

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

**Draft ENVIRONMENTAL ASSESSMENT**



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

***01/14/2023***

## COVER SHEET

<b>Proposed Action:</b>	The Farm Service Agency (FSA) of the United States Department of Agriculture proposes to provide Farm Loan Program assistance to finance the construction of (6) 54' x 600' broiler houses, a generator shed, (2) water wells, load out pad, access road, utilities, and related infrastructure on a 120 acre tract of land. The physical location of this proposal would take place approximately 8.2 miles south of downtown Pine Bluff, AR. The legal description of the proposed farm location is in Section 23, Township 7 South, Range 9 West, Jefferson County.
<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 in the Pine Bluff Commercial on 01/14/2023 and 01/21/2023 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, 100 E 8TH AVE ROOM 2603 PINE BLUFF, AR 71601-5073 and at 303 NORTH LINCOLN AVENUE St. B. STAR CITY, AR 71667. The Draft EA document itself will also be posted from 01/14/2023 thru 02/16/2023 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> <p>Public comments should be submitted in writing to the following USDA Service Center:          USDA, Farm Service Agency, Attn: Adam Kaufman, 419 W. Gaines St. Monticello, AR 71655</p>

## TABLE OF CONTENTS

<b>1. Introduction</b> .....	<b>7</b>
<b>1.1</b> Background .....	7
<b>1.2</b> Purpose and Need for the Proposed Action .....	7
<b>1.3</b> Decision To Be Made .....	8
<b>1.4</b> Regulatory Compliance .....	8
<b>1.5</b> Public Involvement and Consultation .....	8
<b>1.5.1</b> Internal Scoping .....	8
<b>1.5.2</b> External Scoping .....	9
<b>1.5.3</b> Public Involvement .....	9
<b>2. Description of Proposed Action and Alternatives</b> .....	<b>10</b>
<b>2.1</b> Alternative A - Proposed Action .....	10
<b>2.2</b> Alternative B - No Action Alternative .....	12
<b>2.3</b> Alternative C .....	12
<b>2.4</b> Alternatives Considered but Eliminated From Analysis.....	12
<b>3. Affected Environment and Impacts</b> .....	<b>14</b>
<b>3.1</b> Resources Eliminated from Detailed Analysis .....	14
<b>3.2</b> Resources Considered with Detailed Analysis .....	16
<b>3.2.1</b> Wildlife and Habitat.....	16
<b>3.2.2</b> Cultural Resources .....	17
4. Water Quality .....	19
5. Air Quality .....	21
6. Noise .....	22
<b>7. Cumulative Impacts</b> .....	<b>24</b>
7.1 Past, Present and Reasonably Foreseeable Actions .....	25
7.2 Cumulative Analysis .....	25
7.2.1 Wildlife and Habitat.....	26
7.2.2 Cultural Resources.....	26
7.2.4 Water Quality .....	26
7.2.5 Air Quality.....	27
7.3 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES.....	28
<b>8. References</b> .....	<b>30</b>
<b>9. EA Determination and Signatures</b> .....	<b>32</b>

