

**U.S. DEPARTMENT OF AGRICULTURE  
Farm Service Agency**

**Draft ENVIRONMENTAL ASSESSMENT**

 ***Draft EA***

Broiler Farm Expansion

Pike County, Arkansas

**Prepared By  
Adam Kaufman, USDA, Farm Service Agency  
State Environmental Coordinator**

***04/03/2024***

## COVER SHEET

|                              |  |
|------------------------------|--|
| <b>Proposed Action:</b>      | The Farm Service Agency (FSA) of the United States Department of Agriculture (USDA) proposes to provide Farm Loan Program assistance to finance the expansion of an existing (4) house broiler farm. The proposed expansion would take place on 19.5 acre tract of land .45 miles east of the existing farm. The proposed expansion would involve the construction of (3) new 46' x 575' broiler houses and related infrastructure, resulting in large CAFO. The physical location of this proposal would take place in Section 36, Township 8 south, Range 26 west, Pike county, Arkansas.  |
| <b>Type of Document:</b>     | This is a site-specific Environmental Assessment   |
| <b>Lead Agency:</b>          | United States Department of Agriculture (USDA) Farm Service Agency (FSA)   |
| <b>Cooperating Agencies:</b> | None   |
| <b>Further Information:</b>  | Adam Kaufman, USDA, Farm Service Agency, 419 West Gaines Street, Monticello, AR 71655.   |
| <b>Comments:</b>             | <p>This Environmental Assessment (EA) was prepared in accordance with USDA FSA National Environmental Policy Act (NEPA) implementing procedures found in 7 CFR 799, as well as the NEPA of 1969, Public Law 91-140, 42 US Code 4321-4347, as amended.</p> <p>A Notice of Availability (NOA) of the Draft EA will be published on 04/03/2024 and 04/10/2024 in the Nashville Leader with instructions for providing written comments. A copy of the Draft EA and related material will be made available as provided by the NOA at USDA, Farm Service Agency, 101 S. Washington St. Nashville, AR 71852. The Draft EA document itself will be posted from 04/03/2024 thru 05/03/2024 on the FSA State website at: <a href="https://www.fsa.usda.gov/state-offices/Arkansas/index">https://www.fsa.usda.gov/state-offices/Arkansas/index</a></p> |

**TABLE OF CONTENTS**

**1. Introduction .....7**

**1.1 Background ..... 7**

**1.2 Purpose and Need for the Proposed Action ..... 7**

**1.3 Decision To Be Made..... 8**

**1.4 Regulatory Compliance ..... 8**

**1.5 Public Involvement and Consultation ..... 8**

**1.5.1 Internal Scoping ..... 8**

**1.5.2 External Scoping..... 9**

**1.5.3 Public Involvement ..... 9**

**2. Description of Proposed Action and Alternatives .....10**

**2.1 Alternative A - Proposed Action..... 10**

**2.2 Alternative B - No Action Alternative..... 11**

**2.3 Alternative C..... 11**

**2.4 Alternatives Considered but Eliminated From Analysis ..... 12**

**3. Affected Environment and Impacts .....13**

**3.1 Resources Eliminated from Detailed Analysis..... 13**

**3.2 Resources Considered with Detailed Analysis ..... 15**

**3.2.1 Wildlife and Habitat ..... 15**

**3.2.2 Cultural Resources ..... 16**

**4. Water Quality..... 18**

**5. Air Quality ..... 19**

**6. Noise ..... 21**

**7. Cumulative Impacts .....23**

**7.1 Past, Present and Reasonably Foreseeable Actions..... 24**

**7.2 Cumulative Analysis ..... 24**

**7.2.1 Wildlife and Habitat ..... 25**

**7.2.2 Cultural Resources ..... 25**

**7.2.4 Water Quality..... 25**

**7.2.5 Air Quality ..... 26**

**7.3 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES ..... 27**

**8. References .....28**

**9. EA Determination and Signatures.....30**

**APPENDIX A PROJECT AREA MAPS**

**APPENDIX B Site Photos and FSA site Visit Report**

**APPENDIX C Required Permits and Plans**

**C-1 Storm water Pollution Prevention Plan (SWPPP) and NPDES PERMIT**

**APPENDIX D Threatened and Endangered Species Documentation**

**D-1 IPaC Species List, Verification Letters, and protective measures**

**APPENDIX E Agency Correspondence Cultural Resources Documentation**

**E-1 National Register of Historic Places**

**E-2 Tribes With an Interest in Hempstead Co**

**E-3 Section 106 Responses and Correspondence**

**APPENDIX F Wilderness Areas Supporting Documentation**

**F-1 Federal Wilderness Areas, Caney Creek**

**F-2 Pond Creek Bottom Wildlife Management Area, Nearest Federal Land**

**APPENDIX G Wild and Scenic Rivers/ Nationwide Rivers Inventory (NRI) Supporting Documentation**

**Stream and Watershed maps**

**APPENDIX H National Natural Landmark Supporting Documentation**

**APPENDIX I Wetlands Supporting Documentation**

**I-1 FSA 858 "Determining if a Wetland May be Present"**

**I-2 AD-1026**

**APPENDIX J Floodplain Supporting Documentation**

**J-1 Floodplain Map**

**APPENDIX K National Agricultural Statistics Service (NASS), County Extension, and Census info**

**APPENDIX L Notice of Availability (NOA)**



## ACRONYMS AND ABBREVIATIONS

|         |  |
|---------|--|
| ADEQ    | Arkansas Department of Environmental       |
| ANRC    | Arkansas Natural Resource Commission       |
| AR      | Arkansas                                   |
| ATV     | All-terrain vehicle                        |
| BMP's   | Best Management Practices                  |
| CAFO    | Concentrated Animal Feeding Operation      |
| CEQ     | Council on Environmental Quality           |
| CNMP    | Comprehensive Nutrient Management Plan     |
| CFR     | Code of Federal Regulations                |
| EA      | Environmental Assessment                   |
| EO      | Executive Order                            |
| EPA     | Environmental Protection Agency            |
| EQIP    | Environmental Quality Incentives Program   |
| FEMA    | Federal Emergency Management Agency        |
| FONSI   | Finding of No Significant Impact           |
| FSA     | Farm Service Agency                        |
| GHG     | Green House Gases                          |
| GPM     | Gallons per minute                         |
| HUC     | Hydrologic unit code                       |
| IPaC    | Information for Planning and Conservation  |
| MA/NLAA | May Affect, Not Likely to Adversely Affect |
| NEPA    | National Environmental Policy Act          |
| NHPA    | National Historic Preservation Act         |
| NLEB    | Northern Long Eared Bat                    |
| NMP     | Nutrient Management Plan                   |
| NOA     | Notice of Availability                     |
| NPDES   | National Pollutant Discharge Elimination   |
| NRCS    | Natural Resources Conservation Service     |
| SHPO    | State Historic Preservation Officer        |
| SPPP    | Stormwater Pollution Prevention Plan       |
| THPO    | Tribal Historic Preservation Officers      |
| TSP     | Technical Service Provider                 |
| TMDL    | Total Maximum Daily Load                   |
| WMA     | Wildlife Management Area                   |
| U.S.    | United States                              |
| USACE   | U.S. Army Corps of Engineers               |
| USDA    | United States Department of Agriculture    |
| USFWS   | United States Fish and Wildlife Service    |

# 1. INTRODUCTION

---

## 1.1 Background

- The United States Department of Agriculture (USDA) Farm Service Agency (FSA) proposes to provide loan assistance to an applicant to expand their existing poultry farm in Pike county. The farm currently has (4) 43' x 500' broiler houses on a 35 acre tract that were built in 2018. The proposed expansion would add (3) additional 46' x 575 houses on a neighboring 19.5 acre tract of land. SEE APPENDIX A-1. The 19.5 acre tract is located .45 miles northeast of the existing (4) house broiler farm and was purchased by the applicant in 2021. The farm currently has 86,000 square feet of growing space, which can accommodate 114,666 broilers per flock. The proposed (3) house expansion would add an additional 79,350 square feet of growing space. Each new house would hold 35,266 birds per flock. At maximum capacity, all (7) houses combined would be able to grow out 220,466 broilers per flock, which would meet FSA's definition of a large Confined Animal Feeding Operation (CAFO). Flock placement would be dependent on bird variety, needs of the integrator, supply and demand, and several other factors. A flock of broilers is typically kept on the farm for approximately 6-8 weeks. It is anticipated that the farm would receive approximately 4 to 6 flocks annually.
- Pike County is not located in the Nutrient Surplus Area. Appendices A and B contain maps and photos of the proposed project area. A detailed description of the components of the proposed project, the project site and related surrounding area of potential effect is further described in Section 2.1 of this document.

