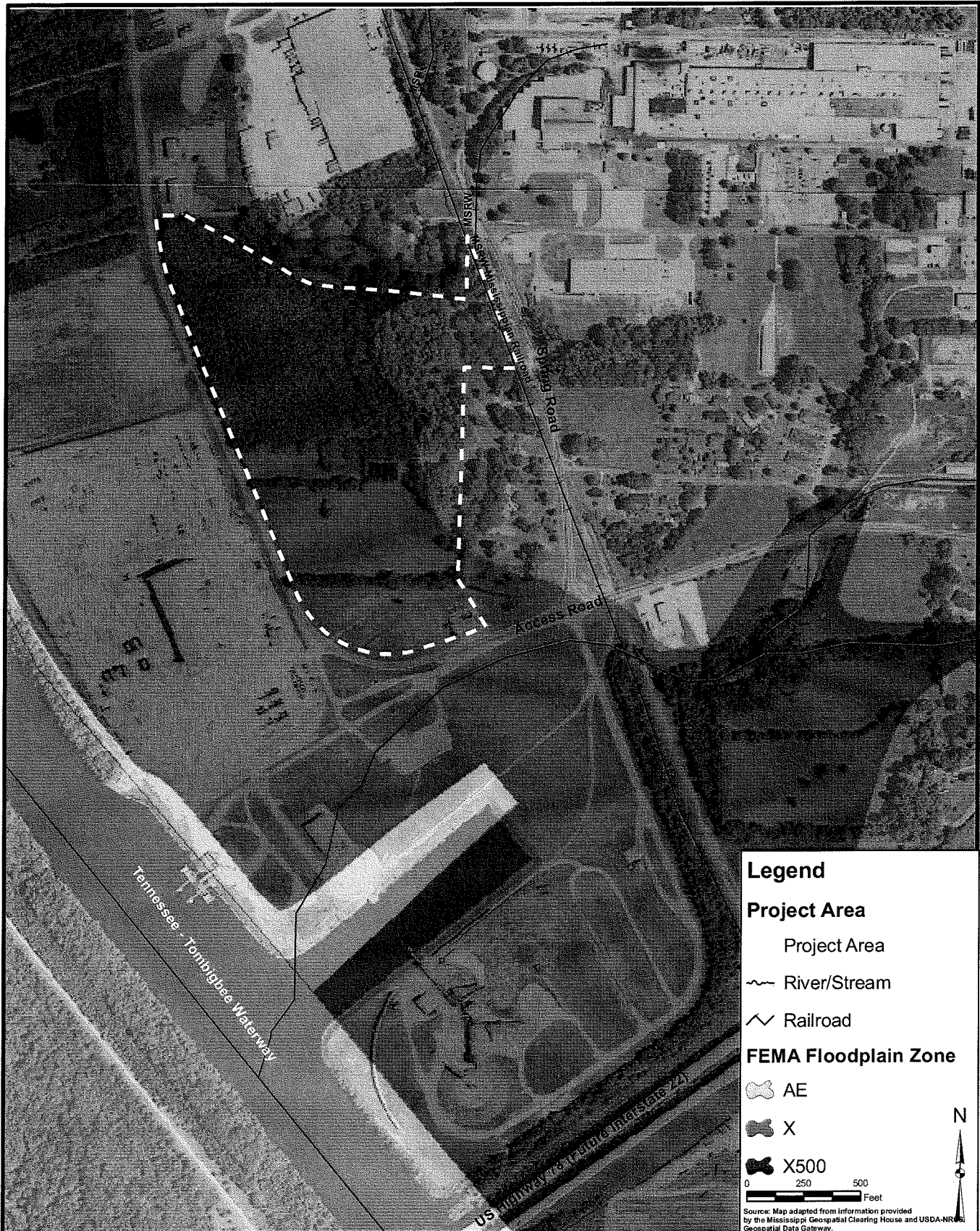
**E. COMMENTS (Optional)**

This area protected from the one percent annual chance (100-year) flood of the Tennessee Tombigbee Waterway by levee, dike, or other structure subject to possible failure or overtopping during larger floods (Wildlife Technical Services, Inc. Phase I Environmental Site Assessment for a 38-acre Parcel of Land located in Section 1, Township 10 South, Range 8 East, Itawamba County, Mississippi, 2009a).