**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)**

**C-2 Notice of Coverage for NPDES Permit from ADEQ**

**APPENDIX D Threatened and Endangered Species Documentation**

**D-1 Official Threatened and Endangered Species List**

**D-2 USFWS Verification Letter and Protective Measures**

**APPENDIX E Agency Correspondence Cultural Resources Documentation**

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

**E-2 Tribes with an Interest in Jefferson and surrounding counties**

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

**APPENDIX F National Natural Landmarks**

**F-1 White River Sugarberry Natural Area**

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

**APPENDIX H Wilderness Areas and Federal Lands Supporting Documentation**

**APPENDIX I Wetlands Supporting Documentation, and AD 1026**

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

**I-2 AD 1026 “HELC and WC Certification”**

**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
SWPPP	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 assistance for the applicant to establish an integrated broiler facility with (6) 54' x 600' houses on a 120 acre tract of land the applicants recently purchased. This proposed facility would have the capacity to house approximately 43,200 birds per house and 259,200 broilers per flock, at maximum capacity, 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.
- Jefferson County is not located in the Nutrient Surplus Area. SEE APPENDIX A-9. Appendices A B, and C 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 establish 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 and 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 Adam Kaufman, USDA, Farm Service Agency on 10/05/2022 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-3.
- Consultation with Tribal Historic Preservation Officers (THPO): Ben Yahola of the Alabama Quassarte Tribal Town, Darrin Cisco of the Apache Tribe of Oklahoma, Derek Hill of the Caddo Nation, Elizabeth Toombs of the Cherokee Nation, Lindsey Bilyeu of the Choctaw Nation of Oklahoma, Linda Langley of the Coushatta Tribe of Louisiana, Alina Shively of the Jena Band of Choctaw Indians, Chief Phylliss Anders of the Mississippi Band of Choctaw Indians, Ms. Corain Lowe-Zedpeda of the Muscogee (Creek) Nation, Dr. Andrea Hunter of the Osage Nation, Everett Bandy 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-3
- 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 01/14/2023 to 02/16/2023 at the following USDA Service Centers:

Farm Service Agency, 100 E 8TH AVE ROOM 2603 PINE BLUFF, AR 71601-5073 and 303 NORTH LINCOLN AVENUE St. B. STAR CITY, AR 71667. The Draft document itself will also be posted on the Arkansas FSA state website <https://www.fsa.usda.gov/state-offices/Arkansas/index> from 01/14/2023 to 02/16/2023. A notice of the availability of the draft EA will be published in the Pine Bluff Commercial on 01/14/2023 and 01/21/2023. Public comments should be put in writing and sent to the attention of Adam Kaufman, at USDA, Farm Service Agency, 419 W. Gaines St. Monticello, AR 71655.

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

---

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

The proposed action involves FSA providing a guaranteed farm ownership loan to a commercial lender that would be used to establish a new (6) house broiler farm on a 120 acre tract of land in Jefferson County located approximately 8.2 miles south of Pine Bluff, AR. The legal description of the proposed location is in Section 23, Township 7 South, Range 9 West, Jefferson County. This tract of land is located along the edge of the South Central Plains eco region of Arkansas. The applicants have recently purchased the 120 acres. The tract was established in timber, which was clearcut in early 2022. Slopes on this proposed site range from 0 to 3 percent. SEE APPENDIX I.

The applicants would enter into a contract with a poultry integrator, who would place flocks of broilers on the farm, where they would be grown to market size. The applicants, as growers, would be responsible for providing the chicken houses and 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.

There are no existing structures on the proposed site with the exception of a few logging trails and a gravel access road. SEE APPENDIX B. The proposed site would be accessible via Pinebergen Road which borders the 120 acre tract to the south. Pinebergen road is paved and runs east and west 1.3 miles in between Highway 63 to the west and Highway 530 to the east.

The proposal would take place in a rural setting. A rectangular shaped 80 tract that was recently clearcut lies in between the proposed site and highway 63 to the west. A pine plantation exists to the northwest of the 120 acre tract. SEE APPENDIX A-1. Additional clearcuts and mixed timber stands exists to the northeast of the proposed site. Mixed timber stands also exists to the east of the proposed site. There are several dwellings located south of Pinebergen road and along the highways and county roads in this area. SEE APPENDIX A-5. The nearest neighboring dwelling would be approximately 500' south of where the proposed compost shed would be located. The nearest dwelling north of Pinebergen road would be located approximately 550' southeast of the southernmost proposed poultry house. A Dollar General is located .3 miles west of the proposed site on the west side of highway 63. The proposal would be located 5.75 miles southeast of Jefferson Preparatory School. SEE APPENDIX A-6. The nearest church in relation to the proposal would be Owen's Chapel, located 1.7 miles to the southeast. SEE APPENDIX A-7. According to the Jefferson County Conservation District 2 poultry farms registered for the 2022 production year. According to NASS, Jefferson county had 2,400 head of cattle, including calves as of January 2022. The 2017 Census of Agriculture indicates land uses in Jefferson county consists of 87% cropland, 9% woodland, 2% grasslands, and 2% other uses in Jefferson county. SEE APPENDIX K-1.