## 1.2 Purpose and Need for the Proposed Action

The purpose of the proposed project/action is to implement USDA, Farm Service Agency programs, to make available economic opportunity to help rural America thrive, and to promote agriculture production that better nourishes Americans and help feed others throughout the world. FSA is tasked with this mission as provided for by the Food and Security Act of 1985 as amended, the Consolidated Farm and Rural Development Act as amended, and related implementing regulations found in 7 CFR Parts 762 and 764.

The need for the proposed action is to fulfill FSA's responsibility to provide access to credit, and to help improve the stability and strength of the agricultural economy, including to start, improve, expand, transition, market, and strengthen family farming and ranching operations, and to provide viable farming opportunities for family and beginning farmers and meet the needs of small and beginning farmers, women and minorities. Specifically, in the case of this loan request, FSA's need is to respond to the applicant's request for funding to support the proposed action.

FSA Farm Loan Program Assistance is not available for commercial operations or facilities that are not family farms, or to those having the ability to qualify for commercial credit without the benefit of FSA assistance. The applicants have been determined to be a family farm as defined by 7 CFR 761.2. The proposed action would allow them the opportunity to expand their family farming operation and provide the economic stability to meet the needs of the family.

In addition, poultry integrators have a demand for new facilities such as these to provide an adequate supply for processing plants and keep them operating at an economically feasible capacity. Specialized livestock facilities such as those proposed, have a limited useful life as they become functionally obsolete as technology advances. Accordingly, a pipeline of new facilities is necessary to insure an adequate and economical supply of low cost protein food for the nation.

### **1.3 Decision To Be Made**

FSA's decision is whether to:

- Approve the applicant's loan request;
- Approve the request with additional mitigations; or
- Deny the loan request.

### **1.4 Regulatory Compliance**

This Environmental Assessment is prepared to satisfy the requirements of NEPA (Public Law 91-190, 42 United States Code 4321 et seq.); its implementing regulations (40 CFR 1500-1508); and FSA implementing regulations, *Environmental Quality and Related Environmental Concerns – Compliance with the National Environmental Policy Act* (7 CFR 799). The intent of NEPA is to protect, restore, and enhance the human environment through well informed Federal decisions. A variety of laws, regulations, and Executive Orders (EO) apply to actions undertaken by Federal agencies and form the basis of the analysis.

All fifty states have enacted right-to-farm laws that seek to protect qualifying farmers and ranchers from nuisance lawsuits filed by individuals who move into a rural area where normal farming operations exist, and who later use nuisance actions to attempt to stop those ongoing operations. The Right to Farm law for Arkansas (Ark. Code Ann. § 24101) protects farming operations from nuisance claims when farms were established prior to the use of the area surrounding the agricultural operation for nonagricultural activities and those farms employ methods or practices commonly or reasonably associated with agricultural production.

### **1.5 Public Involvement and Consultation**

Scoping is an early and open process to involve agencies, organizations, and the public in determining the issues to be addressed in the environmental document. Among other tasks, scoping determines important issues and eliminates issues determined not to be important; identifies other permits, surveys and consultations required with other agencies; and creates a schedule that allows adequate time to prepare and distribute the environmental document for public review and comment before a final decision is made. Scoping is a process that seeks opinions and consultation from the interested public, affected parties, and any agency with interests or legal jurisdiction.

---

#### ***1.5.1 Internal Scoping***

USDA staff of various specialties have been consulted regarding the purpose and need, issues and impact topics appropriate for consideration for the proposed activity. A site visit and pedestrian review was completed by USDA, Farm Service Agency personnel on 3/13/2024. Site visit notes and photographs are included in APPENDIX B.



---

### ***1.5.2 External Scoping***

USDA FSA has completed research and the following tasks and efforts:

- Research of U.S. Fish and Wildlife Service (USFWS) - Information, Planning, and Conservation System (IPaC) about the project’s potential to affect federally listed species as required by the Endangered Species Act of 1973. SEE APPENDIX D.
- Consultation with the State Historic Preservation Officer (SHPO) to ensure that compliance with the requirements of Section 106 of the National Historic Preservation Act (NHPA) are met and that significant impacts to historic properties would not result from the project SEE APPENDIX E.
- Consultation with Tribal Historic Preservation Officers (THPO): Darrin Cisco of the Apache Tribe of Oklahoma, Derek Hill of the Caddo Nation, Autumn Gorrell with the Chickasaw Nation, Lindsey Bilyeu of the Choctaw Nation of Oklahoma, Linda Langley of the Coushatta Tribe of Louisiana, Dr. Andrea Hunter of the Osage Nation, Billie Burtrum of the Quapaw Tribe of Indians and Tonya Tipton of the Shawnee Tribe of Oklahoma, to ensure that compliance with the requirements of Section 106 of the NHPA are met and that significant impacts to historic properties would not result from the project. SEE APPENDIX E
- FSA staff completed Form FSA-858, “Determining if a Wetland May Be Present” to screen for wetland indicators where ground disturbance associated with project would take place SEE APPENDIX I

---

### ***1.5.3 Public Involvement***

The Draft EA and supporting documentation will be made available for public review and comment from 04/03/2024 through 05/03/2024 at USDA, Farm Service Agency, 101 S. Washington St. Nashville, AR 71852. The Draft document itself shall be posted on the Arkansas FSA state website <https://www.fsa.usda.gov/state-offices/Arkansas/index> from 04/03/2024 to 05/03/2024. A notice of the availability of the draft EA will be published in the Nashville Leader on 04/03/2024 and 04/10/2024. Written comments regarding this proposal should be submitted by mail to USDA, Farm Service Agency, Attn: Adam Kaufman, 419 West Gaines Street, Monticello, AR 71655 as instructed by the public notice.

## **2. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES**

---

### **2.1 Alternative A - Proposed Action**

The proposed action involves FSA providing loan assistance to an existing borrower to expand an existing (4) house broiler farm. Farm. The proposed expansion site is located 3.6 miles southwest of Murfreesboro, AR in Section 36, Township 08 south, Range 26 West in Pike county in Arkansas. This area of the state is in the Gulf Coastal Plains eco region. The proposal would involve loan funds to construct (3) 46' x 575' broiler houses and related infrastructure on a 19.5 acre tract of land owned by the applicants. As mentioned earlier in the EA, this would be considered an expansion of the applicant's existing 35 acre, (4) house broiler farm located .45 miles southwest of the proposed expansion site. SEE APPENDIX A-2. The proposed site was established in mixed timber which was clearcut after 2013. The proposed site was allowed to naturally regenerate. The regrowth and debris from the timber harvest was cleared and windrowed by the applicant after they purchased the land. The proposed site is currently established in sage grass and native forbs with some pine trees. Slopes on this proposed site range from 0 to 15 percent. SEE APPENDIX I.