This determination is based on examining the NFIP map, any Federal Emergency Management Agency revisions to it, and any other information needed to locate the building/mobile home on the NFIP map.

**F. PREPARER'S INFORMATION**

NAME, ADDRESS, TELEPHONE NUMBER (If other than Lender) Juliet Bochicchio, Environmental Protection Specialist 1400 Independence Avenue, SW Washington DC, 20250 202-205-8242		DATE OF DETERMINATION October 7, 2010
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**Legend**

**Project Area**

Project Area

~ River/Stream

∨ Railroad

**FEMA Floodplain Zone**

AE

X

X500

0 250 500 Feet

Source: Map adapted from information provided by the Mississippi Geospatial Clearing House and USDA-NRCS Geospatial Data Gateway.



Prepared By:

**AECOM**



Prepared For:

**FIGURE 8  
FULTON PROJECT SITE FEMA FLOODPLAIN MAP**

BLUEFIRE ETHANOL FULTON  
MISSISSIPPI FACILITY  
FULTON, MISSISSIPPI

SEPT. 2009

09180109.01

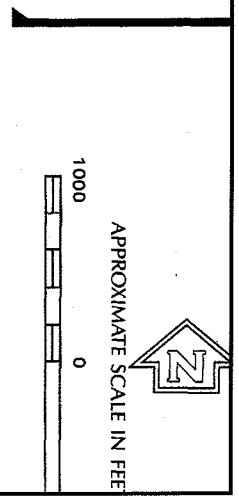


ZONE X

ZONE X

ZONE AE

ZONE AE




**NATIONAL FLOOD INSURANCE PROGRAM**

**FIRM**  
**FLOOD INSURANCE RATE MAP**

CITY OF  
**FULTON,**  
**MISSISSIPPI**  
ITAWAMBA COUNTY

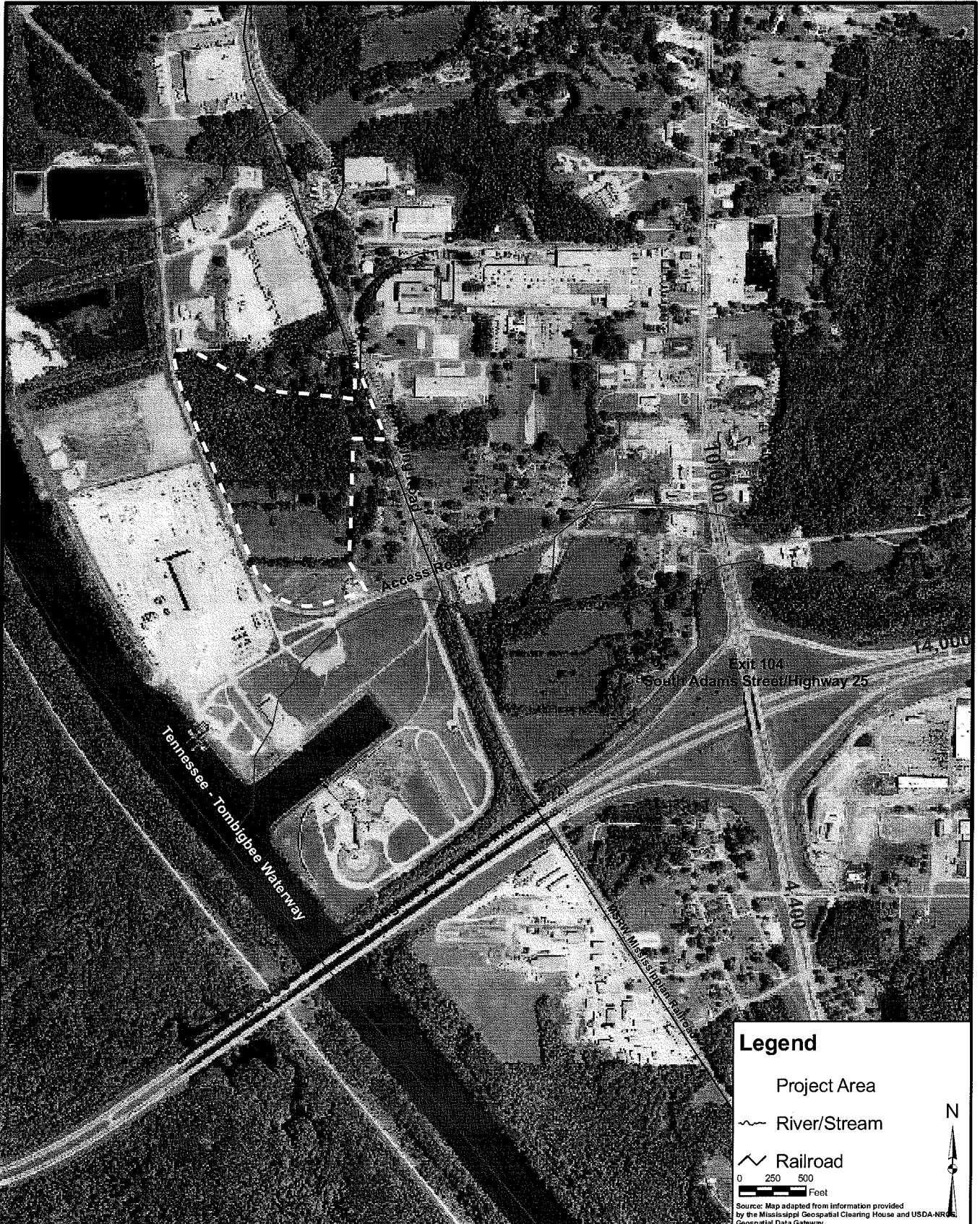
(ONLY PANEL PRINTED)