The proposed layout of this facility would be located as specified on the attached site plan found in APPENDIX A-1. It should be noted that older aerial imagery was used for the engineering plan as shown in A-1. The 120 acres was clear cut earlier in 2022 as shown in the site photos in APPENDIX B and Soil Map in APPENDIX I.

Proposed improvements would consist of (6) 54' x 600' broiler houses, an access road, load out pad, generator shed, a litter stacking shed, compost shed, utilities, water wells, litter stacking shed, compost shed and related infrastructure. The proposed poultry houses would be running east and west and stacked north to south. SEE APPENDIX A-1. These structures would be built on top of earthen pads with dimensions slightly larger than the dimensions of the houses themselves. All soil for the pads would come from the 19 acre proposed site. Each house would have the potential to typically accommodate approximately 43,200 broilers at maximum capacity, which would equate to 259,200 birds per flock in all (6) houses. The proposed broiler farm would have a load out area that would be built on the west side of the (6) broiler houses. The load out area would be approximately 100' wide east to west and extend north and south continuously the length of the houses. The load out area would provide space for live haul, feed and service trucks, and other farm traffic and equipment to park and turn safely while entering and exiting this proposed facility and would be used for equipment storage.

The proposed operation would utilize a compost shed as a means of mortality disposal which is an ANRC approved method. The compost shed would be placed in the southwestern corner of the broiler houses. The compost shed would be built on top of a reinforced concrete slab, have a metal roof and sides, and have the capacity to dispose normal mortality on this proposed farm. The proposed operation would utilize (2) generators for a backup power supply in the event of an outage. The generators would be placed under a 20' x 32' generator shed placed in the center of the proposed broiler houses. The generator shed would have a wood frame, metal roofs and sides, sit on top of a concrete slab, and each would house (2) 150 kW diesel powered generators which would be controlled by (3) 400 Amp transfer switches. The generators would serve as a backup power supply for this proposed broiler facility in the event of a power outage and utilize low sulfur diesel as a fuel source, stored in a 300 gallon above ground tanks. Underground wiring in conduit would be trenched from the generators and plumbed into each poultry house.

There is an existing gravel access road running north and south from Pinebergen road to the proposed site that would join the load out area. The stretch of Pinebergen road south of the 120 acre tract is reasonably straight and flat. Some pine trees exist on the north side of the road. It would appear that any vehicles entering or existing this proposed broiler farm would be able to do so safely and would be visible by any traffic travelling Pinebergen road. Related infrastructure would include access roads in between the (6) broiler houses themselves, utility lines for water and electricity, and best management practices. Electricity to proposed poultry house facilities would be ran over head from the existing service connection on Pinebergen Road to the proposed farm.

Water to the proposed broiler operation would be supplied by (3) water wells, which would be drilled to an approximate depth of 900' based on the bids that have been submitted. Two wells would be placed near the center of the proposed broiler operation and the other would be placed along the western end of the load out pad. Underground plumbing would run from the wells to the proposed broiler facilities. The proposed houses would be heated with natural gas, which would also be available on Pinebergen road. The proposal would also involve setting up a mobile home, septic system, and utilities on the southeastern corner of the 120 acre tract of land.

According to the stormwater pollution prevention plan (SWPPP), this proposal would involve 19 acres of ground disturbance. The 120 acres was established in mixed timber which was clearcut in early 2022.

The proposed site has been allowed to naturally revegetate itself in native vegetation. No tree removal would be necessary.