The applicants would enter into a contract with a poultry integrator for the (3) new houses. The applicants would continue to own and operate the existing (4) house farm. The integrator would place flocks of broilers in the new houses, where they would be grown to market size. The applicants, as growers, would be responsible for providing the buildings, equipment, utilities, and labor required to house and manage the flock including feeding, watering, brooding, waste disposal, maintaining the houses, and providing for animal welfare, sanitation, and biosecurity. The integrator would supply the chicks, feed, labor to deliver and remove the birds from the farm, veterinary services, and technical support to the grower.

The farm is located in between Murfreesboro to the northeast and Nashville to the southwest and approximately 1.5 miles north of the Pike-Hempstead county line. The farm is 2.3 miles southeast of highway 27 and accessible via Sweet Home loop. The proposed site is surrounded by large blocks of timber in all directions. Rural residences are common in this area. The nearest neighboring dwellings in relation to the proposed expansion would be .7 miles to the southwest and .7 miles to the south. SEE APPENDIX A-7. The nearest schools would be located in Murfreesboro, 3.5 miles to the northeast of the proposed expansion site. SEE APPENDIX A-8. Sweet Home Church is located 1.4 miles to the southwest. SEE APPENDIX A-9. Oak Grove Cemetery is located .9 miles to the southwest and Roy Cemetery is located 1.8 miles east of the proposed expansion. The proposed site is located .8 miles southwest of the Little Missouri River and 3.6 miles southwest of the Crater of Diamonds State Park. SEE APPENDIX A.

Agriculture has a strong presence in southwest Arkansas. There are many integrated poultry, cattle, hay, and other livestock feeding operations in this area. According to NASS, Pike County had 23,000 head of cattle, including calves as of January of 2023, which neighboring Howard county had 41,000, and Hempstead had 49,500. SEE APPENDIX K. According to the Arkansas Department of Agriculture, 82 poultry farms registered in 2023 in Pike county. According to NASS, 2017 Census of Agriculture, Pike county had 82,459 acres devoted to farmland on 209 farms. SEE APPENDIX K.

Proposed improvements for the expansion of this existing operation would consist of (3) 46' x 575' broiler houses and related infrastructure including access road, load out area, generator shed, water

well, utilities, an 80' x 40' litter shed, and best management practices. The design of the proposed expansion is shown on the aerial site plan as shown in APPENDIX A-1 and APPENDIX C. The project would encompass 7.1 acres. The broiler houses would be running east and west, stacked north and south. The houses would be spaced out approximately 50' apart. The proposed structures would be built on top of earthen pads slightly larger than the dimensions of the houses themselves. The load out pad would be approximately 100' wide east and west and would extend the length of the houses north and south. The load out area would provide space for construction materials and equipment, live haul, feed trucks, farm equipment and machinery, and other traffic on the proposed farm to turn safely while entering and existing the farm. The proposed expansion would compost mortality in the proposed stacking shed. The 30' x 15' generator shed would placed south of the southernmost house. The generator shed would be built on top of a concrete slab, with metal sides, and roof and would house a 125 kW generator. The generator would serve as a backup power supply for the proposed expansion in the event of a power outage. The generator would use low sulfur diesel as a fuel source, stored in a 250 gallon above ground tank. Underground wires in conduit would run from the generator and be plumbed into each proposed poultry house. The generator would be controlled by a transfer switch. Electricity would be ran overhead to the proposed site from existing connections along Sweet Home Loop. Rural water would be ran along the proposed access road to the farm. The well would serve as the primary water source for the proposed expansion.

According to the SWPPP this proposal would involve 7.1 acres of ground disturbance. SEE APPENDIX C-1. Trenches for the proposed water and underground electric lines would be dug with a ditch witch to an approximate depth of 3.5' deep.

There are no connected actions associated with this proposal at this time, however it would be possible to expand this operation on this location in the future if the applicants were presented the opportunity to do so. Any future expansion financed with FSA funds would require a subsequent environmental review that meets the requirements of 1-EQ (revision 3).

## **2.2 Alternative B - No Action Alternative**

The No Action Alternative means the loan would not be made and the farm described in Section 2.1 above (Proposed Action) would not be built. The applicants could attempt to establish grass on the proposed site and use it as pasture, replant the proposed site in timber, allow the proposed site to naturally regenerate, develop the land in another manner, or sell the 19.5 acre tract. The proposal would not come to light with no impacts to the environment or surroundings as the proposed action would not go forward. The existing (4) house poultry farm would remain in production.

## **2.3 Alternative C**

An alternative location would not be feasible. The proposed project would take place on property the applicants currently own. The applicant's existing broiler farm, dwelling, and farming headquarters is located .45 miles from the proposed site. Integrators typically require a farm manager to live in close proximity to the farm.

The proposed project was designed to disturb the least amount of ground disturbance as possible while remaining within setback requirements while taking the surrounding environment and protected resources into consideration. The proposed site is near utilities and not close to neighboring residences.

The northernmost house would be placed on top of a manmade pond. The pond is approximately 1/10 of an acre in size. The proposal could be moved further to the south to avoid filling in the pond, however this option would place the broiler houses closer to the Sweet Home Loop. The majority of the proposed site would take place on a gravelly soil. The terrain slopes downward north to south. The soils on the southern end of the 19.5 acre tract would be more conducive for growing grass. Filling in the pond would require creating a new pond to comply with the “No Net Loss of Wetlands Executive Order.” The proposed pond would be placed southeast of the proposed poultry houses, near better soil and pasture, to provide a drinking source for cattle. Any alternative configuration of the proposal on the 19.5 acre tract would result in greater ground disturbance than that of the proposed action.

The proposed site configuration was designed to create the least amount of ground disturbance and vegetation removal, therefore having the smallest impact on the environment and its surroundings during the construction phase of the proposal while maximizing the amount of productive grazing land that would remain. Alternative configurations were not considered due to the possibility of having a greater impact on the affected environment. Integrated poultry producers must comply with very specific logistical and design requirements provided by the integrators. Attempting to acquire another property would not be feasible as property values have increased since the applicant purchased the property where the proposed site would take place. The proposed site is near the applicants existing operation. Another location could potentially introduce a nuisance into a new area.

## **2.4 Alternatives Considered but Eliminated From Analysis**

Suitable, more feasible alternatives to the proposed action have not presented themselves. Other locations for the proposed expansion or other uses for the land in question are not considered here because such options do not meet the purpose and need for the proposed action. The applicant has applied for FSA loan assistance to fund the expansion of their existing broiler operation. FSA’s decision to be made is to approve the loan for the proposed farm as designed, to deny the loan, or to approve the loan with additional mitigations, practices or methods that would be needed to minimize or eliminate impacts to protected resources.

Similarly, alternative designs of farm components are not considered as the producer’s agreement with a poultry integrator requires adherence to the integrator’s construction and equipment specifications, which are in place to ensure consistency, maximize production, and reduce loss. Design alternatives that would involve modification of features and infrastructure put in place by an integrator would jeopardize the availability of bird placement, be grounds for a potential loss of the contract with the integrator, and therefore the viability of the farm. Accordingly, this alternative would not warrant further consideration.

### 3. AFFECTED ENVIRONMENT AND IMPACTS

---

The impacts to a number of protected resources, as defined in FSA Handbook 1-EQ (Revision 3) Environmental Quality Programs for State and County Offices, are considered in this EA. Some resources are eliminated from detailed analysis following CEQ regulations (40 CFR 1501.7), which state that the lead agency shall identify and eliminate from detailed study the issues that are not significant or that have been covered by prior environmental review, narrowing the discussion of these issues in the document to a brief presentation of why they would not have a significant effect on the human or natural environment. Resources that are not eliminated are carried forward for detailed analysis. The table below shows the resources that are eliminated from detailed analysis and those carried forward. Section 3.1 contains discussions of those resources eliminated from detailed analysis. Section 3.2 describes the existing conditions for resources carried forward for detailed analysis and the anticipated impacts to those resources resulting from the Proposed Action.

| Resource                                 | Eliminated | Carried Forward |
|--|------------|-----------------|
| Wildlife and Habitat                     |            | X               |
| Cultural Resources                       |            | X               |
| Coastal Barriers                         | X          |                 |
| Coastal Zones                            | X          |                 |
| Wilderness Areas                         | X          |                 |
| Wild and Scenic Rivers, NRI              | X          |                 |
| National Natural Landmarks               | X          |                 |
| Sole Source Aquifers                     | X          |                 |
| Floodplains                              | X          |                 |
| Wetlands                                 | X          |                 |
| Soils                                    | X          |                 |
| Water Quality                            |            | X               |
| Air Quality                              |            | X               |
| Noise                                    |            | X               |
| Important Land Resources                 | X          |                 |
| Socioeconomics and Environmental Justice | X          |                 |

#### 3.1 Resources Eliminated from Detailed Analysis

##### Coastal Barrier Resources System

Coastal barriers are eliminated from detailed analysis as there are no designated Coastal Barriers in Arkansas.