**COMMUNITY-PANEL NUMBER:**  
**280081 0005 C**  
**MAP REVISED:**  
**FEBRUARY 3, 1993**

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)



Prepared By:

**AECOM**



Prepared For:

**FIGURE 3**  
**2005-2007 AVERAGE ANNUAL DAILY TRAFFIC MAP**

BLUEFIRE ETHANOL FULTON  
 MISSISSIPPI FACILITY  
 FULTON, MISSISSIPPI

SEPT. 2009

09180109.01

Rural Development  
Environmental Justice (EJ) and Civil Rights Impact Analysis (CRIA)  
Certification

1. Applicant's name and proposed project description: BlueFire Fulton Rewable Energy LLC -  
Construction and Operation of a 19 MMG/Year Cellulosic Ethanol Facility.

2. Rural Development's loan/grant program/guarantee or other Agency action: 9003 Biorefinery  
Assistance Program - Loan Note Guarantee

3.  Attach a map of the proposal's area of effect identifying location or EJ populations, location of the proposal, area of impact or

Attach results of EJ analysis from the Environmental Protection Agency's (EPAs) EnviroMapper with proposed project location and impact footprint delineated.

4. Does the applicant's proposal or Agency action directly, indirectly or cumulatively affect the quality and/or level of services provided to the community?

Yes  No  N/A

5. Is the applicant's proposal or Agency action likely to result in a change in the current land use patterns (types of land use, development densities, etc)?

Yes  No  N/A

6. Does a demographic analysis indicate the applicant's proposal or Agency's action may disproportionately affect a significant minority and/or low-income populations?

Yes  No  N/A

If answer is no, skip to item 12. If answer is yes, continue with items 7 through 12.

7. Identify, describe, and provide location of EJ population \_\_\_\_\_  
\_\_\_\_\_

8. If a disproportionate adverse affect is expected to impact an EJ population, identify type/level of public outreach implemented. \_\_\_\_\_  
\_\_\_\_\_

9. Identify disproportionately high and adverse impacts on EJ populations. \_\_\_\_\_  
\_\_\_\_\_

10. Are adverse impacts appreciably more severe or greater in magnitude than the adverse impacts expected on non-minority/low-income populations?