The proposed area is relatively flat with 0-3% slopes. SEE APPENDIX I. The proposed load out area and all access roads would be covered with gravel. 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 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 would allow the 120 acres to naturally regenerate, plant it back in trees, establish the land in pasture, or pursue other ventures with no impacts as the proposed action would not go forward.

## **2.3 Alternative C**

An alternative location would not be feasible, as the proposed project would take place on property the applicants currently own. The proposed site is in a rural setting with access to utilities, roads, and highways. Integrators typically require a farm manager to live on or in close proximity to the farm.

The proposed project was designed to require the least amount of ground disturbance possible while taking the surrounding environment into consideration. The proposal as planned would take place on the southern end of the 120 acre tract. The proposal would need to be placed 150' from property boundaries, roads, dwellings, and businesses to comply with integrator setback requirements. The proposed site could be moved farther north, or farther to the northeastern corner of the 120 acre tract of land. These alternatives would increase the distance in between the nearest neighboring dwellings and make the farm less visible to traffic, however it would result in longer access roads, longer utility lines, more materials and greater capital investment to complete the project, and would also disturb more land than that of the proposed action.

The proposed site configuration was designed to create the least amount of ground disturbance and vegetation removal, resulting in minimal impact on the environment and its surroundings during the construction phase of the proposal. Alternative configurations for the proposal were considered, although would not be feasible and may have a greater impact on the affected environment. Integrated poultry producers must comply with very specific logistical and design requirements provided by the integrators.

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

Other locations for the farm 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 guaranteed loans to fund the construction of a new large CAFO. 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 nearest wild and scenic river in relation to the proposed project is the Little Missouri River, located 110 miles west of the proposed broiler farm. SEE APPENDIX G-3. The Saline River has a Nationwide Rivers Inventory (NRI) designation and is located 22 miles to the southwest of the proposal. SEE APPENDIX G-4. No further consultation would be required based on program requirements.

## **National Natural Landmarks**

There are five National Natural Landmarks (NNL) in Arkansas. SEE APPENDIX H-1. The closest NNL in proximity to this proposal would be the White River Sugarberry Natural Area located 51 miles east of the proposed site, therefore National Natural Landmarks are eliminated from detailed analysis.

## **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. No portion of the 120 acre tract of land is located within the 100 year floodplain. 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,” wetland indicators were not present on the 19 acre proposed site where the proposal would be located, therefore no additional screening is necessary. SEE APPENDIX I-1.

## **Soils**

Soils are eliminated from detailed analysis. The proposal would not involve annual tillage. The farm would not be cropped and is therefore not subject to the Highly Erodible Land provisions of the Food Security Act. The applicants have both signed AD-1026 “Highly Erodible Land Conservation and Wetland Conservation Certification.” SEE APPENDIX I-2.

## **Wilderness Areas**

There are 12 designated Wilderness areas in Arkansas. The closest Wilderness Area would be Flatside Wilderness Area, which is located 76 miles northwest of this proposed project. SEE APPENDIX F-1. The nearest federal land in relation to this proposal would be Pine Bluff Arsenal, located 14.7 miles to the northwest. SEE APPENDIX F-1. This proposal should have no impacts on wilderness areas or federal lands.

## **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 for demographic information in Jefferson County.

### 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 majority of the proposed 19 acre project site is currently established in pine plantation and native underbrush, bordered by a gravel county road to the west and north, and surrounded by neighboring stands of timber and clear cuts. Wildlife typical of such areas include whitetail deer, squirrels, raccoons, feral pigs, various other mammals, and birds. A site visit was conducted by FSA on 10/05/2022. 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 Jefferson County was obtained from the US Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) system. SEE APPENDIX D-1. The following threatened and endangered species are known to occur in this area of Jefferson County:

Eastern Black Rail *Laterallus jamaicensis* ssp. *Jamaicensis* (threatened), Piping Plover *Charadrius melodus* (threatened), Red Knot *Calidris canutus rufa* (threatened), and the Monarch Butterfly *Danaus plexippus* (candidate).