##### Coastal Zone Management Areas

Coastal Zone Management Areas are eliminated from detailed analysis because there are no Coastal Zone Management Areas in Arkansas.

## **Wild and Scenic Rivers/NRI**

Wild and Scenic Rivers/NRI were eliminated from detailed analysis in this EA. The Little Missouri River is located .8 miles northeast of the proposed site and does have both a Wild and Scenic and NRI designation. The nearest Wild and Scenic segment of the Little Missouri is 30 miles northwest of the proposed expansion site. SEE G-4. The nearest NRI segment of the Little Missouri in relation to the proposal is 19.7 miles to the northwest of the proposed site. SEE APPENDIX G-3. The proposal is not likely to adversely affect the Little Missouri or jeopardize this stream's special designations. SEE APPENDIX G.

## **National Natural Landmarks**

There are five National Natural Landmarks in Arkansas. SEE APPENDIX H-1. The site of the Proposed Action is not located in close proximity to any of these nor would the proposal threaten to alter or impair them. The closest, in proximity to this proposal Roaring Branch research natural area located 31.6 miles northwest of the proposed site, therefore National Natural Landmarks are eliminated from detailed analysis. SEE APPENDIX H-1

## **Sole Source Aquifers**

Sole source aquifers are eliminated from detailed analysis because there are no sole source aquifers in Arkansas.

## **Floodplains**

Floodplains were eliminated from further detailed analysis. FEMA flood map do not exist in this area of Pike County. Elevations were used to determine whether the proposed site is located in a floodplain. Elevations of the proposed site ranger from 510-520'. The tract slopes downward, from north to south. The nearest stream in relation to the proposed site is located near the southeastern corner of the 19.5 acre tract. This stream is an intermittent tributary (reach code: 08040103001668) to the Little Missouri river. The headwaters of this stream has an elevation of 489', much lower than that of the proposed site. The proposed site should not be located within a flood zone. SEE APPENDIX J-1.

## **Wetlands**

Wetlands have been eliminated from further detailed analysis. According to FSA Form-858 "Determining if a Wetland May Be Present," no wetland indicators were present on the 7.1 acre site where the proposal would be located, therefore no additional screening is necessary. SEE APPENDIX I-1. The 1/10 of an acre pond would be replaced to comply with the "no net loss of wetlands" executive order.

## **Federal Lands and Wilderness Areas**

Federal Lands and Wilderness Areas were eliminated from further detailed analysis. Arkansas has 11 Wilderness areas. SEE APPENDIX F-1. The nearest in relation to the proposed broiler farm would be Caney Creek Wilderness Area, located 41 miles to the northwest. The nearest Federal Land would be the Ouachita National Forest located 26 miles to the north. The proposed expansion of the existing broiler farm should have no impacts on these protected Federal Lands.

## Soils

Soils are eliminated from detailed analysis because no land on this farm would not be cropped and is therefore not subject to the Highly Erodible Land provisions of the Food Security Act. Furthermore, there would be no annual tillage of the soil associated with this proposed project. The applicants have both signed AD-1026 “Highly Erodible Land Conservation and Wetland Conservation Certification.” SEE APPENDIX I-1.

## Important Land Resources

Prime and unique farmland, forestland and rangeland resources are eliminated from detailed analysis because the proposed action would not result in prime and/or important farmland being converted to a nonagricultural use.

## Socioeconomics and Environmental Justice

No impact to population, housing, income, or employment in the region are anticipated to result from the Proposed Action, nor are disproportionate adverse impacts to minority or low income populations anticipated. Therefore, socioeconomics and environmental justice are not carried forward for detailed analysis. SEE APPENDIX K.

## 3.2 Resources Considered with Detailed Analysis

This section describes the environment that would be affected by implementation of the alternatives described in Chapter 2. Aspects of the affected environment described in this section focus on the relevant major resources or issues. Under the no action alternative, the proposed action would not be implemented. The no action alternative would result in the continuation of the current land and resource uses in the project area. This alternative will not be evaluated further in this EA.

---

### 3.2.1 Wildlife and Habitat

#### Existing Conditions

The proposed 7.1 acre project site is currently established in sage grass and other native forbs and plants. Wildlife typical of such areas include various mammals, reptiles, and birds. A site visit was conducted by FSA on 03/13/2024. SEE APPENDIX B-1 for site visit notes and photographs.

An official list of threatened and endangered species and designated critical habitat for this area of Pike County was obtained from the US Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) system on 3/14/2024 SEE APPENDIX D-1. The following threatened and endangered species are known to occur in this area of Pike County:

Indiana Bat *Myotis sodalist* (endangered), Northern Long-eared Bat (NLEB) *Myotis septentrionalis* (endangered), Tricolored Bat *Perimyotis subflavus* (proposed endangered), Eastern Black Rail *Laterallus jamaicensis ssp. Jamaicensis* (threatened), Piping Plover *Charadrius melodus* (threatened), the Rufa Red Knot *Calidris canutus rufa* (threatened), the Alligator Snapping Turtle *Macrochelys temminckii* (proposed threatened), Rabbitsfoot *Quadrula cylindrica cylindricaand* (threatened), and the Monarch Butterfly *Danaus plexippus* (Candidate). SEE APPENDIX D-1.

Some tree removal would be necessary. The trees would not be considered bat habitat. The proposal may affect, but is not likely to affect the Indiana bat. The proposal would have no effect on the NLEB. The proposed site would not be flooded, marshy, or in a wetland area, therefore habitat for the bird species listed above does not exist. The proposed project would have no effect on these bird species. SEE APPENDIX D. The proposal would not take place in or near a stream, therefore the proposal may affect, but is not likely to adversely affect the Rabbitsfoot. The proposed expansion would take place .13 miles northwest of the nearest stream (reach code: 08040103001668), which is an intermittent tributary to the Little Missouri river. SEE APPENDIX G-2. Effect determinations are not required for candidate or proposed threatened species.

The Bald Eagle has been known to occur in this area, however the Bald Eagle is not covered by the Endangered Species Act. No Bald Eagles, or Bald Eagle nests were observed on this proposed site during the site visit. SEE APPENDIX B-1. Effect determinations are not required for candidate or proposed threatened species.

### **Impacts of Proposed Action**

According to the SWPPP, an estimated 7.1 acres of ground disturbance would occur to implement this proposal. SEE APPENDIX C-1. Implementation of the proposal would result in a long-term loss of approximately 7.1 acres of grasslands. This area currently contributes to wildlife habitat. The proposal would result in a long-term loss of wildlife habitat that this 7.1 acres of vegetation provided. Based on the results from the USFWS Programmatic Consultation, and BMP's that would be implemented for this proposal, no significant impacts to Wildlife and Habitat would be expected to result from the Proposed Action. Effect determinations are based on protective measures being followed. SEE APPENDIX D. No adverse impacts on migratory birds are anticipated as a result of this proposal. The primary nesting season for birds in Arkansas is April 1 through July 15.