Yes  No  N/A

11. Are alternatives and/or mitigation required to avoid impacts to EJ populations?

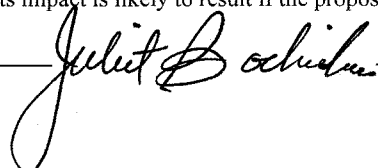
Yes  No  N/A

If yes, describe \_\_\_\_\_  
\_\_\_\_\_

12. I certify that I have reviewed the appropriate documentation and have determined that:

No major EJ or civil rights impact is likely to result if the proposal is implemented.  
 A major EJ or civil rights impact is likely to result if the proposal is implemented.

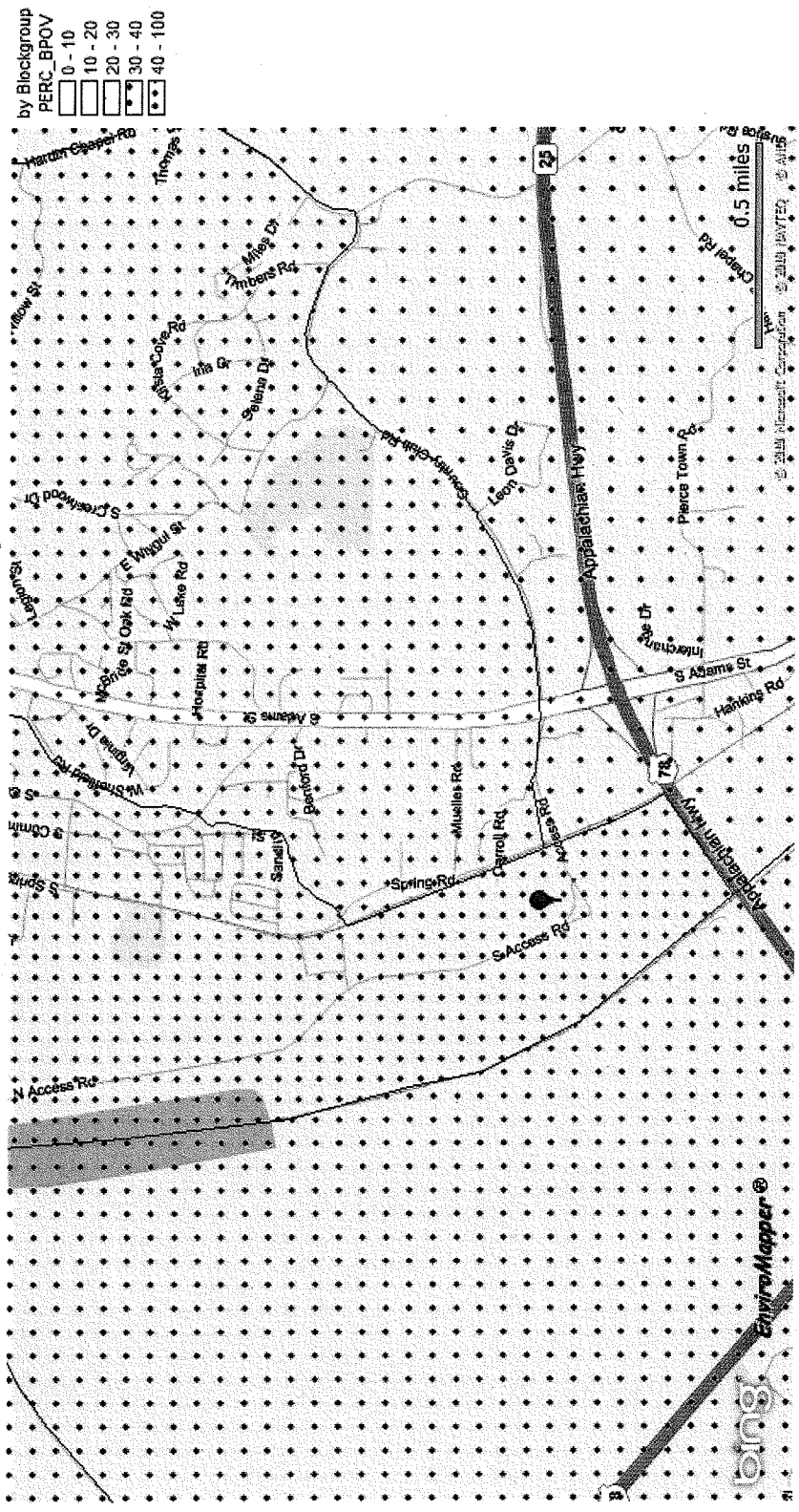
Juliet Bochicchio, EPS  
Name and Title of Certifying Official