According to IPaC there are no critical habitats within the proposed project area under USFWS jurisdiction. SEE APPENDIX D-1.

The proposed 19 acre site lacks suitable wetland and marshy habitats preferred by the Eastern Black Rail, Piping Plover, and the Red Knot, therefore the proposal would have no effect on these bird species. SEE APPENDIX D-2 and APPENDIX I-1. No proposed ground disturbing activities would take place in or near a stream. There are no streams on the 120 acre tract. SEE APPENDIX G-1.

No further consultation for this project is required for these species per USFWS. SEE APPENDIX D-2.

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. Candidate species do not require consultation. Should the

Monarch Butterfly's status be elevated to threatened or endangered, FSA will make an effect determination for the species in IPaC.

### **Impacts of Proposed Action**

According to the SWPPP, 19 acres of ground disturbance would be necessary to implement this proposal. SEE APPENDIX C-1. Implementation of the proposal would result in a long term loss of 19 acres of natural regrowth after a clear cut. This type of terrain and vegetation does currently contribute to wildlife habitat. Based on the results from the USFWS 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. 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**

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. This proposed 19 acre site has been utilized for timber production and recently clear cut in early 2022. SEE APPENDIX A and APPENDIX B. A site visit was conducted by USDA, Farm Service Agency on 10/05/2022. The trees were cut flush with the ground and the stumps still remain on the 120 acres. The majority of the 19 acre proposed site was used for a delimiting and loading area for the logs. The tract and proposed site has no existing improvements other than an existing gravel road. The nearest structure in relation to the proposal that are listed on the National Register of Historic Places is the Bain Jewell House #2 SEE APPENDIX E-1, located 7.9 miles to the northwest. This historic house would not be visible from the proposed site, therefore the proposal should have no effect on it.

FSA consulted with the Arkansas State Historic Preservation Office (SHPO), and Indian Tribes with an interest in this area of Jefferson County, including: Ben Yahola of the Alabama Quassarte Tribal Town, Darrin Cisco of the Apache Tribe of Oklahoma, Derek Hill of the Caddo Nation, Elizabeth Toombs of the Cherokee Nation, Lindsey Bilyeu of the Choctaw Nation of Oklahoma, Linda Langley of the Coushatta Tribe of Louisiana, Alina Shively of the Jena Band of Choctaw Indians, Chief Phyliss Anders of the Mississippi Band of Choctaw Indians, Ms. Corain Lowe-Zedpeda of the Muscogee (Creek) Nation, Dr. Andrea Hunter of the Osage Nation, Everett Bandy of the Quapaw Tribe of Indians, and Tonya Tipton of the Shawnee Tribe of Oklahoma on 10/11/2022. Arkansas SHPO provided a response on 10/18/2022. SHPO's response states that some of the tract has been previously surveyed, and there are no previously recorded archeological sites or historic properties located near or within the are of potential effect. SHPO concurred that no historic properties would be affected for the proposed undertaking. SEE APPENDIX E-3. An email response was received from The Choctaw Nation of Oklahoma on 11/09/2022 which requested an extension due to unforeseen circumstances. FSA responded on the same date, acknowledging the extension through 11/14/2022. No other correspondence was received from the Choctaw Nation. A response was received from the Cherokee Nation on 09/09/2022. The Cherokee Nation does not foresee this project imparting impacts to Cherokee cultural resources at this time, but requests activities to immediately cease if items of cultural significance are discovered during the course of the project. The Osage Nation requested a cultural resource survey that includes shovel testing be

conducted for this project and this area is part of the Osage Nations ancestral territory. FSA contacted Arkansas SHPO and sent the Osage Nation information on where to find the cultural resource survey that had previously been conducted on some of the tract on December 1, 2022. FSA emailed the Osage Nation again on 12/08/2022 to see if the survey was sufficient or if additional information was needed. A response from the Quapaw Nation was received 10/17/2022 requesting SHPO correspondence that has been received. SHPO's response was sent to the Quapaw Nation 01/05/2023.