---

### ***3.2.2 Cultural Resources***

#### **Existing Conditions**

A portion of the Proposed Action involves some ground disturbing activities in areas not previously evaluated or previously disturbed to the depth required for the Proposed Action, therefore cultural resources require detailed analysis. The proposed project would encompass 7.1 acres based on the plans that have been submitted. SEE APPENDIX A-1. The majority of the proposed site is an open area. A site visit was conducted by USDA, Farm Service Agency on 03/13/2024. The proposed site was established in mixed timber, which was clearcut after 2013. SEE A-5. The nearest building listed on the National Register of Historic Places would be the Murfreesboro Cities Service Station and the Pike County Courthouse, both located approximately 3.6 miles to the northeast of proposed expansion site. SEE APPENDIX E-1. These historic places would not be visible from the proposed site, therefore the proposal should have no effect on them. Our applicants are not aware of any cultural resources in existence on the 19.5 acre tract of land.

The following Indian Tribes with an interest in this area of Pike county were contacted on 3/14/2024: Darrin Cisco of the Apache Tribe of Oklahoma, Derek Hill of the Caddo Nation, Autumn Gorrell of the Chickasaw Nation, Lindsey Bilyeu of the Choctaw Nation of Oklahoma, Linda Langley of the Coushatta Tribe of Louisiana, Dr. Andrea Hunter of the Osage Nation, Billie Burtrum of the Quapaw Tribe of Indians



and Tonya Tipton of the Shawnee Tribe of Oklahoma. SEE APPENDIX E-2 for Tribes with an interest in Pike County in Arkansas. FSA sent consultation letters, maps, and proposed project plans to the Arkansas State Historic Preservation Officer and Tribes listed above on 03/14/2024. SEE APPENDIX E-3. A response was received from the Chickasaw Nation on 3/18/2024, which states the proposed project is located outside of the specific area of interest for the Chickasaw and deferred to other tribes that have been identified a connection to the project area. No other responses from Tribes with an interest in this area have been received. FSA is awaiting responses from Arkansas SHPO as well. No final decision would be made until the Section 106 review process has been completed.

### **Impacts of Proposed Action**

Based on the proximity to the Pike county courthouse and Murfreesboro Cities Service Station in relation to the Proposed Action and the response from the Chickasaw Nation, FSA anticipates no impacts to known cultural resources would result from the Proposed Action. FSA's decision on potential effects to historic properties will not be made until the Section 106 consultation process is completed. Impacts to previously unidentified historic properties, including archaeological and historic resources, could occur during land clearing and construction activities. If such resources were encountered during construction of this proposal, all activities would cease, FSA state and national office personnel would be notified, along with Arkansas SHPO and Tribes with an interest in this area. Any potential resources discovered would be professionally evaluated for eligibility for listing on the National Register of Historic Places. No final decision on the proposed action would be made until the Section 106 process has been completed.

## 4. WATER QUALITY

---

### Existing Conditions

In Arkansas, the Arkansas Department of Environmental Quality (ADEQ) has the authority to enforce provisions of the Clean Water Act that are protective of water quality and to issue permits that are protective of water quality standards. This authority is delegated to ADEQ by the Environmental Protection Agency. The ADEQ Water Division issues Stormwater National Pollutant Discharge Elimination System (NPDES) Permits to protect surface waters from contamination from runoff associated with construction. Coverage under General Permit AR1500000 is required for construction that causes ground disturbance in excess of 1 acre. Permit AR1500000 for small sites is for disturbance between 1 and 5 acres and requires operators to post required forms and documents, including a stormwater pollution prevention plan (SWPPP), on the site rather than coordinate directly with ADEQ. Permit AR 1500000 for large sites including disturbance in excess of 5 acres, required documents are submitted to ADEQ. SWPPPs are documents that describe construction activities to prevent stormwater contamination, control sedimentation and erosion, in order to prevent significant harm to surface waters and comply with the requirements of the Clean Water Act. ADEQ is also responsible for issuing Non-stormwater NPDES Permits issued to facilities that discharge water. Animal Feeding Operations and Confined Animal Feeding Operations that do not discharge into waters of the state do not require NPDES permits for ongoing operations. SEE ADEQ Reference

The Arkansas Natural Resource Commission (ANRC) Water Division is responsible for developing and implementing the Arkansas Water Plan, the state's policy for long-term water management, and for the State's Non-point Source Pollution Management Program. The Arkansas Water Plan describes each of the state's river basins. The ANRC Conservation Division supports development, management and conservation of the state's land and water resources, in part through nutrient management planning. A nutrient management plan (NMP) is a document approved by a conservation district board that assists landowners and operators in the proper management and utilization of nutrient sources for maximum soil fertility and protection of state waters. ANRC requires NMPs for farms that plan to land apply litter, sewage sludge, or commercial fertilizer within an area designated as the Nutrient Surplus Area (which includes parts of Baxter, Benton, Boone, Carrol, Crawford, Madison, Marion, Polk, Scott, Sebastian, and Washington Counties. For land application outside this area, usage of a nutrient management plan is voluntary.

The proposal is not located within a nutrient surplus area in Arkansas. SEE APPENDIX A-11. The proposed expansion would take place in the Blocker Creek-Little Missouri River Watershed (HUC12: 080401030502). SEE APPENDIX G-1. This watershed is located within the Upper Ouachita River basin. According to the Arkansas water plan this basin consists of nearly 3.5 million acres of gently rolling hills across southwest Arkansas. Land use in this basin is primarily established in forestland. REFERENCE ARKANSAS WATER PLAN. The applicant utilizes a compost shed for mortality on the existing farm and registered with ANRC for the 2023 production year in 2024. The existing broiler farm is operating in compliance.

## Impacts of Proposed Action

A SWPPP has been prepared for the proposed expansion of the existing broiler operation. Based on the plans that have been submitted, the proposal would disturb 7.1 acres. SEE APPENDIX C. The SWPPP has been reviewed by ADEQ and the applicants have been issued a notice of coverage for an NPDES permit. With adherence to the best management practices described in the SWPPP, minimal impacts to surface water from the proposed construction are anticipated. The proposed farm would not discharge into waters of the state and therefore no impacts to state surface waters are anticipated. Any land application of litter produced on the farm would need to comply with ANRC requirements in order to be protective of surface water quality. REFERENCE ANRC.

The SWPPP has implemented best management BMP's and protective measures into the design of this proposed project to help protect water quality during the construction phase of the proposal. SEE APPENDIX C-1. The farm currently uses a compost shed as a method of dead bird disposal, which would also be used for the proposed expansion of the farm. Composting is an approved method by ANRC.

Integrators typically require their growers to "cake out" in between flocks, which consists of removing the top few inches of litter. Depending on integrator requirements and management practices utilized by the grower, a full house clean out is typically conducted annually, where all the litter is removed from the houses. The applicants would have the option to sell this litter and have it transported off site to another location. Litter is typically spread on neighboring pastures as fertilizer in this area. The applicants would be responsible for record keeping and adherence to the recommendations of a NMP if they choose to have one developed.

In summary, the existing operation is operating in compliance and the applicants have taken the necessary steps and obtained the necessary plans and permits for the proposed construction activities to take place. These proposed measures should be adequate to help prevent contamination of stormwater off site during the construction phase of this proposed farm.

No significant impacts to water quality are anticipated to result from the Proposed Action.