10-13-2010  
Date

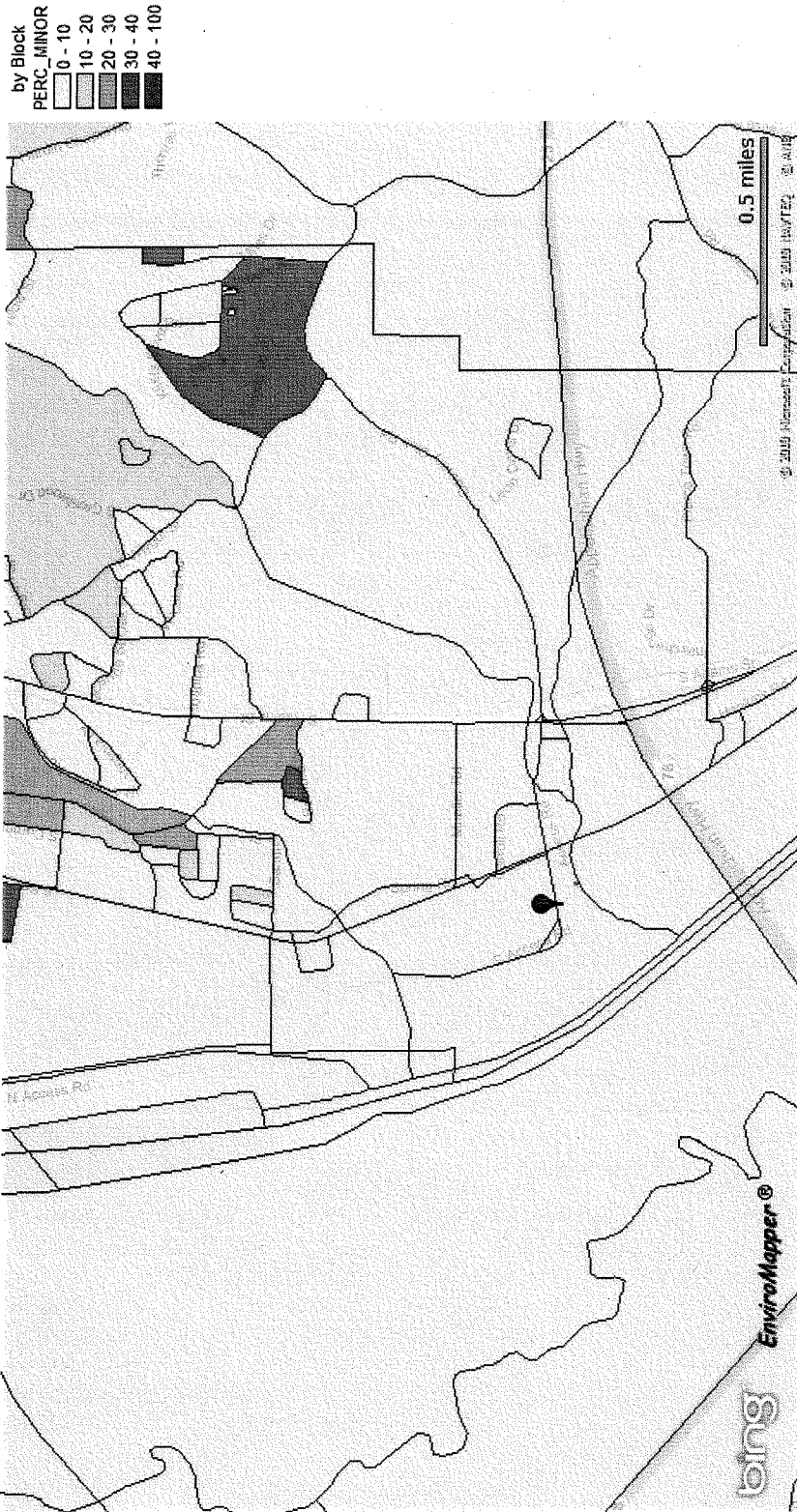


# Fulton Project - 20.4 Percent Below Poverty



bing  
EnviroMapper®

# Fulton Project - 0 to 10 Percent Minority



STATE OF MISSISSIPPI, LEE COUNTY:

Personally appeared before me, DIANNE P. POWELL Notary Public,  
in and for said County and State, H. CLAY FOSTER, JR. Publisher of a

newspaper printed and published in the City of Tupelo, Lee County, Mississippi, called The  
Northeast Mississippi Daily Journal, who being duly sworn, deposes and says that the publication  
of a certain notice, a true copy of which is hereunto attached, has been made in said newspaper for  
3 weeks consecutively to-wit:

Vol. 137 No. 232 Date Nov 18 2010  
Vol. 137 No. 233 Date Nov 19 2010  
Vol. 137 No. 234 Date Nov 20 2010

Vol. \_\_\_\_\_ No. \_\_\_\_\_ Date \_\_\_\_\_ 20\_\_\_\_  
Vol. \_\_\_\_\_ No. \_\_\_\_\_ Date \_\_\_\_\_ 20\_\_\_\_  
Vol. \_\_\_\_\_ No. \_\_\_\_\_ Date \_\_\_\_\_ 20\_\_\_\_

Witness my hand and seal this 20 day  
of November, 2010  
Dianne P. Powell

My Commission expires \_\_\_\_\_



**Notification of the Finding of No Significant Impact (FONSI)**  
**BlueFire Fulton Renewable Energy LLC's**  
**Cellulosic Ethanol Biorefinery**  
**City of Fulton, Mississippi**

The U.S. Department of Agriculture, Rural Business-Cooperative Service (RBS) has received an application from BlueFire Fulton Renewable Energy, LLC (BlueFire) to guarantee a loan under the Biorefinery Assistance Program. The guarantee purpose would be to construct and operate a cellulosic ethanol biorefinery. The proposal would produce up to 19 million gallons of fuel grade ethanol per year at its peak capacity. The facility would utilize advanced cellulose-to-ethanol conversion technologies to