No other responses from Tribes with an interest in the area of Jefferson County were received.

### **Impacts of Proposed Action**

Based on the proximity of the Bain Jewell House #2, response from SHPO and previous cultural survey, responses from the Choctaw Nation of Oklahoma, Cherokee Nation, Osage Nation, and, Quapaw Tribe, lack of response from the additional Tribes listed above, and previous logging and ground disturbing activities that have taken place on the proposed site, FSA anticipates no impacts to known cultural resources would result from the Proposed Action. 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, local authorities would be contacted along with FSA state and national office personnel, and Arkansas SHPO and Tribes with an interest in this area would also be contacted. Any potential resources discovered would be professionally evaluated for eligibility for listing on the National Register of Historic Places.

---

## 4. WATER QUALITY

---

### Existing Conditions

In Arkansas, the Arkansas Department of Energy and Environment (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. A NMP for this proposed broiler operation has not been developed, as NMP's are voluntary outside of the nutrient surplus area, however the applicants would have the option to have a plan developed, if they wish to do so.

The proposal is not located within a nutrient surplus area in Arkansas. SEE APPENDIX A-9. The northwest half of the proposed project would be located in the Boggy Bayou-Bayou Bartholomew Watershed (HUC12: 080402050104) and the southeastern portion of the proposed project would be located within the Steep Bank Creek-Bayou Bartholomew Watershed (HUC12: 080402050301). SEE APPENDIX G-2. These watersheds are located within the Ouachita River Basin, which covers most of the southern half of the state. According to the ADEQ water quality monitoring assessment report, waters

within this segment have been designated as suitable for the propagation of fish and wildlife, primary and secondary contact recreation, and public, industrial, and agricultural water supplies. REFERENCE ADEQ. Bayou Bartholomew is the longest bayou in the world, meandering approximately 364 miles between the U.S. states of Arkansas and Louisiana. Bayou Bartholomew is on the Arkansas ADEQ 2020 Draft 303(d) list. The bayou is in non-attainment for dissolved oxygen, lead, and temperature. These impairments are believed to be from urban runoff and other unknown sources and considered low priorities. REFERENCE ADEQ

## **Impacts of Proposed Action**

The applicants have submitted the required plans and applications to ADEQ and were granted coverage under Storm water NPDES General Permit AR1500000 SEE APPENDIX C-1 and C-2. 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 proposed 19 acre site would be surrounded by vegetation that has established itself since the proposed site was clearcut in early 2022. All existing vegetation surrounding the proposed site would act as a natural buffer. Silt fence would be implemented around the perimeter of exposed soils and areas with concentrated flow. Rock check dams and other velocity dissipation devices would be strategically placed throughout the site. Diversions would direct stormwater flow towards the southeastern corner of the proposed site into a 68,400 cubic foot sediment basin. SEE APPENDIX A-1 and C-1. All exposed soil would eventually be mulched and seeded with mixed grasses.

The applicants would compost mortality on their proposed farm, which is an approved method by ANRC and considered to be one of the more “eco friendly” methods of mortality disposal. The compost shed would lie in the southwest corner of this proposed site.

Integrators typically require their growers to “cake out” in between flocks, which consist 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. The applicants would be responsible for record keeping and adherence to the recommendations of a NMP.

In summary, the applicants have submitted a SWPPP to ADEQ, and have obtained a NPDES permit thru ADEQ for proposed construction activities to take place, which would help protect surface and ground water quality within this area and surrounding areas. The applicants would also have a litter shed to store litter and cake to keep it out of the elements. The proposed broiler operation would use a compost shed to dispose of their mortality, which is a state approved method. These proposed measures should be adequate to help prevent contamination of stormwater off site during the construction phase of this project and should the project be able to go forward.