---

## 5. Air Quality

### Existing Conditions

As of February 1, 2018, all of Arkansas is in attainment for all criteria pollutants established by the Environmental Protection Agency in compliance with the Clean Air Act. The proposed farm would not be required to obtain an air permit in accordance with Arkansas Air Pollution Control Regulation 18.301 since air emissions for defined criteria pollutants at the facility do not exceed the permitting thresholds considered protective of air quality. Potential air quality effects considered here include odor and dust production, which may be associated with construction activities and the ongoing operations of the farm. SEE REFERENCES

The site of the Proposed Action lies in rural Pike County where agriculture, including livestock feeding operations, are common. Pike county had 82 poultry farms registered for the 2022 production year. According to NASS, Pike county had 23,000 head of cattle, including calves in January 2023. SEE

APPENDIX K-2. Timber accounts for 23% of the land use in Pike county. There are large tracts of timber to the north and west of the proposed site and a small patch of timber bordered the farm to the east. The trees would act as a natural buffer that would help filter out odors, dust, and other particulate matter emitted by the proposed poultry houses. The surrounding environment could expect little changes from existing conditions in air quality. The proposal should have no adverse impacts to neighboring residences, schools, or churches. The existing farm has been in production since 2018.

Arkansas Water and Air Pollution Control Act, Subchapter 3 Air Pollution exempts "Agricultural operations in the growing or harvesting of crops and the raising of fowls or animals" and the "use of equipment in agricultural operations in the growth of crops or the raising of fowls or animals." There are no local ordinances regulating odor in this area.

### Impacts of Proposed Action

Construction activities that disturb the soil surface could generate dust. Such impacts would be minor, temporary and localized, generally confined to the farm property and ongoing only during construction activities. Existing poultry house pads would be widened and made longer, along with the load out area. Exposed soils while reworking existing and new pads could be wet down to control fugitive dust. Similarly, during construction, minor and localized emissions associated with heavy machinery could be expected. None of these construction related impacts would have a significant or long-term adverse impact to surrounding air quality.

During operation of the farm, roads used by delivery trucks in between the proposed broiler houses would also be covered with gravel to minimize dust associated with travel. Dust generated while the poultry facility is in operation would occur mostly during feeding. Humidity and misting systems inside poultry houses would keep down dust, within the barns.

Odor would be controlled through management of the poultry barns' ventilation systems, as is required by integrators for flock health. The applicants would utilize a compost shed described in earlier sections of the EA for mortality disposal for their proposed broiler operation, which is an approved method of disposal by the Arkansas Poultry and Livestock Commission. Poultry litter on the farm would be stored in the broiler houses which would keep it dry and reduce the impacts of odor emitted by the litter.

The poultry houses would be cleaned per integrator specifications between flocks as appropriate on an as-needed basis. Litter would be stored in accordance with ANRC regulations, either in a litter shed if the applicants choose to build one in the future, or it would be tarped in an elevated location to be kept out of the elements until it could be removed from the farm and land applied as fertilizer.

Dilution of odors is caused through the mixing of odors with ambient air and is a function of distance, topography, and meteorological conditions. Prevailing winds are from the west and would serve to facilitate the dispersion of odors. Based on the climate of the southeastern United States, there would be a few days in the year when weather conditions and humidity may cause odor to linger in the vicinity.

According to the EPA, total GHG emissions in the US in 2014 were 6,870 million metric tons of carbon dioxide equivalent (CO<sub>2</sub>e), a metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential. Agriculture accounted for approximately 9 percent of the total or 625.4 million metric tons. The contribution of agriculture to GHG emissions is comprised of

livestock (242.96 million metric tons CO<sub>2</sub>e), crops (330.68 million metric tons CO<sub>2</sub>e), and fuel combustion (51.79 million metric tons CO<sub>2</sub>e).

Agricultural activities contribute to GHG in several ways: Management of agricultural soils accounts for over half of agriculture emissions. Activities including fertilizer application, irrigation and tillage, can lead to production and emission of nitrous oxide. Livestock, particularly cattle, produce methane as part of their digestion accounting for almost one third of the agricultural emissions. Manure storage and management also contribute methane and nitrous oxide, accounting for about 14 percent of the agricultural GHG emissions. Smaller agricultural sources include methane produced by rice cultivation and the burning of crop residue, which produces methane and nitrous oxide. Odor impacts would not be expected to be significant. Discharge fans would all be placed on the east end of the houses.

---

## **6. Noise**

### **Existing Conditions**

Existing noise at the site of the proposed action is from routine farming operations that currently take place from the broiler farm as well as the cattle and hay operation. Noise from neighboring farms, residences, and traffic is common along the numerous gravel and paved roads that surround this farm. Existing conditions on site are generally quiet. The proposed site is currently used for grazing beef cattle. Noise from fans, tractors and equipment, vehicle traffic, and other farming and human activity does exist, but is temporary in nature. The surrounding environment would experience minimal changes from existing conditions should the proposal be allowed to continue.

### **Impacts of the Proposed Action**

The Proposed Action would expand an existing (4) house integrated poultry operation. Noise levels would increase slightly during normal, daylight working hours during the construction phase of this project, which typically lasts about 6 months. Upon completion, noise from the Proposed Action would permanently increase noise levels in this area; however, noise from birds would be insignificant as they are contained within the poultry houses which are set back from property lines and further muffled by insulation in between the roofs, and ceilings and solid side walls within these structures and vegetative buffers to the south, east and to the west. These measures would also aid in mitigating periodic equipment usage and truck noise associated with the movement of birds, feed, supplies, and materials. Such activities would rarely take place other than during daylight hours, be infrequent in nature, of brief duration and low intensity. Similarly, noise from generators would be limited to a few minutes of periodic testing and they would only operate on a temporary basis in the event of emergencies should power be lost. As such noise would be of irregular and infrequent duration it would not be significant. Additionally, Arkansas's Right to Farm Law protects operation of farms that were established prior to the use of the area surrounding the agricultural operation for nonagricultural activities and those farms which employ methods or practices commonly or reasonably associated with agricultural production. As integrated poultry production is a mainstay of the state's economy the related production methods have

long been the accepted prevailing practice for widespread production both in Arkansas and throughout the country. SEE ARKANSAS RIGHT TO FARM REFERENCE

The proposed action is not expected to significantly affect ambient noise levels in the area or the nearest dwelling.

## 7. CUMULATIVE IMPACTS

---

The cumulative impacts analysis is important to understanding how multiple actions in a particular time and space (e.g., geographic area) impact the environment. The CEQ regulations define cumulative effects as “...the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions” (40 CFR § 1508.7). Whereas the individual impact of one project in a particular area or region may not be considered significant, numerous projects in the same area or region may cumulatively result in significant impacts.

Cumulative impacts most likely arise when a relationship exists between a proposed action and other actions occurring in a similar location or time period. Actions overlapping with or in proximity to the proposed action would be expected to have more potential for a relationship than those more geographically separated. Similarly, actions that coincide in time, may have the potential for cumulative impacts.

Establishing an appropriate scope for cumulative impacts analysis is important for producing meaningful analysis that appropriately informs agency decision making. This involves identifying geographic or temporal boundaries within which to identify other activities that could contribute to cumulative impacts to resources. Boundaries should consider ecologically and geographically relevant boundaries which sustain resources of concern. Temporal boundaries will be dependent on the length of time the effects of the proposed action are estimated to last and analysis commensurate with the project’s impact on relevant past, present, and reasonably foreseeable activities within those boundaries. For example, small scale projects with minimal impacts of short duration would not likely contribute significantly to cumulative impacts. CEQ guidance (2005) reinforces this, stating:

*“The scope of the cumulative impact analysis is related to the magnitude of the environmental impacts of the proposed action. Proposed actions of limited scope typically do not require as comprehensive an assessment of cumulative impacts as proposed actions that have significant environmental impacts over a large area. Proposed actions that are typically finalized with a Finding of No Significant Impact usually involve only a limited cumulative impact assessment to confirm that the effects of the proposed action do not reach a point of significant environmental impacts”*

This cumulative impacts analysis focuses on the potentially affected resource (identified in section 3.2 of this document) and uses natural local boundaries to establish the geographic scope within which cumulative impacts could occur. Relevant past, present and reasonably foreseeable activities identified in Section 5.1 are based on potential geographic and temporal relationships with the proposed action within those identified boundaries. Cumulative effects on those resources are described in Section 4.2.