convert woody biomass to ethanol. The 38-acre facility would be located in the City of Fulton within the Port Hawamba Industrial Park, Itawamba County, Mississippi. An Environmental Assessment (EA) of this proposed action was prepared by the Department of Energy (DOE) for a similar loan guarantee to BlueFire. This EA is located at [http://www.eere.energy.gov/golden/Reading\\_Room.aspx](http://www.eere.energy.gov/golden/Reading_Room.aspx); RBS has adopted that EA for this proposed action.

As required by the National Environmental Policy Act and agency regulations, RBS has reviewed and adopted the DOE EA that assessed the potential environmental effects of the proposal. Upon consideration of the applicant's proposal, the EA and DOE FONSI, comments from federal and state environmental regulatory and natural resource agencies, the agency has determined that the proposal will not have a significant adverse effect on the quality of human environment. Therefore, RBS will not prepare an Environmental Impact Statement for this project.

For copies of the Environmental Assessment or for further information, please contact: Juliet Bochio, Environmental Protection Specialist, USDA, Rural Development, 1400 Independence Avenue SW, Mail Stop 0761, Washington DC, 20250, RD.NEPA@wdc.usda.gov, (202) 205-8242. Any person interested in commenting on the proposal should submit their comments to the Agency contact above. Comments must be received by RBS within 15 days following the date of publication. RBS will make no further decisions regarding this proposed action during this fifteen-day period.

**PRINTERS FEES**

To \_\_\_\_\_ words at \_\_\_\_\_ Cents per word \_\_\_\_\_ \$

To Proof of Publication \_\_\_\_\_ \$  
Total \_\_\_\_\_ \$ 1080.79