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 proposed poultry houses would be completely surrounded by timber in all directions. SEE APPENDIX A. Trees surrounding this proposal would act as a natural buffer that would filter help filter out odors, dust, and other particulate matter emitted by the proposed poultry houses. The discharge fans on the proposed poultry houses would face towards timberlands to the east. Nearby residences, churches, schools, and non farm businesses should not be affected by this proposal.

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. An existing, stabilized driveway would be utilized as the entrance and exit to the proposed construction site. Exposed soils 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 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 house's ventilation systems, as is required by integrators for flock health. The applicants would compost their mortality as described in earlier sections of the EA, which is an approved method of disposal by the Arkansas Poultry and Livestock Commission. Poultry litter on the proposed broiler operation would be stored in the (6) broiler houses which would keep it dry and reduce the impacts of odor emitted by the litter and would also have a litter shed to store litter from cleanouts and cake outs in between flocks.

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 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 compare the emissions from various greenhouses 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.

---

## **6. Noise**

### **Existing Conditions**

Existing conditions on the 120 acre tract are generally quiet since all of the timber has been harvested. Noise from neighboring residences and vehicle traffic is common along Pinebergen road to the south, highway 63 to the west, and other gravel county roads that surround the 120 acre tract. Noise from vehicles, road graders, diesel trucks, logging equipment, and other farming and human activity does exist, but is temporary in nature. This is not a very densely populated area. The surrounding environment should not experience any increases from existing conditions in noise levels and should be adversely impacted due to potential increases in noise levels associated with this proposal.

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

The Proposed Action would establish a new, (6) 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 and timber that surrounds the proposed site. 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 Jefferson 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 436 farms in Jefferson County and 292,354 acres devoted to farm ground. Cropland accounts for 87% of the land use, Woodland accounts for 9%, grasslands accounts for 2%, and 2% of the land is for 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 there are no critical habitats within the proposed project area under USFWS jurisdiction. SEE APPENDIX D-1. Based on the project information and determinations received from the USFWS IPAC website on the Verification letter, the proposed project would be allowed to continue with no further consultation with USFWS. SEE APPENDIX D-2. The proposed site is established in native vegetation. SEES APPENDIX B. 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.

---

### **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 of Jefferson County, AR. This proposed operation is surrounded by roads and stands of timber which would help filter out particulate matter emitted by the proposed poultry houses. Exhaust fans would point towards the east into a wooded area.

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, State Environmental Coordinator, FSA, Arkansas	BS, Crop, Soil, and Environmental Sciences Years of Experience: 14

Persons and Agencies Contacted	
Name and Title	Affiliation
██████████	Landowner/Applicant
██████████	Guaranteed Lender
██████████	Guaranteed Lender
Stacy Hurst	Arkansas SHPO
Thomas Inebnit	US Fish and Wildlife Service
Ben Yahola	Alabama-Quassarte Tribal Town
Darrin Cisco	Apache Tribe of Oklahoma
Everett Bandy	Quapaw Tribe of Indians
Elizabeth Toombs	Cherokee Nation
Derek Hill	Caddo Nation
Autumn Gorrell	Chickasaw Nation
Lindsey D. Bilyeu	Choctaw Nation of Oklahoma

Maddie Daniel Currie	Choctaw Nation of Oklahoma
Linda Langley	Coushatta Tribe of Louisiana
Alina Shively	Jena Band of Choctaw Indians
Chief Phyliss Anderson	Mississippi Band of Choctaw Indians
Corrain Lowe-Zepeda	Muscogee (Creek) Nation
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>

**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.adeq.state.ar.us/water/>

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

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

**Arkansas Water.Org Jefferson 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>

**University of Arkansas Research and Extension: Jefferson County:**

<https://www.uaex.edu/business-communities/strategic-planning/docs/county-profiles/jefferson-county-profile.pdf>

**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 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)

## 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	