## **7.1 Past, Present and Reasonably Foreseeable Actions**

Analysis of cumulative analysis is forward looking and focuses on Hempstead County where the proposed action would be implemented and the related area which includes the resources of concern. The purpose is to assess if the reasonably foreseeable effects of the proposed action would have an additive relationship to other past effects that would be significant, and to examine its relationship other actions (e.g. Federal, State, local, and private activities) that are currently taking place or are expected to take place in the reasonably foreseeable future.

Federal, State, local, and private activities that are currently taking place, have occurred in the past, or may reasonably be assumed to take place in the future in the cumulative effects area include the following: According to the 2017 Census of Agriculture, there were 394 farms in Pike County and 82,459 acres of established farm ground. Pastureland accounts for 43% of the land use, Woodland accounts for 23%, Cropland accounts for 28%, and 6% of the land is devoted to other land uses. SEE APPENDIX K-1.

Poultry integrators have a finite processing capacity and have a need for new facilities, such as the proposed project, as older facilities are routinely retired due to functional obsolescence or otherwise phased out of production. As there is no foreseeable expectation that integrators would be having a significant expansion in processing capacity in the area, the quantity of bird produced in the area would remain relatively stable, even if the number of farms fluctuates.

## **7.2 Cumulative Analysis**

Some resources considered for detailed analysis above (in Section 3.2) could be directly or indirectly affected by the Proposed Action and therefore the Proposed Action could contribute to additive or interactive cumulative effects to these resources. For other resources, no such contributions to cumulative effects are anticipated because no direct or indirect impacts would occur based on program requirements.

The significance of cumulative effects is dependent on how impacts compare with relevant thresholds, such as regulatory standards. Regulatory standards can restrict development by establishing thresholds of cumulative resource degradation (CEQ 1997):

“Government regulations and administrative standards...often influence developmental activity and the resultant cumulative stress on resources, ecosystems, and human communities. They also shape the manner in which a project may be operated, the amount of air or water emissions that can be released, and the limits on resource harvesting or extraction.”

Cumulative effects in this analysis are described relative to regulatory standards and thresholds in accordance with CEQ guidance. FSA relies on the authority and expertise of regulatory agencies, which have broad knowledge of regional activities that could affect the sensitive resources they are responsible for protecting, and to ensure through their permitting and consultation processes that its activities are not likely to contribute to significant negative cumulative resource impacts.



---

### ***7.2.1 Wildlife and Habitat***

Contributions of the Proposed Action to cumulative impacts include removal of existing vegetation and the loss and fragmentation of wildlife habitat. No impacts to Threatened and Endangered Species are anticipated based on program requirements. According to the Official Endangered and Threatened Species list that was obtained for this area and the Farm Service Agency Programmatic Decision Key, the proposed project may affect, but is not likely to adversely affect threatened or endangered species in Arkansas and that no further consultation with the USFWS Arkansas Regional Field Office is necessary. Implementation of BMP's in the SWPPP for the proposal would help protect water quality in this area. The proposed site is currently utilized as pasture ground and primarily established in mixed forages. Such impacts would add to vegetation and habitat lost as a result of past, present and reasonably foreseeable activities in the region of the Proposed Action including loss of native vegetation communities to agriculture, residential and commercial development and road building, recreation and other human activities. The Proposed Action would not be anticipated to result in long term or adverse impacts or to endangered species or their habitat. No cumulative impacts are anticipated based on coordination and consultation with USFWS and program requirements.

---

### ***7.2.2 Cultural Resources***

Based on program requirements, which call for coordination and consultation with State and Tribal Historic Preservation Offices, no impacts to known cultural resources are expected to result from the Proposed Action. There is the potential for encountering unknown cultural resources if the proposal is implemented. Though unlikely, potential loss and damage to unknown cultural resources could occur, adding to similar potential impacts from other past, ongoing, and future developments that have the potential to degrade and destroy cultural resources. A final decision on the proposed action would not be made until the Section 106 process has been completed.

---

### ***7.2.4 Water Quality***

During construction of the Proposed Action there is the potential for mobilization of exposed soil; however those impacts would be temporary and minor, and minimized by adherence to terms of the SWPPP. Such impacts would add to impacts to water quality resulting from residential, municipal, industrial, and commercial development, particularly the use of septic systems, as well as runoff from roads and development, and agricultural production. Once the disturbed areas are revegetated or otherwise stabilized, no impacts to water quality would be expected. Since there are no long-terms effected to water quality, the proposed action would not be expected to contribute significantly to cumulative effects to water quality.

---

### **7.2.5 Air Quality**

The Council on Environmental Quality Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change In National Environmental Policy Act Reviews states:

The site of the Proposed Action lies in a rural area. This proposed operation is surrounded by mixed timber, which would act as a buffer to filter the odor, dust, and other particulate matter emitted by the existing and proposed poultry houses. Exhaust fans would point towards the west, away from the nearest neighboring residence.

Arkansas Water and Air Pollution Control Act, Subchapter 3 Air Pollution exempts "Agricultural operations in the growing or harvesting of crops and the raising of fowls or animals" and the "use of equipment in agricultural operations in the growth of crops or the raising of fowls or animals." There are no local ordinances regulating odor in existence in this area.

Arkansas's Right to Farm Law protects operation of farms that were established prior to the use of the area surrounding the agricultural operation for nonagricultural activities and those farms employ methods or practices commonly or reasonably associated with agricultural production. Management of agricultural soils accounts for over half of agriculture emissions. Activities including fertilizer application, irrigation and tillage, can lead to production and emission of nitrous oxide.

- Livestock, particularly cattle, produce methane as part of their digestion accounting for almost one third of the agricultural emissions.
- Manure storage and management also contribute methane and nitrous oxide, accounting for about 14 percent of the agriculture GHG emissions.
- Smaller agricultural sources include methane produced by rice cultivation and the burning of crop residue, which produces methane and nitrous oxide.

Dust would be generated from soil disturbance and equipment usage during construction and during operation as a result of equipment use, delivery trucks, and feeding systems. Such impacts would be minor, intermittent, and localized. Though such impacts are not expected to be significant, they would add to dust generated by other activities in the immediate vicinity of the farm.

Odor impacts from the proposed action including from the barns, litter storage facility, land application of litter on the farm, though not significant, would add to other sources of odor in the area including existing cattle and poultry farms nearby.

---

### **7.2.6 Noise**

Increases in noise levels would be minimal compared to existing conditions. There are no local or state noise ordinances, based on Program Requirements.

### 7.3 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

NEPA requires that environmental analysis include identification of any irreversible and irretrievable commitments of resources which would be involved should an action be implemented. The term irreversible refers to the loss of future options and commitments of resources that cannot be renewed or recovered, or can only be recovered over a long period. Irreversible commitments apply primarily to the use of nonrenewable resources, such as minerals or cultural resources, or to factors such as soil productivity, that are renewable only over a long period. Irretrievable refers to the loss of production or use of natural resources. For example, when a road is built through a forest, some, or all of the timber production from an area is lost irretrievably while an area is serving as a road. The production lost is irretrievable, but the action is not irreversible. If the use changes, it is possible to resume timber production. No irreversible resource commitments would occur as a result of the Proposed Action. Irretrievable resources include those raw materials and fuels used during construction. List of Preparers and Persons and Agencies Contacted

| 8. List of Preparers   |   |
|--|---|
| Name and Title   | Education and Experience  |
| Adam Kaufman,<br>State Environmental<br>Coordinator, FSA, Arkansas | BS, Crop, Soil, and Environmental Sciences<br>Years of Experience: 15 |

| Persons and Agencies Contacted |                              |
|--------------------------------|------------------------------|
| Name and Title                 | Affiliation                  |
| [REDACTED]                     | Applicant                    |
| [REDACTED]                     | Guaranteed Lender            |
| Scott Kaufman                  | Arkansas SHPO                |
| Darin Cisco                    | Apache Tribe of Oklahoma     |
| Everett Bandy                  | Quapaw Tribe of Indians      |
| Derek Hill                     | Caddo Nation                 |
| Autumn Gorrell                 | Chickasaw Nation             |
| Lindsey D. Bilyeu              | Choctaw Nation of Oklahoma   |
| Linda Langley                  | Coushatta Tribe of Louisiana |
| Dr. Andrea Hunter              | Osage Nation                 |
| Tonya Tipton                   | Shawnee Tribe of Oklahoma    |
|                                |                              |

## 8. REFERENCES

---

CEQ 1997. Council on Environmental Quality (CEQ). 1997. Guidance under the National Environmental Policy Act. December.

**Arkansas Water Plan:**

<http://www.arwaterplan.arkansas.gov/plan/ArkansasWaterPlan/AppendicesUpdate.htm>

[https://www.arwaterplan.arkansas.gov/basin%20reports/awp\\_red\\_river\\_below\\_fulton.pdf](https://www.arwaterplan.arkansas.gov/basin%20reports/awp_red_river_below_fulton.pdf)

**National Agricultural Statistics Service (NASS):**

[https://www.agcensus.usda.gov/Publications/2012/Online\\_Resources/County\\_Profiles/Arkansas/cp05083.pdf](https://www.agcensus.usda.gov/Publications/2012/Online_Resources/County_Profiles/Arkansas/cp05083.pdf):

**Web Soil Survey (WSS):** <https://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>

**IPAC (Information:** <https://ecos.fws.gov/ipac/>

**FEMA:** <https://msc.fema.gov/portal>

**NEPASSIST:** <https://www.epa.gov/nepa/nepassist>

**National Agricultural Statistics Service (NASS):**

[https://www.agcensus.usda.gov/Publications/2012/Full\\_Report/Volume\\_1,\\_Chapter\\_2\\_County\\_Level/Arkansas/st05\\_2\\_001\\_001.pdf](https://www.agcensus.usda.gov/Publications/2012/Full_Report/Volume_1,_Chapter_2_County_Level/Arkansas/st05_2_001_001.pdf)

**Arkansas Department of Environmental Quality (ADEQ), Impaired Streams/TMDL Lists:**

<https://www.adeg.state.ar.us/water/>

[https://www.adeg.state.ar.us/water/planning/integrated/303d/pdfs/2020/2020CombineCat4\\_&\\_5.pdf](https://www.adeg.state.ar.us/water/planning/integrated/303d/pdfs/2020/2020CombineCat4_&_5.pdf)

**Arkansas Department of Environmental Quality (ADEQ), Rules and Regulations:**

<https://www.adeg.state.ar.us/regs/>

**Arkansas Natural Resource Commission (ANRC) Regs:** <http://www.anrc.arkansas.gov/rules/current-rules/>

**Arkansas Air Pollution Control Regulations:**

[https://www.adeg.state.ar.us/regs/files/reg18\\_final\\_160314.pdf](https://www.adeg.state.ar.us/regs/files/reg18_final_160314.pdf)

**Arkansas Water.Org Hempstead County:**

[http://arkansaswater.org//index.php?option=com\\_content&task=view&id=101&Item](http://arkansaswater.org//index.php?option=com_content&task=view&id=101&Item)

Burns, R.T., H. Li, H. Xin, R.S. Gates, D.G. Overhults, J. Earnest, and L. Moody. 2008. Greenhouse Gas (GHG) Emissions from Broiler Houses in the Southeastern United States. Published in Proceedings of the American Society of Agricultural and Biological Engineers Agricultural and Biosystems Engineering Conference.

**EPA 2016a. US Environmental Protection Agency Sources of Greenhouse Gas Emissions. Available at:** <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#agriculture>. Accessed March 1, 2017.

**EPA 2016b. US Environmental Protection Agency Greenhouse Gas Data Explorer. Available at:** <https://www3.epa.gov/climatechange/ghgemissions/inventoryexplorer/>. Accessed March 1, 2017.

**National Forest Service:** <https://www.fs.usda.gov/osfnf>

**Arkansas Air Pollution Control Regulations:**  
[https://www.adeq.state.ar.us/regs/files/reg18\\_final\\_160314.pdf](https://www.adeq.state.ar.us/regs/files/reg18_final_160314.pdf)

**Arkansas Right to Farm:** [http://www.farmlandinfo.org/sites/default/files/Arkansas\\_RTF\\_law\\_1.htm](http://www.farmlandinfo.org/sites/default/files/Arkansas_RTF_law_1.htm)

**Arkansas 2018-2023 NPS Pollution Management Plan** [https://static.ark.org/eeuploads/anrc/2018-2023\\_NPS\\_Pollution\\_Management\\_Plan.compressed\\_\(2\).pdf](https://static.ark.org/eeuploads/anrc/2018-2023_NPS_Pollution_Management_Plan.compressed_(2).pdf)

**USGS:**  
<https://apps.nationalmap.gov/viewer/>

## 9. EA DETERMINATION AND SIGNATURES

---

### ENVIRONMENTAL DETERMINATION – The FSA preparer of the EA determines:

1. Based on an examination and review of the foregoing information and supplemental documentation attached hereto, I find that this proposed action
  - would have a significant effect on the quality of the human environment and an Environmental Impact Statement (EIS) must be prepared;
  - would not have a significant effect on the quality of the human environment and, therefore, an EIS will not be prepared.
  
2. I recommend that the Project Approval Official for this action make the following compliance determinations for the below-listed environmental requirements.

| Not in compliance | In compliance | Not applicable |   |
|-------------------|---------------|----------------|---|
|                   |               |                | National Environmental Policy Act   |
|                   |               |                | Clean Air Act   |
|                   |               |                | Clean Water Act   |
|                   |               |                | Safe Drinking Water Act   |
|                   |               |                | Endangered Species Act  |
|                   |               |                | Coastal Barrier Resources Act   |
|                   |               |                | Coastal Zone Management Act   |
|                   |               |                | Wild and Scenic Rivers Act/National Rivers Inventory  |
|                   |               |                | National Historic Preservation Act  |
|                   |               |                | Subtitle B, Highly Erodible Land Conservation, and Subtitle C, Wetland Conservation, of the Food Security Act |
|                   |               |                | Executive Order 11988 and 13690, Floodplain Management  |
|                   |               |                | Executive Order 11990, Protection of Wetlands   |
|                   |               |                | Farmland Protection Policy Act  |
|                   |               |                | Department Regulation 9500-3, Land Use Policy   |
|                   |               |                | E.O. 12898, Environmental Justice   |

3. I have reviewed and considered the types and degrees (context and intensity) of adverse environmental impacts identified by this assessment. I have also analyzed the proposal for its consistency with FSA environmental policies, particularly those related to important farmland protection, and have considered the potential benefits of the proposed action. Based upon a consideration of these factors, from an environmental standpoint, this project may:
  - Be approved without further environmental analysis and a Finding of No Significant Impact (FONSI) prepared.
  - Not be approved because of the reasons identified under item b.

|                                    |      |
|------------------------------------|------|
| Signature of Preparer              | Date |
|                                    |      |
| Name and Title of Preparer (print) |      |

**Environmental Determination – FSA State Environmental Coordinator determines:**

Based on my review of the foregoing Environmental Assessment and related supporting documentation, I have determined:

- The appropriate level of environmental review and assessment has been completed and substantiates a Finding of No Significant Impact (FONSI); therefore, an EIS will not be prepared and processing of the requested action may continue without further environmental analysis. A FONSI will be prepared.
  
- The Environmental Assessment is not adequate and further analysis or action is necessary for the following reason(s):
  
  
  
  
  
  
  
  
  
  
- The Environmental Assessment has established the proposed action cannot be approved for the following reason(s):

Additional SEC Comments:

|                  |      |
|------------------|------|
|                  |      |
| Signature of SEC | Date |
| Printed Name     |      |

